BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:)	
SIERRA CLUB, ENVIRONMENTAL)	
LAW AND POLICY CENTER,)	
PRAIRIE RIVERS NETWORK, and)	
CITIZENS AGAINST RUINING THE)	
ENVIRONMENT)	
)	PCB No-2013-015
Complainants,)	(Enforcement – Water)
V.)	
v.)	
MIDWEST GENERATION, LLC,)	
)	
Respondents)	

NOTICE OF FILING

PLEASE TAKE NOTICE that I have filed today with the Illinois Pollution Control Board the attached COMPLAINANTS' OPPOSITION TO RESPONDENT'S MOTION FOR EXTENSION OF TIME TO FILE MOTION FOR RECONSIDERATION AND/OR CLARIFICATION OF THE INTERIM ORDER AND OPINION AND REQUEST FOR EXPEDITED DECISION, copies of which are attached hereto and herewith served upon you.

Respectfully submitted,

Jeffrey Hammons

Environmental Law & Policy Center

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Washington, DC 20005

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(785) 217-5722

Attorney for ELPC, Sierra Club and Prairie Rivers Network

Dated: July 19, 2019

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:)	
SIERRA CLUB, ENVIRONMENTAL LAW AND POLICY CENTER,))	
PRAIRIE RIVERS NETWORK, and)	
CITIZENS AGAINST RUINING THE)	
ENVIRONMENT)	
)	
Complainants,)	
V.)	PCB No-2013-015
)	(Enforcement – Water)
MIDWEST GENERATION, LLC,)	(Emoreoment water)
Respondent.)	
respondent.)	

COMPLAINANTS' OPPOSITION TO RESPONDENT'S MOTION FOR EXTENSION OF TIME TO FILE MOTION FOR RECONSIDERATION AND/OR CLARIFICATION OF THE INTERIM ORDER AND OPINION AND REQUEST FOR EXPEDITED DECISION

Complainants Sierra Club, Environmental Law & Policy Center ("ELPC"), Prairie Rivers Network, and Citizens Against Ruining the Environment ("CARE"), by their undersigned counsel, hereby submit this Opposition to the Motion for Extension of Time to File Motion for Reconsideration and/or Clarification of the Interim Order and Opinion and Request for Expedited Decision ("Motion") submitted by Respondent Midwest Generation, LLC ("MWG"). In support of their opposition to the Motion, Complainants state as follows:

1. The complaint alleging water pollution in this case was filed in 2012, and this proceeding has already taken nearly seven years and is only now reaching the question of remedy. The Board has denied a motion for an extension in an enforcement proceeding that had lasted four years. *People v. Community Landfill Company*, PCB 03-191, 2007 WL 1532649, at *2 (May 17, 2007). "This enforcement proceeding has been pending for more than 4 years and the Board

will not grant any further extensions of time on this issue." *Id.* Likewise, this case, which has gone on even longer than the one at issue in *Community Landfill Company*, should not be delayed any further.

- 2. Per the Illinois Pollution Control Board's ("Board") Interim Order of June 21, 2019, there is ongoing groundwater contamination taking place at all four power plants. In previous enforcement cases, the Board has emphasized the importance of "conducting . . . site remediation in a timely manner" in denying a motion for an extension. *See, e.g., Krautsack v. Patel*, PCB No. 95-143, 1998 WL 401782, at *2 (July 8, 1998). MWG's Motion should be denied because delaying the remedy phase for another 45 days would fail to ensure that site remediation is conducted in a timely matter.
- 3. Not only does the Board's June 2019 order find that the MWG caused water pollution and that water pollution was ongoing up until the most recent time period for which groundwater monitoring was available (May and June 2017), more recent publicly-available information shows that contamination has continued unabated at MWG's Waukegan, Will County, and Powerton facilities. MWG is required by the federal Coal Combustion Residuals rule ("CCR"), 40 CFR § 257.50, *et seq*, to post online annual groundwater monitoring reports. MWG's most recent CCR reports show continued contamination after May/June 2017 consistent with the that

¹ Respondent's most recent annual groundwater monitoring reports can be found here:

Waukegan: http://3659839d00eefa48ab17-3929cea8f28e01ec3cb6bbf40cac69f0.r20.cf1.rackcdn.com/WAU_APE_GMI19.pdf (also attached as Exhibit B)

Will County: http://3659839d00eefa48ab17-3929cea8f28e01ec3cb6bbf40cac69f0.r20.cf1.rackcdn.com/WIL_SAP2_GMI19.pdf (also attached as Exhibit C)

Powerton: http://3659839d00eefa48ab17-3929cea8f28e01ec3cb6bbf40cac69f0.r20.cf1.rackcdn.com/POW_ASB_GMI19.pdf (also attached as Exhibit D)

Joliet 29: http://3659839d00eefa48ab17-3929cea8f28e01ec3cb6bbf40cac69f0.r20.cf1.rackcdn.com/JOT AP2 GMI19.pdf

found in the Board's June 2019 order.

4. Exhibit A is a compilation of exceedances of groundwater quality standards based on the

data contained in MWG's most recent annual CCR groundwater quality monitoring reports for

Waukegan, Will County, and Powerton.² Also attached as exhibits are original copies of MWG's

most recent annual groundwater monitoring reports for these stations. See Exhibit B

(Waukegan), Exhibit C (Will County), and Exhibit D (Powerton). Due to this continuing

contamination, further delay would create concern. MWG's request for an extension of time to

file a motion for reconsideration should be denied.

5. Likewise, MWG's counsels' August vacation plans do not provide any grounds for an

extension to the July 26th deadline for a motion for reconsideration or modification considering

that any August vacations fall after the July 26 deadline.

6. For the foregoing reasons, Complainants respectfully request that the Hearing Officer

deny MWG's motion for a 45-day extension.

Dated: July 19, 2019

Respectfully submitted,

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² The Board's June 2019 order found violations at Joliet 29 at well MW-09, but MWG's most recent annual CCR groundwater monitoring report does not contain sample data on MW-09.

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Attorney for CARE

CERTIFICATE OF SERVICE

I hereby certify that the foregoing NOTICE OF FILING, COMPLAINANTS' OPPOSITION TO RESPONDENT'S MOTION FOR EXTENSION OF TIME TO FILE MOTION FOR RECONSIDERATION AND/OR CLARIFICATION OF THE INTERIM ORDER AND OPINION AND REQUEST FOR EXPEDITED DECISION were served electronically to all parties of record listed below, on July 19, 2019.

Respectfully submitted,

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Exhibit A

					Standard	Concentration
Year	Site	Well	Contaminant	Date	(mg/L)	(mg/L)
2017	Powerton	MW-19	Boron	6/21/2017	2	2.3
2017	Powerton	MW-09	Boron	6/21/2017	2	3.3
2017	Powerton	MW-19	Boron	6/21/2017	2	2.3
2017	Powerton	MW-15	Sulfate	6/21/2017	400	530
2017	Powerton	MW-15	TDS	6/21/2017	1200	1600
2017	Powerton	MW-08	TDS	6/21/2017	1200	1700
2017	Powerton	MW-17	Arsenic	6/22/2017	0.01	0.41
2017	Powerton	MW-17	Sulfate	6/22/2017	400	580
2017	Powerton	MW-17	TDS	6/22/2017	1200	1600
2017	Powerton	MW-11	Arsenic	6/22/2017	0.01	0.07
2017	Powerton	MW-12	Arsenic	6/22/2017	0.01	0.025
2017	Powerton	MW-17	Arsenic	6/22/2017	0.01	0.41
2017	Powerton	MW-12	Sulfate	6/22/2017	400	580
2017	Powerton	MW-17	Sulfate	6/22/2017	400	580
2017	Powerton	MW-12	TDS	6/22/2017	1200	1400
2017	Powerton	MW-17	TDS	6/22/2017	1200	1600
2017	Will	MW-05	Boron	6/27/2017	2	3.8
2017	Will	MW-06	Boron	6/27/2017	2	3.1
2017	Will	MW-10	Boron	6/27/2017	2	2.8
2017	Will	MW-05	Sulfate	6/27/2017	400	500
2017	Waukegan	MW-01	Boron	7/5/2017	2	2.3
2017	Waukegan	MW-02	Boron	7/5/2017	2	4.2
2017	Waukegan	MW-03	Boron	7/5/2017	2	3
2017	Waukegan	MW-04	Boron	7/5/2017	2	3.6
2017	Waukegan	MW-09	Sulfate	7/6/2017	400	610
2017	Waukegan	MW-09	TDS	7/6/2017	1200	1800
2017	Powerton	MW-09	Boron	8/25/2017	2	3.8
_	Powerton	MW-19	Boron	8/28/2017	2	3.5
_	Powerton	MW-11	Arsenic	8/29/2017	0.01	0.017
	Powerton	MW-12	Arsenic	8/29/2017	0.01	0.02
	Powerton	MW-17	Arsenic	8/29/2017	0.01	0.24
	Powerton	MW-11	Boron	8/29/2017	2	2.2
	Powerton	MW-12	Sulfate	8/29/2017	400	520
	Powerton	MW-15	Sulfate	8/29/2017	400	540
	Powerton	MW-17	Sulfate	8/29/2017	400	640
	Powerton	MW-12	TDS	8/29/2017	1200	1400
	Powerton	MW-15	TDS	8/29/2017	1200	1800
	Powerton	MW-17	TDS	8/29/2017	1200	1900
	Powerton	MW-08	TDS	8/29/2017	1200	1500
2017		MW-06	Boron	9/7/2017	2	3.5
2017		MW-10	Boron	9/7/2017	2	2.8
2017		MW-05	Boron	9/8/2017	2	4.8
2017		MW-05	Sulfate	9/8/2017	400	490
	Waukegan	MW-05	Boron	9/11/2017	2	44
2017	Waukegan	MW-05	Sulfate	9/11/2017	400	750

PCB 2013-15

Exhibit A

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					Page 2 of 3
2017 Waukegan	MW-05	TDS	9/11/2017	1200	2000
2017 Waukegan	MW-09	Sulfate	9/13/2017	400	520
2017 Waukegan	MW-09	TDS	9/13/2017	1200	1800
2017 Waukegan	MW-01	Boron	9/14/2017	2	2.4
2017 Waukegan	MW-02	Boron	9/14/2017	2	2.5
2017 Waukegan	MW-03	Boron	9/14/2017	2	2.1
2017 Waukegan	MW-04	Boron	9/14/2017	2	2.5
2017 Powerton	MW-17	Arsenic	11/6/2017	0.01	0.17
2017 Powerton	MW-19	Boron	11/6/2017	2	4.5
2017 Powerton	MW-17	Sulfate	11/6/2017	400	840
2017 Powerton	MW-17	TDS	11/6/2017	1200	1800
2017 Powerton	MW-09	Boron	11/8/2017	2	4
2017 Powerton	MW-11	Arsenic	11/9/2017	0.01	0.092
2017 Powerton	MW-12	Arsenic	11/10/2017	0.01	0.5
2017 Powerton	MW-15	Sulfate	11/10/2017	400	530
2017 Powerton	MW-15	TDS	11/10/2017	1200	1500
2017 Will	MW-09	Boron	11/14/2017	2	2.6
2017 Will	MW-10	Boron	11/15/2017	2	4.1
2017 Will	MW-05	Boron	11/16/2017	2	4.8
2017 Will	MW-06	Boron	11/16/2017	2	3.9
2017 Will	MW-05	Sulfate	11/16/2017	400	650
2017 Will	MW-05	TDS	11/16/2017	1200	1500
2017 Waukegan	MW-01	Boron	11/27/2017	2	2.7
2017 Waukegan	MW-02	Boron	11/27/2017	2	3.4
2017 Waukegan	MW-03	Boron	11/27/2017	2	2.6
2017 Waukegan	MW-04	Boron	11/27/2017	2	2.3
2017 Waukegan	MW-09	TDS	11/29/2017	1200	1600
2017 Waukegan	MW-05	Boron	11/30/2017	2	47
2017 Waukegan	MW-05	Sulfate	11/30/2017	400	790
2017 Waukegan	MW-05	TDS	11/30/2017	1200	1900
2018 Will	MW-10	Boron	5/1/2018	2	3.2
2018 Will	MW-09	Sulfate	5/1/2018	400	430
2018 Will	MW-05	Boron	5/2/2018	2	3.6
2018 Will	MW-05	Sulfate	5/2/2018	400	510
2018 Will	MW-05	TDS	5/2/2018	1200	1300
2018 Will	MW-06	Boron	5/3/2018	2	3
2018 Will	MW-06	Sulfate	5/3/2018	400	530
2018 Powerton	MW-17	Arsenic	• •	0.01	0.42
2018 Powerton	MW-19	Boron	5/14/2018	2	4.1
2018 Powerton	MW-17	Sulfate	5/14/2018	400	800
2018 Powerton	MW-17	TDS	5/14/2018	1200	1700
2018 Powerton	MW-11	Arsenic		0.01	0.089
2018 Powerton	MW-12	Arsenic	·	0.01	0.09
2018 Powerton	MW-09	Boron	5/16/2018	2	4.1
2018 Powerton	MW-12	Sulfate	5/16/2018	400	720
2018 Powerton	MW-12	TDS	5/16/2018	1200	1500
2018 Powerton	MW-15	Sulfate	5/17/2018	400	680
2010 . 0	11111 13	Janace	5, 17, 2010	.50	330

Exhibit A Page 3 of 3

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2018 Powerton	MW-15	TDS	5/17/2018	1200	1800
2018 Waukegan	MW-01	Boron	5/29/2018	2	2.4
2018 Waukegan	MW-02	Boron	5/29/2018	2	4.5
2018 Waukegan	MW-03	Boron	5/29/2018	2	2.4
2018 Waukegan	MW-04	Boron	5/30/2018	2	3
2018 Powerton	MW-17	Arsenic	8/6/2018	0.01	0.087
2018 Powerton	MW-19	Boron	8/6/2018	2	3.8
2018 Powerton	MW-17	Sulfate	8/6/2018	400	620
2018 Powerton	MW-17	TDS	8/6/2018	1200	1600
2018 Powerton	MW-09	Boron	8/8/2018	2	4.3
2018 Powerton	MW-11	Arsenic	8/9/2018	0.01	0.68
2018 Powerton	MW-12	Arsenic	8/9/2018	0.01	0.12
2018 Powerton	MW-12	Sulfate	8/9/2018	400	480
2018 Powerton	MW-15	Sulfate	8/9/2018	400	520
2018 Powerton	MW-12	TDS	8/9/2018	1200	1300
2018 Powerton	MW-15	TDS	8/9/2018	1200	1700
2018 Will	MW-09	Boron	10/2/2018	2	2.1
2018 Will	MW-05	Boron	10/3/2018	2	4.9
2018 Will	MW-06	Boron	10/3/2018	2	3.5
2018 Will	MW-10	Boron	10/3/2018	2	2.5
2018 Will	MW-05	Sulfate	10/3/2018	400	430
2018 Waukegan	MW-02	Boron	11/5/2018	2	3.1
2018 Waukegan	MW-03	Boron	11/5/2018	2	2.4
2018 Waukegan	MW-04	Boron	11/6/2018	2	2.5

Exhibit B

ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

CCR COMPLIANCE ANNUAL GROUNDWATER MONITORING and CORRECTIVE ACTION REPORT - 2018

Midwest Generation, LLC Waukegan Station 401 E. Greenwood Avenue Waukegan, Illinois

Prepared By: KPRG and Associates, Inc.

14665 West Lisbon Road, Suite 1A

Brookfield, WI 53005

January 31, 2019

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FIGURES

- 1 CCR Monitoring Wells Site Map
- 2 CCR Groundwater Contour 05/2018
- 3 CCR Groundwater Contour 11/2018

TABLES

- 1 Groundwater Elevations
- 2 Groundwater Flow Direction and Estimated Seepage Velocity/Flow Rate
- 3 Groundwater Sampling Summary
- 4 Detection Monitoring Appendix III Groundwater Analytical Results

<u>APPENDIX</u>

- A Analytical Data Packages from 2018 Detection Monitoring
- B Alternate Source Demonstration April 12, 2018

Waukegan Geparating Station

1.0 INTRODUCTION

The 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 ash pond monitoring wells located at the Midwest Generation, LLC (Midwest Generation) Waukegan Generating Station. The wells sampled were selected to meet the monitoring requirements of the CCR Rule for both the West and East Ash Ponds. The CCR monitoring well network around these ponds consists of eight monitoring wells (MW-01 though MW-04, MW-09, MW-11, MW-14 and MW-16). Wells MW-09, MW-11 and MW-14 are upgradient wells.

The 2017 CCR Compliance Annual Groundwater Monitoring and Corrective Action Report was submitted on January 24, 2018. This annual report covers the work performed relative to CCR groundwater monitoring from January 1, 2018 through the end of 2018. It does not duplicate information or activities previously reported for 2017. It is prepared in accordance with Section 257.90(e)(1-5) and summarizes the sampling procedures used, provides an evaluation of groundwater flow conditions, summarizes the analytical data generated, provides a discussion of the statistical evaluations completed and alternate source demonstration testing completed as a basis for determining the appropriate next phase of compliance activities.

2.0 FIELD PROCEDURES AND GROUNDWATER FLOW EVALUATION

2.1 Field Procedures

As previously noted, the CCR groundwater monitoring network around the ash ponds at this facility consists of eight wells (MW-01, MW-02, MW-03, MW-04, MW-09, MW-11, MW-14 and MW-16) as shown on Figure 1. As part of sampling procedures, the integrity of all monitoring wells was inspected and water levels obtained using an electronic water level meter (see summary of water level discussion below). All wells were found in good condition.

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

2.2 Groundwater Flow Evaluation

Water level data measurements were obtained from monitoring wells during each round of groundwater sampling. A complete round of water levels was collected prior to initiating sampling, and the water level data are summarized in Table 1. It is noted that water levels were also concurrently measured at other monitoring well locations in the area that are not part of the CCR monitoring network. The full set of water levels were used to generate a groundwater flow map for each sampling event. These maps are provided as Figures 2 and 3. A review of the maps indicates a consistent southeasterly groundwater flow direction beneath the ash ponds. 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:

$$V_s = \underline{Kdh}$$
, where $n_e dl$

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 average hydraulic conductivity of 4.04×10^{-3} ft/sec 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 aquifer materials (0.35) was obtained from literature (Applied Hydrogeology, Fetter, 1980).

3.0 ANALYTICAL DATA AND STATUS OF EVALUATIONS

3.1 Sampling Summary

The groundwater sampling summary from 2018 is provided in Table 3, in accordance with 257.90 (e)(3).

3.2 Data Summary

The analytical data from the detection monitoring groundwater sampling for Appendix III parameters are provided in Table 4 which includes calculated Prediction Limits (PLs) established in the initial CCR Groundwater Monitoring Statistical Evaluation Summary dated January 2018 for data comparison purposes. The downgradient intrawell prediction limits were established for the parameters which were part of the Alternate Source Demonstration (ASD; see discussion in Section 4.2 below). For those parameters in downgradient wells, a concentration above both interwell and intrawell prediction limits would be considered a potential statistically significant increase (SSI).

Confirmatory resampling events were limited to any potential statistically significant increases (SSI) for specific parameters at specific wells for parameters that were either not covered in the ASD or sufficiently addressed in the ASD. The first 2018 semi-annual sampling data indicated calcium and total dissolved solids (TDS) above the calculated statistical Prediction Limits (PLs) at well MW-16 (see discussion on initial statistical evaluation summary in Section 4.1 below). Confirmatory resampling was completed for those parameters at well MW-16 and the results were below the PLs. The second semi-annual sampling data also indicated calcium and TDS above the calculated PLs for well MW-16, however, confirmatory resampling was completed and the results were still above the calculated PLs suggesting potential SSIs for these parameters at this location.

3.3 Current Status

In accordance with section 257.94(e)(2) of the CCR Rule, an Alternate Source Demonstration (ASD) is in the process of being completed to determine whether the noted calcium and TDS concentrations at well MW-16 may be related to the regulated units or whether they may be associated with a source other than the regulated units. The results of that demonstration will determine the next course of action(s) required to maintain compliance with the CCR Rule.

4.0 OTHER REQUIRED SUBMITTALS

4.1 <u>Initial Statistical Evaluation Summary</u>

The initial data to establish statistical background was collected as part of detection monitoring requirements under 257.94(b). Eight rounds of groundwater data were generated for all upgradient and downgradient monitoring wells for Appendix III and Appendix IV parameters. In addition, a ninth round and resample event was collected for subsequent use in statistical comparisons. The Statistical Evaluation Summary dated January 12, 2018 was prepared by KPRG and Associates, Inc. The work was completed in accordance with the CCR Compliance Statistical Approach for Groundwater Data Evaluation for the Waukegan Station dated October 10, 2017 and established PLs for each Appendix III parameter.

The completed initial detection monitoring statistical evaluations determined that there were potential SSIs in various downgradient monitoring wells relative to established background for boron, pH and sulfate. It was recommended to complete an ASD in accordance with Section 257.94(e)(2) of the CCR Rule to determine whether these SSIs may be associated with an actual release from the regulated unit(s) or if another potential source in the vicinity of the ash ponds may be affecting the local groundwater quality. The results of the ASD are discussed below.

4.2 Alternate Source Demonstration

The ASD was completed April 12, 2018 for boron, pH, and sulfate in accordance with Section257.94(e)(2) of the CCR Rule for the Waukegan Generating Station West and East Ash Ponds and as required under Section 257.94(e)(2) a full copy of the ASD is provided in Appendix B. Ash and water samples were collected from each of the two ponds (East and West) 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 source in the vicinity of the ash ponds may be affecting the local groundwater quality.

It was concluded that the SSIs for boron, pH, and sulfate are not the result of a release of leachate from the regulated units (East and West Ash Ponds) but rather from other potential source(s). The recommendation was to continue with routine detection monitoring.

Waukegan Geparating Station

5.0 SUMMARY/CONCLUSIONS AND RECOMMENDATIONS

The detection monitoring requirements in accordance with the CCR Rule have been successfully met. Groundwater monitoring wells that had analytical results showing parameter concentrations above established PLs were resampled to minimize potential for a false positive. An initial ASD was completed which determined that potential SSIs for boron, pH and sulfate at various well locations are from other sources, and not leakage of leachate from the regulated units (East and West Ash Ponds). The most recent semi-annual detection monitoring results for well MW-16 indicate a possible SSIs for calcium and TDS. Midwest Generation is in the process of completing an ASD for these two parameters is accordance with section 257.94(e)(2) of the CCR Rule. The station will stay in routine detection monitoring while the ASD is completed. Once the ASD is completed, appropriate recommendations will be made regarding whether the site should continue with routine detection monitoring or transition to an assessment monitoring program.

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 Waukegan Generating Station, Waukegan, IL. February 2011.
- KPRG and Associates, Inc., CCR Compliance Monitoring, Sampling and Analysis Plan, Midwest Generation, LLC Waukegan Generating Station. October 10, 2017.
- KPRG and Associates, Inc., CCR Compliance Statistical Approach for Groundwater Data Evaluation, Midwest Generation, LLC Waukegan Generating Station. October 10, 2017.
- KPRG and Associates, Inc., CCR Groundwater Monitoring Statistical Evaluation Summary 2017, Midwest Generation, LLC Waukegan Generating Station. January 12, 2018.
- C.W. Fetter, Jr., Applied Hydrogeology. Charles E. Merrill Publishing Co., 1980.

Electronic Filing: Received, Clerk's Office 07/19/2019 PCB 2013-15
Exhibit B
Page 9 of 193

FIGURES

K P R G

KPRG and Associates, inc.

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WAUKEGAN STATION WAUKEGAN, ILLINOIS

Scale: 1" = 550' | Date: January 2, 2018

KPRG Project No. 12313.2

FIGURE 1

PCB 2013-15 Electronic Filing: Received, Clerk's Office 07/19/2019 Page 11 of 193 GENERATING STATION RAIL YARD WEST ASH POND EAST ASH POND LEGEND: MONITORING WELL NON-CCR MONITORING WELL USED IN GROUND WATER CONTOUR DETERMINATION GROUNDWATER CONTOUR LINE GROUNDWATER FLOW LINE ABANDONED WELL 500' APPROXIMATE SCALE ENVIRONMENTAL CONSULTATION & REMEDIATION GROUNDWATER CONTOUR MAP 05/2018

KPRG and Associates, inc.

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

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

WAUKEGAN STATION WAUKEGAN, ILLINOIS

Scale: 1" = 500'Date: June 15, 2018

KPRG Project No. 12313.2

FIGURE 2

PCB 2013-15 Electronic Filing: Received, Clerk's Office 07/19/2019 Page 12 of 193 GENERATING STATION RAIL YARD WEST ASH POND EAST ASH POND LEGEND: MONITORING WELL NON-CCR MONITORING WELL USED IN GROUND WATER CONTOUR DETERMINATION GROUNDWATER CONTOUR LINE GROUNDWATER FLOW LINE ABANDONED WELL 500' APPROXIMATE SCALE ENVIRONMENTAL CONSULTATION & REMEDIATION GROUNDWATER CONTOUR MAP 11/2018

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

WAUKEGAN STATION WAUKEGAN, ILLINOIS

Scale: 1" = 500' Do

Date: November 29, 2018

KPRG Project No. 12313.2

FIGURE 3

Electronic Filing: Received, Clerk's Office 07/19/2019 PCB 2013-15
Exhibit B
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TABLES

	1			
W 11 ID	D .	Top of Casing	Depth to	Groundwater
Well ID	Date	Elevation	Groundwater	Elevation
		(ft above MSL)	(ft below TOC)	(ft above MSL)
	11/2/2015	603.12	20.75	582.37
	2/29/2016	603.12	20.71	582.41
	5/2/2016	603.12	20.89	582.23
	8/23/2016	603.12	22.01	581.11
	12/2/2016	603.62	22.27	581.35
MW-01	2/21/2017	603.62	22.42	581.20
	5/15/2017	603.62	20.52	583.10
	7/5/2017	603.62	21.81	581.81
	9/11/2017	603.62	21.47	582.15
	11/27/2017	603.62	21.82	581.80
	5/29/2018	603.62	19.43	584.19
	11/5/2018	603.62	20.45	583.17
	11/2/2015	603.04	20.71	582.33
	2/29/2016	603.04	20.59	582.45
	5/2/2016	603.04	20.82	582.22
	8/23/2016	603.04	22.04	581.00
	12/2/2016	603.39	22.13	581.26
MW-02	2/21/2017	603.39	22.24	581.15
WI W -02	5/15/2017	603.39	20.25	583.14
	7/5/2017	603.39	21.59	581.80
	9/11/2017	603.39	21.21	582.18
	11/27/2017	603.39	21.63	581.76
	5/29/2018	603.39	19.12	584.27
	11/5/2018	603.39	20.19	583.20
	11/2/2015	602.91	20.37	582.54
	2/29/2016	602.91	20.43	582.48
	5/2/2016	602.91	20.66	582.25
	8/23/2016	602.91	22.12	580.79
	12/2/2016	603.70	22.52	581.18
MW 02	2/21/2017	603.70	22.64	581.06
MW-03	5/15/2017	603.70	20.55	583.15
	7/5/2017	603.70	21.92	581.78
	9/11/2017	603.70	21.55	582.15
	11/28/2017	603.70	21.96	581.74
	5/29/2018	603.70	19.40	584.30
	11/5/2018	603.70	20.48	583.22
	11/2/2015	603.19	20.83	582.36
	2/29/2016	603.19	20.70	582.49
	5/2/2016	603.19	20.94	582.25
	8/23/2016	603.19	22.69	580.50
	12/2/2016	603.17	22.18	580.99
	2/21/2017	603.17	22.36	580.81
MW-04	5/15/2017	603.17	20.04	583.13
	7/5/2017	603.17	21.46	581.71
	9/11/2017	603.17	21.05	582.12
	11/28/2017	603.17	21.54	581.63
	5/30/2018	603.17	18.88	584.29
	11/6/2018	603.17	19.96	583.21
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		Top of Casing	Depth to	Groundwater
Well ID	Date	Elevation	Groundwater	Elevation
		(ft above MSL)	(ft below TOC)	(ft above MSL)
	11/2/2015	594.00	9.78	584.22
	2/29/2016	594.00	9.89	584.11
	5/2/2016	594.00	9.59	584.41
	8/23/2016	594.00	10.58	583.42
	12/2/2016	594.00	10.27	583.73
	2/21/2017	594.00	10.21	583.79
MW-09	5/15/2017	594.00	9.57	584.43
	7/6/2017	594.00	9.81	584.19
	9/11/2017	594.00	10.25	583.75
	11/29/2017	594.00	9.98	584.02
	5/31/2018	594.00	9.38	584.62
	11/6/2018	594.00	9.52	584.48
	11/2/2015	590.35	5.27	585.08
	2/29/2016	590.35	5.54	584.81
	5/2/2016	590.35	5.17	585.18
	8/23/2016	590.35	6.04	584.31
	12/2/2016	590.35	5.86	584.49
	2/21/2017	590.35	5.87	584.48
MW-11	5/15/2017	590.35	5.33	585.02
	7/6/2017	590.35	5.62	584.73
	9/11/2017	590.35	5.61	584.74
	11/30/2017	590.35	5.68	584.67
	5/31/2018	590.35	5.41	584.94
	11/6/2018	590.35	5.29	585.06
	11/2/2015	590.24	5.17	585.07
	2/29/2016	590.24	5.01	585.23
	5/2/2016	590.24	4.49	585.75
	8/23/2016	590.24	6.07	584.17
	12/2/2016	590.24	5.49	584.75
	2/21/2017	590.24	5.33	584.91
MW-14	5/15/2017	590.24	4.67	585.57
	7/6/2017	590.24	5.27	584.97
	9/11/2017	590.24	5.78	584.46
	11/30/2017	590.24	5.19	585.05
	6/1/2018	590.24	4.45	585.79
	11/6/2018	590.24	4.32	585.92
	11/2/2015	607.41	25.13	582.28
	2/29/2016	607.41	24.91	582.50
	5/2/2016	607.41	25.23	582.18
	8/23/2016	607.41	28.33	579.08
	12/2/2016	607.41	28.22	579.19
MW 16	2/21/2017	607.41	27.71	579.70
MW-16	5/15/2017	607.41	23.99	583.42
	7/6/2017	607.41	27.03	580.38
	9/11/2017	607.41	26.74	580.67
	11/27/2017	607.41	27.49	579.92
	6/1/2018	607.41	23.22	584.19
	11/6/2018	607.41	23.65	583.76

MSL - Mean Sea Level TOC - Top of Casing

Table 2. Groundwater Flow Direction and Estimated Seepage Velocity/Flow Rate - Waukegan Generation Station.

DATE	Groundwater Flow Direction	Kavg (ft/sec)*	Average Hydraulic Gradient (ft/ft)	Porosity (unitless)**	Estimated Seepage Velocity (ft/day)
11/2/2015	Southeast	4.040E-03	0.0018	0.35	1.75
2/29/2016	Southeast	4.040E-03	0.0013	0.35	1.30
5/2/2016	Southeast	4.040E-03	0.0015	0.35	1.45
8/23/2016	East-Southeast	4.040E-03	0.0017	0.35	1.65
12/2/2016	East-Southeast	4.040E-03	0.0021	0.35	2.09
2/21/2017	East-Southeast	4.040E-03	0.0022	0.35	2.14
5/15/2017	East-Southeast	4.040E-03	0.0008	0.35	0.80
7/5/2017	East-Southeast	4.040E-03	0.0049	0.35	4.84
9/11/2017	East-Southeast	4.040E-03	0.0018	0.35	1.75
11/27/2017	East-Southeast	4.040E-03	0.0024	0.35	2.39
5/29/2018	East-Southeast	4.040E-03	0.0008	0.35	0.80
11/5/2018	East-Southeast	4.040E-03	0.0014	0.35	1.40

^{*} Kavg - Average hydraulic conductivity (feet/second) from Hydrogeologic Assessment Report, Patrick Engineering, February 2011.

^{** -} Porosity estimate from Applied Hydrogeology, Fetter, 1980.

Table 3. CCR Groundwater Sample Collection Summary for 2018 - Waukegan Generating Station

Well ID	Number of Groundwater Sampling Events	Dates of Groundwater Sampling Events	Detection Monitoring (D) versus Assessment Monitoring (A)
MW-09 (Background)	2	5/31/2018	D
WIW-09 (Dackground)	2	11/6/2018	D
MW-11 (Background)	2	5/31/2018	D
WIW-II (Dackground)	2	11/6/2018	D
MW 14 (Paglaggund)	2	6/1/2018	D
MW-14 (Background)	<u> </u>	11/6/2018	D
MW 01 (Downgradient)	2	5/29/2018	D
MW-01 (Downgradient)		11/5/2018	D
MW 02 (Dayymanadiant)	2	5/29/2018	D
MW-02 (Downgradient)	<u> </u>	11/5/2018	D
MW 02 (Dayymanadiant)	2	5/29/2018	D
MW-03 (Downgradient)	<u> </u>	11/5/2018	D
MW 04 (Dayymanadiant)	2	5/30/2018	D
MW-04 (Downgradient)	2	11/6/2018	D
MW 16 (Dayymana diaut)	2	6/1/2018	D
MW-16 (Downgradient)	2	11/6/2018	D

Table 4. Detection Monitoring - Appendix III Groundwater Analytical Results through 2018 - Midwest Generation, LLC, Waukegan Station, Waukegan, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pН	Sulfate	Total Dissolved
wen								Solids
	11/4/2015	13	210	450	0.14	6.60	370	1700
	3/2/2016	35	380	720	0.11	7.02	970	2800
	5/3/2016	16	310	620	0.12	7.02	740	2500
	8/25/2016	4.5	130	270	0.21	7.13	190	1100
	12/8/2016	15	200	330	0.18	7.01	270	1300
MW-09	2/23/2017	14	190	290	0.12	7.68	320	1300
up-gradient	5/16/2017	27	160	67	0.29	8.15	420	970
, -	7/6/2017	21	220	430	0.13	7.18	610	1800
	Pred. Limit*	43.9	449	963	0.33	8.53-5.92	1214	3499
	9/13/2017	21	250	420	0.14	7.17	520	1800
	11/29/2017	26	200	390	0.13	7.05	390	1600
	5/31/2018	32	200	29	0.1	6.85	490	1000
	11/6/2018	30	170	23	0.11	7.33	290	930
	11/5/2015	5.2	140	240	0.13	6.51	190	1100
	3/2/2016	4.0	170	240	0.1	7.16	210	1200
	5/5/2016	5.0	140	280	0.11	7.17	160	1000
	8/26/2016	3.5	180	240	0.13	6.97	110	1100
	12/7/2016	3.0	170	270	0.12	7.06	110	1200
MW-11	2/24/2017	2.4	180	220	4.9	6.61	170	1200
up-gradient	5/18/2017	1.8	160	170	0.12	7.42	120	1000
	7/6/2017	2.4	160	190	0.14	7.33	130	1100
	Pred. Limit*	6.83	206	333	4.9	7.91-6.14	255	1341
	9/13/2017	1.9	140	150	0.26	7.16	96	870
	11/30/2017	2.2	170	200	0.14	6.99	93	1100
	5/31/2018	1.5	210	160	0.1	6.74	130	1100
	11/6/2018	2.3	170	150	0.12	7.21	78	990
	11/5/2015	1.4	150	190	0.19	6.78	140	1000
	3/2/2016	0.93	150	110	0.17	7.24	150	870
	5/5/2016	1.2	170	120	0.18	7.17	190	980
	8/26/2016	1.5	200	210	0.12	7.00	190	1300
	12/7/2016	0.95	240	340	0.25	6.81	120	1100
2007.14	2/23/2017	0.73	150	99	0.19	6.88	110	730
MW-14 up-gradient	5/18/2017	0.81	120	130	0.3	7.62	70	590
ир вишен	7/6/2017	1.2	190	180	0.13	7.29	190	1300
	Pred. Limit*	1.85	274	389	0.35	7.89-6.31	266	1676
	9/13/2017	2.3	180	190	0.15	7.20	270	1200
	11/30/2017	0.85	170	130	0.19	7.33	99	940
	6/1/2018	0.54	100	57	0.28	6.89	42	410
	11/6/2018	0.98	160	110	0.24	7.36	53	610
	11/2/2015	1.8	64	71	0.46	10.93	310	560
	3/1/2016	V 1.9	58	63	0.26	11.13	270	570
	5/4/2016	2.0	45	60	0.3	11.09	210	490
	8/23/2016	2.0	42	60	0.26	10.49	240	550
	12/5/2016	2.2	55	65	0.34	10.46	180	560
	2/21/2017	2.2	50	61	0.29	11.30	250	540
MW-01	5/15/2017	2.1	52	59	0.37	10.69	330	570
down-gradient	7/5/2017	2.3	44	51	0.34	10.83	320	570
	Pred. Limit	1.83	227**	345**	4.9**	7.70-6.43**	233**	1461**
	Pred. Limit*	2.52	NC	NC	NC	11.7-10.03	411.6	NC
	9/14/2017	2.4	71	47	0.24	10.45	430	770
	11/27/2017	2.7	84	43	0.11	7.85	330	840
	5/29/2018	2.4	54	58	0.33	8.44	350	610
	11/5/2018	2.0	38	43	0.25	8.70	210	630

Notes: All units are in mg/l except pH is in standard units. Pred. Limit - Prediction Limit

Italics Date - Detection Monitoring and resample after statistical background establishment.

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

 ** Based on pooled background from MW-11/MW-14. All others based on MW-14 as background.
- V- Serial dilution exceeds the control limits.
- R- Resampling event

NA - Not analyzed. No confirmation resample required.

BOLD - Potential statistically significant increase relative to interwell Prediction Limit.

BOLD Potential statistically significant increase relative to intrawell Prediction Limit.

BOLD Above both interwell and intrawell Prediction Limits.

NC: Not Calculated.

Table 4. Detection Monitoring - Appendix III Groundwater Analytical Results through 2018 - Midwest Generation, LLC, Waukegan Station, Waukegan, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pН	Sulfate	Total Dissolved Solids
-	11/2/2015	3.0	32	47	0.78	8.27	230	460
	3/1/2016	4.1	39	47	1.3	8.57	220	510
	5/4/2016	3.3	34	51	1.5	8.19	180	440
	8/23/2016	3.1	42	59	1.3	7.52	250	500
	12/5/2016	3.1	28	56	1.0	8.62	160	430
	2/21/2017	3.3	31	52	0.8	8.75	190	420
MW-02	5/15/2017	3.6	85	48	0.6	8.33	320	640
down-gradient	7/5/2017	4.2	100	52	0.4	7.92	300	710
	Pred. Limit	1.83	227**	345**	4.9**	7.70-6.43**	233**	1461**
	Pred. Limit*	4.73	NC	NC	NC	9.38-7.16	386.6	NC
	9/14/2017	2.5	87	54	0.4	8.19	340	780
	11/27/2017	<u>3.4</u>	69	57	0.6	7.34	200	570
	5/29/2018	<u>4.5</u>	160	43	0.4	6.85	<u>420</u>	990
	11/5/2018	3.1	77	59	0.61	8.06	180	610
	11/2/2015	2.3	72	87	0.51	9.26	270	570
	3/1/2016	2.9	61	70	0.33	7.33	220	530
	5/4/2016	2.4	42	74	0.56	7.25	170	470
	8/24/2016	2.0	70	59	0.3	9.13	200	430
	12/5/2016	2.4	57	60	0.41	7.62	120	440
	2/21/2017	2.2	56	65	0.33	7.56	180	460
MW-03	5/16/2017	3.9	110	61	0.27	7.90	320	820
down-gradient	7/5/2017	3.0	60	60	0.28	7.46	200	470
	Pred. Limit	1.83	227**	345**	4.9**	7.70-6.43**	233**	1461**
	Pred. Limit*	4.31	NC	NC	NC	9.26-7.25	378.9	NC
	9/14/2017	<u>2.1</u>	86	57	0.26	7.53	<u>260</u>	680
	11/28/2017	<u>2.6</u>	69	63	0.56	<u>6.96</u>	120	500
	5/29/2018	2.4	67	61	0.38	6.84	190	480
	11/5/2018	2.4	54	54	0.50	8.99	150	500
	11/3/2015	1.8	66	62	0.51	6.68	240	480
	3/1/2016	2.0	58	51	0.5	7.17	170	450
	5/4/2016	1.6	44	49	0.61	6.92	140	340
	8/24/2016	2.0	46	58	0.56	7.01	120	370
	12/5/2016 2/22/2017	3.4 2.4	200 150	60 41	0.21	7.40 7.44	300 290	1000
	5/16/2017	2.4	170	29	0.17	7.44	400	850 970
MW-04 down-gradient	7/5/2017	3.6	200	51	0.29	7.09	520	1100
down-gradient	Pred. Limit	1.83	227**	345**	4.9**	7.70-6.43**	233**	1461**
	Pred. Limit*	4.42	NC NC	NC	NC	8.26-6.15	647.3	NC
	9/14/2017	2.5	180	45	0.28	7.04	480	1100
	11/28/2017	2.3	110	32	0.28	7.04	130	560
	5/30/2018	3.0	150	21	0.38	6.57	200	700
	11/6/2018	2.5	150	58	0.37	6.83	240	900
	11/3/2015	4.1	230	87	0.43	6.24	610	1400
	3/2/2016	3.1	360	130	0.35	6.76	990	1700
	5/2/2016	4.9	250	150	0.49	6.99	620	1600
	8/24/2016	3.6	130	53	0.71	7.00	330	830
	12/5/2016	3.8	160	52	0.51	7.03	280	920
	2/24/2017	6.5	200	67	0.2	5.76	570	1100
	5/16/2017	2.6	340	130	0.15	7.57	760	1700
MW-16	7/6/2017	9.5	190	70	0.57	7.35	480	1100
down-gradient	Pred. Limit	1.83	227**	345**	4.9**	7.70-6.43**	233**	1461**
	Pred. Limit*	10.94	NC	NC	NC	8.45-5.23	1206	NC
	9/13/2017	2.8	190	55	0.61	7.33	460	970
	11/27/2017	4.2	140	58	0.71	7.16	270	760
	6/1/2018	3	380	130	0.32	6.53	890	1900
	8/22/2018 (R)	NA	190	NA	NA	NA	NA	1200
	11/6/2018	3.9	380	150	0.39	6.78	<u>550</u>	1900
	12/4/2018 (R)	NA	<u>320</u>	NA	NA	NA	NA	<u>1600</u>

Notes: All units are in mg/l except pH is in standard units. Pred. Limit - Prediction Limit

Italics Date - Detection Monitoring and resample after statistical background establishment.

- * Intrawell Prediction Limit. All others are interwell comparisons.
- ** Based on pooled background from MW-11/MW-14. All others based on MW-14 as background.

 V- Serial dilution exceeds the control limits.
- R- Resampling event

NA - Not analyzed. No confirmation resample required.

BOLD - Potential statistically significant increase relative to interwell Prediction Limit.

BOLD Potential statistically significant increase relative to intrawell Prediction Limit.

BOLD Above both interwell and intrawell Prediction Limits.

NC- Not Calculated.

Electronic Filing: Received, Clerk's Office 07/19/2019 PCB 2013-15
Exhibit B
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Appendix A Analytical Data Packages from 2018 Detection Monitoring

> Page 21 of 193 **TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 500-146299-1 Client Project/Site: Waukegan CCR

For:

KPRG and Associates, Inc. 14665 West Lisbon Road, Suite 2B Brookfield, Wisconsin 53005

Attn: Richard Gnat

Authorized for release by: 6/15/2018 2:03:33 PM

Eric Lang, Manager of Project Management (708)534-5200

eric.lang@testamericainc.com

.....LINKS

Review your project results through Total Access

Have a Question?



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.

Exhibit B

PCB 2013-15

Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit B TestAmpriga Job IDF 5003146299-1

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

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PCB 2013-15 Electronic Filing: Received Clark's Office 07/19/2019

TestAmerica 300 IB: 500-146299-1

Exhibit B

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

Job ID: 500-146299-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-146299-1

Comments

No additional comments.

Receipt

The samples were received on 6/1/2018 2:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 6 coolers at receipt time were 3.1° C, 3.4° C, 3.5° C, 3.7° C, 3.8° C and 4.1° C.

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

General Chemistry

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

3

PCB 2013-15 Exhibit B

Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 24 Bf. 500-146299-1

Project/Site: Waukegan CCR

Method	Method Description	Protocol	Laboratory
6020A	Metals (ICP/MS)	SW846	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
SM 4500 CI- 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

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

TestAmerica Chicago

PCB 2013-15 Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit B

Client: KPRG and Associates, Inc.

TestAmerica 9 25 IBf 193-146299-1

Project/Site: Waukegan CCR

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-146299-1	MW-01	Water	05/29/18 12:42	06/01/18 14:50
500-146299-2	MW-02	Water	05/29/18 13:54	06/01/18 14:50
500-146299-3	MW-03	Water	05/29/18 15:03	06/01/18 14:50
500-146299-4	MW-04	Water	05/30/18 09:12	06/01/18 14:50
500-146299-5	MW-09	Water	05/31/18 11:24	06/01/18 14:50
500-146299-6	MW-11	Water	05/31/18 14:44	06/01/18 14:50
500-146299-7	MW-14	Water	06/01/18 08:04	06/01/18 14:50
500-146299-8	MW-16	Water	06/01/18 10:23	06/01/18 14:50
500-146299-9	Duplicate	Water	05/29/18 00:00	06/01/18 14:50

Electronic Filing Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 936 IB 500-146299-1

Project/Site: Waukegan CCR

Client Sample ID: MW-01 Lab Sample ID: 500-146299-1 Date Collected: 05/29/18 12:42

Matrix: Water

Date Received: 06/01/18 14:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.4		0.50		mg/L		06/02/18 10:33	06/05/18 14:13	10
Calcium	54		0.20		mg/L		06/02/18 10:33	06/04/18 14:25	1
- General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	610		10		mg/L			06/04/18 03:29	1
	610 58		10 2.0		mg/L mg/L			06/04/18 03:29 06/11/18 12:12	1 1
Total Dissolved Solids Chloride Fluoride			• •		U				1 1 1

Electronic Filing Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 967 IB: 506-146299-1

06/02/18 15:23

06/12/18 07:26

Project/Site: Waukegan CCR

Client Sample ID: MW-02 Lab Sample ID: 500-146299-2 Date Collected: 05/29/18 13:54

Matrix: Water

Date Received: 06/01/18 14:50

Fluoride

Sulfate

Method: 6020A - Metals (IC Analyte	,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	4.5		1.0		mg/L		06/02/18 10:33	06/05/18 14:41	20
Calcium	160		0.20		mg/L		06/02/18 10:33	06/04/18 14:54	1
General Chemistry Analyte	Pocult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	990		10		mg/L	=		06/04/18 03:32	1
	990		2.0		mg/L			06/11/18 12:13	
Chloride									

0.10

100

mg/L

mg/L

0.40

420

Electronic Filing Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 908 IB: 500-146299-1

Project/Site: Waukegan CCR

Chloride

Fluoride

Sulfate

Client Sample ID: MW-03

Date Collected: 05/29/18 15:03 Date Received: 06/01/18 14:50

Lab Sample ID: 500-146299-3

06/11/18 12:17

06/02/18 15:26

06/12/18 07:27

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.4		0.50		mg/L		06/02/18 10:33	06/05/18 14:45	10
Calcium	67		0.20		mg/L		06/02/18 10:33	06/04/18 14:58	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	480		10		mg/L			06/04/18 03:34	1

2.0

0.10

50

mg/L

mg/L

mg/L

61

0.38

190

PCB 2013-15

Electronic Filing Received Clerk's Office 07/19/2019 Exhibit B

Client: KPRG and Associates, Inc.

TestAmerica 309 IB: 500-146299-1

Project/Site: Waukegan CCR

Client Sample ID: MW-04

0.38

200

Lab Sample ID: 500-146299-4

06/02/18 15:29

06/12/18 07:28

Matrix: Water

Date Collected: 05/30/18 09:12 Date Received: 06/01/18 14:50

Fluoride

Sulfate

Method: 6020A - Metals (IC	P/MS) - Total F	Recoverable							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.0		0.50		mg/L		06/02/18 10:33	06/05/18 14:50	10
Calcium	150		0.20		mg/L		06/02/18 10:33	06/04/18 15:02	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	700		10		mg/L			06/04/18 03:37	1
Chloride	21		2.0		ma/L			06/11/18 12:18	1

0.10

50

mg/L

mg/L

Client: KPRG and Associates, Inc.

TestAmerica 30 IB 500-146299-1

Project/Site: Waukegan CCR

Client Sample ID: MW-09 Lab Sample ID: 500-146299-5 Date Collected: 05/31/18 11:24

Matrix: Water

Date Received: 06/01/18 14:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	32		5.0		mg/L		06/02/18 10:33	06/05/18 14:54	100
Calcium	200		0.20		mg/L		06/02/18 10:33	06/04/18 15:06	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1000		10		mg/L			06/04/18 03:40	1
	29		2.0		mg/L			06/11/18 12:48	1
Chloride Fluoride	29 0.10		2.0 0.10		mg/L mg/L			06/11/18 12:48 06/02/18 15:33	1 1

Client: KPRG and Associates, Inc.

TestAmerica 30 IB: 500-146299-1

Project/Site: Waukegan CCR

Client Sample ID: MW-11 Lab Sample ID: 500-146299-6 Date Collected: 05/31/18 14:44

Matrix: Water

06/12/18 07:30

Date Received: 06/01/18 14:50

Sulfate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.5		0.25		mg/L		06/02/18 10:33	06/05/18 14:58	5
Calcium	210		0.20		mg/L		06/02/18 10:33	06/04/18 15:10	1
- General Chemistry									
A a l4 a	Dogult	Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Resuit	Qualifier	NL.	IVIDL	Ollit	U	Frepareu	Allalyzeu	DII Fac
Total Dissolved Solids	1100		10	IVIDE	mg/L			06/04/18 03:42	1
		Qualifier _		WIDE					1 5

50

130

mg/L

Client: KPRG and Associates, Inc.

TestAmerica 3318f 193-146299-1

Project/Site: Waukegan CCR

Client Sample ID: MW-14 Lab Sample ID: 500-146299-7 Date Collected: 06/01/18 08:04

Matrix: Water

Date Received: 06/01/18 14:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.54		0.050		mg/L		06/02/18 10:33	06/05/18 15:02	1
Calcium	100		0.20		mg/L		06/02/18 10:33	06/04/18 15:14	1
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	410		10		mg/L			06/04/18 03:45	1
Chloride	57		2.0		mg/L			06/11/18 12:48	1
Fluoride	0.28		0.10		mg/L			06/02/18 15:40	1

Client: KPRG and Associates, Inc.

TestAmerica 331Bf 193-146299-1

Project/Site: Waukegan CCR

Client Sample ID: MW-16 Lab Sample ID: 500-146299-8 Date Collected: 06/01/18 10:23

Matrix: Water

Date Received: 06/01/18 14:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.0		0.50		mg/L		06/02/18 10:33	06/05/18 15:06	10
Calcium	380		2.0		mg/L		06/02/18 10:33	06/05/18 15:06	10
General Chemistry						_			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1900		10		mg/L			06/04/18 03:47	1
Chloride	130		10		mg/L			06/11/18 12:21	5
Cilionae									
Fluoride	0.32		0.10		mg/L			06/02/18 15:53	1

6/15/2018

Client: KPRG and Associates, Inc.

TestAmerica 34 IB: 500-146299-1

06/11/18 12:21

06/02/18 15:56

06/12/18 07:35

Project/Site: Waukegan CCR

Client Sample ID: Duplicate Lab Sample ID: 500-146299-9 Date Collected: 05/29/18 00:00

43

0.39

390

Matrix: Water

Date Received: 06/01/18 14:50

Chloride

Fluoride

Sulfate

Method: 6020A - Metals (IC Analyte	•	Recoverable Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	4.6		1.0		mg/L		06/02/18 10:33	06/05/18 15:10	20
Calcium	160		0.20		mg/L		06/02/18 10:33	06/04/18 15:27	1
- General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	960		10		mg/L			06/04/18 03:50	1

2.0

0.10

100

mg/L

mg/L

mg/L

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

TestAmerica 35 IB: 500-146299-1

Qualifiers

Metals

Qualifier	Qualifier	Description
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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.
n	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)

MDC MDL ML

MDA

Minimum Detectable Activity (Radiochemistry) Minimum Detectable Concentration (Radiochemistry) Method Detection Limit

Minimum Level (Dioxin) NC Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown) ND

PQL Practical Quantitation Limit

QC **Quality Control**

Relative Error Ratio (Radiochemistry) **RER**

RLReporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points RPD

TEF Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin) **TEQ**

TestAmerica Chicago

Exhibit B

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

TestAmerica 36 lpf 193-146299-1

Metals

Prep Batch: 435023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-146299-1	MW-01	Total Recoverable	Water	3005A	
500-146299-2	MW-02	Total Recoverable	Water	3005A	
500-146299-3	MW-03	Total Recoverable	Water	3005A	
500-146299-4	MW-04	Total Recoverable	Water	3005A	
500-146299-5	MW-09	Total Recoverable	Water	3005A	
500-146299-6	MW-11	Total Recoverable	Water	3005A	
500-146299-7	MW-14	Total Recoverable	Water	3005A	
500-146299-8	MW-16	Total Recoverable	Water	3005A	
500-146299-9	Duplicate	Total Recoverable	Water	3005A	
MB 500-435023/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-435023/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-146299-1 MS	MW-01	Total Recoverable	Water	3005A	
500-146299-1 MSD	MW-01	Total Recoverable	Water	3005A	
500-146299-1 DU	MW-01	Total Recoverable	Water	3005A	

Analysis Batch: 435356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-146299-1	MW-01	Total Recoverable	Water	6020A	435023
500-146299-2	MW-02	Total Recoverable	Water	6020A	435023
500-146299-3	MW-03	Total Recoverable	Water	6020A	435023
500-146299-4	MW-04	Total Recoverable	Water	6020A	435023
500-146299-5	MW-09	Total Recoverable	Water	6020A	435023
500-146299-6	MW-11	Total Recoverable	Water	6020A	435023
500-146299-7	MW-14	Total Recoverable	Water	6020A	435023
500-146299-9	Duplicate	Total Recoverable	Water	6020A	435023
MB 500-435023/1-A	Method Blank	Total Recoverable	Water	6020A	435023
LCS 500-435023/2-A	Lab Control Sample	Total Recoverable	Water	6020A	435023
500-146299-1 MS	MW-01	Total Recoverable	Water	6020A	435023
500-146299-1 MSD	MW-01	Total Recoverable	Water	6020A	435023
500-146299-1 DU	MW-01	Total Recoverable	Water	6020A	435023

Analysis Batch: 435611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-146299-1	MW-01	Total Recoverable	Water	6020A	435023
500-146299-2	MW-02	Total Recoverable	Water	6020A	435023
500-146299-3	MW-03	Total Recoverable	Water	6020A	435023
500-146299-4	MW-04	Total Recoverable	Water	6020A	435023
500-146299-5	MW-09	Total Recoverable	Water	6020A	435023
500-146299-6	MW-11	Total Recoverable	Water	6020A	435023
500-146299-7	MW-14	Total Recoverable	Water	6020A	435023
500-146299-8	MW-16	Total Recoverable	Water	6020A	435023
500-146299-9	Duplicate	Total Recoverable	Water	6020A	435023
MB 500-435023/1-A	Method Blank	Total Recoverable	Water	6020A	435023
LCS 500-435023/2-A	Lab Control Sample	Total Recoverable	Water	6020A	435023
500-146299-1 MS	MW-01	Total Recoverable	Water	6020A	435023
500-146299-1 MSD	MW-01	Total Recoverable	Water	6020A	435023
500-146299-1 DU	MW-01	Total Recoverable	Water	6020A	435023

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

TestAmerica 37 IB: 500-146299-1

General Chemistry

Analysis Batch: 435107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-146299-1	MW-01	Total/NA	Water	SM 2540C	
500-146299-2	MW-02	Total/NA	Water	SM 2540C	
500-146299-3	MW-03	Total/NA	Water	SM 2540C	
500-146299-4	MW-04	Total/NA	Water	SM 2540C	
500-146299-5	MW-09	Total/NA	Water	SM 2540C	
500-146299-6	MW-11	Total/NA	Water	SM 2540C	
500-146299-7	MW-14	Total/NA	Water	SM 2540C	
500-146299-8	MW-16	Total/NA	Water	SM 2540C	
500-146299-9	Duplicate	Total/NA	Water	SM 2540C	
MB 500-435107/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-435107/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 435191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-146299-1	MW-01	Total/NA	Water	SM 4500 F C	
500-146299-2	MW-02	Total/NA	Water	SM 4500 F C	
500-146299-3	MW-03	Total/NA	Water	SM 4500 F C	
500-146299-4	MW-04	Total/NA	Water	SM 4500 F C	
500-146299-5	MW-09	Total/NA	Water	SM 4500 F C	
500-146299-6	MW-11	Total/NA	Water	SM 4500 F C	
500-146299-7	MW-14	Total/NA	Water	SM 4500 F C	
500-146299-8	MW-16	Total/NA	Water	SM 4500 F C	
500-146299-9	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-435191/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-435191/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 436386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-146299-1	MW-01	Total/NA	Water	SM 4500 CI- E	
500-146299-2	MW-02	Total/NA	Water	SM 4500 CI- E	
500-146299-3	MW-03	Total/NA	Water	SM 4500 CI- E	
500-146299-4	MW-04	Total/NA	Water	SM 4500 CI- E	
500-146299-5	MW-09	Total/NA	Water	SM 4500 CI- E	
500-146299-6	MW-11	Total/NA	Water	SM 4500 CI- E	
500-146299-7	MW-14	Total/NA	Water	SM 4500 CI- E	
500-146299-8	MW-16	Total/NA	Water	SM 4500 CI- E	
500-146299-9	Duplicate	Total/NA	Water	SM 4500 CI- E	
MB 500-436386/12	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-436386/13	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 436447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-146299-1	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-146299-2	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-146299-3	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-146299-4	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-146299-5	MW-09	Total/NA	Water	SM 4500 SO4 E	
500-146299-6	MW-11	Total/NA	Water	SM 4500 SO4 E	
500-146299-7	MW-14	Total/NA	Water	SM 4500 SO4 E	
500-146299-8	MW-16	Total/NA	Water	SM 4500 SO4 E	
500-146299-9	Duplicate	Total/NA	Water	SM 4500 SO4 E	

TestAmerica Chicago

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6

8

9

10

11

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Exhibit B

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

TestAmerica 38 lpf 193-146299-1

General Chemistry (Continued)

Analysis Batch: 436447 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-436447/3	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-436447/4	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-146299-1 MS	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-146299-1 MSD	MW-01	Total/NA	Water	SM 4500 SO4 E	

TestAmerica Chicago

Client: KPRG and Associates, Inc.

TestAmerica 39 lpf 193

Client Sample ID: Method Blank

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Type: Total Recoverable

Prep Type: Total Recoverable

Prep Type: Total Recoverable

Project/Site: Waukegan CCR

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-435023/1-A

Matrix: Water

Analysis Batch: 435356

MB MB

Analyte Result Qualifier RL **MDL** Unit **Prepared** Calcium <0.20

0.20

mg/L

Analyzed 06/02/18 10:33 06/04/18 14:17

Prep Batch: 435023

Dil Fac

Lab Sample ID: MB 500-435023/1-A

Matrix: Water

Analysis Batch: 435611

MB MB

Analyte Boron < 0.050

Result Qualifier

RL 0.050 MDL Unit mg/L

Prepared 06/02/18 10:33 06/05/18 14:05

Dil Fac Analyzed

Prep Batch: 435023

Prep Batch: 435023

Prep Batch: 435023

Lab Sample ID: LCS 500-435023/2-A

Matrix: Water

Analyte

Calcium

Analyte

Calcium

Analysis Batch: 435356

Sample Sample

Sample Sample

Sample Sample

54

Result Qualifier

2.4

Result Qualifier

54

Result Qualifier

Spike Added 10.0

Spike

Added

1.00

Spike

Added

10.0

Spike

Added

1 00

Spike

Added

10.0

LCS LCS Result Qualifier 9.00

LCS LCS

MS MS

MS MS

MSD MSD

61.9 4

Result Qualifier

3.37

Result Qualifier

61.3 4

Result Qualifier

1.04

Result Qualifier

Unit mg/L

Unit

mg/L

Unit

mg/L

Unit

mg/L

Unit

mg/L

D %Rec 90

%Rec

%Rec

%Rec

%Rec

76

98

D

70

104

%Rec. Limits 80 - 120

%Rec.

Limits

80 - 120

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 500-435023/2-A

Matrix: Water

Analysis Batch: 435611

Analyte

Boron Lab Sample ID: 500-146299-1 MS

Matrix: Water

Analysis Batch: 435356

Calcium

Lab Sample ID: 500-146299-1 MS **Matrix: Water**

Analysis Batch: 435611

Analyte Boron

Lab Sample ID: 500-146299-1 MSD **Matrix: Water**

Analysis Batch: 435356

Analyte

Lab Sample ID: 500-146299-1 MSD **Matrix: Water**

Analysis Batch: 435611

Sample Sample Analyte Boron

Result Qualifier 2.4

Spike Added 1.00

MSD MSD Result Qualifier 3.40

Unit mg/L

D %Rec

100

75 - 125 TestAmerica Chicago

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Client Sample ID: MW-01

Prep Type: Total Recoverable Prep Batch: 435023 %Rec.

Limits 75 - 125

Client Sample ID: MW-01

Prep Type: Total Recoverable Prep Batch: 435023

%Rec.

Limits

75 - 125

Client Sample ID: MW-01 **Prep Type: Total Recoverable**

> Prep Batch: 435023 %Rec. **RPD** RPD Limits Limit

> 75 - 125 20

Client Sample ID: MW-01 **Prep Type: Total Recoverable**

Prep Batch: 435023 %Rec. **RPD** Limits RPD Limit Lab Sample ID: 500-146299-1 DU

Analysis Batch: 435356

Analysis Batch: 435611

Client Sample ID: MW-01 **Prep Type: Total Recoverable**

Prep Batch: 435023

RPD

D RPD Limit

DU DU Sample Sample Analyte Result Qualifier Result Qualifier Unit Calcium 20 54 53.7 mg/L

Lab Sample ID: 500-146299-1 DU Client Sample ID: MW-01 **Matrix: Water Prep Type: Total Recoverable**

Prep Batch: 435023

DU DU Sample Sample **RPD** Result Qualifier Result Qualifier RPD Limit Analyte Unit Boron 2.4 2.26 mg/L 6 20

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

Result Qualifier

MR MR

<10

Lab Sample ID: MB 500-435107/1 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Water

Analyte

Matrix: Water

Analysis Batch: 435107

MB MB

MDL Unit

mg/L

Prepared Analyzed Dil Fac

06/04/18 02:51

Lab Sample ID: LCS 500-435107/2 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

RL

10

Total Dissolved Solids

Analysis Batch: 435107

LCS LCS Spike %Rec. Added Result Qualifier Unit %Rec Limits **Total Dissolved Solids** 250 280 mg/L 112 80 - 120

Method: SM 4500 CI- E - Chloride, Total

Lab Sample ID: MB 500-436386/12 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 436386

Analyte Result Qualifier RL **MDL** Unit Dil Fac Prepared Analyzed Chloride 2.0 mg/L <2.0 06/11/18 12:07

Lab Sample ID: LCS 500-436386/13 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 436386

Spike LCS LCS %Rec. Added Result Qualifier Analyte Unit D %Rec Limits Chloride 50.0 50.9 mg/L 102 85 - 115

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-435191/3 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 435191

MB MB Analyte Result Qualifier RL **MDL** Unit D **Prepared** Analyzed Dil Fac Fluoride <0.10 0.10 mg/L 06/02/18 14:25

TestAmerica Chicago

PCB 2013-15

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Client: KPRG and Associates, Inc.

TestAmerica Job ID: 500-146299-1

Project/Site: Waukegan CCR

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 500-435191/4 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 435191

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits 10.0 Fluoride 10.3 mg/L 103 80 - 120

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-436447/3 **Client Sample ID: Method Blank Matrix: Water** Prep Type: Total/NA

Analysis Batch: 436447

MB MB **MDL** Unit RL Analyte Result Qualifier D Analyzed Dil Fac Prepared 5.0 Sulfate <5.0 mg/L 06/12/18 07:21

Lab Sample ID: LCS 500-436447/4 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 436447

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Sulfate 20.0 20.4 102 80 - 120 mg/L

Lab Sample ID: 500-146299-1 MS Client Sample ID: MW-01 **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 436447

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Sulfate 350 400 778 mg/L 106 75 - 125

Lab Sample ID: 500-146299-1 MSD Client Sample ID: MW-01 Prep Type: Total/NA

Matrix: Water

Analysis Batch: 436447

RPD Sample Sample Spike MSD MSD %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit Sulfate 350 400 740 96 75 - 125 5 20 mg/L

TestAmerica Chicago

Toct	۱n	nerica	Report To:						BIII T	٠ <u>٠</u>									Page 42	OI 193
10317	17		Contact:	Richard Gnat					Conta		Acco	unts P	ayable						11/120	20
THE LEADER I	N ENVI	RONMENTAL TESTING	Company:	KPRG and A		IC.	-		Comp			Energ						Lab Lot # 500)14DLY	9
TestAmerica (Chica	e pugges	Address:	14665 W. Lis					Addre			elly S						Package Sealed	Samples Se	aded
2417 Bond St.		1300		Brookfield, W									LA 7	0760				(Yes) No	Yes (No	s)
University Park	c. IL 60		Phone:	262-781-047					Phone	e:	713 4	65-41	13					Received on Ice	Samples In	tact
708-534-5200	,	44.	Email:	richardg@		om	,		Email				nrg.	com				(Yes) No	Yes No	N/A
Fax. 708-534-5	5211	500-146299 COC							PO#:	:	4501	57673	2					Temperature °C of	Cooler 3. 14. 3.7.4	1.3.8
Sampler Nam	٥.		Company:	 		#/C	ont.	T		Т	Γ		1				Γ	Within-Hold Time	Preserv. India	ated
Ian John How			1 ' '	sociates Inc.		Volu		 	-	1	 		_					Yes No	(Yes No	
Project Name			+	a Project Num	nber:	Pres		†	+	 								gH-Øheck OK	Res CL ₂ Chec	k OK
Quarterly Wa		an CCR	50011597	- , ,		-		 		1								Yes No	Yes No	
Project Locat			TAT			×	Cont	1			1							Sample Label	s and COC Agre	e
Waukegan,			[15 Days		Matrix	of Of		_@		-							Yes No	COC not pre	sent
Lab PM:		Eric Lang	 			1 -	#		B,C			l	Sulfate							
Laboratory ID	QSW-SW	MW-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0	1 2 3 4 9 1 4	Sampling 5-29-18 5-29-18 5-29-18 5-30-18 5-31-18 5-31-18 6-1-18 5-29-18	12:42 13:54 15:03	W W W W W W W W W W	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		X	X X X X X X X X X X X X X X X X X X X		X	X					Additional An	alyses / Remark	5
RELINQUISHED RELINQUISHED	31+	A	COMPANY: HPRG COMPANY:	· t	DATE: - J-/8 DATE:	14	TIME:		<u> </u>	IVEO B	M	W	co	化	COMP COMP	<u>) ب</u>	H	DATE DATE DATE:	TIME	50
WW = Wastewall W = Water S = Soil SL = Sludge MS = Miscellane OL = Oil	ter	rix Key SE = Sediment SO = Solid DL = Drum Liquid DS = Drum Solid L = Leachate W = Wipe	Conta 1. Plastic 2. VOA Vial 3. Sterile Pla 4. Amber Gla 5. Widemout 6. Other	iss	eservative K 1. HCI, Cool 2. H ₂ SO ₄ , Co 3. HNO ₃ , Coo 4. NaOH, Co 5. NaOH/Zn, 6. Cool to 4°	to 4° ol to 4° ol to 4° ol to 4°			COMIV	MENTS:								Date Received Courier: Hand Deli Bill of Lac	<u></u> -	

STL-8208 (0600)

7. None

6. Other

A = Air

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iling: Received, Clerk's Office 07/19/2019 Exhibit B Login Sample Receipt Checklist Page 43 of 193

Client: KPRG and Associates, Inc.

Job Number: 500-146299-1

Login Number: 146299 List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Creator. Scott, Silerii L		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.1,3.5,3.4,3.7,4.1,3.8
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	

B 1

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J

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Exhibit B

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

TestAmerica Job IB: 500-146299-1

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

PCB 2013-15 Electronic Filing: Received, Clerk's Office 07/19/2019

> Page 45 of 193 **TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 500-150402-1 Client Project/Site: Waukegan CCR

For:

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

Attn: Richard Gnat

Authorized for release by: 8/28/2018 10:02:40 AM

Eric Lang, Manager of Project Management (708)534-5200

eric.lang@testamericainc.com

.....LINKS

Review your project results through Total Access

Have a Question?



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.

Exhibit B

PCB 2013-15

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TestAmprigo July 10, 1003150402-1

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

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Exhibit B

TestAmerica Job ID: 500-150402-1 Client: KPRG and Associates, Inc. Project/Site: Waukegan CCR

Job ID: 500-150402-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-150402-1

Comments

No additional comments.

Receipt

The sample was received on 8/23/2018 1:15 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6° C.

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

General Chemistry

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

Electronic Filing: Received Clerk's Office 07/19/2019

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

TestAmerica 900 ID: 500-150402-1

Method **Method Description** Protocol Laboratory 6020A Metals (ICP/MS) SW846 TAL CHI SM 2540C Solids, Total Dissolved (TDS) TAL CHI SM 3005A Preparation, Total Recoverable or Dissolved Metals 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 = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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

TestAmerica Job IB: 500-150402-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-150402-1	MW-16	Water	08/22/18 14:43	08/23/18 13:15

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Client: KPRG and Associates, Inc.

TestAmerica 50 IB 500-150402-1

Project/Site: Waukegan CCR

Client Sample ID: MW-16 Lab Sample ID: 500-150402-1 Date Collected: 08/22/18 14:43

Matrix: Water

Date Received: 08/23/18 13:15

Method: 6020A - Metals (IC Analyte	•	Recoverable Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	190		0.20		mg/L		08/24/18 08:20	08/24/18 17:49	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1200		10		ma/L		-	08/24/18 07:54	

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

TestAmerica 501 IB: 500-150402-1

Qualifiers

Metals

Qualifier	Qualifier Description	
-		

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.
n	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)

MDC MDL

MDA

Minimum Detectable Activity (Radiochemistry) Minimum Detectable Concentration (Radiochemistry)

Method Detection Limit MLMinimum Level (Dioxin)

NC Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown) ND

PQL Practical Quantitation Limit

QC **Quality Control**

Relative Error Ratio (Radiochemistry) **RER**

RLReporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points RPD

TEF Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin) **TEQ**

Electronic Filing: Received Clark's Office 07/19/2019

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

TestAmerica 9 52 IBf 193-150402-1

Metals

Prep Batch: 446844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150402-1	MW-16	Total Recoverable	Water	3005A	
MB 500-446844/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-446844/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-150402-1 MS	MW-16	Total Recoverable	Water	3005A	
500-150402-1 MSD	MW-16	Total Recoverable	Water	3005A	
500-150402-1 DU	MW-16	Total Recoverable	Water	3005A	

Analysis Batch: 447123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150402-1	MW-16	Total Recoverable	Water	6020A	446844
MB 500-446844/1-A	Method Blank	Total Recoverable	Water	6020A	446844
LCS 500-446844/2-A	Lab Control Sample	Total Recoverable	Water	6020A	446844
500-150402-1 MS	MW-16	Total Recoverable	Water	6020A	446844
500-150402-1 MSD	MW-16	Total Recoverable	Water	6020A	446844
500-150402-1 DU	MW-16	Total Recoverable	Water	6020A	446844

General Chemistry

Analysis Batch: 446816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-150402-1	MW-16	Total/NA	Water	SM 2540C	
MB 500-446816/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-446816/2	Lab Control Sample	Total/NA	Water	SM 2540C	

8/28/2018

TestAmerice 100 1B; 500-150402-1

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Project/Site: Waukegan CCR

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-446844/1-A

Lab Sample ID: LCS 500-446844/2-A

Matrix: Water Analysis Batch: 447123

Analysis Batch: 447123

MB MB

Analyte Result Qualifier RL **MDL** Unit Calcium

<0.20

0.20

mg/L

LCS LCS

MS MS

194 4

Result Qualifier

8.87

Result Qualifier

D

Unit

mg/L

Unit

mg/L

Prepared

%Rec

D %Rec

61

89

Analyzed 08/24/18 08:20 08/24/18 16:22

Dil Fac

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

Client Sample ID: MW-16

Client Sample ID: MW-16

Prep Type: Total Recoverable

Prep Batch: 446844

Prep Batch: 446844

RPD

RPD

Limit

Dil Fac

Prep Type: Total Recoverable

Prep Batch: 446844

Prep Batch: 446844 %Rec.

Limits

%Rec.

Limits

75 - 125

%Rec.

Limits

80 - 120

Lab Sample ID: 500-150402-1 MS

Matrix: Water

Matrix: Water

Analyte

Calcium

Calcium

Analysis Batch: 447123

Analyte

Result Qualifier Calcium

Lab Sample ID: 500-150402-1 MSD **Matrix: Water**

Analysis Batch: 447123

Analyte

Lab Sample ID: 500-150402-1 DU

Analysis Batch: 447123

Analyte

Matrix: Water Sample Sample

Result Qualifier Calcium 190

190

Sample Sample

Sample Sample

190

Result Qualifier

MB MB

<10

Added 10.0

Spike

Added

10.0

Spike

Spike

Added

10.0

MSD MSD

DU DU

185

Result Qualifier

MDL Unit

mg/L

Result Qualifier 191 4

Unit mg/L

Unit

mg/L

28 75 - 125 Client Sample ID: MW-16

%Rec

Prep Type: Total Recoverable Prep Batch: 446844

RPD

RPD Limit 20

Prep Type: Total/NA

Prep Type: Total/NA

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

Lab Sample ID: MB 500-446816/1

Matrix: Water

Analysis Batch: 446816

Analyte **Total Dissolved Solids**

Lab Sample ID: LCS 500-446816/2 **Matrix: Water**

Analysis Batch: 446816

Analyte **Total Dissolved Solids**

RL Result Qualifier 10

Spike

Added

250

LCS LCS Result Qualifier 292

Unit mg/L

D %Rec 117

Prepared

%Rec. Limits 80 - 120

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Analyzed

08/24/18 06:55

TestAmerica Chicago

TestAr	merica	Report To:					Bill 1	Γo:							
		Contact:	Richard Gnat	lichard Gnat			Cont	Contact: Accounts Payable				Lab Lot #	1 1611/17		
THE LEADER IN EN	VIRUNMENTAL TECTING	Company:	KPRG and A	ssociates, In	С		Com	pany:	NRG	Energ	y			Las Lot #50	0-150402
TestAmerica Chic		Address:	14665 W. Lis	bon Rd., Sul	te 2B		Addr	ess:	112	Telly S				Package Sealed	Samples Sected
2417 Bond St.	22).3		Brookfield, W	1 53005					New	Roads	, LA 70	0760		(Yes No	Yes (No)
University Park, IL 6	阿达亚	Phone:	262-781-047	5			Phon	e;	713	465-41	13			Received on Ice	Samples Intact
708-534-5200		Email:	richardg@	kprgine.co	<u>om</u>		Emal		invo	oices(@nrg.	com		(Yes No	Yes No N/A
Fax. 708-534-5211	500-150402 COC						PO#		4501	57673	2			Temperature °C of	Cooler 2. 6
Sampler Name:		Company:		inisanjaniningas karidana dila meraning	#/C	ont.								Within Field Time	Presexv. Indicated
lan John Howiesor	<u> </u>	KPRG & Ass	sociates Inc.	Decimal and services per	Volu	me		ļ	<u> </u>					Yes No	Yes No N/A
Project Name:			n Project Numi	ber:	Pres	erv.			<u> </u>					DH 6heck OK	Res CL ₂ Check OK
Quarterly Wauke	gan CCR	50011597		-	_	₁₂			1					Yes No	Yes No N/A
Project Location:		TAT			Matrix	# of Conf	-							Sample Lab	els and COC Agree
Waukegan, IL			15 Days	a de esperante de la company de la compa	- S	of #	ALCIUM						1	(Yes No	COC not present
Lab PM:	Eric Lang						2 1			60	ate				
Laboratory ID	Client Sam	ple ID	Sampling Tir	Date ne			6020A - Total	SOF	4500_F_C - Fluoride	SM4500_CI_E Chloride	SM4500_SO4_E - Sulfate			Additional A	nalyses / Remarks
	MW-1	6	8-22-18	14:43	W	2	\sim	X							
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WW = Wastewater W = Water S = Soil SL = Studge MS = Miscellaneous	atrix Key SE = Sediment SO = Solld DL = Drum Liquid DS = Drum Solid L = Leachate	1. Plastic 2. VOA Vial 3. Sterile Pla 4. Amber Gle 5. Widemout	188	reservative M 1. HCl, Cool 2. H ₂ SO ₄ , Coo 3. HNO ₃ , Coo 4. NaOH, Co 5. NaOH/Zn,	to 4° ool to 4° ol to 4° ol to 4°		COMN	MENTS						Courier: Hand Da	لمستواكيا
OL = OII	W = Wipe	6. Other		6. Cool to 4°			<u></u>						**************	Bill of La	
A = Air	Ω=	}		7 None											1 of 1

STL-8208 (0600)

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Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-150402-1

Login Number: 150402 List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Creator. Scott, Silem L		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	2.6
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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Client: KPRG and Associates, Inc. Project/Site: Waukegan CCR

TestAmerica Job IB: 500-150402-1

I also and a mark a mark a Chilan

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 500-154522-1 Client Project/Site: Waukegan CCR

For:

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

Attn: Richard Gnat

Authorized for release by: 11/27/2018 5:20:35 PM

Eric Lang, Manager of Project Management (708)534-5200

eric.lang@testamericainc.com

.....LINKS

Review your project results through Total Access

Have a Question?



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.

Exhibit B

PCB 2013-15

Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit B

TestAmprigo Job Up 1003154522-1

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

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PCB 2013-15 Electronic Filing: Received Clark's Office 07/19/2019

Exhibit B

TestAmerica Job ID: 500-154522-1 Client: KPRG and Associates, Inc.

Project/Site: Waukegan CCR

Job ID: 500-154522-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-154522-1

Comments

No additional comments.

Receipt

The samples were received on 11/8/2018 3:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.4° C.

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

General Chemistry

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

Electronic Filing: Received Clerk's Office 07/19/2019

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

TestAmerica Job IB: 500-154522-1

Method	Method Description	Protocol	Laboratory
6020A	Metals (ICP/MS)	SW846	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
SM 4500 CI- 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

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

TestAmerica Chicago

Electronic Filing: Beceived Clerk's Office 07/19/2019

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

Duplicate

500-154522-9

TestAmerica 100 IB: 500-154522-1

11/05/18 00:00 11/08/18 15:20

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-154522-1	MW-01	Water	11/05/18 12:37	11/08/18 15:20
500-154522-2	MW-02	Water	11/05/18 13:44	11/08/18 15:20
500-154522-3	MW-03	Water	11/05/18 15:11	11/08/18 15:20
500-154522-4	MW-04	Water	11/06/18 10:15	11/08/18 15:20
500-154522-5	MW-09	Water	11/06/18 12:55	11/08/18 15:20
500-154522-6	MW-11	Water	11/06/18 14:08	11/08/18 15:20
500-154522-7	MW-14	Water	11/06/18 15:56	11/08/18 15:20
500-154522-8	MW-16	Water	11/06/18 12:10	11/08/18 15:20

Water

3

4

-

9

10

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit B

Client: KPRG and Associates, Inc.

TestAmerica 969 IB: 500-154522-1

Project/Site: Waukegan CCR

Client Sample ID: MW-01 Lab Sample ID: 500-154522-1

Matrix: Water

11/18/18 23:16

Date Collected: 11/05/18 12:37 Date Received: 11/08/18 15:20

Sulfate

Method: 6020A - Metals (IC	•								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.0		0.25		mg/L		11/09/18 07:50	11/12/18 13:50	5
Calcium	38		0.20		mg/L		11/09/18 07:50	11/09/18 16:57	1
- General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	630		10		mg/L			11/09/18 07:38	1
Chloride	43		2.0		mg/L			11/24/18 15:26	1
Fluoride	0.25		0.10		mg/L			11/10/18 14:45	1

100

mg/L

PCB 2013-15 119 Exhibit B

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit

Client: KPRG and Associates, Inc.

TestAmerica 963 IB: 500-154522-1

Project/Site: Waukegan CCR

Client Sample ID: MW-02 Lab Sample ID: 500-154522-2

Matrix: Water

Date Collected: 11/05/18 13:44 Date Received: 11/08/18 15:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.1		0.25		mg/L		11/09/18 07:50	11/12/18 14:16	5
Calcium	77		0.20		mg/L		11/09/18 07:50	11/09/18 17:24	1
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	610		10		mg/L			11/09/18 07:43	1
Chloride	59		2.0		mg/L			11/24/18 15:27	1
Fluoride	0.61		0.10		mg/L			11/10/18 14:54	1
Sulfate	180		50		mg/L			11/18/18 23:17	10

5

7

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11

PCB 2013-15 Exhibit B

Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 965 IB 500-154522-1

Project/Site: Waukegan CCR

Client Sample ID: MW-03 Lab Sample ID: 500-154522-3 Date Collected: 11/05/18 15:11

Matrix: Water

Date Received: 11/08/18 15:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.4		0.25		mg/L		11/09/18 07:50	11/12/18 14:20	5
Calcium	54		0.20		mg/L		11/09/18 07:50	11/09/18 17:28	1
General Chemistry Analyte	Pocult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Allalyte	Kesuit	Qualifier	NL.	IVIDE	Ullit	ט	riepaieu	Allalyzeu	DIIFac
									
Total Dissolved Solids	500		10		mg/L		<u> </u>	11/09/18 07:45	1
	500 54		10 2.0		mg/L mg/L			11/09/18 07:45 11/24/18 16:49	1 1
Total Dissolved Solids Chloride Fluoride					J				1 1 1

Electronic Filing Received Clerk's Office 07/19/2019 Exhibit B

Client: KPRG and Associates, Inc.

TestAmerica 905 IB: 500-154522-1

Project/Site: Waukegan CCR

Client Sample ID: MW-04 Lab Sample ID: 500-154522-4 Date Collected: 11/06/18 10:15

Matrix: Water

Date Received: 11/08/18 15:20

Method: 6020A - Metals (IC	,	Recoverable Qualifier		MDI	Unit	D	Dropored	Analyzad	Dil Fac
Analyte	Result	Quaimer	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Boron	2.5		0.25		mg/L		11/09/18 07:50	11/12/18 14:23	5
Calcium	150		0.20		mg/L		11/09/18 07:50	11/09/18 17:32	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	900		10		mg/L			11/09/18 07:48	1
Chloride	58		2.0		mg/L			11/24/18 16:50	1
Fluoride	0.37		0.10		mg/L			11/10/18 15:01	1
Sulfate	240		100		ma/L			11/18/18 23:21	20

Electronic Filing Received Clerk's Office 07/19/2019 Exhibit B

mg/L

mg/L

Client: KPRG and Associates, Inc.

TestAmerica 966 IB: 506-154522-1

11/10/18 15:04

11/18/18 23:22

Project/Site: Waukegan CCR

Client Sample ID: MW-09 Lab Sample ID: 500-154522-5 Date Collected: 11/06/18 12:55

Matrix: Water

Date Received: 11/08/18 15:20

Fluoride

Sulfate

Method: 6020A - Metals (IC Analyte	,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	30		5.0		mg/L		11/09/18 07:50	11/12/18 15:38	100
Calcium	170		0.20		mg/L		11/09/18 07:50	11/09/18 17:36	1
- General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	930		10		mg/L			11/09/18 07:51	1
Chloride	23		2.0		mg/L			11/24/18 16:50	1

0.10

100

0.11

290

Electronic Filing Received Clerk's Office 07/19/2019 Exhibit B

mg/L

Client: KPRG and Associates, Inc.

TestAmerica 967 IB: 500-154522-1

Project/Site: Waukegan CCR

Client Sample ID: MW-11 Lab Sample ID: 500-154522-6 Date Collected: 11/06/18 14:08

Matrix: Water

11/18/18 23:23

Date Received: 11/08/18 15:20

Sulfate

Method: 6020A - Metals (IC	P/MS) - Total F	Recoverable							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.3		0.35		mg/L		11/09/18 07:50	11/12/18 14:31	7
Calcium	170		0.20		mg/L		11/09/18 07:50	11/09/18 17:39	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	990		10		mg/L			11/09/18 07:53	1
Chloride	150		10		mg/L			11/24/18 16:51	5
Fluoride	0.12		0.10		mg/L			11/10/18 15:06	1

Electronic Filing Received Clerk's Office 07/19/2019 Exhibit B

mg/L

Client: KPRG and Associates, Inc.

TestAmerica 968 IB: 506-154522-1

Project/Site: Waukegan CCR

Client Sample ID: MW-14 Lab Sample ID: 500-154522-7 Date Collected: 11/06/18 15:56

Matrix: Water

11/18/18 23:26

Date Received: 11/08/18 15:20

Sulfate

Analyte	,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.98		0.50		mg/L		11/09/18 07:50	11/12/18 14:35	1
Calcium	160		2.0		mg/L		11/09/18 07:50	11/09/18 17:43	1
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analvzed	Dil Fac
Total Dissolved Solids	610		10		mg/L	— <u> </u>		11/09/18 07:56	1
Chloride	110		10		mg/L			11/24/18 16:51	5
Fluoride	0.24		0.10		mg/L			11/10/18 15:19	1

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit B

Client: KPRG and Associates, Inc.

TestAmerica 969 IB 500-154522-1

Project/Site: Waukegan CCR

Client Sample ID: MW-16 Lab Sample ID: 500-154522-8

Matrix: Water

Date Collected: 11/06/18 12:10 Date Received: 11/08/18 15:20

Method: 6020A - Metals (IC Analyte	,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.9		0.50		mg/L		11/09/18 07:50	11/12/18 14:38	10
Calcium	380		2.0		mg/L		11/09/18 07:50	11/12/18 14:38	10
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1900		10		mg/L			11/09/18 07:58	1
Total Dissolved Solids Chloride	1900 150		10 10		mg/L mg/L			11/09/18 07:58 11/26/18 14:11	1 5
					U				1 5 1

PCB 2013-15 Exhibit B

Electronic Filing Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 70 IB: 500-154522-1

11/09/18 08:01

11/26/18 18:38

11/10/18 15:26

11/18/18 23:28

Project/Site: Waukegan CCR

Client Sample ID: Duplicate Lab Sample ID: 500-154522-9 Date Collected: 11/05/18 00:00

580

42

0.24

240

Matrix: Water

Date Received: 11/08/18 15:20

Total Dissolved Solids

Chloride

Fluoride

Sulfate

Method: 6020A - Metals (ICP) Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.9	0.25	mg/L		11/09/18 07:50	11/12/18 14:42	5
Calcium	38	0.20	mg/L		11/09/18 07:50	11/09/18 17:51	1
General Chemistry Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analvzed	Dil Fac

10

2.0

0.10

50

mg/L

mg/L

mg/L

mg/L

Electronic Filing Perfectives / Glossa Office 07/19/2019

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

Reporting Limit or Requested Limit (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Relative Percent Difference, a measure of the relative difference between two points

TestAmerica Job IB: 500-154522-1

Glossary

RL

RPD

TEF TEQ

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)

Electronic Filing: Received Clark's Office 07/19/2019

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

TestAmerica 9,00 1Bf 193-154522-1

Metals

Prep Batch: 459291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-154522-1	MW-01	Total Recoverable	Water	3005A	
500-154522-2	MW-02	Total Recoverable	Water	3005A	
500-154522-3	MW-03	Total Recoverable	Water	3005A	
500-154522-4	MW-04	Total Recoverable	Water	3005A	
500-154522-5	MW-09	Total Recoverable	Water	3005A	
500-154522-6	MW-11	Total Recoverable	Water	3005A	
500-154522-7	MW-14	Total Recoverable	Water	3005A	
500-154522-8	MW-16	Total Recoverable	Water	3005A	
500-154522-9	Duplicate	Total Recoverable	Water	3005A	
MB 500-459291/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-459291/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-154522-1 MS	MW-01	Total Recoverable	Water	3005A	
500-154522-1 MSD	MW-01	Total Recoverable	Water	3005A	
500-154522-1 DU	MW-01	Total Recoverable	Water	3005A	

Analysis Batch: 459576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-154522-1	MW-01	Total Recoverable	Water	6020A	459291
500-154522-2	MW-02	Total Recoverable	Water	6020A	459291
500-154522-3	MW-03	Total Recoverable	Water	6020A	459291
500-154522-4	MW-04	Total Recoverable	Water	6020A	459291
500-154522-5	MW-09	Total Recoverable	Water	6020A	459291
500-154522-6	MW-11	Total Recoverable	Water	6020A	459291
500-154522-7	MW-14	Total Recoverable	Water	6020A	459291
500-154522-9	Duplicate	Total Recoverable	Water	6020A	459291
MB 500-459291/1-A	Method Blank	Total Recoverable	Water	6020A	459291
LCS 500-459291/2-A	Lab Control Sample	Total Recoverable	Water	6020A	459291
500-154522-1 MS	MW-01	Total Recoverable	Water	6020A	459291
500-154522-1 MSD	MW-01	Total Recoverable	Water	6020A	459291
500-154522-1 DU	MW-01	Total Recoverable	Water	6020A	459291

Analysis Batch: 459758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-154522-1	MW-01	Total Recoverable	Water	6020A	459291
500-154522-2	MW-02	Total Recoverable	Water	6020A	459291
500-154522-3	MW-03	Total Recoverable	Water	6020A	459291
500-154522-4	MW-04	Total Recoverable	Water	6020A	459291
500-154522-6	MW-11	Total Recoverable	Water	6020A	459291
500-154522-7	MW-14	Total Recoverable	Water	6020A	459291
500-154522-8	MW-16	Total Recoverable	Water	6020A	459291
500-154522-9	Duplicate	Total Recoverable	Water	6020A	459291
MB 500-459291/1-A	Method Blank	Total Recoverable	Water	6020A	459291
LCS 500-459291/2-A	Lab Control Sample	Total Recoverable	Water	6020A	459291
500-154522-1 MS	MW-01	Total Recoverable	Water	6020A	459291
500-154522-1 MSD	MW-01	Total Recoverable	Water	6020A	459291
500-154522-1 DU	MW-01	Total Recoverable	Water	6020A	459291

Analysis Batch: 459869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-154522-5	MW-09	Total Recoverable	Water	6020A	459291

TestAmerica Chicago

11/27/2018

ssociates Inc

TestAmerica Job IB: 500-154522-1

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

General Chemistry

Analysis Batch: 459269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-154522-1	MW-01	Total/NA	Water	SM 2540C	
500-154522-2	MW-02	Total/NA	Water	SM 2540C	
500-154522-3	MW-03	Total/NA	Water	SM 2540C	
500-154522-4	MW-04	Total/NA	Water	SM 2540C	
500-154522-5	MW-09	Total/NA	Water	SM 2540C	
500-154522-6	MW-11	Total/NA	Water	SM 2540C	
500-154522-7	MW-14	Total/NA	Water	SM 2540C	
500-154522-8	MW-16	Total/NA	Water	SM 2540C	
500-154522-9	Duplicate	Total/NA	Water	SM 2540C	
MB 500-459269/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-459269/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-154522-1 DU	MW-01	Total/NA	Water	SM 2540C	

Analysis Batch: 459707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-154522-1	MW-01	Total/NA	Water	SM 4500 F C	
500-154522-2	MW-02	Total/NA	Water	SM 4500 F C	
500-154522-3	MW-03	Total/NA	Water	SM 4500 F C	
500-154522-4	MW-04	Total/NA	Water	SM 4500 F C	
500-154522-5	MW-09	Total/NA	Water	SM 4500 F C	
500-154522-6	MW-11	Total/NA	Water	SM 4500 F C	
500-154522-7	MW-14	Total/NA	Water	SM 4500 F C	
500-154522-8	MW-16	Total/NA	Water	SM 4500 F C	
500-154522-9	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-459707/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-459707/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-154522-1 MS	MW-01	Total/NA	Water	SM 4500 F C	
500-154522-1 MSD	MW-01	Total/NA	Water	SM 4500 F C	

Analysis Batch: 460758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-154522-1	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-154522-2	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-154522-3	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-154522-4	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-154522-5	MW-09	Total/NA	Water	SM 4500 SO4 E	
500-154522-6	MW-11	Total/NA	Water	SM 4500 SO4 E	
500-154522-7	MW-14	Total/NA	Water	SM 4500 SO4 E	
500-154522-8	MW-16	Total/NA	Water	SM 4500 SO4 E	
500-154522-9	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-460758/3	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-460758/4	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-154522-2 MS	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-154522-2 MSD	MW-02	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 461554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-154522-1	MW-01	Total/NA	Water	SM 4500 CI- E	
500-154522-2	MW-02	Total/NA	Water	SM 4500 CI- E	
500-154522-3	MW-03	Total/NA	Water	SM 4500 CI- E	
500-154522-4	MW-04	Total/NA	Water	SM 4500 CI- E	

TestAmerica Chicago

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Electronic Filing: Received Clerk's Office 07/19/2019

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

TestAmerica 7.4 lpf 193-154522-1

General Chemistry (Continued)

Analysis Batch: 461554 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-154522-5	MW-09	Total/NA	Water	SM 4500 CI- E	
500-154522-6	MW-11	Total/NA	Water	SM 4500 CI- E	
500-154522-7	MW-14	Total/NA	Water	SM 4500 CI- E	
MB 500-461554/35	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-461554/36	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 461722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-154522-8	MW-16	Total/NA	Water	SM 4500 CI- E	
MB 500-461722/12	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-461722/13	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
500-154522-8 MS	MW-16	Total/NA	Water	SM 4500 CI- E	
500-154522-8 MSD	MW-16	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 461752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-154522-9	Duplicate	Total/NA	Water	SM 4500 CI- E	
MB 500-461752/61	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-461752/62	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
500-154522-9 MS	Duplicate	Total/NA	Water	SM 4500 CI- E	
500-154522-9 MSD	Duplicate	Total/NA	Water	SM 4500 CI- E	

MDL Unit

MDL Unit

LCS LCS

LCS LCS

MS MS

MS MS

MSD MSD

47.1

Result Qualifier

2.92

Result Qualifier

45.9

Result Qualifier

0.953

Result Qualifier

8.19

Result Qualifier

mg/L

Unit

mg/L

Unit

mg/L

Unit

mg/L

Unit

mg/L

Unit

mg/L

mg/L

RL

0.20

RL

0.050

Spike

Added

Spike

Added

1.00

Spike

Added

10.0

Spike

Added

1 00

Spike

Added

10.0

10.0

Client: KPRG and Associates, Inc.

TestAmerice Job ID: 500-154522-1

Client Sample ID: Method Blank

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Type: Total Recoverable

%Rec.

Limits

%Rec.

Limits

%Rec.

Limits

75 - 125

%Rec.

Limits

75 - 125

%Rec.

Limits

75 - 125

%Rec.

80 - 120

Client Sample ID: MW-01

Client Sample ID: MW-01

Client Sample ID: MW-01

Client Sample ID: MW-01

Prep Type: Total Recoverable

Prep Type: Total Recoverable

Prep Type: Total Recoverable

Client Sample ID: Lab Control Sample

80 - 120

Prep Type: Total Recoverable

Analyzed

11/09/18 07:50 11/09/18 16:49

11/09/18 07:50 11/12/18 13:42

Client Sample ID: Lab Control Sample

Prepared

Prepared

82

%Rec

%Rec

%Rec

%Rec

96

90

D

84

95

D %Rec

Prep Type: Total Recoverable

Analyzed

Prep Batch: 459291

RPD

RPD

Limit

RPD

Limit

20

Project/Site: Waukegan CCR

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-459291/1-A **Matrix: Water**

Analysis Batch: 459576

MB MB

Analyte Result Qualifier

<0.20

<0.050

Sample Sample

Sample Sample

Sample Sample

38

Result Qualifier

2.0

Result Qualifier

38

Result Qualifier

MB MB

Result Qualifier

Calcium

Lab Sample ID: MB 500-459291/1-A **Matrix: Water**

Analysis Batch: 459758

Analyte

Lab Sample ID: LCS 500-459291/2-A

Matrix: Water

Boron

Calcium

Analysis Batch: 459576

Analyte

Lab Sample ID: LCS 500-459291/2-A **Matrix: Water**

Analysis Batch: 459758

Analyte

Boron

Lab Sample ID: 500-154522-1 MS **Matrix: Water**

Analysis Batch: 459576

Analyte

Calcium

Lab Sample ID: 500-154522-1 MS

Matrix: Water

Analysis Batch: 459758

Analyte

Boron

Lab Sample ID: 500-154522-1 MSD

Matrix: Water

Analysis Batch: 459576

Analyte Calcium

Lab Sample ID: 500-154522-1 MSD **Matrix: Water**

Analysis Batch: 459758

Sample Sample Result Qualifier Analyte

Boron

Spike Added 2.0 1.00

Result Qualifier 2.94

MSD MSD

Unit mg/L

D %Rec 92

Limits RPD 75 - 125

Prep Type: Total Recoverable

Dil Fac

Dil Fac

Prep Batch: 459291

TestAmerica 700 IB: 500-154522-1

Project/Site: Waukegan CCR

Lab Sample ID: 500-154522-1 DU Client Sample ID: MW-01

Matrix: Water Analysis Batch: 459576

Prep Type: Total Recoverable Prep Batch: 459291 RPD

DU DU Sample Sample Analyte Result Qualifier Result Qualifier Unit D RPD Limit Calcium 38 0.8 20 37.8 mg/L

Lab Sample ID: 500-154522-1 DU Client Sample ID: MW-01 **Matrix: Water Prep Type: Total Recoverable Analysis Batch: 459758**

Prep Batch: 459291

DU DU Sample Sample **RPD** Result Qualifier Result Qualifier RPD Limit Analyte Unit Boron 2.0 1.94 mg/L 20

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

Lab Sample ID: MB 500-459269/1 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 459269

MB MB **MDL** Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac **Total Dissolved Solids** <10 10 mg/L 11/09/18 07:02

Lab Sample ID: LCS 500-459269/2 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 459269

LCS LCS Spike %Rec. Added Result Qualifier Unit %Rec Limits Total Dissolved Solids 250 268 mg/L 107 80 - 120

Lab Sample ID: 500-154522-1 DU Client Sample ID: MW-01 **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 459269

DU DU RPD Sample Sample Analyte Result Qualifier Result Qualifier Unit RPD Limit **Total Dissolved Solids** 630 644 mg/L

Method: SM 4500 CI- E - Chloride, Total

Lab Sample ID: MB 500-461554/35 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 461554

MB MB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 2.0 Chloride 11/24/18 15:11 <2.0 mg/L

Lab Sample ID: LCS 500-461554/36 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 461554

LCS LCS Spike %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Chloride 50.0 51.5 mg/L 103 85 - 115

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Client: KPRG and Associates, Inc.

TestAmerica Job ID: 500-154522-1

Project/Site: Waukegan CCR

Method: SM	4500 CI-	E - Chloride,	Total ((Continued)
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Lab Sample ID: MB 500-461722/12 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 461722

MB MB Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac D Prepared 2.0 11/26/18 13:24 Chloride <2.0 mg/L

Lab Sample ID: LCS 500-461722/13 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 461722

Spike LCS LCS %Rec. Added Limits Analyte Result Qualifier Unit %Rec D 85 - 115 Chloride 50.0 52.2 mg/L 104

Lab Sample ID: 500-154522-8 MS Client Sample ID: MW-16 Prep Type: Total/NA

Matrix: Water

Analysis Batch: 461722

Sample Sample Spike MS MS %Rec. Result Qualifier Added Result Qualifier %Rec Limits Analyte Unit D Chloride 150 50.0 196 mg/L 99 75 - 125

Lab Sample ID: 500-154522-8 MSD Client Sample ID: MW-16 **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 461722

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 150 50.0 196 99 75 - 125 mg/L

Lab Sample ID: MB 500-461752/61 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 461752

Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac Prepared Chloride <2.0 2.0 11/26/18 18:35 mg/L

Lab Sample ID: LCS 500-461752/62 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 461752

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits 100 Chloride 50.0 50.2 mg/L 85 - 115

Lab Sample ID: 500-154522-9 MS **Client Sample ID: Duplicate** Prep Type: Total/NA

MR MR

Matrix: Water

Analysis Batch: 461752

Sample Sample Spike MS MS %Rec. Result Qualifier Added Limits **Analyte** Result Qualifier Unit %Rec Chloride 42 50.0 86.4 mg/L 90 75 - 125

Lab Sample ID: 500-154522-9 MSD **Client Sample ID: Duplicate** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 461752 RPD Sample Sample Spike MSD MSD %Rec. Analyte Result Qualifier Added Limits RPD Limit Result Qualifier Unit D %Rec Chloride 42 50.0 89 75 - 125 0 86.1 mg/L

TestAmerica 78 lpf 193

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: MW-01

Client Sample ID: MW-01

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

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

Prep Type: Total/NA

Project/Site: Waukegan CCR

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-459707/3

Matrix: Water

Analysis Batch: 459707

MB MB

Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac **Prepared** 0.10 11/10/18 14:40 Fluoride <0.10 mg/L

Lab Sample ID: LCS 500-459707/4

Matrix: Water

Analysis Batch: 459707

Spike LCS LCS %Rec. Added Limits Analyte Result Qualifier Unit D %Rec Fluoride 10.0 10.2 mg/L 102 80 - 120

Lab Sample ID: 500-154522-1 MS

Matrix: Water

Analysis Batch: 459707

Sample Sample Spike MS MS %Rec. **Result Qualifier** Added Result Qualifier Analyte Unit D %Rec Limits Fluoride 0.25 5.00 5.23 100 75 - 125 mg/L

Lab Sample ID: 500-154522-1 MSD

Matrix: Water

Analysis Batch: 459707

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Fluoride	0.25		5.00	5.26		mg/L		100	75 - 125	1	20

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-460758/3

Matrix: Water

Analysis Batch: 460758

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			11/18/18 23:14	1

Lab Sample ID: LCS 500-460758/4

Matrix: Water

Analysis Batch: 460758

Analysis Baton. 400700	Spike	LCS LCS			%Rec.	
Analyte	Added	Result Qualifier	r Unit	D %Rec	Limits	
Sulfate	20.0	20.7	mg/L	103	80 - 120	

Lab Sample ID: 500-154522-2 MS

Matrix: Water

Analysis Batch: 460/58										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Sulfate	180		400	583		mg/L		101	75 - 125	

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Client: KPRG and Associates, Inc.

TestAmerica 300 IB: 500-154522-1

Project/Site: Waukegan CCR

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

Client Sample ID: MW-02 Lab Sample ID: 500-154522-2 MSD **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 460758

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Sulfate	180		400	595		mg/L		104	75 - 125	2	20

Electronic Filing: Received, Clerk's Office 07/19/2019

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10317	ZI		Contact:	Richard Gna	t			$\overline{}$	Conta		Acco	unts P	ayable					
THE LEADER IN	ENVI	RONMENTAL TESTING	Company:	KPRG and A		С.			Comp		NRG						Lab Lot # 500	1-15452
estAmerica Cl	h'	eur.	Address:	14665 W. Lis					Addre			elly S					Package Sealed	Samples Seale
417 Bond St.		<u> 1200-c</u>		Brookfield, V	<u>'</u>								, LA 7	0760			Yes No	Yes No
Iniversity Park,	II	ELIGHT.	Phone:	262-781-047	_			F	Phone		713 4		 				Received on Ice	Samples Intact
08-534-5200		U zi ax	Email:	_richardg@		om		_	Email		invo	ices@	nrg.	com			(es) No	(Yes) No
ax. 708-534 - 52	21 50	0-154522 COC	<u> </u>						PO#:		4501	7673	2				Temperature °C of 0	,
ampler Name:	:		Company:			#/C	ont.						T				Within Hold Time	Pregery. Indicate
ın John Howie	son		KPRG & As	sociates Inc.		Volu	me										Yes No	Yes No
roject Name:			TestAmerica	a Project Nun	nber:	Pres	erv.										pH*Sheck OK	Res CL ₂ Check C
Quarterly Wau	ıkega	an CCR	50011597	-													Yes No	Yes No
roject Locatio	n:		TAT	•		ŀĕ	Cont		l						1		Sample Label	s and COC Agree
Vaukegan, II				15 Days		Matrix	6		<u>(ā</u>								Yes No	COC not preser
ab PM:		Eric Lang					#		о (д			o	Sulfate			1	1200	-
Laboratory ID	MS-MSD	Client Samp		Sampling Tir	Date ne				6020A - Total Metals (B,Ca)	2540C -TDS	4500_F_C - Fluoride	SM4500_CI_E Chloride	SM4500_SO4_E -				Additional An	alyses / Remarks
		MW-01		11-5-18	12:37	W	2		Х	Х	Х	Х	Х					
<u> </u>		MW-02	2	11-5-18	13:44	W	2		х	Х	Х	Х	Х					·
3		MW-03	}	11-5-18	15:11	W	2		Х	Х	Х	Х	Х					
$-\psi$		MW-04		11-6-18	10:15	W	2		Х	Х	Х	Х	Х					
5		MW-09)	11-6-18	12:55	w	2		х	Х	Х	Х	Х					
4		MW-11		11-6-18	14:08	W	2		X	Х	Х	Х	Х					
Z		MW-14		11-6-18	15:56	W	2		X	X	Х	X	Х			<u> </u>		
8		MW-16	<u> </u>	11-6-18	12:10	W	2		х	Х	Х	X	Х					
9		Duplicate	es	11-5-18		W	2		х	Х	Х	Х	Х					
•		<i>b</i>	,		<u>.</u>													
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ELINQUISHED B'	1.	V	COMPANY:		DATE:		TIME:	l _K	RĒCEIV	ıch RJ	. y			C	COMPANY:		DATE:	TIME:
W = Wastewater = Water = Soil . = Sludge S = Miscellaneous		ix Key SE = Sediment SO = Solid DL = Drum Liquid DS = Drum Solid L = Leachate	Contai 1. Plastic 2. VOA Vial 3. Sterile Plat 4. Amber Gla 5. Widemoutt	ss	reservative K 1. HCl, Cool t 2. H ₂ SO ₄ , Coo 3. HNO ₃ , Coo 4. NaOH, Coo 5. NaOH/Zn,	o 4" ol to 4° il to 4° ol to 4°	A ⁰	C	OMME	ENTS:							Date Received Courier: Hand Deli	yered
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Login Sample Receipt Checklist

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Client: KPRG and Associates, Inc.

Job Number: 500-154522-1

Login Number: 154522 List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

ordator: Goott, Griorii E		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	0.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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

TestAmerica 300 IB: 500-154522-1

Client Sample ID: MW-01

Lab Sample ID: 500-154522-1 Date Collected: 11/05/18 12:37 **Matrix: Water**

Date Received: 11/08/18 15:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			459291	11/09/18 07:50	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	459576	11/09/18 16:57	FXG	TAL CHI
Total Recoverable	Prep	3005A			459291	11/09/18 07:50	SAH	TAL CHI
Total Recoverable	Analysis	6020A		5	459758	11/12/18 13:50	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	459269	11/09/18 07:38	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		1	461554	11/24/18 15:26	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	459707	11/10/18 14:45	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	460758		CLB	TAL CHI
					(Start) 1	1/18/18 23:16		
					(End) 1	1/18/18 23:17		

Client Sample ID: MW-02 Lab Sample ID: 500-154522-2 **Matrix: Water**

Date Collected: 11/05/18 13:44

Date Received: 11/08/18 15:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			459291	11/09/18 07:50	SAH	TAL CH
Total Recoverable	Analysis	6020A		1	459576	11/09/18 17:24	FXG	TAL CH
Total Recoverable	Prep	3005A			459291	11/09/18 07:50	SAH	TAL CH
Total Recoverable	Analysis	6020A		5	459758	11/12/18 14:16	FXG	TAL CH
Total/NA	Analysis	SM 2540C		1	459269	11/09/18 07:43	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		1	461554	11/24/18 15:27	EAT	TAL CH
Total/NA	Analysis	SM 4500 F C		1	459707	11/10/18 14:54	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		10	460758		CLB	TAL CH
					(Start) 1	1/18/18 23:17		
					(End) 1	1/18/18 23:18		

Client Sample ID: MW-03 Lab Sample ID: 500-154522-3 Date Collected: 11/05/18 15:11 **Matrix: Water**

Date Received: 11/08/18 15:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			459291	11/09/18 07:50	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	459576	11/09/18 17:28	FXG	TAL CHI
Total Recoverable	Prep	3005A			459291	11/09/18 07:50	SAH	TAL CH
Total Recoverable	Analysis	6020A		5	459758	11/12/18 14:20	FXG	TAL CH
Total/NA	Analysis	SM 2540C		1	459269	11/09/18 07:45	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		1	461554	11/24/18 16:49	EAT	TAL CH
Total/NA	Analysis	SM 4500 F C		1	459707	11/10/18 14:58	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		10	460758		CLB	TAL CH
					(Start) 1	1/18/18 23:20		
					(End) 1	1/18/18 23:21		

Exhibit B

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

TestAmerica 900 ID: 500-154522-1

Client Sample ID: MW-04

Lab Sample ID: 500-154522-4 Date Collected: 11/06/18 10:15

Matrix: Water

Date Received: 11/08/18 15:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			459291	11/09/18 07:50	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	459576	11/09/18 17:32	FXG	TAL CH
Total Recoverable	Prep	3005A			459291	11/09/18 07:50	SAH	TAL CH
Total Recoverable	Analysis	6020A		5	459758	11/12/18 14:23	FXG	TAL CH
Total/NA	Analysis	SM 2540C		1	459269	11/09/18 07:48	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		1	461554	11/24/18 16:50	EAT	TAL CH
Total/NA	Analysis	SM 4500 F C		1	459707	11/10/18 15:01	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		20	460758		CLB	TAL CH
					(Start) 1	1/18/18 23:21		
					(End) 1	1/18/18 23:22		

Client Sample ID: MW-09 Lab Sample ID: 500-154522-5

Matrix: Water

Date Collected: 11/06/18 12:55 Date Received: 11/08/18 15:20

Batch Dilution Batch **Batch** Prepared **Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Lab Total Recoverable Prep 3005A 459291 11/09/18 07:50 SAH TAL CHI Total Recoverable 6020A 459576 11/09/18 17:36 FXG Analysis 1 TAL CHI Total Recoverable Prep 3005A 459291 11/09/18 07:50 SAH TAL CHI Total Recoverable 6020A Analysis 100 459869 11/12/18 15:38 FXG TAL CHI Total/NA Analysis SM 2540C 459269 11/09/18 07:51 CLB TAL CHI 1 Total/NA Analysis SM 4500 CI- E 1 461554 11/24/18 16:50 EAT TAL CHI Total/NA Analysis SM 4500 F C 1 459707 11/10/18 15:04 EAT TAL CHI Total/NA Analysis SM 4500 SO4 E 20 460758 CLB TAL CHI (Start) 11/18/18 23:22 (End) 11/18/18 23:23

Client Sample ID: MW-11 Lab Sample ID: 500-154522-6 Date Collected: 11/06/18 14:08 **Matrix: Water**

Date Received: 11/08/18 15:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			459291	11/09/18 07:50	SAH	TAL CH
Total Recoverable	Analysis	6020A		1	459576	11/09/18 17:39	FXG	TAL CH
Total Recoverable	Prep	3005A			459291	11/09/18 07:50	SAH	TAL CH
Total Recoverable	Analysis	6020A		7	459758	11/12/18 14:31	FXG	TAL CH
Total/NA	Analysis	SM 2540C		1	459269	11/09/18 07:53	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		5	461554	11/24/18 16:51	EAT	TAL CH
Total/NA	Analysis	SM 4500 F C		1	459707	11/10/18 15:06	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		4	460758		CLB	TAL CH
					(Start) 1	1/18/18 23:23		
					(End) 1	1/18/18 23:24		

Exhibit B

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

TestAmerica 900 IB: 500-154522-1

Client Sample ID: MW-14

Date Received: 11/08/18 15:20

Lab Sample ID: 500-154522-7 Date Collected: 11/06/18 15:56

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			459291	11/09/18 07:50	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	459576	11/09/18 17:43	FXG	TAL CHI
Total Recoverable	Prep	3005A			459291	11/09/18 07:50	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	459758	11/12/18 14:35	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	459269	11/09/18 07:56	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		5	461554	11/24/18 16:51	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	459707	11/10/18 15:19	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	460758		CLB	TAL CHI
					(Start) 1	1/18/18 23:26		
					(End) 1	1/18/18 23:27		

Lab Sample ID: 500-154522-8 **Client Sample ID: MW-16**

Date Collected: 11/06/18 12:10 **Matrix: Water**

Date Received: 11/08/18 15:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			459291	11/09/18 07:50	SAH	TAL CHI
Total Recoverable	Analysis	6020A		10	459758	11/12/18 14:38	FXG	TAL CH
Total/NA	Analysis	SM 2540C		1	459269	11/09/18 07:58	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		5	461722	11/26/18 14:11	EAT	TAL CH
Total/NA	Analysis	SM 4500 F C		1	459707	11/10/18 15:22	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		50	460758		CLB	TAL CH
					(Start) 1	1/18/18 23:27		
					(End) 1	1/18/18 23:28		

Lab Sample ID: 500-154522-9 **Client Sample ID: Duplicate** Date Collected: 11/05/18 00:00 **Matrix: Water**

Date Received: 11/08/18 15:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			459291	11/09/18 07:50	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	459576	11/09/18 17:51	FXG	TAL CHI
Total Recoverable	Prep	3005A			459291	11/09/18 07:50	SAH	TAL CHI
Total Recoverable	Analysis	6020A		5	459758	11/12/18 14:42	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	459269	11/09/18 08:01	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		1	461752	11/26/18 18:38	EAT	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	459707	11/10/18 15:26	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	460758		CLB	TAL CHI
					(Start) 1	1/18/18 23:28		
					(End) 1	1/18/18 23:29		

Laboratory References:

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

PCB 2013-15 Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 905 IBf 193-154522-1

Exhibit B

Project/Site: Waukegan CCR

Laboratory: TestAmerica Chicago

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

1	Authority	Program	EPA Region	Identification Number	Expiration Date
Ī	Illinois	NELAP	5	100201	04-30-19

PCB 2013-15 Electronic Filing: Received, Clerk's Office 07/19/2019

> Page 86 of 193 **TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 500-155624-1 Client Project/Site: Waukegan CCR

For:

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

Attn: Richard Gnat

Authorized for release by: 12/11/2018 3:29:39 PM

Eric Lang, Manager of Project Management (708)534-5200

eric.lang@testamericainc.com

.....LINKS

Review your project results through Total Access

Have a Question?



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.

Exhibit B

Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit B TestAmpriga Joh IDF 5003155624-1

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

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PCB 2013-15 Electronic Filing: Received Clark's Office 07/19/2019

Exhibit B

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

TestAmerica 300 ID: 500-155624-1

Job ID: 500-155624-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-155624-1

Comments

No additional comments.

Receipt

The sample was received on 12/5/2018 10:30 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4° C.

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

General Chemistry

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

PCB 2013-15)19 Exhibit B

Electronic Filing: Received Clerk's Office 07/19/2019 E

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

TestAmerica Job IB: 500-155624-1

Method	Method Description	Protocol	Laboratory
6020A	Metals (ICP/MS)	SW846	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	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 = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

4

7

0

10

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

TestAmerica Job IB: 500-155624-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-155624-1	MW-16	Water	12/04/18 10:25	12/05/18 10:30

3

4

5

10

11

PCB 2013-15 Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit B

Client: KPRG and Associates, Inc.

TestAmerica 901 IB: 500-155624-1

Project/Site: Waukegan CCR

Lab Sample ID: 500-155624-1 Client Sample ID: MW-16 Date Collected: 12/04/18 10:25

Matrix: Water

Date Received: 12/05/18 10:30

Method: 6020A - Metals (IC Analyte	•	ecoverable Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	320		1.0		mg/L		12/06/18 07:43	12/06/18 12:24	5
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1600		10		ma/L			12/06/18 06:44	

Electronic Filing PCB 2013-15 Exhibit B Exhibit B

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

Qualifier Description

TestAmerica 903 IB: 500-155624-1

Qualifiers

Met	tals
Ous	lifior

Qualifici	addition becompation
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.

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	I nese 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)

MDL ML

MDA

MDC

Method Detection Limit
Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

Minimum Detectable Activity (Radiochemistry)
Minimum Detectable Concentration (Radiochemistry)

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)

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

TestAmerica 93 lpf 193-155624-1

Metals

Prep Batch: 463285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-155624-1	MW-16	Total Recoverable	Water	3005A	
MB 500-463285/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-463285/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-155624-1 MS	MW-16	Total Recoverable	Water	3005A	
500-155624-1 MSD	MW-16	Total Recoverable	Water	3005A	
500-155624-1 DU	MW-16	Total Recoverable	Water	3005A	

Analysis Batch: 463456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-155624-1	MW-16	Total Recoverable	Water	6020A	463285
MB 500-463285/1-A	Method Blank	Total Recoverable	Water	6020A	463285
LCS 500-463285/2-A	Lab Control Sample	Total Recoverable	Water	6020A	463285
500-155624-1 MS	MW-16	Total Recoverable	Water	6020A	463285
500-155624-1 MSD	MW-16	Total Recoverable	Water	6020A	463285
500-155624-1 DU	MW-16	Total Recoverable	Water	6020A	463285

General Chemistry

Analysis Batch: 463300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-155624-1	MW-16	Total/NA	Water	SM 2540C	
MB 500-463300/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-463300/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-155624-1 MS	MW-16	Total/NA	Water	SM 2540C	
500-155624-1 DU	MW-16	Total/NA	Water	SM 2540C	

MDL Unit

LCS LCS

MS MS

321 4

MSD MSD

DU DU

324

Result Qualifier

MDL Unit

mg/L

318

Result Qualifier

Result Qualifier

9.54

Result Qualifier

mg/L

Unit

mg/L

Unit

mg/L

Unit

mg/L

Unit

mg/L

RL

0.20

Spike

Added

10.0

Spike

Added

10.0

Spike

Added

10.0

Client: KPRG and Associates, Inc.

TestAmerica Job ID: 500-155624-1

Project/Site: Waukegan CCR

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-463285/1-A

Matrix: Water

Analysis Batch: 463456

Analyte

MB MB Result Qualifier

Calcium <0.20 Client Sample ID: Method Blank **Prep Type: Total Recoverable Prep Batch: 463285**

%Rec

D %Rec

%Rec

25

54

95

Analyzed Dil Fac Prepared <u>12/06/18 07:43</u> <u>12/06/18 11:23</u>

%Rec.

Limits

%Rec.

Limits

75 - 125

%Rec.

Limits

75 - 125

80 - 120

Prep Type: Total Recoverable

Prep Batch: 463285

Prep Batch: 463285

Prep Batch: 463285

Prep Batch: 463285

Prep Type: Total/NA

Prep Type: Total/NA

RPD

RPD

RPD

Limit

RPD

Limit

Dil Fac

20

Client Sample ID: MW-16

Client Sample ID: MW-16

Client Sample ID: MW-16

Prep Type: Total Recoverable

Client Sample ID: Method Blank

Analyzed

12/06/18 06:39

Prep Type: Total Recoverable

Prep Type: Total Recoverable

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 500-463285/2-A

Matrix: Water

Analysis Batch: 463456

Analyte

Calcium

Lab Sample ID: 500-155624-1 MS

Matrix: Water

Analysis Batch: 463456

Analyte Calcium

Lab Sample ID: 500-155624-1 MSD

Matrix: Water Analysis Batch: 463456

Calcium

Analyte

Lab Sample ID: 500-155624-1 DU **Matrix: Water**

Analysis Batch: 463456

Analyte

Calcium

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

320

Sample Sample

Sample Sample

Sample Sample

Result Qualifier

MB MB

<10

Result Qualifier

320

Result Qualifier

320

Result Qualifier

Lab Sample ID: MB 500-463300/1 **Matrix: Water**

Analysis Batch: 463300

Analyte **Total Dissolved Solids**

Lab Sample ID: LCS 500-463300/2 **Matrix: Water**

Analysis Batch: 463300

Analyte

Total Dissolved Solids

LCS LCS Spike Added Result Qualifier

250

RL

10

252

Unit mg/L

D %Rec 101

Prepared

Limits 80 - 120

%Rec.

Client Sample ID: Lab Control Sample

PCB 2013-15 Exhibit B

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Client: KPRG and Associates, Inc.

TestAmerica 95 IB: 500-155624-1

Project/Site: Waukegan CCR

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

Client Sample ID: MW-16 Lab Sample ID: 500-155624-1 MS **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 463300

Sample Sample Spike MS MS %Rec. Analyte **Result Qualifier** Added Result Qualifier Unit D %Rec Limits **Total Dissolved Solids** 250 89 75 - 125 1600 1830 4 mg/L

Lab Sample ID: 500-155624-1 DU Client Sample ID: MW-16

Matrix: Water Prep Type: Total/NA

Analysis Batch: 463300

RPD Sample Sample DU DU Result Qualifier Analyte Result Qualifier Unit RPD Limit D Total Dissolved Solids 5 1600 1600 mg/L

Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4°

3. HNO3, Cool to 4º

4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4°

6. NaHSO4

7. Cool to 4°

Comments

8. None

9. Other

Chain of Custody Number:

Temperature °C of Cooler:

Relinquished By	3 MPO KPR	Ca La Luca	Time 400	Received By	Company A	Date	Time	Lab Courier	
Relinquished/By	Company Company	9 12/4/18 Date 12-4-18	Time	Received B	Sampany M	12-4-18 j CRT 12/5/18	<u>1400</u> × 17030	Shipped	
Relinquished By	Company	1 J-4-18 Date	1700 Time	Received By	Company	Date 13/10	Time		<u> 1209</u>
	Matrix Key	Client Comments			لل	ab Comments:		Hand Delivered	
WW – Wastewater W – Water	SE – Sediment SO – Soil								
S - Soil SL - Sludge	L – Leachate WI – Wipe								
MS - Miscellaneous OL - Oil	DW – Drinking Water O – Other								
A – Air	O - Other								
									TAL 4104 E00 (4

Electronic Filing: Received, Contact: Rich Graff Contact: Contact:

2540c-TDS

PO#/Reference#

Company: KPRG + Associates Inc.

Address: 14665 W Liston Rd,
Address: Suite 14 Brokfield WI 53005
Phone: 262-781-0475

E-Mail: Nichard GED Kprginc.com

Parameter

Sample Disposal

TestAmerica

WAUKEGAN CCR

MW-16

500-155624 COC

Lab PM

Turnaround Time Required (Business Days)
_____ 1 Day ____ 2 Days ____ 5 Days ____ 7 Days ____ 10 Days ____ 15 Days ____ Other

Client Project # 2313.3

Sampling

12/4/18 1025

THE LEADER IN ENVIRONMENT

KFRG + ASSOCIATES

WAUKEGAN, IL

Mitchel Dolan

Sample ID

Project Location/State

MS/MSD Lab ID

Requested Due Date Relinquished By

2417 Bond Street, University Park, IL

Phone: 708.534.5200 Fax: 708.

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Login Sample Receipt Checklist

Exhibit B Page 97 of 193

Job Number: 500-155624-1

List Source: TestAmerica Chicago Login Number: 155624

List Number: 1

Creator: Scott, Sherri L

Client: KPRG and Associates, Inc.

Creator. Scott, Silerii L		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client: KPRG and Associates, Inc.

TestAmerica 98 lpf. 193-155624-1

Project/Site: Waukegan CCR

Client Sample ID: MW-16

Date Collected: 12/04/18 10:25 Date Received: 12/05/18 10:30 Lab Sample ID: 500-155624-1

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			463285	12/06/18 07:43	SAH	TAL CHI
Total Recoverable	Analysis	6020A		5	463456	12/06/18 12:24	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	463300	12/06/18 06:44	CLB	TAL CHI

Laboratory References:

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

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PCB 2013-15 Exhibit B

Client: KPRG and Associates, Inc.

TestAmerica Job IB: 500-155624-1

Project/Site: Waukegan CCR

Laboratory: TestAmerica Chicago

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

1	Authority	Program	EPA Region	Identification Number	Expiration Date
Ī	llinois	NELAP	5	100201	04-30-19

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12

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Exhibit B

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Appendix B Alternate Source Demonstration April 12, 2018

P R G

ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

ALTERNATE SOURCE DEMONSTRATION CCR GROUNDWATER MONITORING WAUKEGAN GENERATING STATION

April 12, 2018

Ms. Sharene Shealey Midwest Generation, LLC 529 E. Romeo Road Romeoville, IL 60446

VIA E-MAIL

Re: Alternate Source Demonstration

Waukegan Generating Station – Ash Impoundments

Dear Ms. Shealey:

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 ash pond monitoring wells located at the Midwest Generation, LLC (Midwest Generation) Waukegan Generating Station. The wells sampled were selected by Midwest Generation to meet the monitoring requirements of the CCR Rule for both the West and East Ash Ponds. The CCR monitoring well network around these ponds consists of eight monitoring wells (MW-01 though MW-04, MW-09, MW-11, MW-14 and MW-16). Wells MW-09, MW-11 and MW-14 are upgradient wells. The monitoring well network is shown on Figure 1 along with other monitoring wells in the area that are not part of the CCR monitoring network. 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 Waukegan 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 SanitasTM statistical software package and provided in the Statistical

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Ms. Sharene Shealey, Midwest Generation, LLC

Re: Alternate Source Demonstration – Waukegan Generating Station Ash Ponds

Page 102%f²193 April 12, 2018

Evaluation Summary – 2017 CCR Groundwater Monitoring Waukegan Generating Station dated January 12, 2018. The following conclusions/recommendations were provided:

"The completed detection monitoring statistical evaluations have determined that there are SSIs in downgradient monitoring wells relative to established background for boron, pH and sulfate. At this time, KPRG recommends completing an alternate source demonstration to determine whether these exceedances 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. 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."

This report summarizes the results of the Alternate Source Demonstration completed for the Waukegan Station West and East Ash Ponds in accordance with 40 CFR 257.94(e)(2). The report is structured to provide a documentation of field investigation activities, a summary of 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 January 12, 2018 submittal are provided in Attachment 1 for reference.

DOCUMENTATION OF FIELD ACTIVITIES

To assist in evaluating a potential alternate source, both pond water and ash samples were collected. A pond water sample was collected from the West Ash Pond 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. No sample was collected for East Ash Pond water due to frozen conditions. The analytical data package is provided in Attachment 2.

One composite ash sample was collected for each of the two ponds (East Ash Pond and West Ash Pond). The composite samples consisted of a series of equivalent grab samples from across the length of the pond, from the inlet area to the 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 each pond. 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 samples were analyzed using the Leaching Environmental Assessment Framework (LEAF) Test using Method 1313. Under this method, each 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.

Page 103%f³193 April 12, 2018

LEAF TEST DATA OBSERVATIONS

The results of the pond water and the ash LEAF Test analyses are provided in Tables 1 and 2, respectively. A review of Tables 1 and 2 indicates that the Natural pH of the ash leachate is 9.7 which is higher by an order of magnitude than the noted pH of the pond water sample (8.8). This suggests that the pond water sample is not fully representative of equilibrium conditions of expected pore water within the ash sediment and, therefore, that the compound specific data from the pond water sample may also not be representative of leachate under equilibrium conditions. Based on this observation, the focus of this analysis will rely on the results of the LEAF Test data and in particular the data from the "Natural pH" test samples.

Focusing on the LEAF Test data, it is noted that chloride and fluoride appear to be fairly minor components of the ash leachate with most measurements at varying pH levels being below reporting limits. The remaining analytical constituent LEAF Test data are illustrated in graphical form on Figures 2 through 7 as a function of pH. On those figures are also plotted the results of the "Natural pH" test samples and the downgradient monitoring well data from the September 2017 sampling event (the initial detection monitoring event which was compared to established statistical background). In general, the following observations are made:

- Boron The boron leachate concertation is a function of pH with concentrations decreasing from a pH of 2 to a pH of 9 and then slightly increasing again through pH of 13. The Natural pH sample data plots close to where it would be expected on the LEAF Test curve. The boron concentrations at all downgradient wells are higher than the boron concentration noted for the Natural pH test analyses for both ash samples.
- Sulfate The sulfate leachate concertation is a function of pH with concentrations decreasing from a pH of 2 to a pH of 9 and then slightly increasing again through pH of 13. This mimics the boron LEAF Test data discussed above. The Natural pH sample data for the East Pond plots close to the LEAF Test curve, however, the West Pond Natural pH sample measurement appears somewhat low relative to the expected leachate curve trend. The sulfate concentrations in all downgradient monitoring wells are substantially higher than the sulfate concentrations for the Natural pH test analyses of both ash samples.
- Calcium The calcium leachate concentration is a clear function of pH with decreasing concentrations with increasing pH. The Natural pH sample data for both the East and West Ponds plots close to where it would be expected on the LEAF Test curve. The calcium concentrations in all downgradient monitoring wells are higher than the calcium concentrations for Natural pH test analyses for both ash samples.

Page 10426f4193

Ms. Sharene Shealey, Midwest Generation, LLC

Re: Alternate Source Demonstration – Waukegan Generating Station Ash Ponds

• ORP – The oxidation-reduction potential (ORP) is a function of pH with ORP generally decreasing with increasing pH. This is reflected in the LEAF Test curve. The Natural pH sample data for East Pond plot directly on the respective LEAF Test curve. The Natural pH data for the West Pond plots slightly lower than its respective LEAF Test curve. The ORP in all downgradient monitoring wells plot lower than the LEAF Test curve but in an expected trend line with a similar slope to the LEAF Test curve.

- Specific Conductance (SC) The SC measurements have a clear correlation with pH with measurements decreasing from a pH of 2 to a pH of 9 and then again increasing sharply as a pH of 13 is approached. The SC values of the two Natural pH samples both plot slightly below the LEAF Test curve. The specific conductivity values in the downgradient monitoring wells also plot below the LEAF Test curves at concentrations similar to slightly below the Natural pH test analyses for both ash samples.
- Total Dissolved Solids (TDS) The TDS LEAF Test curve somewhat mimics the SC curve with concentrations decreasing to a pH of 9 and then increasing as pH increases. The TDS values of the Natural pH samples both plot slightly below the LEAF Test curve. The TDS values in the downgradient monitoring wells also plot below the LEAF Test curves at concentrations similar to the Natural pH test analyses of both ash samples.

ALTERNATE SOURCE EVALUATOIN OF THE SSI PARAMETERS

In evaluating the groundwater data to determine whether noted specific parameter SSIs are associated with an actual release from the regulated unit(s), when appropriate, consideration is given not only to individual compounds at specific well points in which the SSI was detected, but also to a potential suite of parameters that combined can provide a "signature" of the specific ash leachate. For the purposes of this evaluation, boron and sulfate will be used. Both compounds are accepted indicators of coal ash leachate, both are conservative compounds and both have similar LEAF Test curves (see Figures 2 and 3). The calculated ratio of boron to sulfate based on the LEAF Test curves ranges between 0.027 and 0.035 and for the Natural pH tests for the East and West Ponds from 0.015 to 0.05. Therefore, if the boron to sulfate ratio within a specific downgradient well falls within this range, the noted impact may be related to ash leachate from within the ponds. If it is not within this range, then one or both of those constituents may have another source not related to the ash within the regulated units.

As previously noted, the three parameters that were determined to have SSIs in downgradient monitoring wells relative to established background were boron, sulfate and pH. The boron and sulfate exceedances will be addressed together and the pH exceedances will be discussed separately below.

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Boron and Sulfate

All five downgradient monitoring wells (MW-01 through MW-04 and MW-16) have noted SSIs for boron and sulfate. A mixture of fill and beneficially re-used coal combustion by-product (CCB) were likely used for the construction of the berms for the ash ponds and that there is CCB documented within the well bore columns of each of the five downgradient monitoring wells since these wells are drilled within the berm materials. The boron to sulfate ratios for these wells, using the September 2017 data on which the SSIs were identified, is summarized as follows:

Well	MW-01	MW-02	MW-03	MW-04	MW-16
B/SO4	0.008	0.016	0.013	0.010	0.009

All of these ratios, except for well MW-02 which is at the bottom of the above noted LEAF Test/Natural pH test data ratio range, are consistently below the boron to sulfate ratio range predicted by the LEAF Test data for the bottom ash stored within the ponds. This suggests that one or both of these compounds in groundwater have a source other than leachate from the regulated units.

Sulfate

Focusing on sulfate, the concentration of this compound in downgradient wells as shown on Figure 3, is consistently higher than what would be expected from just ash leachate impacts. Additional sulfate can be generated by reaction of high pH leachate with any sulfide minerals that may be present in the aquifer, however, this reaction would drive pH values downward which is not the case at well MW-01 where pH is higher than within the Natural pH sample of ash (discussed further below in the pH discussion).

The range in sulfate concentrations in the downgradient wells was 260 to 480 mg/l and the calculated statistical PL based on the pooled upgradient well data was 233 mg/l. It is noted that the pooled upgradient sulfate PL is still higher than the sulfate concentrations of the Natural pH analyses (38 and 130 mg/l). Assuming that the Natural pH test is fairly representative of equilibrium concentrations within the ash leachate, any sulfate detections in the downgradient wells would be expected to be the same or less than that of the leachate. There is also a monitoring well MW-05 which is just west (upgradient) of the West Ash Pond (see Figure 1) which is not within the CCR monitoring well network. The quarterly sampling data for 2017 from well MW-05 is provided in Attachment 3. The range of sulfate detections in MW-05 well for 2017 was from 700 to 1,100 mg/l with an average of approximately 835 mg/l. Using an Illinois Environmental Protection Agency (IEPA) recognized, two-dimensional analytical model identified within the Tiered Approach to Corrective Action Objectives (TACO) for simple advection-dispersion based constituent transport with a starting sulfate concentration of 835 mg/l immediately west of the West Ash Pond, the estimated concentrations of sulfate is projected to

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be in the range from 29.2 mg/l to 51.7 mg/l at distances that would be representative of the five downgradient monitoring wells (see Attachment 4). It is noted that this calculation conservatively assumes that the constituent is migrating from the upgradient well to the downgradient wells through a "clean/unimpacted" zone of aquifer which does not contain any other sources of sulfate. If this residual estimated impact from an upgradient source of sulfate is mixed with Natural pH test leachate from ash ponds, the resulting range of potential concentrations of sulfate would be approximately 33.6 to 66.1 mg/l. Based on the above discussions and observations, the elevated sulfate concentrations in the downgradient wells appear to be related to overall elevated sulfate concentrations within the aquifer from sources other than the regulated units.

Boron

Relative to boron, the concentration of this element is consistently slightly higher in the downgradient monitoring wells (ranging from 2.1 to 2.8 mg/l) than in the Natural pH test leachate (ranging from 1.9 to 2.0 mg/l). Assuming that the Natural pH test is fairly representative of equilibrium concentrations within the ash leachate, any boron detections in the downgradient wells would be expected to be the same or less than that of the leachate. As discussed above, there is a monitoring well (MW-05) immediately west of the west Ash Pond that is not part of the CCR monitoring network. The range of boron detections in that well for 2017 was from 7.7 to 47 mg/l (see Attachment 3) with an average of approximately 35 mg/l. Using the same two-dimensional analytical model noted above for simple advectiondispersion based constituent transport with a starting boron concentration of 35 mg/l immediately west of the West Ash Pond, projects estimated concentrations of boron to range from 1.23 to 2.17 mg/l at distances that would be representative of the five downgradient monitoring wells (see Attachment 4). As noted above, this calculation conservatively assumes that the constituent is migrating from the upgradient well to the downgradient wells through a "clean/unimpacted" zone of aquifer which does not contain any other sources of boron. If this residual estimated impact from an upgradient source of boron is mixed with Natural pH test leachate from ash ponds, an anticipated resulting range of potential concentrations of boron would be approximately 1.56 to 2.08 mg/l. Based on the above discussions and observations, the elevated boron concentrations in the downgradient wells can be attributed to potential source(s) other than the regulated units.

<u>pH</u>

The pH at downgradient well locations MW-01 and MW-02 during the September 2017 sampling were at 10.45 and 8.19, respectively. Both of these were over the calculated upper value of the PL for pH of 7.7 indicating an SSI for this parameter. Both wells monitor the northeast portion of the ash ponds. It is noted that both of these monitoring wells were installed in the fourth quarter of 2010 as part of groundwater monitoring initiated voluntarily by Midwest Generation prior to the development of the federal CCR Rule. Figure 8 provides a full time versus pH plot

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for both wells since the initial sampling event in fourth quarter 2010. This plot shows that there appears to be some cyclical upward and downward trends within the pH data at these locations with the highest pH of 12.01 being recorded at well location MW-01 in the February 2015 sampling and the pH peak at MW-02 (10.13) being slightly less and lagging approximately two quarters later than seen at MW-01. The 12.01 pH is higher than would be expected from any bottom ash source. In addition, based on the LEAF Test curves for boron discussed above, boron concentrations within the ash are a function of pH with decreasing concentrations through about a pH of 9 and then increasing again as pH continues to rise. Therefore, as pH rises and falls cyclically above 9 as documented in Figure 8, it would be expected to see a similar contemporal, cyclical trend in boron concentrations over time if this elevated pH was the result of ash leachate emanating from the northeast portion of the pond. No such trend is seen in the boron data for these wells since the boron concentrations during those two high pH events were 1.9 and 2.5 mg/l, respectively for wells MW-01 and MW-02.

Since the other potential indicator parameters for coal ash leachate do not suggest leakage from the regulated units, it appears more likely that the elevated pH at the northeast corner of the ash ponds is related to another localized source and not leakage from the regulated units.

CONCLUSIONS/RECOMMENDATIONS

Based on the data evaluation and discussions provided above, it is concluded that the noted SSIs for boron, sulfate and pH are not the result of leakage of leachate from the regulated units (West and East Ash Ponds) but rather from other potential historical sources. This is based on the following:

- Boron and sulfate, being recognized indicator parameters for coal ash leachate and conservative in nature once dissolved in groundwater, within the ash samples tested have a clear and common relationship as a function of pH with the boron to sulfate ratio being within a narrow range of 0.015 to 0.05. Most downgradient monitoring wells have a lower boron to sulfate ratio.
- All downgradient sulfate concentrations are greater than what would be expected to be emanating from ash leachate based on the LEAF Test data.
- The pooled upgradient sulfate background PL is higher that than the sulfate concentrations of the Natural pH test analysis indicating generally elevated sulfate in the area outside of the regulated units.
- Groundwater from immediately upgradient of the ash ponds has substantially higher sulfate and boron than noted in the downgradient wells and the Natural pH leach test analysis suggesting another potential source outside of the ash ponds.

- The boron concentrations in all downgradient monitoring wells are slightly higher than what would be anticipated based on boron concentrations of the natural pH test analysis and can be accounted for with conservative 2-dimensional analytical solutions for simple advection-dispersion effects from documented elevated boron impacts immediately west and upgradient of the West Ash Pond.
- The elevated pH at monitoring wells MW-01 and MW-02 at the northeast side of the East Ash Pond are cyclical in nature with the highest pH readings being above expected bottom ash pH measurements. There is no correlation of increasing boron concentration at these wells with pH increases above 9 which would be expected based on LEAF Test curve data. These observations, in conjunction with the discussions above, suggests it is more likely that the elevated pH at the northeast corner of the ash ponds is related to another localized source and not leakage from the regulated units.

Based on this conclusion, it is recommended to continue with detection monitoring at this time.

Sincerely,

KPRG and Associates, Inc.

Richard R gnot

Richard R. Gnat, P.G.

Principal

Timothy Stohner, P.E.

Project Manager/Sr. Engineer

cc: David Bacher, NRG

Fred Veenbaas, 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 April 12, 2018, that the information contained in this report is accurate to the best of my knowledge.

Certified by:

Date: April 12, 2018

Timothy Stohner, P.E.

Illinois Professional Engineer Registration No.: 062.057635

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KPRG and Associates, Inc.

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FIGURES



Figure 2. Boron Concentration vs. pH Value - Waukegan Station

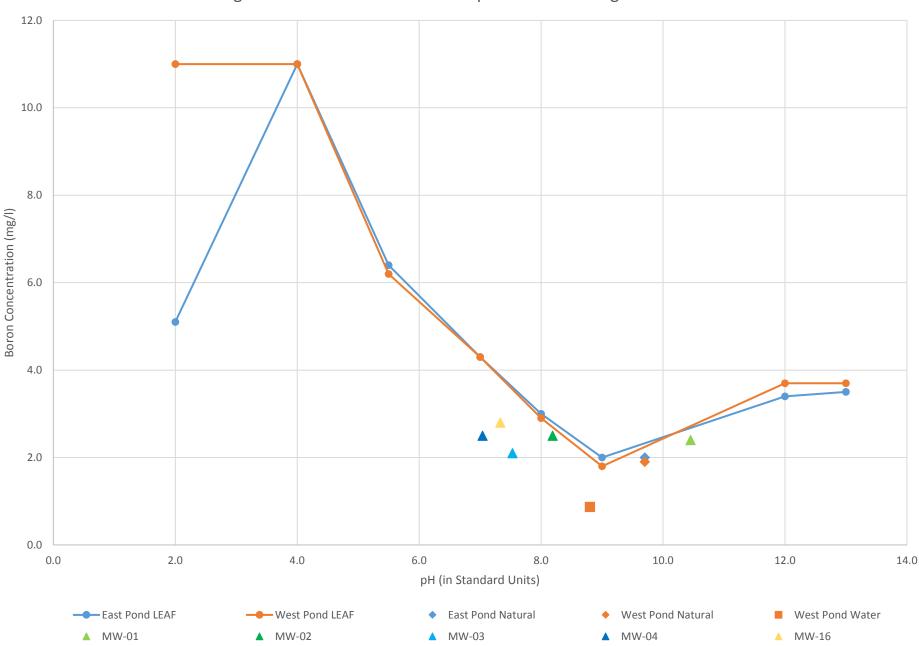


Figure 3. Sulfate Concentration vs. pH Value - Waukegan Station

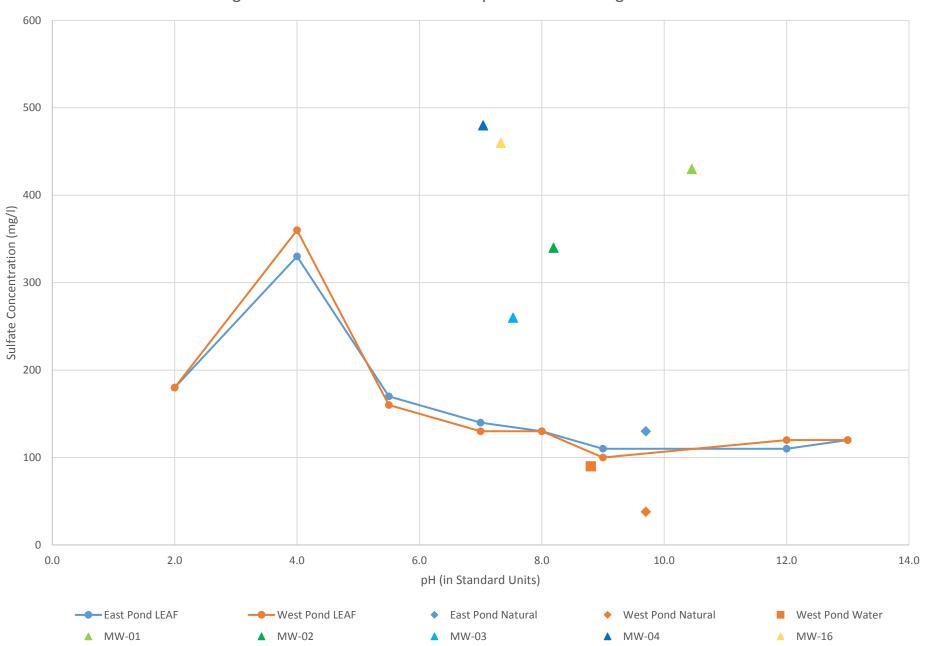


Figure 4. Calcium Concentration vs. pH Value - Waukegan Station

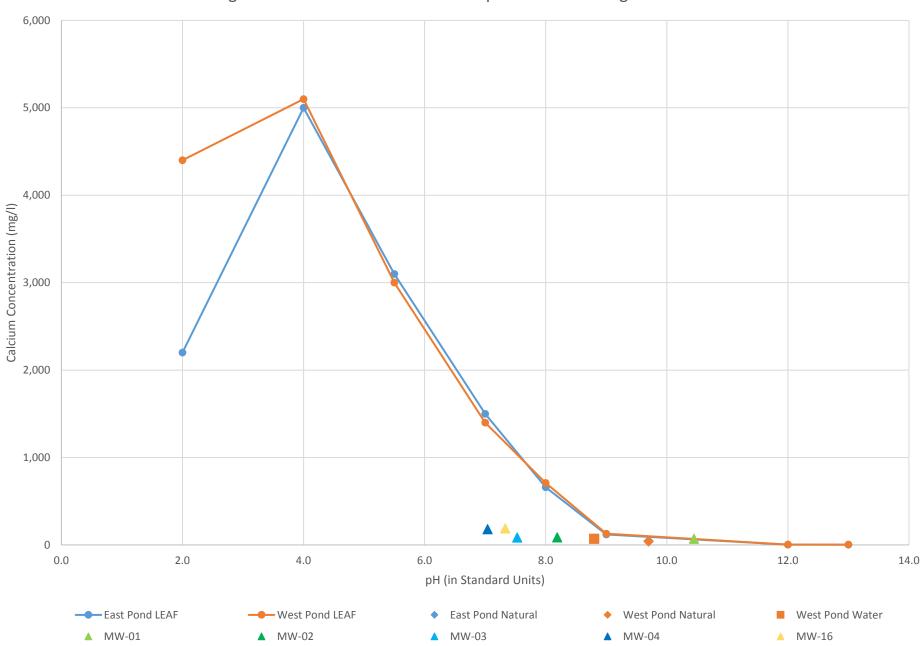


Figure 5. ORP Concentration vs. pH Value - Waukegan Station

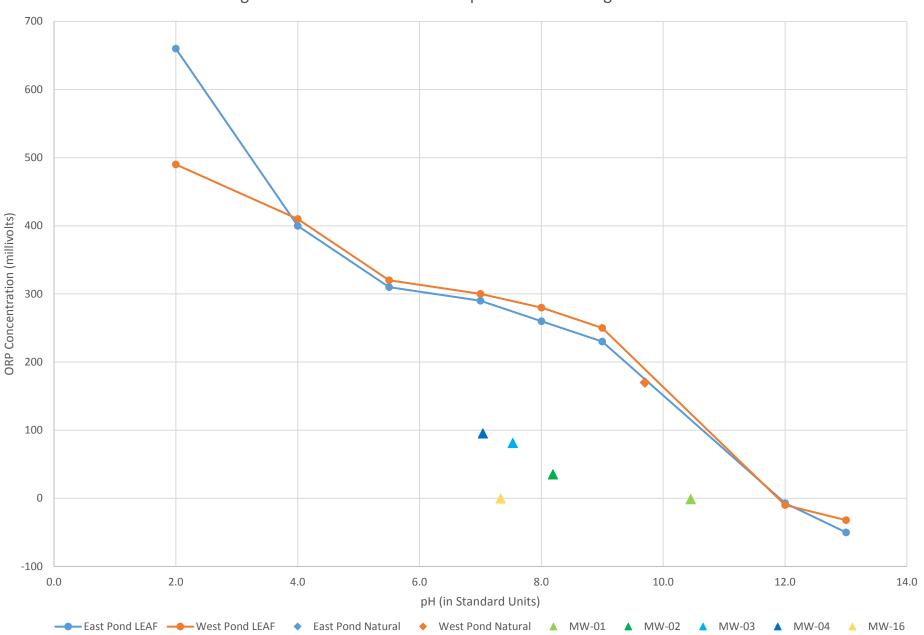


Figure 6. Specific Conductivity vs. pH Value - Waukegan Station

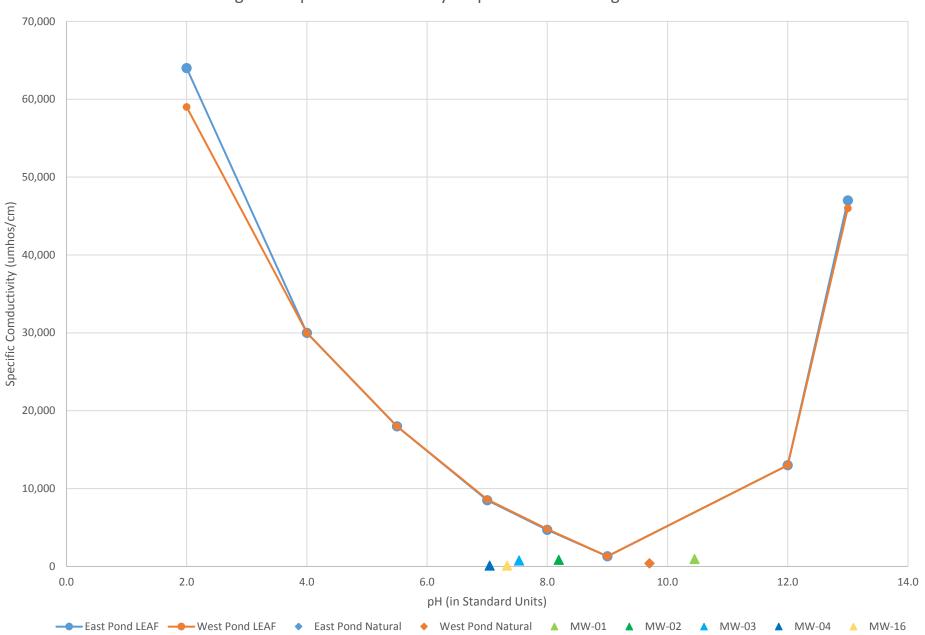
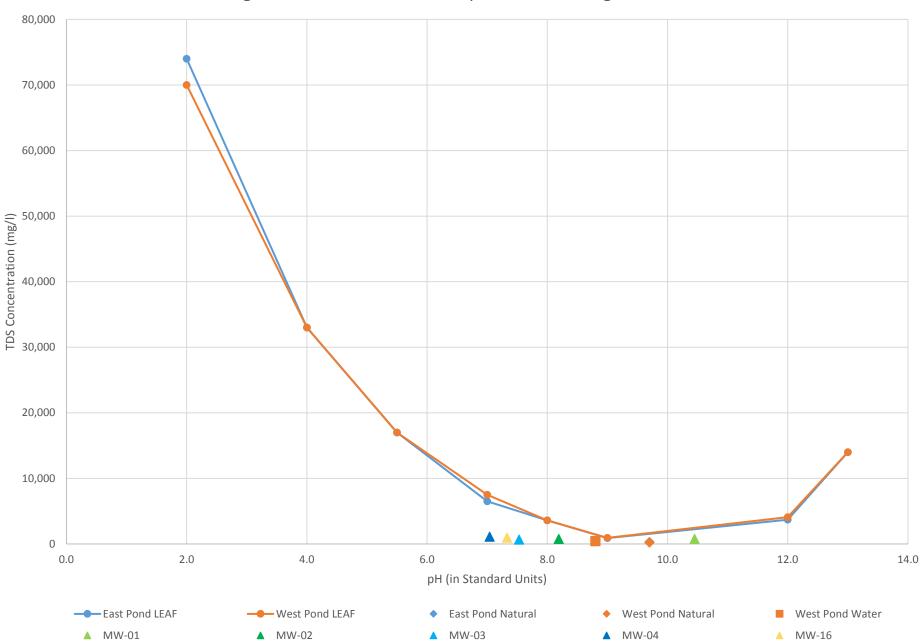
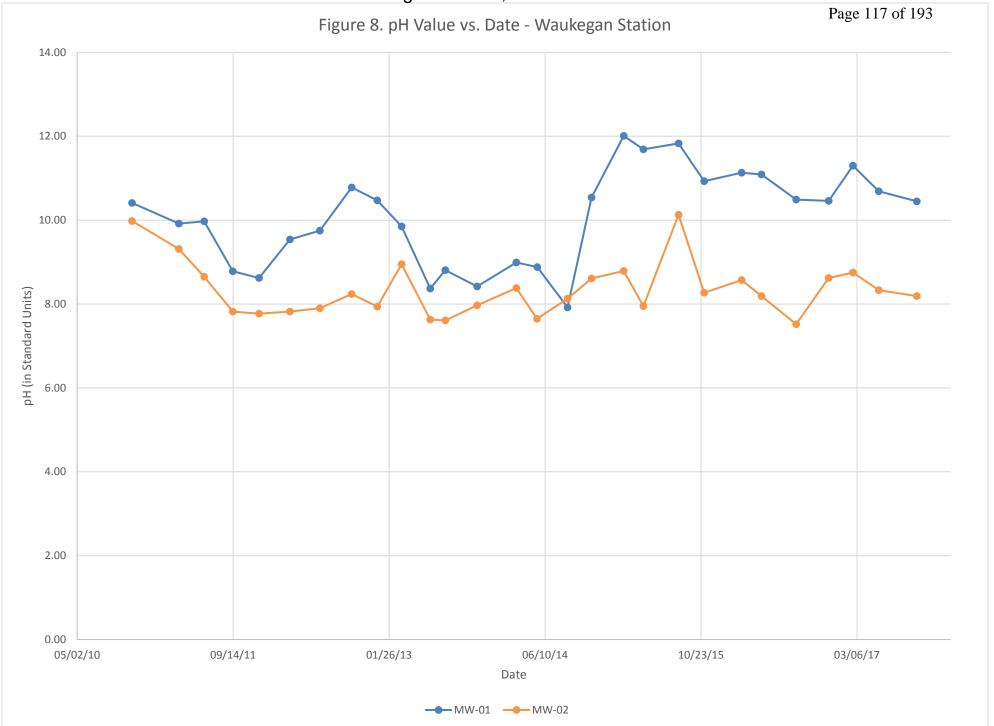


Figure 7. TDS Concentration vs. pH Value - Waukegan Station





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TABLES

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Table 1. Pond Water Results - Midwest Generation Waukegan Station, Waukegan, Illinois

		West
PARAMETER	UNITS	Pond
Boron	mg/L	0.87
Calcium	mg/L	70
Chloride	mg/L	52
Fluoride	mg/L	0.21
рН	SU	8.8
Sulfate	mg/L	90
TDS	mg/L	430

Notes: Units are as noted. TDS - Total Dissolved Solids

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Table 2. LEAF Test Results from Ash Samples- Midwest Generation Waukegan Station, Waukegan, Illinois

EAST POND ASH		LEAF TEST TARGETED pH VALUES								
PARAMETER	UNITS	13.0	12.0	9.0	8.0	7.0	5.5	4.0	2.0	Natural*
Boron	mg/L	3.5	3.4	2.0	3.0	4.3	6.4	11.0	5.1	2.0
Calcium	mg/L	3.7	3.5	120	660	1,500	3,100	5,000	2,200	43.0
Chloride	mg/L	<50	<25	2.8	<2.5	<10	<25	<25	<100	2.9
Fluoride	mg/L	<5.0	<2.5	0.51	<0.50	<1.0	<2.5	7.5	<10	0.32
ORP	millivolts	-50	-7.0	230	260	290	310	400	660	170
рН	SU	12.8	12.5	8.9	7.7	7.0	5.8	3.8	2.1	9.7
Spec Cond	umhos/cm	47,000	13,000	1,300	4,700	8,500	18,000	30,000	64,000	390
Sulfate	mg/L	120	110	110	130	140	170	330	180	130
TDS	mg/L	14,000	3,700	890	3,600	6,500	17,000	33,000	74,000	270

WEST POND ASH		LEAF TEST TARGETED pH VALUES								
PARAMETER	UNITS	13.0	12.0	9.0	8.0	7.0	5.5	4.0	2.0	Natural*
Boron	mg/L	3.7	3.7	1.8	2.9	4.3	6.2	11.0	11.0	1.9
Calcium	mg/L	3.8	3.8	130	710	1,400	3,000	5,100	4,400	42.0
Chloride	mg/L	<50	<25	2.2	<5.0	<10	<25	<25	<100	17
Fluoride	mg/L	<5.0	<2.5	0.2	<0.50	<1.0	<2.5	7.7	<10	0.53
ORP	millivolts	-32	-10	250	280	300	320	410	490	170
рН	SU	12.8	12.4	8.7	7.5	7.0	5.9	3.8	2.5	9.7
Spec Cond	umhos/cm	46,000	13,000	1,300	4,800	8,600	18,000	30,000	59,000	400
Sulfate	mg/L	120	120	100	130	130	160	360	180	38
TDS	mg/L	14,000	4,100	930	3,600	7,500	17,000	33,000	70,000	240

Notes: Units are as noted.

ORP - Oxidation Reduction Potential

Spec Cond - Specific Conductivity

TDS - Total Dissolved Solids

Natural* - pH of ash as measured in the laboratory prior to any pH test modofcations.

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ATTACHMENT 1 Statistical Data Evaluation Tables – January 12, 2018

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Table 1. Detection Monitoring Statistical Comparisons - Appendix III Groundwater Analytical Results 3rd Quarter 2017 and Resample - Midwest Generation, LLC, Waukegan Station, Waukegan, ILC of 193

Well	Date	Boron	Calcium	Chloride	Fluoride	рН	Sulfate	Total Dissolved Solids
	11/4/2015	13	210	450	0.14	6.60	370	1700
	3/2/2016	35	380	720	0.11	7.02	970	2800
	5/3/2016	16	310	620	0.12	7.02	740	2500
	8/25/2016	4.5	130	270	0.21	7.13	190	1100
) (IV) 00	12/8/2016	15	200	330	0.18	7.01	270	1300
MW-09 up-gradient	2/23/2017	14	190	290	0.12	7.68	320	1300
up-gradient	5/16/2017	27	160	67	0.29	8.15	420	970
	7/6/2017	21	220	430	0.13	7.18	610	1800
	Pred. Limit*	43.9	449	963	0.33	8.53-5.92	1214	3499
	9/13/2017	21	250	420	0.14	7.17	520	1800
	11/29/2017	26	200	390	0.13	7.05	390	1600
	11/5/2015	5.2	140	240	0.13	6.51	190	1100
	3/2/2016	4.0	170	240	0.1	7.16	210	1200
	5/5/2016	5.0	140	280	0.11	7.17	160	1000
	8/26/2016	3.5	180	240	0.13	6.97	110	1100
	12/7/2016	3.0	170	270	0.12	7.06	110	1200
MW-11	2/24/2017	2.4	180	220	4.9	6.61	170	1200
up-gradient	5/18/2017	1.8	160	170	0.12	7.42	120	1000
	7/6/2017	2.4	160	190	0.14	7.33	130	1100
	Pred. Limit*	6.83	206	333	4.9	7.91-6.14	255	1341
	9/13/2017	1.9	140	150	0.26	7.16	96	870
	11/30/2017	2.2	170	200	0.14	6.99	93	1100
	11/5/2015	1.4	150	190	0.19	6.78	140	1000
	3/2/2016	0.93	150	110	0.17	7.24	150	870
	5/5/2016	1.2	170	120	0.18	7.17	190	980
	8/26/2016	1.5	200	210	0.12	7.00	190	1300
	12/7/2016	0.95	240	340	0.25	6.81	120	1100
MW-14	2/23/2017	0.73	150	99	0.19	6.88	110	730
up-gradient	5/18/2017	0.81	120	130	0.3	7.62	70	590
	7/6/2017	1.2	190	180	0.13	7.29	190	1300
	Pred. Limit*	1.85	274	389	0.35	7.89-6.31	266	1676
	9/13/2017	2.3	180	190	0.15	7.20	270	1200
	11/30/2017	0.85	170	130	0.19	7.33	99	940
	11/2/2015	1.8	64	71	0.46	10.93	310	560
	3/1/2016	V 1.9	58	63	0.26	11.13	270	570
	5/4/2016	2.0	45	60	0.3	11.09	210	490
	8/23/2016	2.0	42	60	0.26	10.49	240	550
	12/5/2016	2.2	55	65	0.34	10.46	180	560
MW-01	2/21/2017	2.2	50	61	0.29	11.30	250	540
down-gradient	5/15/2017	2.1	52	59	0.37	10.69	330	570
	7/5/2017	2.3	44	51	0.34	10.83	320	570
	Pred. Limit	1.83	227**	345**	4.9**	7.70-6.43**	233**	1461**
	9/14/2017	2.4	71	47	0.24	10.45	430	770
	11/27/2017	2.7	84	43	0.11	7.85	330	840

Notes:

Pred. Limit - Prediction Limit

** - Based on pooled background from MW-11/MW-14.
All others based on MW-14 as background.

<u>Bold -</u> Potential statistically significant increase.

Italics Date - First round of Detection Monitoring and resample after statistical background establishment.

^{* -} Intrawell Prediction Limit. All others are interwell comparisons. All units are in mg/l except pH is in standard units.

F1 - MS and/or MSD Recovery outside of limits.

V- Serial dilution exceeds the control limits.

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Table 1. Detection Monitoring Statistical Comparisons - Appendix III Groundwater Analytical Results 3rd Quarter 2017 and Resample - Midwest Generation, LLC, Waukegan Station, Waukegan, ILC

Well	Date	Boron	Calcium	Chloride	Fluoride	рН	Sulfate	Total Dissolved Solids
	11/2/2015	3.0	32	47	0.78	8.27	230	460
	3/1/2016	4.1	39	47	1.3	8.57	220	510
	5/4/2016	3.3	34	51	1.5	8.19	180	440
	8/23/2016	3.1	42	59	1.3	7.52	250	500
	12/5/2016	3.1	28	56	1.0	8.62	160	430
MW-02	2/21/2017	3.3	31	52	0.8	8.75	190	420
down-gradient	5/15/2017	3.6	85	48	0.6	8.33	320	640
	7/5/2017	4.2	100	52	0.4	7.92	300	710
	Pred. Limit	1.83	227**	345**	4.9**	7.70-6.43**	233**	1461**
	9/14/2017	<u>2.5</u>	87	54	0.4	<u>8.19</u>	340	780
	11/27/2017	<u>3.4</u>	69	57	0.6	7.34	200	570
	11/2/2015	2.3	72	87	0.51	9.26	270	570
	3/1/2016	2.9	61	70	0.33	7.33	220	530
	5/4/2016	2.4	42	74	0.56	7.25	170	470
	8/24/2016	2.0	70	59	0.3	9.13	200	430
	12/5/2016	2.4	57	60	0.41	7.62	120	440
MW-03 down-gradient	2/21/2017	2.2	56	65	0.33	7.56	180	460
down-gradient	5/16/2017	3.9	110	61	0.27	7.9	320	820
	7/5/2017	3	60	60	0.28	7.46	200	470
	Pred. Limit	1.83	227**	345**	4.9**	7.70-6.43**	233**	1461**
	9/14/2017	<u>2.1</u>	86	57	0.26	7.53	260	680
	11/28/2017	<u>2.6</u>	69	63	0.56	6.96	120	500
	11/3/2015	1.8	66	62	0.51	6.68	240	480
	3/1/2016	2.0	58	51	0.5	7.17	170	450
	5/4/2016	1.6	44	49	0.61	6.92	140	340
	8/24/2016	2.0	46	58	0.56	7.01	120	370
2007.04	12/5/2016	3.4	200	60	0.21	7.40	300	1000
MW-04 down-gradient	2/22/2017	2.4	150	41	0.17	7.44	290	850
down-gradient	5/16/2017	2.5	170	29	0.32	7.94	400	970
	7/5/2017	3.6	200	51	0.29	7.09	520	1100
	Pred. Limit	1.83	227**	345**	4.9**	7.70-6.43**	233**	1461**
	9/14/2017	<u>2.5</u>	180	45	0.28	7.04	<u>480</u>	1100
	11/28/2017	<u>2.3</u>	110	32	0.28	7.04	130	560
	11/3/2015	4.1	230	87	0.43	6.24	610	1400
	3/2/2016	3.1	360	130	0.35	6.76	990	1700
	5/2/2016	4.9	250	150	0.49	6.99	620	1600
	8/24/2016	3.6	130	53	0.71	7.00	330	830
1007.16	12/5/2016	3.8	160	52	0.51	7.03	280	920
MW-16 down-gradient	2/24/2017	6.5	200	67	0.2	5.76	570	1100
down-gradient	5/16/2017	2.6	340	130	0.15	7.57	760	1700
	7/6/2017	9.5	190	70	0.57	7.35	480	1100
	Pred. Limit	1.83	227**	345**	4.9**	7.70-6.43**	233**	1461**
	9/13/2017	<u>2.8</u>	190	55	0.61	7.33	<u>460</u>	970
	11/27/2017	4.2	140	58	0.71	7.16	270	760

Notes:

Pred. Limit - Prediction Limit

F1 - MS and/or MSD Recovery outside of limits.

** - Based on pooled background from MW-11/MW-14.
All others based on MW-14 as background.

 $\underline{\textbf{Bold -}} \qquad \text{Potential statistically significant increase}.$

V- Serial dilution exceeds the control limits.

Italics Date - First round of Detection Monitoring and resample after statistical background establishment.

^{* -} Intrawell Prediction Limit. All others are interwell comparisons.

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

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ATTACHMENT 2 Analytical Data Packages

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-74229-1

Client Project/Site: Midwest Generation

For:

KPRG and Associates, Inc. 14665 West Lisbon Road, Suite 2B Brookfield, Wisconsin 53005

Attn: Richard Gnat

Errw G. Camby, Authorized for release by:

2/27/2018 10:38:12 AM

Carrie Gamber, Senior Project Manager (412)963-2428

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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.

Exhibit B

PCB 2013-15

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

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PCB 2013-15 Exhibit B

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 370 of 1930-74229-1

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Job ID: 180-74229-1

Laboratory: TestAmerica Pittsburgh

Narrative

CASE NARRATIVE

Client: KPRG and Associates, Inc.

Project: Midwest Generation

Report Number: 180-74229-1

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 1/18/2018 12:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.4° C.

IC

Several samples were diluted due to the nature of the sample matrix. Dilutions were based on the conductivity readings during pre-screen. Elevated reporting limits (RLs) are provided.

Several samples were diluted due to the level of analytes detected in the samples. Elevated reporting limits (RLs) are provided.

METALS

Several samples were diluted due to the nature of the sample matrix and/or to bring the concentration of boron and calcium within the linear range. Elevated reporting limits (RLs) are provided.

GENERAL CHEMISTRY

Due to the sample matrix and amount of sample generated, the initial volumes used for several samples deviated from the standard procedure for TDS. The reporting limits (RLs) have been adjusted proportionately.

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

Reporting Limit or Requested Limit (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)
Toxicity Equivalent Quotient (Dioxin)

Relative Percent Difference, a measure of the relative difference between two points

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Glossary

RL

RPD

TEF

TEQ

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)

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

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Laboratory: TestAmerica Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

thority	Program		EPA Region	Identification Number	Expiration Date
nois	NELAP		5	200005	06-30-18
The following analytes	are included in this repo	rt, but are not accre	dited/certified unde	er this accreditation/certificat	ion:
Analysis Method	Prep Method	Matrix	Ana	lyte	
SM 2510B		Solid	Spe	cific Conductance	
SM 2540C		Solid	Tota	al Dissolved Solids	
The following analytes	are included in this repo	rt, but accreditation/	certification is not	offered by the governing aut	hority:
Analysis Method	Prep Method	Matrix	Ana	lyte	
2540G		Solid	Per	cent Moisture	
2340G		00			
2540G 2540G		Solid	Per	cent Solids	

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Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 95.193.

Lab Sample ID	Client Sample ID	Matrix	Collected Received
180-74229-1	EAST POND - PRETEST	Solid	01/17/18 10:18 01/18/18 12:20
180-74229-2	EAST POND - PH 13.0	Solid	01/17/18 10:18 01/18/18 12:20
180-74229-3	EAST POND - PH 12.0	Solid	01/17/18 10:18 01/18/18 12:20
180-74229-5	EAST POND - PH 9.0	Solid	01/17/18 10:18 01/18/18 12:20
180-74229-6	EAST POND - PH 8.0	Solid	01/17/18 10:18 01/18/18 12:20
180-74229-7	EAST POND - PH 7.0	Solid	01/17/18 10:18 01/18/18 12:20
180-74229-8	EAST POND - PH 5.5	Solid	01/17/18 10:18 01/18/18 12:20
180-74229-9	EAST POND - PH 4.0	Solid	01/17/18 10:18 01/18/18 12:20
180-74229-10	EAST POND - PH 2.0	Solid	01/17/18 10:37 01/18/18 12:20
180-74229-11	EAST POND - NATURAL	Solid	01/17/18 10:37 01/18/18 12:20
180-74229-12	WEST POND - PRETEST	Solid	01/17/18 10:37 01/18/18 12:20
180-74229-13	WEST POND - PH 13.0	Solid	01/17/18 10:37 01/18/18 12:20
180-74229-14	WEST POND - PH 12.0	Solid	01/17/18 10:37 01/18/18 12:20
180-74229-16	WEST POND - PH 9.0	Solid	01/17/18 10:37 01/18/18 12:20
180-74229-17	WEST POND - PH 8.0	Solid	01/17/18 10:37 01/18/18 12:20
180-74229-18	WEST POND - PH 7.0	Solid	01/17/18 10:37 01/18/18 12:20
180-74229-19	WEST POND - PH 5.5	Solid	01/17/18 10:37 01/18/18 12:20
180-74229-20	WEST POND - PH 4.0	Solid	01/17/18 10:37 01/18/18 12:20
180-74229-21	WEST POND - PH 2.0	Solid	01/17/18 10:37 01/18/18 12:20
180-74229-22	WEST POND - NATURAL	Solid	01/17/18 10:37 01/18/18 12:20
180-74229-23	EAST POND - AIR DRIED	Solid	01/17/18 10:18 01/18/18 12:20
180-74229-24	WEST POND - AIR DRIED	Solid	01/17/18 10:37 01/18/18 12:20

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

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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

Protocol References:

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

SM22 = SM22

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

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

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Client Sample ID: EAST POND - PRETEST

Date Collected: 01/17/18 10:18 Date Received: 01/18/18 12:20 Lab Sample ID: 180-74229-1

Matrix: Solid

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	2540G at ID: NOEQUIP		1			234978	01/24/18 09:55	CLL	TAL PIT
Leach	Leach	1313			40.5 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 15:07	MTW	TAL PIT
Leach	Leach	1313			40.5 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 15:16	MTW	TAL PIT

Client Sample ID: EAST POND - PH 13.0

Date Collected: 01/17/18 10:18 Date Received: 01/18/18 12:20 Lab Sample ID: 180-74229-2

Matrix: Solid

Batch Dil Initial Final **Batch Prepared** Batch Method **Prep Type** Type Run **Factor** Amount Amount Number or Analyzed Analyst Lab 1313 236165 LWM TAL PIT Leach Leach 40.5 g 400 mL 02/05/18 11:30 Leach Analysis **EPA 9056A** 50 236553 02/09/18 19:50 CMR TAL PIT Instrument ID: CHICS2000 1313 40.5 g 400 mL 236165 02/05/18 11:30 LWM TAL PIT Leach Leach 3010A 50 mL 50 mL 236440 TAL PIT Leach Prep 02/08/18 11:28 KA Leach Analysis **EPA 6020A** 1 236729 02/10/18 00:39 WTR TAL PIT Instrument ID: A Leach 1313 40.5 q 400 mL 236165 02/05/18 11:30 LWM TAL PIT Leach 236440 3010A 50 mL 50 mL 02/08/18 11:28 KA TAL PIT Leach Prep 236828 Leach Analysis **EPA 6020A** 1 02/13/18 03:43 WTR TAL PIT Instrument ID: M 1313 40.5 g 400 mL TAL PIT Leach Leach 236165 02/05/18 11:30 LWM Leach Analysis **EPA 9040C** 1 236465 02/07/18 12:13 MTW TAL PIT Instrument ID: NOEQUIP Leach Leach 1313 40.5 g 400 mL 236165 02/05/18 11:30 LWM TAL PIT Leach Analysis SM 2510B 1 236475 02/07/18 12:01 MTW TAL PIT Instrument ID: NOEQUIP 400 mL Leach Leach 1313 40.5 g 236165 02/05/18 11:30 LWM TAL PIT Leach Analysis SM 2540C 3 mL 100 mL 237078 02/15/18 14:59 KXW TAL PIT 1 Instrument ID: NOEQUIP Leach 1313 400 mL Leach 40.5 g 236165 02/05/18 11:30 LWM TAL PIT Leach Analysis SM 2580B 1 236472 02/07/18 11:54 MTW TAL PIT Instrument ID: NOEQUIP

Client Sample ID: EAST POND - PH 12.0

Date Collected: 01/17/18 10:18

Date Received: 01/18/18 12:20

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT

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Lab Sample ID: 180-74229-3 Matrix: Solid

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

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Client Sample ID: EAST POND - PH 12.0

Date Collected: 01/17/18 10:18 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-3

Matrix: Solid

Duan Toma	Batch	Batch	Dun	Dil	Initial	Final	Batch	Prepared	Amalust	l ab
Prep Type	Type	Method EPA 9056A	Run	Factor 25	Amount	Amount	Number 237859	or Analyzed 02/26/18 13:35	Analyst	Lab TAL PIT
Leach	Analysis Instrumen	at ID: CHICS2000		25			237859	02/26/18 13:35	MJH	IAL PII
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237311	02/19/18 13:03	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: A		1			237590	02/21/18 01:20	WTR	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237311	02/19/18 13:03	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: M		1			237713	02/22/18 04:30	WTR	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			237737	02/16/18 13:32	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1	-		237752	02/16/18 13:16	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	10 mL	100 mL	237329	02/19/18 15:41	KXW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B at ID: NOEQUIP		1	-		237751	02/16/18 13:18	MTW	TAL PIT

Client Sample ID: EAST POND - PH 9.0

Date Collected: 01/17/18 10:18 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-5 **Matrix: Solid**

	Batch	Batch	_	Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A t ID: CHIC2100A		1			236732	02/13/18 17:11	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2000		5			236891	02/14/18 16:40	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236807	02/13/18 13:38	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: M		1			237198	02/15/18 23:15	WTR	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 15:19	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1			237425	02/12/18 15:01	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 9D: 180-74229-1

Client Sample ID: EAST POND - PH 9.0

Date Collected: 01/17/18 10:18 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-5

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Analysis	SM 2540C		1	100 mL	100 mL	237077	02/15/18 14:55	KXW	TAL PIT
	Instrumer	nt ID: NOEQUIP								
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	SM 2580B		1			237422	02/12/18 15:02	MTW	TAL PIT
	Instrumer	nt ID: NOEQUIP								

Client Sample ID: EAST POND - PH 8.0 Lab Sample ID: 180-74229-6 **Matrix: Solid**

Date Collected: 01/17/18 10:18

Date Received: 01/18/18 12:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrument	EPA 9056A t ID: CHIC2100A		2.5			236732	02/13/18 17:43	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrument	EPA 9056A t ID: CHICS2000		5			236891	02/14/18 16:56	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236807	02/13/18 13:38	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A t ID: M		1			237198	02/15/18 23:06	WTR	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C t ID: NOEQUIP		1			237380	02/12/18 15:10	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B t ID: NOEQUIP		1			237425	02/12/18 14:51	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	25 mL	100 mL	237077	02/15/18 14:55	KXW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B t ID: NOEQUIP		1			237422	02/12/18 14:49	MTW	TAL PIT

Client Sample ID: EAST POND - PH 7.0 Lab Sample ID: 180-74229-7

Date Collected: 01/17/18 10:18

Date Received: 01/18/18 12:20

Prep Type Leach Leach	Batch Type Leach Analysis Instrumen	Batch Method 1313 EPA 9056A t ID: CHICS2000	Run	Dil Factor	Amount 40.5 g	Final Amount 400 mL	Batch Number 236722 236997	Prepared or Analyzed 02/10/18 08:30 02/15/18 14:02		Lab TAL PIT TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT

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Matrix: Solid

2/27/2018

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 05:180-74229-1

Client Sample ID: EAST POND - PH 7.0

Date Collected: 01/17/18 10:18 Date Received: 01/18/18 12:20 Lab Sample ID: 180-74229-7

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Analysis	EPA 9056A		10			237100	02/16/18 07:20	MJH	TAL PIT
	Instrumen	t ID: CHICS2000								
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236807	02/13/18 13:38	KA	TAL PIT
Leach	Analysis	EPA 6020A		10			237323	02/16/18 20:43	WTR	TAL PIT
	Instrumen	nt ID: M								
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	EPA 9040C		1			237380	02/12/18 15:13	MTW	TAL PIT
	Instrumen	t ID: NOEQUIP								
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	SM 2510B		1			237425	02/12/18 14:56	MTW	TAL PIT
	Instrumen	t ID: NOEQUIP								
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	SM 2540C		1	25 mL	100 mL	237077	02/15/18 14:55	KXW	TAL PIT
	Instrumen	t ID: NOEQUIP								
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	SM 2580B		1			237422	02/12/18 14:55	MTW	TAL PIT
	Instrumen	t ID: NOEQUIP								

Client Sample ID: EAST POND - PH 5.5 Lab Sample I

Date Collected: 01/17/18 10:18 Date Received: 01/18/18 12:20 Lab Sample ID: 180-74229-8
Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A at ID: CHICS2000		25			236997	02/15/18 14:18	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A at ID: CHICS2000		25	· ·		237100	02/16/18 07:36	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236807	02/13/18 13:38	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A nt ID: M		10			237323	02/16/18 20:47	WTR	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C nt ID: NOEQUIP		1			237380	02/12/18 15:23	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2510B nt ID: NOEQUIP		1			237425	02/12/18 15:07	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2540C nt ID: NOEQUIP		1	10 mL	100 mL	237077	02/15/18 14:55	KXW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 0f. 193-74229-1

Client Sample ID: EAST POND - PH 5.5

Date Collected: 01/17/18 10:18 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-8

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Analysis	SM 2580B	· ——	1			237422	02/12/18 15:08	MTW	TAL PIT
	Instrument	ID: NOEQUIP								

Client Sample ID: EAST POND - PH 4.0

Date Collected: 01/17/18 10:18 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-9

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A at ID: CHICS2000		25			236553	02/09/18 18:15	CMR	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236440	02/08/18 11:28	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A at ID: M		10			236828	02/13/18 04:00	WTR	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			236465	02/07/18 11:39	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2510B at ID: NOEQUIP		1			236475	02/07/18 11:21	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	4 mL	100 mL	236825	02/13/18 15:26	KXW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2580B		1			236472	02/07/18 11:16	MTW	TAL PIT

Client Sample ID: EAST POND - PH 2.0

Lab Sample ID: 180-74229-10 Date Collected: 01/17/18 10:37 **Matrix: Solid**

Date Received: 01/18/18 12:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis	EPA 9056A		100			237859	02/26/18 11:59	MJH	TAL PIT
	Instrumen	it ID: CHICS2000								
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237311	02/19/18 13:03	KA	TAL PIT
Leach	Analysis	EPA 6020A		10			237713	02/22/18 04:48	WTR	TAL PIT
	Instrumen	t ID: M								
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis	EPA 9040C		1			237737	02/16/18 13:38	MTW	TAL PIT
	Instrumen	t ID: NOEQUIP								
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

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Client Sample ID: EAST POND - PH 2.0

Date Collected: 01/17/18 10:37

Lab Sample ID: 180-74229-10

Matrix: Solid

Date Received: 01/18/18 12:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Analysis	SM 2510B		1			237752	02/16/18 13:24	MTW	TAL PIT
	Instrumen	t ID: NOEQUIP								
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis	SM 2540C		1	2 mL	100 mL	237329	02/19/18 15:41	KXW	TAL PIT
	Instrumen	t ID: NOEQUIP								
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis	SM 2580B		1			237751	02/16/18 13:26	MTW	TAL PIT
	Instrumen	t ID: NOEQUIP								

Client Sample ID: EAST POND - NATURAL Lab Sample ID: 180-74229-11

Date Collected: 01/17/18 10:37 Matrix: Solid

Date Received: 01/18/18 12:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A t ID: CHICS2100B		1			236373	02/08/18 11:47	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236437	02/08/18 11:22	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A t ID: A		1			236729	02/09/18 23:12	WTR	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236437	02/08/18 11:22	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A t ID: M		1			236828	02/13/18 01:15	WTR	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C t ID: NOEQUIP		1			236465	02/07/18 14:19	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B t ID: NOEQUIP		1			236475	02/07/18 14:45	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	236825	02/13/18 15:26	KXW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B t ID: NOEQUIP		1			236472	02/07/18 14:47	MTW	TAL PIT

Client Sample ID: WEST POND - PRETEST Lab Sample ID: 180-74229-12

Date Collected: 01/17/18 10:37

Date Received: 01/18/18 12:20

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			234978	01/24/18 09:55	CLL	TAL PIT

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Matrix: Solid

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 9D: 180-74229-1

Client Sample ID: WEST POND - PRETEST

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-12

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	2540G t ID: NOEQUIP		1			234978	01/24/18 09:55	CLL	TAL PIT
Leach	Leach	1313			40.6 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C t ID: NOEQUIP		1			237380	02/12/18 15:32	MTW	TAL PIT
Leach	Leach	1313			40.6 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C t ID: NOEQUIP		1			237380	02/12/18 15:35	MTW	TAL PIT

Lab Sample ID: 180-74229-13 Client Sample ID: WEST POND - PH 13.0

Date Collected: 01/17/18 10:37 Matrix: Solid

Date Received: 01/18/18 12:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2000		50			236553	02/09/18 20:22	CMR	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236440	02/08/18 11:28	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: A		1			236729	02/10/18 00:50	WTR	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236440	02/08/18 11:28	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: M		1			236828	02/13/18 04:05	WTR	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			236465	02/07/18 11:27	MTW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1			236475	02/07/18 11:07	MTW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	3 mL	100 mL	236825	02/13/18 15:26	KXW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B at ID: NOEQUIP		1			236472	02/07/18 11:04	MTW	TAL PIT

Client Sample ID: WEST POND - PH 12.0

Date Collected: 01/17/18 10:37

Date Received: 01/18/18 12:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.6 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT

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Lab Sample ID: 180-74229-14

Matrix: Solid

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

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Client Sample ID: WEST POND - PH 12.0

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20 Lab Sample ID: 180-74229-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2000		25			237859	02/26/18 14:06	MJH	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237311	02/19/18 13:03	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: A		1			237590	02/21/18 01:25	WTR	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237311	02/19/18 13:03	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: M		1			237713	02/22/18 04:53	WTR	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			237737	02/16/18 13:43	MTW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1			237752	02/16/18 13:31	MTW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	10 mL	100 mL	237329	02/19/18 15:41	KXW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B at ID: NOEQUIP		1			237751	02/16/18 13:34	MTW	TAL PIT

Client Sample ID: WEST POND - PH 9.0

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20 Lab Sample ID: 180-74229-16
Matrix: Solid

Dil Initial Batch Batch Batch Final Prepared Method **Factor Amount** Number or Analyzed **Prep Type** Type Run Amount Analyst Lab 1313 40.6 g 400 mL 236722 02/10/18 08:30 LWM TAL PIT Leach Leach **EPA 9056A** 236997 TAL PIT Leach Analysis 02/15/18 14:33 MJH 1 Instrument ID: CHICS2000 Leach 1313 02/10/18 08:30 LWM Leach 40.6 g 400 mL 236722 TAL PIT **EPA 9056A** 10 237100 02/16/18 07:52 MJH TAL PIT Leach Analysis Instrument ID: CHICS2000 Leach 1313 40.6 g 400 mL 236722 02/10/18 08:30 LWM TAL PIT Leach Leach Prep 3010A 50 mL 50 mL 236807 02/13/18 13:38 KA TAL PIT Analysis **EPA 6020A** 237198 02/15/18 23:51 WTR TAL PIT Leach 1 Instrument ID: M 1313 40.6 g 400 mL 236722 02/10/18 08:30 LWM TAL PIT Leach Leach Leach Analysis **EPA 9040C** 1 237380 02/12/18 15:44 MTW TAL PIT Instrument ID: NOEQUIP Leach 1313 400 mL 236722 02/10/18 08:30 LWM TAL PIT Leach 40.6 g 237425 Leach Analysis SM 2510B 1 02/12/18 15:38 MTW TAL PIT Instrument ID: NOEQUIP Leach Leach 1313 40.6 g 400 mL 236722 02/10/18 08:30 LWM TAL PIT

TestAmerica Pittsburgh

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 9D: 180-74229-1

Client Sample ID: WEST POND - PH 9.0

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-16

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	237077	02/15/18 14:55	KXW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2580B at ID: NOEQUIP		1			237422	02/12/18 15:40	MTW	TAL PIT

Client Sample ID: WEST POND - PH 8.0

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-17

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.6 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A at ID: CHICS2000		5			236997	02/15/18 15:05	MJH	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A at ID: CHICS2000		5			237100	02/16/18 08:08	MJH	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236807	02/13/18 13:38	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A at ID: M		1			237198	02/15/18 23:24	WTR	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 15:26	MTW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2510B at ID: NOEQUIP		1			237425	02/12/18 15:12	MTW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	25 mL	100 mL	237077	02/15/18 14:55	KXW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2580B at ID: NOEQUIP		1			237422	02/12/18 15:14	MTW	TAL PIT

Client Sample ID: WEST POND - PH 7.0

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-18

Matrix: Solid

Prep Type Leach Leach	Batch Type Leach Analysis Instrumen	Batch Method 1313 EPA 9056A at ID: CHICS2000	Run	Factor 10	Initial Amount 40.6 g	Final Amount 400 mL	Batch Number 236722 236997	Prepared or Analyzed 02/10/18 08:30 02/15/18 15:21		Lab TAL PIT TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT

2/27/2018

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 15:193-74229-1

Client Sample ID: WEST POND - PH 7.0

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20 Lab Sample ID: 180-74229-18

Lab Sample ID: 180-74229-19

Matrix: Solid

Matrix: Solid

	Batch -	Batch	_	Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Analysis	EPA 9056A		10			237100	02/16/18 08:24	MJH	TAL PIT
	Instrumen	t ID: CHICS2000								
Leach	Leach	1313			40.6 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236807	02/13/18 13:38	KA	TAL PIT
Leach	Analysis	EPA 6020A		10			237323	02/16/18 20:52	WTR	TAL PIT
	Instrumen	nt ID: M								
Leach	Leach	1313			40.6 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	EPA 9040C		1			237380	02/12/18 15:29	MTW	TAL PIT
	Instrumen	it ID: NOEQUIP								
Leach	Leach	1313			40.6 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	SM 2510B		1			237425	02/12/18 15:17	MTW	TAL PIT
	Instrumen	t ID: NOEQUIP								
Leach	Leach	1313			40.6 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	SM 2540C		1	10 mL	100 mL	237077	02/15/18 14:55	KXW	TAL PIT
	Instrumen	it ID: NOEQUIP								
Leach	Leach	1313			40.6 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	SM 2580B		1			237422	02/12/18 15:21	MTW	TAL PIT
	Instrumen	t ID: NOEQUIP								

Client Sample ID: WEST POND - PH 5.5

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20

Batch Batch Dil Initial Final **Batch** Prepared Method Factor **Amount** Number or Analyzed **Prep Type** Type Run Amount Analyst Lab 400 mL Leach Leach 1313 40.6 g 236722 02/10/18 08:30 LWM TAL PIT Leach Analysis **EPA 9056A** 25 236997 02/15/18 15:37 MJH TAL PIT Instrument ID: CHICS2000 Leach Leach 1313 40.6 g 400 mL 236722 02/10/18 08:30 LWM TAL PIT Leach Analysis **EPA 9056A** 25 237100 02/16/18 08:40 MJH TAL PIT Instrument ID: CHICS2000 Leach 1313 40.6 g 400 mL 236722 02/10/18 08:30 LWM TAL PIT Leach 3010A 50 mL 50 mL 236807 TAL PIT Leach Prep 02/13/18 13:38 KA **EPA 6020A** 10 237323 02/16/18 20:57 WTR TAL PIT Leach Analysis Instrument ID: M 400 mL Leach 1313 40.6 g 236722 02/10/18 08:30 LWM TAL PIT Leach Leach Analysis **EPA 9040C** 1 237380 02/12/18 15:41 MTW TAL PIT Instrument ID: NOEQUIP Leach Leach 1313 40.6 g 400 mL 236722 02/10/18 08:30 LWM TAL PIT Leach SM 2510B 237425 02/12/18 15:33 MTW TAL PIT Analysis 1 Instrument ID: NOEQUIP TAL PIT Leach 1313 40.6 g 400 mL 236722 02/10/18 08:30 LWM Leach 10 mL 100 mL 237077 02/15/18 14:55 KXW TAL PIT Leach Analysis SM 2540C Instrument ID: NOEQUIP Leach Leach 1313 40.6 g 400 mL 236722 02/10/18 08:30 LWM TAL PIT

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Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

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Client Sample ID: WEST POND - PH 5.5

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-19

Matrix: Solid

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Type Method Run **Factor Amount Amount** Number or Analyzed Analyst Lab Leach Analysis SM 2580B 237422 02/12/18 15:34 MTW TAL PIT Instrument ID: NOEQUIP

Client Sample ID: WEST POND - PH 4.0 Lab Sample ID: 180-74229-20

Date Collected: 01/17/18 10:37 **Matrix: Solid**

Date Received: 01/18/18 12:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2000		25			236553	02/09/18 18:47	CMR	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236440	02/08/18 11:28	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: M		10			236828	02/13/18 04:10	WTR	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1	-		236465	02/07/18 11:58	MTW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1			236475	02/07/18 11:36	MTW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	4 mL	100 mL	236825	02/13/18 15:26	KXW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B		1	-		236472	02/07/18 11:33	MTW	TAL PIT

Client Sample ID: WEST POND - PH 2.0

Lab Sample ID: 180-74229-21 Date Collected: 01/17/18 10:37 Matrix: Solid

Date Received: 01/18/18 12:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.6 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2000		100			237859	02/26/18 12:31	MJH	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237311	02/19/18 13:03	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: M		10			237713	02/22/18 04:58	WTR	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			237737	02/16/18 13:49	MTW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 95: 180-74229-1

Client Sample ID: WEST POND - PH 2.0

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20 Lab Sample ID: 180-74229-21

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1			237752	02/16/18 13:38	MTW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	2 mL	100 mL	237329	02/19/18 15:41	KXW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B at ID: NOEQUIP		1			237751	02/16/18 13:43	MTW	TAL PIT

Client Sample ID: WEST POND - NATURAL Lab Sample ID: 180-74229-22

Date Collected: 01/17/18 10:37

Date Received: 01/18/18 12:20

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A t ID: CHICS2100B		1			236373	02/08/18 12:03	MJH	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236437	02/08/18 11:22	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: A		1			236729	02/09/18 23:14	WTR	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236437	02/08/18 11:22	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: M		1			236828	02/13/18 01:20	WTR	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			236465	02/07/18 14:23	MTW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1			236475	02/07/18 14:49	MTW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	236785	02/13/18 10:45	KXW	TAL PIT
Leach	Leach	1313			40.6 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B at ID: NOEQUIP		1	-		236472	02/07/18 14:51	MTW	TAL PIT

Client Sample ID: EAST POND - AIR DRIED

Date Collected: 01/17/18 10:18

Date Received: 01/18/18 12:20

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			235859	02/02/18 11:37	SES	TAL PIT

TestAmerica Pittsburgh

Lab Sample ID: 180-74229-23

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5

9

1 1

12

Matrix: Solid

Exhibit B

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

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Client Sample ID: EAST POND - AIR DRIED

Date Collected: 01/17/18 10:18 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-23

Matrix: Solid

Batch Dil Initial Final Batch Batch Prepared **Prep Type** Type Method Run **Factor Amount Amount** Number or Analyzed Analyst Total/NA Analysis 2540G 235859 02/02/18 11:37 SES TAL PIT

Client Sample ID: WEST POND - AIR DRIED

Instrument ID: NOEQUIP

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-24 **Matrix: Solid**

> Analyst Lab TAL PIT

Batch Dil Initial Final Batch Batch Prepared **Prep Type** Type Method Run **Factor Amount Amount** Number or Analyzed Total/NA Analysis 2540G 235859 02/02/18 11:37 SES Instrument ID: NOEQUIP

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Leach LWM = Larry Matko

Batch Type: Prep

KA = Kayla Kalamasz

Batch Type: Analysis

CLL = Cheryl Loheyde

CMR = Carl Reagle

KXW = Kaitlyn White

MJH = Matthew Hartman

MTW = Michael Wesoloski

SES = Samantha Strauser

WTR = Bill Reinheimer

Client: KPRG and Associates, Inc.

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Project/Site: Midwest Generation

Client Sample ID: EAST POND - PRETEST

Date Collected: 01/17/18 10:18 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-1

Matrix: Solid

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.8		0.1		%			01/24/18 09:55	1
Percent Solids	85.2		0.1		%			01/24/18 09:55	1
General Chemistry - Leach	D 16	0	Б.		1114	_	Daniera	Anabasal	D!! E
Analyte	Result	Qualifier	RL _	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	12.8		0.1		SU			02/12/18 15:07	1
pH	3.6		0.1		SU			02/12/18 15:16	1

Client Sample ID: EAST POND - PH 13.0 Lab Sample ID: 180-74229-2 **Matrix: Solid**

Date Collected: 01/17/18 10:18

Date Received: 01/18/18 12:20

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<50	50	mg/L			02/09/18 19:50	50
Fluoride	<5.0	5.0	mg/L			02/09/18 19:50	50
Sulfate	120	50	mg/L			02/09/18 19:50	50

Method: EPA 6020A - Metals (ICP/MS) - Leach										
Analyte	Result Qualifier	RL	MDL Uni	t D	Prepared	Analyzed	Dil Fac			
Boron	3500	80	ug/L		02/08/18 11:28	02/13/18 03:43	1			
Calcium	3700	500	ug/L	-	02/08/18 11:28	02/10/18 00:39	1			

General Chemistry - Leach Analyte	Result Q	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	12.8		0.1		SU			02/07/18 12:13	1
Specific Conductance	47000		1.0		umhos/cm			02/07/18 12:01	1
Total Dissolved Solids	14000		330		mg/L			02/15/18 14:59	1
Oxidation Reduction Potential	- 50		10		millivolts			02/07/18 11:54	1

Client Sample ID: EAST POND - PH 12.0 Lab Sample ID: 180-74229-3

Date Collected: 01/17/18 10:18 Date Received: 01/18/18 12:20

Method: EPA 9056A - Anions, Ion Chromatography - Leach								
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<25	25	mg/L			02/26/18 13:35	25	
Fluoride	<2.5	2.5	mg/L			02/26/18 13:35	25	
Sulfate	110	25	mg/L			02/26/18 13:35	25	

Method: EPA 6020A - Metals (ICP/MS) - Leach										
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Boron	3400	80		ug/L		02/19/18 13:03	02/22/18 04:30	1		
Calcium	3500	500		ug/L		02/19/18 13:03	02/21/18 01:20	1		

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	12.5	0.1	SU			02/16/18 13:32	1
Specific Conductance	13000	1.0	umhos/cm			02/16/18 13:16	1
Total Dissolved Solids	3700	100	mg/L			02/19/18 15:41	1
Oxidation Reduction Potential	- 7	10	millivolts			02/16/18 13:18	1

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Matrix: Solid

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TestAmerica Job 9D: 180-74229-1

Project/Site: Midwest Generation

Client Sample ID: EAST POND - PH 9.0

Date Collected: 01/17/18 10:18 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-5

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.8		1.0		mg/L			02/13/18 17:11	1
Fluoride	0.51		0.50		mg/L			02/14/18 16:40	5
Sulfate	110		1.0		mg/L			02/13/18 17:11	1
Method: EPA 6020A - Metals (I	CP/MS) - L	each							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2000		80		ug/L		02/13/18 13:38	02/15/18 23:15	1
Calcium	120000		500		ug/L		02/13/18 13:38	02/15/18 23:15	1
General Chemistry - Leach									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.9		0.1		SU			02/12/18 15:19	1
Specific Conductance	1300		1.0		umhos/cm			02/12/18 15:01	1
Total Dissolved Solids	890		10		mg/L			02/15/18 14:55	1
Oxidation Reduction Potential	230		10		millivolts			02/12/18 15:02	1

Lab Sample ID: 180-74229-6 Client Sample ID: EAST POND - PH 8.0 Matrix: Solid

Date Collected: 01/17/18 10:18

Date Received: 01/18/18 12:20

Method: EPA 9056A - Anions, Ion Chromatography - Leach								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.5	2.5		mg/L			02/13/18 17:43	2.5
Fluoride	<0.50	0.50		mg/L			02/14/18 16:56	5
Sulfate	130	2.5		mg/L			02/13/18 17:43	2.5

Method: EPA 6020A - Metals (ICP/MS) - Leach									
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac		
Boron	3000	80	ug/L		02/13/18 13:38	02/15/18 23:06	1		
Calcium	660000	500	ug/L		02/13/18 13:38	02/15/18 23:06	1		

General Chemistry - Leach Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7		0.1		SU	·		02/12/18 15:10	1
Specific Conductance	4700		1.0		umhos/cm			02/12/18 14:51	1
Total Dissolved Solids	3600		40		mg/L			02/15/18 14:55	1
Oxidation Reduction Potential	260		10		millivolts			02/12/18 14:49	1

Client Sample ID: EAST POND - PH 7.0 Lab Sample ID: 180-74229-7

Date Collected: 01/17/18 10:18 Date Received: 01/18/18 12:20

Method: EPA 9056A	- Anions, Ion Chroma	tography - L	each						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10		10		mg/L			02/15/18 14:02	10
Fluoride	<1.0		1.0		mg/L			02/15/18 14:02	10
Sulfate	140		10		mg/L			02/16/18 07:20	10

	ICP/MS) - Leach							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	4300	800		ug/L		02/13/18 13:38	02/16/18 20:43	10

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Matrix: Solid

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Project/Site: Midwest Generation

Client Sample ID: EAST POND - PH 7.0

Date Collected: 01/17/18 10:18 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-7

Lab Sample ID: 180-74229-8

Lab Sample ID: 180-74229-9

02/08/18 11:28 02/13/18 04:00

Matrix: Solid

Matrix: Solid

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1500000		5000		ug/L		02/13/18 13:38	02/16/18 20:43	10
General Chemistry - Leach									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.0		0.1		SU			02/12/18 15:13	1
Specific Conductance	8500		1.0		umhos/cm			02/12/18 14:56	1
Total Dissolved Solids	6500		40		mg/L			02/15/18 14:55	1
Oxidation Reduction Potential	290		10		millivolts			02/12/18 14:55	1

Client Sample ID: EAST POND - PH 5.5

Date Collected: 01/17/18 10:18

Date Received: 01/18/18 12:20

Method: EPA 9056A - Anions, Ion Chromatography - Leach								
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<25	25	mg/L			02/15/18 14:18	25	
Fluoride	<2.5	2.5	mg/L			02/15/18 14:18	25	
Sulfate	170	25	mg/L			02/16/18 07:36	25	

Method: EPA 6020A - Metals (ICP/MS) - Leach								
	Analyte	Result Qualit	lifier RL	MDL U	nit D	Prepared	Analyzed	Dil Fac
	Boron	6400	800	uç	g/L	02/13/18 13:38	02/16/18 20:47	10
	Calcium	3100000	5000	uç	g/L	02/13/18 13:38	02/16/18 20:47	10

General Chemistry - Leach Analyte	Result Q	ualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.8		0.1		SU			02/12/18 15:23	1
Specific Conductance	18000		1.0		umhos/cm			02/12/18 15:07	1
Total Dissolved Solids	17000		100		mg/L			02/15/18 14:55	1
Oxidation Reduction Potential	310		10		millivolts			02/12/18 15:08	1

Client Sample ID: EAST POND - PH 4.0

11000

5000000

Date Collected: 01/17/18 10:18

Date Received: 01/18/18 12:20

Boron

Calcium

Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
<25	25	mg/L			02/09/18 18:15	25
7.5	2.5	mg/L			02/09/18 18:15	25
330	25	mg/L			02/09/18 18:15	25
	<25 7.5	<25 25 7.5 2.5	<25 25 mg/L 7.5 2.5 mg/L	<25 25 mg/L 7.5 2.5 mg/L	<25 25 mg/L 7.5 2.5 mg/L	<25 25 mg/L 02/09/18 18:15 7.5 2.5 mg/L 02/09/18 18:15

800

5000

ug/L

ug/L

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	3.8	0.1	SU			02/07/18 11:39	1
Specific Conductance	30000	1.0	umhos/cm			02/07/18 11:21	1
Total Dissolved Solids	33000	250	mg/L			02/13/18 15:26	1

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 05 193

Client Sample ID: EAST POND - PH 4.0

Date Collected: 01/17/18 10:18 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-9

Lab Sample ID: 180-74229-11

Matrix: Solid

Matrix: Solid

General Chemistry - Leach (Co								
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Oxidation Reduction Potential	400		10	millivolts			02/07/18 11:16	1

Date Received: 01/18/18 12:20

Oxidation Roddonon Fotonia		
Client Sample ID: EAST PON	ID - PH 2.0	Lab Sample ID: 180-74229-10
Date Collected: 01/17/18 10:37		Matrix: Solid

Method: EPA 9056A - Anions, Ion Chromatography - Leach Analyte Result Qualifier MDL Unit Prepared Analyzed RL Dil Fac Chloride <100 100 mg/L 02/26/18 11:59 100 Fluoride <10 10 mg/L 02/26/18 11:59 100 **Sulfate** 180 100 mg/L 02/26/18 11:59 100

Method: EPA 6020A - Metals (ICP/MS) - Leach MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Dil Fac Boron 5100 800 ug/L 02/19/18 13:03 02/22/18 04:48 10 5000 **Calcium** 2200000 ug/L 02/19/18 13:03 02/22/18 04:48 10

General Chemistry - Leach Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac SU рН 2.1 0.1 02/16/18 13:38 **Specific Conductance** 64000 1.0 umhos/cm 02/16/18 13:24 74000 500 mg/L 02/19/18 15:41 **Total Dissolved Solids** 10 millivolts 02/16/18 13:26 **Oxidation Reduction Potential** 660

Client Sample ID: EAST POND - NATURAL

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20

Method: EPA 9056A - Anions, Ion Chromatography - Leach Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac Chloride 2.9 1.0 mg/L 02/08/18 11:47 0.10 02/08/18 11:47 **Fluoride** 0.32 mg/L 02/08/18 11:47 **Sulfate** 130 1.0 mg/L

Method: EPA 6020A - Metals (ICP/MS) - Leach **MDL** Unit **Analyte** Result Qualifier RL D Prepared Dil Fac Analyzed 80 02/08/18 11:22 02/13/18 01:15 Boron 2000 ug/L 500 02/08/18 11:22 02/09/18 23:12 **Calcium** 43000 ug/L

General Chemistry - Leach MDL Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac 0.1 SU рН 9.7 02/07/18 14:19 **Specific Conductance** 390 1.0 umhos/cm 02/07/18 14:45 1 **Total Dissolved Solids** 270 10 mg/L 02/13/18 15:26 **Oxidation Reduction Potential** 170 10 millivolts 02/07/18 14:47

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Project/Site: Midwest Generation

Client Sample ID: WEST POND - PRETEST

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-12

Matrix: Solid

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	38.6		0.1		%			01/24/18 09:55	1
Percent Solids	61.4		0.1		%			01/24/18 09:55	1

General Chemistry - Leach Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	12.7		0.1		SU			02/12/18 15:32	1
рН	3.7		0.1		SU			02/12/18 15:35	1

Lab Sample ID: 180-74229-13 Client Sample ID: WEST POND - PH 13.0

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20

Fluoride

Sulfate

Matrix: Solid

Method: EPA 9056A - Anions, Ion Chromatography - Leach									
	Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	<50	50		mg/L			02/09/18 20:22	50
	Fluoride	<5.0	5.0		mg/L			02/09/18 20:22	50
	Sulfate	120	50		mg/L			02/09/18 20:22	50
	_								

Method: EPA 6020A - Metals (IC	CP/MS) - Leach						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Boron	3700	80	ug/L		02/08/18 11:28	02/13/18 04:05	1
Calcium	3800	500	ug/L		02/08/18 11:28	02/10/18 00:50	1

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	12.8	0.1	SU			02/07/18 11:27	1
Specific Conductance	46000	1.0	umhos/cm			02/07/18 11:07	1
Total Dissolved Solids	14000	330	mg/L			02/13/18 15:26	1
Oxidation Reduction Potential	- 32	10	millivolts			02/07/18 11:04	1

Lab Sample ID: 180-74229-14 Client Sample ID: WEST POND - PH 12.0 **Matrix: Solid**

Date Collected: 01/17/18 10:37 Data Danaburd, 04/40/40 40:00

<2.5

120

Date Received: 01/18/18 12:20									
Method: EPA 9056A - Anions,	Ion Chroma	atography	- Leach						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<25		25		mg/L			02/26/18 14:06	25

2.5

25

mg/L

mg/L

Method: EPA 6020A - Metals (I	CP/MS) - Leach						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Boron	3700	80	ug/L		02/19/18 13:03	02/22/18 04:53	1
Calcium	3800	500	ua/L		02/19/18 13:03	02/21/18 01:25	1

General Chemistry - Leach Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	12.4		0.1		SU			02/16/18 13:43	1
Specific Conductance	13000		1.0		umhos/cm			02/16/18 13:31	1
Total Dissolved Solids	4100		100		mg/L			02/19/18 15:41	1
Oxidation Reduction Potential	- 10		10		millivolts			02/16/18 13:34	1

TestAmerica Pittsburgh

02/26/18 14:06

02/26/18 14:06

25

TestAmerica Job 95: 180-74229-1

Project/Site: Midwest Generation

Client Sample ID: WEST POND - PH 9.0

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20 Lab Sample ID: 180-74229-16

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.2		1.0		mg/L			02/15/18 14:33	1
Fluoride	0.20		0.10		mg/L			02/15/18 14:33	1
Sulfate	100		10		mg/L			02/16/18 07:52	10
- Method: EPA 6020A - Metals (I	CP/MS) - L	each							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1800		80		ug/L		02/13/18 13:38	02/15/18 23:51	1
Calcium	130000		500		ug/L		02/13/18 13:38	02/15/18 23:51	1
General Chemistry - Leach									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.7		0.1		SU			02/12/18 15:44	1
Specific Conductance	1300		1.0		umhos/cm			02/12/18 15:38	1
Total Dissolved Solids	930		10		mg/L			02/15/18 14:55	1
Oxidation Reduction Potential	250		10		millivolts			02/12/18 15:40	1

Client Sample ID: WEST POND - PH 8.0 Lab Sample ID: 180-74229-17

Date Collected: 01/17/18 10:37

Date Received: 01/18/18 12:20

Method: EPA 9056A - Anions, Ion Chromatography - Leach									
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<5.0	5.0		mg/L			02/15/18 15:05	5	
Fluoride	<0.50	0.50		mg/L			02/15/18 15:05	5	
Sulfate	130	5.0		mg/L			02/16/18 08:08	5	

Method: EPA 6020A - Metals (
Analyte	Result Qualifier	RL	MDL I	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2900	80	ί	ug/L		02/13/18 13:38	02/15/18 23:24	1
Calcium	710000	500	ι	ug/L		02/13/18 13:38	02/15/18 23:24	1

General Chemistry - Leach Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.5		0.1		SU	·		02/12/18 15:26	1
Specific Conductance	4800		1.0		umhos/cm			02/12/18 15:12	1
Total Dissolved Solids	3600		40		mg/L			02/15/18 14:55	1
Oxidation Reduction Potential	280		10		millivolts			02/12/18 15:14	1

Client Sample ID: WEST POND - PH 7.0 Lab Sample ID: 180-74229-18

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20

Method: EPA 9056A - Anions, Ion Chromatography - Leach								
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<10	10	mg/L			02/15/18 15:21	10	
Fluoride	<1.0	1.0	mg/L			02/15/18 15:21	10	
Sulfate	130	10	mg/L			02/16/18 08:24	10	

Method: EPA 6020A - Metals (ICP/MS) - Leach							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	4300	800		ug/L		02/13/18 13:38	02/16/18 20:52	10

TestAmerica Pittsburgh

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5

3

5

6

8

10

19

13

Matrix: Solid

Matrix: Solid

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Client: KPRG and Associates, Inc.

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02/12/18 15:21

02/16/18 08:40

Lab Sample ID: 180-74229-19

Lab Sample ID: 180-74229-20

Project/Site: Midwest Generation

Client Sample ID: WEST POND - PH 7.0

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-18

Matrix: Solid

Matrix: Solid

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1400000		5000		ug/L		02/13/18 13:38	02/16/18 20:52	10
General Chemistry - Leach									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.0		0.1		SU			02/12/18 15:29	1
Specific Conductance	8600		1.0		umhos/cm			02/12/18 15:17	1

10

millivolts

mg/L

Client Sample ID: WEST POND - PH 5.5

300

160

Date Collected: 01/17/18 10:37

Date Received: 01/18/18 12:20

Sulfate

Oxidation Reduction Potential

Date Received. 01/16/16 12.20									
Method: EPA 9056A - Anions,	lon Chroma	atography -	Leach						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<25		25	-	mg/L			02/15/18 15:37	25
Fluoride	<2.5		2.5		mg/L			02/15/18 15:37	25

25

Method: EPA 6020A - Metals (ICP/MS) - Leach **Analyte** Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Boron 6200 800 ug/L 02/13/18 13:38 02/16/18 20:57 10 3000000 5000 02/13/18 13:38 02/16/18 20:57 **Calcium** ug/L 10

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	5.9	0.1	SU			02/12/18 15:41	1
Specific Conductance	18000	1.0	umhos/cm			02/12/18 15:33	1
Total Dissolved Solids	17000	100	mg/L			02/15/18 14:55	1
Oxidation Reduction Potential	320	10	millivolts			02/12/18 15:34	1

Client Sample ID: WEST POND - PH 4.0

Date Collected: 01/17/18 10:37

Date Received: 01/18/18 12:20

Method: EPA 9056A - Anions, Ion Chromatography - Leach										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	<25		25		mg/L			02/09/18 18:47	25
	Fluoride	7.7		2.5		mg/L			02/09/18 18:47	25
	Sulfate	360		25		mg/L			02/09/18 18:47	25

Method: EPA 6020A - Metals (ICP/MS) - Leach									
	Analyte	Result Qualifier	RL	MDL I	Unit	D	Prepared	Analyzed	Dil Fac
	Boron	11000	800	ί	ug/L		02/08/18 11:28	02/13/18 04:10	10
	Calcium	5100000	5000	ι	ug/L		02/08/18 11:28	02/13/18 04:10	10

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	3.8	0.1		SU			02/07/18 11:58	1
Specific Conductance	30000	1.0		umhos/cm			02/07/18 11:36	1
Total Dissolved Solids	33000	250		mg/L			02/13/18 15:26	1

TestAmerica Pittsburgh

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Client: KPRG and Associates, Inc.

TestAmerica Job 9D: 180-74229-1

Project/Site: Midwest Generation

Client Sample ID: WEST POND - PH 4.0

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-20

Matrix: Solid

General Chemistry - Leach (Continued)								
	Analyte	Result Qualifier	RL	MDL	Unit D	Prepared	Analyzed	Dil Fac
	Oxidation Reduction Potential	410	10		millivolts		02/07/18 11:33	1

Client Sample ID: WEST POND - PH 2.0

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-21

Matrix: Solid

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<100	100	mg/L			02/26/18 12:31	100
Fluoride	<10	10	mg/L			02/26/18 12:31	100
Sulfate	180	100	mg/L			02/26/18 12:31	100

Method: EPA 6020A - Metals (ICP/MS) - Leach Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Boron 11000 800 ug/L 02/19/18 13:03 02/22/18 04:58 **Calcium** 4400000 5000 ug/L 02/19/18 13:03 02/22/18 04:58 10

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Uni	it D	Prepared	Analyzed	Dil Fac
pH	2.5	0.1	SU	_		02/16/18 13:49	1
Specific Conductance	59000	1.0	um	nhos/cm		02/16/18 13:38	1
Total Dissolved Solids	70000	500	mg	ı/L		02/19/18 15:41	1
Oxidation Reduction Potential	490	10	mill	livolts		02/16/18 13:43	1

Client Sample ID: WEST POND - NATURAL

Date Collected: 01/17/18 10:37 Date Received: 01/18/18 12:20

Lab Sample ID: 180-74229-22 **Matrix: Solid**

Method: EPA 9056A - Anions, Ion Chromatography - Leach									
	Analyte	Result Qua	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	17	1.0		mg/L			02/08/18 12:03	1
	Fluoride	0.53	0.10		mg/L			02/08/18 12:03	1
	Sulfate	38	1.0		mg/L			02/08/18 12:03	1
	_								

Method: EPA 6020A - Metals (ICP/MS) - Leach										
	Analyte	Result Q	ualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Boron	1900		80		ug/L		02/08/18 11:22	02/13/18 01:20	1
	Calcium	42000		500		ug/L		02/08/18 11:22	02/09/18 23:14	1

General Chemistry - Leach								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	9.7	0.1		SU			02/07/18 14:23	1
Specific Conductance	400	1.0		umhos/cm			02/07/18 14:49	1
Total Dissolved Solids	240	10		mg/L			02/13/18 10:45	1
Oxidation Reduction Potential	170	10		millivolts			02/07/18 14:51	1

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 9D: 180-74229-1

Client Sample ID: EAST POND - AIR DRIED

Date Collected: 01/17/18 10:18 Date Received: 01/18/18 12:20 Lab Sample ID: 180-74229-23

Matrix: Solid

Matrix: Solid

General Chemistry Analyte	Result Qualifier	RL	MDL Un	it D	Prepared	Analyzed	Dil Fac
Percent Moisture	1.2	0.1	%			02/02/18 11:37	1
Percent Solids	98.8	0.1	%			02/02/18 11:37	1

Client Sample ID: WEST POND - AIR DRIED Lab Sample ID: 180-74229-24

Date Collected: 01/17/18 10:37

Date Received: 01/18/18 12:20

General Chemistry Analyte	Result Qualif	fier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	1.4	0.1		%			02/02/18 11:37	1
Percent Solids	98.6	0.1		%			02/02/18 11:37	1

0

10

11

TestAmerica Job 9D: 180-74229-1

Project/Site: Midwest Generation

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-236373/6

Matrix: Solid

Analysis Batch: 236373

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.0		1.0		mg/L			02/08/18 06:17	1
Fluoride	<0.10		0.10		mg/L			02/08/18 06:17	1
Sulfate	<1.0		1.0		mg/L			02/08/18 06:17	1

Lab Sample ID: LCS 180-236373/5

Matrix: Solid

Analysis Batch: 236373

	Spi	ke LCS	LCS		%Rec.	
Analyte	Add	ed Resul	t Qualifier Unit	t D %Re	ec Limits	
Chloride		5.0 25.0	mg/l	L 10	00 80 - 120	
Fluoride	1.	25 1.02	2 mg/l	L 8	82 80 - 120	
Sulfate	29	5.0 24.0) mg/l	L 9	96 80 - 120	

Lab Sample ID: MB 180-236553/16

Matrix: Solid

Analysis Batch: 236553

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

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample

	MB ME	В				
Analyte	Result Qu	ualifier RL	MDL Unit	D Prepared	Analyzed	Dil Fac
Chloride	<1.0	1.0	mg/L		02/09/18 16:56	1
Fluoride	<0.10	0.10	mg/L		02/09/18 16:56	1
Sulfate	<1.0	1.0	mg/L		02/09/18 16:56	1

Lab Sample ID: LCS 180-236553/15

Matrix: Solid

Analysis Batch: 236553

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	25.0	25.9		mg/L		103	80 - 120	
Fluoride	1.25	1.20		mg/L		96	80 - 120	
Sulfate	25.0	22.0		mg/L		88	80 - 120	

Lab Sample ID: MB 180-236732/6	Client Sample ID: Method Blank
Matrix: Solid	Prep Type: Total/NA
Analysis Batch: 236732	

	IVID	IVID								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<1.0		1.0		mg/L			02/13/18 05:33	1	
Sulfate	<1.0		1.0		mg/L			02/13/18 05:33	1	

Lab Sample ID: LCS 180-236732/5

Matrix: Solid

Analysis Ratch: 236732

Alialysis Dalcii. 230132								
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	25.0	25.9		mg/L	_	103	80 - 120	
Sulfate	25.0	25.1		mg/L		100	80 - 120	

TestAmerica Pittsburgh

Prep Type: Total/NA

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Project/Site: Midwest Generation

Method: EPA 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-236891/6

Matrix: Solid

Analysis Batch: 236891

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

10

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Chloride 1.0 mg/L 02/14/18 11:05 <1.0 Fluoride <0.10 0.10 02/14/18 11:05 mg/L Sulfate 02/14/18 11:05 <1.0 1.0 mg/L

Lab Sample ID: LCS 180-236891/5

Matrix: Solid

Analysis Batch: 236891

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit Limits D %Rec Chloride 50.0 80 - 120 51.9 mg/L 104 Fluoride 2.50 2.58 mg/L 103 80 - 120 Sulfate 50.0 49.2 mg/L 98 80 - 120

Lab Sample ID: MB 180-236997/6

Matrix: Solid

Analysis Batch: 236997

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

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample

	MB N	MB					
Analyte	Result 0	Qualifier RL	MDL Ur	nit D	Prepared	Analyzed	Dil Fac
Chloride	<1.0	1.0	mg	g/L		02/15/18 09:09	1
Fluoride	<0.10	0.10	m	g/L		02/15/18 09:09	1
Sulfate	<1.0	1.0	m	g/L		02/15/18 09:09	1

Lab Sample ID: LCS 180-236997/5

Matrix: Solid

Analysis Batch: 236997

	Spike	LCS	LCS			%Rec.	
Analyte	Added	Result	Qualifier	Unit D	%Rec	Limits	
Chloride	50.0	49.6		mg/L	99	80 - 120	
Fluoride	2.50	2.35		mg/L	94	80 - 120	
Sulfate	50.0	45.6		mg/L	91	80 - 120	

Lab Sample ID: MB 180-237100/6	Client Sample ID: Method Blank
Matrix: Solid	Prep Type: Total/NA
Analysis Batch: 237100	

		טו					
Analyte	Result Q	ualifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.0	1.0	mg/L	 -		02/16/18 06:07	1
Fluoride	<0.10	0.10	mg/L	=		02/16/18 06:07	1
Sulfate	<1.0	1.0	mg/L	=		02/16/18 06:07	1

MD MD

Lab Sample ID: LCS 180-237100/5

Matrix: Solid

Analysis Batch: 237100

Alialysis Datcii. 237 100								
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Sulfate	50.0	45.2		mg/L		90	80 - 120	

TestAmerica Pittsburgh

Prep Type: Total/NA

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 05 193

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Method: EPA 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-237859/6 **Matrix: Solid**

Analysis Batch: 237859

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

MB MB Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac 1.0 Chloride mg/L 02/26/18 08:06 <1.0 Fluoride <0.10 0.10 02/26/18 08:06 mg/L 02/26/18 08:06 Sulfate <1.0 1.0 mg/L

Lab Sample ID: LCS 180-237859/5

Matrix: Solid

Analysis Batch: 237859

•	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	25.0	26.4		mg/L		106	80 - 120	
Fluoride	1.25	1.23		mg/L		99	80 - 120	
Sulfate	25.0	22.5		mg/L		90	80 - 120	

RL

500

RL

80

Spike

Added

50000

Spike

Added

1000

MDL Unit

MDL Unit

LCS LCS

LCS LCS

1010

Result Qualifier

53100

Result Qualifier

ug/L

Unit

ug/L

Unit

ug/L

ug/L

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

Lab Sample ID: MB 180-236437/1-A

Matrix: Solid

Analysis Batch: 236729

•	MB	MB
Analyte	Result	Qualifier

Result
I

Calcium	<500

0 4.0.4	
<u>L</u>	
_	

Lab Sample ID: MB 180-236437/1-A

Matrix: Solid

Analyte

Calcium

Analyte

Boron

Analysis Batch: 236828

MR MR

	IVID	IVID
Analyte	Result	Qualifier

Analyte	
Boron	-

H							
1	l ah	Sample	ID: I	CS	180-2	36437	12-A

Matrix: Solid

Analysis Batch: 236729

Lah Sample ID:	LCS 180-236437/2-A
Lub Guilipic ID.	LOG TOO LOG TOTTLE A

Matrix: Solid

Analysis Batch: 236828

Г		
Lab Samp	ole ID: LCSI	D 180-236437/3-A

Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Spike LCSD LCSD

Analysis Batch: 236729 Added Analyte Result Qualifier Unit 50000 Calcium

<80

52500 ug/L

%Rec 105

Prep Batch: 236437 %Rec. RPD Limits

Limit 80 - 120 20

TestAmerica Pittsburgh

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

Dil Fac

Prep Batch: 236437

Prep Type: Total/NA

Prep Batch: 236437

Analyzed

Analyzed Dil Fac 02/08/18 11:22 02/13/18 00:25

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

02/08/18 11:22 02/09/18 22:43

Prepared

Prepared

%Rec

D %Rec

101

106

Prep Type: Total/NA **Prep Batch: 236437**

%Rec. Limits

RPD

10

Prep Type: Total/NA

Client: KPRG and Associates, Inc.

Matrix: Solid

TestAmerica Job 05:1180-74229-1

Project/Site: Midwest Generation

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

Lab Sample ID: LCSD 180-236437/3-A			C	Client Sa	mple	ID: Lab	Control	Sample	Dup
Matrix: Solid							Prep Ty	e: Tot	al/NA
Analysis Batch: 236828							Prep Ba	itch: 23	36437
-	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Boron	1000	1030		ug/L		103	80 - 120	2	20

Lab Sample ID: MB 180-236440/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 236729** Prep Batch: 236440 MB MB Dil Fac Result Qualifier RL MDL Unit Prepared

Analyte Analyzed 500 02/08/18 11:28 02/10/18 00:04 Calcium <500 ug/L Lab Sample ID: MB 180-236440/1-A **Client Sample ID: Method Blank**

Analysis Batch: 236828 Prep Batch: 236440 MB MB Result Qualifier RL **MDL** Unit Prepared Dil Fac Analyte Analyzed

Boron <80 80 ug/L 02/08/18 11:28 02/13/18 02:47 **Client Sample ID: Lab Control Sample** Lab Sample ID: LCS 180-236440/2-A **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 236729 Prep Batch: 236440 Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Calcium 50000 52800 ug/L 106 80 - 120

Lab Sample ID: LCS 180-236440/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA **Prep Batch: 236440 Analysis Batch: 236828** Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit %Rec Limits 1000 916 92 80 - 120 Boron ug/L

Lab Sample ID: LCSD 180-236440/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA **Prep Batch: 236440 Analysis Batch: 236729** LCSD LCSD Spike %Rec. **RPD** Added Result Qualifier Limits **RPD** Analyte Unit D %Rec Limit 50000 51500 103 80 - 120 Calcium ug/L

Lab Sample ID: LCSD 180-236440/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 236828 Prep Batch: 236440** Spike LCSD LCSD %Rec. **RPD** Added Result Qualifier RPD **Analyte** Unit %Rec Limits Limit Boron 1000 917 ug/L 92 80 - 120 0 20

Lab Sample ID: MB 180-236807/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 237198** Prep Batch: 236807

MB MB Analyte RL MDL Unit D Prepared Result Qualifier Analyzed Dil Fac Boron <80 80 ug/L 02/13/18 13:38 02/15/18 21:43

TestAmerica Pittsburgh

Prep Batch: 236807

Prep Batch: 236807

Prep Type: Total/NA **Prep Batch: 236807**

Prep Batch: 237311

Prep Batch: 237311

Client Sample ID: Lab Control Sample Dup

Client: KPRG and Associates, Inc.

TestAmerica Job 05 180-74229-1

Project/Site: Midwest Generation

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

Lab Sample ID: MB 180-236807/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Total/NA**

Analysis Batch: 237198

MR MR

RL **MDL** Unit Analyte Result Qualifier Prepared Analyzed Dil Fac Calcium 500 02/13/18 13:38 02/15/18 21:43 <500 ug/L

Lab Sample ID: LCS 180-236807/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 237198

		Spike	LCS	LCS				%Rec.	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Boron		1000	866		ug/L		87	80 - 120	_
Calcium		50000	46700		ug/L		93	80 - 120	

Lab Sample ID: LCSD 180-236807/3-A

Matrix: Solid

Analysis Batch: 237198

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Boron	1000	879		ug/L		88	80 - 120	1	20
Calcium	50000	46500		ug/L		93	80 - 120	1	20

Lab Sample ID: MB 180-237311/1-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237590

MB MB

Analyte	Result Qual	lifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<500	500	ug/L		02/19/18 13:03	02/21/18 00:31	1

Lab Sample ID: MB 180-237311/1-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237713

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Boron <80 80 ug/L 02/19/18 13:03 02/22/18 03:08

Lab Sample ID: LCS 180-237311/2-A **Client Sample ID: Lab Control Sample**

LCS LCS

Matrix: Solid

Analysis Batch: 237590

Spike Analyte Added Result Qualifier Unit %Rec Limits Calcium 48400 50000 ug/L 80 - 120

Lab Sample ID: LCS 180-237311/2-A

Matrix: Solid							Prep Type: Tot	tal/NA
Analysis Batch: 237713							Prep Batch: 2	3731 1
•	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Boron	1000	1010		ua/l		101	80 - 120	

2/27/2018

10

Prep Type: Total/NA **Prep Batch: 237311**

%Rec.

Client Sample ID: Lab Control Sample

TestAmerica Job 95.1930-74229-1

Project/Site: Midwest Generation

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

Lab Sample ID: LCSD 180-237311/3-A	Client Sample ID: Lab Control Sample Dup								
Matrix: Solid							Prep Ty	pe: Tot	al/NA
Analysis Batch: 237590							Prep Ba	atch: 23	37311
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Calcium	50000	48200		ug/L		96	80 - 120	0	20

	Spike	LCOD	LCOD				7οRec.		KPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Calcium	50000	48200		ug/L		96	80 - 120	0	20
Lab Sample ID: LCSD 180-237311/3-A			C	Client Sa	ample	ID: Lab	Control	Sample	Dup
Matrix: Solid							Prep Ty	pe: Tot	al/NA
Analysis Batch: 237713							Prep Ba	tch: 23	37311
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Boron	1000	1020		ug/L		102	80 - 120		20

Method: 2540G - SM 2540G Lab Sample ID: 180-74229-1 DU

Matrix: Solid

Lab Sample ID: 180-74 Matrix: Solid Analysis Batch: 23497					Client S	ample ID:	Prep Type: Tot	
		Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Percent Moisture	14.8		17.0		%			20
Percent Solids	85.2		83.0		%		3	20

Analyte	Result	Qualifier	Resu	t Qualifier	Unit	D		RPD	Limit
Percent Moisture	14.8		17.	0	%		 	14	20
Percent Solids	85.2		83.	0	%			3	20
Method: FPA 9040C - n	н								

Lab Sample ID: LCS 180-236465/1 Matrix: Solid Analysis Batch: 236465				Ciler	nt Sai	mpie iu	: Lab Control Sample Prep Type: Total/NA
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
pH	7.00	7.0		SU		100	99 - 101
Lab Sample ID: LCS 180-236465/24				Clier	nt Sai	mple ID	: Lab Control Sampl
Matrix: Solid							Prep Type: Total/N

Analysis Batch: 236465									
-		Spike	LCS	LCS				%Rec.	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
pH	 	7.00	7.0		SU		100	99 - 101	

Lab Sample ID: LCS 180-236465/47 Matrix: Solid Analysis Batch: 236465				Clie	nt Sar	nple ID	: Lab Control Sample Prep Type: Total/NA
Analyte pH	Spike	LCS Result	LCS Qualifier	Unit SU	D	%Rec	%Rec. Limits 99 - 101
Lab Sample ID: LCS 180-237380/1	7.00	7.0			nt Sar		: Lab Control Sample

Analysis Batch: 237380									
-	5	Spike	LCS	LCS				%Rec.	
Analyte	Α	dded	Result	Qualifier	Unit	D	%Rec	Limits	
рН	 	7.00	7.0		SU		100	99 - 101	

TestAmerica Pittsburgh

Prep Type: Total/NA

TestAmerica Job 10: 180-74229-1

Project/Site: Midwest Generation

Method: EPA 9040C - pH (Continued)

Lab Sample ID: LCS 180-237737/1

Matrix: Solid

Analysis Batch: 237737

Analyte

Spike Added 7.00

LCS LCS Result Qualifier 7.0

Unit SU

D %Rec 100 Limits 99 - 101

Client Sample ID: Method Blank

%Rec.

Client Sample ID: Lab Control Sample

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 180-236475/17

Matrix: Solid

рН

Analysis Batch: 236475

MB MB

Analyte Specific Conductance Result Qualifier <1.0

RL 1.0

MDL Unit umhos/cm

D

Prepared

Dil Fac Analyzed 02/07/18 11:58

Prep Type: Total/NA

Prep Type: Total/NA

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

Lab Sample ID: MB 180-236475/2 **Matrix: Solid**

Analysis Batch: 236475

Analyte

Specific Conductance Lab Sample ID: MB 180-236475/43

MB MB Result Qualifier

<1.0

RL 1.0 **MDL** Unit umhos/cm

Analyzed Dil Fac 02/07/18 11:03

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

Matrix: Solid

Specific Conductance

Analysis Batch: 236475

MB MB Result Qualifier

<1.0

1.0

MDL Unit umhos/cm Prepared

Analyzed 02/07/18 13:32

Prep Type: Total/NA

Lab Sample ID: LCS 180-236475/1

Matrix: Solid

Analysis Batch: 236475

Analyte

Specific Conductance

Lab Sample ID: LCS 180-236475/16

Matrix: Solid

Analysis Batch: 236475

Analyte Specific Conductance

Lab Sample ID: LCS 180-236475/42 **Matrix: Solid**

Analysis Batch: 236475

Analyte Specific Conductance

Spike Added 84.0

Spike

Added

84.0

Spike

Added

84.0

LCS LCS 85.1

Result Qualifier

LCS LCS

LCS LCS

85.1

Result Qualifier

85.0

Result Qualifier

Unit umhos/cm

Unit

umhos/cm

%Rec Limits 101 90 - 110

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

%Rec.

Unit D %Rec Limits umhos/cm 101 90 - 110

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

%Rec. D %Rec Limits 101 90 - 110

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%Rec.

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Project/Site: Midwest Generation

Method: SM 2510B - Conductivity, Specific Conductance (Continued)

Lab Sample ID: MB 180-237425/2

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

Matrix: Solid Analysis Batch: 237425

Specific Conductance

Analyte

MB MB Result Qualifier RL **MDL** Unit Analyzed Dil Fac Prepared 1.0 02/12/18 10:05 umhos/cm <1.0

Lab Sample ID: LCS 180-237425/1 Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 237425

Spike LCS LCS %Rec. Added Limits Analyte Result Qualifier Unit %Rec 90 - 110 Specific Conductance 84.0 85.0 umhos/cm 101

Lab Sample ID: MB 180-237752/2 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237752

MB MB Result Qualifier RL **MDL** Unit Dil Fac Analyte Prepared Analyzed Specific Conductance <1.0 1.0 umhos/cm 02/16/18 08:07

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 180-237752/1 **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 237752

Spike LCS LCS %Rec. Analyte Added Result Qualifier %Rec Limits Specific Conductance 84.0 85.1 101 umhos/cm 90 _ 110

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

Lab Sample ID: MB 180-236785/2 **Client Sample ID: Method Blank Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 236785

MB MB Result Qualifier RL **MDL** Unit Dil Fac Analyte Prepared Analyzed 10 Total Dissolved Solids mg/L 02/13/18 10:45 <10

Lab Sample ID: LCS 180-236785/1 **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 236785

Spike LCS LCS %Rec. Added Result Qualifier Analyte Unit %Rec Limits **Total Dissolved Solids** 339 388 mg/L 114 80 - 120

Lab Sample ID: MB 180-236825/2 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 236825

MB MB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac **Total Dissolved Solids** <10 10 mg/L 02/13/18 15:26

10

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Client: KPRG and Associates, Inc.

TestAmerica 300 9D: 180-74229-1

Project/Site: Midwest Generation

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

Lab Sample ID: LCS 180-236825/1 Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 236825

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits **Total Dissolved Solids** 339 364 mg/L 107 80 - 120

Lab Sample ID: MB 180-237077/2 Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 237077

MB MB Analyte Result Qualifier RL MDL Unit Analyzed Dil Fac Prepared **Total Dissolved Solids** 02/15/18 14:55 <10 10 mg/L

Lab Sample ID: LCS 180-237077/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237077

Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit D %Rec Total Dissolved Solids 339 346 mg/L 102 80 - 120

Lab Sample ID: MB 180-237078/2 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237078

MR MR Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Total Dissolved Solids <10 10 mg/L 02/15/18 14:59

Lab Sample ID: LCS 180-237078/1 **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 237078

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit %Rec Limits Total Dissolved Solids 339 342 80 - 120 mg/L 101

Lab Sample ID: MB 180-237329/2 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237329

Analyte Result Qualifier RL MDL Unit Prepared Dil Fac Analyzed **Total Dissolved Solids** 10 mg/L 02/19/18 15:41 <10

MB MB

Lab Sample ID: LCS 180-237329/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237329

Spike LCS LCS %Rec. Added Result Qualifier Analyte Unit %Rec Limits **Total Dissolved Solids** 339 330 mg/L 97 80 - 120

Lab Sample ID: 180-74229-13 DU Client Sample ID: WEST POND - PH 13.0 Prep Type: Leach

Matrix: Solid

Analysis Batch: 236825

DU DU Sample Sample **RPD** Result Qualifier Result Qualifier Limit Analyte Unit D RPD Total Dissolved Solids 14000 14200 mg/L

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Project/Site: Midwest Generation

Lab Sample ID: 180-74229-19 DU Client Sample ID: WEST POND - PH 5.5 **Matrix: Solid Prep Type: Leach**

Analysis Batch: 237077

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	17000		 17200		mg/L		 2	10

Lab Sample ID: 180-74229-2 DU Client Sample ID: EAST POND - PH 13.0 **Prep Type: Leach**

Matrix: Solid

Analysis Batch: 237078

-	Sample	Sample	DU	DU					RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D		RPD	Limit
Total Dissolved Solids	14000		13400		mg/L	_		2	10

Method: SM 2580B - Reduction-Oxidation (REDOX) Potential

Lab Sample ID: LCS 180-236472/1 **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Total/NA**

Analysis Batch: 236472

	Spike	LCS LCS				%Rec.	
Analyte	Added	Result Qualific	er Unit	D	%Rec	Limits	
Oxidation Reduction Potential	475	467	millivolts	_	98	90 - 110	

Lab Sample ID: LCS 180-236472/13 **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 236472

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Oxidation Reduction Potential	475	465		millivolts		98	90 - 110	

Lab Sample ID: LCS 180-236472/36 **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Total/NA**

Analysis Batch: 236472

ı			Бріке	LCS	LCS				%Rec.	
	Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
l	Oxidation Reduction Potential		475	463		millivolts		97	90 - 110	

Lab Sample ID: LCS 180-237422/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid Analysis Batch: 237422

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

D %Rec Oxidation Reduction Potential 475 466 millivolts 98 90 - 110

Lab Sample ID: LCS 180-237751/1

Matrix: Solid

Analysis Batch: 237751

_	Spike	LCS LCS				%Rec.	
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	
Oxidation Reduction Potential	475	467	millivolts	_	98	90 - 110	

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

TestAmerica Job 10: 180-74229-1

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

HPLC/IC

Leach Batch: 236165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-2	EAST POND - PH 13.0	Leach	Solid	1313	
180-74229-9	EAST POND - PH 4.0	Leach	Solid	1313	
180-74229-11	EAST POND - NATURAL	Leach	Solid	1313	
180-74229-13	WEST POND - PH 13.0	Leach	Solid	1313	
180-74229-20	WEST POND - PH 4.0	Leach	Solid	1313	
180-74229-22	WEST POND - NATURAL	Leach	Solid	1313	

Analysis Batch: 236373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-11	EAST POND - NATURAL	Leach	Solid	EPA 9056A	236165
180-74229-22	WEST POND - NATURAL	Leach	Solid	EPA 9056A	236165
MB 180-236373/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-236373/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Analysis Batch: 236553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-2	EAST POND - PH 13.0	Leach	Solid	EPA 9056A	236165
180-74229-9	EAST POND - PH 4.0	Leach	Solid	EPA 9056A	236165
180-74229-13	WEST POND - PH 13.0	Leach	Solid	EPA 9056A	236165
180-74229-20	WEST POND - PH 4.0	Leach	Solid	EPA 9056A	236165
MB 180-236553/16	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-236553/15	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Leach Batch: 236722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-5	EAST POND - PH 9.0	Leach	Solid	1313	
180-74229-6	EAST POND - PH 8.0	Leach	Solid	1313	
180-74229-7	EAST POND - PH 7.0	Leach	Solid	1313	
180-74229-8	EAST POND - PH 5.5	Leach	Solid	1313	
180-74229-16	WEST POND - PH 9.0	Leach	Solid	1313	
180-74229-17	WEST POND - PH 8.0	Leach	Solid	1313	
180-74229-18	WEST POND - PH 7.0	Leach	Solid	1313	
180-74229-19	WEST POND - PH 5.5	Leach	Solid	1313	

Analysis Batch: 236732

Lab Sampl	e ID Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-	EAST POND - PH 9.0	Leach	Solid	EPA 9056A	236722
180-74229-	EAST POND - PH 8.0	Leach	Solid	EPA 9056A	236722
MB 180-236	732/6 Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-23	6732/5 Lab Control Sample	Total/NA	Solid	EPA 9056A	

Analysis Batch: 236891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-5	EAST POND - PH 9.0	Leach	Solid	EPA 9056A	236722
180-74229-6	EAST POND - PH 8.0	Leach	Solid	EPA 9056A	236722
MB 180-236891/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-236891/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Analysis Batch: 236997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-7	EAST POND - PH 7.0	Leach	Solid	EPA 9056A	236722

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

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HPLC/IC (Continued)

Analysis Batch: 236997 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-8	EAST POND - PH 5.5	Leach	Solid	EPA 9056A	236722
180-74229-16	WEST POND - PH 9.0	Leach	Solid	EPA 9056A	236722
180-74229-17	WEST POND - PH 8.0	Leach	Solid	EPA 9056A	236722
180-74229-18	WEST POND - PH 7.0	Leach	Solid	EPA 9056A	236722
180-74229-19	WEST POND - PH 5.5	Leach	Solid	EPA 9056A	236722
MB 180-236997/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-236997/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Analysis Batch: 237100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-7	EAST POND - PH 7.0	Leach	Solid	EPA 9056A	236722
180-74229-8	EAST POND - PH 5.5	Leach	Solid	EPA 9056A	236722
180-74229-16	WEST POND - PH 9.0	Leach	Solid	EPA 9056A	236722
180-74229-17	WEST POND - PH 8.0	Leach	Solid	EPA 9056A	236722
180-74229-18	WEST POND - PH 7.0	Leach	Solid	EPA 9056A	236722
180-74229-19	WEST POND - PH 5.5	Leach	Solid	EPA 9056A	236722
MB 180-237100/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-237100/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Leach Batch: 237165

l	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
7	180-74229-3	EAST POND - PH 12.0	Leach	Solid	1313	
'	180-74229-10	EAST POND - PH 2.0	Leach	Solid	1313	
'	180-74229-14	WEST POND - PH 12.0	Leach	Solid	1313	
-	180-74229-21	WEST POND - PH 2.0	Leach	Solid	1313	

Analysis Batch: 237859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-3	EAST POND - PH 12.0	Leach	Solid	EPA 9056A	237165
180-74229-10	EAST POND - PH 2.0	Leach	Solid	EPA 9056A	237165
180-74229-14	WEST POND - PH 12.0	Leach	Solid	EPA 9056A	237165
180-74229-21	WEST POND - PH 2.0	Leach	Solid	EPA 9056A	237165
MB 180-237859/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-237859/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Metals

Leach Batch: 236165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-2	EAST POND - PH 13.0	Leach	Solid	1313	_
180-74229-9	EAST POND - PH 4.0	Leach	Solid	1313	
180-74229-11	EAST POND - NATURAL	Leach	Solid	1313	
180-74229-13	WEST POND - PH 13.0	Leach	Solid	1313	
180-74229-20	WEST POND - PH 4.0	Leach	Solid	1313	
180-74229-22	WEST POND - NATURAL	Leach	Solid	1313	

Prep Batch: 236437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-11	EAST POND - NATURAL	Leach	Solid	3010A	236165
180-74229-22	WEST POND - NATURAL	Leach	Solid	3010A	236165

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

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Metals (Continued)

Prep Batch: 236437 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-236437/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-236437/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-236437/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

Prep Batch: 236440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-2	EAST POND - PH 13.0	Leach	Solid	3010A	236165
180-74229-9	EAST POND - PH 4.0	Leach	Solid	3010A	236165
180-74229-13	WEST POND - PH 13.0	Leach	Solid	3010A	236165
180-74229-20	WEST POND - PH 4.0	Leach	Solid	3010A	236165
MB 180-236440/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-236440/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-236440/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

Leach Batch: 236722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-5	EAST POND - PH 9.0	Leach	Solid	1313	
180-74229-6	EAST POND - PH 8.0	Leach	Solid	1313	
180-74229-7	EAST POND - PH 7.0	Leach	Solid	1313	
180-74229-8	EAST POND - PH 5.5	Leach	Solid	1313	
180-74229-16	WEST POND - PH 9.0	Leach	Solid	1313	
180-74229-17	WEST POND - PH 8.0	Leach	Solid	1313	
180-74229-18	WEST POND - PH 7.0	Leach	Solid	1313	
180-74229-19	WEST POND - PH 5.5	Leach	Solid	1313	

Analysis Batch: 236729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-2	EAST POND - PH 13.0	Leach	Solid	EPA 6020A	236440
180-74229-11	EAST POND - NATURAL	Leach	Solid	EPA 6020A	236437
180-74229-13	WEST POND - PH 13.0	Leach	Solid	EPA 6020A	236440
180-74229-22	WEST POND - NATURAL	Leach	Solid	EPA 6020A	236437
MB 180-236437/1-A	Method Blank	Total/NA	Solid	EPA 6020A	236437
MB 180-236440/1-A	Method Blank	Total/NA	Solid	EPA 6020A	236440
LCS 180-236437/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	236437
LCS 180-236440/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	236440
LCSD 180-236437/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	236437
LCSD 180-236440/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	236440

Prep Batch: 236807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-5	EAST POND - PH 9.0	Leach	Solid	3010A	236722
180-74229-6	EAST POND - PH 8.0	Leach	Solid	3010A	236722
180-74229-7	EAST POND - PH 7.0	Leach	Solid	3010A	236722
180-74229-8	EAST POND - PH 5.5	Leach	Solid	3010A	236722
180-74229-16	WEST POND - PH 9.0	Leach	Solid	3010A	236722
180-74229-17	WEST POND - PH 8.0	Leach	Solid	3010A	236722
180-74229-18	WEST POND - PH 7.0	Leach	Solid	3010A	236722
180-74229-19	WEST POND - PH 5.5	Leach	Solid	3010A	236722
MB 180-236807/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-236807/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-236807/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

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PCB 2013-15

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 95.193.-74229-1

Analysis Batch: 236828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-2	EAST POND - PH 13.0	Leach	Solid	EPA 6020A	236440
180-74229-9	EAST POND - PH 4.0	Leach	Solid	EPA 6020A	236440
180-74229-11	EAST POND - NATURAL	Leach	Solid	EPA 6020A	236437
180-74229-13	WEST POND - PH 13.0	Leach	Solid	EPA 6020A	236440
180-74229-20	WEST POND - PH 4.0	Leach	Solid	EPA 6020A	236440
180-74229-22	WEST POND - NATURAL	Leach	Solid	EPA 6020A	236437
MB 180-236437/1-A	Method Blank	Total/NA	Solid	EPA 6020A	236437
MB 180-236440/1-A	Method Blank	Total/NA	Solid	EPA 6020A	236440
LCS 180-236437/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	236437
LCS 180-236440/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	236440
LCSD 180-236437/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	236437
LCSD 180-236440/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	236440

Leach Batch: 237165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-3	EAST POND - PH 12.0	Leach	Solid	1313	
180-74229-10	EAST POND - PH 2.0	Leach	Solid	1313	
180-74229-14	WEST POND - PH 12.0	Leach	Solid	1313	
180-74229-21	WEST POND - PH 2.0	Leach	Solid	1313	

Analysis Batch: 237198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-5	EAST POND - PH 9.0	Leach	Solid	EPA 6020A	236807
180-74229-6	EAST POND - PH 8.0	Leach	Solid	EPA 6020A	236807
180-74229-16	WEST POND - PH 9.0	Leach	Solid	EPA 6020A	236807
180-74229-17	WEST POND - PH 8.0	Leach	Solid	EPA 6020A	236807
MB 180-236807/1-A	Method Blank	Total/NA	Solid	EPA 6020A	236807
LCS 180-236807/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	236807
LCSD 180-236807/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	236807

Prep Batch: 237311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-3	EAST POND - PH 12.0	Leach	Solid	3010A	237165
180-74229-10	EAST POND - PH 2.0	Leach	Solid	3010A	237165
180-74229-14	WEST POND - PH 12.0	Leach	Solid	3010A	237165
180-74229-21	WEST POND - PH 2.0	Leach	Solid	3010A	237165
MB 180-237311/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-237311/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-237311/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

Analysis Batch: 237323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-7	EAST POND - PH 7.0	Leach	Solid	EPA 6020A	236807
180-74229-8	EAST POND - PH 5.5	Leach	Solid	EPA 6020A	236807
180-74229-18	WEST POND - PH 7.0	Leach	Solid	EPA 6020A	236807
180-74229-19	WEST POND - PH 5.5	Leach	Solid	EPA 6020A	236807

Analysis Batch: 237590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-3	EAST POND - PH 12.0	Leach	Solid	EPA 6020A	237311
180-74229-14	WEST POND - PH 12.0	Leach	Solid	EPA 6020A	237311
MB 180-237311/1-A	Method Blank	Total/NA	Solid	EPA 6020A	237311
LCS 180-237311/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	237311

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

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Metals (Continued)

Analysis Batch: 237590 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 180-237311/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	237311

Analysis Batch: 237713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-3	EAST POND - PH 12.0	Leach	Solid	EPA 6020A	237311
180-74229-10	EAST POND - PH 2.0	Leach	Solid	EPA 6020A	237311
180-74229-14	WEST POND - PH 12.0	Leach	Solid	EPA 6020A	237311
180-74229-21	WEST POND - PH 2.0	Leach	Solid	EPA 6020A	237311
MB 180-237311/1-A	Method Blank	Total/NA	Solid	EPA 6020A	237311
LCS 180-237311/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	237311
LCSD 180-237311/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	237311

General Chemistry

Analysis Batch: 234978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-1	EAST POND - PRETEST	Total/NA	Solid	2540G	
180-74229-12	WEST POND - PRETEST	Total/NA	Solid	2540G	
180-74229-1 DU	EAST POND - PRETEST	Total/NA	Solid	2540G	

Analysis Batch: 235859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-23	EAST POND - AIR DRIED	Total/NA	Solid	2540G	
180-74229-24	WEST POND - AIR DRIED	Total/NA	Solid	2540G	

Leach Batch: 236165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-2	EAST POND - PH 13.0	Leach	Solid	1313	_
180-74229-9	EAST POND - PH 4.0	Leach	Solid	1313	
180-74229-11	EAST POND - NATURAL	Leach	Solid	1313	
180-74229-13	WEST POND - PH 13.0	Leach	Solid	1313	
180-74229-20	WEST POND - PH 4.0	Leach	Solid	1313	
180-74229-22	WEST POND - NATURAL	Leach	Solid	1313	
180-74229-2 DU	EAST POND - PH 13.0	Leach	Solid	1313	
180-74229-13 DU	WEST POND - PH 13.0	Leach	Solid	1313	

Analysis Batch: 236465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-2	EAST POND - PH 13.0	Leach	Solid	EPA 9040C	236165
180-74229-9	EAST POND - PH 4.0	Leach	Solid	EPA 9040C	236165
180-74229-11	EAST POND - NATURAL	Leach	Solid	EPA 9040C	236165
180-74229-13	WEST POND - PH 13.0	Leach	Solid	EPA 9040C	236165
180-74229-20	WEST POND - PH 4.0	Leach	Solid	EPA 9040C	236165
180-74229-22	WEST POND - NATURAL	Leach	Solid	EPA 9040C	236165
LCS 180-236465/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	
LCS 180-236465/24	Lab Control Sample	Total/NA	Solid	EPA 9040C	
LCS 180-236465/47	Lab Control Sample	Total/NA	Solid	EPA 9040C	

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job of 193 -74229-1

General Chemistry (Continued)

Analysis Batch: 236472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-2	EAST POND - PH 13.0	Leach	Solid	SM 2580B	236165
180-74229-9	EAST POND - PH 4.0	Leach	Solid	SM 2580B	236165
180-74229-11	EAST POND - NATURAL	Leach	Solid	SM 2580B	236165
180-74229-13	WEST POND - PH 13.0	Leach	Solid	SM 2580B	236165
180-74229-20	WEST POND - PH 4.0	Leach	Solid	SM 2580B	236165
180-74229-22	WEST POND - NATURAL	Leach	Solid	SM 2580B	236165
LCS 180-236472/1	Lab Control Sample	Total/NA	Solid	SM 2580B	
LCS 180-236472/13	Lab Control Sample	Total/NA	Solid	SM 2580B	
LCS 180-236472/36	Lab Control Sample	Total/NA	Solid	SM 2580B	

Analysis Batch: 236475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-2	EAST POND - PH 13.0	Leach	Solid	SM 2510B	236165
180-74229-9	EAST POND - PH 4.0	Leach	Solid	SM 2510B	236165
180-74229-11	EAST POND - NATURAL	Leach	Solid	SM 2510B	236165
180-74229-13	WEST POND - PH 13.0	Leach	Solid	SM 2510B	236165
180-74229-20	WEST POND - PH 4.0	Leach	Solid	SM 2510B	236165
180-74229-22	WEST POND - NATURAL	Leach	Solid	SM 2510B	236165
MB 180-236475/17	Method Blank	Total/NA	Solid	SM 2510B	
MB 180-236475/2	Method Blank	Total/NA	Solid	SM 2510B	
MB 180-236475/43	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-236475/1	Lab Control Sample	Total/NA	Solid	SM 2510B	
LCS 180-236475/16	Lab Control Sample	Total/NA	Solid	SM 2510B	
LCS 180-236475/42	Lab Control Sample	Total/NA	Solid	SM 2510B	

Leach Batch: 236722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-5	EAST POND - PH 9.0	Leach	Solid	1313	_
180-74229-6	EAST POND - PH 8.0	Leach	Solid	1313	
180-74229-7	EAST POND - PH 7.0	Leach	Solid	1313	
180-74229-8	EAST POND - PH 5.5	Leach	Solid	1313	
180-74229-16	WEST POND - PH 9.0	Leach	Solid	1313	
180-74229-17	WEST POND - PH 8.0	Leach	Solid	1313	
180-74229-18	WEST POND - PH 7.0	Leach	Solid	1313	
180-74229-19	WEST POND - PH 5.5	Leach	Solid	1313	
180-74229-19 DU	WEST POND - PH 5.5	Leach	Solid	1313	

Analysis Batch: 236785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-22	WEST POND - NATURAL	Leach	Solid	SM 2540C	236165
MB 180-236785/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-236785/1	Lab Control Sample	Total/NA	Solid	SM 2540C	

Analysis Batch: 236825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-9	EAST POND - PH 4.0	Leach	Solid	SM 2540C	236165
180-74229-11	EAST POND - NATURAL	Leach	Solid	SM 2540C	236165
180-74229-13	WEST POND - PH 13.0	Leach	Solid	SM 2540C	236165
180-74229-20	WEST POND - PH 4.0	Leach	Solid	SM 2540C	236165
MB 180-236825/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-236825/1	Lab Control Sample	Total/NA	Solid	SM 2540C	

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Electronic Filing: Received Clark's Office 07/19/2019

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 170 of 1930-74229-1

General Chemistry (Continued)

Analysis Batch: 236825 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-13 DU	WEST POND - PH 13.0	Leach	Solid	SM 2540C	236165

Analysis Batch: 237077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-5	EAST POND - PH 9.0	Leach	Solid	SM 2540C	236722
180-74229-6	EAST POND - PH 8.0	Leach	Solid	SM 2540C	236722
180-74229-7	EAST POND - PH 7.0	Leach	Solid	SM 2540C	236722
180-74229-8	EAST POND - PH 5.5	Leach	Solid	SM 2540C	236722
180-74229-16	WEST POND - PH 9.0	Leach	Solid	SM 2540C	236722
180-74229-17	WEST POND - PH 8.0	Leach	Solid	SM 2540C	236722
180-74229-18	WEST POND - PH 7.0	Leach	Solid	SM 2540C	236722
180-74229-19	WEST POND - PH 5.5	Leach	Solid	SM 2540C	236722
MB 180-237077/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-237077/1	Lab Control Sample	Total/NA	Solid	SM 2540C	
180-74229-19 DU	WEST POND - PH 5.5	Leach	Solid	SM 2540C	236722

Analysis Batch: 237078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-2	EAST POND - PH 13.0	Leach	Solid	SM 2540C	236165
MB 180-237078/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-237078/1	Lab Control Sample	Total/NA	Solid	SM 2540C	
180-74229-2 DU	EAST POND - PH 13.0	Leach	Solid	SM 2540C	236165

Leach Batch: 237107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-1	EAST POND - PRETEST	Leach	Solid	1313	
180-74229-1	EAST POND - PRETEST	Leach	Solid	1313	
180-74229-12	WEST POND - PRETEST	Leach	Solid	1313	
180-74229-12	WEST POND - PRETEST	Leach	Solid	1313	

Leach Batch: 237165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-3	EAST POND - PH 12.0	Leach	Solid	1313	
180-74229-10	EAST POND - PH 2.0	Leach	Solid	1313	
180-74229-14	WEST POND - PH 12.0	Leach	Solid	1313	
180-74229-21	WEST POND - PH 2.0	Leach	Solid	1313	

Analysis Batch: 237329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-3	EAST POND - PH 12.0	Leach	Solid	SM 2540C	237165
180-74229-10	EAST POND - PH 2.0	Leach	Solid	SM 2540C	237165
180-74229-14	WEST POND - PH 12.0	Leach	Solid	SM 2540C	237165
180-74229-21	WEST POND - PH 2.0	Leach	Solid	SM 2540C	237165
MB 180-237329/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-237329/1	Lab Control Sample	Total/NA	Solid	SM 2540C	

Analysis Batch: 237380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-1	EAST POND - PRETEST	Leach	Solid	EPA 9040C	237107
180-74229-1	EAST POND - PRETEST	Leach	Solid	EPA 9040C	237107
180-74229-5	EAST POND - PH 9.0	Leach	Solid	EPA 9040C	236722

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Exhibit B

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 9D: 180-74229-1

General Chemistry (Continued)

Analysis Batch: 237380 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-6	EAST POND - PH 8.0	Leach	Solid	EPA 9040C	236722
180-74229-7	EAST POND - PH 7.0	Leach	Solid	EPA 9040C	236722
180-74229-8	EAST POND - PH 5.5	Leach	Solid	EPA 9040C	236722
180-74229-12	WEST POND - PRETEST	Leach	Solid	EPA 9040C	237107
180-74229-12	WEST POND - PRETEST	Leach	Solid	EPA 9040C	237107
180-74229-16	WEST POND - PH 9.0	Leach	Solid	EPA 9040C	236722
180-74229-17	WEST POND - PH 8.0	Leach	Solid	EPA 9040C	236722
180-74229-18	WEST POND - PH 7.0	Leach	Solid	EPA 9040C	236722
180-74229-19	WEST POND - PH 5.5	Leach	Solid	EPA 9040C	236722
LCS 180-237380/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	

Analysis Batch: 237422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-5	EAST POND - PH 9.0	Leach	Solid	SM 2580B	236722
180-74229-6	EAST POND - PH 8.0	Leach	Solid	SM 2580B	236722
180-74229-7	EAST POND - PH 7.0	Leach	Solid	SM 2580B	236722
180-74229-8	EAST POND - PH 5.5	Leach	Solid	SM 2580B	236722
180-74229-16	WEST POND - PH 9.0	Leach	Solid	SM 2580B	236722
180-74229-17	WEST POND - PH 8.0	Leach	Solid	SM 2580B	236722
180-74229-18	WEST POND - PH 7.0	Leach	Solid	SM 2580B	236722
180-74229-19	WEST POND - PH 5.5	Leach	Solid	SM 2580B	236722
LCS 180-237422/1	Lab Control Sample	Total/NA	Solid	SM 2580B	

Analysis Batch: 237425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-5	EAST POND - PH 9.0	Leach	Solid	SM 2510B	236722
180-74229-6	EAST POND - PH 8.0	Leach	Solid	SM 2510B	236722
180-74229-7	EAST POND - PH 7.0	Leach	Solid	SM 2510B	236722
180-74229-8	EAST POND - PH 5.5	Leach	Solid	SM 2510B	236722
180-74229-16	WEST POND - PH 9.0	Leach	Solid	SM 2510B	236722
180-74229-17	WEST POND - PH 8.0	Leach	Solid	SM 2510B	236722
180-74229-18	WEST POND - PH 7.0	Leach	Solid	SM 2510B	236722
180-74229-19	WEST POND - PH 5.5	Leach	Solid	SM 2510B	236722
MB 180-237425/2	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-237425/1	Lab Control Sample	Total/NA	Solid	SM 2510B	

Analysis Batch: 237737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-3	EAST POND - PH 12.0	Leach	Solid	EPA 9040C	237165
180-74229-10	EAST POND - PH 2.0	Leach	Solid	EPA 9040C	237165
180-74229-14	WEST POND - PH 12.0	Leach	Solid	EPA 9040C	237165
180-74229-21	WEST POND - PH 2.0	Leach	Solid	EPA 9040C	237165
LCS 180-237737/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	

Analysis Batch: 237751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-3	EAST POND - PH 12.0	Leach	Solid	SM 2580B	237165
180-74229-10	EAST POND - PH 2.0	Leach	Solid	SM 2580B	237165
180-74229-14	WEST POND - PH 12.0	Leach	Solid	SM 2580B	237165
180-74229-21	WEST POND - PH 2.0	Leach	Solid	SM 2580B	237165
LCS 180-237751/1	Lab Control Sample	Total/NA	Solid	SM 2580B	

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PCB 2013-15

Electronic Filing: Received Clark's Office 07/19/2019 Exhibit B

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 1D: 180-74229-1

Analysis Batch: 237752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74229-3	EAST POND - PH 12.0	Leach	Solid	SM 2510B	237165
180-74229-10	EAST POND - PH 2.0	Leach	Solid	SM 2510B	237165
180-74229-14	WEST POND - PH 12.0	Leach	Solid	SM 2510B	237165
180-74229-21	WEST POND - PH 2.0	Leach	Solid	SM 2510B	237165
MB 180-237752/2	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-237752/1	Lab Control Sample	Total/NA	Solid	SM 2510B	

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Login Sample Receipt Checklist

Job Number: 180-74229-1

List Source: TestAmerica Pittsburgh Login Number: 74229

List Number: 1

Creator: Watson, Debbie

Client: KPRG and Associates, Inc.

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	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?	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	

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago 2417 Bond Street University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-139827-1 Client Project/Site: Waukegan CCR

For:

KPRG and Associates, Inc. 14665 West Lisbon Road, Suite 2B Brookfield, Wisconsin 53005

Attn: Richard Gnat

Authorized for release by: 1/30/2018 1:18:47 PM

Eric Lang, Manager of Project Management (708)534-5200

eric.lang@testamericainc.com

.....Links

Review your project results through

Have a Question?



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.

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PCB 2013-15

Exhibit B

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PCB 2013-15

Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit B TestApperica 194 10 5003139827-1

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

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PCB 2013-15 Exhibit B

Electronic Filing: Received Clerk's Office 07/19/2019

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

TestAmerica Job ID: 500-139827-1

Job ID: 500-139827-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-139827-1

Comments

No additional comments.

Receipt

The sample was received on 1/18/2018 9:55 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

Metals

Method(s) 6020A: The continuing calibration verification (CCV) at line 37 in AD batch 417738 was outside the control limits for Boron. This CCV bracketed the method blank (MB) and laboratory control sample (LCS) only. Both the MB and LCS were within the method control limits. The associated samples were bracketed by CCV that were within control limits. Therefore, the data have been reported.

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

General Chemistry

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

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TestAmerica Chicago 1/30/2018

PCB 2013-15

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit B

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

TestAmerica 179 lpf 193-139827-1

Method	Method Description	Protocol	Laboratory
6020A	Metals (ICP/MS)	SW846	TAL CHI
9040C	рН	SW846	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
SM 4500 CI- E	Chloride, Total	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
SM 4500 SO4 E	Sulfate, Total	SM	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 = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

PCB 2013-15 Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit B

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

TestAmerica Job IB: 500-139827-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-139827-1	West Pond	Water	01/17/18 10:31	01/18/18 10:41

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PCB 2013-15

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit B

Client: KPRG and Associates, Inc.

TestAmenea Job IB 500-139827-1

Project/Site: Waukegan CCR

Client Sample ID: West Pond Lab Sample ID: 500-139827-1 Date Collected: 01/17/18 10:31

Matrix: Water

Date Received: 01/18/18 10:41

Method: 6020A - Metals (ICP/MS) - Total Recoverable Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Di							Dil Fac			
	Boron	0.87	Qualifier	0.050	WIDL	mg/L			01/23/18 14:39	1
						J				1 4
	Calcium	70		0.20		mg/L		01/18/18 15:10	01/23/18 14:39	1
	General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

General Chemistry Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8	HF	0.2	SU			01/18/18 16:28	1
Total Dissolved Solids	430		10	mg/L			01/19/18 04:41	1
Chloride	52		2.0	mg/L			01/19/18 00:03	1
Fluoride	0.21		0.10	mg/L			01/25/18 13:00	1
Sulfate	90		25	mg/L			01/19/18 07:57	5

1/30/2018

Electronic Filing Definitions/Slors's Pyffice 07/19/2019

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

TestAmerica Job ID: 500-139827-1

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**

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

Decision Level Concentration (Radiochemistry) DLC

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 Minimum Level (Dioxin) MLNC

Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown) ND

PQL Practical Quantitation Limit

Quality Control QC

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) **TEQ**

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

TestAmerica 183 lpf 193-139827-1

Metals

Prep	Batc	h: 41	7296
------	------	-------	------

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139827-1	West Pond	Total Recoverable	Water	3005A	
MB 500-417296/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-417296/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 417738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139827-1	West Pond	Total Recoverable	Water	6020A	417296
MB 500-417296/1-A	Method Blank	Total Recoverable	Water	6020A	417296
LCS 500-417296/2-A	Lab Control Sample	Total Recoverable	Water	6020A	417296

General Chemistry

Analysis Batch: 417329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139827-1	West Pond	Total/NA	Water	SM 2540C	
MB 500-417329/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-417329/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-139827-1 DU	West Pond	Total/NA	Water	SM 2540C	

Analysis Batch: 417361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139827-1	West Pond	Total/NA	Water	SM 4500 SO4 E	
MB 500-417361/3	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-417361/4	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 417368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139827-1	West Pond	Total/NA	Water	9040C	
500-139827-1 DU	West Pond	Total/NA	Water	9040C	

Analysis Batch: 417451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139827-1	West Pond	Total/NA	Water	SM 4500 CI- E	
MB 500-417451/4	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-417451/5	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 418006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139827-1	West Pond	Total/NA	Water	SM 4500 F C	
MB 500-418006/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-418006/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-139827-1 MS	West Pond	Total/NA	Water	SM 4500 F C	
500-139827-1 MSD	West Pond	Total/NA	Water	SM 4500 F C	

1/30/2018

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

TestAmerica Job ID: 500-139827-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-417296/1-A

Matrix: Water

Analysis Batch: 417738

Client Sample ID: Method Blank Prep Type: Total Recoverable

Prep Batch: 417296

Analyte	Result	Qualifier	RL	MDL	Unit)	Prepared	Analyzed	Dil Fac
Boron	<0.050	^	0.050		mg/L	 0	01/18/18 15:10	01/23/18 12:40	1
Calcium	<0.20		0.20		mg/L	0)1/18/18 15:10	01/23/18 12:40	1

MB MB

Lab Sample ID: LCS 500-417296/2-A

Matrix: Water

Analysis Batch: 417738

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

Prep Batch: 417296

Client Sample ID: West Pond

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: West Pond

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Boron	 1.00	0.927	٨	mg/L		93	80 - 120	
Calcium	10.0	10.4		mg/L		104	80 - 120	

Method: 9040C - pH

Lab Sample ID: 500-139827-1 DU

Matrix: Water

Analysi

: Water							Prep Type: Tota	I/NA
sis Batch: 417368								
	Sample	Sample	DU	J DU				RPD
	D14	O	Danul		11	_	DDD	1 ! !4

Analyte Result Qualifier Result Qualifier Unit рН 8.8 HF 8.8 SU

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

Lab Sample ID: MB 500-417329/1

Matrix: Water

Total Dissolved Solids

Analyte

Analysis Batch: 417329

	Prep Type: Total/NA

MB MB Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 10 <10 mg/L 01/19/18 04:03

Lab Sample ID: LCS 500-417329/2

Matrix: Water

Analysis Batch: 417329

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Total Dissolved Solids	250	288		mg/L		115	80 - 120	

Lab Sample ID: 500-139827-1 DU

Matrix: Water

Analysis Batch: 417329									
-	Sample	Sample	DU	DU					RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D		RPD	Limit
Total Dissolved Solids	430		 458		mg/L		 	5	5

LCS LCS

49.7

Result Qualifier

Unit

mg/L

D

Client: KPRG and Associates, Inc.

TestAmerica Job ID: 500-139827-1

Client Sample ID: Method Blank

Prep Type: Total/NA

Project/Site: Waukegan CCR

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-417451/4

Matrix: Water

Analysis Batch: 417451

MB MB

Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac D Prepared 2.0 01/18/18 23:43 Chloride <2.0 mg/L

Spike

Added

50.0

Lab Sample ID: LCS 500-417451/5

Matrix: Water

Analyte

Analysis Batch: 417451

Chloride

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

%Rec. Limits %Rec

99

85 - 115

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

RPD

Client Sample ID: West Pond

Client Sample ID: West Pond

%Rec.

Limits

75 - 125

Client Sample ID: Method Blank

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-418006/31

Matrix: Water

Analysis Batch: 418006

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Fluoride 0.10 01/25/18 12:53 <0.10 mg/L

Lab Sample ID: LCS 500-418006/32

Matrix: Water

Analysis Batch: 418006

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Fluoride 10.0 10.1 mg/L 101 80 - 120

Lab Sample ID: 500-139827-1 MS

Matrix: Water

Analysis Batch: 418006

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Fluoride 5.00 0.21 5.00 96 75 - 125 mg/L

5.00

5.03

Lab Sample ID: 500-139827-1 MSD

Fluoride

Matrix: Water Analysis Batch: 418006

Sample Sample Spike MSD MSD Added Result Qualifier Analyte Result Qualifier Unit

0.21

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-417361/3

Matrix: Water

Analysis Batch: 417361

MB MB Analyte Result Qualifier

Sulfate <5.0

RL 5.0 **MDL** Unit mg/L

mg/L

D Prepared

D

%Rec

96

Analyzed 01/19/18 07:43

Dil Fac

RPD

Limit

20

TestAmerica Chicago

Prep Type: Total/NA

PCB 2013-15

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Client: KPRG and Associates, Inc.

TestAmenea 186 IBF 193-139827-1

Client Sample ID: Lab Control Sample

%Rec. Limits 80 - 120

Project/Site: Waukegan CCR

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

Lab Sample ID: LCS 500-417361/4 **Matrix: Water**

Analysis Batch: 417361

	Spike	LCS LCS		
Analyte	Added	Result Qualifier	Unit	D %Rec
Sulfate	20.0	19.5	mg/L	97

Prep Type: Total/NA

<u>TestA</u>	merico	Electron Contact:		Received	I, Clerk's C	Offi@@n07/19/2019	Chain of C	ustody Record
THE LEADER IN	ENVIRONMENTAL TESTIN	IG					Lab Job #:	500 18 102
2417 Bond Stre Phone: 708.534.	et, University Park, 1L 60484 5200 Fax: 708.534.5211				1		Chain of Custoo	ly Number:
							Page	_ of
		Fax:			Fax:PO#/Reference#		Temperature °C	of Cooler: 1.9 73.4
ient KPRG &	ASSEC. Client Proje	23517	Preservative	3 8				Preservative Key 1. HCL, Cool to 4°
	RG		Parameter	7 6				2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4°
oject Location/State	Lab Projec	t#		PH NOT				5. NaOH/Zn, Cool to 4° 6. NaHSO4
	Lab PM			a St				7, Cool to 4° 8. None 9. Other
OI OR WS/WSD Sample ID		Sampling Date Time	# of Containers Matrix	B, C				
Sample ID We	st Pond	1/17/18 103		XX				Comments
1 00	31 1000							
								Fried:
								\$ 54 <u>0</u>
	•							500-139827 COC
Requested Due Date	5 Days 7 Days 10 [Days 15 Days Other	nerum r	o Client Di		Archive for Months (A fee may	/ be assessed if samples are retai	ined longer than 1 month)
Belinquished by	Company KPR6	Date /17/18	1325	Received B	Company	1-17-18		Lab Courier
Reli nquistied By	Company	1-17-18	Time 1700	Received By	Damy Company	1AU Date 01/18/19	2 Time 955	Shipped TX Proprity
eli nquished By	Company	Date	Time	Received By	Company	Date	Time	nd Delivered
Mat NVV - Wastewater N	rix Key CI SE - Sediment SO - Soil	ient Comments				Lab Comments:		
S — Soil SL -Sludge	L – Leachate WI – Wipe	- particular variables var	Wallack Dealer		According to the second			
MS - Miscellaneous DL - Oll	DW Drinking Water O Other							

Login Sample Receipt Checklist

Job Number: 500-139827-1

Login Number: 139827 List Source: TestAmerica Chicago

List Number: 1

Creator: Sanchez, Ariel M

Client: KPRG and Associates, Inc.

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

PCB 2013-15 Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit B

100201

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

Illinois

TestAmerica Job IB: 500-139827-1

04-30-18

Laboratory: TestAmerica Chicago The accreditations/certifications listed below are applicable to this report.

NELAP

Authority	Program	EPA Region	Identification Number	Expiration Date

PCB 2013-15 Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit B Page 190 of 193

<u>ATTACHMENT 3</u> 2017 Quarterly Monitoring Data from Non-CCR Well MW-05

Electronic Filing: Received, Clerk's Office 07/19/2019

Table 2. Groundwater Analytical Results - Midwest Generation LLC, Waukegan Station, Waukegan, IL

MW-05	Date	2/22/	2017	5/15/	/2017	9/11/2017		11/30/2017	
Parameter	Standards	DL	Result	DL	Result	DL	Result	DL	Result
Antimony	0.006	0.0030	ND	0.0030	ND	0.0030	ND	0.0030	ND
Arsenic	0.010	0.0010	0.040	0.0010	0.0053	0.0010	0.076	0.0010	0.034
Barium	2.0	0.0025	0.061	0.0025	0.036	0.0025	0.046	0.0025	0.066
Beryllium	0.004	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Boron	2.0	5.0	42	0.50	7.7	5.0	44	5.0	47
Cadmium	0.005	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Chloride	200.0	10	82	2.0	73	2.0	71 F1	10	81
Chromium	0.1	0.0050	ND	0.0050	ND	0.0050	ND	0.0050	ND
Cobalt	1.0	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND
Copper	0.65	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Cyanide, Total	0.2	0.010	ND	0.010	ND	0.010	ND	0.010	ND
Fluoride	4.0	0.10	0.21	0.10	0.15	0.10	0.25	0.10	0.27
Iron	5.0	0.10	15	0.10	1.9	0.10	35	0.10	19
Lead	0.0075	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Manganese	0.15	0.0025	0.54	0.0025	0.12	0.0025	0.62	0.0025	0.63
Mercury	0.002	0.00020	ND	0.00020	ND	0.00020	ND	0.00020	ND
Nickel	0.1	0.0020	ND	0.0020	0.0038	0.0020	0.0033	0.0020	ND
Nitrogen, Nitrate	10.0	0.10	ND	0.10	ND	0.10	ND	0.10	ND
Nitrogen, Nitrate Nitrite	NA	0.10	ND	0.10	ND	0.10	ND	0.10	ND
Nitrogen, Nitrite	NA	0.020	ND	0.020	ND	0.020	ND	0.020	ND
Radium 226	20	0.110	0.331	0.110	ND	0.0778	0.170	0.0771	0.284
Radium 228	20	0.443	0.805	0.531	0.703	0.474	ND	0.332	1.29
Selenium	0.05	0.0025	ND	0.0025	0.0041	0.0025	0.0071	0.0025	ND
Silver	0.05	0.00050	ND	0.00050	ND	0.00050	ND	0.00050	ND
Sulfate	400.0	250	700	500	1100	250	750	100	790
Thallium	0.002	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND
Total Dissolved Solids	1,200	10	1700	10	2600	10	2000	10	1900
Vanadium	0.049	0.0050	ND	0.0050	ND	0.0050	0.020	0.0050	ND
Zinc	5.0	0.020	ND	0.020	ND	0.020	ND	0.020	ND
pН	6.5 - 9.0	NA	7.46	NA	7.78	NA	6.89	NA	7.02
Temperature	NA	NA	14.8	NA	13.9	NA	14.6	NA	11.2
Conductivity	NA	NA	1.63	NA	2.20	NA	1.79	NA	1.48
Dissolved Oxygen	NA	NA	1.46	NA	5.90	NA	0.58	NA	1.44
ORP	NA	NA	-29.1	NA	-20.7	NA	-68.1	NA	58.5

Notes: Standards obtained from IAC, Title 35, Chapter I, Part 620, Subpart D, Section 620.410 - Groundwater Quality Standards for Class I: Potable Resource Groundwater All values are in mg/L (ppm) unless otherwise noted.

DL - Detection limit

* - LCS or LCSD is outside acceptable limits.

NA - Not Applicable ND - Not Detected

Temperature Conductivity Dissolved Oxygen Oxygen Reduction Potential (ORP)

degrees Celsius millisiemens/centimeters milligrams/liter millivolts

PCB 2013-15 Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit B Page 192 of 193

ATTACHMENT 4 Analytical Model Calculations

Electronic Filing: Received, Clerk's Office 07/19/2019

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SITE NAME: Waukegan Station

401 E. Greenwood Ave. Waukegan, II 60087 ADDRESS:

LPC NUMBER:

Ash Pond Well LOCATION:

RISK-BASED CORRECTIVE ACTION (RBCA) GROUNDWATER COMPONENT OF THE GROUNDWATER INGESTION EXPOSURE ROUTE TIER 2 EVALUATION

CONTAMINANT:

			Boron-800	Boron-1000	Boron-1200	Sulfate-800	Sulfate-1000	Sulfate-1200
		dist along centerline of plume in gw flow dir to N						
	X (cm)	property boundary	24384	30480	36576	24384	30480	36576
R16	ALPHA _x (cm)	longitudinal dispersivity	2438.4		3657.6	2438.4	3048	3657.6
R17	ALPHA _y (cm)	transverse dispersivity	812.8	1016	1219.2	812.8	1016	1219.2
R18	ALPHA _z (cm)	vertical dispersivity	121.92		182.88	121.92	152.4	182.88
	LAMBDA (1/d)	first order degradation constant*	0		0	0	0	0
R19	U (cm/d)	specific discharge	72.955		72.955	72.955	72.955	72.955
	K (cm/d)	hydraulic conductivity (site specific) hydraulic gradient (site specific), 11/27/17	10639.22688	10639.227 0.0024	10639.227 0.0024	10639.227	10639.2269	10639.2269 0.0024
	i (cm/cm) THETA _t (cm ³ /cm ³)		0.002 <i>4</i> 0.35	0.0024	0.0024	0.002 <i>4</i> 0.35	0.002 <i>4</i> 0.35	0.0024
		total soil porosity (site specific)						
	THETA _{as} (cm ³ /cm ³)	volumetric air content (surface soil <1 m)	0.14	0.14	0.14	0.14	0.14	0.14
	THETA _{ws} (cm ³ /cm ³)	volumetric water content (surface soil <1 m) source width perpendicular to gw flow dir in horiz	0.18	0.18	0.18	0.18	0.18	0.18
	S _w (cm)	plane- source width perpendicular to gw flow dir in	24384	24384	24384	24384	24384	24384
	S _d (cm)	vertical plane (default)	200	200	200	200	200	200
	BETA _y	R15 input	1.369	1.095	0.913	1.369	1.095	0.913
	BETA _z	R15 input	0.058	0.046	0.039	0.058	0.046	0.039
		steady-state attenuation along centerline of						
R15	C _x /C _{source}	dissolve plume	6.19E-02		3.50E-02	6.19E-02	4.60E-02	3.50E-02
	RHO _s (g/cm ³)	soil bulk density (default)	1.5	1.5	1.5	1.5	1.5	1.5
R20	k _s (cm ³ /g)	soil water sorption coefficient	1.1	1.1	1.1	0	0	0
	K _{oc} (cm ³ /g)	organic carbon partition coefficient	0	0	0	0	0	0
		organic carbon content of soil (subsurface						
	f _{oc} (g/g)	default)	0.002	0.002	0.002	0.002	0.002	0.002
	H'	Henry's Law constant	0	0	0	0	0	0
R24	U _{gw} (cm/yr)	groundwater Darcy velocity	9319.96	9319.96	9319.96	9319.96	9319.96	9319.96
	DELTA _{gw} (cm)	gw mixing zone thickness (default)	200	200	200	200	200	200
	W (cm)	width of source area parallel to dir gw-	15240	15240	15240	15240	15240	15240
	I (cm/yr)	infiltration rate	30		30	30	30	30
R14	LF _{sw} (kg _{soil} /L _{water})	leaching factor	0.1614489	0.1614489	0.1614489	1.6413977	1.6413977	1.6413977
	0 (/1)	greatest potential concentration of contaminant at source	05	0.5	0.5	205	205	205
	C _{source} (mg/L)		35	35	35	835	835	835
	GW _{comp} (mg/L)	gw objective at compliance point (Class I)	2	2	2			
	GW _{comp} (mg/L)	gw objective at compliance point (Class II)	2	2	2		1	
R26	C _x (mg/L)	dissolved concentration along centerline at property boundary	2.17E+00	1.61E+00	1.23E+00	5.17E+01	3.84E+01	2.92E+01
	C _s (mg/kg)	Soil source concentration						
	X (feet)	Distance to POC	800	1000	1200	800	1000	1200

Exhibit C

ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

CCR COMPLIANCE ANNUAL GROUNDWATER MONITORING and CORRECTIVE ACTION REPORT - 2018

Midwest Generation, LLC Will County 259 E. 135th Street Romeoville, Illinois

Prepared By: KPRG and Associates, Inc.

14665 West Lisbon Road, Suite 1A

Brookfield, WI 53005

January 31, 2019

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- 1 CCR Monitoring Wells Site Map
- 2 CCR Groundwater Contour 05/2018
- 3 CCR Groundwater Contour 10/2018

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- 1 Groundwater Elevations
- 2 Groundwater Flow Direction and Estimated Seepage Velocity/Flow Rate
- 3 Groundwater Sampling Summary
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APPENDICES

- A Analytical Data Packages
- B Alternate Source Demonstration April 12, 2018

CCR Annual Report - 2018

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1.0 INTRODUCTION

The 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 ash pond monitoring wells located at the Midwest Generation, LLC (Midwest Generation) Will County Generating Station. The wells sampled were selected to meet the monitoring requirements of the CCR Rule for Ash Ponds 2 South (2S) and 3 South (3S). The CCR monitoring well network around these ponds consists of six monitoring wells (MW-05, MW-06, MW-09, MW-10, MW-11 and MW-12) as shown on Figure 1. Wells MW-05 and MW-06 are upgradient wells.

The first CCR Compliance Annual Groundwater Monitoring and Corrective Action report was submitted January 24, 2018. This second annual report covers the work performed relative to CCR groundwater monitoring from January 1, 2018 through the end of 2018. It does not duplicate information or activities previously reported for 2017. It is prepared in accordance with Section 257.90(e)(1-5) and summarizes the sampling procedures used, provides an evaluation of groundwater flow conditions, summarizes the analytical data generated and provides a discussion of the statistical evaluations and alternate source demonstration testing completed as a basis for determining the appropriate next phase of compliance activities.

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2.0 FIELD PROCEDURES AND GROUNDWATER FLOW EVALUATION

2.1 Field Procedures

As previously noted, the CCR groundwater monitoring network around the Ash Ponds 2S and 3S at the Will County facility consists of six wells (MW-05, MW-06, MW-09, MW-10, MW-11 and MW-12) as shown on Figure 1. As part of sampling procedures, the integrity of all monitoring wells was inspected and water levels obtained using an electronic water level meter (see summary of water level discussion below). Wells MW-05, MW-06, MW-09 were found in good condition with locked protector casings and intact concrete surface seals. Wells MW-10, MW-11 and MW-12 are completed with flush-mounts at ground surface and were also in good condition.

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

2.2 Groundwater Flow Evaluation

Water level data measurements were obtained from each well during each round of groundwater monitoring. A complete round of water levels was collected prior to initiating sampling, and the water level data are summarized in Table 1. The water levels were used to generate a groundwater flow map for each sampling event. These maps are provided as Figures 2 and 3. A review of the maps indicates a consistent westerly groundwater flow direction. 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:

$$V_s = \underline{Kdh}$$
, where $n_e dl$

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 average hydraulic conductivity of 4.32×10^{-4} ft/sec used in Table 2 was obtained from the Hydrogeologic Assessment Report dated February 2011 and prepared by Patrick

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Engineering. The estimated effective porosity of the aquifer materials (0.20) was obtained from literature (Groundwater, Freeze and Cherry, 1979).

3.0 ANALYTICAL DATA AND STATUS OF EVALUATIONS

3.1 Sampling Summary

The groundwater sampling summary from 2018 is provided in Table 3, in accordance with 257.90 (e)(3).

3.2 Data Summary

The analytical data from the detection monitoring groundwater sampling for Appendix III parameters are provided in Table 4 which includes calculated Prediction Limits (PLs) established in the initial CCR Groundwater Monitoring Statistical Evaluation Summary dated January 2018 for data comparison purposes. The downgradient intrawell prediction limits were established for the three parameters which were part of the Alternate Source Demonstration (ASD) as recommended at the end of that evaluation (see discussion in Section 4.2 below). For those parameters in downgradient wells, a concentration above both interwell and intrawell prediction limits would be considered a potential statistically significant increase (SSI).

Semi-annual groundwater sampling was completed for Appendix III 2018 accordance with detection monitoring requirements under Section 257.94. The data 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 were within an acceptable range. The analytical data packages from the detection monitoring events are provided in Appendix A. Groundwater sampling for Appendix IV was not performed in 2018 since this facility is not in assessment monitoring.

Resampling events were limited to any potential statistically significant increases (SSI) for specific parameters at specific wells. First semi-annual sampling data indicated pH and sulfate above the PLs at MW-06 and sulfate above its PL at MW-09. Confirmatory resampling as permitted within the rule indicated that analytical results were below the PLs for each resampled well.

3.3 Current Status

Ash Ponds 2S and 3S are, and continue to be, in detection monitoring, and there has been no transition between monitoring programs in 2018 since no confirmed SSIs in association with the regulated unit(s) were recorded.

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4.0 OTHER REQUIRED SUBMITTALS

4.1 <u>Initial Statistical Evaluation Summary</u>

The initial data to establish statistical background was collected as part of detection monitoring requirements under 257.94(b) and completed in 2017. Eight rounds of groundwater data were generated for all upgradient and downgradient monitoring wells for Appendix III and Appendix IV parameters. In addition, a ninth round and resample event was collected for subsequent use in statistical comparisons. The CCR Groundwater Monitoring Statistical Evaluation Summary dated January 2018 was prepared by KPRG and Associates, Inc. All statistical calculations were completed in accordance with the CCR Compliance Statistical Approach for Groundwater Data Evaluation for Will County Generating Station dated October 10, 2017.

The completed detection monitoring statistical evaluation determined that there were SSIs in downgradient monitoring wells relative to established background for chloride, fluoride and TDS. It was recommended to complete an ASD in accordance with 40 CFR 257.94(e)(2) to determine whether these SSIs may be associated with an actual release from the regulated unit(s) or if another potential source in the vicinity of the ash ponds may be affecting the local groundwater quality. The results of the ASD are discussed below.

4.2 Alternate Source Demonstration

The ASD was completed April 12, 2018 in accordance with 40 CFR 257.94(e)(2) for the Will County Generating Station Ash Ponds 2S and 3S (see Appendix B). Ash and water samples were collected from each of the two ponds (2S and 3S) and analyzed using the Leaching Environmental Assessment Framework (LEAF) method to determine whether SSIs may be associated with an actual release from the regulated unit(s) or if another potential source in the vicinity of the ash ponds may be affecting the local groundwater quality.

It was concluded that the SSIs for chloride, fluoride and TDS are not the result of a release of leachate from the regulated units (Ponds 2S and 3S) but rather from other potential source(s). The recommendation was to continue with routine detection monitoring. It was also recommended, if necessary, to include intrawell statistical evaluations/comparisons for the downgradient wells in addition to the current interwell evaluations, since upgradient well chemistry for various Appendix III constituents is similar to ash leachate chemistry at natural pH levels. Based on this recommendation, the intrawell PLs for the three parameters that were part of the ASD were calculated for the downgradient monitoring wells and are included in Table 4 (see discussion in Section 3.2 above).

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5.0 <u>SUMMARY/CONCLUSIONS AND RECOMMENDATIONS</u>

The detection monitoring requirements in accordance with the CCR Rule have been successfully met. While in detection monitoring, Ash Ponds 2S and 3S analytical results were below the established PLs. Groundwater monitoring wells that had analytical results that showed parameters above the PLs were resampled to minimize potential for a false positive. All monitoring wells that were resampled showed analytical results below the PLs. An ASD completed in April 2018 determined that SSIs for chloride, fluoride and TDS are from other sources, and not leakage of leachate from the regulated units (Ponds 2S and 3S). Therefore, it is recommended that the site continue with routine detection monitoring at this time. The next round of CCR semi-annual detection monitoring groundwater sampling is scheduled for 2nd Ouarter of 2019.

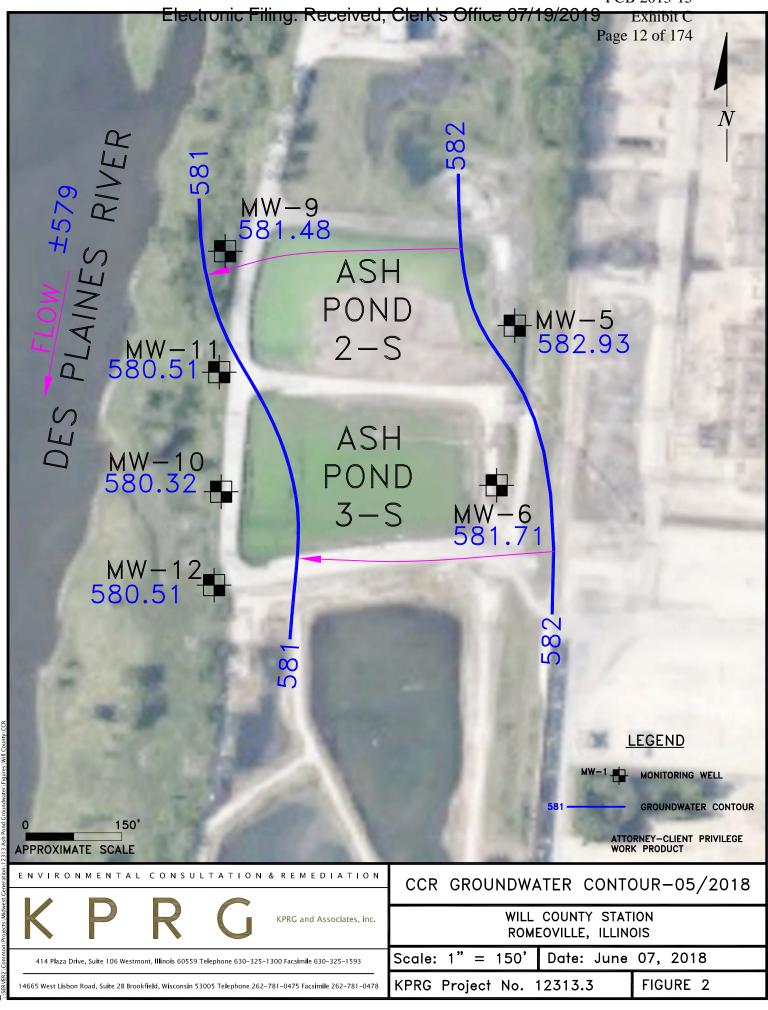
6.0 REFERENCES

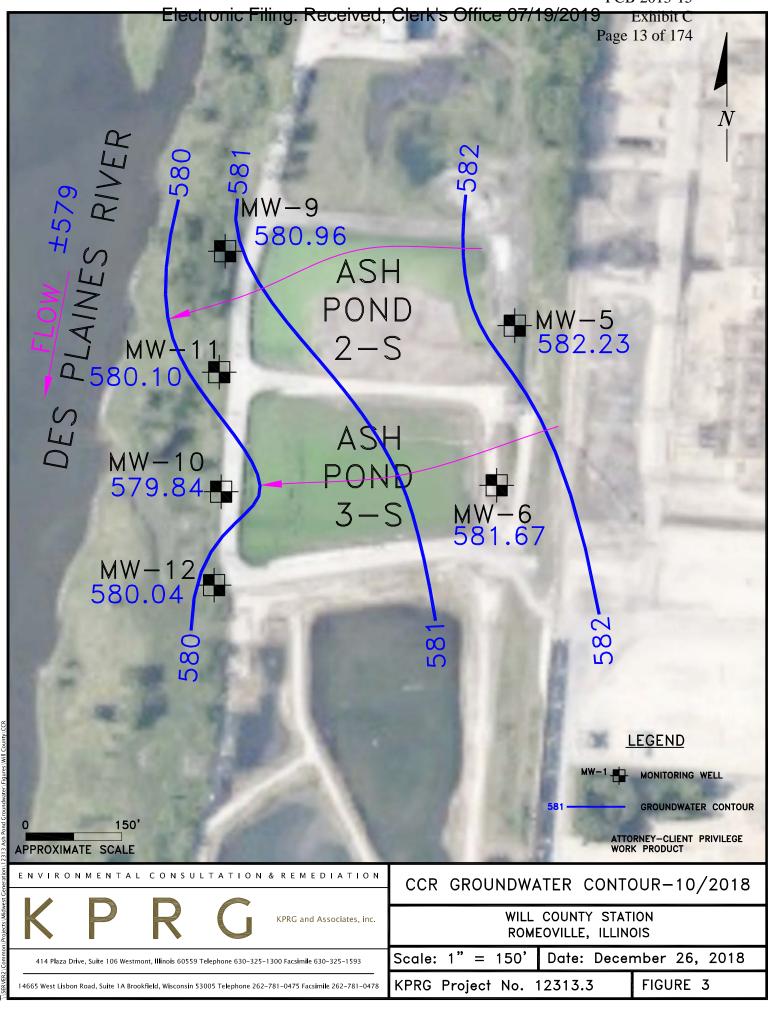
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- Patrick Engineering, Inc., Hydrogeologic Assessment Report Will County Generating Station, Romeoville, IL. February 2011.
- KPRG and Associates, Inc., CCR Compliance Monitoring, Sampling and Analysis Plan, Midwest Generation, LLC Will County Generating Station. October 10, 2017.
- KPRG and Associates, Inc., CCR Compliance Statistical Approach for Groundwater Data Evaluation, Midwest Generation, LLC Will County Generating Station. October 10, 2017.
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FIGURES







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TABLES

Well ID	Date	Top of Casing Elevation	Depth to Groundwater	Groundwater Elevation
		(ft above MSL)	(ft below TOC)	(ft above MSL)
	11/9/2015	592.87 592.87	9.99 9.91	582.88 582.96
	2/16/2016 5/24/2016	592.87	9.91	582.98
	8/9/2016	592.87	10.09	582.78
	10/25/2016	592.87	9.02	583.85
	1/31/2017	592.87	9.81	583.06
MW-05	5/9/2017	592.87	9.63	583.24
	6/27/2017	592.87	10.26	582.61
	9/6/2017	592.87	10.48	582.39
	11/16/2017	592.87	10.02	582.85
	2/28/2018	592.87	9.48	583.39
	5/1/2018	592.87	9.94	582.93
	10/2/2018	592.87	10.64	582.23
	11/9/2015	593.18	9.96	583.22
	2/16/2016	593.18	11.37	581.81
	5/24/2016	593.18	11.37	581.81
	8/9/2016	593.18	11.54	581.64
	10/25/2016	593.18	11.37	581.81
	1/31/2017	593.18	11.24	581.94
MW-06	5/9/2017	593.18	10.86	582.32
	6/27/2017	593.18	11.55	581.63
	9/6/2017	593.18	11.77	581.41
	11/16/2017	593.18	11.49	581.69
	2/28/2018 5/1/2018	593.18 593.18	10.91	582.27 581.71
	10/2/2018	593.18	11.47	581.71
	11/9/2015	592.87	11.38	581.49
	2/16/2016	592.87	11.03	581.84
	5/24/2016	592.87	11.35	581.52
	8/9/2016	592.87	11.43	581.44
	10/25/2016	592.87	10.74	582.13
	1/31/2017	592.87	11.15	581.72
MW-09	5/9/2017	592.87	10.45	582.42
	6/27/2017	592.87	11.66	581.21
	9/6/2017	592.87	11.95	580.92
	11/14/2017	592.87	11.54	581.33
	2/27/2018	592.87	10.13	582.74
	5/1/2018	592.87	11.39	581.48
	10/2/2018	592.87	11.91	580.96
	11/9/2015	590.96	10.65	580.31
	2/16/2016	590.96	10.43	580.53
	5/24/2016	590.96	10.72	580.24
	8/9/2016	590.96	11.12	579.84
	10/25/2016	590.96	10.73	580.23
	1/31/2017	590.96	10.37	580.59
MW-10	5/9/2017	590.96	9.78	581.18
	6/27/2017	590.96	11.09	579.87
	9/6/2017	590.96	11.20	579.76
	11/15/2017	590.96	10.76	580.20
	2/27/2018	590.96	9.54	581.42
	5/1/2018	590.96	10.64	580.32
	10/2/2018	590.96	11.12	579.84
	11/9/2015 2/16/2016	590.69 590.69	10.28 10.15	580.41 580.54
	5/24/2016	590.69	10.15	580.54
	5/24/2016 8/9/2016	590.69	10.25	580.44
	10/25/2016	590.69	10.42	580.03
	1/31/2017	590.69	9.91	580.27
MW-11	5/9/2017	590.69	9.91	581.48
	6/27/2017	590.69	10.48	580.21
	9/6/2017	590.69	10.73	579.96
	11/15/2017	590.69	10.43	580.26
	5/1/2018	590.69	10.18	580.51
	10/2/2018	590.69	10.59	580.10
	11/9/2015	590.81	10.15	580.66
	2/16/2016	590.81	10.24	580.57
	5/24/2016	590.81	10.31	580.50
	8/9/2016	590.81	10.73	580.08
	10/25/2016	590.81	10.45	580.36
MW-12	1/31/2017	590.81	10.16	580.65
IVI W-1∠	5/9/2017	590.81	9.88	580.93
	6/27/2017	590.81	10.62	580.19
	9/6/2017	590.81	10.61	580.20
	11/15/2017	590.81	10.20	580.61
	5/1/2018	590.81	10.30	580.51

MSL - Mean Sea Level TOC - Top of Casing

Table 2. Groundwater Flow Direction and Estimated Seepage Velocity/Flow Rate - Midwest Generation, LLC, Will County Station, Romeoville, IL.

DATE	Groundwater Flow Direction	Kavg (ft/sec)*	Average Hydraulic Gradient (ft/ft)	Porosity (unitless)**	Estimated Seepage Velocity (ft/day)
11/9/2015	West	4.320E-04	0.0053	0.2	0.99
2/16/2016	West	4.320E-04	0.0030	0.2	0.55
5/24/2016	West	4.320E-04	0.0030	0.2	0.55
8/9/2016	West	4.320E-04	0.0030	0.2	0.55
10/25/2016	West	4.320E-04	0.0030	0.2	0.55
1/31/2017	West	4.320E-04	0.0030	0.2	0.55
5/9/2017	West	4.320E-04	0.0045	0.2	0.84
6/27/2017	West	4.320E-04	0.0049	0.2	0.91
9/6/2017	West	4.320E-04	0.0047	0.2	0.88
11/16/2017	West	4.320E-04	0.0026	0.2	0.49
5/1/2018	West	4.320E-04	0.0025	0.2	0.46
10/2/2018	West	4.320E-04	0.0040	0.2	0.75

^{*} Kavg - Average hydraulic conductivity (feet/second) from Hydrogeologic Assessment Report, Patrick Engineering, February 2011.

**- Porosity estimate from Groundwater, Freeze and Cherry, 1979.

Table 3. CCR Groundwater Sample Collection Summary for 2018 - Will County Generating Station

Well ID	Number of Groundwater Sampling Events	Dates Groundwater Sampling Events	Detection Monitoring (D) versus Assessment Monitoring (A)		
MW-5 (Upgradient)	2	5/2/2018	D		
W W -3 (Opgradient)	۷	10/3/2018	D		
MW-6 (Upgradient)	2	5/3/2018	D		
W w -0 (Opgradient)	Z	10/3/2018	D		
MW 0 (Down and dignt)	2	5/1/2018	D		
MW-9 (Downgradient)	2	10/2/2018	D		
MW-10 (Downgradient)	2	5/1/2018	D		
Ww-10 (Downgradient)	2	10/3/2018	D		
MW 11 (Downgradient)	2	5/3/2018	D		
MW-11 (Downgradient)	<u> </u>	10/3/2018	D		
MW 12 (Daysun and dieut)	2	5/3/2018	D		
MW-12 (Downgradient)	2	10/2/2018	D		

Table 4. Semi-Annual Detection Monitoring Statistical Comparisons - Appendix III Groundwater Analytical Results 2018 and Confirmatory Resampling - Midwest Generation, LLC, Will County Station, Romeoville, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pН	Sulfate	Total Dissolved Solids
	11/11/2015	6.1	220	110	0.31	7.24	770	1,900
	2/18/2016	4.4	230	120	0.31	6.99	730	1,600
	5/26/2016	3.7	170	110	0.33	6.73	670	1,500
	8/10/2016	3.6	67	120	0.72	8.62	480	970
	10/26/2016	3.6	44	120	0.70	9.08	410	920
	2/1/2017	4.6	250	48	0.35	6.81	530	1,600
MW-05	5/11/2017	4.0	140	85	0.31	7.86	610	1,200
up-gradient	6/27/2017	3.8	83	99	0.53	7.95	500	1,000
	Pred. Limit*	6.65	359	148	0.72	9.93-5.39	923	2,286
	9/8/2017	4.8	89	78	0.52	9.40	490	1,000
	11/16/2017	4.8	180	52	0.45	6.70	650	1,500
	5/2/2018	3.6	200	32	0.39	7.23	510	1,300
	10/3/2018	4.9	150	55	0.48	7.07	430	1,200
	11/10/2015	3.0	52	100	0.55	8.63	300	660
	2/18/2016	2.5	74	150	0.47	8.58	280	650
	5/26/2016	2.7	86	92	0.44	7.79	350	800
	8/11/2016	3.6	110	58	0.35	7.74	330	840
	10/26/2016	3.8	86	74	0.40	8.16	220	800
	2/1/2017	3.4	70	83	0.41	7.88	260	700
MW-06	5/11/2017	3.0	75	84	0.28	8.68	330	570
up-gradient	6/27/2017	3.1	65	74	0.38	8.15	330	710
	Pred. Limit*	4.29	122	162	0.62	9.21-7.19	415	956
	9/7/2017	3.5	75	67	0.40	8.20	300	740
	11/16/2017	3.9	88	54	0.39	7.59	280	810
	5/3/2018	3	91	52	0.26	6.91	530	750
	7/25/2018 R	NA	NA	NA	NA	7.47	280	NA
	10/3/2018	3.5	93	44	0.31	7.83	240	720
	11/11/2015	1.9	56	190	0.55	9.12	460	750
	2/17/2016	1.8	47	160	0.55	9.10	250	600
	5/24/2016	1.6	48	180	0.51	8.79	240	640
	8/9/2016	2.2	53	140	0.48	8.35	280	750
	10/26/2016	2.2	33	130	0.81	9.16	230	660
	1/31/2017	2.0	61	250	0.57	8.59	180	710
	5/9/2017	1.8	66	340	0.38	8.58	250	900
MW-09	6/27/2017	1.9	64	330	0.51	7.76	240	940
down-gradient	Pred. Limit	4.26	275**	149**	0.72**	9.39-6.48**	413	950
	Pred. Limit*	NC	NC NC	431.2	0.87	NC	NC	1,060
	9/6/2017	1.8	59	310	0.51	8.98	240	890
	11/14/2017	2.6	160	270	0.51	8.1	290	910
	5/1/2018	1.7	49	200	0.52	7.81	430	820
	7/25/2018 R	NA	NA NA	NA	NA	NA	320	NA
	10/2/2018	2.1	49	170	0.55	8.09	270	820
	11/10/2015	3.9	140	140	0.77	7.34	310	980
	2/16/2016	3.6	150	240	0.79	7.29	290	950
	5/25/2016	3.6	120	140	0.83	7.26	260	1,000
	8/10/2016	4.3	150	120	0.78	7.22	230	970
	10/26/2016	3.0	160	74	0.78	7.30	220	1,000
	2/2/2017	3.7	180	81	0.54	7.16	160	930
MW7 10	5/10/2017	3.0	150	100	0.34	7.83	340	860
MW-10 down-gradient	6/27/2017	2.8	130	110	0.44	7.49	250	930
GOWII-graulelit	Pred. Limit	4.26	275**	110 149**	0.67	9.39-6.48**	413	930 950
	Pred. Limit*	4.26 NC	NC	262.2	1.06	9.39-6.48^^ NC	NC	1,074
	9/7/2017	2.8	120	120		7.37	290	920
			120	120	0.77			
	11/15/2017	4.1 3.2	150	130	0.77 0.65	7.10 7.31	270 280	1,000 990
	5/1/2018							
	10/3/2018	2.5	110	140	0.89	7.60	200	860

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

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

** - Based on pooled background from MW-5/MW-6. All others based on MW-6 as background. Italics Date - First round of Detection Monitoring and resample after statistical background establishment.

NC - Not calculated.

<u>BOLD - Potential statistically significant increase relative to interwell Prediction Limit.</u> BOLD - Potential statistically significant increase relative to intrawell Prediction Limit.

NA - Not analyzed. No confirmation resample required.

R - Resample

F1 - MS and/or MSD Recovery outside of limits.

Table 4. Semi-Annual Detection Monitoring Statistical Comparisons - Appendix III Groundwater Analytical Results 2018 and Confirmatory Resampling - Midwest Generation, LLC, Will County Station, Romeoville, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
	11/10/2015	2.6	120	89	0.61	7.60	180	620
	2/16/2016	3.0	100	88	0.68	7.47	170	640
	5/25/2016	2.8	82	98	0.75	7.43	170	640
	8/10/2016	3.1	96	86	0.72	7.57	150	660
	10/26/2016	2.5	110	67	0.53	7.82	120	630
	2/1/2017	3.9	110	72	0.65	7.54	110	600
MW-11	5/10/2017	3.1	95	84	0.46	8.37	170	590
down-gradient	6/27/2017	2.8	87	90	0.59	7.57	150	680
	Pred. Limit	4.26	275**	149**	0.72**	9.39-6.48**	413	950
	Pred. Limit*	NC	NC	110.6	0.88	NC	NC	710
	9/7/2017	2.8	90	94	0.58	7.40	150	730
	11/15/2017	2.9	96	100	0.65	7.41	160	750
	5/3/2018	3.8	73	110	0.69	6.74	190	670
	10/3/2018	3.1	78	110	0.66	7.65	120	680
	11/10/2015	2.3	150	160	0.59	7.44	290	1,000
	2/16/2016	1.8	130	140	0.52	7.38	220	850
	5/25/2016	1.9	130	150	0.54	7.23	250	890
	8/10/2016	2.4	170	140	0.49	7.20	280	1000
	10/26/2016	2.6	140	120	0.49	7.44	220	980
	2/1/2017	2.0	160	120	0.48	7.30	150	900
MW-12	5/10/2017	2.3	200	240	0.30	7.65	260	1,300
down-gradient	6/27/2017	2.4	180	280	0.44	7.31	260	1,300
	Pred. Limit	4.26	275**	149**	0.72**	9.39-6.48**	413	950
	Pred. Limit*	NC	NC	338.8	0.71	NC	NC	1,519
	9/6/2017	2.6	190	<u>270</u>	0.49	7.26	260	<u>1,400</u>
	11/15/2017	1.7	55	<u>200</u>	0.47	6.90	250	<u>1,200</u>
	5/3/2018	1.8	140	<u>170</u>	0.47	6.60	170	<u>960</u>
	10/2/2018	F1 2.2	150	<u>160</u>	0.49	7.30	170	1,100

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

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

** - Based on pooled background from MW-5/MW-6. All others based on MW-6 as background.

Italics Date - First round of Detection Monitoring and resample after statistical background establishment.

Not calculated.

<u>BOLD</u> - Potential statistically significant increase relative to interwell Prediction Limit.

<u>BOLD</u> - Potential statistically significant increase relative to intrawell Prediction Limit.

<u>BOLD</u> - Above both interwell and intrawell Prediction Limts

NA - Not analyzed. No confirmation resample required.

R - Resample

F1 - MS and/or MSD Recovery outside of limits.

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Exhibit C
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APPENDIX A Analytical Data Packages

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 500-144853-1 Client Project/Site: Will County CCR

For:

KPRG and Associates, Inc. 14665 West Lisbon Road, Suite 2B Brookfield, Wisconsin 53005

Attn: Richard Gnat

Therese Hargaves Authorized for release by:

5/17/2018 12:33:58 PM Therese Hargraves, Project Manager I therese.hargraves@testamericainc.com

Designee for

Eric Lang, Manager of Project Management (708)534-5200

eric.lang@testamericainc.com

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

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

Exhibit C

Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit C TestAmpriga Job IDF 5004144853-1

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

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PCB 2013-15 Electronic Filing: Received Clark's Office 07/19/2019 Exhibit C

Client: KPRG and Associates, Inc.

TestAmerica 23 lBf 174 144853-1

Project/Site: Will County CCR

Job ID: 500-144853-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-144853-1

Comments

No additional comments.

Receipt

The samples were received on 5/3/2018 3:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.9° C and 3.2° C.

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

General Chemistry

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

3

Electronic Filing: Received Clerk's Office 07/19/2019

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

TestAmerica 930 1Bf 1774-144853-1

Method **Method Description** Protocol Laboratory 6020A Metals (ICP/MS) SW846 TAL CHI TAL CHI SM 2540C Solids, Total Dissolved (TDS) SM Chloride, Total SM 4500 CI- E TAL CHI SM 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

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

Electronic Filing: Beceived Clerk's Office 07/19/2019

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

TestAmerica 305 IBf 1774-144853-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-144853-1	MW-05	Water	05/02/18 15:42	05/03/18 15:40
500-144853-2	MW-06	Water	05/03/18 10:04	05/03/18 15:40
500-144853-3	MW-09	Water	05/01/18 14:35	05/03/18 15:40
500-144853-4	MW-10	Water	05/01/18 16:17	05/03/18 15:40
500-144853-5	MW-11	Water	05/03/18 11:25	05/03/18 15:40
500-144853-6	MW-12	Water	05/03/18 12:17	05/03/18 15:40
500-144853-7	Duplicate	Water	05/03/18 00:00	05/03/18 15:40

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Electronic Filing Received Clerk's Office 07/19/2019 Exhibit C

Client: KPRG and Associates, Inc.

TestAmerica 926 IBf 370-144853-1

Project/Site: Will County CCR

Client Sample ID: MW-05 Date Collected: 05/02/18 15:42 Lab Sample ID: 500-144853-1

Matrix: Water

Date Received: 05/03/18 15:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.6		0.50		mg/L		05/04/18 07:13	05/07/18 11:30	10
Calcium	200		0.20		mg/L		05/04/18 07:13	05/04/18 17:36	1
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1300		10		mg/L			05/08/18 04:43	1
Chloride	32		2.0		mg/L			05/13/18 19:37	1
Fluoride	0.39		0.10		mg/L			05/11/18 23:05	1

5/17/2018

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit C

Client: KPRG and Associates, Inc.

TestAmerica 927 IBf 170-144853-1

Project/Site: Will County CCR

Client Sample ID: MW-06 Lab Sample ID: 500-144853-2 Date Collected: 05/03/18 10:04

Matrix: Water

Date Received: 05/03/18 15:40

Method: 6020A - Metals (ICP/M	•					_	_		
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.0		0.50		mg/L		05/04/18 07:13	05/07/18 11:33	10
Calcium	91		0.20		mg/L		05/04/18 07:13	05/04/18 17:39	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	750		10		mg/L			05/10/18 05:35	1
Chloride	52		2.0		mg/L			05/13/18 19:38	1
Fluoride	0.26		0.10		mg/L			05/11/18 23:09	1
Sulfate	530		100		mg/L			05/12/18 06:07	20

Electronic Filing Received Clerk's Office 07/19/2019 Exhibit C

Client: KPRG and Associates, Inc.

TestAmerica 928 IBf 170-144853-1

Project/Site: Will County CCR

Client Sample ID: MW-09 Lab Sample ID: 500-144853-3 Date Collected: 05/01/18 14:35

Matrix: Water

Date Received: 05/03/18 15:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.7		0.25		mg/L		05/04/18 07:13	05/07/18 11:37	5
Calcium	49		0.20		mg/L		05/04/18 07:13	05/04/18 17:43	1
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	820		10		mg/L		<u> </u>	05/07/18 04:58	1
Chloride	200		10		mg/L			05/13/18 20:16	5
Fluoride	0.52		0.10		mg/L			05/11/18 23:14	1

Electronic Filing Received Clerk's Office 07/19/2019 Exhibit C

Client: KPRG and Associates, Inc.

TestAmerica 369 IBF 370-144853-1

Project/Site: Will County CCR

Client Sample ID: MW-10 Lab Sample ID: 500-144853-4 Date Collected: 05/01/18 16:17

Matrix: Water

Date Received: 05/03/18 15:40

Method: 6020A - Metals (IC	P/MS) - Total F	Recoverable	1						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.2		0.50		mg/L		05/04/18 07:13	05/07/18 11:41	10
Calcium	150		0.20		mg/L		05/04/18 07:13	05/04/18 17:47	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	990		10		mg/L			05/07/18 05:01	1
Chloride	130		10		mg/L			05/13/18 20:17	5
Fluoride	0.65		0.10		mg/L			05/11/18 23:18	1
Sulfate	280		50		ma/L			05/12/18 06:09	10

Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 900 IBf 500-144853-1

Project/Site: Will County CCR

Client Sample ID: MW-11 Lab Sample ID: 500-144853-5 Date Collected: 05/03/18 11:25

Matrix: Water

Date Received: 05/03/18 15:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.8		0.50		mg/L		05/04/18 07:13	05/07/18 11:45	10
Calcium	73		0.20		mg/L		05/04/18 07:13	05/04/18 17:51	1
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	670		10		mg/L			05/10/18 05:37	1
Chloride	110		10		mg/L			05/13/18 20:18	5
er and the	0.69		0.10		mg/L			05/11/18 23:22	1
Fluoride	0.03								

Electronic Filing Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 301 IBF 500-144853-1

Project/Site: Will County CCR

Client Sample ID: MW-12 Lab Sample ID: 500-144853-6

Matrix: Water

Date Collected: 05/03/18 12:17 Date Received: 05/03/18 15:40

Method: 6020A - Metals (IC	P/MS) - Total F	Recoverable)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.8		0.25		mg/L		05/04/18 07:13	05/07/18 11:48	5
Calcium	140		0.20		mg/L		05/04/18 07:13	05/04/18 17:54	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	960		10		mg/L			05/10/18 05:40	1
Chloride	170		10		mg/L			05/13/18 20:18	5
Fluoride	0.47		0.10		mg/L			05/11/18 23:26	1
Sulfate	170		50		mg/L			05/12/18 06:11	10

Electronic Filing Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 93218f. 370-144853-1

Project/Site: Will County CCR

Chloride

Fluoride

Sulfate

Client Sample ID: Duplicate Date Collected: 05/03/18 00:00

Lab Sample ID: 500-144853-7

05/13/18 20:19

05/11/18 23:30

05/12/18 06:12

Matrix: Water

Date Received: 05/03/18 15:40

Method: 6020A - Metals (IC	P/MS) - Total F	Recoverable							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.9	F1	0.50		mg/L		05/04/18 07:13	05/07/18 12:00	10
Calcium	68		0.20		mg/L		05/04/18 07:13	05/04/18 18:06	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	670		10		mg/L			05/10/18 05:43	1

10

25

0.10

mg/L

mg/L

mg/L

110

0.70

180

Electronic Filing Perfectiveds/Glerk's Office 07/19/2019

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

TestAmerica 903 IB: 500-144853-1

Qualifiers

M	eta	ls

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
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.

General Chemistry

e concentration; therefore, control limits are not
e

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 I	Limit

Quality Control QC

RER Relative Error Ratio (Radiochemistry)

RLReporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) TEF **TEQ** Toxicity Equivalent Quotient (Dioxin)

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

TestAmerica 300 IB: 500-144853-1

Metals

Prep Batch: 430640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-144853-1	MW-05	Total Recoverable	Water	3005A	
500-144853-2	MW-06	Total Recoverable	Water	3005A	
500-144853-3	MW-09	Total Recoverable	Water	3005A	
500-144853-4	MW-10	Total Recoverable	Water	3005A	
500-144853-5	MW-11	Total Recoverable	Water	3005A	
500-144853-6	MW-12	Total Recoverable	Water	3005A	
500-144853-7	Duplicate	Total Recoverable	Water	3005A	
MB 500-430640/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-430640/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-144853-7 MS	Duplicate	Total Recoverable	Water	3005A	
500-144853-7 MSD	Duplicate	Total Recoverable	Water	3005A	
500-144853-7 DU	Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 430950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-144853-1	MW-05	Total Recoverable	Water	6020A	430640
500-144853-2	MW-06	Total Recoverable	Water	6020A	430640
500-144853-3	MW-09	Total Recoverable	Water	6020A	430640
500-144853-4	MW-10	Total Recoverable	Water	6020A	430640
500-144853-5	MW-11	Total Recoverable	Water	6020A	430640
500-144853-6	MW-12	Total Recoverable	Water	6020A	430640
500-144853-7	Duplicate	Total Recoverable	Water	6020A	430640
MB 500-430640/1-A	Method Blank	Total Recoverable	Water	6020A	430640
LCS 500-430640/2-A	Lab Control Sample	Total Recoverable	Water	6020A	430640
500-144853-7 MS	Duplicate	Total Recoverable	Water	6020A	430640
500-144853-7 MSD	Duplicate	Total Recoverable	Water	6020A	430640
500-144853-7 DU	Duplicate	Total Recoverable	Water	6020A	430640

Analysis Batch: 431132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-144853-1	MW-05	Total Recoverable	Water	6020A	430640
500-144853-2	MW-06	Total Recoverable	Water	6020A	430640
500-144853-3	MW-09	Total Recoverable	Water	6020A	430640
500-144853-4	MW-10	Total Recoverable	Water	6020A	430640
500-144853-5	MW-11	Total Recoverable	Water	6020A	430640
500-144853-6	MW-12	Total Recoverable	Water	6020A	430640
500-144853-7	Duplicate	Total Recoverable	Water	6020A	430640
MB 500-430640/1-A	Method Blank	Total Recoverable	Water	6020A	430640
LCS 500-430640/2-A	Lab Control Sample	Total Recoverable	Water	6020A	430640
500-144853-7 MS	Duplicate	Total Recoverable	Water	6020A	430640
500-144853-7 MSD	Duplicate	Total Recoverable	Water	6020A	430640
500-144853-7 DU	Duplicate	Total Recoverable	Water	6020A	430640

General Chemistry

Analysis Batch: 430893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-144853-3	MW-09	Total/NA	Water	SM 2540C	
500-144853-4	MW-10	Total/NA	Water	SM 2540C	
MB 500-430893/1	Method Blank	Total/NA	Water	SM 2540C	

TestAmerica Chicago

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11

15

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

TestAmerica 35 IBf 1774 144853-1

General Chemistry (Continued)

Analysis Batch: 430893 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-430893/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 431082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-144853-1	MW-05	Total/NA	Water	SM 2540C	<u> </u>
MB 500-431082/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-431082/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 431535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-144853-2	MW-06	Total/NA	Water	SM 2540C	
500-144853-5	MW-11	Total/NA	Water	SM 2540C	
500-144853-6	MW-12	Total/NA	Water	SM 2540C	
500-144853-7	Duplicate	Total/NA	Water	SM 2540C	
MB 500-431535/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-431535/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 431959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-144853-1	MW-05	Total/NA	Water	SM 4500 F C	-
500-144853-2	MW-06	Total/NA	Water	SM 4500 F C	
500-144853-3	MW-09	Total/NA	Water	SM 4500 F C	
500-144853-4	MW-10	Total/NA	Water	SM 4500 F C	
500-144853-5	MW-11	Total/NA	Water	SM 4500 F C	
500-144853-6	MW-12	Total/NA	Water	SM 4500 F C	
500-144853-7	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-431959/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-431959/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-144853-7 MS	Duplicate	Total/NA	Water	SM 4500 F C	
500-144853-7 MSD	Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 431994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-144853-1	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-144853-2	MW-06	Total/NA	Water	SM 4500 SO4 E	
500-144853-3	MW-09	Total/NA	Water	SM 4500 SO4 E	
500-144853-4	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-144853-5	MW-11	Total/NA	Water	SM 4500 SO4 E	
500-144853-6	MW-12	Total/NA	Water	SM 4500 SO4 E	
500-144853-7	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-431994/3	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-431994/4	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 432035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-144853-1	MW-05	Total/NA	Water	SM 4500 CI- E	
500-144853-2	MW-06	Total/NA	Water	SM 4500 CI- E	
500-144853-3	MW-09	Total/NA	Water	SM 4500 CI- E	
500-144853-4	MW-10	Total/NA	Water	SM 4500 CI- E	
500-144853-5	MW-11	Total/NA	Water	SM 4500 CI- E	
500-144853-6	MW-12	Total/NA	Water	SM 4500 CI- E	

TestAmerica Chicago

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

TestAmerica Job IB: 500-144853-1

General Chemistry (Continued)

Analysis Batch: 432035 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-144853-7	Duplicate	Total/NA	Water	SM 4500 CI- E	
MB 500-432035/4	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-432035/5	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
500-144853-3 MS	MW-09	Total/NA	Water	SM 4500 CI- E	
500-144853-3 MSD	MW-09	Total/NA	Water	SM 4500 CI- E	

Client: KPRG and Associates, Inc.

TestAmerica 37 IB: 500-144853-1

Project/Site: Will County CCR

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-430640/1-A

Matrix: Water

Calcium

Analysis Batch: 430950

MB MB

Analyte

Result Qualifier <0.20

RL 0.20

MDL Unit mg/L **Prepared**

Analyzed 05/04/18 07:13 05/04/18 16:43

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Dil Fac

Prep Batch: 430640

Lab Sample ID: MB 500-430640/1-A

Matrix: Water

Analysis Batch: 431132

MB MB

Analyte Boron < 0.050

Result Qualifier

RL MDL Unit 0.050 mg/L

Prepared 05/04/18 07:13 05/07/18 11:22

Dil Fac Analyzed

Prep Batch: 430640

Prep Batch: 430640

Prep Batch: 430640

Lab Sample ID: LCS 500-430640/2-A

Matrix: Water

Analyte

Calcium

Analysis Batch: 430950

Spike Added 10.0

LCS LCS Result Qualifier 9.63

Unit D %Rec mg/L

Limits 96 80 - 120

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample

%Rec.

Prep Type: Total Recoverable

Lab Sample ID: LCS 500-430640/2-A

Matrix: Water

Analysis Batch: 431132

Analyte Boron

Spike Added 1.00

LCS LCS Result Qualifier 1.02

Unit mg/L

Unit

mg/L

Unit

mg/L

%Rec 102 %Rec. Limits

Prep Type: Total Recoverable

Client Sample ID: Duplicate

Prep Type: Total Recoverable

Lab Sample ID: 500-144853-7 MS **Matrix: Water**

Analysis Batch: 430950

Analyte

Sample Sample Result Qualifier Calcium 68

Spike Added 10.0

Spike

Added

1 00

Spike

Added

10.0

MS MS Result Qualifier 77.6

4

MS MS

MSD MSD

79.4 4

Result Qualifier

5.09

Result Qualifier

Unit D %Rec 96 mg/L

> D %Rec

> > 123

%Rec

D %Rec

132

114

Prep Batch: 430640 %Rec.

Client Sample ID: Duplicate

Client Sample ID: Duplicate

Prep Type: Total Recoverable

Prep Batch: 430640

Prep Batch: 430640

RPD

Prep Type: Total Recoverable

Limits 75 - 125

%Rec.

Limits

75 - 125

%Rec.

Limits

75 - 125

80 - 120

Lab Sample ID: 500-144853-7 MS

Matrix: Water

Analysis Batch: 431132

Analyte

3.9 F1 Boron

Lab Sample ID: 500-144853-7 MSD

Matrix: Water Analysis Batch: 430950

Analyte

Calcium Lab Sample ID: 500-144853-7 MSD

Matrix: Water Analysis Batch: 431132

Analyte

Boron

Sample Sample Result Qualifier

Sample Sample

Sample Sample

68

Result Qualifier

Result Qualifier

Spike Added 3.9 F1 1.00

MSD MSD Result Qualifier

5.18 F1

Unit mg/L

Client Sample ID: Duplicate Prep Type: Total Recoverable Prep Batch: 430640

RPD

Limit

20

%Rec. **RPD** Limits RPD Limit 75 - 125 2

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

TestAmerica 38 lpf 174

Lab Sample ID: 500-144853-7 DU **Matrix: Water**

Analysis Batch: 430950

Client Sample ID: Duplicate Prep Type: Total Recoverable

Prep Batch: 430640

Client Sample ID: Duplicate

Prep Batch: 430640

Prep Type: Total/NA

Analyzed

05/07/18 04:02

RPD

20

Limit

Dil Fac

Dil Fac

Prep Type: Total Recoverable

Client Sample ID: Method Blank

DU DU Sample Sample **RPD** Analyte Result Qualifier Result Qualifier Unit RPD Limit Calcium 68 3 20 69.8 mg/L

Lab Sample ID: 500-144853-7 DU

Matrix: Water

Analyte

Boron

Analysis Batch: 431132

Sample Sample Result Qualifier 3.9 F1

DU DU 3.98

RL

10

RL

10

RL

10

Spike

Added

Spike

Added

250

250

Result Qualifier

MDL Unit

LCS LCS

292

Result Qualifier

MDL Unit

mg/L

mg/L

Unit

mg/L

Unit

mg/L

Unit mg/L

RPD 3

Client Sample ID: Lab Control Sample

%Rec.

Limits

80 - 120

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

%Rec.

Limits

80 - 120

Client Sample ID: Method Blank

Analyzed

05/08/18 03:49

Prepared

%Rec

Prepared

%Rec

117

117

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

Lab Sample ID: MB 500-430893/1

Matrix: Water

Analysis Batch: 430893

MB MB Result Qualifier **Total Dissolved Solids** <10

Lab Sample ID: LCS 500-430893/2 **Matrix: Water**

Analysis Batch: 430893

Total Dissolved Solids

Lab Sample ID: MB 500-431082/1 **Matrix: Water**

Analysis Batch: 431082

Analyte

Total Dissolved Solids

Lab Sample ID: LCS 500-431082/2 **Matrix: Water**

Lab Sample ID: MB 500-431535/1

Analysis Batch: 431082

Analyte

Total Dissolved Solids

Matrix: Water

Analysis Batch: 431535

Analyte **Total Dissolved Solids**

<10

MB MB

MB MB

<10

Result Qualifier

Result Qualifier

MDL Unit mg/L

LCS LCS

292

Result Qualifier

Prepared

D

05/10/18 05:12

Dil Fac Analyzed

Client: KPRG and Associates, Inc.

TestAmerica 39 lpf 174

Project/Site: Will County CCR

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

Lab Sample ID: LCS 500-431535/2 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 431535

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits **Total Dissolved Solids** 250 288 mg/L 115 80 - 120

Method: SM 4500 CI- E - Chloride, Total

Lab Sample ID: MB 500-432035/4 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 432035

MB MB

RL Analyte Result Qualifier **MDL** Unit Dil Fac D Prepared Analyzed 2.0 Chloride <2.0 05/13/18 19:35 mq/L

Lab Sample ID: LCS 500-432035/5 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 432035

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Chloride 50.0 104 85 - 115 52.0 mg/L

Lab Sample ID: 500-144853-3 MS Client Sample ID: MW-09 Prep Type: Total/NA **Matrix: Water**

Analysis Batch: 432035

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier %Rec Limits Unit D Chloride 200 50.0 230 4 mg/L 75 - 125

Lab Sample ID: 500-144853-3 MSD Client Sample ID: MW-09 Prep Type: Total/NA

Matrix: Water

Analysis Batch: 432035

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit Chloride 200 50.0 238 4 75 mg/L 75 - 125 20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-431959/3 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 431959

MB MB **Analyte** Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 0.10 Fluoride <0.10 mg/L 05/11/18 21:56

Lab Sample ID: LCS 500-431959/4 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 431959

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Fluoride 10.0 10.3 mg/L 103 80 - 120

Electronic Filing: Reseived Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica Job ID: 500-144853-1

%Rec.

%Rec.

Project/Site: Will County CCR

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 500-144853-7 MS

Matrix: Water

Fluoride

Analysis Batch: 431959 Analyte

Sample Sample Spike Result Qualifier Added 5.00 0.70

MS MS 5.84

Result Qualifier

Unit mg/L

D %Rec Limits 103

75 - 125 **Client Sample ID: Duplicate**

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Type: Total/NA

Lab Sample ID: 500-144853-7 MSD

Matrix: Water

Analysis Batch: 431959

Analyte Fluoride

Sample Sample Result Qualifier 0.70

Spike Added 5.00

MSD MSD Result Qualifier 5.87

Unit mg/L

%Rec 103

Limits **RPD** 75 - 125

Client Sample ID: Method Blank

RPD

Limit

20

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-431994/3

Matrix: Water

Analyte

Sulfate

Sulfate

Analysis Batch: 431994

MB MB

Result Qualifier <5.0

RL 5.0

MDL Unit mg/L Prepared

Analyzed Dil Fac 05/12/18 05:51

Prep Type: Total/NA

Prep Type: Total/NA

Lab Sample ID: LCS 500-431994/4

Matrix: Water

Analysis Batch: 431994

Analyte

Spike Added 20.0

LCS LCS Result Qualifier 18.4

Unit mg/L %Rec 92 %Rec. Limits 80 - 120

Client Sample ID: Lab Control Sample

PCB 2013-15 Exhibit C Page 41 of 174

Tect∆	\n	nerica	Report To:						Bill To	o:										Р	age 41	ΟĪ
			Contact:	Richard Gn	at				Conta	ct:								Labla	14 1			
THE LEADER IN	ENVI	RONMENTAL TESTING	Company:	KPRG and	Associates,	inc			Comp	any:								Lab Lo	t# 50	0-1	1485	,3
TestAmerica C	hicag	jo	Address:	14665 W. L	isbon Rd., S	uite 2	В		Addre	ss:								Package	Sealed	Sam	ples Seale	ed
2417 Bond St.				Brookfield,	WI 53005													Yes	No	Yes	(vio)
University Park,	, IL 60	484	Phone:	262-781-04	75				Phone	9:								Received	on tce	San	ples Intac	ct
708-534-5200			Email:	richardg@	kprginc.c	<u>com</u>			Email									Yes	No	Yes	No	N/A
Fax. 708-534-5	211								PO#:									Tempera	ture °C of		2.9	
Sampler Name):		COMPANY:			#/C	ont.											Within H	old Time	Prese	rv. Indicat	ted
lan John Howi	eson		KPRG and As	ssociates Inc	C.	Volu	me					1						Ves	No	Yes) ···· No	N/A
Project Name:			TestAmerica	Project Nun	nber:	Pres	erv.											pH CI	neck OK	Res	L ₂ Check	ок
Quarterly- Will	Cour	ity CCR	50011609															Yes	No	(Yes	No	- 1
Project Location	on:		TAT			Ě	Cont	ł					1	ŀ				Sai	nple Labe	s and CC	C Agree	
Romeoville,			15 Days			Matrix	₽		S a				o o					Yes	No	coc	not prese	ent
Lab PM:	Eric	Lang	eric.lang@	testamer	ica.com	1	#		(8)			ge	Sulfat									
Laboratory ID	MS-MSD	Client Sam	ole ID	Sampling Date	Sampling Time				6020A - Total Metals (B	2540C -TDS	4500_F_C - Fluoride	SM4500_CI_E Chloride	SM4500_SO4_E - S					Ad	ditional Ar	aalyses / i	Remarks	
1		MW-0	5	5-2-18	15:42	W	2		Х	Х	Х	Х	Х									
2		MW-0	6	5-3-18	10:04	W	2		Х	_ X	Х	Х	Х									
3		MW-0	9	5-1-18	14135	W	2		Х	Х	Х	Х	Х									
y		MW-1		5-1-18	16:17	W	2		Х	Х	Х	Х	Х									
5		MW-1		5-3-18	11:25	w	2		Х	_ X	Х	Х	X									
6		MW-1:	2	5-3-18	12:17	w	2		Х	Х	Х	Х	X									
7	:	Duplica	te	5-3-18	N/A	w	2		X	X	Х	Х	Х									
		A											<u></u>					<u></u>				
RELINQUISHED (*	2	COMPANY: KPRG	5-3		15	TIME:)	RECEI	W	m) N	20	16	сомр.	A	CH	gt_	DATE: 5/3/	18	IS4	Ó
RELINQUISHED	3y: \	Ú	COMPANY:	···	DATE:		TIME:		RECEN	VED BY	/ :				COMP	ANY:			DATE:	· <u> </u>	TIME:	.
WW = Wastewate V = Water S = Soil SL = Sludge MS = Miscellaneou DL = Oil	us	x Key SE = Sediment SO = Solid DL = Drum Liquid DS = Drum Solid L = Leachate W = Wipe	Containe 1. Plastic 2. VOA Vial 3. Sterile Plast 4. Amber Glass 5. Widemouth 6. Other	ic s Glass	eservative K 1. HCl, Cool t 2. H ₂ SO ₄ , Coo 3. HNO ₃ , Coo 4. NaOH, Coo 5. NaOH/Zn, 6. Cool to 4°	o 4° of to 4° of to 4° of to 4°	4°		500-1	44853	E coc								Date Received Courier: Hand Del	1:44 ivered	<u>,18</u>	
A = Air		0=			7. None															_2	_of_ 4 _	

STL-8208 (0600)

Login Sample Receipt Checklist

Exhibit C

List Source: TestAmerica Chicago

Page 42 of 174

Client: KPRG and Associates, Inc.

Job Number: 500-144853-1

Login Number: 144853

List Number: 1

Creator: Kelsey, Shawn M

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	(3.2)(2.9)c
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.	True	

2

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

TestAmerica 9 ob IB: 500-144853-1

Client Sample ID: MW-05

MW-05 Lab Sample ID: 500-144853-1

Matrix: Water

Date Collected: 05/02/18 15:42 Date Received: 05/03/18 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			430640	05/04/18 07:13	JEF	TAL CHI
Total Recoverable	Analysis	6020A		1	430950	05/04/18 17:36	FXG	TAL CHI
Total Recoverable	Prep	3005A			430640	05/04/18 07:13	JEF	TAL CHI
Total Recoverable	Analysis	6020A		10	431132	05/07/18 11:30	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	431082	05/08/18 04:43	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		1	432035	05/13/18 19:37	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	431959	05/11/18 23:05	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	431994		CLB	TAL CHI
					(Start) 0	05/12/18 06:06		
					(End) (05/12/18 06:07		

Client Sample ID: MW-06 Lab Sample ID: 500-144853-2

. Matrix: Water

Date Collected: 05/03/18 10:04 Date Received: 05/03/18 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A	_		430640	05/04/18 07:13	JEF	TAL CHI
Total Recoverable	Analysis	6020A		1	430950	05/04/18 17:39	FXG	TAL CHI
Total Recoverable	Prep	3005A			430640	05/04/18 07:13	JEF	TAL CHI
Total Recoverable	Analysis	6020A		10	431132	05/07/18 11:33	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	431535	05/10/18 05:35	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		1	432035	05/13/18 19:38	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	431959	05/11/18 23:09	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	431994		CLB	TAL CHI
					(Start) 0	5/12/18 06:07		
					(End) (5/12/18 06:08		

Client Sample ID: MW-09

Lab Sample ID: 500-144853-3

Matrix: Water

Date Received: 05/03/18 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			430640	05/04/18 07:13	JEF	TAL CH
Total Recoverable	Analysis	6020A		1	430950	05/04/18 17:43	FXG	TAL CH
Total Recoverable	Prep	3005A			430640	05/04/18 07:13	JEF	TAL CH
Total Recoverable	Analysis	6020A		5	431132	05/07/18 11:37	FXG	TAL CH
Total/NA	Analysis	SM 2540C		1	430893	05/07/18 04:58	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		5	432035	05/13/18 20:16	HMW	TAL CH
Total/NA	Analysis	SM 4500 F C		1	431959	05/11/18 23:14	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		20	431994		CLB	TAL CH
					(Start) 0	05/12/18 06:08		
					(End) (05/12/18 06:09		

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

TestAmerica Job ID: 500-144853-1

Client Sample ID: MW-10

Date Received: 05/03/18 15:40

Lab Sample ID: 500-144853-4 Date Collected: 05/01/18 16:17

Matrix: Water

Batch Batch Dilution Batch **Prepared Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Lab Total Recoverable Prep 3005A 430640 05/04/18 07:13 JEF TAL CHI Total Recoverable 6020A 430950 05/04/18 17:47 FXG TAL CHI Analysis 1 Total Recoverable Prep 3005A 430640 05/04/18 07:13 JEF TAL CHI Total Recoverable 6020A 10 431132 05/07/18 11:41 FXG TAL CHI Analysis Total/NA SM 2540C 430893 05/07/18 05:01 CLB TAL CHI Analysis 1 Total/NA SM 4500 CI- E 5 432035 05/13/18 20:17 HMW TAL CHI Analysis Total/NA Analysis SM 4500 F C 1 431959 05/11/18 23:18 EAT TAL CHI Total/NA Analysis SM 4500 SO4 E 10 431994 CLB TAL CHI (Start) 05/12/18 06:09

Client Sample ID: MW-11 Lab Sample ID: 500-144853-5

(End) 05/12/18 06:10

Matrix: Water

Date Collected: 05/03/18 11:25 Date Received: 05/03/18 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			430640	05/04/18 07:13	JEF	TAL CH
Total Recoverable	Analysis	6020A		1	430950	05/04/18 17:51	FXG	TAL CH
Total Recoverable	Prep	3005A			430640	05/04/18 07:13	JEF	TAL CH
Total Recoverable	Analysis	6020A		10	431132	05/07/18 11:45	FXG	TAL CH
Total/NA	Analysis	SM 2540C		1	431535	05/10/18 05:37	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		5	432035	05/13/18 20:18	HMW	TAL CH
Total/NA	Analysis	SM 4500 F C		1	431959	05/11/18 23:22	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		10	431994		CLB	TAL CH
					(Start) 0	5/12/18 06:10		
					(End) (5/12/18 06:11		

Client Sample ID: MW-12 Lab Sample ID: 500-144853-6

Date Collected: 05/03/18 12:17 **Matrix: Water** Date Received: 05/03/18 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			430640	05/04/18 07:13	JEF	TAL CH
Total Recoverable	Analysis	6020A		1	430950	05/04/18 17:54	FXG	TAL CH
Total Recoverable	Prep	3005A			430640	05/04/18 07:13	JEF	TAL CH
Total Recoverable	Analysis	6020A		5	431132	05/07/18 11:48	FXG	TAL CH
Total/NA	Analysis	SM 2540C		1	431535	05/10/18 05:40	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		5	432035	05/13/18 20:18	HMW	TAL CH
Total/NA	Analysis	SM 4500 F C		1	431959	05/11/18 23:26	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		10	431994		CLB	TAL CH
					(Start) (05/12/18 06:11		
					(End) (05/12/18 06:12		

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

TestAmerica 905 IB 500-144853-1

Lab Sample ID: 500-144853-7 **Client Sample ID: Duplicate Matrix: Water**

Date Collected: 05/03/18 00:00 Date Received: 05/03/18 15:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			430640	05/04/18 07:13	JEF	TAL CHI
Total Recoverable	Analysis	6020A		1	430950	05/04/18 18:06	FXG	TAL CHI
Total Recoverable	Prep	3005A			430640	05/04/18 07:13	JEF	TAL CHI
Total Recoverable	Analysis	6020A		10	431132	05/07/18 12:00	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	431535	05/10/18 05:43	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		5	432035	05/13/18 20:19	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	431959	05/11/18 23:30	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	431994		CLB	TAL CHI
					(Start) 0	5/12/18 06:12		
					(End) (5/12/18 06:13		

Laboratory References:

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

> Page 46 of 174 **TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 500-149021-1 Client Project/Site: Will County CCR

For:

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

Attn: Richard Gnat

Authorized for release by: 8/3/2018 4:47:52 PM

Eric Lang, Manager of Project Management (708)534-5200

eric.lang@testamericainc.com

.....LINKS

Review your project results through Total Access

Have a Question?



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.

Exhibit C

Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit C TestAmpriga Joh IDF 5004149021-1

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

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Electronic Filing: Received Clerk's Office 07/19/2019 PCB 2013-15
Exhibit C

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

TestAmerica 900 ID: 500-149021-1

Job ID: 500-149021-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-149021-1

Comments

No additional comments.

Receipt

The samples were received on 7/26/2018 11:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.6° C.

General Chemistry

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

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PCB 2013-15 Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit C

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

TestAmerica 900 IB: 500-149021-1

Laboratory Method **Method Description** Protocol SM 4500 SO4 E Sulfate, Total SM TAL CHI

Protocol References:

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

Laboratory References:

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

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit C

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

TestAmerica Job IB: 500-149021-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-149021-1	MW-06	Water	07/25/18 16:16	07/26/18 11:20
500-149021-2	MW-09	Water	07/25/18 12:10	07/26/18 11:20

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PCB 2013-15 Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit C

Client: KPRG and Associates, Inc.

TestAmerica 551 IBF 570-149021-1

Project/Site: Will County CCR

Lab Sample ID: 500-149021-1 Client Sample ID: MW-06 Date Collected: 07/25/18 16:16

Matrix: Water

Date Received: 07/26/18 11:20

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	280	50	mg/L			08/02/18 11:50	10

PCB 2013-15 Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit C

Client: KPRG and Associates, Inc.

TestAmerica 9.52 IBf 1774

Project/Site: Will County CCR

Client Sample ID: MW-09 Lab Sample ID: 500-149021-2 Date Collected: 07/25/18 12:10

Matrix: Water

Date Received: 07/26/18 11:20

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	320	50	mg/L			08/02/18 11:51	10

Electronic Filing Perfectiveds/Glerk's Office 07/19/2019

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

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

TestAmerica 9.53 IBf 1774

Glossary

RER

RL RPD

TEF

TEQ

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

8/3/2018

PCB 2013-15 Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit C

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

TestAmerica 9 54 IBf 1774 149021-1

General Chemistry

Analysis Batch: 443674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-149021-1	MW-06	Total/NA	Water	SM 4500 SO4 E	
500-149021-2	MW-09	Total/NA	Water	SM 4500 SO4 E	
MB 500-443674/3	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-443674/4	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

PCB 2013-15

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit C

Client: KPRG and Associates, Inc.

TestAmerica 955 IB 500-149021-1

Client Sample ID: Method Blank

Project/Site: Will County CCR

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-443674/3

Matrix: Water

Analysis Batch: 443674

MB MB

Analyte Result Qualifier Sulfate

<5.0

RL 5.0 **MDL** Unit mg/L D

Prepared

Analyzed Dil Fac 08/02/18 11:31

Prep Type: Total/NA

Prep Type: Total/NA

Lab Sample ID: LCS 500-443674/4

Matrix: Water

Sulfate

Analysis Batch: 443674

Analyte

Spike Added

20.0

LCS LCS 20.0

Result Qualifier

Unit D %Rec 100 mg/L

%Rec. Limits 80 - 120

Client Sample ID: Lab Control Sample

Electronic Filing: Received, Clerk's Office 07/19/2019

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Test.	۸r	nerica	Report To:						Bill T	Го:										
			Contact:	Richard Gn	at				Conta	act:							Lab Lat #	/- λi	· //	0001
THE LEADER I	IN ENV	IRONMENTAL TESTING	Company:	KPRG and	Associates,	Inc			Com	pany:							Lab Lot #	90	574	404
TestAmerica	Chica	go	Address:	14665 W. L	isbon Rd., S	uite 2	В		Addre	ess:							Package Sea	led	Şamp	les Sealed
2417 Bond St.				Brookfield,	WI 53005												Yes No Yes No			No
University Par	rk, IL 6	0484	Phone:	262-781-04	75				Phon	e:							Regeived on	Regeived on Ice Samples Intact		
708-534-5200)		Email:	richardg@	@kprginc.c	<u>com</u>			Emai	l							ີ່(Yesr∕ N	0	(Ke8)	No N/A
Fax. 708-534-	5211								PO#	:							Temperature	°C of Co	ooler	
Sampler Nam	ne:		COMPANY:			# / C	ont.		Ι								Within Hold 1		Preser	/. Indicated
lan John How	vieson		KPRG and A	ssociates In	c.	Volu	ıme										(Ves) N	。	Yes	No (N/A
Project Name):		TestAmerica	Project Nun	nber:	Pres	erv.										pዟ Check	ок	Res.CL	Check OK
Quarterly- Wi	II Cou	nty CCR	50011609						stals								es) N	• 1	(Yes)	No N/A
Project Locat	tion:		TAT			ĬĚ	of Cont	, g	- Total Meta				古	ľ		ĺ	Sample	Labels	and COC	Agree
Romeoville	, IL		15 Days			Matrix	of C	3/22	ota				1 -1		ŀ		Yes No			ot present
Lab PM:	Eric	Lang	eric.lang@	testame	rica.com		#	122	-	ŀ		l e	Sulfate	ł						
Laboratory ID	QSW-SW	MW-0 MW-0 MW-1 MW-1 MW-1	05 06 09 0 1	Sampling Date — 7-25-18 — — — — — — — — — — — — — — — — — — —	Sampling Time ————————————————————————————————————	w w w w	1	903.0, 904.0 Radium 226/228)) 6010C, 6020A, 7470A) 2540C -TDS	4500_F_C - Fluoride	SM4500_CI_E Chloride	XX SM4500_SO4_E - S					nal Anal	yses / Re	emarks
														[
	<u> </u>			<u> </u>		l	L			لہا			igsquare				<u> </u>			
RELINQUISHED I JH		4	COMPANY: KPRG	7.2	DATE 8)j:	TIME:)	RECE	H	12	X	coti	5	COMPANY:	CH	t 7/2	b/8	- (TIME: O
RELINQUISHED	ØY: ¥		COMPANY:		DATE:		TIME:		RECEI	VED BY	' :			(COMPANY:		/ DA	TE:		TIME:
WW = Wastewat W = Water S = Soil SL = Sludge MS = Miscellaned	er	x Key SE = Sediment SO = Solid DL = Drum Liquid DS = Drum Solid L = Leachate W = Wipe	Contain 1. Plastic 2. VOA Vial 3. Sterile Plast 4. Amber Glas 5. Widemouth 6. Other	tic s	eservative Ko 1. HCl, Cool to 2. H ₂ SO ₄ , Coo 3. HNO ₃ , Coo 4. NaOH, Coo 5. NaOH/Zn, (6. Cool to 4°	o 4° ol to 4° I to 4° ol to 4°			СОММ	ENTS:							Co	te ceived urier: nd Delive	red	<u>/18'</u>
A = Air		0 =	J. Ouijoi		7. None				<u> </u>								Ipii	o Lauin		of_2

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STL-8208 (0600)

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Login Sample Receipt Checklist

Exhibit C Page 57 of 174

Client: KPRG and Associates, Inc. Job Number: 500-149021-1

List Source: TestAmerica Chicago Login Number: 149021

List Number: 1

Creator: Sanchez, Ariel M

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td>- Commont</td>	True	- Commont
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	5.6
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	

TestAmerica 958 IB: 500-149021-1

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

Client Sample ID: MW-06

Lab Sample ID: 500-149021-1

Matrix: Water

Date Collected: 07/25/18 16:16 Date Received: 07/26/18 11:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 SO4 E		10	443674		CLB	TAL CHI
					(Start) 0	8/02/18 11:50		
					(End) 0	8/02/18 11:51		

Client Sample ID: MW-09 Lab Sample ID: 500-149021-2

Date Collected: 07/25/18 12:10 Matrix: Water

Date Received: 07/26/18 11:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 SO4 E		10	443674	-	CLB	TAL CHI
					(Start) 0	8/02/18 11:51		
					(End) 0	8/02/18 11:52		

Laboratory References:

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

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> Page 59 of 174 **TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 500-152628-1 Client Project/Site: Will County CCR

For:

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

Attn: Richard Gnat

Authorized for release by: 10/22/2018 3:05:36 PM

Eric Lang, Manager of Project Management (708)534-5200

eric.lang@testamericainc.com

.....LINKS

Review your project results through Total Access

Have a Question?



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.

Exhibit C

PCB 2013-15

Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit C TestAmpriga Job IDF 5004152628-1

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

Table of Contents

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PCB 2013-15 Electronic Filing: Received Clerk's Office 07/19/2019

Exhibit C

TestAmerica Job IB: 500-152628-1 Client: KPRG and Associates, Inc. Project/Site: Will County CCR

Job ID: 500-152628-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-152628-1

Comments

No additional comments.

Receipt

The samples were received on 10/4/2018 1:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.9° C.

Metals

Method(s) 6020A: The matrix spike duplicate (MSD) recovery for sample (500-152628-A-6-D MSD ^5) were outside control limits for Boron. The associated laboratory control sample (LCS) recovery was within acceptance limits, therefore the data has been reported.

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

General Chemistry

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

PCB 2013-15

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit C

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

TestAmerica 969 18: 500-152628-1

Method	Method Description	Protocol	Laboratory
6020A	Metals (ICP/MS)	SW846	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
SM 4500 CI- E	Chloride, Total	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
SM 4500 SO4 E	Sulfate, Total	SM	TAL CHI
3005A	Prenaration, Total Recoverable or Dissolved Metals	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 = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Electronic Filing: Received Clerk's Office 07/19/2019

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

TestAmerica 300 IB. 500-152628-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-152628-1	MW-05	Water	10/03/18 09:18	10/04/18 13:25
500-152628-2	MW-06	Water	10/03/18 10:44	10/04/18 13:25
500-152628-3	MW-09	Water	10/02/18 14:10	10/04/18 13:25
500-152628-4	MW-10	Water	10/03/18 12:52	10/04/18 13:25
500-152628-5	MW-11	Water	10/03/18 15:05	10/04/18 13:25
500-152628-6	MW-12	Water	10/03/18 11:56	10/04/18 13:25
500-152628-7	Duplicate	Water	10/03/18 00:00	10/04/18 13:25

3

4

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9

4 4

11

Electronic Filing Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 965 IB: 500-152628-1

Project/Site: Will County CCR

Client Sample ID: MW-05 Lab Sample ID: 500-152628-1 Date Collected: 10/03/18 09:18

Matrix: Water

10/05/18 23:31

10/12/18 08:00

Date Received: 10/04/18 13:25

Fluoride

Sulfate

Method: 6020A - Metals (IC	P/MS) - Total F	Recoverable							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	4.9		0.50		mg/L		10/08/18 08:49	10/10/18 14:31	10
Calcium	150		0.20		mg/L		10/08/18 08:49	10/09/18 21:59	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1200		10		mg/L			10/08/18 00:03	1
Chloride	55		2.0		mg/L			10/19/18 11:30	1

0.10

100

mg/L

mg/L

0.48

430

PCB 2013-15

Electronic Filing Received Clerk's Office 07/19/2019 Exhibit C

Client: KPRG and Associates, Inc.

TestAmerica 965 IB: 370-152628-1

10/19/18 11:31

10/05/18 23:35

10/12/18 08:01

Project/Site: Will County CCR

Client Sample ID: MW-06 Lab Sample ID: 500-152628-2

Matrix: Water

Date Collected: 10/03/18 10:44 Date Received: 10/04/18 13:25

Chloride

Fluoride

Sulfate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.5		0.50		mg/L		10/08/18 08:49	10/10/18 14:35	10
Calcium	93		0.20		mg/L		10/08/18 08:49	10/09/18 22:03	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	720		10		mg/L			10/08/18 00:08	1

2.0

0.10

50

mg/L

mg/L

mg/L

44

0.31

240

Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 966 18f 370-152628-1

Project/Site: Will County CCR

Client Sample ID: MW-09 Lab Sample ID: 500-152628-3 Date Collected: 10/02/18 14:10

Matrix: Water

Date Received: 10/04/18 13:25

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.1		0.25		mg/L		10/08/18 08:49	10/10/18 14:45	5
Calcium	49		0.20		mg/L		10/08/18 08:49	10/09/18 22:14	1
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	820		10		mg/L			10/08/18 00:11	1
Chloride	170		10		mg/L			10/19/18 11:32	5
Fluoride	0.55		0.10		mg/L			10/05/18 23:40	1
			100		mg/L			10/12/18 08:02	20

Electronic Filing Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 967 IB: 370-152628-1

Project/Site: Will County CCR

Client Sample ID: MW-10 Lab Sample ID: 500-152628-4 Date Collected: 10/03/18 12:52

Matrix: Water

10/05/18 23:42

10/12/18 08:05

Date Received: 10/04/18 13:25

Fluoride

Sulfate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.5		0.25		mg/L		10/08/18 08:49	10/10/18 14:49	5
Calcium	110		0.20		mg/L		10/08/18 08:49	10/09/18 22:18	1
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	860		10		mg/L	— <u>-</u>		10/08/18 00:14	1
Chloride	140		10		mg/L			10/19/18 11:33	5

0.10

100

mg/L

mg/L

0.89

200

Electronic Filing Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 968 IBf 370-152628-1

Project/Site: Will County CCR

Client Sample ID: MW-11 Lab Sample ID: 500-152628-5 Date Collected: 10/03/18 15:05

Matrix: Water

Date Received: 10/04/18 13:25

Method: 6020A - Metals (IC Analyte	,	Recoverable Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.1		0.50		mg/L		10/08/18 08:49		10
Calcium	78		0.20		mg/L		10/08/18 08:49	10/09/18 22:22	1
General Chemistry						_			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	680		10		mg/L			10/08/18 00:16	1
Chloride	110		10		mg/L			10/19/18 11:34	5
Fluoride	0.66		0.10		mg/L			10/05/18 23:46	1
Sulfate	120		50		ma/L			10/12/18 08:06	10

10/22/2018

PCB 2013-15

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit C

Client: KPRG and Associates, Inc.

TestAmerica 969 IBf 1704-152628-1

Project/Site: Will County CCR

Client Sample ID: MW-12 Lab Sample ID: 500-152628-6

Matrix: Water

Date Collected: 10/03/18 11:56 Date Received: 10/04/18 13:25

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.2	F1	0.25		mg/L		10/08/18 08:49	10/10/18 14:56	5
Calcium	150		0.20		mg/L		10/08/18 08:49	10/09/18 22:26	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		10		mg/L			10/08/18 00:19	1
Total Dissolved Solids									
Chloride	160		10		mg/L			10/19/18 11:35	5
	160 0.49		10 0.10		mg/L mg/L			10/19/18 11:35 10/06/18 00:02	5 1

Electronic Filing: Received Clerk's Office 07/19/2019

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

TestAmerica 900 IBf 1774

Client Sample ID: Duplicate Date Collected: 10/03/18 00:00

Date Received: 10/04/18 13:25

Lab Sample ID: 500-152628-7

Matrix: Water

Method: 6020A - Metals (ICP/	MS) - Total Recoverable)					
Analyte	Result Qualifier	RL	MDL Uni	t D	Prepared	Analyzed	Dil Fac
Boron	5.0	0.50	mg/	L	10/08/18 08:49	10/10/18 15:22	10
Calcium	140	0.20	mg/	L	10/08/18 08:49	10/09/18 22:45	1

General Chemistry Analyte	Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1200	10	mg/L		10/08/18 00:21	1
Chloride	56	2.0	mg/L		10/19/18 11:40	1
Fluoride	0.47	0.10	mg/L		10/06/18 00:06	1
Sulfate	400	100	mg/L		10/12/18 08:08	20

Electronic Filing Definitions/Gloss's Pyffice 07/19/2019

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

Minimum Detectable Activity (Radiochemistry)

Method Detection Limit

Minimum Level (Dioxin) Not Calculated

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Quality Control

Minimum Detectable Concentration (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry)

Not Detected at the reporting limit (or MDL or EDL if shown)

Relative Percent Difference, a measure of the relative difference between two points

TestAmerica 970 IB: 500-152628-1

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
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

MDA

MDC

MDL

ML

NC ND

PQL

QC

RL RPD

TEF TEQ

RER

Abbreviation	These commonly used abbreviations may or may not be present in this report.
a	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)
_OD	Limit of Detection (DoD/DOE)
100	Limit of Quantitation (DoD/DQE)

Electronic Filing: Received Clark's Office 07/19/2019

Client: KPRG and Associates, Inc.

Project/Site: Will County CCR

TestAr

TestAmerica 9,721Bf 1774

Metals

Prep Batch: 453720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-152628-1	MW-05	Total Recoverable	Water	3005A	_
500-152628-2	MW-06	Total Recoverable	Water	3005A	
500-152628-3	MW-09	Total Recoverable	Water	3005A	
500-152628-4	MW-10	Total Recoverable	Water	3005A	
500-152628-5	MW-11	Total Recoverable	Water	3005A	
500-152628-6	MW-12	Total Recoverable	Water	3005A	
500-152628-7	Duplicate	Total Recoverable	Water	3005A	
MB 500-453720/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-453720/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-152628-6 MS	MW-12	Total Recoverable	Water	3005A	
500-152628-6 MSD	MW-12	Total Recoverable	Water	3005A	
500-152628-6 DU	MW-12	Total Recoverable	Water	3005A	

Analysis Batch: 454115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-152628-1	MW-05	Total Recoverable	Water	6020A	453720
500-152628-2	MW-06	Total Recoverable	Water	6020A	453720
500-152628-3	MW-09	Total Recoverable	Water	6020A	453720
500-152628-4	MW-10	Total Recoverable	Water	6020A	453720
500-152628-5	MW-11	Total Recoverable	Water	6020A	453720
500-152628-6	MW-12	Total Recoverable	Water	6020A	453720
500-152628-7	Duplicate	Total Recoverable	Water	6020A	453720
MB 500-453720/1-A	Method Blank	Total Recoverable	Water	6020A	453720
LCS 500-453720/2-A	Lab Control Sample	Total Recoverable	Water	6020A	453720
500-152628-6 MS	MW-12	Total Recoverable	Water	6020A	453720
500-152628-6 MSD	MW-12	Total Recoverable	Water	6020A	453720
500-152628-6 DU	MW-12	Total Recoverable	Water	6020A	453720

Analysis Batch: 454359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-152628-1	MW-05	Total Recoverable	Water	6020A	453720
500-152628-2	MW-06	Total Recoverable	Water	6020A	453720
500-152628-3	MW-09	Total Recoverable	Water	6020A	453720
500-152628-4	MW-10	Total Recoverable	Water	6020A	453720
500-152628-5	MW-11	Total Recoverable	Water	6020A	453720
500-152628-6	MW-12	Total Recoverable	Water	6020A	453720
500-152628-7	Duplicate	Total Recoverable	Water	6020A	453720
MB 500-453720/1-A	Method Blank	Total Recoverable	Water	6020A	453720
LCS 500-453720/2-A	Lab Control Sample	Total Recoverable	Water	6020A	453720
500-152628-6 MS	MW-12	Total Recoverable	Water	6020A	453720
500-152628-6 MSD	MW-12	Total Recoverable	Water	6020A	453720
500-152628-6 DU	MW-12	Total Recoverable	Water	6020A	453720

General Chemistry

Analysis Batch: 453606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-152628-1	MW-05	Total/NA	Water	SM 4500 F C	
500-152628-2	MW-06	Total/NA	Water	SM 4500 F C	
500-152628-3	MW-09	Total/NA	Water	SM 4500 F C	

TestAmerica Chicago

10/22/2018

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TestAmerica 9,05 IBf 1774

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

General Chemistry (Continued)

Analysis Batch: 453606 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-152628-4	MW-10	Total/NA	Water	SM 4500 F C	
500-152628-5	MW-11	Total/NA	Water	SM 4500 F C	
500-152628-6	MW-12	Total/NA	Water	SM 4500 F C	
500-152628-7	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-453606/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-453606/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 453675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-152628-1	MW-05	Total/NA	Water	SM 2540C	_
500-152628-2	MW-06	Total/NA	Water	SM 2540C	
500-152628-3	MW-09	Total/NA	Water	SM 2540C	
500-152628-4	MW-10	Total/NA	Water	SM 2540C	
500-152628-5	MW-11	Total/NA	Water	SM 2540C	
500-152628-6	MW-12	Total/NA	Water	SM 2540C	
500-152628-7	Duplicate	Total/NA	Water	SM 2540C	
MB 500-453675/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-453675/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-152628-1 DU	MW-05	Total/NA	Water	SM 2540C	

Analysis Batch: 454555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-152628-1	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-152628-2	MW-06	Total/NA	Water	SM 4500 SO4 E	
500-152628-3	MW-09	Total/NA	Water	SM 4500 SO4 E	
500-152628-4	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-152628-5	MW-11	Total/NA	Water	SM 4500 SO4 E	
500-152628-6	MW-12	Total/NA	Water	SM 4500 SO4 E	
500-152628-7	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-454555/3	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-454555/4	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 455858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
500-152628-1	MW-05	Total/NA	Water	SM 4500 CI- E	
500-152628-2	MW-06	Total/NA	Water	SM 4500 CI- E	
500-152628-3	MW-09	Total/NA	Water	SM 4500 CI- E	
500-152628-4	MW-10	Total/NA	Water	SM 4500 CI- E	
500-152628-5	MW-11	Total/NA	Water	SM 4500 CI- E	
500-152628-6	MW-12	Total/NA	Water	SM 4500 CI- E	
500-152628-7	Duplicate	Total/NA	Water	SM 4500 CI- E	
MB 500-455858/39	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-455858/40	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
500-152628-6 MS	MW-12	Total/NA	Water	SM 4500 CI- E	
500-152628-6 MSD	MW-12	Total/NA	Water	SM 4500 CI- E	

TestAmerica Chicago

Client: KPRG and Associates, Inc.

TestAmerice Job ID: 500-152628-1

%Rec.

Project/Site: Will County CCR

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

Lab Sample ID: MB 500-453720/1-A Client Sample ID: Method Blank **Matrix: Water Prep Type: Total Recoverable Analysis Batch: 454115**

Prep Batch: 453720 MB MB

Analyte Result Qualifier RL **MDL** Unit D Analyzed Dil Fac **Prepared** 0.20 <u>10/08/18 08:49</u> <u>10/09/18 21:28</u> Calcium <0.20 mg/L

Lab Sample ID: MB 500-453720/1-A Client Sample ID: Method Blank **Matrix: Water Prep Type: Total Recoverable**

Analysis Batch: 454359

Prep Batch: 453720 MB MB

Analyte Result Qualifier RL MDL Unit Analyzed Dil Fac Prepared 0.050 10/08/18 08:49 10/10/18 14:24 Boron < 0.050 mg/L

Lab Sample ID: LCS 500-453720/2-A

Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total Recoverable Analysis Batch: 454115 **Prep Batch: 453720**

LCS LCS

Spike Added Result Qualifier Limits Analyte Unit D %Rec Calcium 10.0 10.6 mg/L 106 80 - 120

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 500-453720/2-A **Matrix: Water Prep Type: Total Recoverable** Analysis Batch: 454359 **Prep Batch: 453720** Spike LCS LCS %Rec.

Analyte Added Result Qualifier Unit Limits %Rec Boron 1.00 0.869 87 80 - 120 mg/L

Lab Sample ID: 500-152628-6 MS Client Sample ID: MW-12 **Matrix: Water Prep Type: Total Recoverable Prep Batch: 453720 Analysis Batch: 454115** Spike MS MS Sample Sample %Rec.

Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Calcium 150 10.0 75 - 125 151 4 mg/L 30

Lab Sample ID: 500-152628-6 MS Client Sample ID: MW-12 **Matrix: Water Prep Type: Total Recoverable** Analysis Batch: 454359 **Prep Batch: 453720**

Sample Sample Spike MS MS %Rec. Result Qualifier Added Result Qualifier Limits Analyte Unit D %Rec

2.2 F1 1 00 Boron 3.03 80 75 - 125 mg/L Lab Sample ID: 500-152628-6 MSD Client Sample ID: MW-12

Matrix: Water Prep Type: Total Recoverable Analysis Batch: 454115 **Prep Batch: 453720** Sample Sample Spike MSD MSD %Rec. **RPD** Result Qualifier Added Result Qualifier RPD **Analyte** Unit %Rec Limits Limit Calcium 150 10.0 156 4 mg/L 81 75 - 125 20

Lab Sample ID: 500-152628-6 MSD Client Sample ID: MW-12 **Matrix: Water Prep Type: Total Recoverable Analysis Batch: 454359 Prep Batch: 453720** Sample Sample Spike MSD MSD %Rec. **RPD** Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Boron 2.2 F1 1.00 2.97 F1 mg/L 74 75 - 125 2

TestAmerica Chicago

Lab Sample ID: 500-152628-6 DU Client Sample ID: MW-12 **Matrix: Water Prep Type: Total Recoverable**

Analysis Batch: 454115 **Prep Batch: 453720** DU DU Sample Sample **RPD** Analyte Result Qualifier Result Qualifier Unit D RPD Limit Calcium 150 mg/L 20 147

Lab Sample ID: 500-152628-6 DU Client Sample ID: MW-12 **Matrix: Water Prep Type: Total Recoverable Analysis Batch: 454359 Prep Batch: 453720**

DU DU Sample Sample **RPD** Result Qualifier Result Qualifier RPD Limit Analyte Unit 2.2 F1 Boron 2.17 mg/L 3 20

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

Lab Sample ID: MB 500-453675/1 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 453675

MB MB **MDL** Unit Analyte Result Qualifier RL **Prepared** Analyzed Dil Fac **Total Dissolved Solids** <10 10 mg/L 10/07/18 23:25

Lab Sample ID: LCS 500-453675/2 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 453675

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

Lab Sample ID: 500-152628-1 DU Client Sample ID: MW-05 **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 453675

DU DU RPD Sample Sample Analyte Result Qualifier Result Qualifier Unit RPD Limit **Total Dissolved Solids** 1200 1240 mg/L

Method: SM 4500 CI- E - Chloride, Total

Lab Sample ID: MB 500-455858/39 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 455858

MB MB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 2.0 Chloride 10/19/18 11:28 <2.0 mg/L

Lab Sample ID: LCS 500-455858/40 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 455858

LCS LCS Spike %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Chloride 50.0 48.5 mg/L 97 85 - 115

Client Sample ID: MW-12

Client Sample ID: MW-12

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Client: KPRG and Associates, Inc.

TestAmerica 76 18 500-152628-1

Project/Site: Will County CCR

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

Lab Sample ID: 500-152628-6 MS

Matrix: Water

Analysis Batch: 455858

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Chloride 50.0 86 75 - 125 160 207 mg/L

Lab Sample ID: 500-152628-6 MSD

Matrix: Water

Analysis Batch: 455858

Sample Sample Spike MSD MSD %Rec. **RPD** Limits Result Qualifier Added Analyte Result Qualifier **RPD** Limit Unit D %Rec 97 Chloride 160 50.0 212 mg/L 75 - 125 20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-453606/3

Matrix: Water

Analysis Batch: 453606

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Fluoride 0.10 10/05/18 22:17 <0.10 mg/L

Lab Sample ID: LCS 500-453606/4

Matrix: Water

Analysis Batch: 453606

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Fluoride 10.0 10.6 mg/L 106 80 - 120

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-454555/3

Matrix: Water

Analysis Batch: 454555

MB MB **MDL** Unit Analyte Result Qualifier RI D Analyzed Dil Fac Prepared Sulfate 5.0 mg/L 10/12/18 07:53 <5.0

Lab Sample ID: LCS 500-454555/4

Matrix: Water

Analysis Batch: 454555

Spike LCS LCS %Rec. Added Result Qualifier **Analyte** Unit D %Rec Limits Sulfate 20.0 19.3 97 mg/L 80 - 120

TestAmerica Chicago

10/22/2018

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

Client Sample ID: Lab Control Sample

8

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Test.	4r	nerica	Report To:						він т	o:										
			Contact:	Richard Gn	at				Conta	act:								lablat# air A	10	2120
THE LEADER !	N ENVI	PO111111111	Company:	KPRG and	Associates,	Inc			Comp	cany:								Lab Lot # 500	- 150	4018
TestAmerica	Chic	K3V26	Address:	14665 W. L	isbon Rd., S	uite 2	В		Addre	ess:								Package Sealed		es Sealed
2417 Bond St.		47.5		Brookfield,	WI 53005													Yes No	Yes	(No ')
University Par	k, IL 6	4.4	Phone:	262-781-04	75		•		Phon	e:								Received on Ice	Semp	les Intact
708-534-5200	•		Email:	richarda@	nkprginc.c	om			Email	- ·- · · · · · · · · · · · · · · · · ·								Yes No	(Yes)	No N/A
Fax. 708-534-	5211	500-152628 COC	<u></u>						PO#									Temperature °C of C		4
Sampler Nam	e:	· · · · · · · · · · · · · · · · · · ·	COMPANY:			#/C	ont.											Within Hold Time	Preserv	/. Indicated
ian John How	ieson		KPRG and A	ssociates In	c.	Volu	me									i		(Yes) No	(Yes)	No N/A
Project Name	:		TestAmerica	Project Nun	nber:	Pres	erv.		-									pH-Check OK	Res CL	Check OK
Quarterly- Wil		nty CCR	50011609	•					蠤				1		†			Yes No	Yes	No (N/A
Project Locat			TAT			¥	# of Cont		- Total Metal									Sample Labels		3
Romeoville,			15 Days			Matrix	ဦ	122	otal									(Yes) No		ot present
Lab PM:		Lang	eric.lang@	ntestame	rica com	-	#	226/228	5			<u> a</u>	Sulfate					100	00011	or process
Laboratory ID		Client Sam						, 904.0 Radium	6010C, 6020A, 7470A	2540C -TDS	4500_F_C - Fluoride	SM4500_CI_E Chloride	S04_E-					Additional Ana	ilyses / Re	·marks
	MS-MSD			Sampling Date	Time			903.0,	60100	25400	4500		SM4500							
		MW-0	15	10-3-18	09:18	W	2	}	X	×	X	X	X							
ュ		MW-0	16	10-3-18		w	2	-	X	X	X	X	X							
3,		MW-0	9	10-2-18	14:10	W	2	_	X	X	X	X	X							
		MW-1	0	10-3-18		w	2	_	X	X	X	X	X							
4		MW-1	1	10.3-18	15:05	w	2		X	*	X	X	X							
\mathcal{L}		MW-1	2	10-3-18		w	2	-	X	X	X	X	X							
7		Duplica	ate	10-3-18	-	w	2	-	X	Ż	X	X	X		\vdash					
				0070		**				-	<u> </u>		 	<u> </u>	 					
				<u> </u>								_	+	_						
RELINQUISHED	BY:		COMPANY: KPRG	10-4	DATE:8	[2	TIME:	25	RECEI	Z	IN)	sle	rodl))	соме	any:	RT.	10/4/18	7	TIME: 325
RELINQUISHED	BY:		COMPANY:		DATE:		TIME:		RECE	AED B,	Y:				COMP	ANY:		DATÉ:		TIME:
WW = Wastewate W = Water S = Soil	er	x Key SE = Sediment SO = Solid DL = Drum Liquid	Contain 1. Plastic 2. VOA Vial 3. Sterile Plast	ic	reservative Ke 1. HCl, Cool to 2. H ₂ SO ₄ , Coo 3. HNO ₃ , Coo	o 4° ol to 4° I to 4°		-	СОММ	ENTS:								Date Received Courier:		
SL = Sludge		DS = Drum Solid	4. Amber Glas	S	4. NaOH, Coo	I to 4°												Hand Deliv	ered	
MS = Miscellaneo	ous	L = Leachate	5. Widemouth		5. NaOH/Zn, (Cool to	4°													
OL = Oil		W = Wipe	6. Other		6. Cool to 4°				<u> </u>									Bill of Ladi	ng:	
A = Air		0=			7. None													STL-8208 (0600)	_2_	of_ _2

PCB 2013-15 Electronic Filing: Received, Clerk's Office 07/19/2019

Exhibit C Page 78 of 174 **Login Sample Receipt Checklist**

Client: KPRG and Associates, Inc. Job Number: 500-152628-1

List Source: TestAmerica Chicago Login Number: 152628

List Number: 1

Creator: Scott, Sherri L

Creator. Scott, Silem L		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica Job IB: 500-152628-1

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

Client Sample ID: MW-05

Lab Sample ID: 500-152628-1

Matrix: Water

Date Collected: 10/03/18 09:18
Date Received: 10/04/18 13:25

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			453720	10/08/18 08:49	SAH	TAL CH
Total Recoverable	Analysis	6020A		1	454115	10/09/18 21:59	FXG	TAL CH
Total Recoverable	Prep	3005A			453720	10/08/18 08:49	SAH	TAL CH
Total Recoverable	Analysis	6020A		10	454359	10/10/18 14:31	FXG	TAL CH
Total/NA	Analysis	SM 2540C		1	453675	10/08/18 00:03	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		1	455858	10/19/18 11:30	CCK	TAL CH
Total/NA	Analysis	SM 4500 F C		1	453606	10/05/18 23:31	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		20	454555		CLB	TAL CH
					(Start) 1	0/12/18 08:00		
					(End) 1	0/12/18 08:01		

Client Sample ID: MW-06 Lab Sample ID: 500-152628-2

. Matrix: Water

Date Collected: 10/03/18 10:44
Date Received: 10/04/18 13:25

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			453720	10/08/18 08:49	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	454115	10/09/18 22:03	FXG	TAL CHI
Total Recoverable	Prep	3005A			453720	10/08/18 08:49	SAH	TAL CHI
Total Recoverable	Analysis	6020A		10	454359	10/10/18 14:35	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	453675	10/08/18 00:08	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		1	455858	10/19/18 11:31	CCK	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	453606	10/05/18 23:35	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	454555		CLB	TAL CHI
					(Start) 1	0/12/18 08:01		
					(End) 1	0/12/18 08:02		

Client Sample ID: MW-09

Date Collected: 10/02/18 14:10

Lab Sample ID: 500-152628-3

Matrix: Water

Date Received: 10/04/18 13:25

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			453720	10/08/18 08:49	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	454115	10/09/18 22:14	FXG	TAL CH
Total Recoverable	Prep	3005A			453720	10/08/18 08:49	SAH	TAL CH
Total Recoverable	Analysis	6020A		5	454359	10/10/18 14:45	FXG	TAL CH
Total/NA	Analysis	SM 2540C		1	453675	10/08/18 00:11	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		5	455858	10/19/18 11:32	CCK	TAL CH
Total/NA	Analysis	SM 4500 F C		1	453606	10/05/18 23:40	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		20	454555		CLB	TAL CH
					(Start) 1	0/12/18 08:02		
					(End) 1	0/12/18 08:03		

TestAmerica Chicago

Exhibit C

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

TestAmerica 300 IB: 500-152628-1

Client Sample ID: MW-10

Lab Sample ID: 500-152628-4

Matrix: Water

Date Collected: 10/03/18 12:52 Date Received: 10/04/18 13:25

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			453720	10/08/18 08:49	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	454115	10/09/18 22:18	FXG	TAL CHI
Total Recoverable	Prep	3005A			453720	10/08/18 08:49	SAH	TAL CHI
Total Recoverable	Analysis	6020A		5	454359	10/10/18 14:49	FXG	TAL CHI
Total/NA	Analysis	SM 2540C		1	453675	10/08/18 00:14	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		5	455858	10/19/18 11:33	CCK	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	453606	10/05/18 23:42	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		20	454555		CLB	TAL CHI
					(Start) 1	0/12/18 08:05		
					(End) 1	0/12/18 08:06		

Lab Sample ID: 500-152628-5 Client Sample ID: MW-11

Matrix: Water

Date Collected: 10/03/18 15:05 Date Received: 10/04/18 13:25

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A	_		453720	10/08/18 08:49	SAH	TAL CH
Total Recoverable	Analysis	6020A		1	454115	10/09/18 22:22	FXG	TAL CH
Total Recoverable	Prep	3005A			453720	10/08/18 08:49	SAH	TAL CH
Total Recoverable	Analysis	6020A		10	454359	10/10/18 14:52	FXG	TAL CH
Total/NA	Analysis	SM 2540C		1	453675	10/08/18 00:16	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		5	455858	10/19/18 11:34	CCK	TAL CH
Total/NA	Analysis	SM 4500 F C		1	453606	10/05/18 23:46	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		10	454555		CLB	TAL CH
					(Start) 1	0/12/18 08:06		
					(End) 1	0/12/18 08:07		

Client Sample ID: MW-12 Lab Sample ID: 500-152628-6

Date Collected: 10/03/18 11:56 **Matrix: Water** Date Received: 10/04/18 13:25

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			453720	10/08/18 08:49	SAH	TAL CH
Total Recoverable	Analysis	6020A		1	454115	10/09/18 22:26	FXG	TAL CH
Total Recoverable	Prep	3005A			453720	10/08/18 08:49	SAH	TAL CH
Total Recoverable	Analysis	6020A		5	454359	10/10/18 14:56	FXG	TAL CH
Total/NA	Analysis	SM 2540C		1	453675	10/08/18 00:19	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		5	455858	10/19/18 11:35	CCK	TAL CH
Total/NA	Analysis	SM 4500 F C		1	453606	10/06/18 00:02	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		10	454555		CLB	TAL CH
					(Start) 1	0/12/18 08:07		
					(End) 1	0/12/18 08:08		

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Client: KPRG and Associates, Inc.

TestAmerica 900 IB 500-152628-1

Project/Site: Will County CCR

Client Sample ID: Duplicate

Date Received: 10/04/18 13:25

Lab Sample ID: 500-152628-7 Date Collected: 10/03/18 00:00

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			453720	10/08/18 08:49	SAH	TAL CHI
Total Recoverable	Analysis	6020A		1	454115	10/09/18 22:45	FXG	TAL CH
Total Recoverable	Prep	3005A			453720	10/08/18 08:49	SAH	TAL CH
Total Recoverable	Analysis	6020A		10	454359	10/10/18 15:22	FXG	TAL CH
Total/NA	Analysis	SM 2540C		1	453675	10/08/18 00:21	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		1	455858	10/19/18 11:40	CCK	TAL CH
Total/NA	Analysis	SM 4500 F C		1	453606	10/06/18 00:06	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		20	454555		CLB	TAL CH
					(Start) 1	0/12/18 08:08		
					(End) 1	0/12/18 08:09		

Laboratory References:

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

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Exhibit C
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<u>APPENDIX B</u> Alternate Source Demonstration April 12, 2018

Exhibit C

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ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

ALTERNATE SOURCE DEMONSTRATION CCR GROUNDWATER MONITORING WILL COUNTY GENERATING STATION

April 12, 2018

Ms. Sharene Shealey Midwest Generation, LLC 529 E. Romeo Road Romeoville, IL 60446

VIA E-MAIL

Re: Alternate Source Demonstration

Will County Generating Station – Ash Ponds

Dear Ms. Shealey:

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 ash pond monitoring wells located at the Midwest Generation, LLC (Midwest Generation) Will County Generating Station. The wells sampled were selected by Midwest Generation to meet the monitoring requirements of the CCR Rule for Ash Ponds 2 South (2S) and 3 South (3S). The CCR monitoring well network around these ponds consists of six monitoring wells (MW-05, MW-06, MW-09, MW-10, MW-11 and MW-12) as shown on Figure 1. Wells MW-05 and MW-06 are upgradient wells.

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 Will County 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 SanitasTM statistical software package and provided in the Statistical Evaluation Summary – 2017 CCR Groundwater Monitoring Will County Generating

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Ms. Sharene Shealey, Midwest Generation, LLC

Re: Alternate Source Demonstration – Will County Generating Station Ash Ponds

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Station dated January 12, 2018. The following conclusion/recommendations were provided:

"The completed detection monitoring statistical evaluations have determined that there are SSIs in downgradient monitoring wells relative to established background for chloride, fluoride and TDS. At this time, KPRG recommends completing an alternate source demonstration to determine whether these exceedances 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. 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."

This report summarizes the results of the Alternate Source Demonstration in accordance with 40 CFR 257.94(e)(2) completed for the Will County Generating Station Ash Ponds 2S and 3S. The report is structured to provide a documentation of field investigation activities, a summary of 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 January 12, 2018 submittal are provided in Attachment 1 for reference.

DOCUMENTATION OF FIELD ACTIVITIES

To assist in evaluating a potential alternate source, both pond water and ash samples were collected. A pond water sample was collected from ash pond 3S 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. No sample was collected for ash pond 2S due to frozen conditions. The analytical data package is provided in Attachment 2.

One composite ash sample was collected for each of the two ponds (2S and 3S). The composite samples consisted of a series of equivalent grab samples from across the length of the pond, from the inlet area to the outfall, to minimize potential skewing of the sample due to gradation changes (i.e., a larger coarse fraction near the inlet and a larger fine fraction near outfall). The individual grab samples were thoroughly mixed to form a single composite sample for each pond. 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 samples were analyzed using the Leaching Environmental Assessment Framework (LEAF) test using Method 1313. Under this method, each 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 included in Attachment 2.

Exhibit C

Ms. Sharene Shealey, Midwest Generation, LLC

Re: Alternate Source Demonstration - Will County Generating Station Ash Ponds

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LEAF TEST DATA OBSERVATIONS

The results of the pond water and the ash LEAF Test analyses are provided in Tables 1 and 2, respectively. A review of Tables 1 and 2 indicates that the Natural pH of the ash leachate ranges from 8.8 to 9.2 which is higher by an order of magnitude, or more, than the noted pH of the pond water sample (7.8). This suggests that the pond water sample is not fully representative of equilibrium conditions of expected pore water within the ash sediment and, therefore, that the compound specific data from the pond water sample may also not be representative of leachate under equilibrium conditions. Based on this observation, the focus of this analysis will rely on the results of the LEAF Test data and in particular the data from the "Natural pH" samples.

Focusing on the LEAF Test data, it is noted that fluoride appears to be fairly minor component of the ash leachate with most measurements at varying pH levels being below reporting limits. The Natural pH fluoride test data for Pond 2S was <0.10 mg/l and the Natural pH fluoride test data for Pond 3S was 0.31 mg/l. The remaining analytical constituent LEAF Test data are illustrated in graphical form on Figures 2 through 8 as a function of pH. On those figures are also plotted the results of the "Natural pH" test samples and the up- and downgradient monitoring well data from the September 2017 sampling event (the initial detection monitoring event which was compared to established statistical background). In general, the following observations are made:

- Boron The boron leachate concertation is a function of pH with concentrations decreasing from a pH of 2 through a pH of 12. There is a noted disparity in boron concentrations above a pH of 12 with Pond 2S showing a substantial increase in boron concentration and Pond 3S fairly consistent with the overall curve trend. The Natural pH sample data plots close to where it would be expected on the LEAF Test curves. The boron concentrations at all downgradient wells are slightly lower than the boron concentration noted for the Natural pH test analyses for both ash samples. The upgradient monitoring well detections for boron are within the same range as the Natural pH test analyses for both ash samples.
- Sulfate The sulfate leachate concertation shows some scatter relative to pH. The Natural pH test samples plot within an expected range for sulfate based on their pH as compared to the two LEAF Test curves. The upgradient well sulfate data plots similar to the Natural pH analyses for both ash samples and most downgradient monitoring wells show lower sulfate concentrations than from the Natural pH analyses for both ash samples.
- Calcium The calcium leachate concentration is a function of pH with concentrations decreasing with increasing pH. The Natural pH sample data for both Ponds 2S and 3S plots close to where it would be expected on the LEAF Test curve with calcium concentrations ranging from 59 to 95 mg/l. The upgradient well concentrations fall within the noted Natural pH test range for both ash samples. Downgradient wells generally show lower concentrations than within the noted Natural pH test range for both ash samples.

Re: Alternate Source Demonstration – Will County Generating Station Ash Ponds

- Chloride There were some non-detect values within the LEAF Test chloride data. For these cases, one-half of the noted detection limit was used for graphing purposes. The chloride concentrations do not appear to be a function of pH with a relatively narrow range of concentrations. The Natural pH test data and the upgradient monitoring well data all plot within a similar range as defined by the LEAF Test data. All downgradient monitoring wells show elevated chloride levels relative to the LEAF Test data.
- ORP The oxidation-reduction potential (ORP) is a known function of pH with ORP generally decreasing with increasing pH. This is reflected in the LEAF Test curves. The Natural pH sample data for both Ponds 2S and 3S plots slightly lower than what would be expected on the LEAF Test curves. The ORP in all downgradient (and upgradient) monitoring wells plot lower than the LEAF Test curve and Natural pH test data for both ash samples.
- Specific Conductance (SC) The SC measurements have a clear correlation with pH with measurements decreasing from a pH of 2 to a pH of 10 and then again increasing sharply as a pH of 13 is approached. The SC values of the Natural pH samples both plot slightly below the LEAF Test curve. The specific conductivity values in both the up- and downgradient monitoring wells plots below the Natural pH test data for both ash samples.
- Total Dissolved Solids (TDS) The TDS LEAF Test curves mimic the SC curves with concentrations decreasing to a pH of just over 10 and then increasing as pH increases. The TDS values of the Natural pH samples both plot slightly below the LEAF Test curve with a narrow range of 590 to 610 mg/l. The TDS concentrations in the upgradient wells and downgradient wells are above the concentration range for both ash samples.

ALTERNATE SOURCE EVALUATOIN OF THE SSI PARAMETERS

As previously noted, the three parameters that were determined to have SSIs in downgradient monitoring wells relative to established background were chloride, fluoride and TDS. Each is discussed separately below.

Chloride

Downgradient monitoring wells MW-09 and MW-12 had potential SSIs for chloride during the September 2017 sampling event relative to the established pooled upgradient background. The two exceeding chloride concentrations were 310 and 270 mg/l, respectively with an established background of 149 mg/l. As discussed above in the LEAF Test curve evaluation, the chloride concentrations are independent of pH. The range of detected chloride concentrations from the LEAF Testing, including the Natural pH test, is 12 to 210 mg/l with an average of 48.7 (using one-half reporting limit for non-detect values). It is also noted that the 210 mg/l value appears to be an outlier with the next highest LEAF Test concentration

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Ms. Sharene Shealey, Midwest Generation, LLC

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being 69 mg/l. The upgradient well chloride concentrations were 67 to 78 mg/l. Based on this data distribution, the elevated chloride concentrations detected in downgradient wells MW-09 and MW-12 must have a source other than the leachate from the ponds.

Fluoride

Downgradient monitoring well MW-10 had a potential SSI for this parameter during the September 2017 sampling event relative to the established pooled upgradient background. The exceeding fluoride concentration was 0.77 mg/l which was just above the established background of 0.72 mg/l. Most of the LEAF Test data shows no detections of fluoride. The two Natural pH test samples reported fluoride at <0.10 mg/l (Pond 2S) and 0.31 mg/l (Pond 3S). The upgradient well fluoride concentrations ranged from 0.40 to 0.52 mg/l. Based on this data distribution, the elevated fluoride concentration detected in monitoring well MW-10 must have a different source other than the leachate from the ponds.

TDS

Downgradient monitoring well MW-12 had a potential SSI for this parameter during the September 2017 sampling event relative to the established upgradient background. The exceeding TDS concentration was 1,400 mg/l which was above the established background of 950 mg/l. The TDS concentrations in the Natural pH test data ranged from 590 mg/l to 610 mg/l. The upgradient well TDS concentrations ranged from 740 mg/l to 1,000 mg/l. Based on this data, the elevated TDS concentration detected in monitoring well MW-12 must have a different source other than the leachate from the ponds.

CONCLUSIONS/RECOMMENDATIONS

Based on the data evaluation and discussions provided above, it is concluded that the noted SSIs for chloride, fluoride and TDS are not the result of leakage of leachate from the regulated units (Ponds 2S and 3S) but rather from other potential sources. This is based on the following:

- Upgradient monitoring well concentrations of fluoride and TDS are higher than those measured for ash leachate at Natural pH conditions.
- The ash leachate at Natural pH conditions does not contain a sufficient concentration of each of these constituents to result in the measured downgradient well concentrations.

It is therefore, recommended to continue with routine detection monitoring at this time. It is noted that since upgradient well chemistry for various Appendix III constituents is similar to ash leachate chemistry at natural pH levels, it is also recommended to include intra-well statistical evaluations/comparisons for the downgradient wells in addition to the current inter-well evaluations.

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Ms. Sharene Shealey, Midwest Generation, LLC

Re: Alternate Source Demonstration – Will County Generating Station Ash Ponds

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If there are any questions, please contact me at 262-781-0475.

Sincerely,

KPRG and Associates, Inc.

Richard R gnot

Richard R. Gnat, P.G.

Principal

Timothy Stohner, P.E.

Project Manager/Sr. Engineer

cc: David Bacher, NRG

Peter O'Day, 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 April 12, 2018, that the information contained in this report is accurate to the best of my knowledge.

Certified by:

Date: April 12, 2018

Timothy Stohner, P.E.

Illinois Professional Engineer Registration No.: 062.057635

KPRG and Associates, Inc.

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FIGURES



Figure 2. Boron Concentration vs. pH Value - Will County Station

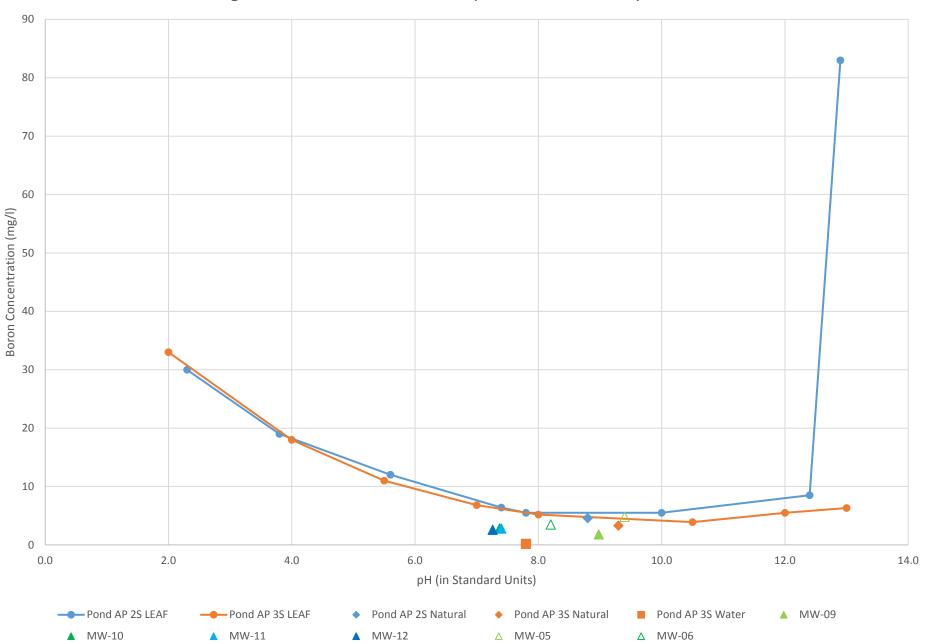


Figure 3. Sulfate Concentration vs. pH Value - Will County Station

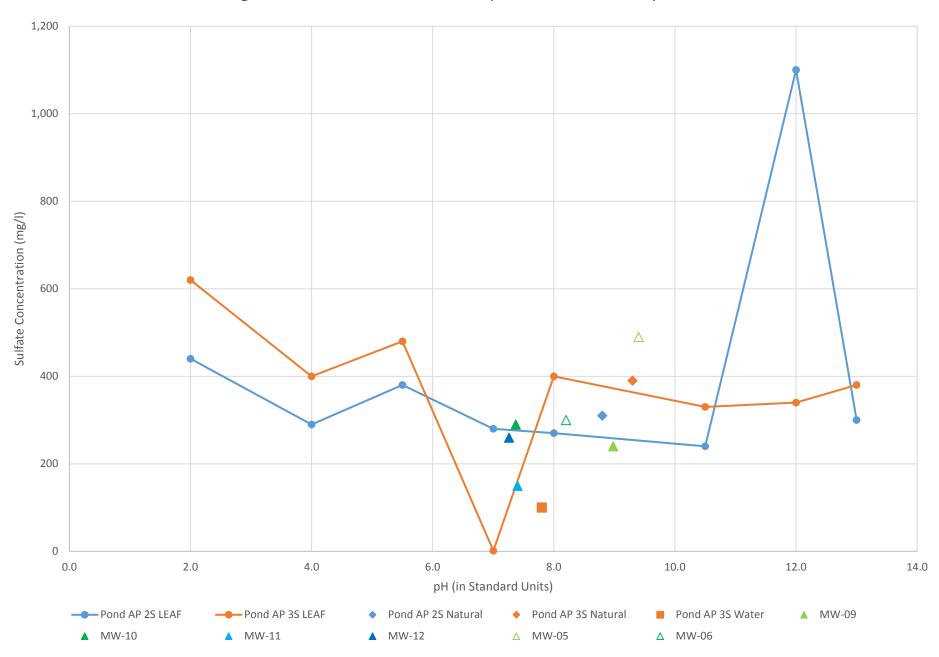


Figure 4. Calcium Concentration vs. pH Value - Will County Station

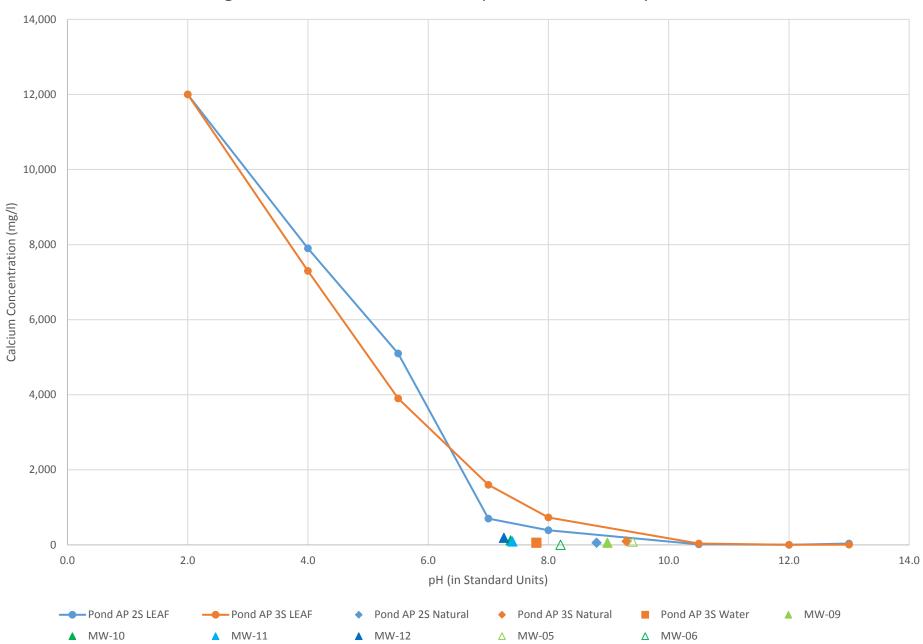


Figure 5. Chloride Concentration vs. pH Value - Will County Station

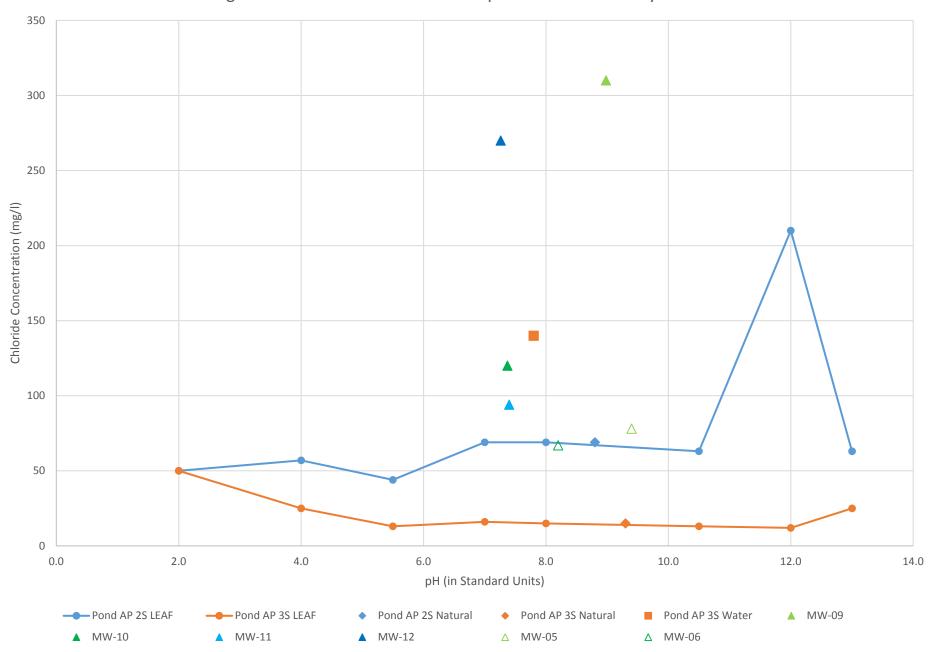


Figure 6. ORP Concentration vs. pH Value - Will County Station

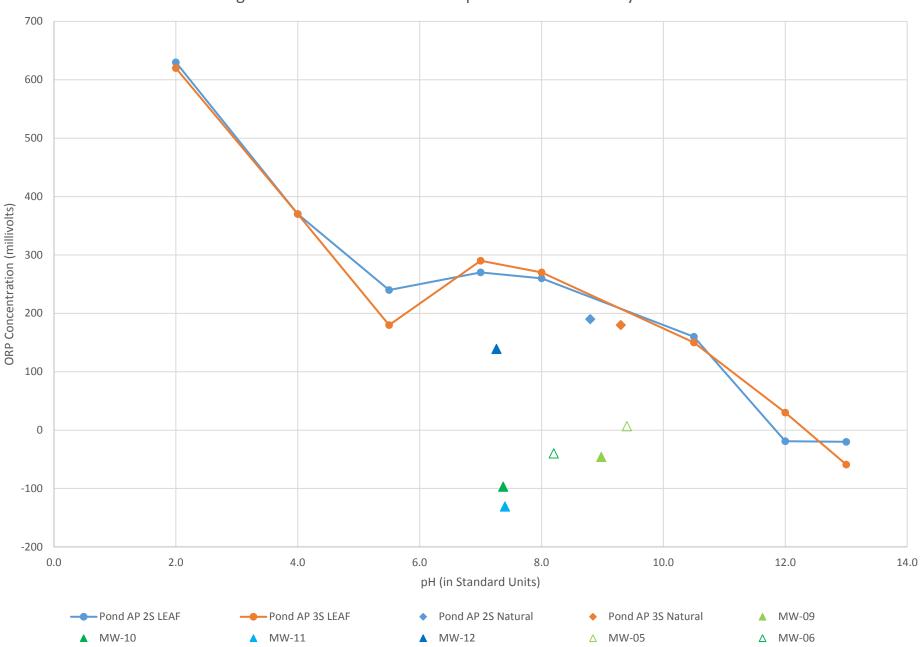


Figure 7. Specific Conductivity vs. pH Value - Will County Station

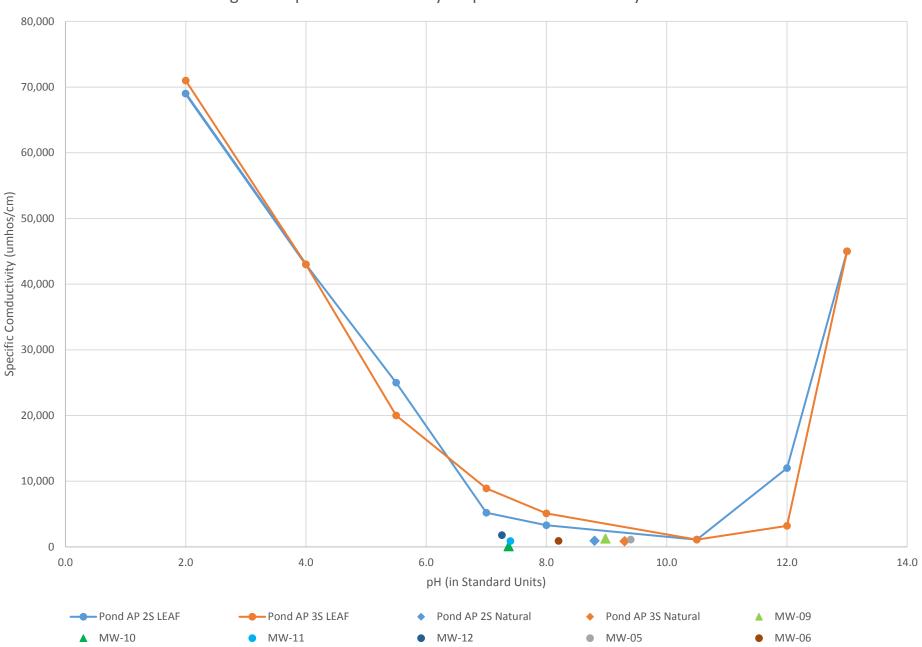
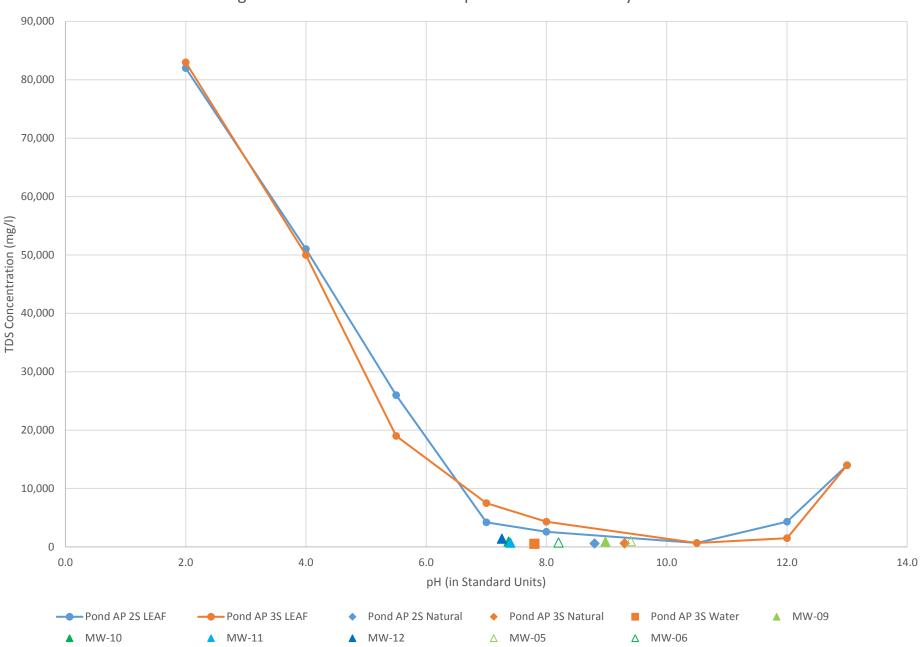


Figure 8. TDS Concentration vs. pH Value - Will County Station



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TABLES

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Table 1. Pond Water Results - Midwest Generation Will County Station, Romeoville, Illinois

		Pond
PARAMETER	UNITS	AP 3S
Boron	mg/L	0.18
Calcium	mg/L	56
Chloride	mg/L	140
Fluoride	mg/L	0.52
рН	SU	7.8
Sulfate	mg/L	100
TDS	mg/L	540

Notes: Units are as noted. TDS - Total Dissolved Solids

Table 2. LEAF Test Results from Ash Samples - Midwest Generation Will County Station, Romeoville, Illinois

AP 2S ASH			LEAF TEST TARGETED pH VALUES							
PARAMETER	UNITS	13.0	12.0	10.5	8.0	7.0	5.5	4.0	2.0	Natural*
Boron	mg/L	83	8.5	5.5	5.5	6.4	12	19	30	4.6
Calcium	mg/L	34	2.5	13	390	700	5,100	7,900	12,000	59
Chloride	mg/L	63	210	63	69	69	44	57	<100	69
Fluoride	mg/L	<5.0	<10	0.42	<0.50	<0.50	<2.5	<10	<10	<0.10
ORP	millivolts	-20	-19	160	260	270	240	370	630	190
рН	SU	12.9	12.4	10.0	7.8	7.4	5.6	3.8	2.3	8.8
Spec Cond	umhos/cm	45,000	12,000	1,100	3,300	5,200	25,000	43,000	69,000	930
Sulfate	mg/L	300	1,100	240	270	280	380	290	440	310
TDS	mg/L	14,000	4,300	670	2,600	4,200	26,000	51,000	82,000	590

AP 3S ASH			LEAF TEST TARGETED pH VALUES							
PARAMETER	UNITS	13.0	12.0	10.5	8.0	7.0	5.5	4.0	2.0	Natural*
Boron	mg/L	6.3	5.5	3.9	5.2	6.8	11	18	33	3.3
Calcium	mg/L	4.7	3.6	37	730	1,600	3,900	7,300	12,000	95
Chloride	mg/L	<50	12	13	15	16	<25	<50	<100	15
Fluoride	mg/L	<5.0	1.0	0.47	<0.50	<0.50	<2.5	11	<10	0.31
ORP	millivolts	-59	30	150	270	290	180	370	620	180
рН	SU	12.7	11.9	10.2	7.5	7.0	6.0	3.8	2.3	9.3
Spec Cond	umhos/cm	45,000	3,200	1,100	5,100	8,900	20,000	43,000	71,000	870
Sulfate	mg/L	380	340	330	400	<2.5	480	400	620	390
TDS	mg/L	14,000	1,500	670	4,300	7,500	19,000	50,000	83,000	610

Notes: Units are as noted.

ORP - Oxidation Reduction Potential

Spec Cond - Specific Conductivity
TDS - Total Dissolved Solids

Natural* - pH of ash as measured in the laboratory prior to any pH test modifications.

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<u>ATTACHMENT 1</u> Statistical Evaluation Data Tables – January 12, 2018

Table 1. Detection Monitoring Statistical Comparisons - Appendix III Groundwater Analytical Results 3rd Quarter 2017 and Resample - Midwest Generation, LLC, Will County Station, Romeoville, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pН	Sulfate	Total Dissolved Solids
	11/11/2015	6.1	220	110	0.31	7.24	770	1900
	2/18/2016	4.4	230	120	0.31	6.99	730	1600
	5/26/2016	3.7	170	110	0.33	6.73	670	1500
	8/10/2016	3.6	67	120	0.72	8.62	480	970
MW-05	10/26/2016	3.6	44	120	0.70	9.08	410	920
up-gradient	2/1/2017	4.6	250	48	0.35	6.81	530	1600
up-grautent	5/11/2017	4	140	85	0.31	7.86	610	1200
	6/27/2017	3.8	83	99	0.53	7.95	500	1000
	Pred. Limit*	6.65	359	148	0.72	9.93-5.39	923	2286
	9/8/2017	4.8	89	78	0.52	9.4	490	1000
	11/16/2017	4.8	180	52	0.45	6.7	650	1500
	11/10/2015	3.0	52	100	0.55	8.63	300	660
	2/18/2016	2.5	74	150	0.47	8.58	280	650
	5/26/2016	2.7	86	92	0.44	7.79	350	800
	8/11/2016	3.6	110	58	0.35	7.74	330	840
	10/26/2016	3.8	86	74	0.40	8.16	220	800
MW-06 up-gradient	2/1/2017	3.4	70	83	0.41	7.88	260	700
up-gradient	5/11/2017	3	75	84	0.28	8.68	330	570
	6/27/2017	3.1	65	74	0.38	8.15	330	710
	Pred. Limit*	4.29	122	162	0.62	9.21-7.19	415	956
	9/7/2017	3.5	75	67	0.40	8.2	300	740
	11/16/2017	3.9	88	54	0.39	7.59	280	810
	11/11/2015	1.9	56	190	0.55	9.12	460	750
	2/17/2016	1.8	47	160	0.55	9.10	250	600
	5/24/2016	1.6	48	180	0.51	8.79	240	640
	8/9/2016	2.2	53	140	0.48	8.35	280	750
	10/26/2016	2.2	33	130	0.81	9.16	230	660
MW-09 down-gradient	1/31/2017	2	61	250	0.57	8.59	180	710
down-gradient	5/9/2017	1.8	66	340	0.38	8.58	250	900
	6/27/2017	1.9	64	330	0.51	7.76	240	940
	Pred. Limit	4.26	275**	149**	0.72**	9.39-6.48**	413	950
	9/6/2017	1.8	59	310	0.51	8.98	240	890
	11/14/2017	2.6	160	<u>270</u>	0.51	8.1	290	910
	11/10/2015	3.9	140	140	0.77	7.34	310	980
	2/16/2016	3.6	150	240	0.79	7.29	290	950
	5/25/2016	3.6	120	140	0.83	7.26	260	1000
	8/10/2016	4.3	150	120	0.78	7.22	230	970
	10/26/2016	3.0	160	74	0.52	7.30	220	1000
MW-10	2/2/2017	3.7	180	81	0.54	7.16	160	930
down-gradient	5/10/2017	3.0	150	100	0.44	7.83	340	860
	6/27/2017	2.8	130	110	0.67	7.49	250	930
	Pred. Limit	4.26	275**	149**	0.72**	9.39-6.48**	413	950
	9/7/2017	2.8	120	120	<u>0.77</u>	7.37	290	920
	11/15/2017	4.1	140	120	0.77	7.10	270	1000

Notes:

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

F1 - MS and/or MSD Recovery outside of limits.

**- Based on pooled background from MW-5/MW-6.
All others based on MW-6 as background.

Bold - Potential statistically significant increase.

Italics Date - First round of Detection Monitoring and resample after statistical background establishment.

^{* -} Intrawell Prediction Limit. All others are interwell comparisons.

Table 1. Detection Monitoring Statistical Comparisons - Appendix III Groundwater Analytical Results 3rd Quarter 2017 and Resample - Midwest Generation, LLC, Will County Station, Romeoville, IL.

Well	Date	Boron	Calcium	Chloride	Fluoride	pН	Sulfate	Total Dissolved Solids
	11/10/2015	2.6	120	89	0.61	7.60	180	620
	2/16/2016	3.0	100	88	0.68	7.47	170	640
	5/25/2016	2.8	82	98	0.75	7.43	170	640
	8/10/2016	3.1	96	86	0.72	7.57	150	660
2007.11	10/26/2016	2.5	110	67	0.53	7.82	120	630
MW-11 down-gradient	2/1/2017	3.9	110	72	0.65	7.54	110	600
down-gradient	5/10/2017	3.1	95	84	0.46	8.37	170	590
	6/27/2017	2.8	87	90	0.59	7.57	150	680
	Pred. Limit	4.26	275**	149**	0.72**	9.39-6.48**	413	950
	9/7/2017	2.8	90	94	0.58	7.4	150	730
	11/15/2017	2.9	96	100	0.65	7.41	160	750
	11/10/2015	2.3	150	160	0.59	7.44	290	1000
	2/16/2016	1.8	130	140	0.52	7.38	220	850
	5/25/2016	1.9	130	150	0.54	7.23	250	890
	8/10/2016	2.4	170	140	0.49	7.20	280	1000
3.007.10	10/26/2016	2.6	140	120	0.49	7.44	220	980
MW-12 down-gradient	2/1/2017	2	160	120	0.48	7.3	150	900
down-gradient	5/10/2017	2.3	200	240	0.3	7.65	260	1300
	6/27/2017	2.4	180	280	0.44	7.31	260	1300
	Pred. Limit	4.26	275**	149**	0.72**	9.39-6.48**	413	950
	9/6/2017	2.6	190	<u>270</u>	0.49	7.26	260	<u>1400</u>
	11/15/2017	1.7	55	<u>200</u>	0.47	6.90	250	<u>1200</u>

Notes

F1 - MS and/or MSD Recovery outside of limits. <u>Bold -</u> Potential statistically significant increase.

Italics Date - First round of Detection Monitoring and resample after statistical background establishment.

^{* -} Intrawell Prediction Limit. All others are interwell comparisons. All units are in mg/l except pH is in standard units.

^{** -} Based on pooled background from MW-5/MW-6.
All others based on MW-6 as background.

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ATTACHMENT 2 Analytical Data Packages

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 500-139618-1 Client Project/Site: Will County CCR

For:

KPRG and Associates, Inc. 14665 West Lisbon Road, Suite 2B Brookfield, Wisconsin 53005

Attn: Richard Gnat

RILL WhyM

Authorized for release by: 1/26/2018 2:20:29 PM
Richard Wright, Senior Project Manager richard.wright@testamericainc.com

Designee for

Eric Lang, Manager of Project Management (708)534-5200 eric.lang@testamericainc.com

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Have a Question?



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.

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Exhibit C

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

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

TestAmenea 107 IB: 500-139618-1

Job ID: 500-139618-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-139618-1

Comments

No additional comments.

Receipt

The sample was received on 1/12/2018 9:40 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3° C.

Metals

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

General Chemistry

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

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

TestAmerica Job ID: 500-139618-1

Method **Method Description** Protocol Laboratory Metals (ICP/MS) SW846 TAL CHI 6020A SW846 TAL CHI 9040C рΗ SM 2540C Solids, Total Dissolved (TDS) TAL CHI SM SM 4500 CI- E Chloride, Total SM TAL CHI SM 4500 F C Fluoride SM TAL CHI SM 4500 SO4 E Sulfate, Total SM 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 = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

PCB 2013-15 2019 Exhibit C

Electronic Filing: Beceived Clerk's Office 07/19/2019 Ex

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

TestAmenea 109 IB: 500-139618-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-139618-1	AP 3-S	Water	01/10/18 09:55	01/12/18 09:40

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PCB 2013-15

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit C

Client: KPRG and Associates, Inc.

TestAmenea Job IB 500-139618-1

Project/Site: Will County CCR

Client Sample ID: AP 3-S Lab Sample ID: 500-139618-1 Date Collected: 01/10/18 09:55

Matrix: Water

Date Received: 01/12/18 09:40

Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.18		0.050		mg/L		01/12/18 14:46	01/15/18 13:05	1
Calcium	56		0.20		mg/L		01/12/18 14:46	01/15/18 13:05	1
General Chemistry Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

General Chemistry Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8	HF	0.2	SU			01/12/18 15:56	1
Total Dissolved Solids	540		10	mg/L			01/14/18 23:49	1
Chloride	140		10	mg/L			01/15/18 00:54	5
Fluoride	0.52		0.10	mg/L			01/25/18 11:25	1
Sulfate	100		25	mg/L			01/16/18 04:24	5

1/26/2018

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

TestAmerica Job ID: 500-139618-1

Qualifiers

Metals

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

General Chemistry

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)

TestAmerica Chicago

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

TestAmeries Job 18f. 370-139618-1

Metals

Prep Batch: 416709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139618-1	AP 3-S	Total Recoverable	Water	3005A	
MB 500-416709/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-416709/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-139618-1 MS	AP 3-S	Total Recoverable	Water	3005A	
500-139618-1 MSD	AP 3-S	Total Recoverable	Water	3005A	
500-139618-1 DU	AP 3-S	Total Recoverable	Water	3005A	

Analysis Batch: 416965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139618-1	AP 3-S	Total Recoverable	Water	6020A	416709
MB 500-416709/1-A	Method Blank	Total Recoverable	Water	6020A	416709
LCS 500-416709/2-A	Lab Control Sample	Total Recoverable	Water	6020A	416709
500-139618-1 MS	AP 3-S	Total Recoverable	Water	6020A	416709
500-139618-1 MSD	AP 3-S	Total Recoverable	Water	6020A	416709
500-139618-1 DU	AP 3-S	Total Recoverable	Water	6020A	416709

General Chemistry

Analysis Batch: 416763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139618-1	AP 3-S	Total/NA	Water	SM 2540C	
MB 500-416763/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-416763/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 416921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139618-1	AP 3-S	Total/NA	Water	SM 4500 CI- E	
MB 500-416921/4	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-416921/37	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 416927

Lab Sample ID 500-139618-1	Client Sample ID AP 3-S	Prep Type Total/NA	Matrix Water	Method SM 4500 SO4 E	Prep Batch
MB 500-416927/3	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-416927/4	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 416975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139618-1	AP 3-S	Total/NA	Water	9040C	
500-139618-1 DU	AP 3-S	Total/NA	Water	9040C	

Analysis Batch: 418006

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139618-1	AP 3-S	Total/NA	Water	SM 4500 F C	
MB 500-418006/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-418006/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-139618-1 MS	AP 3-S	Total/NA	Water	SM 4500 F C	
500-139618-1 MSD	AP 3-S	Total/NA	Water	SM 4500 F C	

TestAmerica Chicago

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

TestAmenea Job IB: 500-139618-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-416709/1-A

Matrix: Water

Analysis Batch: 416965

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

Prep Batch: 416709

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050	0.050	mg/L		01/12/18 14:46	01/15/18 12:57	1
Calcium	<0.20	0.20	mg/L		01/12/18 14:46	01/15/18 12:57	1

Lab Sample ID: LCS 500-416709/2-A **Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total Recoverable** Analysis Batch: 416965 **Prep Batch: 416709** LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Boron 1.00 0.988 mg/L 99 80 - 120 Calcium 10.0 80 - 120 9.54 mg/L 95

Lab Sample ID: 500-139618-1 MS Client Sample ID: AP 3-S **Matrix: Water Prep Type: Total Recoverable Analysis Batch: 416965 Prep Batch: 416709** MS MS Sample Sample Spike %Rec. Analyte **Result Qualifier** Added Result Qualifier Limits Unit D %Rec

Boron 0.18 1.00 1.19 mg/L 101 75 - 125 56 10.0 65.5 4 75 - 125 Calcium mg/L 93

Spike

Added

1.00

Lab Sample ID: 500-139618-1 MSD

Matrix: Water

Analyte

Boron

Analysis Batch: 416965

Prep Type: Total Recoverable Prep Batch: 416709 %Rec. **RPD** D %Rec Limits RPD Limit 100 75 - 125 2 20

Client Sample ID: AP 3-S

Calcium 56 10.0 64.3 4 75 - 125 20 mg/L 81 2 Lab Sample ID: 500-139618-1 DU Client Sample ID: AP 3-S **Matrix: Water Prep Type: Total Recoverable**

MSD MSD

1.18

Result Qualifier

Unit

mg/L

Analysis Batch: 416965

Sample Sample

0.18

Result Qualifier

MB MB

Prep Batch: 416709 DU DU Sample Sample Analyte Result Qualifier Result Qualifier Unit **RPD** Boron 0.18 0.174 mg/L Calcium 56 56.5 mg/L 0.4 20

Method: 9040C - pH

Lab Sample ID: 500-139618-1 DU Client Sample ID: AP 3-S **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 416975									
_	Sample	Sample	DU	DU					RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D		RPD	Limit
pH	7.8	HF	7.8		SU		 	0.3	

1/26/2018

RPD

Limit 20

Client: KPRG and Associates, Inc.

TestAmerica Job ID: 500-139618-1

Client Sample ID: Method Blank

Project/Site: Will County CCR

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

Lab Sample ID: MB 500-416763/1

Matrix: Water Analysis Batch: 416763

MB MB

Analyte Result Qualifier **Total Dissolved Solids** <10

RL 10

MDL Unit mg/L D

Prepared

Analyzed 01/14/18 22:56

Prep Type: Total/NA

Prep Type: Total/NA

Dil Fac

Lab Sample ID: LCS 500-416763/2

Matrix: Water

Analysis Batch: 416763

Analyte **Total Dissolved Solids**

Spike Added 250 LCS LCS 278

Result Qualifier

Unit mg/L %Rec 111

%Rec. Limits 80 - 120

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-416921/4

Matrix: Water

Analysis Batch: 416921

MB MB

MB MB

<0.10

Result Qualifier

Analyte Chloride <2.0

Result Qualifier

RL 2.0 **MDL** Unit mg/L

D

Prepared

Analyzed Dil Fac 01/15/18 00:10

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: AP 3-S

Prep Type: Total/NA

Dil Fac

Lab Sample ID: LCS 500-416921/37 **Client Sample ID: Lab Control Sample**

50.0

Matrix: Water

Analysis Batch: 416921

Analyte

Chloride

LCS LCS Spike Added

RI

0.10

Result Qualifier 52.5

MDL Unit

mg/L

Unit mg/L %Rec 105

Prepared

101

%Rec. Limits 85 - 115

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

%Rec.

Limits

80 - 120

Analyzed

01/25/18 11:20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-418006/3

Matrix: Water

Analysis Batch: 418006

Analyte

Fluoride Lab Sample ID: LCS 500-418006/4

Matrix: Water

Analysis Batch: 418006

Analyte Fluoride

Lab Sample ID: 500-139618-1 MS

Matrix: Water

Analysis Batch: 418006

Analyte Fluoride

Sample Sample Result Qualifier 0.52

Spike Added 5.00

Spike

Added

10.0

MS MS Result Qualifier 5.51

LCS LCS

10.1

Result Qualifier

Unit mg/L

Unit

mg/L

D %Rec 100

D %Rec

> Limits 75 - 125

%Rec.

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Client: KPRG and Associates, Inc.

TestAmerica Job IB: 500-139618-1

Project/Site: Will County CCR

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 500-139618-1 MSD

Matrix: Water

Analysis Batch: 418006

Client Sample ID: AP 3-S **Prep Type: Total/NA**

MDL Unit

LCS LCS

mg/L

D

Sample Sample Spike MSD MSD Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD 0.52 5.00 99 Fluoride 5.46 mg/L 75 - 125 20

RL

5.0

Spike

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-416927/3

Matrix: Water

Analysis Batch: 416927

MB MB

Result Qualifier

Analyte Sulfate

Lab Sample ID: LCS 500-416927/4

Matrix: Water

Analysis Batch: 416927

Analyte Added Result Qualifier Unit Sulfate 20.0 19.4 mg/L

<5.0

%Rec. RPD Limit

Client Sample ID: Method Blank

Prep Type: Total/NA

Prepared Analyzed Dil Fac 01/16/18 04:04

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

%Rec. %Rec

97

Limits 80 - 120

THE LEADER IN ENVIRONMENTAL TESTING 2417 Bond Street, University Park, IL 60484 Phone: 708.534.5200 Fax: 708.534.5211 Contact: Company: Address: Address: Address:	Preservative 3 8	Contact: Company: Address: Phone: Fax: PO#/Reference#	PCB 2013-15 Chain of Custody iRecord Page 116 of 174 8 Chain of Custody Number: Page of Temperature °C of Cooler: Preservative Key 1. HCL, Cool to 4° 2. H2804, Cool to 4° 3. HN03, Cool to 4° 4. NaOH, Cool to 4° 4. NaOH, Cool to 4°
Project Location/State IL Lab Project # Sampler LR/MW Lab PM	Ca , FX, PH		5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other
Q Sampling Date Time	Containers Matrix Matrix Containers Containers	50	0-139618 COC Comments
1 AP 3-5 1/10/18 0955			
Turnaround Time Required (Business Days) 1 Day 2 Days 5 Days 7 Days 10 Days 15 Days Other Requested Due Date	Heturi to client		y be assessed if samples are retained longer than 1 month)
Relinquished by Corroany Date Ti	ime Received B Time Received By Received By Received By	Company Company Date DI 121 Date	Lab Courier Shipped FX Prior Hand Delivered
Matrix Key WW – Wastewater SE – Sediment W – Water SO – Soil S – Soil L – Leachate SL – Sludge WI – Wipe MS – Miscellaneous DW – Drinking Water OL – Oil O – Other A – Air		Lab Comments:	

TAL-4124-5026692018

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Login Sample Receipt Checklist

Client: KPRG and Associates, Inc. Job Number: 500-139618-1

Login Number: 139618 List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

ordator: Goott, Griorii E		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.3
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	

Exhibit C

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit C

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

TestAmerica July 18 500-139618-1

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-18

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TestAmerica Page 119 of 174

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-74122-1

Client Project/Site: Midwest Generation

For:

KPRG and Associates, Inc. 14665 West Lisbon Road, Suite 2B Brookfield, Wisconsin 53005

Attn: Richard Gnat

Carra G. Cambu

Authorized for release by: 2/28/2018 5:01:06 PM

Carrie Gamber, Senior Project Manager (412)963-2428

carrie.gamber@testamericainc.com

.....LINKS

Review your project results through

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Have a Question?



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.

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PCB 2013-15

Exhibit C

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PCB 2013-15

Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit C Testpaggica 200 JP:1780-74122-1

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

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Exhibit C

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 95:174-74122-1

3

Job ID: 180-74122-1

Laboratory: TestAmerica Pittsburgh

Narrative

CASE NARRATIVE

Client: KPRG and Associates, Inc.

Project: Midwest Generation

Report Number: 180-74122-1

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 01/12/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.8 C.

<u>IC</u>

Several samples were diluted due to the nature of the sample matrix. Elevated reporting limits (RLs) were provided. Dilutions were based on conductivity pre-screen of samples.

METALS

Several samples were diluted due to the nature of the sample matrix. Elevated reporting limits (RLs) are provided.

GENERAL CHEMISTRY

Due to the matrix, the initial volumes used for several samples deviated from the standard procedure for TDS.

Electronic Filing Definitions/Glork's Office 07/19/2019

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

Quality Control

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

TestAmerica Job 9D:174122-1

Glossary

QC

RER

RL

RPD TEF

TEQ

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

2/28/2018

TestAmerica 123 of 174 100-74122-1

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

Laboratory: TestAmerica Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

uthority	Program		EPA Region	Identification Number	Expiration Date
inois	NELAP		5	200005	06-30-18
The following analytes	s are included in this repo	rt, but are not accred	lited/certified under t	his accreditation/certificatio	n:
Analysis Method	Prep Method	Matrix	Analyt	е	
SM 2510B		Solid	Specif	ic Conductance	
SM 2540C		Solid	Total [Dissolved Solids	
The following analytes	s are included in this repo	rt, but accreditation/o	certification is not off	ered by the governing author	ority:
Analysis Method	Prep Method	Matrix	Analyt	е	
2540G		Solid	Percei	nt Moisture	
05400		Solid	Percei	nt Solids	
2540G		Oolid	1 01001		

PCB 2013-15 Exhibit C

Electronic Filing: Beceived Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 300 15:174

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-74122-1	AP 3-S - PRETEST	Solid	01/10/18 10:20	01/12/18 09:10
180-74122-2	AP 3-S - PH 13.0	Solid	01/10/18 10:20 0	01/12/18 09:10
180-74122-3	AP 3-S - PH 12.0	Solid	01/10/18 10:20 0	01/12/18 09:10
180-74122-4	AP 3-S - PH 10.5	Solid	01/10/18 10:20 0	01/12/18 09:10
180-74122-6	AP 3-S - PH 8.0	Solid	01/10/18 10:20 0	01/12/18 09:10
180-74122-7	AP 3-S - PH 7.0	Solid	01/10/18 10:20 0	01/12/18 09:10
180-74122-8	AP 3-S - PH 5.5	Solid	01/10/18 10:20 0	01/12/18 09:10
180-74122-9	AP 3-S - PH 4.0	Solid	01/10/18 10:20 0	01/12/18 09:10
180-74122-10	AP 3-S - PH 2.0	Solid	01/10/18 10:50	01/12/18 09:10
180-74122-11	AP 3-S - NATURAL	Solid	01/10/18 10:50 0	01/12/18 09:10
180-74122-12	AP 2-S - PRETEST	Solid	01/10/18 10:50	01/12/18 09:10
180-74122-13	AP 2-S - PH 13.0	Solid	01/10/18 10:50	01/12/18 09:10
180-74122-14	AP 2-S - PH 12.0	Solid	01/10/18 10:50 0	01/12/18 09:10
180-74122-15	AP 2-S - PH 10.5	Solid	01/10/18 10:50	01/12/18 09:10
180-74122-17	AP 2-S - PH 8.0	Solid	01/10/18 10:50	01/12/18 09:10
180-74122-18	AP 2-S - PH 7.0	Solid	01/10/18 10:50 0	01/12/18 09:10
180-74122-19	AP 2-S - PH 5.5	Solid	01/10/18 10:50	01/12/18 09:10
180-74122-20	AP 2-S - PH 4.0	Solid	01/10/18 10:50	01/12/18 09:10
180-74122-21	AP 2-S - PH 2.0	Solid	01/10/18 10:50 0	01/12/18 09:10
180-74122-22	AP 2-S - NATURAL	Solid	01/10/18 10:50	01/12/18 09:10
180-74122-23	AP 3-S - AIR DIED	Solid	01/10/18 10:20 0	01/12/18 09:10
180-74122-24	AP 2-S - AIR DRIED	Solid	01/10/18 10:50	01/12/18 09:10

2/28/2018

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PCB 2013-15

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit C

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 300 15:174

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

Protocol References:

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

SM22 = SM22

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

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerical 360 95:1780-74122-1

Client Sample ID: AP 3-S - PRETEST

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74122-1

Matrix: Solid

Prep Type Total/NA	Batch Type Analysis	Batch Method 2540G	Run	Pactor 1	Initial Amount	Final Amount	Batch Number 234952	Prepared or Analyzed 01/24/18 06:29	Analyst CLL	Lab TAL PIT
	Instrumer	nt ID: NOEQUIP								
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C nt ID: NOEQUIP		1			236465	02/07/18 11:36	MTW	TAL PIT
Leach	Leach	1313			40.5 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 14:21	MTW	TAL PIT
Leach	Leach	1313			40.5 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C nt ID: NOEQUIP		1			237380	02/12/18 14:24	MTW	TAL PIT
Leach	Leach	1313			40.5 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C nt ID: NOEQUIP		1			237380	02/12/18 14:27	MTW	TAL PIT
Leach	Leach	1313			40.5 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C nt ID: NOEQUIP		1			237380	02/12/18 14:33	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237733	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C nt ID: NOEQUIP		1			237737	02/16/18 13:05	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237733	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			237737	02/16/18 13:10	MTW	TAL PIT

Client Sample ID: AP 3-S - PH 13.0

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74122-2 **Matrix: Solid**

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A nt ID: CHIC2100A		50			236377	02/08/18 20:09	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236440	02/08/18 11:28	KA	TAL PIT
Leach	Analysis	EPA 6020A		1			236729	02/10/18 00:33	WTR	TAL PIT
	Instrumer	nt ID: A								
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236440	02/08/18 11:28	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A nt ID: M		1			236828	02/13/18 03:33	WTR	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C nt ID: NOEQUIP		1			236465	02/07/18 11:43	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT

TestAmerica Pittsburgh

2/28/2018

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerical 370 of 1730-74122-1

Client Sample ID: AP 3-S - PH 13.0

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74122-2

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1			236475	02/07/18 11:25	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	3 mL	100 mL	237078	02/15/18 14:59	KXW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B at ID: NOEQUIP		1			236472	02/07/18 11:21	MTW	TAL PIT

Client Sample ID: AP 3-S - PH 12.0 Lab Sample ID: 180-74122-3

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10 **Matrix: Solid**

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A t ID: CHICS2000		5			237859	02/26/18 16:14	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A t ID: CHICS2000		50			237859	02/26/18 16:30	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237311	02/19/18 13:03	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A t ID: A		1			237590	02/21/18 01:14	WTR	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237311	02/19/18 13:03	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A t ID: M		1			237713	02/22/18 04:21	WTR	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C t ID: NOEQUIP		1			237737	02/16/18 12:54	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B t ID: NOEQUIP		1	-		237752	02/16/18 12:48	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	25 mL	100 mL	237329	02/19/18 15:41	KXW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B t ID: NOEQUIP		1			237751	02/16/18 12:53	MTW	TAL PIT

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerical 300 95:1780-74122-1

Client Sample ID: AP 3-S - PH 10.5

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74122-4

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.5 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2000		1	1 mL	1.0 mL	237598	02/22/18 12:20	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2000		10	1 mL	1.0 mL	237598	02/22/18 12:35	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237537	02/21/18 11:22	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: A		1			237821	02/23/18 11:40	RSK	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237537	02/21/18 11:22	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: M		1			238052	02/26/18 21:29	WTR	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			237531	02/19/18 10:12	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1	-		237553	02/19/18 10:18	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	237940	02/26/18 14:33	KXW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B at ID: NOEQUIP		1	-		237550	02/19/18 10:13	MTW	TAL PIT

Client Sample ID: AP 3-S - PH 8.0

Date Collected: 01/10/18 10:20

Matrix: Solid Date Received: 01/12/18 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313		-	40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	EPA 9056A		2.5			236732	02/13/18 11:30	MJH	TAL PIT
	Instrumer	nt ID: CHIC2100A								
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	EPA 9056A		5			236891	02/14/18 14:33	MJH	TAL PIT
	Instrumer	nt ID: CHICS2000								
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236807	02/13/18 13:38	KA	TAL PIT
Leach	Analysis	EPA 6020A		1			237198	02/15/18 22:34	WTR	TAL PIT
	Instrumer	nt ID: M								
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	EPA 9040C		1			237380	02/12/18 14:39	MTW	TAL PIT
	Instrumer	nt ID: NOEQUIP								

TestAmerica Pittsburgh

Lab Sample ID: 180-74122-6

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 05 174

Client Sample ID: AP 3-S - PH 8.0

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74122-6

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B t ID: NOEQUIP		1			237425	02/12/18 14:19	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	25 mL	100 mL	237078	02/15/18 14:59	KXW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B t ID: NOEQUIP		1			237422	02/12/18 14:17	MTW	TAL PIT

Client Sample ID: AP 3-S - PH 7.0 Lab Sample ID: 180-74122-7

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10

Matrix: Solid

Dil Initial Final Batch Batch Batch Prepared **Prep Type** Type Method **Factor Amount** Amount Number or Analyzed Run Analyst Lab Leach 1313 40.5 g 400 mL 236722 02/10/18 08:30 LWM TAL PIT Leach 236732 Leach Analysis **EPA 9056A** 2.5 02/13/18 12:00 MJH TAL PIT Instrument ID: CHIC2100A Leach 1313 02/10/18 08:30 LWM TAL PIT Leach 40.5 g 400 mL 236722 Leach Analysis **EPA 9056A** 5 236891 02/14/18 14:49 TAL PIT Instrument ID: CHICS2000 Leach 1313 40.5 g 400 mL 236722 02/10/18 08:30 LWM TAL PIT Leach 3010A 50 mL 50 mL 236807 Leach Prep 02/13/18 13:38 KA TAL PIT Leach Analysis **EPA 6020A** 10 237323 02/16/18 20:33 WTR TAL PIT Instrument ID: M 400 mL TAL PIT Leach Leach 1313 40.5 g 236722 02/10/18 08:30 LWM Leach Analysis **EPA 9040C** 1 237380 02/12/18 14:36 MTW TAL PIT Instrument ID: NOEQUIP Leach 1313 400 mL 236722 02/10/18 08:30 LWM TAL PIT Leach 40.5 g Analysis SM 2510B 237425 02/12/18 14:14 MTW TAL PIT Leach 1 Instrument ID: NOEQUIP Leach 1313 400 mL 236722 02/10/18 08:30 LWM Leach 40.5 g TAL PIT 25 mL 100 mL 237078 02/15/18 14:59 KXW TAL PIT Leach Analysis SM 2540C 1 Instrument ID: NOEQUIP 1313 400 mL 236722 02/10/18 08:30 LWM TAL PIT Leach Leach 40.5 g Leach Analysis SM 2580B 237422 02/12/18 14:10 MTW TAL PIT Instrument ID: NOEQUIP

Client Sample ID: AP 3-S - PH 5.5 Lab Sample ID: 180-74122-8

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.5 g	400 mL	237761	02/21/18 10:00	LWM	TAL PIT

TestAmerica Pittsburgh

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Matrix: Solid

sociates, Inc.

TestAmerical 300 of 1780-74122-1

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

Client Sample ID: AP 3-S - PH 5.5

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74122-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Analysis	EPA 9056A at ID: CHICS2000		25		741104111	237859	02/26/18 08:57	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237761	02/21/18 10:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237767	02/23/18 12:01	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A at ID: M		10			238052	02/27/18 09:59	WTR	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237761	02/21/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			237772	02/23/18 10:12	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237761	02/21/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2510B at ID: NOEQUIP		1			237776	02/23/18 10:12	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237761	02/21/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	5 mL	100 mL	238055	02/27/18 15:07	KXW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237761	02/21/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2580B at ID: NOEQUIP		1			237774	02/23/18 10:12	MTW	TAL PIT

Client Sample ID: AP 3-S - PH 4.0

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74122-9

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313		·	40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHIC2100A		50			236732	02/13/18 13:32	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2000		100			236891	02/14/18 15:04	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236807	02/13/18 13:38	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: M		10			237323	02/16/18 20:29	WTR	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 14:18	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1			237425	02/12/18 13:58	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	3 mL	100 mL	237078	02/15/18 14:59	KXW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT

PCB 2013-15 Exhibit C

Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 30b 95:1780-74122-1

Client Sample ID: AP 3-S - PH 4.0

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74122-9

Matrix: Solid

Batch Batch Dil Initial Final Batch Prepared Method **Prep Type** Type Run **Factor Amount Amount** Number or Analyzed Analyst Lab Leach Analysis SM 2580B 237422 02/12/18 13:57 MTW TAL PIT

Instrument ID: NOEQUIP

Client Sample ID: AP 3-S - PH 2.0 Lab Sample ID: 180-74122-10

Date Collected: 01/10/18 10:50 Matrix: Solid

Date Received: 01/12/18 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.5 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A at ID: CHICS2000		100	1 mL	1.0 mL	237598	02/22/18 11:16	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Prep	3010A			5 mL	50 mL	237767	02/23/18 12:01	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A nt ID: A		10			237942	02/24/18 17:13	WTR	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Prep	3010A			5 mL	50 mL	237767	02/23/18 12:01	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A nt ID: M		10			238052	02/27/18 09:46	WTR	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C nt ID: NOEQUIP		1			237531	02/19/18 10:38	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2510B nt ID: NOEQUIP		1			237553	02/19/18 10:36	MTW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2540C nt ID: NOEQUIP		1	2 mL	100 mL	237940	02/26/18 14:33	KXW	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2580B nt ID: NOEQUIP		1	-		237550	02/19/18 10:34	MTW	TAL PIT

Client Sample ID: AP 3-S - NATURAL

Date Collected: 01/10/18 10:50

Date Received: 01/12/18 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2100B		1			236373	02/08/18 10:43	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2100B		5			236373	02/08/18 10:59	MJH	TAL PIT
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT

TestAmerica Pittsburgh

Lab Sample ID: 180-74122-11

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sburgh

Matrix: Solid

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerical 32 of 1780-74122-1

Client Sample ID: AP 3-S - NATURAL

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74122-11

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Prep	3010A			50 mL	50 mL	236437	02/08/18 11:22	KA	TAL PIT
Leach	Analysis	EPA 6020A		1			236729	02/09/18 23:06	WTR	TAL PIT
	Instrumer	nt ID: A								
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236437	02/08/18 11:22	KA	TAL PIT
Leach	Analysis	EPA 6020A		1			236828	02/13/18 01:06	WTR	TAL PIT
	Instrumer	nt ID: M								
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis	EPA 9040C		1			236465	02/07/18 14:13	MTW	TAL PIT
	Instrumer	t ID: NOEQUIP								
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis	SM 2510B		1			236475	02/07/18 14:38	MTW	TAL PIT
	Instrumer	t ID: NOEQUIP								
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis	SM 2540C		1	100 mL	100 mL	236785	02/13/18 10:45	KXW	TAL PIT
	Instrumer	t ID: NOEQUIP								
Leach	Leach	1313			40.5 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis	SM 2580B		1			236472	02/07/18 14:38	MTW	TAL PIT
	Instrumer	t ID: NOEQUIP								

Client Sample ID: AP 2-S - PRETEST

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74122-12

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	2540G at ID: NOEQUIP		1			234952	01/24/18 06:29	CLL	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			236465	02/07/18 11:49	MTW	TAL PIT
Leach	Leach	1313			40.9 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1	-		237380	02/12/18 14:43	MTW	TAL PIT
Leach	Leach	1313			40.9 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 14:46	MTW	TAL PIT
Leach	Leach	1313			40.9 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 14:58	MTW	TAL PIT
Leach	Leach	1313			40.9 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 15:01	MTW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	237733	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C		1	-		237737	02/16/18 13:16	MTW	TAL PIT

PCB 2013-15 Exhibit C

Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 1303 95:1740-74122-1

Project/Site: Midwest Generation

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.9 g	400 mL	237733	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis	EPA 9040C		1			237737	02/16/18 13:27	MTW	TAL PIT
	Instrumen	t ID: NOEQUIP								

Client Sample ID: AP 2-S - PH 13.0

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74122-13

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			40.9 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHIC2100A		50			236377	02/08/18 20:40	MJH	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			5 mL	50 mL	236440	02/08/18 11:28	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: A		1			236729	02/10/18 00:36	WTR	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			5 mL	50 mL	236440	02/08/18 11:28	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: M		1			236828	02/13/18 03:38	WTR	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			236465	02/07/18 11:30	MTW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1			236475	02/07/18 11:10	MTW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	3 mL	100 mL	236788	02/13/18 11:04	KXW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B at ID: NOEQUIP		1	-		236472	02/07/18 11:08	MTW	TAL PIT

Client Sample ID: AP 2-S - PH 12.0

Batch

Batch

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10

> Batch Prepared

Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.9 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis	EPA 9056A		100			237859	02/26/18 13:03	MJH	TAL PIT
	Instrumer	t ID: CHICS2000								
Leach	Leach	1313			40.9 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237311	02/19/18 13:03	KA	TAL PIT
Leach	Analysis	EPA 6020A		1			237590	02/21/18 01:17	WTR	TAL PIT
	Instrumer	nt ID: A								
Leach	Leach	1313			40.9 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237311	02/19/18 13:03	KA	TAL PIT
Leach	Analysis	EPA 6020A		1			237713	02/22/18 04:26	WTR	TAL PIT
	Instrumer	nt ID: M								

Initial

Final

Dil

TestAmerica Pittsburgh

Lab Sample ID: 180-74122-14 Matrix: Solid

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 95:174

Client Sample ID: AP 2-S - PH 12.0

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74122-14

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.9 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			237737	02/16/18 13:21	MTW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1			237752	02/16/18 13:09	MTW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	10 mL	100 mL	237329	02/19/18 15:41	KXW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B t ID: NOEQUIP		1			237751	02/16/18 13:09	MTW	TAL PIT

Client Sample ID: AP 2-S - PH 10.5 Lab Sample ID: 180-74122-15

Date Collected: 01/10/18 10:50

Date Received: 01/12/18 09:10

	Batch	Batch	_	Dil	Initial	Final	Batch	Prepared		
Prep Type Leach	Type	- Method 1313	Run	Factor	Amount	Amount 400 mL	Number 237381	or Analyzed 02/17/18 10:00	Analyst LWM	Lab TAL PIT
Leach	Leach	EPA 9056A		1	40.9 g 1 mL	400 ML	237598	02/17/18 10:00		TAL PIT
Leacn	Analysis Instrumer	nt ID: CHICS2000		1	1 ML	1.0 IIIL	23/396	02/22/16 12.51	IVIJ⊓	IAL PII
Leach	Leach	1313			40.9 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A nt ID: CHICS2000		10	1 mL	1.0 mL	237598	02/22/18 13:07	MJH	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237537	02/21/18 11:22	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A nt ID: A		1			237821	02/23/18 11:43	RSK	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237537	02/21/18 11:22	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A nt ID: M		1			238052	02/26/18 21:33	WTR	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C nt ID: NOEQUIP		1			237531	02/19/18 10:19	MTW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2510B nt ID: NOEQUIP		1			237553	02/19/18 10:24	MTW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2540C nt ID: NOEQUIP		1	100 mL	100 mL	237940	02/26/18 14:33	KXW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2580B nt ID: NOEQUIP		1			237550	02/19/18 10:20	MTW	TAL PIT

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Matrix: Solid

TestAmerica 35 of 174 TestAmerica 300 0D: 180-74122-1

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

Client Sample ID: AP 2-S - PH 8.0

Date Collected: 01/10/18 10:50
Date Received: 01/12/18 09:10

Lab Sample ID: 180-74122-17 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			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A t ID: CHIC2100A		2.5			236732	02/13/18 14:03	MJH	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A t ID: CHICS2000		5			236891	02/14/18 15:20	MJH	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236807	02/13/18 13:38	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A t ID: M		1			237198	02/15/18 23:01	WTR	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C t ID: NOEQUIP		1			237380	02/12/18 14:55	MTW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B t ID: NOEQUIP		1			237425	02/12/18 14:35	MTW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	50 mL	100 mL	237078	02/15/18 14:59	KXW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B t ID: NOEQUIP		1	-		237422	02/12/18 14:36	MTW	TAL PIT

Client Sample ID: AP 2-S - PH 7.0

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74122-18
Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313	_		40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A nt ID: CHIC2100A		2.5			236732	02/13/18 14:34	MJH	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A nt ID: CHICS2000		5			236891	02/14/18 15:36	MJH	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236807	02/13/18 13:38	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A nt ID: M		1			237198	02/15/18 22:39	WTR	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C nt ID: NOEQUIP		1	-		237380	02/12/18 14:49	MTW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2510B nt ID: NOEQUIP		1	-		237425	02/12/18 14:24	MTW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT

TestAmerica Pittsburgh

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 366 95:1780-74122-1

Client Sample ID: AP 2-S - PH 7.0

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74122-18

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Analysis	SM 2540C		1	25 mL	100 mL	237078	02/15/18 14:59	KXW	TAL PIT
	Instrumer	t ID: NOEQUIP								
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	SM 2580B		1			237422	02/12/18 14:23	MTW	TAL PIT
	Instrumer	t ID: NOEQUIP								

Client Sample ID: AP 2-S - PH 5.5

Date Collected: 01/10/18 10:50

Date Received: 01/12/18 09:10

Lab Sample ID: 180-74122-19
Matrix: Solid

Batch Batch Dil Initial Final **Batch** Prepared Method **Amount Amount** Number **Prep Type** Type Run **Factor** or Analyzed Analyst Lab Leach Leach 1313 40.9 g 400 mL 237761 02/21/18 10:00 LWM TAL PIT Leach EPA 9056A 25 237859 02/26/18 09:13 MJH TAL PIT Analysis Instrument ID: CHICS2000 Leach 1313 40.9 g 400 mL 237761 02/21/18 10:00 LWM TAL PIT Leach Leach 3010A 50 mL 50 mL 237767 02/23/18 12:01 KA TAL PIT Prep TAL PIT Leach Analysis **EPA 6020A** 10 238052 02/27/18 10:17 WTR Instrument ID: M Leach 1313 02/21/18 10:00 LWM TAL PIT Leach 40.9 g 400 mL 237761 Leach Analysis **EPA 9040C** 237772 02/23/18 10:18 MTW TAL PIT 1 Instrument ID: NOEQUIP 40.9 g Leach Leach 1313 400 mL 237761 02/21/18 10:00 LWM TAL PIT Leach Analysis SM 2510B 1 237776 02/23/18 10:17 MTW TAL PIT Instrument ID: NOEQUIP Leach Leach 1313 40.9 g 400 mL 237761 02/21/18 10:00 LWM TAL PIT Leach Analysis SM 2540C 1 5 mL 100 mL 238055 02/27/18 15:07 KXW TAL PIT Instrument ID: NOEQUIP Leach Leach 1313 40.9 g 400 mL 237761 02/21/18 10:00 LWM TAL PIT Leach SM 2580B 237774 02/23/18 10:18 MTW TAL PIT Analysis

Client Sample ID: AP 2-S - PH 4.0

Instrument ID: NOEQUIP

Date Collected: 01/10/18 10:50

Date Received: 01/12/18 09:10

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A nt ID: CHIC2100A		50			236732	02/13/18 16:40	MJH	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A at ID: CHICS2000		100			236891	02/14/18 15:52	MJH	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236807	02/13/18 13:38	KA	TAL PIT

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Lab Sample ID: 180-74122-20 Matrix: Solid

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

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Client Sample ID: AP 2-S - PH 4.0

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74122-20

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Analysis	EPA 6020A		10			237323	02/16/18 20:38	WTR	TAL PIT
	Instrumen	t ID: M								
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	EPA 9040C		1			237380	02/12/18 14:52	MTW	TAL PIT
	Instrumen	t ID: NOEQUIP								
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	SM 2510B		1			237425	02/12/18 14:29	MTW	TAL PIT
	Instrumen	t ID: NOEQUIP								
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	SM 2540C		1	3 mL	100 mL	237078	02/15/18 14:59	KXW	TAL PIT
	Instrumen	t ID: NOEQUIP								
Leach	Leach	1313			40.9 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	SM 2580B		1			237422	02/12/18 14:29	MTW	TAL PIT
	Instrumen	t ID: NOEQUIP								

Client Sample ID: AP 2-S - PH 2.0

Date Collected: 01/10/18 10:50

Lab Sample ID: 180-74122-21

Matrix: Solid

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.9 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A t ID: CHICS2000		100	1 mL	1.0 mL	237598	02/22/18 11:48	MJH	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Prep	3010A			5 mL	50 mL	237767	02/23/18 12:01	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A t ID: A		10			237942	02/24/18 17:16	WTR	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Prep	3010A			5 mL	50 mL	237767	02/23/18 12:01	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A t ID: M		10			238052	02/27/18 09:50	WTR	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C t ID: NOEQUIP		1			237531	02/19/18 10:44	MTW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B t ID: NOEQUIP		1	-		237553	02/19/18 10:42	MTW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	2 mL	100 mL	237940	02/26/18 14:33	KXW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B t ID: NOEQUIP		1	_		237550	02/19/18 10:40	MTW	TAL PIT

TestAmerica Pittsburgh

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TestAmerica Job 9D: 180-74122-1

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

Client Sample ID: AP 2-S - NATURAL

Lab Sample ID: 180-74122-22 Date Collected: 01/10/18 10:50 **Matrix: Solid**

Date Received: 01/12/18 09:10

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.9 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2100B		1			236373	02/08/18 11:15	MJH	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2100B		5			236373	02/08/18 11:31	MJH	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236437	02/08/18 11:22	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: A		1			236729	02/09/18 23:09	WTR	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236437	02/08/18 11:22	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: M		1			236828	02/13/18 01:11	WTR	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			236465	02/07/18 14:16	MTW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1	-		236475	02/07/18 14:41	MTW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	236785	02/13/18 10:45	KXW	TAL PIT
Leach	Leach	1313			40.9 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B at ID: NOEQUIP		1			236472	02/07/18 14:43	MTW	TAL PIT

Client Sample ID: AP 3-S - AIR DIED

Date Collected: 01/10/18 10:20

Date Received: 01/12/18 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			235859	02/02/18 11:37	SES	TAL PIT
	Instrumer	nt ID: NOEQUIP								

Lab Sample ID: 180-74122-24 Client Sample ID: AP 2-S - AIR DRIED

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10

Prep Type Total/NA	Batch Type Analysis	Batch Method 2540G	Run	Factor 1	Initial Amount	Final Amount	Batch Number 235859	Prepared or Analyzed 02/02/18 11:37	Analyst SES	Lab TAL PIT
	Instrumen	t ID: NOEQUIP								

Lab Sample ID: 180-74122-23

Matrix: Solid

Matrix: Solid

Electronic Filing: Received Clerk's Office 07/19/2019 PCB 2013-15 Exhibit C

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 139 of 1740-74122-1

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Leach LWM = Larry Matko

Batch Type: Prep

KA = Kayla Kalamasz

Batch Type: Analysis

CLL = Cheryl Loheyde

KXW = Kaitlyn White

MJH = Matthew Hartman

MTW = Michael Wesoloski

RSK = Robert Kurtz

SES = Samantha Strauser

WTR = Bill Reinheimer

9

3

4

5

6

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10

Client: KPRG and Associates, Inc.

TestAmerical Job 95:1740-74122-1

Project/Site: Midwest Generation

Client Sample ID: AP 3-S - PRETEST

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74122-1

Matrix: Solid

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	28.6		0.1		%			01/24/18 06:29	1
Percent Solids	71.4		0.1		%			01/24/18 06:29	1

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	4.6	0.1	SU			02/07/18 11:36	1
pH	12.6	0.1	SU			02/12/18 14:21	1
pH	12.7	0.1	SU			02/12/18 14:24	1
pH	4.4	0.1	SU			02/12/18 14:27	1
pH	6.2	0.1	SU			02/12/18 14:33	1
pH	12.4	0.1	SU			02/16/18 13:05	1
pH	3.2	0.1	SU			02/16/18 13:10	1

Client Sample ID: AP 3-S - PH 13.0 Lab Sample ID: 180-74122-2

Date Collected: 01/10/18 10:20

Date Received: 01/12/18 09:10

Method: EPA 9056A - Anions, Ion Chromatography - Leach										
	Analyte	Result Qualifi	ier RL	MDL U	Jnit	D	Prepared	Analyzed	Dil Fac	
	Chloride	<50	50	n	ng/L			02/08/18 20:09	50	
	Fluoride	<5.0	5.0	n	ng/L			02/08/18 20:09	50	
	Sulfate	380	50	n	ng/L			02/08/18 20:09	50	

Method: EPA 6020A - Metals	(ICP/MS) - Leach							
Analyte	Result Qualifier	r RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	6300	80		ug/L		02/08/18 11:28	02/13/18 03:33	1
Calcium	4700	500		ug/L		02/08/18 11:28	02/10/18 00:33	1

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	12.7	0.1		SU			02/07/18 11:43	1
Specific Conductance	45000	1.0		umhos/cm			02/07/18 11:25	1
Total Dissolved Solids	14000	330		mg/L			02/15/18 14:59	1
Oxidation Reduction Potential	- 59	10		millivolts			02/07/18 11:21	1

Client Sample ID: AP 3-S - PH 12.0 Lab Sample ID: 180-74122-3

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10

Method: EPA 9056A - Anions, Ion Chromatography - Leach										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	12		5.0		mg/L			02/26/18 16:14	5	
Fluoride	1.0		0.50		mg/L			02/26/18 16:14	5	
Sulfate	340		50		mg/L			02/26/18 16:30	50	

Method: EPA 6020A - N	Metals (ICP/MS) - Lead	ch						
Analyte	Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	5500	80		ug/L		02/19/18 13:03	02/22/18 04:21	1
Calcium	3600	500		ug/L		02/19/18 13:03	02/21/18 01:14	1

TestAmerica Pittsburgh

Matrix: Solid

Matrix: Solid

Project/Site: Midwest Generation

Client Sample ID: AP 3-S - PH 12.0

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74122-3

Matrix: Solid

General Chemistry - Leach Analyte	Result Qı	ualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	11.9		0.1		SU			02/16/18 12:54	1
Specific Conductance	3200		1.0		umhos/cm			02/16/18 12:48	1
Total Dissolved Solids	1500		40		mg/L			02/19/18 15:41	1
Oxidation Reduction Potential	30		10		millivolts			02/16/18 12:53	1

Client Sample ID: AP 3-S - PH 10.5 Lab Sample ID: 180-74122-4

Date Collected: 01/10/18 10:20

Matrix: Solid

Date Received: 01/12/18 09:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		1.0		mg/L			02/22/18 12:20	1
Fluoride	0.47		0.10		mg/L			02/22/18 12:20	1
Sulfate	330		10		mg/L			02/22/18 12:35	10

Method: EPA 6020A - Metals (I	CP/MS) - Leach						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Boron	3900	80	ug/L		02/21/18 11:22	02/26/18 21:29	1
Calcium	37000	500	ug/L		02/21/18 11:22	02/23/18 11:40	1

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	10.2	0.1		SU			02/19/18 10:12	1
Specific Conductance	1100	1.0		umhos/cm			02/19/18 10:18	1
Total Dissolved Solids	670	10		mg/L			02/26/18 14:33	1
Oxidation Reduction Potential	150	10		millivolts			02/19/18 10:13	1

Lab Sample ID: 180-74122-6 Client Sample ID: AP 3-S - PH 8.0 **Matrix: Solid**

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10

Method: EPA 9056A - Anions, Ion Chromatography - Leach										
Analyte	Result	Qualifier	RL	MDL Ur	nit	D	Prepared	Analyzed	Dil Fac	
Chloride	15		2.5	m	g/L			02/13/18 11:30	2.5	
Fluoride	<0.50		0.50	mg	g/L			02/14/18 14:33	5	
Sulfate	400		2.5	mg	g/L			02/13/18 11:30	2.5	

Method: EPA 6020A - Metals ((ICP/MS) - Leach							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	5200	80		ug/L		02/13/18 13:38	02/15/18 22:34	1
Calcium	730000	500		ug/L		02/13/18 13:38	02/15/18 22:34	1

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	7.5	0.1	SU			02/12/18 14:39	1
Specific Conductance	5100	1.0	umhos/cm			02/12/18 14:19	1
Total Dissolved Solids	4300	40	mg/L			02/15/18 14:59	1
Oxidation Reduction Potential	270	10	millivolts			02/12/18 14:17	1

Client: KPRG and Associates, Inc.

TestAmerica Job 95:174

Project/Site: Midwest Generation

Client Sample ID: AP 3-S - PH 7.0

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74122-7

Matrix: Solid

02/26/18 08:57

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16		2.5		mg/L			02/13/18 12:00	2.5
Fluoride	<0.50		0.50		mg/L			02/14/18 14:49	5
Sulfate	<2.5		2.5		mg/L			02/13/18 12:00	2.5
Method: EPA 6020A - Metals (ICP/MS) - L	each							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	6800		800		ug/L		02/13/18 13:38	02/16/18 20:33	10
Calcium	1600000		5000		ug/L		02/13/18 13:38	02/16/18 20:33	10
General Chemistry - Leach									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.0		0.1		SU			02/12/18 14:36	1
Specific Conductance	8900		1.0		umhos/cm			02/12/18 14:14	1
Total Dissolved Solids	7500		40		mg/L			02/15/18 14:59	1
Oxidation Reduction Potential	290		10		millivolts			02/12/18 14:10	1

Client Sample ID: AP 3-S - PH 5.5 Lab Sample ID: 180-74122-8 Matrix: Solid

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10

Fluoride

Method: EPA 9056A - Anions, Ion Chromatography - Leach Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac Chloride <25 25 mg/L 02/26/18 08:57 25

2.5

mg/L

<2.5

Sulfate	480	25	mg/L		02/26/18 08:57	25
Method: EPA 6020A - Metals (I	CP/MS) - Leach					
Analyte	Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
Boron	11000	800	ug/L	02/23/18 12:01	02/27/18 09:59	10
Calcium	3900000	5000	ug/L	02/23/18 12:01	02/27/18 09:59	10

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.0	0.1		SU			02/23/18 10:12	1
Specific Conductance	20000	1.0		umhos/cm			02/23/18 10:12	1
Total Dissolved Solids	19000	200		mg/L			02/27/18 15:07	1
Oxidation Reduction Potential	180	10		millivolts			02/23/18 10:12	1

Client Sample ID: AP 3-S - PH 4.0 Lab Sample ID: 180-74122-9

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10

Method: EPA 9056A	Method: EPA 9056A - Anions, Ion Chromatography - Leach						
Analyte	Result Q	ualifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<50	50	mg/L			02/13/18 13:32	50
Fluoride	11	10	mg/L			02/14/18 15:04	100
Sulfate	400	50	mg/L			02/13/18 13:32	50

Method: EPA 6020A - Metals (I	CP/MS) - Leach						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Boron	18000	800	ug/L		02/13/18 13:38	02/16/18 20:29	10

TestAmerica Pittsburgh

Matrix: Solid

25

2/28/2018

Client: KPRG and Associates, Inc.

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Project/Site: Midwest Generation

Client Sample ID: AP 3-S - PH 4.0

Date Collected: 01/10/18 10:20 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74122-9

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	7300000		5000		ug/L		02/13/18 13:38	02/16/18 20:29	10
- General Chemistry - Leach									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	3.8		0.1		SU			02/12/18 14:18	1
Specific Conductance	43000		1.0		umhos/cm			02/12/18 13:58	1
			330					02/15/18 14:59	

millivolts

Client Sample ID: AP 3-S - PH 2.0

370

Date Collected: 01/10/18 10:50

Date Received: 01/12/18 09:10

Oxidation Reduction Potential

Lab Sample ID:	180-74122-10
	Matrix: Solid

Lab Sample ID: 180-74122-11

Matrix: Solid

02/12/18 13:57

Method: EPA 9056A - Anions,	Ion Chromatog	graphy - Leach					
Analyte	Result Qua	alifier RL	MDL Unit	: D	Prepared	Analyzed	Dil Fac
Chloride	<100	100	mg/l			02/22/18 11:16	100
Fluoride	<10	10	mg/l	_		02/22/18 11:16	100
Sulfate	620	100	mg/l	_		02/22/18 11:16	100

Method: EPA 6020A - Metals (I	CP/MS) - Leach							
Analyte	Result Qualifier	r RL	MDL U	Jnit	D	Prepared	Analyzed	Dil Fac
Boron	33000	8000	u	g/L	_	02/23/18 12:01	02/27/18 09:46	10
Calcium	12000000	50000	u	g/L		02/23/18 12:01	02/24/18 17:13	10

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	2.3	0.1	SU			02/19/18 10:38	1
Specific Conductance	71000	1.0	umhos/cm			02/19/18 10:36	1
Total Dissolved Solids	83000	500	mg/L			02/26/18 14:33	1
Oxidation Reduction Potential	620	10	millivolts			02/19/18 10:34	1

Client Sample ID: AP 3-S - NATURAL

Date Collected: 01/10/18 10:50

Date Received: 01/12/18 09:10

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15	1.0	mg/L			02/08/18 10:43	1
Fluoride	0.31	0.10	mg/L			02/08/18 10:43	1
Sulfate	390	5.0	mg/L			02/08/18 10:59	5

Ha	9.3		0.1		SU			02/07/18 14:13	1	
Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
General Chemistry - Leach										
Calcium	95000		500		ug/L	(02/08/18 11:22	02/09/18 23:06	1	
Boron	3300		80		ug/L	(J2/08/18 11:22	02/13/18 01:06	1	

Specific Conductance 870 1.0 umhos/cm 02/07/18 14:38 **Total Dissolved Solids** 610 10 mg/L 02/13/18 10:45

Client: KPRG and Associates, Inc.

TestAmerica Job 9D: 180-74122-1

Project/Site: Midwest Generation

Client Sample ID: AP 3-S - NATURAL

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74122-11

Matrix: Solid

General	Chemistry -	- Leach	(Continued)	
			_	_

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Oxidation Reduction Potential	180	10	millivolts			02/07/18 14:38	1

Client Sample ID: AP 2-S - PRETEST

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74122-12

Matrix: Solid

General Chemistry

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	31.6	0.1	%			01/24/18 06:29	1
Percent Solids	68.4	0.1	%			01/24/18 06:29	1

General Chemistry - Leach

General Chemistry - Leach									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	4.9		0.1		SU			02/07/18 11:49	1
pH	12.5		0.1		SU			02/12/18 14:43	1
pH	6.3		0.1		SU			02/12/18 14:46	1
pH	4.7		0.1		SU			02/12/18 14:58	1
pH	12.7		0.1		SU			02/12/18 15:01	1
pH	11.3		0.1		SU			02/16/18 13:16	1
pH	3.4		0.1		SU			02/16/18 13:27	1
<u> </u>									

Client Sample ID: AP 2-S - PH 13.0

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74122-13

Matrix: Solid

Method: EPA 9056A - Anions, Ion Chromatography - Leach									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63		50		mg/L			02/08/18 20:40	50
Fluoride	<5.0		5.0		mg/L			02/08/18 20:40	50
Sulfate	300		50		mg/L			02/08/18 20:40	50

Method: EPA 6020A - Metals (ICP/MS) - Leach								
Analyte	Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac		
Boron	83000	800	ug/L	02/08/18 11:28	02/13/18 03:38	1		
Calcium	34000	5000	ua/L	02/08/18 11:28	02/10/18 00:36	1		

General	Chemistry	-	Leach
Analyte	•		

Analyte	mony - Leach	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	 -	12.9		0.1		SU			02/07/18 11:30	1
Specific Conduc	ctance	45000		1.0		umhos/cm			02/07/18 11:10	1
Total Dissolved	Solids	14000		330		mg/L			02/13/18 11:04	1
Oxidation Redu	ction Potential	- 20		10		millivolts			02/07/18 11:08	1

Client Sample ID: AP 2-S - PH 12.0

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74122-14

Matrix: Solid

Method: EPA 9056A - Anions, Ion Chromatography - Leach									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		100		mg/L			02/26/18 13:03	100
Fluoride	<10		10		mg/L			02/26/18 13:03	100

Client: KPRG and Associates, Inc.

TestAmerica Job 9D: 180-74122-1

Project/Site: Midwest Generation

Client Sample ID: AP 2-S - PH 12.0

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74122-14

Matrix: Solid

Matrix: Solid

Matrix: Solid

Method: EPA 9056A - Anions,	Ion Chrom	atography - I	Leach (Con	tinued)					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1100		100		mg/L			02/26/18 13:03	100
- Method: EPA 6020A - Metals (ICP/MS) - L	each							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	8500		80		ug/L		02/19/18 13:03	02/22/18 04:26	1
Calcium	2500		500		ug/L		02/19/18 13:03	02/21/18 01:17	1
General Chemistry - Leach									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	12.4		0.1		SU			02/16/18 13:21	1
Specific Conductance	12000		1.0		umhos/cm			02/16/18 13:09	1
Total Dissolved Solids	4300		100		mg/L			02/19/18 15:41	1
Oxidation Reduction Potential	- 19		10		millivolts			02/16/18 13:09	1

Client Sample ID: AP 2-S - PH 10.5 Lab Sample ID: 180-74122-15

Date Collected: 01/10/18 10:50

Date Received: 01/12/18 09:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63		1.0		mg/L			02/22/18 12:51	1
Fluoride	0.42		0.10		mg/L			02/22/18 12:51	1
Sulfate	240		10		mg/L			02/22/18 13:07	10
Method: EPA 6020A - Metals (I	CP/MS) - L	each							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	5500		80		ug/L		02/21/18 11:22	02/26/18 21:33	1
Calcium	13000		500		ug/L		02/21/18 11:22	02/23/18 11:43	1
General Chemistry - Leach									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
рН	10.0		0.1		SU			02/19/18 10:19	1
Specific Conductance	1100		1.0		umhos/cm			02/19/18 10:24	1
Total Dissolved Solids	670		10		mg/L			02/26/18 14:33	1
Oxidation Reduction Potential	160		10		millivolts			02/19/18 10:20	

Client Sample ID: AP 2-S - PH 8.0 Lab Sample ID: 180-74122-17

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10

Method: EPA 9056A - Anions, Ion Chromatography - Leach									
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	69	2.5	mg/L			02/13/18 14:03	2.5		
Fluoride	<0.50	0.50	mg/L			02/14/18 15:20	5		
Sulfate	270	2.5	mg/L			02/13/18 14:03	2.5		

Method: EPA 6020A - Metals (ICP/MS) - Leach								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	5500	80		ug/L		02/13/18 13:38	02/15/18 23:01	1
Calcium	390000	500		ug/L		02/13/18 13:38	02/15/18 23:01	1

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Client: KPRG and Associates, Inc.

TestAmerica Job 9D: 180-74122-1

Project/Site: Midwest Generation

Client Sample ID: AP 2-S - PH 8.0

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74122-17

Matrix: Solid

General Chemistry - Leach Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8		0.1		SU	'		02/12/18 14:55	1
Specific Conductance	3300		1.0		umhos/cm			02/12/18 14:35	1
Total Dissolved Solids	2600		20		mg/L			02/15/18 14:59	1
Oxidation Reduction Potential	260		10		millivolts			02/12/18 14:36	1

Client Sample ID: AP 2-S - PH 7.0 Lab Sample ID: 180-74122-18 Matrix: Solid

Date Collected: 01/10/18 10:50

Date Received: 01/12/18 09:10

Method: EPA 9056A - A	Anions, Ion Chromatography	/ - Leach					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	69	2.5	mg/L			02/13/18 14:34	2.5
Fluoride	<0.50	0.50	mg/L			02/14/18 15:36	5
Sulfate	280	2.5	mg/L			02/13/18 14:34	2.5
_							

Method: EPA 6020A - Metals (IC	CP/MS) - Lea	ach							
Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	6400		80		ug/L		02/13/18 13:38	02/15/18 22:39	1
Calcium	700000		500		ug/L		02/13/18 13:38	02/15/18 22:39	1

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	7.4	0.1	SU			02/12/18 14:49	1
Specific Conductance	5200	1.0	umhos/cm	ı		02/12/18 14:24	1
Total Dissolved Solids	4200	40	mg/L			02/15/18 14:59	1
Oxidation Reduction Potential	270	10	millivolts			02/12/18 14:23	1

Lab Sample ID: 180-74122-19 Client Sample ID: AP 2-S - PH 5.5 **Matrix: Solid**

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10

Method: EPA 9056A	Anions, Ion Chromatograph	y - Leach					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44	25	mg/L			02/26/18 09:13	25
Fluoride	<2.5	2.5	mg/L			02/26/18 09:13	25
Sulfate	380	25	mg/L			02/26/18 09:13	25

Method: EPA 6020A - Metals (ICP/MS) - Leach								
Analyte	Result Quali	ifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	12000	800		ug/L		02/23/18 12:01	02/27/18 10:17	10
Calcium	5100000	5000		ug/L		02/23/18 12:01	02/27/18 10:17	10

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Uni	t I	D	Prepared	Analyzed	Dil Fac
pH	5.6	0.1	SU				02/23/18 10:18	1
Specific Conductance	25000	1.0	uml	hos/cm			02/23/18 10:17	1
Total Dissolved Solids	26000	200	mg/	L'L			02/27/18 15:07	1
Oxidation Reduction Potential	240	10	mill	ivolts			02/23/18 10:18	1

Client: KPRG and Associates, Inc.

TestAmerica Job 9D: 180-74122-1

Project/Site: Midwest Generation

Client Sample ID: AP 2-S - PH 4.0

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74122-20

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57		50		mg/L			02/13/18 16:40	50
Fluoride	<10		10		mg/L			02/14/18 15:52	100
Sulfate	290		50		mg/L			02/13/18 16:40	50
- Method: EPA 6020A - Metals (ICP/MS) - L	each							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	19000		800		ug/L		02/13/18 13:38	02/16/18 20:38	10
Calcium	7900000		5000		ug/L		02/13/18 13:38	02/16/18 20:38	10
General Chemistry - Leach									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	3.8		0.1		SU			02/12/18 14:52	1
Specific Conductance	43000		1.0		umhos/cm			02/12/18 14:29	1
Total Dissolved Solids	51000		330		mg/L			02/15/18 14:59	1
Oxidation Reduction Potential	370		10		millivolts			02/12/18 14:29	1

Lab Sample ID: 180-74122-21 Client Sample ID: AP 2-S - PH 2.0 Matrix: Solid

Date Collected: 01/10/18 10:50

Date Received: 01/12/18 09:10

Method: EPA 9056A - A	nions, Ion Chromatography	/ - Leach					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<100	100	mg/L			02/22/18 11:48	100
Fluoride	<10	10	mg/L			02/22/18 11:48	100
Sulfate	440	100	mg/L			02/22/18 11:48	100

Method: EPA 6020A - Metals (ICP/MS) - Leach							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Boron	30000	8000	ug/L		02/23/18 12:01	02/27/18 09:50	10
Calcium	12000000	50000	ug/L		02/23/18 12:01	02/24/18 17:16	10

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	2.3	0.1	SU			02/19/18 10:44	1
Specific Conductance	69000	1.0	umhos/c	m		02/19/18 10:42	1
Total Dissolved Solids	82000	500	mg/L			02/26/18 14:33	1
Oxidation Reduction Potential	630	10	millivolts			02/19/18 10:40	1

Client Sample ID: AP 2-S - NATURAL Lab Sample ID: 180-74122-22

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	69		1.0		mg/L			02/08/18 11:15	1
Fluoride	<0.10		0.10		mg/L			02/08/18 11:15	1
Sulfate	310		5.0		mg/L			02/08/18 11:31	5

Method: EPA 6020A - Metals (ICP/MS) - Leach									
	Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
	Boron	4600	80	ug/L		02/08/18 11:22	02/13/18 01:11	1	

TestAmerica Pittsburgh

Matrix: Solid

Client: KPRG and Associates, Inc.

TestAmerica Job 15:174

Project/Site: Midwest Generation

Client Sample ID: AP 2-S - NATURAL

Date Collected: 01/10/18 10:50 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74122-22

Matrix: Solid

Matrix: Solid

Matrix: Solid

Method: EPA 6020A - Metals (ICP/MS) - Leach (Continued)									
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Calcium	59000	500		ug/L		02/08/18 11:22	02/09/18 23:09	1	

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analvzed	Dil Fac
pH	8.8	0.1	SU	_ =		02/07/18 14:16	1
Specific Conductance	930	1.0	umhos/cm			02/07/18 14:41	1
Total Dissolved Solids	590	10	mg/L			02/13/18 10:45	1
Oxidation Reduction Potential	190	10	millivolts			02/07/18 14:43	1

Client Sample ID: AP 3-S - AIR DIED Lab Sample ID: 180-74122-23

Result Qualifier

Date Collected: 01/10/18 10:20

Date Received: 01/12/18 09:10

General Chemistry

Analyte

MDL	Unit	D	Prepared	Analyzed	Dil Fac
				,	
	%			02/02/18 11:37	1

% **Percent Moisture** 1.2 0.1 **Percent Solids** 98.8 0.1 % 02/02/18 11:37 Lab Sample ID: 180-74122-24

RL

Client Sample ID: AP 2-S - AIR DRIED

Date Collected: 01/10/18 10:50

Date Received: 01/12/18 09:10

General Chemistry Analyte	Result Q	ualifier RL	. MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	2.1	0.1		%			02/02/18 11:37	1
Percent Solids	97.9	0.1		%			02/02/18 11:37	1

TestAmerica Job 05 1741

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-236373/6

Matrix: Solid

Analysis Batch: 236373

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

10

Prep Type: Total/NA

MB MB Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac Chloride 1.0 mg/L 02/08/18 06:17 <1.0 Fluoride <0.10 0.10 02/08/18 06:17 mg/L Sulfate 02/08/18 06:17 <1.0 1.0 mg/L

Lab Sample ID: LCS 180-236373/5

Matrix: Solid

Analysis Batch: 236373

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Chloride 25.0 25.0 mg/L 100 80 - 120 Fluoride 1.25 1.02 mg/L 82 80 - 120 Sulfate 25.0 24.0 mg/L 96 80 - 120

Lab Sample ID: MB 180-236377/17

Matrix: Solid

Analysis Batch: 236377

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

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

MB MB **MDL** Unit Analyte Result Qualifier RL D Prepared Analyzed Dil Fac Chloride <1.0 1.0 mg/L 02/08/18 09:27 Fluoride < 0.10 0.10 mg/L 02/08/18 09:27 Sulfate mg/L 02/08/18 09:27 <1.0 1.0

Lab Sample ID: LCS 180-236377/16

Matrix: Solid

Analysis Batch: 236377

	Spike	LCS	LCS			%Rec.	
Analyte	Added	Result	Qualifier	Unit D	%Rec	Limits	
Chloride	25.0	25.0		mg/L	100	80 - 120	
Fluoride	1.25	1.18		mg/L	94	80 - 120	
Sulfate	25.0	24.1		mg/L	96	80 - 120	

Lab Sample ID: MB 180-236732/6

Matrix: Solid

Analysis Batch: 236732

	MIR MIR	В				
Analyte	Result Qu	ualifier RL	MDL Unit	D Prepared	Analyzed	Dil Fac
Chloride	<1.0	1.0	mg/L	<u></u>	02/13/18 05:33	1
Sulfate	<1.0	1.0	mg/L		02/13/18 05:33	1

Lab Sample ID: LCS 180-236732/5

Matrix: Solid

Analysis Batch: 236732								
_	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	25.0	25.9		mg/L		103	80 - 120	
Sulfate	25.0	25.1		mg/L		100	80 - 120	

TestAmerica Pittsburgh

2/28/2018

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 05:174122-1

Method: EPA 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-236891/6

Matrix: Solid

Analysis Batch: 236891

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Chloride 1.0 <1.0 mg/L 02/14/18 11:05 Fluoride <0.10 0.10 02/14/18 11:05 mg/L Sulfate 02/14/18 11:05 <1.0 1.0 mg/L

Lab Sample ID: LCS 180-236891/5

Matrix: Solid

Analysis Batch: 236891

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	50.0	51.9		mg/L		104	80 - 120	
Fluoride	2.50	2.58		mg/L		103	80 - 120	
Sulfate	50.0	49.2		mg/L		98	80 - 120	

Lab Sample ID: MB 180-237598/6

Matrix: Solid

Analysis Batch: 237598

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

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Chloride <1.0 1.0 mg/L 02/22/18 08:13 Fluoride 02/22/18 08:13 < 0.10 0.10 mg/L Sulfate mg/L 02/22/18 08:13 <1.0 1.0

Lab Sample ID: LCS 180-237598/5

Matrix: Solid

Analysis Batch: 237598

	Spike	LCS	LCS			%Rec.	
Analyte	Added	Result	Qualifier	Unit	D %Rec	Limits	
Chloride	25.0	25.4		mg/L	102	80 - 120	
Fluoride	1.25	1.20		mg/L	96	80 - 120	
Sulfate	25.0	21.2		mg/L	85	80 - 120	

Analysis Batch: 237859

Surate _	25.0	21.2	mg/L	85 80 - 120	
Lab Sample ID: MB 180-237859/6				Client Sample ID: Method Bl	ank
Matrix: Solid				Pren Type: Total	/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.0		1.0		mg/L			02/26/18 08:06	1
Fluoride	<0.10		0.10		mg/L			02/26/18 08:06	1
Sulfate	<1.0		1.0		mg/L			02/26/18 08:06	1

Lab Sample ID: LCS 180-237859/5

Matrix: Solid

Analysis Batch: 237859

7 , 0.0 0.0	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	25.0	26.4		mg/L		106	80 - 120	
Fluoride	1.25	1.23		mg/L		99	80 - 120	
Sulfate	25.0	22.5		mg/L		90	80 - 120	

TestAmerica Pittsburgh

Prep Type: Total/NA

Prep Batch: 236437

Prep Type: Total/NA

Prep Batch: 236437

10

Client: KPRG and Associates, Inc.

TestAmerica Job 05 1741

Client Sample ID: Method Blank

Project/Site: Midwest Generation

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

Lab Sample ID: MB 180-236437/1-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 236729

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 500 02/08/18 11:22 02/09/18 22:43 Calcium <500 ug/L

Lab Sample ID: MB 180-236437/1-A

Matrix: Solid

Analysis Batch: 236828

MB MB

Analyte Result Qualifier RL MDL Unit Analyzed Dil Fac Prepared 80 02/08/18 11:22 02/13/18 00:25 Boron <80 ug/L

Lab Sample ID: LCS 180-236437/2-A **Client Sample ID: Lab Control Sample Prep Type: Total/NA**

Matrix: Solid

Analysis Batch: 236729

Spike LCS LCS Added Result Qualifier Analyte Unit Calcium 50000 53100 ug/L 106

Lab Sample ID: LCS 180-236437/2-A

LCS LCS

LCSD LCSD

1030

Result Qualifier

MDL Unit

ug/L

Unit

ug/L

D %Rec

D

Prepared

02/08/18 11:28 02/13/18 02:47

Matrix: Solid

Analysis Batch: 236828

Spike Analyte Added Result Qualifier Unit %Rec Limits Boron 1000 1010 ug/L 101 80 - 120

Spike

Added

1000

Lab Sample ID: LCSD 180-236437/3-A

Matrix: Solid

Analysis Batch: 236729

Spike LCSD LCSD Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Calcium 50000 52500 105 80 - 120 ug/L 20

Lab Sample ID: LCSD 180-236437/3-A

Matrix: Solid

Boron

Analysis Batch: 236828

Analyte

Lab Sample ID: MB 180-236440/1-A

Matrix: Solid

Analysis Batch: 236729

MB MB

MDL Unit **Analyte** Result Qualifier RL **Prepared** Analyzed Dil Fac 02/08/18 11:28 02/10/18 00:04 Calcium <500 500 ug/L

Lab Sample ID: MB 180-236440/1-A

Matrix: Solid

Analysis Batch: 236828

MB MB

Analyte Result Qualifier Boron <80

Prep Batch: 236437 %Rec. Limits D %Rec

80 - 120

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 236437

%Rec.

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

Prep Batch: 236437

%Rec. RPD

Client Sample ID: Lab Control Sample Dup

103

Prep Type: Total/NA **Prep Batch: 236437** %Rec. **RPD**

Limits **RPD** Limit 80 - 120

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

Prep Batch: 236440

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

Prep Batch: 236440

TestAmerica Pittsburgh

Analyzed

RL

80

Dil Fac

52800

ug/L

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

Calcium

TestAmerica Job 05 1741-74122-1

80 - 120

106

Lab Sample ID: LCS 180-236440/2-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA **Matrix: Solid Analysis Batch: 236729 Prep Batch: 236440** Spike LCS LCS %Rec. Analyte Added Result Qualifier %Rec Limits Unit

Lab Sample ID: LCS 180-236440/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA **Prep Batch: 236440 Analysis Batch: 236828** LCS LCS Spike %Rec. Added Result Qualifier Limits Analyte Unit D %Rec 1000 Boron 916 ug/L 92 80 - 120

50000

Lab Sample ID: LCSD 180-236440/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 236729 Prep Batch: 236440** LCSD LCSD RPD Spike %Rec. Limits Added Result Qualifier **Analyte** %Rec RPD Limit Unit Calcium 50000 51500 ug/L 103 80 - 120

Lab Sample ID: LCSD 180-236440/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 236828** Prep Batch: 236440 Spike LCSD LCSD %Rec. **RPD Analyte** Added Result Qualifier Unit %Rec Limits **RPD** Limit Boron 1000 917 ug/L 80 - 120

Lab Sample ID: MB 180-236807/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 237198** Prep Batch: 236807

мв мв RL **MDL** Unit Analyte Result Qualifier **Prepared** Analyzed Dil Fac Boron <80 80 ug/L 02/13/18 13:38 02/15/18 21:43 500 02/13/18 13:38 02/15/18 21:43 Calcium <500 ug/L

Lab Sample ID: LCS 180-236807/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA **Prep Batch: 236807 Analysis Batch: 237198** Spike LCS LCS %Rec. Analyte Added Result Qualifier Limits Unit D %Rec Boron 1000 866 87 80 - 120 ug/L 50000 46700 Calcium 93 80 - 120 ug/L

Lab Sample ID: LCSD 180-236807/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 237198 Prep Batch: 236807** LCSD LCSD Spike %Rec. **RPD** Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 80 - 120 Boron 1000 879 ug/L 88 20 50000 Calcium 46500 ug/L 93 80 - 120 20

2/28/2018

Prep Batch: 237311

Prep Batch: 237311

Prep Batch: 237311

Prep Batch: 237311

Prep Batch: 237311

Analyzed

Client: KPRG and Associates, Inc.

TestAmerica Job 05 1741

Project/Site: Midwest Generation

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

Lab Sample ID: MB 180-237311/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 237590

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 500 02/19/18 13:03 02/21/18 00:31 Calcium <500 ug/L

Lab Sample ID: MB 180-237311/1-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid Analysis Batch: 237713

MB MB

Analyte Result Qualifier RL MDL Unit Prepared 80 02/19/18 13:03 02/22/18 03:08 Boron <80 ug/L

Lab Sample ID: LCS 180-237311/2-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237590

Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit D %Rec Calcium 50000 48400 ug/L 97 80 - 120

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 180-237311/2-A Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237713

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Boron 1000 1010 ug/L 101 80 - 120

Lab Sample ID: LCSD 180-237311/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA Prep Batch: 237311

Analysis Batch: 237590

Spike

LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Calcium 50000 48200 96 80 - 120 ug/L 0 20

Lab Sample ID: LCSD 180-237311/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 237713

Spike LCSD LCSD %Rec. **RPD** Added Result Qualifier Unit Limits Analyte D %Rec **RPD** Limit 1000 1020 102 Boron ug/L 80 - 120 0

Lab Sample ID: MB 180-237537/1-A Client Sample ID: Method Blank

<80

Matrix: Solid

Analysis Batch: 237821

Prep Type: Total/NA Prep Batch: 237537 MB MB

ug/L

MDL Unit Dil Fac **Analyte** Result Qualifier RL **Prepared** Analyzed Calcium <500 500 ug/L 02/21/18 11:22 02/23/18 11:29

Lab Sample ID: MB 180-237537/1-A

Matrix: Solid

Boron

Prep Type: Total/NA **Analysis Batch: 238052** Prep Batch: 237537 MB MB RL MDL Unit Analyte Result Qualifier D Prepared Analyzed Dil Fac

80

TestAmerica Pittsburgh

Client Sample ID: Method Blank

02/21/18 11:22 02/26/18 21:10

Dil Fac

10

Dil Fac

Prep Type: Total/NA

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

Matrix: Solid

TestAmerica 154 95:1780-74122-1

Lab Sample ID: LCS 180-237537/2-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA **Matrix: Solid** Analysis Batch: 237821 Prep Batch: 237537 Spike LCS LCS %Rec. Analyte Added Result Qualifier Limits Unit %Rec Calcium 50000 55300 80 - 120 ug/L 111

Lab Sample ID: LCS 180-237537/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Prep Batch: 237537 **Analysis Batch: 238052** Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit D %Rec Boron 1000 1010 ug/L 101 80 - 120

Lab Sample ID: LCSD 180-237537/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 237821 Prep Batch: 237537 LCSD LCSD Spike %Rec. **RPD** Limits Added Result Qualifier **Analyte** %Rec **RPD** Limit Unit Calcium 50000 55200 ug/L 110 80 - 120

Lab Sample ID: LCSD 180-237537/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 238052** Prep Batch: 237537 Spike LCSD LCSD %Rec. **RPD Analyte** Added Result Qualifier Unit D %Rec Limits **RPD** Limit Boron 1000 1060 ug/L 106 80 - 120

Lab Sample ID: MB 180-237767/1-A

Matrix: Solid

Analysis Batch: 237942

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 237767

Calcium <500 500 ug/L 02/23/18 12:01 02/24/18 16:45 1

Lab Sample ID: MB 180-237767/1-A Client Sample ID: Method Blank

Analysis Batch: 238052

MB MB

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac
80 80 02/23/18 12:01 02/27/18 09:22 1

Lab Sample ID: LCS 180-237767/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 237942 Prep Batch: 237767** Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit %Rec 50000 51800 104 Calcium ug/L 80 - 120

Lab Sample ID: LCS 180-237767/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Prep Batch: 237767 **Analysis Batch: 238052** LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Boron 1000 970 ug/L 97 80 - 120

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerical 505 95.1780-74122-1

Client Sample ID: AP 2-S - PRETEST

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

ab Sample ID: LCSD 180-237767/3-A Client Sample ID: Lab Cor			Control						
Matrix: Solid							Prep Ty	pe: Tot	al/NA
Analysis Batch: 237942							Prep Ba	atch: 23	37767
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Calcium	50000	52100		ug/L		104	80 - 120	1	20

Calcium	50000	52100		ug/L		104	80 - 120	1	20
Lab Sample ID: LCSD 180-237767/3-A Matrix: Solid			(Client Sa	ample	ID: Lab	Control S	•	
Analysis Batch: 238052	Spike	LCSD	LCSD				Prep Ba %Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Boron	1000	1000		ug/L		100	80 - 120	3	20

|--|

Lab Sample ID: 180-74122-12 DU

Matrix: Solid Analysis Batch: 234952							Prep Typ	e: Tot	al/NA
	Sample	Sample	DU	DU					RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D		RPD	Limit
Percent Moisture	31.6		32.9		%			4	20
Percent Solids	68.4		67.1		%			2	20

Lab Sample ID: 180-74 Matrix: Solid Analysis Batch: 23585					С	lient Sa	ample ID: AP 3-S - AIR Prep Type: To	
		Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Percent Moisture	1.2		1.2		%		0.4	20
Percent Solids	98.8		98.8		%		0	20

Analyte Result Qualifier	Result	Qualifier Unit	D	RPD	1 ! !4
		Quantities Office	U	KPD	Limit
Percent Moisture 1.2	1.2	<u></u> %		0.4	20
Percent Solids 98.8	98.8	%		0	20

Lab Sample ID: LCS 180-236465/1				Clie	nt Sar	nple ID	: Lab Control Sample
Matrix: Solid							Prep Type: Total/NA
Analysis Batch: 236465							
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
рН	7.00	7.0		SU		100	99 - 101
Lab Sample ID: LCS 180-236465/47				Clie	nt Sar	nple ID	: Lab Control Sample
Matrix: Solid						•	Prep Type: Total/NA
Analysis Batch: 236465							,
•	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
рН	7.00	7.0		SU		100	99 - 101
Lab Sample ID: LCS 180-237380/1				Clie	nt Sar	nple ID	: Lab Control Sample
Matrix: Solid						-	Prep Type: Total/NA
Analysis Batch: 237380							
•	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
pH — — — —	7.00	7.0		SU		100	99 - 101

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Client: KPRG and Associates, Inc.

TestAmerica Job 05 1741-74122-1

Project/Site: Midwest Generation

Lab Sample ID: LCS 180-237531/1 Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237531

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits рН 7.00 SU 100 99 - 101 7.0

Lab Sample ID: LCS 180-237737/1 **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 237737

Spike LCS LCS %Rec. Added Result Qualifier Analyte Unit D %Rec Limits 7 00 SU pН 7.0 100 99 - 101

Lab Sample ID: LCS 180-237772/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237772

LCS LCS Spike %Rec. Limits **Analyte** Added Result Qualifier Unit %Rec рН 7.00 7.0 SU 100 99 - 101

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 180-236475/2 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 236475

MR MR

Result Qualifier RL **MDL** Unit **Prepared** Dil Fac Analyzed Specific Conductance <1.0 1.0 02/07/18 11:03 umhos/cm

Lab Sample ID: MB 180-236475/43 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 236475

MR MR

Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac Prepared Specific Conductance 1.0 02/07/18 13:32 <1.0 umhos/cm

Lab Sample ID: LCS 180-236475/1

Matrix: Solid

Analysis Batch: 236475

Spike LCS LCS %Rec. Added Result Qualifier Analyte Unit %Rec Limits Specific Conductance 84.0 85.1 101 90 - 110 umhos/cm

Lab Sample ID: LCS 180-236475/42 Client Sample ID: Lab Control Sample

Matrix: Solid

Analysis Batch: 236475

Spike LCS LCS %Rec. Added Limits **Analyte** Result Qualifier Unit %Rec Specific Conductance 84.0 85.1 umhos/cm 101 90 - 110

Lab Sample ID: MB 180-237425/2 **Client Sample ID: Method Blank**

Matrix: Solid

Analysis Batch: 237425

MB MB RL Analyte Result Qualifier **MDL** Unit D Prepared Analyzed Dil Fac Specific Conductance 1.0 02/12/18 10:05 <1.0 umhos/cm

TestAmerica Pittsburgh

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

RL

1.0

RL

10

Client: KPRG and Associates, Inc.

TestAmerica Job 05:1741-74122-1

Client Sample ID: Lab Control Sample

Project/Site: Midwest Generation

Lab Sample ID: LCS 180-237425/1

Matrix: Solid

Analysis Batch: 237425

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Specific Conductance 84.0 85.0 umhos/cm 101 90 - 110

Spike

Added

84.0

Spike

Added

MB MB

<1.0

Result Qualifier

84.0

84.0

Lab Sample ID: MB 180-237553/2

Matrix: Solid

Analysis Batch: 237553

MB MB

Result Qualifier Analyte Specific Conductance <1.0

Lab Sample ID: LCS 180-237553/1 **Matrix: Solid**

Analysis Batch: 237553

Analyte

Specific Conductance

Lab Sample ID: MB 180-237752/2 **Matrix: Solid**

Analysis Batch: 237752

MB MB

Analyte Result Qualifier Specific Conductance <1.0

Lab Sample ID: LCS 180-237752/1

Matrix: Solid

Analysis Batch: 237752

Analyte

Specific Conductance Lab Sample ID: MB 180-237776/2

Matrix: Solid

Analysis Batch: 237776

Analyte

Specific Conductance

Lab Sample ID: LCS 180-237776/1 **Matrix: Solid**

Analysis Batch: 237776

Analyte Specific Conductance

Spike LCS LCS Added

RL

1.0

88.5

Result Qualifier

MDL Unit

umhos/cm

MDL Unit

LCS LCS

88.6

Result Qualifier

MDL Unit

LCS LCS

85.1

Result Qualifier

umhos/cm

Unit

Unit

umhos/cm

Unit umhos/cm %Rec 105

Prepared

%Rec. Limits 90 - 110

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Type: Total/NA

Prepared Analyzed Dil Fac 02/19/18 10:06

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

%Rec. Limits %Rec umhos/cm 105 90 - 110

Prepared

101

Client Sample ID: Method Blank

Analyzed

Prep Type: Total/NA

Dil Fac

Dil Fac

10

umhos/cm 02/16/18 08:07

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

%Rec. Limits %Rec

90 - 110 **Client Sample ID: Method Blank**

Prep Type: Total/NA

Analyzed

02/23/18 10:04

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

TestAmerica Pittsburgh

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Client: KPRG and Associates, Inc.

TestAmerica Job 05 1741

Project/Site: Midwest Generation

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

Lab Sample ID: MB 180-236785/2 Client Sample ID: Method Blank **Prep Type: Total/NA Matrix: Solid**

Analysis Batch: 236785

MB MB Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac D **Prepared Total Dissolved Solids** 10 02/13/18 10:45 <10 mg/L

Lab Sample ID: LCS 180-236785/1 Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 236785

Spike LCS LCS %Rec. Added Limits Analyte Result Qualifier Unit %Rec Total Dissolved Solids 339 388 mg/L 114 80 - 120

Lab Sample ID: MB 180-236788/2 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 236788

MB MB

Result Qualifier RL MDL Unit Dil Fac Analyte Prepared Analyzed **Total Dissolved Solids** <10 10 mg/L 02/13/18 11:04

Lab Sample ID: LCS 180-236788/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 236788

Spike LCS LCS %Rec. Added Result Qualifier Unit %Rec Limits **Total Dissolved Solids** 339 360 106 80 - 120 mg/L

Lab Sample ID: MB 180-237078/2 **Client Sample ID: Method Blank Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 237078

MR MR

Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac Prepared Total Dissolved Solids 10 02/15/18 14:59 <10 mg/L

Lab Sample ID: LCS 180-237078/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237078

Spike LCS LCS %Rec. Added Result Qualifier Analyte Unit D %Rec Limits **Total Dissolved Solids** 339 342 101 80 - 120 mg/L

Lab Sample ID: MB 180-237329/2 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237329

MB MB RL **MDL** Unit Analyte Result Qualifier Prepared Analyzed Dil Fac **Total Dissolved Solids** <10 10 mg/L 02/19/18 15:41

Lab Sample ID: LCS 180-237329/1

Matrix: Solid

Analysis Batch: 237329

LCS LCS Spike %Rec. Added Result Qualifier Analyte Unit D %Rec Limits **Total Dissolved Solids** 339 97 80 - 120 330 mg/L

TestAmerica Pittsburgh

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

10

Client: KPRG and Associates, Inc.

TestAmerica Job 05 1741

Project/Site: Midwest Generation

Lab Sample ID: MB 180-237940/2 Client Sample ID: Method Blank **Prep Type: Total/NA**

Matrix: Solid

Analysis Batch: 237940

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 02/26/18 14:33 Total Dissolved Solids 10 mg/L <10

Lab Sample ID: LCS 180-237940/1 Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 237940

LCS LCS Spike %Rec. Added Result Qualifier Limits Analyte Unit D %Rec 80 - 120 **Total Dissolved Solids** 339 338 mg/L 100

Lab Sample ID: MB 180-238055/2 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 238055

MB MB RL **MDL** Unit Analyte Result Qualifier

Prepared Analyzed Dil Fac **Total Dissolved Solids** <10 10 mg/L 02/27/18 15:07

Lab Sample ID: LCS 180-238055/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 238055

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits **Total Dissolved Solids** 339 360 mg/L 106 80 - 120

Lab Sample ID: 180-74122-13 DU Client Sample ID: AP 2-S - PH 13.0 **Prep Type: Leach**

Matrix: Solid

Analysis Batch: 236788

DU DU RPD Sample Sample Analyte Result Qualifier Result Qualifier Unit Limit Total Dissolved Solids 14000 13800 mg/L

Lab Sample ID: 180-74122-2 DU

Matrix: Solid

Analysis Batch: 237078

DU DU Sample Sample **RPD** Analyte Result Qualifier Result Qualifier Unit **RPD** Limit 13800 **Total Dissolved Solids** 14000 mg/L

Lab Sample ID: 180-74122-10 DU Client Sample ID: AP 3-S - PH 2.0 **Prep Type: Leach**

Matrix: Solid

Analysis Batch: 237940

Sample Sample DU DU **RPD** Result Qualifier Result Qualifier Analyte Unit RPD Limit Total Dissolved Solids 83000 83300 mg/L 0.8

Lab Sample ID: 180-74122-21 DU Client Sample ID: AP 2-S - PH 2.0

Matrix: Solid

Analysis Batch: 237940

DU DU **RPD** Sample Sample Analyte Result Qualifier Result Qualifier Unit ח RPD Limit **Total Dissolved Solids** 82000 79400 mg/L 10

TestAmerica Pittsburgh

Prep Type: Leach

Client Sample ID: AP 3-S - PH 13.0

Prep Type: Leach

Client: KPRG and Associates, Inc.

TestAmerica 1500 9b:1780-74122-1

Project/Site: Midwest Generation

Method: SM 2580B -	Reduction-Oxidation	(REDOX) Potential
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Lab Sample ID: LCS 180-236472/1 Matrix: Solid				Clien	t Sa	mple ID	: Lab Control Sample
							Prep Type: Total/NA
Analysis Batch: 236472	Spike	1.00	LCS				%Rec.
Analyte	Added	_	Qualifier	Unit	D	%Rec	Limits
Oxidation Reduction Potential		467	- Qualifier	millivolts		98	90 - 110
- Oxidation reduction relation	470	407		minvoito		30	00-110
Lab Sample ID: LCS 180-236472/36				Clien	t Saı	mple ID	: Lab Control Sample
Matrix: Solid							Prep Type: Total/NA
Analysis Batch: 236472							- 7F
•	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Oxidation Reduction Potential	475	463		millivolts		97	90 - 110
Lab Sample ID: LCS 180-237422/1				Clien	t Sai	mple ID	: Lab Control Sample
Matrix: Solid					. • •		Prep Type: Total/NA
Analysis Batch: 237422							
,	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Oxidation Reduction Potential	475	466	-	millivolts		98	90 - 110
Lab Sample ID: LCS 180-237550/1				Clien	t Sai	mple ID	: Lab Control Sample
Matrix: Solid							Prep Type: Total/NA
Analysis Batch: 237550							
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Oxidation Reduction Potential	475	469		millivolts		99	90 - 110
Lab Sample ID: LCS 180-237751/1				Clien	t Sai	mnle ID	: Lab Control Sample
Matrix: Solid				Onen	. Oai	iiipie ib	Prep Type: Total/NA
Analysis Batch: 237751							i top Type. Total/IV
Alialysis Datell. 201101							a. -

Lab Sample ID: LCS 180-237774/1

Matrix: Solid

Analyte

Analysis Batch: 237774

Oxidation Reduction Potential

7 , 0.0	Spike	LCS LC	s		%Rec.	
Analyte	Added	Result Qu	ualifier Unit	D %Rec	Limits	
Oxidation Reduction Potential	475	473	millivolts	100	90 - 110	

Spike

Added

475

LCS LCS

467

Result Qualifier Unit

millivolts

%Rec.

Limits

90 - 110

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

D %Rec

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 95.174 180-74122-1

HPLC/IC

Leach Batch: 236165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-2	AP 3-S - PH 13.0	Leach	Solid	1313	
180-74122-11	AP 3-S - NATURAL	Leach	Solid	1313	
180-74122-13	AP 2-S - PH 13.0	Leach	Solid	1313	
180-74122-22	AP 2-S - NATURAL	Leach	Solid	1313	

Analysis Batch: 236373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-11	AP 3-S - NATURAL	Leach	Solid	EPA 9056A	236165
180-74122-11	AP 3-S - NATURAL	Leach	Solid	EPA 9056A	236165
180-74122-22	AP 2-S - NATURAL	Leach	Solid	EPA 9056A	236165
180-74122-22	AP 2-S - NATURAL	Leach	Solid	EPA 9056A	236165
MB 180-236373/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-236373/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Analysis Batch: 236377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-2	AP 3-S - PH 13.0	Leach	Solid	EPA 9056A	236165
180-74122-13	AP 2-S - PH 13.0	Leach	Solid	EPA 9056A	236165
MB 180-236377/17	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-236377/16	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Leach Batch: 236722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-6	AP 3-S - PH 8.0	Leach	Solid	1313	
180-74122-7	AP 3-S - PH 7.0	Leach	Solid	1313	
180-74122-9	AP 3-S - PH 4.0	Leach	Solid	1313	
180-74122-17	AP 2-S - PH 8.0	Leach	Solid	1313	
180-74122-18	AP 2-S - PH 7.0	Leach	Solid	1313	
180-74122-20	AP 2-S - PH 4.0	Leach	Solid	1313	

Analysis Batch: 236732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-6	AP 3-S - PH 8.0	Leach	Solid	EPA 9056A	236722
180-74122-7	AP 3-S - PH 7.0	Leach	Solid	EPA 9056A	236722
180-74122-9	AP 3-S - PH 4.0	Leach	Solid	EPA 9056A	236722
180-74122-17	AP 2-S - PH 8.0	Leach	Solid	EPA 9056A	236722
180-74122-18	AP 2-S - PH 7.0	Leach	Solid	EPA 9056A	236722
180-74122-20	AP 2-S - PH 4.0	Leach	Solid	EPA 9056A	236722
MB 180-236732/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-236732/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Analysis Batch: 236891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-6	AP 3-S - PH 8.0	Leach	Solid	EPA 9056A	236722
180-74122-7	AP 3-S - PH 7.0	Leach	Solid	EPA 9056A	236722
180-74122-9	AP 3-S - PH 4.0	Leach	Solid	EPA 9056A	236722
180-74122-17	AP 2-S - PH 8.0	Leach	Solid	EPA 9056A	236722
180-74122-18	AP 2-S - PH 7.0	Leach	Solid	EPA 9056A	236722
180-74122-20	AP 2-S - PH 4.0	Leach	Solid	EPA 9056A	236722
MB 180-236891/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-236891/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 300 9D: 180-74122-1

Leach Batch: 237165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-3	AP 3-S - PH 12.0	Leach	Solid	1313	
180-74122-14	AP 2-S - PH 12.0	Leach	Solid	1313	

Leach Batch: 237381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-4	AP 3-S - PH 10.5	Leach	Solid	1313	<u> </u>
180-74122-10	AP 3-S - PH 2.0	Leach	Solid	1313	
180-74122-15	AP 2-S - PH 10.5	Leach	Solid	1313	
180-74122-21	AP 2-S - PH 2.0	Leach	Solid	1313	

Analysis Batch: 237598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-4	AP 3-S - PH 10.5	Leach	Solid	EPA 9056A	237381
180-74122-4	AP 3-S - PH 10.5	Leach	Solid	EPA 9056A	237381
180-74122-10	AP 3-S - PH 2.0	Leach	Solid	EPA 9056A	237381
180-74122-15	AP 2-S - PH 10.5	Leach	Solid	EPA 9056A	237381
180-74122-15	AP 2-S - PH 10.5	Leach	Solid	EPA 9056A	237381
180-74122-21	AP 2-S - PH 2.0	Leach	Solid	EPA 9056A	237381
MB 180-237598/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-237598/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Leach Batch: 237761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-8	AP 3-S - PH 5.5	Leach	Solid	1313	
180-74122-19	AP 2-S - PH 5.5	Leach	Solid	1313	

Analysis Batch: 237859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-3	AP 3-S - PH 12.0	Leach	Solid	EPA 9056A	237165
180-74122-3	AP 3-S - PH 12.0	Leach	Solid	EPA 9056A	237165
180-74122-8	AP 3-S - PH 5.5	Leach	Solid	EPA 9056A	237761
180-74122-14	AP 2-S - PH 12.0	Leach	Solid	EPA 9056A	237165
180-74122-19	AP 2-S - PH 5.5	Leach	Solid	EPA 9056A	237761
MB 180-237859/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-237859/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Metals

Leach Batch: 236165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-2	AP 3-S - PH 13.0	Leach	Solid	1313	 _
180-74122-11	AP 3-S - NATURAL	Leach	Solid	1313	
180-74122-13	AP 2-S - PH 13.0	Leach	Solid	1313	
180-74122-22	AP 2-S - NATURAL	Leach	Solid	1313	

Prep Batch: 236437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-11	AP 3-S - NATURAL	Leach	Solid	3010A	236165
180-74122-22	AP 2-S - NATURAL	Leach	Solid	3010A	236165
MB 180-236437/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-236437/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-236437/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 15: 180-74122-1

Metals (Continued)

Prep Batch: 236440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-2	AP 3-S - PH 13.0	Leach	Solid	3010A	236165
180-74122-13	AP 2-S - PH 13.0	Leach	Solid	3010A	236165
MB 180-236440/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-236440/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-236440/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

Leach Batch: 236722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-6	AP 3-S - PH 8.0	Leach	Solid	1313	
180-74122-7	AP 3-S - PH 7.0	Leach	Solid	1313	
180-74122-9	AP 3-S - PH 4.0	Leach	Solid	1313	
180-74122-17	AP 2-S - PH 8.0	Leach	Solid	1313	
180-74122-18	AP 2-S - PH 7.0	Leach	Solid	1313	
180-74122-20	AP 2-S - PH 4.0	Leach	Solid	1313	

Analysis Batch: 236729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-2	AP 3-S - PH 13.0	Leach	Solid	EPA 6020A	236440
180-74122-11	AP 3-S - NATURAL	Leach	Solid	EPA 6020A	236437
180-74122-13	AP 2-S - PH 13.0	Leach	Solid	EPA 6020A	236440
180-74122-22	AP 2-S - NATURAL	Leach	Solid	EPA 6020A	236437
MB 180-236437/1-A	Method Blank	Total/NA	Solid	EPA 6020A	236437
MB 180-236440/1-A	Method Blank	Total/NA	Solid	EPA 6020A	236440
LCS 180-236437/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	236437
LCS 180-236440/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	236440
LCSD 180-236437/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	236437
LCSD 180-236440/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	236440

Prep Batch: 236807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-6	AP 3-S - PH 8.0	Leach	Solid	3010A	236722
180-74122-7	AP 3-S - PH 7.0	Leach	Solid	3010A	236722
180-74122-9	AP 3-S - PH 4.0	Leach	Solid	3010A	236722
180-74122-17	AP 2-S - PH 8.0	Leach	Solid	3010A	236722
180-74122-18	AP 2-S - PH 7.0	Leach	Solid	3010A	236722
180-74122-20	AP 2-S - PH 4.0	Leach	Solid	3010A	236722
MB 180-236807/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-236807/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-236807/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

Analysis Batch: 236828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-2	AP 3-S - PH 13.0	Leach	Solid	EPA 6020A	236440
180-74122-11	AP 3-S - NATURAL	Leach	Solid	EPA 6020A	236437
180-74122-13	AP 2-S - PH 13.0	Leach	Solid	EPA 6020A	236440
180-74122-22	AP 2-S - NATURAL	Leach	Solid	EPA 6020A	236437
MB 180-236437/1-A	Method Blank	Total/NA	Solid	EPA 6020A	236437
MB 180-236440/1-A	Method Blank	Total/NA	Solid	EPA 6020A	236440
LCS 180-236437/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	236437
LCS 180-236440/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	236440
LCSD 180-236437/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	236437

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Metals (Continued)

Analysis	Batch:	236828	(Continued)	
Milaivoio	Daten.	230020	(Continued)	

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 180-236440/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	236440

Leach Batch: 237165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-3	AP 3-S - PH 12.0	Leach	Solid	1313	
180-74122-14	AP 2-S - PH 12.0	Leach	Solid	1313	

Analysis Batch: 237198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-6	AP 3-S - PH 8.0	Leach	Solid	EPA 6020A	236807
180-74122-17	AP 2-S - PH 8.0	Leach	Solid	EPA 6020A	236807
180-74122-18	AP 2-S - PH 7.0	Leach	Solid	EPA 6020A	236807
MB 180-236807/1-A	Method Blank	Total/NA	Solid	EPA 6020A	236807
LCS 180-236807/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	236807
LCSD 180-236807/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	236807

Prep Batch: 237311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-3	AP 3-S - PH 12.0	Leach	Solid	3010A	237165
180-74122-14	AP 2-S - PH 12.0	Leach	Solid	3010A	237165
MB 180-237311/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-237311/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-237311/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

Analysis Batch: 237323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-7	AP 3-S - PH 7.0	Leach	Solid	EPA 6020A	236807
180-74122-9	AP 3-S - PH 4.0	Leach	Solid	EPA 6020A	236807
180-74122-20	AP 2-S - PH 4.0	Leach	Solid	EPA 6020A	236807

Leach Batch: 237381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-4	AP 3-S - PH 10.5	Leach	Solid	1313	
180-74122-10	AP 3-S - PH 2.0	Leach	Solid	1313	
180-74122-15	AP 2-S - PH 10.5	Leach	Solid	1313	
180-74122-21	AP 2-S - PH 2.0	Leach	Solid	1313	

Prep Batch: 237537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-4	AP 3-S - PH 10.5	Leach	Solid	3010A	237381
180-74122-15	AP 2-S - PH 10.5	Leach	Solid	3010A	237381
MB 180-237537/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-237537/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-237537/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

Analysis Batch: 237590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-3	AP 3-S - PH 12.0	Leach	Solid	EPA 6020A	237311
180-74122-14	AP 2-S - PH 12.0	Leach	Solid	EPA 6020A	237311
MB 180-237311/1-A	Method Blank	Total/NA	Solid	EPA 6020A	237311
LCS 180-237311/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	237311

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TestAmerica Job 95.174

Metals (Continued)

Analy	/sis	Batch:	237590	(Continued)	١
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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 180-237311/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	237311

Analysis Batch: 237713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-3	AP 3-S - PH 12.0	Leach	Solid	EPA 6020A	237311
180-74122-14	AP 2-S - PH 12.0	Leach	Solid	EPA 6020A	237311
MB 180-237311/1-A	Method Blank	Total/NA	Solid	EPA 6020A	237311
LCS 180-237311/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	237311
LCSD 180-237311/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	237311

Leach Batch: 237761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-8	AP 3-S - PH 5.5	Leach	Solid	1313	
180-74122-19	AP 2-S - PH 5.5	Leach	Solid	1313	

Prep Batch: 237767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-8	AP 3-S - PH 5.5	Leach	Solid	3010A	237761
180-74122-10	AP 3-S - PH 2.0	Leach	Solid	3010A	237381
180-74122-19	AP 2-S - PH 5.5	Leach	Solid	3010A	237761
180-74122-21	AP 2-S - PH 2.0	Leach	Solid	3010A	237381
MB 180-237767/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-237767/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-237767/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

Analysis Batch: 237821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-4	AP 3-S - PH 10.5	Leach	Solid	EPA 6020A	237537
180-74122-15	AP 2-S - PH 10.5	Leach	Solid	EPA 6020A	237537
MB 180-237537/1-A	Method Blank	Total/NA	Solid	EPA 6020A	237537
LCS 180-237537/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	237537
LCSD 180-237537/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	237537

Analysis Batch: 237942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-10	AP 3-S - PH 2.0	Leach	Solid	EPA 6020A	237767
180-74122-21	AP 2-S - PH 2.0	Leach	Solid	EPA 6020A	237767
MB 180-237767/1-A	Method Blank	Total/NA	Solid	EPA 6020A	237767
LCS 180-237767/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	237767
LCSD 180-237767/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	237767

Analysis Batch: 238052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-4	AP 3-S - PH 10.5	Leach	Solid	EPA 6020A	237537
180-74122-8	AP 3-S - PH 5.5	Leach	Solid	EPA 6020A	237767
180-74122-10	AP 3-S - PH 2.0	Leach	Solid	EPA 6020A	237767
180-74122-15	AP 2-S - PH 10.5	Leach	Solid	EPA 6020A	237537
180-74122-19	AP 2-S - PH 5.5	Leach	Solid	EPA 6020A	237767
180-74122-21	AP 2-S - PH 2.0	Leach	Solid	EPA 6020A	237767
MB 180-237537/1-A	Method Blank	Total/NA	Solid	EPA 6020A	237537
MB 180-237767/1-A	Method Blank	Total/NA	Solid	EPA 6020A	237767

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Analysis Batch: 238052 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-237537/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	237537
LCS 180-237767/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	237767
LCSD 180-237537/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	237537
LCSD 180-237767/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	237767

General Chemistry

Analysis Batch: 234952

Lab Sample ID 180-74122-1	Client Sample ID AP 3-S - PRETEST	Prep Type Total/NA	Matrix Solid	Method 2540G	Prep Batch
180-74122-12	AP 2-S - PRETEST	Total/NA	Solid	2540G	
180-74122-12 DU	AP 2-S - PRETEST	Total/NA	Solid	2540G	

Analysis Batch: 235859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-23	AP 3-S - AIR DIED	Total/NA	Solid	2540G	
180-74122-24	AP 2-S - AIR DRIED	Total/NA	Solid	2540G	
180-74122-23 DU	AP 3-S - AIR DIED	Total/NA	Solid	2540G	

Leach Batch: 236165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-1	AP 3-S - PRETEST	Leach	Solid	1313	
180-74122-2	AP 3-S - PH 13.0	Leach	Solid	1313	
180-74122-11	AP 3-S - NATURAL	Leach	Solid	1313	
180-74122-12	AP 2-S - PRETEST	Leach	Solid	1313	
180-74122-13	AP 2-S - PH 13.0	Leach	Solid	1313	
180-74122-22	AP 2-S - NATURAL	Leach	Solid	1313	
180-74122-2 DU	AP 3-S - PH 13.0	Leach	Solid	1313	
180-74122-13 DH	AP 2-S - PH 13.0	l each	Solid	1313	

Analysis Batch: 236465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-1	AP 3-S - PRETEST	Leach	Solid	EPA 9040C	236165
180-74122-2	AP 3-S - PH 13.0	Leach	Solid	EPA 9040C	236165
180-74122-11	AP 3-S - NATURAL	Leach	Solid	EPA 9040C	236165
180-74122-12	AP 2-S - PRETEST	Leach	Solid	EPA 9040C	236165
180-74122-13	AP 2-S - PH 13.0	Leach	Solid	EPA 9040C	236165
180-74122-22	AP 2-S - NATURAL	Leach	Solid	EPA 9040C	236165
LCS 180-236465/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	
LCS 180-236465/47	Lab Control Sample	Total/NA	Solid	EPA 9040C	

Analysis Batch: 236472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-2	AP 3-S - PH 13.0	Leach	Solid	SM 2580B	236165
180-74122-11	AP 3-S - NATURAL	Leach	Solid	SM 2580B	236165
180-74122-13	AP 2-S - PH 13.0	Leach	Solid	SM 2580B	236165
180-74122-22	AP 2-S - NATURAL	Leach	Solid	SM 2580B	236165
LCS 180-236472/1	Lab Control Sample	Total/NA	Solid	SM 2580B	
LCS 180-236472/36	Lab Control Sample	Total/NA	Solid	SM 2580B	

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Analysis Batch: 236475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-2	AP 3-S - PH 13.0	Leach	Solid	SM 2510B	236165
180-74122-11	AP 3-S - NATURAL	Leach	Solid	SM 2510B	236165
180-74122-13	AP 2-S - PH 13.0	Leach	Solid	SM 2510B	236165
180-74122-22	AP 2-S - NATURAL	Leach	Solid	SM 2510B	236165
MB 180-236475/2	Method Blank	Total/NA	Solid	SM 2510B	
MB 180-236475/43	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-236475/1	Lab Control Sample	Total/NA	Solid	SM 2510B	
LCS 180-236475/42	Lab Control Sample	Total/NA	Solid	SM 2510B	

Leach Batch: 236722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-6	AP 3-S - PH 8.0	Leach	Solid	1313	
180-74122-7	AP 3-S - PH 7.0	Leach	Solid	1313	
180-74122-9	AP 3-S - PH 4.0	Leach	Solid	1313	
180-74122-17	AP 2-S - PH 8.0	Leach	Solid	1313	
180-74122-18	AP 2-S - PH 7.0	Leach	Solid	1313	
180-74122-20	AP 2-S - PH 4.0	Leach	Solid	1313	

Analysis Batch: 236785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-11	AP 3-S - NATURAL	Leach	Solid	SM 2540C	236165
180-74122-22	AP 2-S - NATURAL	Leach	Solid	SM 2540C	236165
MB 180-236785/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-236785/1	Lab Control Sample	Total/NA	Solid	SM 2540C	

Analysis Batch: 236788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-13	AP 2-S - PH 13.0	Leach	Solid	SM 2540C	236165
MB 180-236788/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-236788/1	Lab Control Sample	Total/NA	Solid	SM 2540C	
180-74122-13 DU	AP 2-S - PH 13.0	Leach	Solid	SM 2540C	236165

Analysis Batch: 237078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-2	AP 3-S - PH 13.0	Leach	Solid	SM 2540C	236165
180-74122-6	AP 3-S - PH 8.0	Leach	Solid	SM 2540C	236722
180-74122-7	AP 3-S - PH 7.0	Leach	Solid	SM 2540C	236722
180-74122-9	AP 3-S - PH 4.0	Leach	Solid	SM 2540C	236722
180-74122-17	AP 2-S - PH 8.0	Leach	Solid	SM 2540C	236722
180-74122-18	AP 2-S - PH 7.0	Leach	Solid	SM 2540C	236722
180-74122-20	AP 2-S - PH 4.0	Leach	Solid	SM 2540C	236722
MB 180-237078/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-237078/1	Lab Control Sample	Total/NA	Solid	SM 2540C	
180-74122-2 DU	AP 3-S - PH 13.0	Leach	Solid	SM 2540C	236165

Leach Batch: 237107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-1	AP 3-S - PRETEST	Leach	Solid	1313	
180-74122-1	AP 3-S - PRETEST	Leach	Solid	1313	
180-74122-1	AP 3-S - PRETEST	Leach	Solid	1313	
180-74122-1	AP 3-S - PRETEST	Leach	Solid	1313	

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Leach Batch: 237107 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-12	AP 2-S - PRETEST	Leach	Solid	1313	
180-74122-12	AP 2-S - PRETEST	Leach	Solid	1313	
180-74122-12	AP 2-S - PRETEST	Leach	Solid	1313	
180-74122-12	AP 2-S - PRETEST	Leach	Solid	1313	

Leach Batch: 237165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-3	AP 3-S - PH 12.0	Leach	Solid	1313	
180-74122-14	AP 2-S - PH 12.0	Leach	Solid	1313	

Analysis Batch: 237329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-3	AP 3-S - PH 12.0	Leach	Solid	SM 2540C	237165
180-74122-14	AP 2-S - PH 12.0	Leach	Solid	SM 2540C	237165
MB 180-237329/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-237329/1	Lab Control Sample	Total/NA	Solid	SM 2540C	

Analysis Batch: 237380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-1	AP 3-S - PRETEST	Leach	Solid	EPA 9040C	237107
180-74122-1	AP 3-S - PRETEST	Leach	Solid	EPA 9040C	237107
180-74122-1	AP 3-S - PRETEST	Leach	Solid	EPA 9040C	237107
180-74122-1	AP 3-S - PRETEST	Leach	Solid	EPA 9040C	237107
180-74122-6	AP 3-S - PH 8.0	Leach	Solid	EPA 9040C	236722
180-74122-7	AP 3-S - PH 7.0	Leach	Solid	EPA 9040C	236722
180-74122-9	AP 3-S - PH 4.0	Leach	Solid	EPA 9040C	236722
180-74122-12	AP 2-S - PRETEST	Leach	Solid	EPA 9040C	237107
180-74122-12	AP 2-S - PRETEST	Leach	Solid	EPA 9040C	237107
180-74122-12	AP 2-S - PRETEST	Leach	Solid	EPA 9040C	237107
180-74122-12	AP 2-S - PRETEST	Leach	Solid	EPA 9040C	237107
180-74122-17	AP 2-S - PH 8.0	Leach	Solid	EPA 9040C	236722
180-74122-18	AP 2-S - PH 7.0	Leach	Solid	EPA 9040C	236722
180-74122-20	AP 2-S - PH 4.0	Leach	Solid	EPA 9040C	236722
LCS 180-237380/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	

Leach Batch: 237381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-4	AP 3-S - PH 10.5	Leach	Solid	1313	
180-74122-10	AP 3-S - PH 2.0	Leach	Solid	1313	
180-74122-15	AP 2-S - PH 10.5	Leach	Solid	1313	
180-74122-21	AP 2-S - PH 2.0	Leach	Solid	1313	
180-74122-10 DU	AP 3-S - PH 2.0	Leach	Solid	1313	
180-74122-21 DU	AP 2-S - PH 2.0	Leach	Solid	1313	

Analysis Batch: 237422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-6	AP 3-S - PH 8.0	Leach	Solid	SM 2580B	236722
180-74122-7	AP 3-S - PH 7.0	Leach	Solid	SM 2580B	236722
180-74122-9	AP 3-S - PH 4.0	Leach	Solid	SM 2580B	236722
180-74122-17	AP 2-S - PH 8.0	Leach	Solid	SM 2580B	236722
180-74122-18	AP 2-S - PH 7.0	Leach	Solid	SM 2580B	236722

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General Chemistry (Continued)

Analysis Batch: 237422 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-20	AP 2-S - PH 4.0	Leach	Solid	SM 2580B	236722
LCS 180-237422/1	Lab Control Sample	Total/NA	Solid	SM 2580B	

Analysis Batch: 237425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-6	AP 3-S - PH 8.0	Leach	Solid	SM 2510B	236722
180-74122-7	AP 3-S - PH 7.0	Leach	Solid	SM 2510B	236722
180-74122-9	AP 3-S - PH 4.0	Leach	Solid	SM 2510B	236722
180-74122-17	AP 2-S - PH 8.0	Leach	Solid	SM 2510B	236722
180-74122-18	AP 2-S - PH 7.0	Leach	Solid	SM 2510B	236722
180-74122-20	AP 2-S - PH 4.0	Leach	Solid	SM 2510B	236722
MB 180-237425/2	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-237425/1	Lab Control Sample	Total/NA	Solid	SM 2510B	

Analysis Batch: 237531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-4	AP 3-S - PH 10.5	Leach	Solid	EPA 9040C	237381
180-74122-10	AP 3-S - PH 2.0	Leach	Solid	EPA 9040C	237381
180-74122-15	AP 2-S - PH 10.5	Leach	Solid	EPA 9040C	237381
180-74122-21	AP 2-S - PH 2.0	Leach	Solid	EPA 9040C	237381
LCS 180-237531/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	

Analysis Batch: 237550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-4	AP 3-S - PH 10.5	Leach	Solid	SM 2580B	237381
180-74122-10	AP 3-S - PH 2.0	Leach	Solid	SM 2580B	237381
180-74122-15	AP 2-S - PH 10.5	Leach	Solid	SM 2580B	237381
180-74122-21	AP 2-S - PH 2.0	Leach	Solid	SM 2580B	237381
LCS 180-237550/1	Lab Control Sample	Total/NA	Solid	SM 2580B	

Analysis Batch: 237553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-4	AP 3-S - PH 10.5	Leach	Solid	SM 2510B	237381
180-74122-10	AP 3-S - PH 2.0	Leach	Solid	SM 2510B	237381
180-74122-15	AP 2-S - PH 10.5	Leach	Solid	SM 2510B	237381
180-74122-21	AP 2-S - PH 2.0	Leach	Solid	SM 2510B	237381
MB 180-237553/2	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-237553/1	Lab Control Sample	Total/NA	Solid	SM 2510B	

Leach Batch: 237733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-1	AP 3-S - PRETEST	Leach	Solid	1313	
180-74122-1	AP 3-S - PRETEST	Leach	Solid	1313	
180-74122-12	AP 2-S - PRETEST	Leach	Solid	1313	
180-74122-12	AP 2-S - PRETEST	Leach	Solid	1313	

Analysis Batch: 237737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-1	AP 3-S - PRETEST	Leach	Solid	EPA 9040C	237733
180-74122-1	AP 3-S - PRETEST	Leach	Solid	EPA 9040C	237733
180-74122-3	AP 3-S - PH 12.0	Leach	Solid	EPA 9040C	237165

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General Chemistry (Continued)

Analysis Batch: 237737 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-12	AP 2-S - PRETEST	Leach	Solid	EPA 9040C	237733
180-74122-12	AP 2-S - PRETEST	Leach	Solid	EPA 9040C	237733
180-74122-14	AP 2-S - PH 12.0	Leach	Solid	EPA 9040C	237165
LCS 180-237737/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	

Analysis Batch: 237751

Lab Sample ID 180-74122-3	Client Sample ID AP 3-S - PH 12.0	Prep Type Leach	Matrix Solid	Method SM 2580B	Prep Batch 237165
180-74122-14	AP 2-S - PH 12.0	Leach	Solid	SM 2580B	237165
LCS 180-237751/1	Lab Control Sample	Total/NA	Solid	SM 2580B	

Analysis Batch: 237752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-3	AP 3-S - PH 12.0	Leach	Solid	SM 2510B	237165
180-74122-14	AP 2-S - PH 12.0	Leach	Solid	SM 2510B	237165
MB 180-237752/2	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-237752/1	Lab Control Sample	Total/NA	Solid	SM 2510B	

Leach Batch: 237761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-8	AP 3-S - PH 5.5	Leach	Solid	1313	
180-74122-19	AP 2-S - PH 5.5	Leach	Solid	1313	

Analysis Batch: 237772

Lab S	ample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74	4122-8	AP 3-S - PH 5.5	Leach	Solid	EPA 9040C	237761
180-74	4122-19	AP 2-S - PH 5.5	Leach	Solid	EPA 9040C	237761
LCS 1	80-237772/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	

Analysis Batch: 237774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-8	AP 3-S - PH 5.5	Leach	Solid	SM 2580B	237761
180-74122-19	AP 2-S - PH 5.5	Leach	Solid	SM 2580B	237761
LCS 180-237774/1	Lab Control Sample	Total/NA	Solid	SM 2580B	

Analysis Batch: 237776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-8	AP 3-S - PH 5.5	Leach	Solid	SM 2510B	237761
180-74122-19	AP 2-S - PH 5.5	Leach	Solid	SM 2510B	237761
MB 180-237776/2	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-237776/1	Lab Control Sample	Total/NA	Solid	SM 2510B	

Analysis Batch: 237940

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-4	AP 3-S - PH 10.5	Leach	Solid	SM 2540C	237381
180-74122-10	AP 3-S - PH 2.0	Leach	Solid	SM 2540C	237381
180-74122-15	AP 2-S - PH 10.5	Leach	Solid	SM 2540C	237381
180-74122-21	AP 2-S - PH 2.0	Leach	Solid	SM 2540C	237381
MB 180-237940/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-237940/1	Lab Control Sample	Total/NA	Solid	SM 2540C	
180-74122-10 DU	AP 3-S - PH 2.0	Leach	Solid	SM 2540C	237381

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 15:174

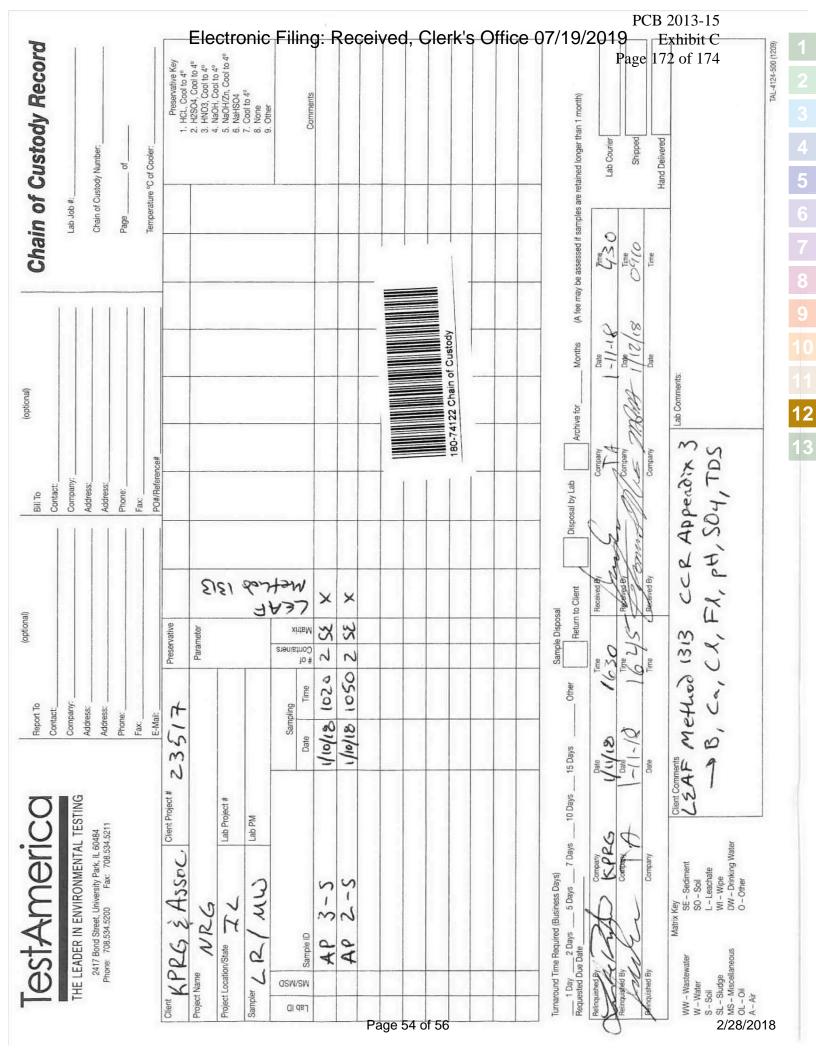
General Chemistry (Continued)

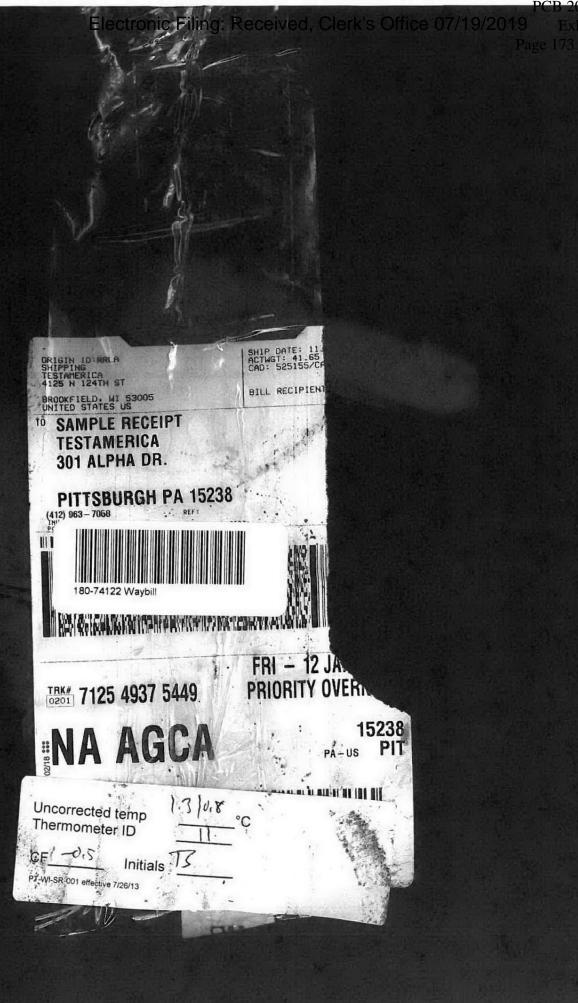
Analysis Batch: 237940 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-21 DU	AP 2-S - PH 2.0	Leach	Solid	SM 2540C	237381

Analysis Batch: 238055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74122-8	AP 3-S - PH 5.5	Leach	Solid	SM 2540C	237761
180-74122-19	AP 2-S - PH 5.5	Leach	Solid	SM 2540C	237761
MB 180-238055/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-238055/1	Lab Control Sample	Total/NA	Solid	SM 2540C	





Login Sample Receipt Checklist

Client: KPRG and Associates, Inc. Job Number: 180-74122-1

List Source: TestAmerica Pittsburgh Login Number: 74122

List Number: 1 Creator: Neri, Tom

orouton non, rom		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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 ampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
OC is filled out in ink and legible.	True	
OC is filled out with all pertinent information.	True	
the Field Sampler's name present on COC?	True	
here are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate ITs)	True	
ample containers have legible labels.	True	
Containers are not broken or leaking.	True	
ample collection date/times are provided.	True	
ppropriate sample containers are used.	True	
ample bottles are completely filled.	True	
ample Preservation Verified.	True	
here 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	
Iultiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica Pittsburgh

Exhibit D

PRG

ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

CCR COMPLIANCE ANNUAL GROUNDWATER MONITORING and CORRECTIVE ACTION REPORT – 2018 ASH BY-PASS BASIN AND ASH SURGE BASIN

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

Prepared By: KPRG and Associates, Inc.

14665 West Lisbon Road, Suite 1A

Brookfield, WI 53005

January 31, 2019

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- B Alternate Source Demonstration April 12, 2018

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1.0 INTRODUCTION

Based on the results of the initial detection monitoring statistical evaluation performed in January 2018, an Alternate Source Demonstration (ASD) was performed for the Ash Surge Basin (ASB) and Ash By-pass Basin (ABB). The ASD was completed on April 12, 2018, in accordance with 40 CFR 257.94(e)(2) and concluded that based upon statistically significant increases (SSIs) in various detection monitoring parameters, the ASB and ABB monitoring would transition from detection monitoring to assessment monitoring in accordance with 40 CFR 257.95.

The Assessment Monitoring requirements in accordance with the Federal Register, Environmental Protection Agency, 40 CFR Parts 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 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 ASB and the ABB. The monitoring well network around these ponds consists of monitoring wells (MW-01 [upgradient], MW-08, MW-09 [upgradient], MW-11, MW-12, MW-15, MW-17, MW-18 and MW-19 [upgradient]) as shown on Figure 1.

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 Surge Basin and Ash By-pass Basin. The FAB monitoring results are discussed under separate cover.

The 2017 CCR Compliance Annual Groundwater Monitoring and Corrective Action Report was submitted on January 24, 2018. This annual report covers the work performed relative to CCR groundwater monitoring from January 1, 2018 through the end of 2018 for the ASB and ABB. It does not duplicate information or activities previously reported for 2017. It is prepared in accordance with Section 257.90(e)(1-5) and summarizes the sampling procedures used, provides an evaluation of groundwater flow conditions, summarizes the analytical data generated, provides a discussion of an initial statistical evaluation summary completed for Appendix III and IV parameters, and summarizes the results of an alternate source demonstration completed at the site.

2.0 FIELD PROCEDURES AND GROUNDWATER FLOW EVALUATION

2.1 Field Procedures

As previously noted, the CCR groundwater monitoring network around the ASB and ABB consists of monitoring wells (MW-01 [upgradient], MW-08, MW-09 [upgradient], MW-11, MW-12, MW-15, MW-17, MW-18 and MW-19 [upgradient]) as shown on Figure 1. As part of sampling procedures, the integrity of all monitoring wells was inspected and water levels obtained using an electronic water level meter (see summary of water level discussion below). All wells were found in generally good condition.

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

2.2 Groundwater Flow Evaluation

Water level data measurements were obtained from monitoring wells during each round of groundwater sampling. A complete round of water levels was collected prior to initiating sampling, and the water level data are summarized in Table 1. It is noted that water levels were also concurrently measured at other monitoring well locations in the area that are not part of the CCR monitoring network for the ASB and ABB. The full set of water levels were used to generate a groundwater flow map for each sampling event. It is also noted that CCR monitoring wells MW-08, MW-12, MW-15 and MW-17 are screened within a shallow, localized, saturated clay/silt unit which is underlain by a more extensive sand unit. The remaining monitoring wells, have deeper screens, within the more extensive sand unit. The water levels from wells screened in the clay/silt unit and the water levels from monitoring wells screened within the sand unit were evaluated separately and used to generate groundwater flow maps for each unit. These maps are provided on Figures 2 through 5.

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

$$V_s = \underline{Kdh}_{n_e dl}$$
, 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)

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The average hydraulic conductivities of 3.28 x 10⁻⁷ ft/sec (silt/clay unit) in Table 2 was estimated from literature (Freeze and Cherry, 1979). The hydraulic conductivity of 3.81 x 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 porosities of the silt/clay materials (0.40) and 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 2018 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 May 2018 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 July 12, 2018 (see discussion in Section 4.1).

In accordance with Section 257.95(d)(1), within 90 days of obtaining the initial assessment results, the 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 August 2018.

The analytical data from the ABB and ASB assessment monitoring groundwater sampling for Appendix III and IV parameters are provided in Tables 4 and 5, respectively. Table 4 includes Prediction Limits (PLs) for Appendix III parameters and Table 5 includes Groundwater Protection Standards (GWPS) for detected Appendix IV constituents (see discussion in Section 4.1). Both tables include the sample dates and whether the specific well is considered upgradient or downgradient relative to groundwater flow and the regulated unit(s). All duplicate values were within an acceptable range. The analytical data packages from these sampling events are provided in Appendix A.

3.3 Current Status

The ASB and ABB were transitioned from detection monitoring to assessment monitoring in April, 2018 and currently remain in assessment monitoring.

4.0 OTHER REQUIRED SUBMITTALS

4.1 <u>Initial Statistical Evaluation Summaries</u>

The first eight rounds of Appendix III detection monitoring data from established upgradient wells MW-01 and MW-09 were statistically evaluated to establish background water quality in accordance with procedures defined in CCR Compliance Statistical Approach for Groundwater Data Evaluation, Midwest Generation Powerton Generating Station dated October 10, 2017. This included outlier testing, spatial/temporal variability testing, distributional testing, and the establishment of Prediction Limits for all Appendix III compounds to which the ninth round of groundwater detection monitoring data were compared to determine whether there may be a SSI for a specific compound at each well location. The Statistical Evaluation Summary Dated January 12, 2018 was prepared by KPRG and Associates, Inc. It is noted that at the time of the initial statistical data evaluation, a full eight rounds of groundwater data was not available for upgradient monitoring well MW-19 which was installed at a later date than the original monitoring wells. Since that time the full set of eight rounds of sampling was completed for this well and PLs were established and are included in the summary data tables referenced in Section 3.2.

The completed initial detection monitoring statistical evaluations determined that there were potential SSIs in various downgradient monitoring wells relative to established background for all seven Appendix III parameters, not all parameters were above SSIs at all well locations. It was recommended to complete an ASD in accordance with Section 257.94(e)(2) of the CCR Rule to determine whether these SSIs may be associated with an actual release from the regulated unit(s) or if another potential source in the vicinity of the ash ponds may be affecting the local groundwater quality. The results of the ASD are discussed in Section 4.2 of this report.

Based on the results of the ASD (see Section 4.2), the site 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, cadmium, cobalt, fluoride, lead, lithium, mercury, molybdenum, radium 226/228, selenium and thallium. 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, MW-09 and MW-19 were statistically evaluated to establish the applicable site specific Groundwater Protection Standards

(GWPSs) for the twelve 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 Powerton Generating Station dated December 26, 2018.

The completed assessment monitoring statistical evaluations and data comparison to the established GWPSs for the site indicated the following detection above the established GWPSs: arsenic at three well locations MW-11, MW-12 and MW-17, barium at well location MW-11 (August sampling only), selenium at well location MW-15 and molybdenum (May sampling only) and thallium at well location MW-17. In accordance with the CCR Rule requirements, it was recommended that a notification of the Appendix IV parameters that were found to be above the GWPSs be completed and the notification placed in the facilities operating record. It was also recommended that an ASD be completed in accordance with provisions in Section 257.95(g)(ii) to determine whether these SSIs may be associated with an actual release from the regulated unit(s) or if another potential source in the vicinity of the ash ponds may be affecting the local groundwater quality.

4.2 Alternate Source Demonstration

An ASD for SSIs of Appendix III detection monitoring parameters was completed April 12, 2018 in accordance with Section 257.94(e)(2) for the Powerton Generating Station ASB and ABB. As required under section 257.94(e)(2) a full copy of the ASD is provided in Appendix B. Ash and water samples were collected from each of the two ponds (ASB and ABB) 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 the ASB is not the source of downgradient monitoring well SSIs and that there is an alternate source(s) of impacts. However, the data relative to the ABB was not as definitive and potential contribution of leachate from the ABB to the local downgradient groundwater impacts could not be ruled out. Since the monitoring well network for the ABB and the ASB are somewhat integrated, it was recommended that the ASB and ABB be shifted from detection monitoring into assessment monitoring in accordance with Section 257.95 of the CCR Rule.

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5.0 SUMMARY/CONCLUSIONS AND RECOMMENDATIONS

The assessment monitoring requirements in accordance with the CCR rule are being successfully met. An initial ASD was completed which determined that potential contribution of leachate from the ABB could not be ruled out for SSIs of various Appendix III parameters. It was recommended that the regulated units be transitioned from detection monitoring to assessment monitoring based on these conclusions. This triggered an initial round of assessment monitoring sampling for all Appendix III and IV for parameters. CCR wells were then resampled for all parameters in Appendix III and all constituents in Appendix IV that were detected in the initial assessment sampling round. The Statistical Evaluation Summary dated December 26, 2018 established GWPSs for the twelve detected Appendix IV parameters. Four wells showed various parameter concentrations above the established GWPSs. Midwest Generation is in the process of completing another ASD for these parameters in accordance with provisions in Section 257.95(g)(ii) of the CCR Rule. Once the ASD is completed, appropriate recommendations will be made regarding the next steps that should be taken to maintain compliance with the CCR Rule.

Exhibit D

6.0 REFERENCES

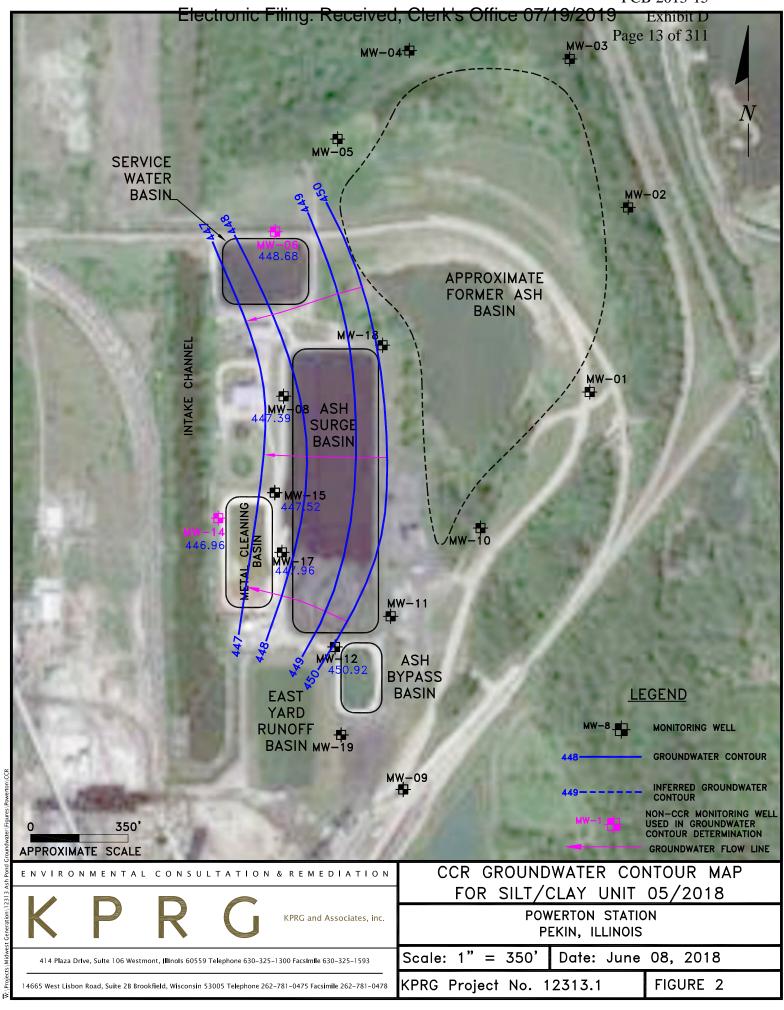
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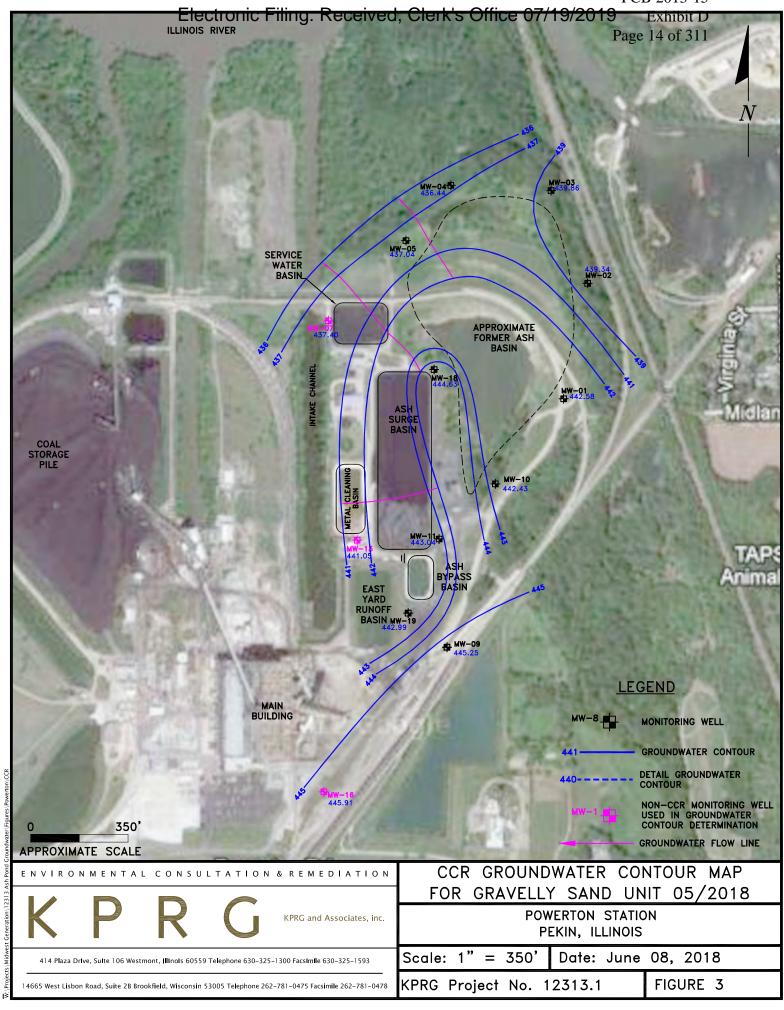
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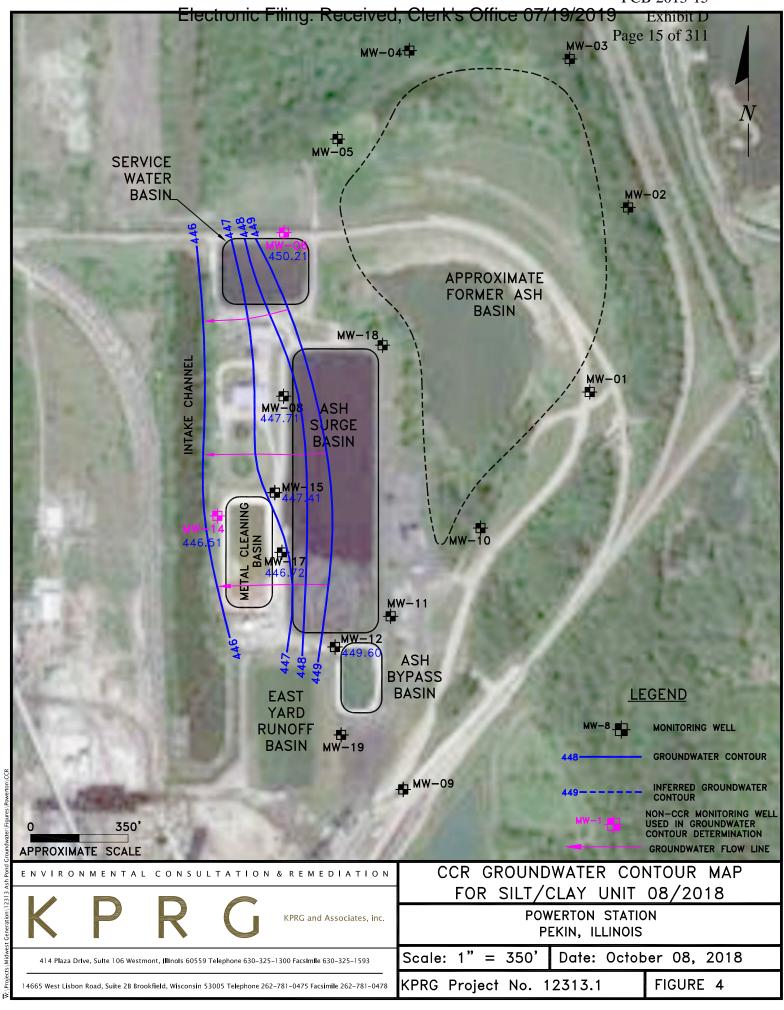
FIGURES

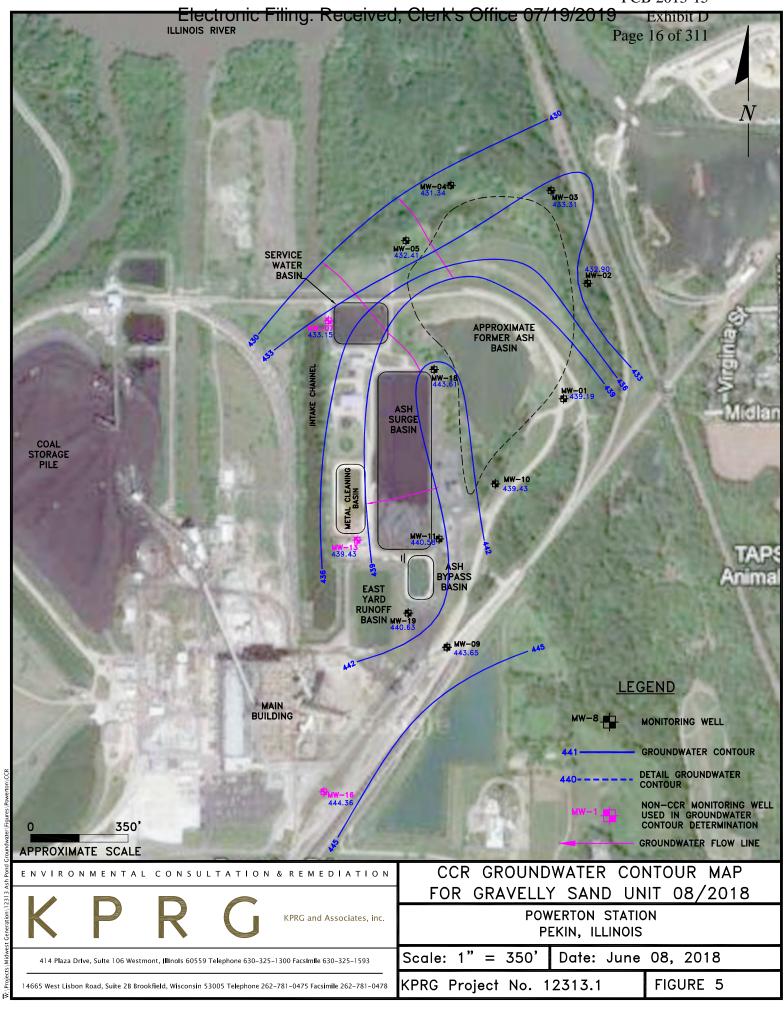
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TABLES

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Well ID	Date	Top of Casing Elevation (ft above MSL)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft above MSL)
	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
MW-01	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
	11/16/2015	471.75	26.06	445.69
	2/22/2016	471.75	23.99	447.76
	5/16/2016	471.75	25.48	446.27
	8/15/2016	471.75	23.61	448.14
	11/14/2016	471.75	24.31	447.44
	2/13/2017	471.75	23.97	447.78
MW-08	5/1/2017	471.75	23.28	448.47
	6/20/2017	471.75	23.31	448.44
	8/29/2017	471.75	24.52	447.23
	11/8/2017	471.75	25.27	446.48
	5/17/2018	471.75	24.36	447.39
	8/8/2018	471.75	24.04	447.71
	10/31/2018	471.75	24.92	446.83
	11/16/2015	469.14	26.07	443.07
	2/22/2016	469.14	22.83	446.31
	5/16/2016	469.14	23.06	446.08
	8/15/2016	469.14	24.50	444.64
	11/14/2016	469.14	24.33	444.81
	2/13/2017	469.14	23.43	445.71
MW-09	5/1/2017	469.14	20.77	448.37
	6/20/2017	469.14	22.15	446.99
	8/25/2017	469.14	24.79	444.35
	11/8/2017	469.14	25.74	443.40
	5/16/2018	469.14	23.89	445.25
	8/8/2018	469.14	25.49	443.65
	11/1/2018	469.14	26.02	443.12
	11/16/2015	471.62	31.67	439.95
	2/22/2016	471.62	28.34	443.28
	5/16/2016	471.62	27.11	444.51
	8/15/2016	471.62	29.64	441.98
	11/14/2016	471.62	29.19	442.43
	2/13/2017	471.62	27.49	444.13
MW-11	5/1/2017	471.62	24.34	447.28
	6/20/2017	471.62	26.94	444.68
	8/29/2017	471.62	30.42	441.20
	11/9/2017	471.62	30.27	441.35
	5/16/2018	471.62	28.58	443.04
	8/9/2018	471.62	31.04	440.58
	11/1/2018	471.62	30.82	440.80

Well ID	Date	Top of Casing Elevation	Depth to Groundwater	Groundwater Elevation
		(ft above MSL)	(ft below TOC)	(ft above MSL)
	11/16/2015	473.38	24.48	448.90
	2/22/2016	473.38	21.41	451.97
	5/16/2016	473.38	22.94	450.44
	8/15/2016	473.38	23.85	449.53
	11/14/2016	473.38	23.89	449.49
	2/13/2017	473.38	21.93	451.45
MW-12	5/1/2017	473.38	22.26	451.12
	6/20/2017	473.38	22.76	450.62
	8/26/2017	473.38	23.92	449.46
	11/10/2017	473.38	24.29	449.09
	5/16/2018	473.38	22.46	450.92
	8/9/2018	473.38	23.78	449.60
	11/1/2018	473.38	23.74	449.64
	11/16/2015	471.37	25.33	446.04
	2/22/2016	471.37	22.91	448.46
	5/16/2016	471.37	24.71	446.66
	8/15/2016	471.37	23.45	447.92
	11/14/2016	471.37	23.94	447.43
	2/13/2017	471.37	23.73	447.64
MW-15	5/1/2017	471.37	23.27	448.10
ĺ	6/20/2017	471.37	22.86	448.51
	8/29/2017	471.37	23.13	448.24
	11/10/2017	471.37	25.13	446.24
	5/17/2018	471.37	23.85	447.52
	8/9/2018	471.37	23.96	447.41
	10/31/2018	471.37	24.55	446.82
	11/16/2015	467.75	26.92	440.83
	2/22/2016	467.75	19.86	447.89
	5/16/2016	467.75	20.42	447.33
	8/15/2016	467.75	21.61	446.14
	11/14/2016	467.75	21.39	446.36
NOV 17	2/13/2017	467.75	19.66	448.09
MW-17	5/1/2017	467.75	18.78	448.97
	6/20/2017 8/29/2017	467.75 467.75	19.42 22.68	448.33 445.07
		467.75		443.07
	11/6/2017 5/14/2018	467.75	24.66 19.79	443.09
	8/6/2018	467.75	21.03	446.72
	10/29/2018 11/16/2015	467.75 469.28	21.98 28.42	445.77 440.86
	2/22/2016	469.28	27.96	441.32
	5/16/2016	469.28	25.57	443.71
	8/15/2016	469.28	27.86	441.42
	11/14/2016	469.28	27.39	441.89
	2/13/2017	469.28	25.06	444.22
MW-18	5/1/2017	469.28	22.49	446.79
	6/20/2017	469.28	24.97	444.31
	8/28/2017	469.28	27.30	441.98
	11/6/2017	469.28	26.33	442.95
	5/14/2018	469.28	24.65	444.63
	8/6/2018	469.28	25.67	443.61
	10/29/2018	469.28	25.79	443.49
	11/14/2016	465.07	22.65	442.42
	2/13/2017	465.07	21.27	443.80
	5/1/2017	465.07	18.39	446.68
	6/20/2017	465.07	20.44	444.63
MW-19	8/28/2017	465.07	23.60	441.47
1	11/9/2017	465.07	23.80	441.27
	5/14/2018	465.07	22.08	442.99
ĺ	8/6/2018	465.07	24.14	442.99
	10/29/2018	465.07		440.76
	10/27/2018	403.07	24.31	++U./0

MSL - Mean Sea Level TOC - Top of Casing

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

DATE	Screened Unit	Groundwater Flow Direction	Kavg (ft/sec)*	Average Hydraulic Gradient (ft/ft)	Porosity (unitless)**	Estimated Seepage Velocity (ft/day)
11/16/2015	Silt/clay	Westerly	3.280E-07	0.0093	0.4	0.001
11/16/2015	Sandy	North-Northwest	3.810E-03	0.0026	0.35	2.40
2/22/2016	Silt/clay	Westerly	3.280E-07	0.0098	0.4	0.001
2/22/2016	Sandy	North-Northwest	3.810E-03	0.0030	0.35	2.82
5/16/2016	Silt/clay	Westerly	3.280E-07	0.0124	0.4	0.001
5/16/2016	Sandy	North-Northwest	3.810E-03	0.0021	0.35	1.98
8/15/2016	Silt/clay	Westerly	3.280E-07	0.0093	0.4	0.001
8/15/2016	Sandy	North-Northwest	3.810E-03	0.0014	0.35	1.32
11/14/2016	Silt/clay	Westerly	3.280E-07	0.0083	0.4	0.001
11/14/2016	Sandy	North-Northwest	3.810E-03	0.0014	0.35	1.32
2/13/2017	Silt/clay	Westerly	3.280E-07	0.0091	0.4	0.001
2/13/2017	Sandy	Northeasterly - Northwesterly	3.810E-03	0.0049	0.35	4.61
5/1/2017	Silt/clay	Westerly	3.280E-07	0.0100	0.4	0.001
5/1/2017	Sandy	Northeasterly - Northwesterly	3.810E-03	0.0021	0.35	1.98
6/20/2017	Silt/clay	Westerly	3.280E-07	0.0088	0.4	0.001
6/20/2017	Sandy	Northeasterly - Northwesterly	3.810E-03	0.0057	0.35	5.36
8/25/2017	Silt/clay	Westerly	3.280E-07	0.0214	0.4	0.002
8/25/2017	Sandy	North-Northwest	3.810E-03	0.0174	0.35	16.37
11/8/2017	Silt/clay	Westerly	3.280E-07	0.0267	0.4	0.002
11/8/2017	Sandy	North-Northwest	3.810E-03	0.0157	0.35	14.77
5/17/2018	Silt/clay	Westerly	3.280E-07	0.0070	0.4	0.0005
5/17/2018	Sandy	North-Northwest	3.810E-03	0.0042	0.35	3.95
8/7/2018	Silt/clay	Westerly	3.280E-07	0.0263	0.4	0.002
8/7/2018	Sandy	North-Northwest	3.810E-03	0.0037	0.35	3.48

^{*} Kavg - 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 2018 - Powerton Generating Station Ash Bypass Basin & Ash Surge Basin

Well ID	Number of Groundwater Sampling Events	Dates of Groundwater Sampling Events	Detection Monitoring (D) versus Assessment Monitoring (A)
MW-01 (Upgradient)	2	5/17/2018	A
Wiw-or (Opgradient)	2	8/8/2018	A
MW-09 (Upgradient)	2	5/16/2018	A
W w -07 (Opgradient)	2	8/8/2018	A
MW-19 (Upgradient)	2	5/14/2018	A
W W - 19 (Opgradient)	2	8/6/2018	A
MW-08 (Downgradient)	2	5/17/2018	A
	2	8/8/2018	A
MW-11 (Downgradient)	2	5/16/2018	A
WW-11 (Downgradient)	2	8/9/2018	A
MW 12 (Downgradient)	2	5/16/2018	A
MW-12 (Downgradient)	<u> </u>	8/9/2018	A
MW 15 (Daymana diant)	2	5/17/2018	A
MW-15 (Downgradient)	<u> </u>	8/9/2018	A
MW 17 (Dayymana diaut)	2	5/14/2018	A
MW-17 (Downgradient)	<u> </u>	8/6/2018	A
MW 10 (Daven and 1')	2	5/14/2018	A
MW-18 (Downgradient)	2	8/6/2018	A

Table 4. ASB/ABB Assessment Monitoring - Appendix III Groundwater Analytical Results through 2018 - Midwest Generation, LLC, Powerton Station, Pekirr, Page 22 of 311

Well	Date	Boron	Calcium	Chloride	Fluoride	pН	Sulfate	Total Dissolved Solids
	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
MW-01	2/14/2017	0.18	120	55	0.17	7.30	60	550
(S)	5/3/2017	0.19	86	66	0.16	7.41	45	460
up-gradient	6/21/2017	0.18	85	58	0.18	7.60	47	540
	Pred. Limit*	1.0	142	81	0.25	7.90-6.58	115	648
	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	6.7	48	540
	8/8/2018	0.14	86	48	0.13	6.80	43	430
	11/18/2015	2.0	63	Н 31	Н 0.19	7.15	H 110	H 440
	2/25/2016	2.3	77	36	0.19	7.34		500
	5/19/2016	2.0	73	38	0.17	7.30	100	520
	8/17/2016	2.7	74	39	0.15	7.32		750
	11/17/2016	4.5	85	38	0.13	7.37		630
MW-09	2/15/2017	4.1	84	38	0.13	6.94		620
(S)	5/3/2017	3.5	85	38	0.17	7.48		680
up-gradient	6/21/2017	3.3	82	38	0.14	7.63		760
-	Pred. Limit*	6.19	103	39	0.24	7.99-6.64		1000
	8/25/2017	3.8	85	36	0.14	7.30		630
	11/8/2017	4	89	37	0.13	6.92		650
	5/16/2018	4.1	89	36	0.15	7.83		550
	8/8/2018	4.3	86	39	0.14	7.31	6.58 115 63 63 61 48 48 43 H 110 120 120 110 160 150 180 120 180 160 170 180 160 170 180 180 160 170 180 160 170 180 160 170 180 160 170 160 190 180 180 180 170 180 180 170 180 180 170 180 180 180 170 180 180 170 180 180 180 170 180 180 180 180 170 180 180 180 180 180 180 180 180 180 18	690
	11/18/2016	3.8	89	38	0.13	7.34		670
	2/15/2017	4.7	88	37	0.13	7.50		630
	5/5/2017	3.3	88	38	0.14	7.51		640
MW-19^	6/21/2017	2.3	110	35	0.12	7.30		690
(S)	8/28/2017	3.5	97	36	0.16	7.20		700
up-gradient	11/6/2017	4.5	86	35	0.17	7.26		640
-	5/14/2018	4.1	96	35	0.16	7.92		820
	8/6/2018	3.8	100	37	0.13	7.57		720
	Pred. Limit*	6.20	121	41	0.20	8.20-6.70		890
	11/18/2015	1.5	160	Н 170	Н 0.44	7.61		H 1300
 	2/25/2016	1.7	160	200	0.30	7.00		1100
	5/18/2016	1.7	160	140	0.34	7.67		1200
	8/17/2016	1.0	150	230	0.35	7.33		1400
	11/15/2016	1.2	140	290	0.33	6.90		1300
MW-08	2/16/2017	1.5	150	460	0.28	7.00		1500
(CL)	5/2/2017	0.55	140	300	0.33	7.30	320	1300
down-gradient	6/21/2017	1.2	160	490	0.30	7.27	350	1700
·	Pred. Limit	1.0	136	77	0.24**	7.73-6.83**	107	788**
	8/29/2017	1.2	150	360	0.47	7.29	300	1500
F	11/8/2017	0.68	130	260	0.45	7.27	270	1200
F	5/17/2018	1.2	130	200	0.37	6.79	170	1000
	8/8/2018	1.1	140	270	0.32	6.93	190	1200

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

Pred. Limit - Prediction Limit

(S) - Sandy Unit

(CL) - Sitry Clay Unit

* Intrawell Prediction Limit. All others are interwell comparisons.

** - Based on pooled background from MW-01/MW-09. All others based on MW-01 as background.

^* - Recently installed upgradient well. Insufficient rounds of sampling for statistical evaluation at this time.

Italics Date - First round of Detection Monitoring and resample after statistical background establishment.

Bold - Potential statistically significant increase.

F1 - MS and/or MSD Recovery outside of limits.

H - Sample was prepped or analyzed beyond the specified holding time.

V- Serial dilution exceeds control limits.

Table 4. ASB/ABB Assessment Monitoring - Appendix III Groundwater Analytical Results through 2018 - Midwest Generation, LLC, Powerton Station, Pekirr, Page 23 of 311

Well	Date	Boron	Calcium	Chloride	Fluoride	pН	Sulfate	Total Dissolved Solids
	11/18/2015	1.7	110	H 54	H 0.55	7.06	H 160	Н 670
	2/26/2016	1.5	140	120	0.55	7.25	220	850
	5/20/2016	1.6	140	120	0.56	7.10	210	920
	8/17/2016	1.0	130	93	0.67	7.08	180	910
	11/17/2016	1.2	140	130	0.44	7.21	240	1100
MW-11	2/16/2017	1.6	140	110	0.40	6.62	260	910
(S)	5/3/2017	1.3	160	160	0.42	7.36	440	1300
down-gradient	6/22/2017	1.2	140	120	0.60	7.21	260	1000
	Pred. Limit	1.0	136	77	0.24**	7.73-6.83**	107	788**
	8/29/2017	<u>2.2</u>	130	<u>83</u>	0.52	7.23	<u>310</u>	<u>1100</u>
_	11/9/2017	<u>1.5</u>	140	<u>100</u>	0.59	6.96	230	<u>970</u>
<u> </u>	5/16/2018	2.0	140	88	0.61	7.89	270	1000
ļ	8/9/2018	1.4	160	120	0.65	7.24	220	1000
	11/19/2015	0.94	160	Н 220	Н 0.57	7.12	Н 650	H 1400
	2/26/2016	0.42	130	200	0.40	7.96	530	1200
	5/20/2016	0.65	150	200	0.49	7.28	550	1400
<u> </u>	8/18/2016	0.69	170	200	0.49	7.06	620	1600
<u> </u>	11/18/2016	0.83	140	180	0.46	7.34	340	1300
MW-12	2/16/2017	0.48	140	190	0.37	7.54	630	1300
(CL)	5/3/2017	0.49	120	190	0.37	7.47	500	1200
down-gradient	6/22/2017 Pred. Limit	0.50 1.0	130 136	190 77	0.48 0.24**	7.36 7.73-6.83**	580 107	1400 788**
<u>-</u>	8/29/2017	0.78	140	180	0.52	7.34		1400
l –	11/10/2017	0.78				7.38	<u>520</u>	
l –	5/16/2018	0.46	130 100	170 180	0.48 0.47	8.12	370 720	1200 1500
_	8/9/2018	0.46	120	190	0.44	7.42	480	1300
 	11/18/2015	1.5	270	H 210	H 0.53	6.55	H 1400	H 2400
l —	2/25/2016	2.0	240	110	0.61	6.84	640	1700
_	5/19/2016	2.7	320	240	0.53	6.83	1200	2800
	8/18/2016	1.5	200	F1 170	0.54	6.96	660	1900
	11/17/2016	1.3	120	180	0.47	6.91	560	1900
MW-15	2/17/2017	1.9	200	190	0.43	7.24	670	1700
(CL)	5/4/2017	1.5	180	190	0.57	7.35	670	1700
down-gradient	6/21/2017	1.6	180	200	0.56	7.30	530	1600
	Pred. Limit	1.0	136	77	0.24**	7.73-6.83**	107	788**
	8/29/2017	2.2	190	200	0.53	6.87	540	1800
	11/10/2017	1.6	170	180	0.63	7.09	530	1500
	5/17/2018	2.3	200	160	0.5	6.75	680	1800
	8/9/2018	2.3	200	200	0.48	7.06	520	1700
	11/19/2015	1.6	210	Н 230	H 0.43	7.11	H 850	H 1800
	2/22/2016	1.8	290	280	0.55	7.19	960	2100
	5/18/2016	1.4	200	230	0.64	7.02	700	1800
	8/15/2016	1.1	220	220	0.60	7.08	860	2100
	11/14/2016	1.5	200	210	0.56	7.26	560	2000
MW-17	2/13/2017	1.6	190	230	0.56	6.84	770	1600
(CL)	5/4/2017	1.2	170	210	0.61	7.29	720	1500
down-gradient	6/22/2017	0.95	150	230	0.72	7.38	580	1600
	Pred. Limit	1.0	136	77	0.24**	7.73-6.83**	107	788**
	8/29/2017	<u>1.4</u>	<u>190</u>	<u>230</u>	<u>0.64</u>	7.19	<u>640</u>	<u>1900</u>
	11/6/2017	<u>1.7</u>	<u>190</u>	<u>240</u>	0.62	7.27	<u>840</u>	<u>1800</u>
	5/14/2018	<u>1.6</u>	<u>170</u>	220	<u>0.6</u>	<u>7.79</u>	<u>800</u>	<u>1700</u>
	8/6/2018	1.3	<u>170</u>	<u>230</u>	0.6	7.12	<u>620</u>	<u>1600</u>
	11/19/2015	0.80	140	H 220	Н 0.66	7.62	H 310	H 1200
	2/22/2016	0.76	150	220	0.68	7.06	310	1200
_	5/18/2016	0.72	120	230	0.71	7.68	230	1200
<u> </u>	8/15/2016	0.67	130	210	0.64	7.52	330	1300
	11/18/2016	0.94	130	200	0.58	7.69	250	1300
MW-18	2/15/2017	0.56	140	190	0.50	7.81	340	1200
(S)	5/5/2017	0.46	130	180	0.52	8.12	360	1100
down-gradient	6/21/2017	0.53	120	190	0.51 0.24**	8.10	320	1200 788**
	Pred. Limit	1.00	136	77		7.73-6.83**	107	
	8/28/2017 11/6/2017	0.65 0.67	120 120	200 100	0.53	7.81	310 400	1200 1200
-				190 180	0.57	7.74 8.27	400 440	1200 1200
	5/14/2018 8/6/2018	0.57 0.58	130 120	180 230	0.59 0.57	8.27 7.88	440 270	1200 1100
	8/0/2018	0.58	120	230	0.57	<u>7.88</u>	2/0	1100

Bold - Potential statistically significant increase.
F1 - MS and/or MSD Recovery outside of limits.
H - Sample was prepped or analyzed beyond the specified holding time.
V- Serial dilution exceeds control limits.

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

Pred. Limit - Prediction Limit

(S) - Sandy Unit

(CL) - Silty Clay Unit

* Intrawell Prediction Limit. All others are interwell comparisons.

** Based on pooled background from MW-01/MW-09. All others based on MW-01 as background.

^ Recently installed upgradient well. Insufficient rounds of sampling for statistical evaluation at this time.

Italics Date - First round of Detection Monitoring and resample after statistical background establishment.

Table 5. ASB/ABB Assessment Monitoring - Detected Appendix IV Groundwater Analytical Results through 2018 - Midwest Generation, LLC, Powerton Station, Pekin, IL.

Well	Date	Arsenic	Barium	Cadmium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Radium 226 + 228 Combined	Selenium	Thallium
	11/16/2015	< 0.001	0.057	< 0.0005	< 0.001	0.17	* < 0.0005	< 0.01	< 0.0002	< 0.0050	0.744	< 0.0025	* < 0.002
	2/25/2016	0.0025	0.053	< 0.0005	0.0014	0.16	0.0019	< 0.01	< 0.0002	< 0.005	< 0.722	0.0029	< 0.002
	5/20/2016	0.0081	0.062	< 0.0005	0.0053	0.17	0.011	< 0.01	< 0.0002	< 0.005	< 0.953	< 0.0025	< 0.002
	8/17/2016	0.0014	0.048	< 0.0005	< 0.001	0.25	0.0014	< 0.010	< 0.0002	0.0057	< 0.491	< 0.0025	< 0.002
	11/16/2016	0.0051	0.056	< 0.0005	0.0044	0.21	0.0082	< 0.01	< 0.0002	0.0059	< 0.618	< 0.0025	< 0.002
	2/14/2017	0.0041	0.056	< 0.0005	0.0045	0.17	0.0076	< 0.01	< 0.0002	0.0056	< 0.837	< 0.0025	< 0.002
MW-01 up-gradient	5/3/2017	0.0015	0.045	< 0.0005	0.0033	0.16	0.0067	< 0.01	< 0.0002	< 0.005	0.574	< 0.0025	< 0.002
up-gradient	6/21/2017	< 0.001	0.04	< 0.0005	< 0.001	0.18	< 0.0005	< 0.01	< 0.0002	0.0061	< 0.418	< 0.0025	< 0.002
	GWPS	0.011	2.0	0.005	0.009	4.0	0.018	0.04	0.002	0.10	5.0	0.05	0.002
	8/25/2017	< 0.001	0.049	< 0.0005	< 0.001	0.18	< 0.0005	< 0.01	< 0.0002	0.0059	0.775	< 0.0025	< 0.002
	11/8/2017	< 0.001	0.083	< 0.0005	< 0.001	0.12	< 0.0005	< 0.01	< 0.0002	< 0.005	0.343	< 0.0025	< 0.002
	5/17/2018	< 0.001	0.045	< 0.0005	< 0.001	0.12	0.00068	< 0.01	< 0.0002	< 0.005	< 0.396	< 0.0025	< 0.002
	8/8/2018	< 0.001	0.051	< 0.0005	< 0.001	0.13	< 0.0005	< 0.01	< 0.0002	< 0.005	0.579	< 0.0025	< 0.002
	11/18/2015	< 0.001	0.027	< 0.0005	< 0.001	H 0.19	< 0.0005	< 0.01	H < 0.0002	0.043	< 0.655	< 0.0025	< 0.002
	2/25/2016	0.0042	0.036	< 0.0005	0.0011	0.19	< 0.0005	< 0.01	< 0.0002	0.053	< 0.361	< 0.0025	< 0.002
	5/19/2016	< 0.001	0.029	< 0.0005	< 0.001	0.17	< 0.0005	< 0.01	< 0.0002	0.042	< 0.394	0.0032	< 0.002
	8/17/2016	< 0.001	0.031	< 0.0005	< 0.001	0.15	< 0.0005	< 0.01	< 0.0002	0.036	< 0.498	< 0.0025	< 0.002
	11/17/2016	0.0038	0.039	< 0.0005	< 0.001	0.13	< 0.0005	< 0.010	< 0.0002	0.036	0.646	0.0025	< 0.002
) W (00	2/15/2017	0.0032	0.043	< 0.0005	< 0.001	0.13	< 0.0005	< 0.010	< 0.0002	0.035	< 0.377	0.0062	< 0.002
MW-09 up-gradient	5/3/2017	0.0012	0.034	< 0.0005	< 0.001	0.17	< 0.0005	< 0.010	< 0.0002	0.034	< 0.445	0.011	< 0.002
-t 8	6/21/2017	< 0.001	0.037	< 0.0005	< 0.001	0.14	< 0.0005	< 0.010	< 0.0002	0.033	< 0.380	0.0072	< 0.002
	GWPS	0.011	2.0	0.005	0.009	4.0	0.018	0.04	0.002	0.10	5.0	0.05	0.002
	8/25/2017	< 0.001	0.044	< 0.0005	< 0.001	0.14	< 0.0005	< 0.010	< 0.0002	0.028	< 0.160	0.0043	< 0.002
	11/8/2017	0.0012	0.048	< 0.0005	< 0.001	0.13	< 0.0005	< 0.010	< 0.0002	0.026	0.344	< 0.0025	< 0.002
	5/16/2018	< 0.001	0.038	< 0.0005	< 0.001	0.15	< 0.0005	< 0.010	0.00029	0.031	< 0.424	0.006	< 0.002
	8/8/2018	< 0.001	0.037	< 0.0005	< 0.001	0.14	< 0.0005	< 0.010	< 0.0002	0.032	0.440	0.0078	< 0.002
	11/18/2016	< 0.001	0.084	< 0.0005	0.001	0.13	0.00068	< 0.01	< 0.0002	0.035	< 0.476	0.0043	< 0.002
	2/15/2017	< 0.001	0.088	< 0.0005	< 0.001	0.13	0.00061	< 0.01	< 0.0002	0.046	< 0.482	0.0063	< 0.002
	5/5/2017	< 0.001	0.076	< 0.0005	0.0013	0.14	0.0012	< 0.01	< 0.0002	0.035	0.923	0.0068	< 0.002
MW-19	6/21/2017	< 0.001	0.089	< 0.0005	< 0.001	0.12	< 0.0005	< 0.01	< 0.0002	0.024	< 0.334	0.0028	< 0.002
up-gradient	8/28/2017	< 0.001	0.073	< 0.0005	< 0.001	0.16	< 0.0005	< 0.01	< 0.0002	0.041	0.370	0.0035	< 0.002
	11/6/2017	< 0.001	0.071	< 0.0005	< 0.001	0.17	< 0.0005	< 0.01	< 0.0002	0.042	0.360	< 0.0025	< 0.002
	5/14/2018	< 0.001	0.079	< 0.0005	< 0.001	0.16	< 0.0005	< 0.01	< 0.0002	0.043	0.562	0.0044	< 0.002
	8/7/2018	< 0.001	0.078	< 0.0005	< 0.001	0.13	< 0.0005	< 0.01	< 0.0002	0.032	0.835	0.0052	< 0.002
	GWPS	0.011	2.0	0.005	0.009	4.0	0.018	0.04	0.002	0.10	5.0	0.05	0.002
I	11/18/2015	0.0029	0.15	< 0.0005	< 0.001	H 0.44	< 0.0005	0.028	H < 0.0002	0.01	< 0.559	< 0.0025	< 0.002
	2/25/2016	0.0018	0.11	0.00052	< 0.001	0.30	0.00072	0.015	< 0.0002	0.02	0.535	< 0.0025	< 0.002
	5/18/2016	0.0029	0.16	< 0.0005	< 0.001	0.34	< 0.0005	0.036	< 0.0002	0.0069	0.417	< 0.0025	< 0.002
	8/17/2016	0.0032	0.15	< 0.0005	< 0.001	0.35	< 0.0005	0.023	< 0.0002	0.013	< 0.519	< 0.0025	< 0.002
	11/15/2016	0.0012	0.076	< 0.0005	< 0.001	0.33	< 0.0005	0.017	< 0.0002	0.016	0.583	< 0.0025	< 0.002
MW-08	2/16/2017	0.003	0.086	< 0.0005	< 0.001	0.28	0.00087	< 0.01	< 0.0002	0.026	< 0.375	< 0.0025	< 0.002
down-gradient	5/2/2017	0.0029	0.13	< 0.0005	< 0.001	0.33	< 0.0005	0.022	< 0.0002	0.0083	< 0.480	< 0.0025	< 0.002
	6/21/2017	0.0045	0.14	< 0.0005	< 0.001	0.30	< 0.0005	0.017	< 0.0002	0.031	< 0.439	< 0.0025	< 0.002
I -	GWPS	0.011 0.0011	2.0	0.005	0.009	4.0	0.018 < 0.0005	0.04 < 0.01	0.002 < 0.0002	0.10	5.0 0.699	0.05 < 0.0025	0.002 < 0.002
	8/29/2017		0.062	< 0.0005	< 0.001	0.47							
	11/8/2017	0.0027	0.10	< 0.0005	< 0.001	0.45	< 0.0005	0.019	< 0.0002	0.014	0.806	< 0.0025	< 0.002
	5/17/2018	0.003 0.0055	0.07 0.071	< 0.0005	< 0.001	0.37	< 0.0005 < 0.0005	< 0.01	< 0.0002	0.024	0.655	< 0.0025	< 0.002
	8/8/2018	0.0055	0.071	< 0.0005	< 0.001	0.32	< 0.0005	< 0.01	< 0.0002	0.019	< 0.410	< 0.0025	< 0.002

Notes:

All units are in mg/l except Radium is in pCi/L as noted.

 ${\it Italics} \ \hbox{-} \ Assessment \ Monitoring \ Conducted \ After \ Identification \ of \ Detected \ Appendix \ IV \ Compounds.$

GWPS - Groundwater Protection Standard based on Table 2 and discussion in text

BOLD - Exceeds established GWPS.

F1 - MS and/or MSD Recovery outside of limits.

H - Sample was prepped or analyzed beyond the specified holding time.

* - LCS or LCSD is outside acceptance limits.

^ - Denotes instrument related QC exceeds the control limits

Table 5. ASB/ABB Assessment Monitoring - Detected Appendix IV Groundwater Analytical Results through 2018 - Midwest Generation, LLC, Powerton Station, Pekin, IL.

1118/2015 0.017 0.18	 < 0.002
S202016 0.027 0.26 < 0.0005 0.0024 0.56 0.00076 < 0.01 < 0.0002 0.014 0.534 < 0.0025 1.0172016 Ft D. 39 1.4 < 0.0005 0.0034 0.67 0.0011 < 0.0002 0.018 0.0111 1.110 < 0.0025 1.0172016 1.027 0.044 < 0.0005 0.0037 0.44 0.0003 < 0.001 < 0.0002 0.0088 0.734 < 0.0025 0.0035 0.0037 0.44 0.0003 < 0.01 < 0.0002 0.0088 0.734 < 0.0025 0.0035	 < 0.002
## 817/2016 F1 0.29	 < 0.002
Mary	 < 0.002
MW-11	 < 0.002
MW-12 63/2012 0.019 0.26	 < 0.002
	 < 0.002 0.002 < 0.002
GAVES 0.011 2.0 0.085 0.009 4.0 0.018 0.001 0.0002 0.016 0.013 0.0025	0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002
11/19/2017 9.092	 < 0.002
\$\frac{5:16:2018}{8:90201} \frac{0.08}{0.08} \qq \qq \	 < 0.002
	 < 0.002
11/19/2015 0.10	 < 0.002
Part	 < 0.002
S502016	 < 0.002
Strike S	< 0.002 < 0.002 < 0.002 < 0.002 < 0.002 < 0.002 0.002 < 0.002 < 0.002
MW-12	< 0.002 < 0.002 < 0.002 < 0.002 < 0.002 0.002 < 0.002 < 0.002
MW-15	< 0.002 < 0.002 0.002 < 0.002 < 0.002
MW-15 MW-1	< 0.002 0.002 < 0.002 < 0.002
G22/2017 0.025 0.011 < 0.0005 < 0.001 0.48 0.00096 < 0.010 < 0.0002 0.028 0.376 < 0.0025	0.002 < 0.002 < 0.002
829/2017 0.02 0.095 < 0.0005 < 0.001 0.52 < 0.0005 0.014 < 0.0002 0.024 0.529 < 0.0025	< 0.002 < 0.002
11/10/2017 0.50 0.45 0.0015 < 0.001 0.48 0.00097 0.018 < 0.0002 0.023 1.67 < 0.0025	< 0.002
S/16/2018 0.09	
Name	< 0.002
11/18/2015 0.03 0.096 0.00061 < 0.001 H 0.53 < 0.0005 0.042 H < 0.0002 0.023 < 0.599 0.0065	< 0.002
## 1/2 2/25/2016 0.025 0.083 < 0.0005 < 0.001 0.61 < 0.0005 0.041 < 0.0002 0.035 0.870 0.045	< 0.002
S/18/2016 0.13 0.11 0.0041 < 0.001 0.54 < 0.0005 0.028 < 0.0002 0.027 < 0.672 0.0061	< 0.002
MW-15 down-gradient	< 0.002
MW-15 down-gradient 5/4/2017 0.02 0.056 < 0.0005 < 0.0010 0.43 < 0.0005 0.025 < 0.0002 0.027 < 0.392 0.0032	< 0.002
MW-15 MW-1	< 0.002
6/21/2017 0.0093 0.054 < 0.0005 < 0.0010 0.56 < 0.0005 0.027 < 0.0002 0.03 < 0.347 0.019	< 0.002 < 0.002
GWPS 0.011 2.0 0.005 0.009 4.0 0.018 0.04 0.002 0.10 5.0 0.05 8/29/2017 0.0018 0.044 < 0.0005	< 0.002
8/29/2017 0.0018 0.044 < 0.0005 < 0.0010 0.53 < 0.0005 0.023 < 0.0002 0.032 0.377 0.0092 11/10/2017 0.0063 0.046 < 0.0005	0.002
5/17/2018 0.0081 0.05 < 0.0005 < 0.0010 0.5 < 0.0005 0.029 < 0.0002 0.03 0.397 0.077 8/9/2018 0.0083 0.048 < 0.0005	< 0.002
8/9/2018 0.0083 0.048 < 0.0005 < 0.0010 0.48 < 0.0005 0.026 < 0.0002 0.033 0.566 0.06 11/19/2015 0.0028 0.14 < 0.0005	< 0.002
11/19/2015 0.0028 0.14 < 0.0005 0.0012 H 0.43 0.0012 0.019 H < 0.0002 0.035 < 0.790 < 0.0025 2/22/2016 0.021 0.051 < 0.0005	< 0.002
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	< 0.002
5/18/2016 0.32 0.12 0.0011 0.0015 0.64 < 0.0005 0.026 < 0.0002 0.12 8.27 < 0.0025	< 0.002 < 0.002
	0.002
-1 -1 0.017291001 0.324 1 0.12 1 0.000 1 0.000 1 0.002 1 0.002 1 0.002 1 0.002 1 0.002	0.0028
11/14/2016 0.19 0.073 0.00051 0.0012 0.56 < 0.0005 0.022 < 0.0002 0.042 3.76 < 0.0025	0.0021
2/13/2017 0.35 0.16 0.00093 0.0014 0.56 0.00079 0.019 < 0.0002 0.088 2.08 < 0.0025	0.0025
MW-17 down-gradient 5/4/2017 0.24 0.39 0.0023 0.0023 0.61 0.00066 0.016 < 0.0002 0.036 1.91 < 0.0025	0.0065
6/22/2017 0.41 0.13 0.0007 0.0012 0.72 0.0011 0.022 < 0.0002 0.11 1.21 < 0.0025	0.0022
GWPS 0.011 2.0 0.005 0.009 4.0 0.018 0.04 0.002 0.10 5.0 0.05 8/29/2017 0.24 0.092 < 0.0005	0.002 0.0025
8/29/2017 0.24 0.092 < 0.0005 < 0.001 0.64 0.00058 0.021 < 0.0002 0.13 3.32 < 0.0025 11/6/2017 0.17 0.38 0.0022 0.0015 0.62 < 0.0005	0.0025 0.0075
11/0/2017 0.17 0.36 0.0022 0.0013 0.02 0.0003 0.01 0.0002 0.014 2.34 0.0023 0.0023 0.014 0.0024 0.015 0.0002 0.13 0.0025 0.00	0.0068
8/6/2018 0.087 0.055 0.00094 0.0015 0.60 < 0.0005 0.019 < 0.0002 0.084 1.34 < 0.0025	0.0023
11/19/2015 0.0014 0.14 < 0.0005 < 0.001 H 0.66 < 0.0005 0.017 H < 0.0002 0.0051 < 0.845 < 0.0025	< 0.002
2/22/2016 0.0012 0.15 < 0.0005 < 0.001 0.68 < 0.0005 0.022 < 0.0002 0.0055 1.88 < 0.0025	< 0.002
5/18/2016 < 0.001	< 0.002
8/15/2016 < 0.001	
11/18/2016 < 0.001	< 0.002
MW-18 5/5/2017 0.0032 0.12 < 0.0005 < 0.001 0.52 0.00057 0.01 < 0.0002 < 0.005 0.612 < 0.0025	< 0.002
down-gradient 6/21/2017 < 0.001 0.12 < 0.0005 < 0.001 0.51 < 0.0005 0.014 < 0.0002 0.0051 0.629 < 0.0025	< 0.002 < 0.002
GWPS 0.011 2.0 0.005 0.009 4.0 0.018 0.04 0.002 0.10 5.0 0.05	< 0.002 < 0.002 < 0.002
8/28/2017 < 0.001	< 0.002 < 0.002
11/6/2017 < 0.001 0.12 < 0.001 0.57 < 0.0005 0.011 < 0.0002 0.0057 0.755 < 0.0025	< 0.002 < 0.002 < 0.002 < 0.002
5/14/2018 < 0.001 0.13 < 0.0005 < 0.001 0.59 < 0.0005 0.013 < 0.0002 0.0052 0.641 < 0.0025	< 0.002 < 0.002 < 0.002 < 0.002 < 0.002 0.002 < 0.002 < 0.002
8/6/2018 < 0.001 0.12 < 0.0005 < 0.001 0.57 < 0.0005 0.013 < 0.0002 0.0052 1.02 < 0.0025	< 0.002 < 0.002 < 0.002 < 0.002 0.002 0.002

NI-4---

All units are in mg/l except Radium is in pCi/L as noted.

Italics - Assessment Monitoring Conducted After Identification of Detected Appendix IV Compounds.

GWPS - Groundwater Protection Standard based on Table 2 and discussion in text

BOLD - Exceeds established GWPS.

F1 - MS and/or MSD Recovery outside of limits.

H - Sample was prepped or analyzed beyond the specified holding time.

^{* -} LCS or LCSD is outside acceptance limits.

^{^ -} Denotes instrument related QC exceeds the control limits

Electronic Filing: Received, Clerk's Office 07/19/2019 PCB 2013-15
Exhibit D
Page 26 of 311

Appendix A Analytical Data Packages from 2018 Assessment Monitoring

PCB 2013-15 Electronic Filing: Received, Clerk's Office 07/19/2019

> Page 27 of 311 **TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 500-145716-1 Client Project/Site: Powerton CCR

For:

KPRG and Associates, Inc. 14665 West Lisbon Road, Suite 2B Brookfield, Wisconsin 53005

Attn: Richard Gnat

Authorized for release by: 6/4/2018 4:41:01 PM

Eric Lang, Manager of Project Management (708)534-5200

eric.lang@testamericainc.com

.....LINKS

Review your project results through Total Access

Have a Question?



Visit us at: 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.

Exhibit D

PCB 2013-15

Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit D TestAmpriga Job IDr 5001145716-1

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

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PCB 2013-15 Exhibit D

Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 300 IB: 500-145716-1

Project/Site: Powerton CCR

Job ID: 500-145716-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-145716-1

Comments

No additional comments.

Receipt

The samples were received on 5/18/2018 5:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 2.1° C, 2.8° C, 3.1° C, 3.9° C and 4.7° C.

Metals

Method(s) 6020A: The low level continuing calibration verification (CCVL) at line 58, associated with batch 500-433393 recovered above the upper control limit for Beryllium. The samples associated with this CCVL were non-detects for the affected analytes; therefore, the data have been reported

Method(s) 6020A: The internal standard Terbium (Tb) was used to report the elements Lead and Thallium in batch 500-433393. 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.

PCB 2013-15 Exhibit D

Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 30 IBf 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-01 Lab Sample ID: 500-145716-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.045		0.0025		mg/L		_	6020A	Total
									Recoverable
Boron	0.15		0.050		mg/L	1		6020A	Total
									Recoverable
Calcium	88		0.20		mg/L	1		6020A	Total
									Recoverable
Lead	0.00068		0.00050		mg/L	1		6020A	Total
									Recoverable
Total Dissolved Solids	540		10		mg/L	1		SM 2540C	Total/NA
Chloride	50		2.0		mg/L	1		SM 4500 CI- E	Total/NA
Fluoride	0.12		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	48		20		mg/L	4		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-02 Lab Sample ID: 500-145716-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0013		0.0010		mg/L		_	6020A	Total
									Recoverable
Barium	0.065		0.0025		mg/L	1		6020A	Total
									Recoverable
Boron	0.22		0.050		mg/L	1		6020A	Total
									Recoverable
Calcium	80		0.20		mg/L	1		6020A	Total
									Recoverable
Mercury	0.00040		0.00020		mg/L	1		7470A	Total/NA
Total Dissolved Solids	500		10		mg/L	1		SM 2540C	Total/NA
Chloride	45		2.0		mg/L	1		SM 4500 CI- E	Total/NA
Fluoride	0.23		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	54		20		mg/L	4		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-03 Lab Sample ID: 500-145716-3

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Arsenic	0.0010	0.0010	mg/L		6020A	Total
						Recoverable
Barium	0.059	0.0025	mg/L	1	6020A	Total
						Recoverable
Boron	0.35	0.050	mg/L	1	6020A	Total
						Recoverable
Calcium	77	0.20	mg/L	1	6020A	Total
						Recoverable
Total Dissolved Solids	520	10	mg/L	1	SM 2540C	Total/NA
Chloride	65	2.0	mg/L	1	SM 4500 CI- E	Total/NA
Fluoride	0.23	0.10	mg/L	1	SM 4500 F C	Total/NA
Sulfate	77	20	mg/L	4	SM 4500 SO4 E	Total/NA

Client Sample ID: MW-04 Lab Sample ID: 500-145716-4

Analyte	Result	Qualifier F	L MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.037	0.002	5	mg/L	1	_	6020A	Total
Boron	0.68	0.08	0	mg/L	1		6020A	Recoverable Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

6/4/2018

PCB 2013-15

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 900 IB: 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-04 (Continued)

Lab Sample ID: 500-145716-4

Result Qualifier	RL	MDL Unit	Dil Fac	Method	Prep Type
87	0.20	mg/L		6020A	Total
					Recoverable
630	10	mg/L	1	SM 2540C	Total/NA
66	2.0	mg/L	1	SM 4500 CI- E	Total/NA
0.27	0.10	mg/L	1	SM 4500 F C	Total/NA
100	25	mg/L	5	SM 4500 SO4 E	Total/NA
_	87 630 66 0.27	87 0.20 630 10 66 2.0 0.27 0.10	87 0.20 mg/L 630 10 mg/L 66 2.0 mg/L 0.27 0.10 mg/L	87 0.20 mg/L 1 630 10 mg/L 1 66 2.0 mg/L 1 0.27 0.10 mg/L 1	87 0.20 mg/L 1 6020A 630 10 mg/L 1 SM 2540C 66 2.0 mg/L 1 SM 4500 CI- E 0.27 0.10 mg/L 1 SM 4500 F C

Client Sample ID: MW-05 Lab Sample ID: 500-145716-5

Analyte	Result	Qualifier RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.062	0.0025		mg/L		_	6020A	Total
								Recoverable
Boron	0.61	0.050		mg/L	1		6020A	Total
								Recoverable
Calcium	130	0.20		mg/L	1		6020A	Total
								Recoverable
Total Dissolved Solids	910	10		mg/L	1		SM 2540C	Total/NA
Chloride	89	10		mg/L	5		SM 4500 CI- E	Total/NA
Fluoride	0.29	0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	210	50		mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-08 Lab Sample ID: 500-145716-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0030		0.0010		mg/L	1	_	6020A	Total
Barium	0.072		0.0025		mg/L	1		6020A	Recoverable Total
Boron	1.2		0.25		ma/l	5		6020A	Recoverable
DOIOII	1.2		0.25		mg/L	5		0020A	Total Recoverable
Calcium	130		0.20		mg/L	1		6020A	Total
Molybdenum	0.024		0.0050		ma/l	1		6020A	Recoverable
Morybaenam	0.024		0.0050		mg/L	ı		0020A	Total Recoverable
Total Dissolved Solids	1000		10		mg/L	1		SM 2540C	Total/NA
Chloride	200		10		mg/L	5		SM 4500 CI- E	Total/NA
Fluoride	0.37		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	170		50		mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-09 Lab Sample ID: 500-145716-7

Analyte	Result C	Qualifier RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.038	0.0025		mg/L		_	6020A	Total
								Recoverable
Boron	4.1	1.0		mg/L	20		6020A	Total
								Recoverable
Calcium	89	0.20		mg/L	1		6020A	Total
								Recoverable
Molybdenum	0.031	0.0050		mg/L	1		6020A	Total
								Recoverable
Selenium	0.0060	0.0025		mg/L	1		6020A	Total
								Recoverable
Mercury	0.00029	0.00020		mg/L	1		7470A	Total/NA
Total Dissolved Solids	550	10		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

6/4/2018

PCB 2013-15

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 3218f 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-09 (Continued)

Lab Sample ID: 500-145716-7

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Chloride	36	2.0	mg/L		SM 4500 CI- E	Total/NA
Fluoride	0.15	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-10 Lab Sample ID: 500-145716-8

Analyte	Result	Qualifier RL	MDL Unit	Dil Fac	D Method	Prep Type
Arsenic	0.0010	0.0010	mg/L		6020A	Total
						Recoverable
Barium	0.22	0.0025	mg/L	1	6020A	Total
						Recoverable
Boron	0.42	0.050	mg/L	1	6020A	Total
						Recoverable
Calcium	93	0.20	mg/L	1	6020A	Total
						Recoverable
Cobalt	0.021	0.0010	mg/L	1	6020A	Total
						Recoverable
Lead	0.0010	0.00050	mg/L	1	6020A	Total
						Recoverable
Selenium	0.0050	0.0025	mg/L	1	6020A	Total
						Recoverable
Total Dissolved Solids	530	10	mg/L	1	SM 2540C	Total/NA
Chloride	44	2.0	mg/L	1	SM 4500 CI- E	Total/NA
Fluoride	0.19	0.10	mg/L	1	SM 4500 F C	Total/NA
Sulfate	80	20	mg/L	4	SM 4500 SO4 E	Total/NA

Client Sample ID: MW-11

Lab Sample ID: 500-145716-9

Analyte	Result (Qualifier RL	MDL Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.089	0.0010	mg/L	1	_	6020A	Total
							Recoverable
Barium	0.47	0.0025	mg/L	1		6020A	Total
							Recoverable
Boron	2.0	0.50	mg/L	10		6020A	Total
							Recoverable
Calcium	140	0.20	mg/L	1		6020A	Total
							Recoverable
Cobalt	0.0041	0.0010	mg/L	1		6020A	Total
							Recoverable
Molybdenum	0.014	0.0050	mg/L	1		6020A	Total
							Recoverable
Total Dissolved Solids	1000	10	mg/L	1		SM 2540C	Total/NA
Chloride	88	10	mg/L	5		SM 4500 CI- E	Total/NA
Fluoride	0.61	0.10	mg/L	1		SM 4500 F C	Total/NA
Sulfate	270	50	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-12

Lab Sample ID: 500-145716-10

Analyte	Result	Qualifier	RL MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.012	0.0	10	mg/L	1	_	6010C	Total
Arsenic	0.086	0.00	10	mg/L	1		6020A	Recoverable Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

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Client: KPRG and Associates, Inc.

TestAmerica 331Bf 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-12 (Continued)

Lab Sample ID: 500-145716-10

Analyte	Result	Qualifier RL	MDL Unit	Dil Fac	D	Method	Prep Type
Barium	0.10	0.0025	mg/l	1	_	6020A	Total
							Recoverable
Boron	0.46	0.050	mg/l	. 1		6020A	Total
							Recoverable
Cadmium	0.00052	0.00050	mg/l	_ 1		6020A	Total
							Recoverable
Calcium	100	0.20	mg/l	_ 1		6020A	Total
							Recoverable
Lead	0.00067	0.00050	mg/l	_ 1		6020A	Total
							Recoverable
Molybdenum	0.021	0.0050	mg/l	_ 1		6020A	Total
							Recoverable
Total Dissolved Solids	1500	10	mg/l	_ 1		SM 2540C	Total/NA
Chloride	180	10	mg/l	_ 5		SM 4500 CI- E	Total/NA
Fluoride	0.47	0.10	mg/l	_ 1		SM 4500 F C	Total/NA
Sulfate	720	130	mg/l	_ 25		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-15

Lab Sample ID: 500-145716-11

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Lithium	0.029	0.010	mg/L		6010C	Total
						Recoverable
Arsenic	0.0081	0.0010	mg/L	1	6020A	Total
						Recoverable
Barium	0.050	0.0025	mg/L	1	6020A	Total
						Recoverable
Boron	2.3	0.50	mg/L	10	6020A	Total
						Recoverable
Calcium	200	0.20	mg/L	1	6020A	Total
						Recoverable
Molybdenum	0.030	0.0050	mg/L	1	6020A	Total
						Recoverable
Selenium	0.077	0.0025	mg/L	1	6020A	Total
			_			Recoverable
Total Dissolved Solids	1800	10	mg/L	1	SM 2540C	Total/NA
Chloride	160	10	mg/L	5	SM 4500 CI- E	Total/NA
Fluoride	0.50	0.10	mg/L	1	SM 4500 F C	Total/NA
Sulfate	680	130	mg/L	25	SM 4500 SO4 E	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 500-145716-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.015		0.010		mg/L	1	_	6010C	Total
									Recoverable
Arsenic	0.42		0.0010		mg/L	1		6020A	Total
									Recoverable
Barium	0.17		0.0025		mg/L	1		6020A	Total
									Recoverable
Boron	1.6		0.50		mg/L	10		6020A	Total
									Recoverable
Cadmium	0.0020		0.00050		mg/L	1		6020A	Total
									Recoverable
Calcium	170		0.20		mg/L	1		6020A	Total
									Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

6/4/2018

Client: KPRG and Associates, Inc.

TestAmerica 36 18 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-17 (Continued)

Lab Sample ID: 500-145716-12

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.0029	0.0010		mg/L		_	6020A	Total
								Recoverable
Lead	0.0021	0.00050		mg/L	1		6020A	Total
								Recoverable
Molybdenum	0.13	0.0050		mg/L	1		6020A	Total
								Recoverable
Thallium	0.0068	0.0020		mg/L	1		6020A	Total
								Recoverable
Total Dissolved Solids	1700	10		mg/L	1		SM 2540C	Total/NA
Chloride	220	10		mg/L	5		SM 4500 CI- E	Total/NA
Fluoride	0.60	0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	800	130		mg/L	25		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-18

Lab Sample ID: 500-145716-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.013		0.010		mg/L		_	6010C	Total
									Recoverable
Barium	0.13		0.0025		mg/L	1		6020A	Total
									Recoverable
Boron	0.57		0.050		mg/L	1		6020A	Total
									Recoverable
Calcium	130		0.20		mg/L	1		6020A	Total
					_	_			Recoverable
Molybdenum	0.0052		0.0050		mg/L	1		6020A	Total
									Recoverable
Total Dissolved Solids	1200		10		mg/L	1		SM 2540C	Total/NA
Chloride	180		10		mg/L	5		SM 4500 CI- E	Total/NA
Fluoride	0.59		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	440		100		mg/L	20		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-19

Lab Sample ID: 500-145716-14

Analyte	Result	Qualifier RL	MDL Unit	Dil Fac D	Method	Prep Type
Barium	0.079	0.0025	mg/L		6020A	Total
						Recoverable
Boron	4.1	1.0	mg/L	20	6020A	Total
						Recoverable
Calcium	96	0.20	mg/L	1	6020A	Total
						Recoverable
Molybdenum	0.043	0.0050	mg/L	1	6020A	Total
						Recoverable
Selenium	0.0044	0.0025	mg/L	1	6020A	Total
						Recoverable
Total Dissolved Solids	820	10	mg/L	1	SM 2540C	Total/NA
Chloride	35	2.0	mg/L	1	SM 4500 CI- E	Total/NA
Fluoride	0.16	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: Duplicate

Lab Sample ID: 500-145716-15

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Barium	0.077	0.0025	mg/L		6020A	Total
						Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

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6/4/2018

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

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

TestAmerica 35 IBF 310-145716-1

Lab Sample ID: 500-145716-15

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Client Sample ID: Duplicate (Continued)

Analyte	Result Qua	lifier RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.9	1.0		mg/L	20	_	6020A	Total
								Recoverable
Calcium	95	0.20		mg/L	1		6020A	Total
								Recoverable
Molybdenum	0.042	0.0050		mg/L	1		6020A	Total
								Recoverable
Selenium	0.0040	0.0025		mg/L	1		6020A	Total
								Recoverable
Total Dissolved Solids	850	10		mg/L	1		SM 2540C	Total/NA
Chloride	36	2.0		mg/L	1		SM 4500 CI- E	Total/NA
Fluoride	0.15	0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	190	50		mg/L	10		SM 4500 SO4 E	Total/NA

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PCB 2013-15

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica Job IB: 310-145716-1

Project/Site: Powerton CCR

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 CI- E	Chloride, Total	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
SM 4500 SO4 E	Sulfate, Total	SM	TAL CHI
8005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI
470A	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 = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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PCB 2013-15 019 Exhibit D

Electronic Filing: Received Clerk's Office 07/19/2019 E

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

TestAmerica 307 IBF 300-145716-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-145716-1	MW-01	Water	05/17/18 15:15	05/18/18 17:20
500-145716-2	MW-02	Water	05/15/18 09:05	05/18/18 17:20
500-145716-3	MW-03	Water	05/15/18 11:00	05/18/18 17:20
500-145716-4	MW-04	Water	05/15/18 12:11	05/18/18 17:20
500-145716-5	MW-05	Water	05/15/18 13:31	05/18/18 17:20
500-145716-6	MW-08	Water	05/17/18 13:29	05/18/18 17:20
500-145716-7	MW-09	Water	05/16/18 10:19	05/18/18 17:20
500-145716-8	MW-10	Water	05/16/18 11:41	05/18/18 17:20
500-145716-9	MW-11	Water	05/16/18 13:01	05/18/18 17:20
500-145716-10	MW-12	Water	05/16/18 14:41	05/18/18 17:20
500-145716-11	MW-15	Water	05/17/18 11:58	05/18/18 17:20
500-145716-12	MW-17	Water	05/14/18 14:51	05/18/18 17:20
500-145716-13	MW-18	Water	05/14/18 16:05	05/18/18 17:20
500-145716-14	MW-19	Water	05/14/18 17:35	05/18/18 17:20
500-145716-15	Duplicate	Water	05/14/18 00:00	05/18/18 17:20

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Client: KPRG and Associates, Inc.

TestAmerica 38 IBf 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-01 Lab Sample ID: 500-145716-1 Date Collected: 05/17/18 15:15

Matrix: Water

Date Received: 05/18/18 17:20

Fluoride

Sulfate

Analyte	Result Q	ualifier RI	. MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010	0.010		mg/L		05/19/18 11:03	05/22/18 19:37	1
Method: 6020A - Metals (IC	CP/MS) - Total Re	coverable						
Analyte	Result Q		. MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	0.0030	<u> </u>	mg/L		05/19/18 11:03	05/21/18 22:46	1
Arsenic	<0.0010	0.0010)	mg/L		05/19/18 11:03	05/21/18 22:46	1
Barium	0.045	0.002	;	mg/L		05/19/18 11:03	05/21/18 22:46	1
Beryllium	<0.0010	0.0010)	mg/L		05/19/18 11:03	05/21/18 22:46	1
Boron	0.15	0.050)	mg/L		05/19/18 11:03	05/22/18 17:05	1
Cadmium	< 0.00050	0.00050)	mg/L		05/19/18 11:03	05/21/18 22:46	1
Calcium	88	0.20)	mg/L		05/19/18 11:03	05/21/18 22:46	1
Chromium	< 0.0050	0.0050)	mg/L		05/19/18 11:03	05/21/18 22:46	1
Cobalt	<0.0010	0.0010)	mg/L		05/19/18 11:03	05/21/18 22:46	1
Lead	0.00068	0.00050)	mg/L		05/19/18 11:03	05/22/18 17:05	1
Molybdenum	< 0.0050	0.0050)	mg/L		05/19/18 11:03	05/21/18 22:46	1
Selenium	< 0.0025	0.002	;	mg/L		05/19/18 11:03	05/21/18 22:46	1
Thallium	<0.0020	0.0020)	mg/L		05/19/18 11:03	05/21/18 22:46	1
Method: 7470A - Mercury ((CVAA)							
Analyte	Result Q	ualifier RI	. MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	0.00020	·	mg/L		05/25/18 12:35	05/30/18 16:04	1
General Chemistry								
Analyte	Result Q	ualifier RI	. MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	540		j ———	mg/L			05/21/18 04:13	1
Chloride	50	2.0)	mg/L			05/28/18 18:53	1

0.10

20

0.12

48

mg/L

mg/L

05/26/18 14:30

05/30/18 12:43

Client: KPRG and Associates, Inc.

TestAmerica 30 IBf 310-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-02 Lab Sample ID: 500-145716-2 Date Collected: 05/15/18 09:05

Matrix: Water

Date Received: 05/18/18 17:20

Sulfate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Lithium	<0.010		0.010		mg/L		05/19/18 11:03	05/22/18 19:56	
Method: 6020A - Metals (I	CP/MS) - Total F	Recoverabl	e						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Antimony	<0.0030		0.0030		mg/L		05/19/18 11:03	05/21/18 23:12	-
Arsenic	0.0013		0.0010		mg/L		05/19/18 11:03	05/21/18 23:12	
Barium	0.065		0.0025		mg/L		05/19/18 11:03	05/21/18 23:12	
Beryllium	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 23:12	· · · · · · · · ·
Boron	0.22		0.050		mg/L		05/19/18 11:03	05/22/18 17:24	
Cadmium	<0.00050		0.00050		mg/L		05/19/18 11:03	05/21/18 23:12	
Calcium	80		0.20		mg/L		05/19/18 11:03	05/21/18 23:12	
Chromium	<0.0050		0.0050		mg/L		05/19/18 11:03	05/21/18 23:12	
Cobalt	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 23:12	
Lead	<0.00050		0.00050		mg/L		05/19/18 11:03	05/21/18 23:12	
Molybdenum	< 0.0050		0.0050		mg/L		05/19/18 11:03	05/21/18 23:12	
Selenium	< 0.0025		0.0025		mg/L		05/19/18 11:03	05/21/18 23:12	
Thallium	<0.0020		0.0020		mg/L		05/19/18 11:03	05/21/18 23:12	
Method: 7470A - Mercury	(CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Mercury	0.00040		0.00020		mg/L		05/25/18 12:35	05/30/18 16:06	-
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total Dissolved Solids	500		10		mg/L			05/21/18 04:20	
Chloride	45		2.0		mg/L			05/28/18 18:54	
Fluoride	0.23		0.10		mg/L			05/26/18 14:38	

mg/L

05/30/18 12:44

6/4/2018

Client: KPRG and Associates, Inc.

TestAmerica 900 IBF 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-03 Lab Sample ID: 500-145716-3 Date Collected: 05/15/18 11:00

Matrix: Water

Date Received: 05/18/18 17:20

Fluoride

Sulfate

Analyte	CP) - Total Recove Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010	0.010		mg/L		05/19/18 11:03	05/22/18 20:00	1
Method: 6020A - Metals (IC	CP/MS) - Total Rec	roverable						
Analyte	Result Qu		MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	0.0030		mg/L		05/19/18 11:03	05/21/18 23:16	1
Arsenic	0.0010	0.0010		mg/L		05/19/18 11:03	05/21/18 23:16	1
Barium	0.059	0.0025		mg/L		05/19/18 11:03	05/21/18 23:16	1
Beryllium	<0.0010	0.0010		mg/L		05/19/18 11:03	05/21/18 23:16	1
Boron	0.35	0.050		mg/L		05/19/18 11:03	05/22/18 17:28	1
Cadmium	< 0.00050	0.00050		mg/L		05/19/18 11:03	05/21/18 23:16	1
Calcium	77	0.20		mg/L		05/19/18 11:03	05/21/18 23:16	1
Chromium	< 0.0050	0.0050		mg/L		05/19/18 11:03	05/21/18 23:16	1
Cobalt	<0.0010	0.0010		mg/L		05/19/18 11:03	05/21/18 23:16	1
Lead	<0.00050	0.00050		mg/L		05/19/18 11:03	05/21/18 23:16	1
Molybdenum	< 0.0050	0.0050		mg/L		05/19/18 11:03	05/21/18 23:16	1
Selenium	< 0.0025	0.0025		mg/L		05/19/18 11:03	05/21/18 23:16	1
Thallium	<0.0020	0.0020		mg/L		05/19/18 11:03	05/21/18 23:16	1
Method: 7470A - Mercury ((CVAA)							
Analyte	Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	0.00020		mg/L		05/25/18 12:35	05/30/18 16:08	1
General Chemistry								
Analyte	Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<u>520</u>			mg/L			05/21/18 04:26	1
Chloride	65	2.0		mg/L			05/28/18 18:55	1

0.10

20

0.23

77

mg/L

mg/L

6/4/2018

05/26/18 14:41

06/04/18 12:51

Client: KPRG and Associates, Inc.

TestAmerica 900 IBf 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-04 Lab Sample ID: 500-145716-4 Date Collected: 05/15/18 12:11

Matrix: Water

Date Received: 05/18/18 17:20

Fluoride

Sulfate

Analyte	CP) - Total Recov Result (RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		05/19/18 11:03	05/22/18 20:04	1
Method: 6020A - Metals (IC	CP/MS) - Total Re	ecoverable							
Analyte	Result (RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/19/18 11:03	05/21/18 23:20	1
Arsenic	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 23:20	1
Barium	0.037		0.0025		mg/L		05/19/18 11:03	05/21/18 23:20	1
Beryllium	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 23:20	1
Boron	0.68		0.050		mg/L		05/19/18 11:03	05/22/18 17:32	1
Cadmium	< 0.00050		0.00050		mg/L		05/19/18 11:03	05/21/18 23:20	1
Calcium	87		0.20		mg/L		05/19/18 11:03	05/21/18 23:20	1
Chromium	<0.0050		0.0050		mg/L		05/19/18 11:03	05/21/18 23:20	1
Cobalt	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 23:20	1
Lead	<0.00050		0.00050		mg/L		05/19/18 11:03	05/21/18 23:20	1
Molybdenum	< 0.0050		0.0050		mg/L		05/19/18 11:03	05/21/18 23:20	1
Selenium	<0.0025		0.0025		mg/L		05/19/18 11:03	05/21/18 23:20	1
Thallium	<0.0020		0.0020		mg/L		05/19/18 11:03	05/21/18 23:20	1
Method: 7470A - Mercury	(CVAA)								
Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/25/18 12:35	05/30/18 16:10	1
General Chemistry									
Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	630		10		mg/L			05/21/18 04:28	1
Chloride	66		2.0		mg/L			05/28/18 18:56	1

0.10

25

0.27

100

mg/L

mg/L

05/26/18 14:45

06/04/18 12:52

1

Client: KPRG and Associates, Inc.

TestAmerica 969 18f 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-05 Lab Sample ID: 500-145716-5 Date Collected: 05/15/18 13:31

Matrix: Water

Date Received: 05/18/18 17:20

Fluoride

Sulfate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		05/19/18 11:03	05/22/18 20:08	1
Method: 6020A - Metals (IC	CP/MS) - Total R	ecoverable	Ž						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/19/18 11:03	05/21/18 23:24	1
Arsenic	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 23:24	1
Barium	0.062		0.0025		mg/L		05/19/18 11:03	05/21/18 23:24	1
Beryllium	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 23:24	1
Boron	0.61		0.050		mg/L		05/19/18 11:03	05/22/18 17:44	1
Cadmium	< 0.00050		0.00050		mg/L		05/19/18 11:03	05/21/18 23:24	1
Calcium	130		0.20		mg/L		05/19/18 11:03	05/21/18 23:24	1
Chromium	< 0.0050		0.0050		mg/L		05/19/18 11:03	05/21/18 23:24	1
Cobalt	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 23:24	1
Lead	<0.00050		0.00050		mg/L		05/19/18 11:03	05/21/18 23:24	1
Molybdenum	< 0.0050		0.0050		mg/L		05/19/18 11:03	05/21/18 23:24	1
Selenium	<0.0025		0.0025		mg/L		05/19/18 11:03	05/21/18 23:24	1
Thallium	<0.0020		0.0020		mg/L		05/19/18 11:03	05/21/18 23:24	1
Method: 7470A - Mercury	(CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/25/18 12:35	05/30/18 16:23	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	910		10		mg/L			05/21/18 04:31	1
Chloride	89		10		mg/L			05/28/18 18:57	5

0.10

50

0.29

210

mg/L

mg/L

05/26/18 14:48

06/04/18 12:55

1

10

6/4/2018

Client: KPRG and Associates, Inc.

TestAmerica 9 ob 18f 311-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-08 Lab Sample ID: 500-145716-6

Date Collected: 05/17/18 13:29

Date Received: 05/18/18 17:20

Matrix: Water

Method: 6010C - Metals (I	CP) - Total Recoverable							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010	0.010		mg/L		05/19/18 11:03	05/22/18 20:12	1
Method: 6020A - Metals (I	CP/MS) - Total Recoverable)						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	0.0030		mg/L		05/19/18 11:03	05/21/18 23:27	1
Arsenic	0.0030	0.0010		ma/L		05/19/18 11:03	05/21/18 23:27	1

Analyte	Result	Qualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	0.0030		mg/L		05/19/18 11:03	05/21/18 23:27	1
Arsenic	0.0030	0.0010		mg/L		05/19/18 11:03	05/21/18 23:27	1
Barium	0.072	0.0025		mg/L		05/19/18 11:03	05/21/18 23:27	1
Beryllium	<0.0010	0.0010		mg/L		05/19/18 11:03	05/21/18 23:27	1
Boron	1.2	0.25		mg/L		05/19/18 11:03	05/22/18 17:47	5
Cadmium	<0.00050	0.00050		mg/L		05/19/18 11:03	05/21/18 23:27	1
Calcium	130	0.20		mg/L		05/19/18 11:03	05/21/18 23:27	1
Chromium	<0.0050	0.0050		mg/L		05/19/18 11:03	05/21/18 23:27	1
Cobalt	<0.0010	0.0010		mg/L		05/19/18 11:03	05/21/18 23:27	1
Lead	<0.00050	0.00050		mg/L		05/19/18 11:03	05/21/18 23:27	1
Molybdenum	0.024	0.0050		mg/L		05/19/18 11:03	05/21/18 23:27	1
Selenium	<0.0025	0.0025		mg/L		05/19/18 11:03	05/21/18 23:27	1
Thallium	<0.0020	0.0020		mg/L		05/19/18 11:03	05/21/18 23:27	1

Method: 7470A - Mercury (CVA	AA)								
Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/25/18 12:35	05/30/18 16:26	1

General Chemistry Analyte	Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1000	10	mg/L		05/21/18 04:33	1
Chloride	200	10	mg/L		05/28/18 18:58	5
Fluoride	0.37	0.10	mg/L		05/26/18 14:51	1
Sulfate	170	50	mg/L		06/04/18 12:56	10

Client: KPRG and Associates, Inc.

TestAmerica 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-09 Lab Sample ID: 500-145716-7 Date Collected: 05/16/18 10:19

Matrix: Water

Date Received: 05/18/18 17:20

Sulfate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		05/19/18 11:03	05/22/18 20:24	1
Method: 6020A - Metals (I	CP/MS) - Total R	Recoverabl	e						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/19/18 11:03	05/21/18 23:31	1
Arsenic	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 23:31	1
Barium	0.038		0.0025		mg/L		05/19/18 11:03	05/21/18 23:31	1
Beryllium	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 23:31	1
Boron	4.1		1.0		mg/L		05/19/18 11:03	05/22/18 17:51	20
Cadmium	<0.00050		0.00050		mg/L		05/19/18 11:03	05/21/18 23:31	1
Calcium	89		0.20		mg/L		05/19/18 11:03	05/21/18 23:31	1
Chromium	<0.0050		0.0050		mg/L		05/19/18 11:03	05/21/18 23:31	1
Cobalt	< 0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 23:31	1
Lead	<0.00050		0.00050		mg/L		05/19/18 11:03	05/21/18 23:31	1
Molybdenum	0.031		0.0050		mg/L		05/19/18 11:03	05/21/18 23:31	1
Selenium	0.0060		0.0025		mg/L		05/19/18 11:03	05/21/18 23:31	1
Thallium	<0.0020		0.0020		mg/L		05/19/18 11:03	05/21/18 23:31	1
Method: 7470A - Mercury	(CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00029		0.00020		mg/L		05/25/18 12:35	05/30/18 16:28	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	550		10		mg/L			05/21/18 04:36	1
Chloride	36		2.0		mg/L			05/28/18 19:01	1
Fluoride	0.15		0.10		mg/L			05/26/18 15:04	1

50

mg/L

180

06/04/18 12:57

Client: KPRG and Associates, Inc.

TestAmerica 905 IBf 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-10 Lab Sample ID: 500-145716-8 Date Collected: 05/16/18 11:41

Matrix: Water

Date Received: 05/18/18 17:20

Fluoride

Sulfate

Method: 6010C - Metals (ICAnalyte	Result Qu		MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010	0.010		mg/L		05/19/18 11:03	05/22/18 20:28	1
Method: 6020A - Metals (IC	CP/MS) - Total Red	coverable						
Analyte	Result Q		MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	0.0030		mg/L		05/19/18 11:03	05/21/18 23:35	1
Arsenic	0.0010	0.0010		mg/L		05/19/18 11:03	05/21/18 23:35	1
Barium	0.22	0.0025		mg/L		05/19/18 11:03	05/21/18 23:35	1
Beryllium	<0.0010	0.0010		mg/L		05/19/18 11:03	05/21/18 23:35	1
Boron	0.42	0.050		mg/L		05/19/18 11:03	05/22/18 17:55	1
Cadmium	<0.00050	0.00050		mg/L		05/19/18 11:03	05/21/18 23:35	1
Calcium	93	0.20		mg/L		05/19/18 11:03	05/21/18 23:35	1
Chromium	<0.0050	0.0050		mg/L		05/19/18 11:03	05/21/18 23:35	1
Cobalt	0.021	0.0010		mg/L		05/19/18 11:03	05/21/18 23:35	1
Lead	0.0010	0.00050		mg/L		05/19/18 11:03	05/21/18 23:35	1
Molybdenum	< 0.0050	0.0050		mg/L		05/19/18 11:03	05/21/18 23:35	1
Selenium	0.0050	0.0025		mg/L		05/19/18 11:03	05/21/18 23:35	1
Thallium	<0.0020	0.0020		mg/L		05/19/18 11:03	05/21/18 23:35	1
Method: 7470A - Mercury	(CVAA)							
Analyte	Result Q	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	0.00020		mg/L		05/25/18 12:35	05/30/18 16:30	1
General Chemistry								
Analyte	Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	530			mg/L			05/21/18 04:39	1
Chloride	44	2.0		mg/L			05/28/18 19:02	1

0.10

20

0.19

80

mg/L

mg/L

05/26/18 15:07

06/04/18 12:58

Client: KPRG and Associates, Inc.

TestAmerica 900 IBF 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-11 Lab Sample ID: 500-145716-9 Date Collected: 05/16/18 13:01

Matrix: Water

Date Received: 05/18/18 17:20

Sulfate

Analyte	CP) - Total Reco	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010	<u>Quantition</u>	0.010		mg/L	=	05/19/18 11:03	05/22/18 20:32	1
: Method: 6020A - Metals (I	CD/MS) - Total B	Pocovorabl	•						
Analyte		Qualifier	RL RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L	— <u> </u>	05/19/18 11:03	05/21/18 23:39	
Arsenic	0.089		0.0010		mg/L		05/19/18 11:03	05/21/18 23:39	
Barium	0.47		0.0025		mg/L		05/19/18 11:03	05/21/18 23:39	
Beryllium	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 23:39	· · · · · .
Boron	2.0		0.50		mg/L		05/19/18 11:03	05/22/18 17:59	10
Cadmium	<0.00050		0.00050		mg/L		05/19/18 11:03	05/21/18 23:39	
Calcium	140		0.20		mg/L		05/19/18 11:03	05/21/18 23:39	· · · · · · .
Chromium	<0.0050		0.0050		mg/L		05/19/18 11:03	05/21/18 23:39	
Cobalt	0.0041		0.0010		mg/L		05/19/18 11:03	05/21/18 23:39	
Lead	<0.00050		0.00050		mg/L		05/19/18 11:03	05/21/18 23:39	
Molybdenum	0.014		0.0050		mg/L		05/19/18 11:03	05/21/18 23:39	
Selenium	<0.0025		0.0025		mg/L		05/19/18 11:03	05/21/18 23:39	
Thallium	<0.0020		0.0020		mg/L		05/19/18 11:03	05/21/18 23:39	
Method: 7470A - Mercury	(CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Mercury	<0.00020		0.00020		mg/L		05/25/18 12:35	05/30/18 16:33	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total Dissolved Solids	1000		10		mg/L			05/21/18 04:41	
Chloride	88		10		mg/L			05/28/18 19:03	
Fluoride	0.61		0.10		mg/L			05/26/18 15:10	1

50

mg/L

270

06/04/18 13:01

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 9 of 18f 311-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-12 Lab Sample ID: 500-145716-10

Date Collected: 05/16/18 14:41 Matrix: Water

Method: 6010C - Metals (IC	CP) - Total Recov	/erable							
Analyte	Result C		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.012		0.010		mg/L		05/19/18 11:03	05/22/18 20:36	1
Method: 6020A - Metals (IC	CP/MS) - Total Re	ecoverable	9						
Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/19/18 11:03	05/21/18 23:43	1
Arsenic	0.086		0.0010		mg/L		05/19/18 11:03	05/21/18 23:43	1
Barium	0.10		0.0025		mg/L		05/19/18 11:03	05/21/18 23:43	1
Beryllium	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 23:43	1
Boron	0.46		0.050		mg/L		05/19/18 11:03	05/22/18 18:03	1
Cadmium	0.00052		0.00050		mg/L		05/19/18 11:03	05/21/18 23:43	1
Calcium	100		0.20		mg/L		05/19/18 11:03	05/21/18 23:43	1
Chromium	<0.0050		0.0050		mg/L		05/19/18 11:03	05/21/18 23:43	1
Cobalt	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 23:43	1
Lead	0.00067		0.00050		mg/L		05/19/18 11:03	05/21/18 23:43	1
Molybdenum	0.021		0.0050		mg/L		05/19/18 11:03	05/21/18 23:43	1
Selenium	<0.0025		0.0025		mg/L		05/19/18 11:03	05/21/18 23:43	•
Thallium	<0.0020		0.0020		mg/L		05/19/18 11:03	05/21/18 23:43	· · · · · · ,
Method: 7470A - Mercury	(CVAA)								
Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/25/18 12:35	05/30/18 16:35	1
General Chemistry									
Analyte	Result 0	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1500		10		mg/L			05/21/18 04:44	1
Chloride	180		10		mg/L			05/28/18 19:21	
Fluoride	0.47		0.10		mg/L			05/26/18 15:13	•
Sulfate	720		130		mg/L			06/04/18 13:02	25

TestAmerica 900 IB: 300-145716-1

Project/Site: Powerton CCR

Chloride

Fluoride

Sulfate

Client Sample ID: MW-15

Lab Sample ID: 500-145716-11

Matrix: Water

Date Collected: 05/17/18 11:58 Date Received: 05/18/18 17:20

Method: 6010C - Metals (Id Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.029		0.010		mg/L		05/19/18 11:03	05/22/18 20:40	1
Method: 6020A - Metals (I	CP/MS) - Total R	Recoverabl	e						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/19/18 11:03	05/21/18 23:54	1
Arsenic	0.0081		0.0010		mg/L		05/19/18 11:03	05/21/18 23:54	1
Barium	0.050		0.0025		mg/L		05/19/18 11:03	05/21/18 23:54	1
Beryllium	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 23:54	1
Boron	2.3		0.50		mg/L		05/19/18 11:03	05/22/18 18:07	10
Cadmium	<0.00050		0.00050		mg/L		05/19/18 11:03	05/21/18 23:54	1
Calcium	200		0.20		mg/L		05/19/18 11:03	05/21/18 23:54	1
Chromium	<0.0050		0.0050		mg/L		05/19/18 11:03	05/21/18 23:54	1
Cobalt	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 23:54	1
Lead	<0.00050		0.00050		mg/L		05/19/18 11:03	05/21/18 23:54	1
Molybdenum	0.030		0.0050		mg/L		05/19/18 11:03	05/21/18 23:54	1
Selenium	0.077		0.0025		mg/L		05/19/18 11:03	05/21/18 23:54	1
Thallium	<0.0020		0.0020		mg/L		05/19/18 11:03	05/21/18 23:54	1
Method: 7470A - Mercury	(CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/25/18 12:35	05/30/18 16:37	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1800		10		mg/L			05/21/18 04:46	1

10

0.10

130

160

0.50 680 mg/L

mg/L

mg/L

TestAmerica Chicago

05/28/18 19:04

05/26/18 15:16

06/04/18 13:03

5

1

TestAmerica 300 IBF 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-17 Lab Sample ID: 500-145716-12 Date Collected: 05/14/18 14:51

220

0.60

800

Matrix: Water

Date Received: 05/18/18 17:20

Chloride

Fluoride

Sulfate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.015		0.010		mg/L		05/19/18 11:03	05/22/18 20:44	1
Method: 6020A - Metals (IC	CP/MS) - Total R	ecoverabl	e						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/19/18 11:03	05/21/18 23:58	1
Arsenic	0.42		0.0010		mg/L		05/19/18 11:03	05/21/18 23:58	1
Barium	0.17		0.0025		mg/L		05/19/18 11:03	05/21/18 23:58	1
Beryllium	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 23:58	1
Boron	1.6		0.50		mg/L		05/19/18 11:03	05/22/18 18:11	10
Cadmium	0.0020		0.00050		mg/L		05/19/18 11:03	05/21/18 23:58	1
Calcium	170		0.20		mg/L		05/19/18 11:03	05/21/18 23:58	1
Chromium	<0.0050		0.0050		mg/L		05/19/18 11:03	05/21/18 23:58	1
Cobalt	0.0029		0.0010		mg/L		05/19/18 11:03	05/21/18 23:58	1
Lead	0.0021		0.00050		mg/L		05/19/18 11:03	05/21/18 23:58	1
Molybdenum	0.13		0.0050		mg/L		05/19/18 11:03	05/21/18 23:58	1
Selenium	<0.0025		0.0025		mg/L		05/19/18 11:03	05/21/18 23:58	1
Thallium	0.0068		0.0020		mg/L		05/19/18 11:03	05/21/18 23:58	1
Method: 7470A - Mercury (CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/25/18 12:35	05/30/18 16:44	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1700		10		mg/L			05/21/18 04:49	1

10

0.10

130

mg/L

mg/L

mg/L

5

1

25

05/28/18 19:04

05/26/18 15:19

06/04/18 13:04

TestAmerica 950 IB: 300-145716-1

Project/Site: Powerton CCR

Total Dissolved Solids

Chloride

Fluoride

Sulfate

Client Sample ID: MW-18

Date Collected: 05/14/18 16:05 Date Received: 05/18/18 17:20 Lab Sample ID: 500-145716-13

Matrix: Water

05/21/18 04:51

05/28/18 19:05

05/26/18 15:22

06/04/18 13:05

5

1

20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.013		0.010		mg/L		05/19/18 11:03	05/22/18 20:48	1
Method: 6020A - Metals (I	ICP/MS) - Total R	ecoverabl	e						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/19/18 11:03	05/22/18 00:01	1
Arsenic	<0.0010		0.0010		mg/L		05/19/18 11:03	05/22/18 00:01	1
Barium	0.13		0.0025		mg/L		05/19/18 11:03	05/22/18 00:01	1
Beryllium	<0.0010		0.0010		mg/L		05/19/18 11:03	05/22/18 00:01	1
Boron	0.57		0.050		mg/L		05/19/18 11:03	05/22/18 18:15	1
Cadmium	<0.00050		0.00050		mg/L		05/19/18 11:03	05/22/18 00:01	1
Calcium	130		0.20		mg/L		05/19/18 11:03	05/22/18 00:01	1
Chromium	<0.0050		0.0050		mg/L		05/19/18 11:03	05/22/18 00:01	1
Cobalt	<0.0010		0.0010		mg/L		05/19/18 11:03	05/22/18 00:01	1
Lead	<0.00050		0.00050		mg/L		05/19/18 11:03	05/22/18 00:01	1
Molybdenum	0.0052		0.0050		mg/L		05/19/18 11:03	05/22/18 00:01	1
Selenium	<0.0025		0.0025		mg/L		05/19/18 11:03	05/22/18 00:01	1
Thallium	<0.0020		0.0020		mg/L		05/19/18 11:03	05/22/18 00:01	1
Method: 7470A - Mercury	(CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/25/18 12:35	05/30/18 16:46	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

10

10

0.10

100

1200

180

0.59

440

mg/L

mg/L

mg/L

mg/L

TestAmerica 551 IBF 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-19

Lab Sample ID: 500-145716-14

Matrix: Water

Date Collected: 05/14/18 17:35 Date Received: 05/18/18 17:20

Sulfate

Method: 6010C - Metals (ICAnalyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		05/19/18 11:03	05/22/18 20:52	1
Method: 6020A - Metals (IC	CP/MS) - Total F	Recoverabl	e						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/19/18 11:03	05/22/18 00:05	1
Arsenic	<0.0010		0.0010		mg/L		05/19/18 11:03	05/22/18 00:05	1
Barium	0.079		0.0025		mg/L		05/19/18 11:03	05/22/18 00:05	1
Beryllium	<0.0010		0.0010		mg/L		05/19/18 11:03	05/22/18 00:05	1
Boron	4.1		1.0		mg/L		05/19/18 11:03	05/22/18 18:18	20
Cadmium	<0.00050		0.00050		mg/L		05/19/18 11:03	05/22/18 00:05	1
Calcium	96		0.20		mg/L		05/19/18 11:03	05/22/18 00:05	1
Chromium	< 0.0050		0.0050		mg/L		05/19/18 11:03	05/22/18 00:05	1
Cobalt	<0.0010		0.0010		mg/L		05/19/18 11:03	05/22/18 00:05	1
Lead	<0.00050		0.00050		mg/L		05/19/18 11:03	05/22/18 00:05	1
Molybdenum	0.043		0.0050		mg/L		05/19/18 11:03	05/22/18 00:05	1
Selenium	0.0044		0.0025		mg/L		05/19/18 11:03	05/22/18 00:05	1
Thallium	<0.0020		0.0020		mg/L		05/19/18 11:03	05/22/18 00:05	1
Method: 7470A - Mercury	(CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/25/18 12:35	05/30/18 16:49	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	820		10		mg/L			05/21/18 04:54	1
Chloride	35		2.0		mg/L			05/28/18 19:07	
Fluoride	0.16		0.10		mg/L			05/26/18 15:25	4

50

mg/L

180

10

06/04/18 13:06

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Client: KPRG and Associates, Inc.

TestAmerica 55218f 300-145716-1

Project/Site: Powerton CCR

Fluoride

Sulfate

Client Sample ID: Duplicate Date Collected: 05/14/18 00:00

Lab Sample ID: 500-145716-15

Matrix: Water

Date Received: 05/18/18 17:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		05/19/18 11:03	05/22/18 20:57	1
Method: 6020A - Metals (IC	CP/MS) - Total R	ecoverable	e						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/19/18 11:03	05/22/18 00:09	1
Arsenic	<0.0010		0.0010		mg/L		05/19/18 11:03	05/22/18 00:09	1
Barium	0.077		0.0025		mg/L		05/19/18 11:03	05/22/18 00:09	1
Beryllium	<0.0010		0.0010		mg/L		05/19/18 11:03	05/22/18 00:09	1
Boron	3.9		1.0		mg/L		05/19/18 11:03	05/22/18 18:33	20
Cadmium	< 0.00050		0.00050		mg/L		05/19/18 11:03	05/22/18 00:09	1
Calcium	95		0.20		mg/L		05/19/18 11:03	05/22/18 00:09	1
Chromium	<0.0050		0.0050		mg/L		05/19/18 11:03	05/22/18 00:09	1
Cobalt	<0.0010		0.0010		mg/L		05/19/18 11:03	05/22/18 00:09	1
Lead	<0.00050		0.00050		mg/L		05/19/18 11:03	05/22/18 00:09	1
Molybdenum	0.042		0.0050		mg/L		05/19/18 11:03	05/22/18 00:09	1
Selenium	0.0040		0.0025		mg/L		05/19/18 11:03	05/22/18 00:09	1
Thallium	<0.0020		0.0020		mg/L		05/19/18 11:03	05/22/18 00:09	1
Method: 7470A - Mercury	(CVAA)								
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		05/25/18 12:35	05/30/18 16:51	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	850		10		mg/L			05/21/18 04:57	1
Chloride	36		2.0		mg/L			05/28/18 19:22	1

0.10

50

0.15

190

mg/L

mg/L

05/26/18 15:29

06/04/18 13:07

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Client: KPRG and Associates, Inc.

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TestAmerica 553 IBF 310-145716-1

Project/Site: Powerton CCR

Qualifiers

Metals

Qualifier Qualifier Description

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

n

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)

Ö

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

TestAmerica 9 ob 18: 300-145716-1

Metals

Prep Batch: 433097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145716-1	MW-01	Total Recoverable	Water	3005A	
500-145716-2	MW-02	Total Recoverable	Water	3005A	
500-145716-3	MW-03	Total Recoverable	Water	3005A	
500-145716-4	MW-04	Total Recoverable	Water	3005A	
500-145716-5	MW-05	Total Recoverable	Water	3005A	
500-145716-6	MW-08	Total Recoverable	Water	3005A	
500-145716-7	MW-09	Total Recoverable	Water	3005A	
500-145716-8	MW-10	Total Recoverable	Water	3005A	
500-145716-9	MW-11	Total Recoverable	Water	3005A	
500-145716-10	MW-12	Total Recoverable	Water	3005A	
500-145716-11	MW-15	Total Recoverable	Water	3005A	
500-145716-12	MW-17	Total Recoverable	Water	3005A	
500-145716-13	MW-18	Total Recoverable	Water	3005A	
500-145716-14	MW-19	Total Recoverable	Water	3005A	
500-145716-15	Duplicate	Total Recoverable	Water	3005A	
MB 500-433097/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-433097/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-145716-1 MS	MW-01	Total Recoverable	Water	3005A	
500-145716-1 MSD	MW-01	Total Recoverable	Water	3005A	
500-145716-1 DU	MW-01	Total Recoverable	Water	3005A	

Analysis Batch: 433393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145716-1	MW-01	Total Recoverable	Water	6020A	433097
500-145716-2	MW-02	Total Recoverable	Water	6020A	433097
500-145716-3	MW-03	Total Recoverable	Water	6020A	433097
500-145716-4	MW-04	Total Recoverable	Water	6020A	433097
500-145716-5	MW-05	Total Recoverable	Water	6020A	433097
500-145716-6	MW-08	Total Recoverable	Water	6020A	433097
500-145716-7	MW-09	Total Recoverable	Water	6020A	433097
500-145716-8	MW-10	Total Recoverable	Water	6020A	433097
500-145716-9	MW-11	Total Recoverable	Water	6020A	433097
500-145716-10	MW-12	Total Recoverable	Water	6020A	433097
500-145716-11	MW-15	Total Recoverable	Water	6020A	433097
500-145716-12	MW-17	Total Recoverable	Water	6020A	433097
500-145716-13	MW-18	Total Recoverable	Water	6020A	433097
500-145716-14	MW-19	Total Recoverable	Water	6020A	433097
500-145716-15	Duplicate	Total Recoverable	Water	6020A	433097
MB 500-433097/1-A	Method Blank	Total Recoverable	Water	6020A	433097
LCS 500-433097/2-A	Lab Control Sample	Total Recoverable	Water	6020A	433097
500-145716-1 MS	MW-01	Total Recoverable	Water	6020A	433097
500-145716-1 MSD	MW-01	Total Recoverable	Water	6020A	433097
500-145716-1 DU	MW-01	Total Recoverable	Water	6020A	433097

Analysis Batch: 433534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145716-1	MW-01	Total Recoverable	Water	6010C	433097
500-145716-2	MW-02	Total Recoverable	Water	6010C	433097
500-145716-3	MW-03	Total Recoverable	Water	6010C	433097
500-145716-4	MW-04	Total Recoverable	Water	6010C	433097
500-145716-5	MW-05	Total Recoverable	Water	6010C	433097

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

Metals (Continued)

Analysis Batch: 433534 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145716-6	MW-08	Total Recoverable	Water	6010C	433097
500-145716-7	MW-09	Total Recoverable	Water	6010C	433097
500-145716-8	MW-10	Total Recoverable	Water	6010C	433097
500-145716-9	MW-11	Total Recoverable	Water	6010C	433097
500-145716-10	MW-12	Total Recoverable	Water	6010C	433097
500-145716-11	MW-15	Total Recoverable	Water	6010C	433097
500-145716-12	MW-17	Total Recoverable	Water	6010C	433097
500-145716-13	MW-18	Total Recoverable	Water	6010C	433097
500-145716-14	MW-19	Total Recoverable	Water	6010C	433097
500-145716-15	Duplicate	Total Recoverable	Water	6010C	433097
MB 500-433097/1-A	Method Blank	Total Recoverable	Water	6010C	433097
LCS 500-433097/2-A	Lab Control Sample	Total Recoverable	Water	6010C	433097
500-145716-1 MS	MW-01	Total Recoverable	Water	6010C	433097
500-145716-1 MSD	MW-01	Total Recoverable	Water	6010C	433097
500-145716-1 DU	MW-01	Total Recoverable	Water	6010C	433097

Analysis Batch: 433604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145716-1	MW-01	Total Recoverable	Water	6020A	433097
500-145716-2	MW-02	Total Recoverable	Water	6020A	433097
500-145716-3	MW-03	Total Recoverable	Water	6020A	433097
500-145716-4	MW-04	Total Recoverable	Water	6020A	433097
500-145716-5	MW-05	Total Recoverable	Water	6020A	433097
500-145716-6	MW-08	Total Recoverable	Water	6020A	433097
500-145716-7	MW-09	Total Recoverable	Water	6020A	433097
500-145716-8	MW-10	Total Recoverable	Water	6020A	433097
500-145716-9	MW-11	Total Recoverable	Water	6020A	433097
500-145716-10	MW-12	Total Recoverable	Water	6020A	433097
500-145716-11	MW-15	Total Recoverable	Water	6020A	433097
500-145716-12	MW-17	Total Recoverable	Water	6020A	433097
500-145716-13	MW-18	Total Recoverable	Water	6020A	433097
500-145716-14	MW-19	Total Recoverable	Water	6020A	433097
500-145716-15	Duplicate	Total Recoverable	Water	6020A	433097
MB 500-433097/1-A	Method Blank	Total Recoverable	Water	6020A	433097
LCS 500-433097/2-A	Lab Control Sample	Total Recoverable	Water	6020A	433097
500-145716-1 MS	MW-01	Total Recoverable	Water	6020A	433097
500-145716-1 MSD	MW-01	Total Recoverable	Water	6020A	433097
500-145716-1 DU	MW-01	Total Recoverable	Water	6020A	433097

Prep Batch: 434080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
500-145716-1	MW-01	Total/NA	Water	7470A	
500-145716-2	MW-02	Total/NA	Water	7470A	
500-145716-3	MW-03	Total/NA	Water	7470A	
500-145716-4	MW-04	Total/NA	Water	7470A	
500-145716-5	MW-05	Total/NA	Water	7470A	
500-145716-6	MW-08	Total/NA	Water	7470A	
500-145716-7	MW-09	Total/NA	Water	7470A	
500-145716-8	MW-10	Total/NA	Water	7470A	
500-145716-9	MW-11	Total/NA	Water	7470A	
500-145716-10	MW-12	Total/NA	Water	7470A	

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

TestAmerica 9 ob IB: 300-145716-1

Metals (Continued)

Prep Batch: 434080 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145716-11	MW-15	Total/NA	Water	7470A	
500-145716-12	MW-17	Total/NA	Water	7470A	
500-145716-13	MW-18	Total/NA	Water	7470A	
500-145716-14	MW-19	Total/NA	Water	7470A	
500-145716-15	Duplicate	Total/NA	Water	7470A	
MB 500-434080/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-434080/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-145716-4 MS	MW-04	Total/NA	Water	7470A	
500-145716-4 MSD	MW-04	Total/NA	Water	7470A	
500-145716-4 DU	MW-04	Total/NA	Water	7470A	

Analysis Batch: 434677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145716-1	MW-01	Total/NA	Water	7470A	434080
500-145716-2	MW-02	Total/NA	Water	7470A	434080
500-145716-3	MW-03	Total/NA	Water	7470A	434080
500-145716-4	MW-04	Total/NA	Water	7470A	434080
500-145716-5	MW-05	Total/NA	Water	7470A	434080
500-145716-6	MW-08	Total/NA	Water	7470A	434080
500-145716-7	MW-09	Total/NA	Water	7470A	434080
500-145716-8	MW-10	Total/NA	Water	7470A	434080
500-145716-9	MW-11	Total/NA	Water	7470A	434080
500-145716-10	MW-12	Total/NA	Water	7470A	434080
500-145716-11	MW-15	Total/NA	Water	7470A	434080
500-145716-12	MW-17	Total/NA	Water	7470A	434080
500-145716-13	MW-18	Total/NA	Water	7470A	434080
500-145716-14	MW-19	Total/NA	Water	7470A	434080
500-145716-15	Duplicate	Total/NA	Water	7470A	434080
MB 500-434080/12-A	Method Blank	Total/NA	Water	7470A	434080
LCS 500-434080/13-A	Lab Control Sample	Total/NA	Water	7470A	434080
500-145716-4 MS	MW-04	Total/NA	Water	7470A	434080
500-145716-4 MSD	MW-04	Total/NA	Water	7470A	434080
500-145716-4 DU	MW-04	Total/NA	Water	7470A	434080

General Chemistry

Analysis Batch: 433168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145716-1	MW-01	Total/NA	Water	SM 2540C	
500-145716-2	MW-02	Total/NA	Water	SM 2540C	
500-145716-3	MW-03	Total/NA	Water	SM 2540C	
500-145716-4	MW-04	Total/NA	Water	SM 2540C	
500-145716-5	MW-05	Total/NA	Water	SM 2540C	
500-145716-6	MW-08	Total/NA	Water	SM 2540C	
500-145716-7	MW-09	Total/NA	Water	SM 2540C	
500-145716-8	MW-10	Total/NA	Water	SM 2540C	
500-145716-9	MW-11	Total/NA	Water	SM 2540C	
500-145716-10	MW-12	Total/NA	Water	SM 2540C	
500-145716-11	MW-15	Total/NA	Water	SM 2540C	
500-145716-12	MW-17	Total/NA	Water	SM 2540C	

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Client: KPRG and Associates, Inc.

TestAmerica 9 57 IBf 311-145716-1

Project/Site: Powerton CCR

General Chemistry (Continued)

Analysis Batch: 433168 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145716-13	MW-18	Total/NA	Water	SM 2540C	
500-145716-14	MW-19	Total/NA	Water	SM 2540C	
500-145716-15	Duplicate	Total/NA	Water	SM 2540C	
MB 500-433168/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-433168/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-145716-1 MS	MW-01	Total/NA	Water	SM 2540C	
500-145716-1 DU	MW-01	Total/NA	Water	SM 2540C	
500-145716-2 DU	MW-02	Total/NA	Water	SM 2540C	

Analysis Batch: 434275

0-145716-1 MW-01 Total/ 0-145716-2 MW-02 Total/ 0-145716-3 MW-03 Total/ 0-145716-4 MW-04 Total/	NA Water NA Water NA Water	r SM 4500 F C r SM 4500 F C	
0-145716-3 MW-03 Total/	NA Water NA Water	r SM 4500 F C	
	NA Water		
0-145716-4 MW-04 Total/		r SM 4500 F C	
	NIA Water		
0-145716-5 MW-05 Total/	NA Wate	r SM 4500 F C	
0-145716-6 MW-08 Total/	NA Wate	r SM 4500 F C	
0-145716-7 MW-09 Total/	NA Wate	r SM 4500 F C	
0-145716-8 MW-10 Total/	NA Wate	r SM 4500 F C	
0-145716-9 MW-11 Total/	NA Wate	r SM 4500 F C	
0-145716-10 MW-12 Total/	NA Wate	r SM 4500 F C	
0-145716-11 MW-15 Total/	NA Wate	r SM 4500 F C	
0-145716-12 MW-17 Total/	NA Wate	r SM 4500 F C	
0-145716-13 MW-18 Total/	NA Wate	r SM 4500 F C	
0-145716-14 MW-19 Total/	NA Wate	r SM 4500 F C	
0-145716-15 Duplicate Total/	NA Wate	r SM 4500 F C	
3 500-434275/3 Method Blank Total/	NA Wate	r SM 4500 F C	
S 500-434275/4 Lab Control Sample Total/	NA Wate	r SM 4500 F C	
0-145716-1 MS MW-01 Total/	NA Wate	r SM 4500 F C	
0-145716-1 MSD MW-01 Total/	NA Wate	r SM 4500 F C	

Analysis Batch: 434300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145716-1	MW-01	Total/NA	Water	SM 4500 CI- E	
500-145716-2	MW-02	Total/NA	Water	SM 4500 CI- E	
500-145716-3	MW-03	Total/NA	Water	SM 4500 CI- E	
500-145716-4	MW-04	Total/NA	Water	SM 4500 CI- E	
500-145716-5	MW-05	Total/NA	Water	SM 4500 CI- E	
500-145716-6	MW-08	Total/NA	Water	SM 4500 CI- E	
500-145716-7	MW-09	Total/NA	Water	SM 4500 CI- E	
500-145716-8	MW-10	Total/NA	Water	SM 4500 CI- E	
500-145716-9	MW-11	Total/NA	Water	SM 4500 CI- E	
500-145716-10	MW-12	Total/NA	Water	SM 4500 CI- E	
500-145716-11	MW-15	Total/NA	Water	SM 4500 CI- E	
500-145716-12	MW-17	Total/NA	Water	SM 4500 CI- E	
500-145716-13	MW-18	Total/NA	Water	SM 4500 CI- E	
500-145716-14	MW-19	Total/NA	Water	SM 4500 CI- E	
500-145716-15	Duplicate	Total/NA	Water	SM 4500 CI- E	
MB 500-434300/4	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-434300/5	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
500-145716-7 MS	MW-09	Total/NA	Water	SM 4500 CI- E	

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Project/Site: Powerton CCR

General Chemistry (Continued)

Analysis Batch: 434300 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145716-7 MSD	MW-09	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 434591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145716-1	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-145716-2	MW-02	Total/NA	Water	SM 4500 SO4 E	
MB 500-434591/3	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-434591/4	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 435221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145716-3	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-145716-4	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-145716-5	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-145716-6	MW-08	Total/NA	Water	SM 4500 SO4 E	
500-145716-7	MW-09	Total/NA	Water	SM 4500 SO4 E	
500-145716-8	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-145716-9	MW-11	Total/NA	Water	SM 4500 SO4 E	
500-145716-10	MW-12	Total/NA	Water	SM 4500 SO4 E	
500-145716-11	MW-15	Total/NA	Water	SM 4500 SO4 E	
500-145716-12	MW-17	Total/NA	Water	SM 4500 SO4 E	
500-145716-13	MW-18	Total/NA	Water	SM 4500 SO4 E	
500-145716-14	MW-19	Total/NA	Water	SM 4500 SO4 E	
500-145716-15	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-435221/3	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-435221/4	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-145716-4 MS	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-145716-4 MSD	MW-04	Total/NA	Water	SM 4500 SO4 E	

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LCS LCS

MS MS

MSD MSD

DU DU

Result Qualifier

Result Qualifier

Result Qualifier

0.515

0.545

0.541

<0.010

Result Qualifier

Client: KPRG and Associates, Inc.

TestAmerica 30 10 145716-1

Project/Site: Powerton CCR

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-433097/1-A

Matrix: Water

Analysis Batch: 433534

Client Sample ID: Method Blank **Prep Type: Total Recoverable Prep Batch: 433097**

Unit

mg/L

Unit

mg/L

Unit

mg/L

Unit

mg/L

MB MB

Sample Sample

Sample Sample

Sample Sample

<0.010

Result Qualifier

Result Qualifier

Result Qualifier

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac D 0.010 05/19/18 11:03 05/22/18 19:21 Lithium <0.010 mg/L

Spike

Added

0.500

Spike

Added

0.500

Spike

Added

0.500

Lab Sample ID: LCS 500-433097/2-A

Matrix: Water

Analysis Batch: 433534

Analyte

Lithium Lab Sample ID: 500-145716-1 MS

Matrix: Water

Analysis Batch: 433534

Analyte

Lithium <0.010 Lab Sample ID: 500-145716-1 MSD

Matrix: Water

Analysis Batch: 433534

Analyte

Lithium <0.010 Lab Sample ID: 500-145716-1 DU

Matrix: Water

Analysis Batch: 433534

Method: 6020A - Metals (ICP/MS) Lab Sample ID: MB 500-433097/1-A

Matrix: Water

Analyte

Lithium

Analysis Batch: 433393

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

Prep Batch: 433097

%Rec. Limits %Rec

80 - 120

103

108

Client Sample ID: MW-01 **Prep Type: Total Recoverable**

Prep Batch: 433097 %Rec.

Limits D %Rec 109 75 - 125

Client Sample ID: MW-01 **Prep Type: Total Recoverable**

Prep Batch: 433097 %Rec. **RPD** Limits **RPD** Limit

Client Sample ID: MW-01

Prep Type: Total Recoverable Prep Batch: 433097

RPD

RPD Limit NC 20

75 - 125

Client Sample ID: Method Blank Prep Type: Total Recoverable Prep Batch: 433097

7 thialy old Datolli 100000									
•	MB	MB						•	
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		05/19/18 11:03	05/21/18 22:39	1
Arsenic	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 22:39	1
Barium	<0.0025		0.0025		mg/L		05/19/18 11:03	05/21/18 22:39	1
Beryllium	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 22:39	1
Cadmium	<0.00050		0.00050		mg/L		05/19/18 11:03	05/21/18 22:39	1
Calcium	<0.20		0.20		mg/L		05/19/18 11:03	05/21/18 22:39	1
Chromium	<0.0050		0.0050		mg/L		05/19/18 11:03	05/21/18 22:39	1
Cobalt	<0.0010		0.0010		mg/L		05/19/18 11:03	05/21/18 22:39	1
Molybdenum	<0.0050		0.0050		mg/L		05/19/18 11:03	05/21/18 22:39	1
Selenium	<0.0025		0.0025		mg/L		05/19/18 11:03	05/21/18 22:39	1
Thallium	<0.0020		0.0020		mg/L		05/19/18 11:03	05/21/18 22:39	1

TestAmerica Chicago

TestAmerica Job IB: 311-145716-1

Project/Site: Powerton CCR

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

MB MB

Lab Sample ID: MB 500-433097/1-A

Matrix: Water

Analysis Batch: 433604

Client Sample ID: Method Blank **Prep Type: Total Recoverable Prep Batch: 433097**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050		0.050		mg/L		05/19/18 11:03	05/22/18 16:57	1
Lead	<0.00050		0.00050		mg/L		05/19/18 11:03	05/22/18 16:57	1

Lab Sample ID: LCS 500-433097/2-A

Matrix: Water

Analysis Batch: 433393

Client Sample ID: Lab Control Sample Prep Type: Total Recoverable Pren Batch: 433097

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Allalysis Batcii. 455595	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.508		mg/L		102	80 - 120
Arsenic	0.100	0.0952		mg/L		95	80 - 120
Barium	2.00	2.01		mg/L		100	80 - 120
Beryllium	0.0500	0.0518		mg/L		104	80 - 120
Cadmium	0.0500	0.0511		mg/L		102	80 - 120
Calcium	10.0	9.19		mg/L		92	80 - 120
Chromium	0.200	0.211		mg/L		105	80 - 120
Cobalt	0.500	0.533		mg/L		107	80 - 120
Molybdenum	1.00	0.940		mg/L		94	80 - 120
Selenium	0.100	0.0954		mg/L		95	80 - 120
Thallium	0.100	0.106		mg/L		106	80 - 120

Lab Sample ID: LCS 500-433097/2-A

Matrix: Water

Analysis Batch: 433604

Client Sample ID: Lab Control Sample Prep Type: Total Recoverable Prep Batch: 433097

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Boron	1.00	0.988		mg/L		99	80 - 120	
Lead	0.100	0.109		mg/L		109	80 - 120	

Lab Sample ID: 500-145716-1 MS

Matrix: Water

Analysis Batch: 433393

Client Sample ID: MW-01 **Prep Type: Total Recoverable**

Prep Batch: 433097 Sample Sample Spike MS MS %Rec. Result Qualifier Analyte Added Result Qualifier Unit D %Rec Limits Antimony <0.0030 0.500 0.521 mg/L 104 75 - 125 Arsenic < 0.0010 0.100 0.0994 mg/L 99 75 - 125 Barium 2.00 2.06 mg/L 101 75 - 125 0.045 Beryllium < 0.0010 0.0500 0.0503 mg/L 101 75 - 125 Cadmium <0.00050 0.0500 0.0516 103 75 - 125 mg/L Calcium 10.0 95.5 4 mg/L 78 75 - 125 88 0.200 Chromium 75 - 125 < 0.0050 0.204 mg/L 102 Cobalt <0.0010 0.500 0.506 101 75 - 125 mg/L Molybdenum < 0.0050 1.00 0.974 mg/L 97 75 - 125 Selenium < 0.0025 0.100 0.101 mg/L 98 75 - 125 0.100 0.105 Thallium < 0.0020 mg/L 105 75 - 125

TestAmerica 960 IBF 300-145716-1

Project/Site: Powerton CCR

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

Lab Sample ID: 500-145716-1 MS Matrix: Water								Client Sample ID: MW-0 Prep Type: Total Recoverabl				
Analysis Batch: 433604									Prep Ba	atch: 433097		
	Sample	Sample	Spike	MS	MS				%Rec.			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Boron	0.15		1.00	1.14		mg/L		99	75 - 125			
Lead	0.00068		0.100	0.107		ma/L		107	75 - 125			

Lab Sample ID: 500-145710 Matrix: Water Analysis Batch: 433393	6-1 MSD						P		ent Sampl be: Total I Prep Ba	Recove	erable
-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	<0.0030		0.500	0.523		mg/L		105	75 - 125	0	20
Arsenic	<0.0010		0.100	0.100		mg/L		99	75 - 125	1	20
Barium	0.045		2.00	2.05		mg/L		100	75 - 125	0	20
Beryllium	<0.0010		0.0500	0.0494		mg/L		99	75 - 125	2	20
Cadmium	< 0.00050		0.0500	0.0517		mg/L		103	75 - 125	0	20
Calcium	88		10.0	97.1	4	mg/L		94	75 - 125	2	20
Chromium	<0.0050		0.200	0.206		mg/L		103	75 - 125	1	20
Cobalt	< 0.0010		0.500	0.511		mg/L		102	75 - 125	1	20
Molybdenum	< 0.0050		1.00	0.980		mg/L		98	75 - 125	1	20
Selenium	<0.0025		0.100	0.101		mg/L		99	75 - 125	1	20
Thallium	< 0.0020		0.100	0.105		mg/L		105	75 ₋ 125	0	20

Lab Sample ID: 500-145710	ab Sample ID: 500-145716-1 MSD									Client Sample ID: MW-01					
Matrix: Water	latrix: Water								Prep Type: Total Recoverable						
Analysis Batch: 433604									Prep Ba	atch: 43	33097				
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD				
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit				
Boron	0.15		1.00	1.15		mg/L		101	75 - 125	1	20				
Lead	0.00068		0.100	0.109		mg/L		109	75 - 125	2	20				
	Matrix: Water Analysis Batch: 433604 Analyte Boron	Matrix: Water Analysis Batch: 433604 Sample Analyte Result Boron 0.15	Matrix: Water Analysis Batch: 433604 Sample Sample Analyte Result Qualifier Boron 0.15	Matrix: Water Analysis Batch: 433604 Sample Sample Spike Analyte Result Qualifier Added Boron 0.15 1.00	Matrix: WaterAnalysis Batch: 433604SampleSampleSpikeMSDAnalyteResultQualifierAddedResultBoron0.151.001.15	Matrix: WaterAnalysis Batch: 433604SampleSampleSpikeMSDMSDAnalyteResultQualifierAddedResultQualifierBoron0.151.001.15	Analysis Batch: 433604SampleSampleSpikeMSDMSDAnalyteResultQualifierAddedResultQualifierUnitBoron0.151.001.15Unit	Matrix: Water Analysis Batch: 433604 Sample Spike MSD MSD Analyte Result Qualifier Added Result Qualifier Unit D Boron 0.15 1.00 1.15 mg/L	Matrix: Water Analysis Batch: 433604 Sample Sample Spike MSD MSD Analyte Result Boron 0.15 0.15 0.100 0.115 0.100 0.115 0.100 0.115 0.11	Matrix: WaterAnalysis Batch: 433604Sample Sample Sample Spike MSD MSDMSD MSD MSD MSD MSD MSD MSD MSD MSD MSD	Matrix: Water Analysis Batch: 433604 Sample Sample Spike MSD MSD Analyte Result Boron O.15 Matrix: Water Prep Type: Total Recover Prep Batch: 43 Result Qualifier Qualifier Qualifier Unit D MRCD NRec Limits RPD 1.00 1.15 Mg/L 101 75-125 1				

Lab Sample ID: 500-145716 Matrix: Water Analysis Batch: 433393		O	5	DI.			nt Sample ID: M e: Total Recove Prep Batch: 43	erable 33097
Analista	•	Sample		DU	11		222	RPD
Analyte		Qualifier		Qualifier	Unit	D	RPD	Limit
Antimony	<0.0030		< 0.0030		mg/L		NC	20
Arsenic	<0.0010		<0.0010		mg/L		NC	20
Barium	0.045		0.0459		mg/L		1	20
Beryllium	<0.0010		<0.0010		mg/L		NC	20
Cadmium	<0.00050		<0.00050		mg/L		NC	20
Calcium	88		89.6		mg/L		2	20
Chromium	<0.0050		<0.0050		mg/L		NC	20
Cobalt	<0.0010		<0.0010		mg/L		NC	20
Molybdenum	<0.0050		<0.0050		mg/L		NC	20
Selenium	<0.0025		<0.0025		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20

TestAmerica Chicago

TestAmerica 100 101 310-145716-1

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434080

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Project/Site: Powerton CCR

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

Lab Sample ID: 500-145716-1 DU **Matrix: Water**

Analysis Batch: 433604

Client Sample ID: MW-01 **Prep Type: Total Recoverable Prep Batch: 433097**

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Boron	0.15		0.141		mg/L		 5	20
Lead	0.00068		0.000683		mg/L		1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-434080/12-A

Matrix: Water

Analysis Batch: 434677

	MR MR						
Analyte	Result Qualifie	er RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	0.00020	mg/L		05/25/18 12:35	05/30/18 15:47	1

Lab Sample ID: LCS 500-434080/13-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA **Analysis Batch: 434677 Prep Batch: 434080** LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Mercury 0.00200 0.00221 111 80 - 120 mg/L

Lab Sample ID: 500-145716-4 MS Client Sample ID: MW-04 **Matrix: Water** Prep Type: Total/NA **Analysis Batch: 434677 Prep Batch: 434080** Sample Sample Spike MS MS %Rec. Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits 0.00100 75 - 125 Mercury <0.00020 0.00110 mg/L 110

Lab Sample ID: 500-145716-4 MSD Client Sample ID: MW-04 **Matrix: Water** Prep Type: Total/NA Analysis Batch: 434677 **Prep Batch: 434080** Sample Sample Spike MSD MSD %Rec. **RPD** Added Analyte Result Qualifier Result Qualifier Limits Unit D %Rec RPD Limit Mercury <0.00020 0.00100 0.000972 mg/L 97 75 - 125 12

Lab Sample ID: 500-145716-4 DU Client Sample ID: MW-04 **Matrix: Water** Prep Type: Total/NA **Analysis Batch: 434677** Prep Batch: 434080 Sample Sample DU DU **RPD** Analyte Result Qualifier Result Qualifier Unit D RPD Limit mg/L Mercury <0.00020 <0.00020 NC 20

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

Lab Sample ID: MB 500-433168/1 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Ratch: 433168

Analysis Daten. 400100									
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			05/21/18 04:08	1

TestAmerica Chicago

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Client: KPRG and Associates, Inc.

TestAmerica 963 Pf 310-145716-1

Project/Site: Powerton CCR

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

Lab Sample ID: LCS 500-433168/2 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 433168

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits **Total Dissolved Solids** 250 80 - 120 296 mg/L 118

Lab Sample ID: 500-145716-1 MS Client Sample ID: MW-01 **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 433168

Sample Sample Spike MS MS %Rec. Result Qualifier Added Limits Analyte Result Qualifier %Rec Unit D **Total Dissolved Solids** 250 98 540 788 mg/L 75 - 125

Lab Sample ID: 500-145716-1 DU Client Sample ID: MW-01 Prep Type: Total/NA

Matrix: Water

Analysis Batch: 433168

Sample Sample DU DU **RPD** Result Qualifier RPD Result Qualifier Limit Analyte Unit D Total Dissolved Solids 540 554 mg/L

Lab Sample ID: 500-145716-2 DU Client Sample ID: MW-02 **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 433168

DU DU RPD Sample Sample Result Qualifier Result Qualifier Unit **RPD** Limit **Total Dissolved Solids** 500 508 5 mg/L

Method: SM 4500 CI- E - Chloride, Total

Lab Sample ID: MB 500-434300/4 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 434300

MB MB

Analyte Result Qualifier RL **MDL** Unit Dil Fac Prepared Analyzed Chloride 2.0 mg/L 05/28/18 18:51 <2.0

Lab Sample ID: LCS 500-434300/5 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 434300

Spike LCS LCS %Rec. Added Result Qualifier %Rec Analyte Unit Limits Chloride 50.0 85 - 115 49.6 mg/L 99

Lab Sample ID: 500-145716-7 MS Client Sample ID: MW-09 Prep Type: Total/NA

Matrix: Water

Analysis Batch: 434300

Sample Sample Spike MS MS %Rec. Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits Chloride 36 50.0 81.0 mg/L 90 75 - 125

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Client: KPRG and Associates, Inc.

TestAmerica 300-145716-1

Project/Site: Powerton CCR

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

Lab Sample ID: 500-145716-7 MSD Client Sample ID: MW-09 **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 434300

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit 50.0 Chloride 36 80.6 mg/L 89 75 - 125 20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-434275/3 **Client Sample ID: Method Blank Prep Type: Total/NA**

Matrix: Water

Analysis Batch: 434275

MB MB **MDL** Unit RL Analyte Result Qualifier D Analyzed Dil Fac Prepared 0.10 Fluoride <0.10 mg/L 05/26/18 14:23

Lab Sample ID: LCS 500-434275/4 Client Sample ID: Lab Control Sample **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 434275

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Fluoride 10.0 104 80 - 120 10.4 mg/L

Lab Sample ID: 500-145716-1 MS Client Sample ID: MW-01 Prep Type: Total/NA

Matrix: Water

Analysis Batch: 434275

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Fluoride 0.12 5.00 5.21 mg/L 102 75 - 125

Lab Sample ID: 500-145716-1 MSD Client Sample ID: MW-01 Prep Type: Total/NA

Matrix: Water

Analysis Batch: 434275

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit Fluoride 0.12 5.00 5.29 103 2 mg/L 75 - 125 20

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-434591/3 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 434591

MB MB RL MDL Unit **Analyte** Result Qualifier Prepared Analyzed Dil Fac Sulfate 5.0 <5.0 mg/L 05/30/18 12:23

Lab Sample ID: LCS 500-434591/4 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 434591

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Sulfate 20.0 20.3 mg/L 102 80 - 120

TestAmerica Chicago

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Client: KPRG and Associates, Inc.

TestAmerica 900 IB: 500-145716-1

Project/Site: Powerton CCR

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

Lab Sample ID: MB 500-435221/3 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 435221

MB MB Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac 5.0 06/04/18 12:49 Sulfate <5.0 mg/L

Lab Sample ID: LCS 500-435221/4 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 435221

Spike LCS LCS %Rec. Added Limits Analyte Result Qualifier Unit %Rec D 98 Sulfate 20.0 19.6 mg/L 80 - 120

Lab Sample ID: 500-145716-4 MS Client Sample ID: MW-04 **Matrix: Water Prep Type: Total/NA**

Analysis Batch: 435221

Sample Sample Spike MS MS %Rec. Result Qualifier Analyte Added Result Qualifier Limits Unit D %Rec Sulfate 100 200 330 mg/L 113 75 - 125

Lab Sample ID: 500-145716-4 MSD Client Sample ID: MW-04 **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 435221

RPD Sample Sample Spike MSD MSD %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit Sulfate 100 200 285 90 75 - 125 20 mg/L 15

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Client: KPRG and Associates, Inc.

TestAmerica 9661Bf 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-01 Lab Sample ID: 500-145716-1

Date Collected: 05/17/18 15:15 Matrix: Water Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	433534	05/22/18 19:37	PJ1	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	433393	05/21/18 22:46	FXG	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	433604	05/22/18 17:05	FXG	TAL CHI
Total/NA	Prep	7470A			434080	05/25/18 12:35	EEN	TAL CHI
Total/NA	Analysis	7470A		1	434677	05/30/18 16:04	EEN	TAL CHI
Total/NA	Analysis	SM 2540C		1	433168	05/21/18 04:13	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		1	434300	05/28/18 18:53	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	434275	05/26/18 14:30	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		4	434591		CLB	TAL CHI
					(Start) 0)5/30/18 12:43		
					(End) (5/30/18 12:44		

Client Sample ID: MW-02 Lab Sample ID: 500-145716-2

Date Collected: 05/15/18 09:05

Date Received: 05/18/18 17:20

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	433534	05/22/18 19:56	PJ1	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	433393	05/21/18 23:12	FXG	TAL CH
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CH
Total Recoverable	Analysis	6020A		1	433604	05/22/18 17:24	FXG	TAL CH
Total/NA	Prep	7470A			434080	05/25/18 12:35	EEN	TAL CH
Total/NA	Analysis	7470A		1	434677	05/30/18 16:06	EEN	TAL CH
Total/NA	Analysis	SM 2540C		1	433168	05/21/18 04:20	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		1	434300	05/28/18 18:54	HMW	TAL CH
Total/NA	Analysis	SM 4500 F C		1	434275	05/26/18 14:38	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		4	434591		CLB	TAL CH
					(Start) 0)5/30/18 12:44		
					(End) ()5/30/18 12:45		

Client Sample ID: MW-03 Lab Sample ID: 500-145716-3

Date Collected: 05/15/18 11:00
Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	433534	05/22/18 20:00	PJ1	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI

TestAmerica Chicago

Matrix: Water

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4.6

TestAmerica 967 IBf 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-03 Lab Sample ID: 500-145716-3

Matrix: Water

Date Collected: 05/15/18 11:00 Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6020A			433393	05/21/18 23:16	FXG	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	433604	05/22/18 17:28	FXG	TAL CHI
Total/NA	Prep	7470A			434080	05/25/18 12:35	EEN	TAL CHI
Total/NA	Analysis	7470A		1	434677	05/30/18 16:08	EEN	TAL CHI
Total/NA	Analysis	SM 2540C		1	433168	05/21/18 04:26	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		1	434300	05/28/18 18:55	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	434275	05/26/18 14:41	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		4	435221		CLB	TAL CHI
					(Start) (06/04/18 12:51		
					(End) (06/04/18 12:52		

Client Sample ID: MW-04 Lab Sample ID: 500-145716-4

Matrix: Water

Date Collected: 05/15/18 12:11 Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CH
Total Recoverable	Analysis	6010C		1	433534	05/22/18 20:04	PJ1	TAL CH
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CH
Total Recoverable	Analysis	6020A		1	433393	05/21/18 23:20	FXG	TAL CH
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CH
Total Recoverable	Analysis	6020A		1	433604	05/22/18 17:32	FXG	TAL CH
Total/NA	Prep	7470A			434080	05/25/18 12:35	EEN	TAL CH
Total/NA	Analysis	7470A		1	434677	05/30/18 16:10	EEN	TAL CH
Total/NA	Analysis	SM 2540C		1	433168	05/21/18 04:28	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		1	434300	05/28/18 18:56	HMW	TAL CH
Total/NA	Analysis	SM 4500 F C		1	434275	05/26/18 14:45	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		5	435221		CLB	TAL CH
					(Start) 0	06/04/18 12:52		
					(End) (06/04/18 12:53		

Client Sample ID: MW-05

Date Collected: 05/15/18 13:31

Lab Sample ID: 500-145716-5

Matrix: Water

Date Received: 05/18/18 17:20

-	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	433534	05/22/18 20:08	PJ1	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	433393	05/21/18 23:24	FXG	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	433604	05/22/18 17:44	FXG	TAL CHI

TestAmerica Chicago

Exhibit D

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

TestAmerica 908 IB: 500-145716-1

Client Sample ID: MW-05

Lab Sample ID: 500-145716-5

Matrix: Water

Date Collected: 05/15/18 13:31 Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			434080	05/25/18 12:35	EEN	TAL CHI
Total/NA	Analysis	7470A		1	434677	05/30/18 16:23	EEN	TAL CHI
Total/NA	Analysis	SM 2540C		1	433168	05/21/18 04:31	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		5	434300	05/28/18 18:57	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	434275	05/26/18 14:48	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	435221		CLB	TAL CHI
					(Start) 0	06/04/18 12:55		
					(End) (06/04/18 12:56		

Client Sample ID: MW-08 Lab Sample ID: 500-145716-6

Matrix: Water

Date Collected: 05/17/18 13:29 Date Received: 05/18/18 17:20

Batch **Batch** Dilution Batch Prepared **Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Lab Total Recoverable Prep 3005A 433097 05/19/18 11:03 BDE TAL CHI Total Recoverable Analysis 6010C 1 433534 05/22/18 20:12 PJ1 TAL CHI Total Recoverable Prep 3005A 433097 05/19/18 11:03 BDE TAL CHI Total Recoverable Analysis 6020A 1 433393 05/21/18 23:27 FXG TAL CHI Total Recoverable Prep 3005A 433097 05/19/18 11:03 BDE TAL CHI Total Recoverable TAL CHI Analysis 6020A 5 433604 05/22/18 17:47 FXG 7470A Total/NA 434080 05/25/18 12:35 EEN TAL CHI Prep Total/NA Analysis 7470A 1 434677 05/30/18 16:26 EEN TAL CHI Total/NA Analysis SM 2540C 433168 05/21/18 04:33 CLB TAL CHI 1 Total/NA Analysis SM 4500 CI- E 5 434300 05/28/18 18:58 HMW TAL CHI Total/NA TAL CHI Analysis SM 4500 F C 1 434275 05/26/18 14:51 EAT Total/NA Analysis SM 4500 SO4 E 435221 CLB TAL CHI 10 (Start) 06/04/18 12:56 (End) 06/04/18 12:57

Lab Sample ID: 500-145716-7 Client Sample ID: MW-09 Date Collected: 05/16/18 10:19 **Matrix: Water**

Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CH
Total Recoverable	Analysis	6010C		1	433534	05/22/18 20:24	PJ1	TAL CH
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CH
Total Recoverable	Analysis	6020A		1	433393	05/21/18 23:31	FXG	TAL CH
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CH
Total Recoverable	Analysis	6020A		20	433604	05/22/18 17:51	FXG	TAL CH
Total/NA	Prep	7470A			434080	05/25/18 12:35	EEN	TAL CH
Total/NA	Analysis	7470A		1	434677	05/30/18 16:28	EEN	TAL CH
Total/NA	Analysis	SM 2540C		1	433168	05/21/18 04:36	CLB	TAL CH

TestAmerica Chicago

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6/4/2018

TestAmerica 969 IBf 300-145716-1

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

Client Sample ID: MW-09

Lab Sample ID: 500-145716-7

Matrix: Water

Date Collected: 05/16/18 10:19 Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 CI- E			434300	05/28/18 19:01	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	434275	05/26/18 15:04	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	435221		CLB	TAL CHI
					(Start) C	6/04/18 12:57		
					(End) C	06/04/18 12:58		

Lab Sample ID: 500-145716-8

Matrix: Water

Date Collected: 05/16/18 11:41 Date Received: 05/18/18 17:20

Client Sample ID: MW-10

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	433534	05/22/18 20:28	PJ1	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	433393	05/21/18 23:35	FXG	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	433604	05/22/18 17:55	FXG	TAL CHI
Total/NA	Prep	7470A			434080	05/25/18 12:35	EEN	TAL CHI
Total/NA	Analysis	7470A		1	434677	05/30/18 16:30	EEN	TAL CHI
Total/NA	Analysis	SM 2540C		1	433168	05/21/18 04:39	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		1	434300	05/28/18 19:02	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	434275	05/26/18 15:07	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		4	435221		CLB	TAL CHI
					(Start) 0	06/04/18 12:58		
					(End) (06/04/18 12:59		

Client Sample ID: MW-11 Lab Sample ID: 500-145716-9 Date Collected: 05/16/18 13:01 **Matrix: Water**

Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	433534	05/22/18 20:32	PJ1	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	433393	05/21/18 23:39	FXG	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	433604	05/22/18 17:59	FXG	TAL CHI
Total/NA	Prep	7470A			434080	05/25/18 12:35	EEN	TAL CHI
Total/NA	Analysis	7470A		1	434677	05/30/18 16:33	EEN	TAL CHI
Total/NA	Analysis	SM 2540C		1	433168	05/21/18 04:41	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		5	434300	05/28/18 19:03	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	434275	05/26/18 15:10	EAT	TAL CHI

Exhibit D

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

TestAmerica 300 IB: 311-145716-1

Client Sample ID: MW-11 Lab Sample ID: 500-145716-9

Matrix: Water

Date Collected: 05/16/18 13:01 Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 SO4 E		10	435221	-	CLB	TAL CHI
					(Start) 0	6/04/18 13:01		
					(End) 0	6/04/18 13:02		

Lab Sample ID: 500-145716-10 Client Sample ID: MW-12 Date Collected: 05/16/18 14:41

Date Received: 05/18/18 17:20

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	433534	05/22/18 20:36	PJ1	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	433393	05/21/18 23:43	FXG	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	433604	05/22/18 18:03	FXG	TAL CHI
Total/NA	Prep	7470A			434080	05/25/18 12:35	EEN	TAL CHI
Total/NA	Analysis	7470A		1	434677	05/30/18 16:35	EEN	TAL CHI
Total/NA	Analysis	SM 2540C		1	433168	05/21/18 04:44	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		5	434300	05/28/18 19:21	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	434275	05/26/18 15:13	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		25	435221		CLB	TAL CHI
	•				(Start) 0	06/04/18 13:02		
					(End) (06/04/18 13:03		

Client Sample ID: MW-15 Lab Sample ID: 500-145716-11

Date Collected: 05/17/18 11:58 **Matrix: Water** Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	433534	05/22/18 20:40	PJ1	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	433393	05/21/18 23:54	FXG	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	433604	05/22/18 18:07	FXG	TAL CHI
Total/NA	Prep	7470A			434080	05/25/18 12:35	EEN	TAL CHI
Total/NA	Analysis	7470A		1	434677	05/30/18 16:37	EEN	TAL CHI
Total/NA	Analysis	SM 2540C		1	433168	05/21/18 04:46	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		5	434300	05/28/18 19:04	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	434275	05/26/18 15:16	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		25	435221		CLB	TAL CH
					(Start) (06/04/18 13:03		
					(End) (06/04/18 13:04		

TestAmerica 9 ob IB: 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-17

Date Received: 05/18/18 17:20

Lab Sample ID: 500-145716-12 Date Collected: 05/14/18 14:51

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	433534	05/22/18 20:44	PJ1	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	433393	05/21/18 23:58	FXG	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	433604	05/22/18 18:11	FXG	TAL CHI
Total/NA	Prep	7470A			434080	05/25/18 12:35	EEN	TAL CHI
Total/NA	Analysis	7470A		1	434677	05/30/18 16:44	EEN	TAL CHI
Total/NA	Analysis	SM 2540C		1	433168	05/21/18 04:49	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		5	434300	05/28/18 19:04	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	434275	05/26/18 15:19	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		25	435221		CLB	TAL CHI
					(Start) (06/04/18 13:04		
L					(End) (06/04/18 13:05		

Client Sample ID: MW-18 Lab Sample ID: 500-145716-13

Matrix: Water

Date Collected: 05/14/18 16:05 Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI	
Total Recoverable	Analysis	6010C		1	433534	05/22/18 20:48	PJ1	TAL CHI	
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI	
Total Recoverable	Analysis	6020A		1	433393	05/22/18 00:01	FXG	TAL CHI	
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI	
Total Recoverable	Analysis	6020A		1	433604	05/22/18 18:15	FXG	TAL CHI	
Total/NA	Prep	7470A			434080	05/25/18 12:35	EEN	TAL CHI	
Total/NA	Analysis	7470A		1	434677	05/30/18 16:46	EEN	TAL CHI	
Total/NA	Analysis	SM 2540C		1	433168	05/21/18 04:51	CLB	TAL CHI	
Total/NA	Analysis	SM 4500 CI- E		5	434300	05/28/18 19:05	HMW	TAL CHI	
Total/NA	Analysis	SM 4500 F C		1	434275	05/26/18 15:22	EAT	TAL CHI	
Total/NA	Analysis	SM 4500 SO4 E		20	435221		CLB	TAL CHI	
					(Start) (06/04/18 13:05			
					(End) (06/04/18 13:06			

Lab Sample ID: 500-145716-14 **Client Sample ID: MW-19** Matrix: Water

Date Collected: 05/14/18 17:35 Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	433534	05/22/18 20:52	PJ1	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI

TestAmerica Chicago

TestAmerica 97218f. 300-145716-1

Project/Site: Powerton CCR

Client Sample ID: MW-19

Lab Sample ID: 500-145716-14

Matrix: Water

Date Collected: 05/14/18 17:35 Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6020A			433393	05/22/18 00:05	FXG	TAL CHI
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	433604	05/22/18 18:18	FXG	TAL CHI
Total/NA	Prep	7470A			434080	05/25/18 12:35	EEN	TAL CHI
Total/NA	Analysis	7470A		1	434677	05/30/18 16:49	EEN	TAL CHI
Total/NA	Analysis	SM 2540C		1	433168	05/21/18 04:54	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		1	434300	05/28/18 19:07	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	434275	05/26/18 15:25	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	435221		CLB	TAL CHI
					(Start) (06/04/18 13:06		
					(End) (06/04/18 13:07		

Client Sample ID: Duplicate Lab Sample ID: 500-145716-15

Matrix: Water

Date Collected: 05/14/18 00:00 Date Received: 05/18/18 17:20

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	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CH
Total Recoverable	Analysis	6010C		1	433534	05/22/18 20:57	PJ1	TAL CH
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CH
Total Recoverable	Analysis	6020A		1	433393	05/22/18 00:09	FXG	TAL CH
Total Recoverable	Prep	3005A			433097	05/19/18 11:03	BDE	TAL CH
Total Recoverable	Analysis	6020A		20	433604	05/22/18 18:33	FXG	TAL CH
Total/NA	Prep	7470A			434080	05/25/18 12:35	EEN	TAL CH
Total/NA	Analysis	7470A		1	434677	05/30/18 16:51	EEN	TAL CH
Total/NA	Analysis	SM 2540C		1	433168	05/21/18 04:57	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		1	434300	05/28/18 19:22	HMW	TAL CH
Total/NA	Analysis	SM 4500 F C		1	434275	05/26/18 15:29	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		10	435221		CLB	TAL CH
					(Start) (06/04/18 13:07		
					(End) (06/04/18 13:08		

Laboratory References:

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

PCB 2013-15 Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 9,05 IBf 300-145716-1

Project/Site: Powerton CCR

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

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Test/	4r	nerica	Report To:						Bill T	o:									-	Page	/4 C
	/1		Contact:	Richard Gna	t				Conta	ect:								1.44 -			
THE LEADER I	N ENVI	RONMENTAL TESTING	Company:	KPRG and A	ssociates, Inc	3			Comp	any:	-						Lat	Lab Lot # 600-1457			P
TestAmerica	Chica	10	Address:	14665 W. Lis					Addre			ħ	28	Æ	_		Pag	Rage Sealed	San	nples Sea	aled
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University Parl	k. 1L 60	0484	Phone:	262-781-047	5				Phon	e:		C		Ŀ			R/ec	elyed on Ice	Sai	mples Inf	tact
708-534-5200			Email:	richardg@		m			Email			- -	1 1571	6 000				(es) No	Yes	No No	N/A
Fax. 708-534-	5211								PO #:		_	- 500-	145/1	6 COC	, ,		Tem	perature °C of	Cooler		
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Sampler Nam	e:		COMPANY:			#/C	ont.					Γ	1	Π				in Hold Time	T / 3"	erv. Indic	
lan John How			KPRG & Ass	ociates Inc.		Volu		!										res No	Yes		o N/A
Project Name			TestAmerica		oer:	Pres		 	1	<u> </u>		<u> </u>	1					H Check OK	1 2	L ₂ Chec	
Quarterly- Po		CCR	50011612	, rojout italii.		1.100		 	g			\vdash	—					es No	Ves	_	o N/A
Project Locati		. ook	TAT			×	i i		Total Metal			l	ļ				H\-	Sample Labe			
Pekin, IL			15 Days			Matrix	of Cont	722	ga							- 1		es No		not pre	
Lab PM:	Eric	Lang	eric.lang@	Mactamaria	ca com	=	#	226/228	1 .			.00	Sulfate				14			not pro-	-
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								Radium	6010C, 6020A, 7470A		F_C - Fluoride	E Chloride	ĺ ш́,				į				
Laboratory									8	ဟု	됴		SM4500_SO4_					Additional Ar	alyses /	Remarks	s
ID	}	Client Sam	ple ID		İ]	l	904.0	99	Ę	ا ا ,,		0,1		1]	Ì				
	AS-MSD			Sampling	Sampling	1		903.0,	ပြွ	2540C -TDS		SM4500_CI	450								
	MS-1			Date	Time	<u> </u>		6	60	254	4500	NS	SM								
1		MVV-01		5-17-18	15:15	W	5	Х	X	Х	Х	Х	Х								
2		MW-02		5-15-18	09:05	W	5	Х	Х	Х	Х	Х	Х								
3		MW-03		5-15-18	11:00	W	5	Х	X	Х	Х	Х	Х			Ţ					
4		MW-04		5-15-18	12:11	W	5	Х	Х	Х	Х	Х	Х								
5		MW-05		5-15-18	13:31	W	5	Х	Х	Х	Х	Х	Х								
(a		MW-08		5-17-18	13:29	W	5	Х	Х	×	Х	Х	Х								
7		MW-09		5-16-18	10:19	W	5	Х	Х	X	Х	Х	Х								
8		MW-10		5-16-18	11:41	W	5	Х	Х	Х	Х	X	Х								
9		MW-11		5-16-18	13:01	W	5	Х	Х	Х	Х	Х	Х								
نا		MW-12		5-16-18	14:41	W	5	Х	Х	Х	Х	Х	Х								
		MW-15		5-17-18	11:58	W	5	Х	Х	Х	Х	Х	X								
		4								7 /		7							7		
RELINQUISHED	^{BY} ://	^	COMPANY:	5-18	DATE:	11	TIME:	-	RE	/ED/	^{(;} //.	1		,	COMP	Z Y Y Y		2/10/	10	TIME	11
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RELINQUISHED	BY: U		COMPANY:		DATE:		TIME:		RECEI	VED B	Y: /				COMPA	ANY:		DATE:		TIME	i:
									<u></u>												_
	Matri		Contair	ner Key	reservative Ke				сомм	ENTS:								Date Received	75	18,18	
VW = Wastewate V = Water		SE = Sediment SO = Solid	1. Plastic		1. HCl, Cool to													Received Courier:	<u>/ </u>	10/10	<u>-</u>
s = Soil		DL = Drum Liquid	VOA Vial Sterile Plasti	lc	2. H ₂ SO ₄ , Cool 3. HNO ₃ , Cool													Courier.			
SL = Sludge		DS = Drum Solid	4. Amber Glass		4. NaOH, Coo	l to 4°												Hand Del	ivered	X	
/IS = Miscellaneo	us	L = Leachate	5. Widemouth	Glass	5. NaOH/Zn, 0	Cool to	4°]											•	
DL = Oil		W = Wipe	6. Other		6. Cool to 4°				<u> </u>									Bill of Lac	ling:		

STL-8208 (0600)

__1__of__2___

A = Air

STL-8208 (0600)

PCB 2013-15 Electronic Filing: Received, Clerk's Office 07/19/2019

Login Sample Receipt Checklist

Exhibit D Page 76 of 311

Job Number: 500-145716-1

Client: KPRG and Associates, Inc.

List Source: TestAmerica Chicago

List Number: 1

Creator: Sanchez, Ariel M

Login Number: 145716

Grouter: Garleting, Aller III		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	2.1, 2.8, 3.1, 3.9, 4.7
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	

TestAmerica Chicago

PCB 2013-15 Electronic Filing: Received, Clerk's Office 07/19/2019

> Page 77 of 311 **TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 500-145716-2 Client Project/Site: Powerton CCR

For:

KPRG and Associates, Inc. 14665 West Lisbon Road, Suite 2B Brookfield, Wisconsin 53005

Attn: Richard Gnat

Authorized for release by: 6/28/2018 1:30:40 PM

Eric Lang, Manager of Project Management (708)534-5200

eric.lang@testamericainc.com

.....LINKS

Review your project results through Total Access

Have a Question?



Visit us at: 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.

Exhibit D

Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit D TestAmpriga Job IDr 500 145716-2

Client: KPRG and Associates, Inc.

Project/Site: Powerton CCR

Table of Contents

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Chain of Custody	30
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Tracer Carrier Summary	37

PCB 2013-15 Electronic Filing: Received Clark's Office 07/19/2019

Exhibit D

TestAmerica 909 10f 300-145716-2 Client: KPRG and Associates, Inc. Project/Site: Powerton CCR

Job ID: 500-145716-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-145716-2

Comments

No additional comments.

Receipt

The samples were received on 5/18/2018 5:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 2.1° C, 2.8° C, 3.1° C, 3.9° C and 4.7° C.

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

PCB 2013-15 Exhibit D

Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 300 IBf 311-145716-2

Project/Site: Powerton CCR

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

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PCB 2013-15 O19 Exhibit D

Electronic Filing: Beceived Clerk's Office 07/19/2019 E

Client: KPRG and Associates, Inc.

TestAmerica 900 IBf 311-145716-2

Project/Site: Powerton CCR

Lab Sample ID	Client Sample ID	Matrix	Collected Received
500-145716-1	MW-01	Water	05/17/18 15:15 05/18/18 17:20
500-145716-2	MW-02	Water	05/15/18 09:05 05/18/18 17:20
500-145716-3	MW-03	Water	05/15/18 11:00 05/18/18 17:20
500-145716-4	MW-04	Water	05/15/18 12:11 05/18/18 17:20
500-145716-5	MW-05	Water	05/15/18 13:31 05/18/18 17:20
500-145716-6	MW-08	Water	05/17/18 13:29 05/18/18 17:20
500-145716-7	MW-09	Water	05/16/18 10:19 05/18/18 17:20
500-145716-8	MW-10	Water	05/16/18 11:41 05/18/18 17:20
500-145716-9	MW-11	Water	05/16/18 13:01 05/18/18 17:20
500-145716-10	MW-12	Water	05/16/18 14:41 05/18/18 17:20
500-145716-11	MW-15	Water	05/17/18 11:58 05/18/18 17:20
500-145716-12	MW-17	Water	05/14/18 14:51 05/18/18 17:20
500-145716-13	MW-18	Water	05/14/18 16:05 05/18/18 17:20
500-145716-14	MW-19	Water	05/14/18 17:35 05/18/18 17:20
500-145716-15	Duplicate	Water	05/14/18 00:00 05/18/18 17:20

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Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 900 IBf 311-145716-2

Project/Site: Powerton CCR

Lab Sample ID: 500-145716-1 **Client Sample ID: MW-01** Date Collected: 05/17/18 15:15

Matrix: Water

Date Received: 05/18/18 17:20

Method: 903.0 - F	Radium-226	(GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.109		0.143	0.143	1.00	0.238				1
rtadiam 220	0.100	J	0.110	0.110	1.00	0.200	PO#E	00/20/10 11:00	00/20/10 10:12	•
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110					05/29/18 11:58	06/20/18 10:42	

Method: 904.0 -		(5115)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.244	Ū	0.243	0.244	1.00	0.396	pCi/L	05/29/18 13:22	06/19/18 10:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110					05/29/18 13:22	06/19/18 10:52	1
Y Carrier	87.1		40 - 110					05/29/18 13:22	06/19/18 10:52	1

Method: Ra226_Ra2	28 - Con	nbined Ra	dium-226 a	nd Radiun	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.353	U	0.282	0.283	5.00	0.396	pCi/L	_	06/23/18 19:42	1
+ 228										

Electronic Filing: Received Clark's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 300 IBF 300-145716-2

Project/Site: Powerton CCR

Client Sample ID: MW-02 Lab Sample ID: 500-145716-2

Matrix: Water

Date Collected: 05/15/18 09:05 Date Received: 05/18/18 17:20

Method: 903.0 - Ra	adium-226	(GFPC)								
		` ,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0490	U	0.132	0.132	1.00	0.244	pCi/L	05/29/18 11:58	06/20/18 10:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					05/29/18 11:58	06/20/18 10:42	1

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0624	U	0.224	0.224	1.00	0.408	pCi/L	05/29/18 13:22	06/19/18 10:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					05/29/18 13:22	06/19/18 10:52	1
Y Carrier	84.5		40 - 110					05/29/18 13:22	06/19/18 10:52	1

Method: Ra226 Ra	228 - Com	bined Ra	dium-226 a	nd Radiun	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0134	Ū	0.260	0.260	5.00	0.408	pCi/L		06/23/18 19:42	1

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Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 900 IB: 300-145716-2

Project/Site: Powerton CCR

Lab Sample ID: 500-145716-3 Client Sample ID: MW-03 Date Collected: 05/15/18 11:00

Matrix: Water

Date Received: 05/18/18 17:20

Method: 903.0 - Ra	dium-226	(GFPC)	Count	Tatal						
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0740	U	0.146	0.146	1.00	0.262	pCi/L	05/29/18 11:58	06/20/18 10:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					05/29/18 11:58	06/20/18 10:43	1

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.326	U	0.302	0.303	1.00	0.489	pCi/L	05/29/18 13:22	06/19/18 10:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					05/29/18 13:22	06/19/18 10:52	1
Y Carrier	80.7		40 - 110					05/29/18 13:22	06/19/18 10:52	1

Method: Ra226 Ra	228 - Con	nbined Ra	dium-226 a	nd Radiun	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.400	Ū	0.335	0.336	5.00	0.489	pCi/L		06/23/18 19:42	1

6/28/2018

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 905 IBf 311-145716-2

Project/Site: Powerton CCR

Lab Sample ID: 500-145716-4 Client Sample ID: MW-04 Date Collected: 05/15/18 12:11

Matrix: Water

Date Received: 05/18/18 17:20

Method: 903.0 - Ra	dium-226	(GFPC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.243	U	0.188	0.190	1.00	0.273	pCi/L	05/29/18 11:58	06/20/18 10:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					05/29/18 11:58	06/20/18 10:43	1

Method: 904.0 -	rtadiam 220	(0110)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.418		0.270	0.273	1.00	0.417	pCi/L	05/29/18 13:22	06/19/18 10:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					05/29/18 13:22	06/19/18 10:52	1
Y Carrier	81.5		40 - 110					05/29/18 13:22	06/19/18 10:52	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radiur	m-228				
_			Count Uncert.	Total Uncert.					
Analyte Combined Radium	Result 0.661	Qualifier	(2 σ+/-) 0.329	(2σ+/-) 0.333	RL 5.00	MDC 0.417	 Prepared	Analyzed 06/23/18 19:42	Dil Fac
226 + 228									

6/28/2018

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 900 IBf 311-145716-2

Project/Site: Powerton CCR

Lab Sample ID: 500-145716-5 **Client Sample ID: MW-05** Date Collected: 05/15/18 13:31

Matrix: Water

Date Received: 05/18/18 17:20

Method: 903.0 -	Radium-226	(GFPC)	Count Uncert.	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0476	U	0.142	0.142	1.00	0.266	pCi/L	05/29/18 11:58	06/20/18 10:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					05/29/18 11:58	06/20/18 10:43	1

Method: 904.0 -		. ,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.337	U	0.248	0.250	1.00	0.390	pCi/L	05/29/18 13:22	06/19/18 10:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					05/29/18 13:22	06/19/18 10:52	1
Y Carrier	86.0		40 - 110					05/29/18 13:22	06/19/18 10:52	1

Method: Ra226_Ra2	228 - Con	nbined Ra	dium-226 a	nd Radiun	n- 228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.385	U	0.286	0.288	5.00	0.390	pCi/L		06/23/18 19:42	1

6/28/2018

Electronic Filing: Received Clark's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 907 IBf 311-145716-2

Project/Site: Powerton CCR

Client Sample ID: MW-08 Lab Sample ID: 500-145716-6

Matrix: Water

Date Collected: 05/17/18 13:29 Date Received: 05/18/18 17:20

Method: 903.0 - R	adium-226	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.323		0.210	0.212	1.00	0.285	pCi/L	05/29/18 11:58	06/20/18 10:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.5		40 - 110					05/29/18 11:58	06/20/18 10:43	1

	Radium-228	(GFPC)								
Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.333		0.265	0.267	1.00		pCi/L	05/29/18 13:22	06/19/18 10:53	1
Carrier Ba Carrier	%Yield 85.5	Qualifier	Limits 40 - 110					Prepared 05/29/18 13:22	Analyzed 06/19/18 10:53	Dil Fac
Y Carrier	87.9		40 - 110					05/29/18 13:22	06/19/18 10:53	1

Method: Ra226_Ra	228 - Con	bined Rad	dium-226 a	nd Radium	1-228					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.655		0.338	0.341	5.00	0.420	pCi/L		06/23/18 19:42	1

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Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 908 lpf 311-145716-2

Project/Site: Powerton CCR

Lab Sample ID: 500-145716-7 Client Sample ID: MW-09 Date Collected: 05/16/18 10:19

Matrix: Water

Date Received: 05/18/18 17:20

Method: 903.0 -	Radium-226	(GFPC)								
		. ,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.103	U	0.141	0.142	1.00	0.238	pCi/L	05/29/18 11:58	06/20/18 10:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					05/29/18 11:58	06/20/18 10:43	1

Method: 904.0 -	Naululli-220	(GIFC)	Count	Total						
Analyta	Popult	Qualifier	Uncert.	Uncert.	RL	MDC	Unit	Prepared	Anglyzad	Dil Fac
Analyte			(2σ+/-)	(2σ+/-)	KL _				Analyzed	DII Fac
Radium-228	0.235	U	0.259	0.260	1.00	0.424	pCi/L	05/29/18 13:22	06/19/18 10:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					05/29/18 13:22	06/19/18 10:53	1
Y Carrier	87.1		40 - 110					05/29/18 13:22	06/19/18 10:53	1

Method: Ra226_Ra2	228 - Con	nbined Ra	dium-226 a	nd Radiun	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.338	Ū	0.295	0.296	5.00	0.424	pCi/L	_	06/23/18 19:42	1

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 909 IBf 311-145716-2

Project/Site: Powerton CCR

Lab Sample ID: 500-145716-8 **Client Sample ID: MW-10** Date Collected: 05/16/18 11:41

Matrix: Water

Method: 903.0 - I	Radium-226	(GFPC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.780		0.259	0.268	1.00	0.251	pCi/L	05/29/18 11:58	06/20/18 10:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					05/29/18 11:58	06/20/18 10:43	1
_										

Method: 904.0 -		(0)	Count Uncert.	Total Uncert.						
Analyte	Posult	Qualifier	(2σ+/-)	(2σ+/-)	RL	мрс	Unit	Prepared	Analyzed	Dil Fac
		Qualifier								DII Fac
Radium-228	0.766		0.289	0.297	1.00	0.400	pCi/L	05/29/18 13:22	06/19/18 10:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					05/29/18 13:22	06/19/18 10:53	1
Y Carrier	83.0		40 - 110					05/29/18 13:22	06/19/18 10:53	1

Method: Ra226_Ra	a228 - Con	nbined Rad	dium-226 a	nd Radiun	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium	1.55		0.388	0.400	5.00	0.400	pCi/L		06/23/18 19:42	1

Electronic Filing: Received Clark's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 900 lBf. 300-145716-2

Project/Site: Powerton CCR

Client Sample ID: MW-11 Lab Sample ID: 500-145716-9

Matrix: Water

Date Collected: 05/16/18 13:01 Date Received: 05/18/18 17:20

Method: 903.0 - R	adium-226	(GFPC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.625		0.234	0.241	1.00	0.235	pCi/L	05/29/18 11:58	06/20/18 10:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					05/29/18 11:58	06/20/18 10:43	1

Method: 904.0 -	Kadidiii-220	(0110)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.497		0.263	0.267	1.00	0.395	pCi/L	05/29/18 13:22	06/19/18 10:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					05/29/18 13:22	06/19/18 10:53	1
Y Carrier	88.6		40 - 110					05/29/18 13:22	06/19/18 10:53	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radiur	n-228				
_			Count	Total					
			Uncert.	Uncert.					
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC Unit	Prepared	Analyzed	Dil Fac
Combined Radium	1.12		0.352	0.360	5.00	0.395 pCi/L		06/23/18 19:42	1

PCB 2013-15 Exhibit D

Electronic Filing: Received Clark's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 901 lpf 311-145716-2

Project/Site: Powerton CCR

Client Sample ID: MW-12 Lab Sample ID: 500-145716-10

Matrix: Water

Date Collected: 05/16/18 14:41 Date Received: 05/18/18 17:20

Method: 903.0 - F	Radium-226	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.690		0.255	0.263	1.00	0.263	pCi/L	05/29/18 11:58	06/20/18 10:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		40 - 110					05/29/18 11:58	06/20/18 10:43	1

Method: 904.0 -	Naululli-220	(GI FC)	Count	Total						
		_	Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0505	U	0.229	0.229	1.00	0.401	pCi/L	05/29/18 13:22	06/19/18 10:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		40 - 110					05/29/18 13:22	06/19/18 10:53	1
Y Carrier	88.2		40 - 110					05/29/18 13:22	06/19/18 10:53	1

Method: Ra226_Ra	228 - Con	nbined Ra	dium-226 a	nd Radiun	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.741		0.343	0.349	5.00	0.401	pCi/L		06/23/18 19:42	1

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 9218f 311-145716-2

Project/Site: Powerton CCR

Client Sample ID: MW-15 Lab Sample ID: 500-145716-11

Date Collected: 05/17/18 11:58 **Matrix: Water** Date Received: 05/18/18 17:20

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.172	U	0.154	0.154	1.00	0.232	pCi/L	05/29/18 11:58	06/20/18 13:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.6		40 - 110					05/29/18 11:58	06/20/18 13:17	1
_ Method: 904.0 -	Radium-228	(GFPC)								
		(/	Count	Total						
			l lm a a mt	l luca aut						

Method: 904.0 -	Radium-228	(GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.226	U	0.217	0.218	1.00	0.351	pCi/L	05/29/18 13:22	06/19/18 10:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.6		40 - 110					05/29/18 13:22	06/19/18 10:53	1
Y Carrier	85.6		40 - 110					05/29/18 13:22	06/19/18 10:53	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radiur	n-228					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.397		0.266	0.267	5.00	0.351	pCi/L		06/23/18 19:42	1

6/28/2018

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 931Bf 311-145716-2

Project/Site: Powerton CCR

Client Sample ID: MW-17 Lab Sample ID: 500-145716-12 Date Collected: 05/14/18 14:51

Matrix: Water

Method: 903.0 - F	Radium-226	(GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.27		0.316	0.336	1.00	0.250	pCi/L	05/29/18 11:58	06/20/18 13:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					05/29/18 11:58	06/20/18 13:17	1

Method: 904.0 -	- tadiaii 220	(3113)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.755	<u> </u>	0.284	0.292	1.00	0.398	pCi/L	05/29/18 13:22	06/19/18 10:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					05/29/18 13:22	06/19/18 10:53	1
Y Carrier	92.3		40 - 110					05/29/18 13:22	06/19/18 10:53	1

Method: Ra226_Ra	228 - Con	nbined Ra	dium-226 a	nd Radiur	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium	2.03		0.425	0.445	5.00	0.398	pCi/L	 -	06/23/18 19:42	1

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 94 lpf 311-145716-2

Project/Site: Powerton CCR

Client Sample ID: MW-18 Lab Sample ID: 500-145716-13 Date Collected: 05/14/18 16:05

Matrix: Water

Method: 903.0 - R	adium-226	(GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.332		0.189	0.192	1.00	0.244	pCi/L	05/29/18 11:58	06/20/18 12:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					05/29/18 11:58	06/20/18 12:47	1

Method: 904.0 -	Naululli-220	(0110)	Count	Total						
Amalusta	Decult	Ouglifier	Uncert.	Uncert.	DI	MDC	l lmi4	Duamanad	Amalumad	Dil Faa
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL _	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.309	U	0.206	0.208	1.00	0.317	pCi/L	05/29/18 13:22	06/19/18 10:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					05/29/18 13:22	06/19/18 10:57	1
Y Carrier	87.5		40 - 110					05/29/18 13:22	06/19/18 10:57	1

Method: Ra226_Ra	a228 - Combined Ra	adium-226 a	nd Radiun	n-228				
_		Count Uncert.	Total Uncert.					
Analyte Combined Radium 226 + 228	Result Qualifier 0.641	(2σ+/-) 0.280	(2σ+/-) 0.283	RL 5.00	MDC Unit 0.317 pCi/L	Prepared	Analyzed 06/23/18 19:42	Dil Fac

PCB 2013-15 Exhibit D

Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 905 IBf 311-145716-2

Project/Site: Powerton CCR

Client Sample ID: MW-19 Lab Sample ID: 500-145716-14 Date Collected: 05/14/18 17:35

Matrix: Water

Method: 903.0 - I	Radium-226	(GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.235	U	0.173	0.174	1.00	0.246	pCi/L	05/29/18 11:58	06/20/18 12:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					05/29/18 11:58	06/20/18 12:47	1

Method: 904.0 -	Naululli-220	(GFFC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.326		0.193	0.195	1.00	0.288	pCi/L	05/29/18 13:22	06/19/18 10:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					05/29/18 13:22	06/19/18 10:57	1
Y Carrier	88.2		40 - 110					05/29/18 13:22	06/19/18 10:57	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radiun	n-228					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.562		0.259	0.261	5.00	0.288	pCi/L		06/23/18 19:42	1

Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica 906 lBf 311-145716-2

Project/Site: Powerton CCR

Client Sample ID: Duplicate

Lab Sample ID: 500-145716-15

Matrix: Water

onone campio is. Supricate
Date Collected: 05/14/18 00:00
Date Received: 05/18/18 17:20

Method: 903.0 -	Radium-226	(GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.193	U	0.166	0.166	1.00	0.249	pCi/L	05/29/18 11:58	06/20/18 12:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					05/29/18 11:58	06/20/18 12:47	1
Ba Carrier	101		40 - 110					05/29/18 11:58	06/20/18 12	:47

Method: 904.0 -	Radium-228	(GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.404		0.210	0.213	1.00	0.307	pCi/L	05/29/18 13:22	06/19/18 10:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					05/29/18 13:22	06/19/18 10:57	1
Y Carrier	87.5		40 - 110					05/29/18 13:22	06/19/18 10:57	1

Method: Ra226 Ra	228 - Con	nbined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.597		0.268	0.270	5.00	0.307	pCi/L		06/23/18 19:42	1

PCB 2013-15 PCB 2013-15 PCB 2013-15

Electronic Filing Definitions/Glock's Pffice 07/19/2019

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

TestAmerica 907 IB: 300-145716-2

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
	» %R CFL

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)

19 Exhibit D

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

TestAmerica 908 lpf 311-145716-2

Rad

Prep Batch: 367843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145716-1	MW-01	Total/NA	Water	PrecSep-21	
500-145716-2	MW-02	Total/NA	Water	PrecSep-21	
500-145716-3	MW-03	Total/NA	Water	PrecSep-21	
500-145716-4	MW-04	Total/NA	Water	PrecSep-21	
500-145716-5	MW-05	Total/NA	Water	PrecSep-21	
500-145716-6	MW-08	Total/NA	Water	PrecSep-21	
500-145716-7	MW-09	Total/NA	Water	PrecSep-21	
500-145716-8	MW-10	Total/NA	Water	PrecSep-21	
500-145716-9	MW-11	Total/NA	Water	PrecSep-21	
500-145716-10	MW-12	Total/NA	Water	PrecSep-21	
500-145716-11	MW-15	Total/NA	Water	PrecSep-21	
500-145716-12	MW-17	Total/NA	Water	PrecSep-21	
500-145716-13	MW-18	Total/NA	Water	PrecSep-21	
500-145716-14	MW-19	Total/NA	Water	PrecSep-21	
500-145716-15	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-367843/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-367843/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-145716-10 DU	MW-12	Total/NA	Water	PrecSep-21	

Prep Batch: 367857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-145716-1	MW-01	Total/NA	Water	PrecSep_0	
500-145716-2	MW-02	Total/NA	Water	PrecSep_0	
500-145716-3	MW-03	Total/NA	Water	PrecSep_0	
500-145716-4	MW-04	Total/NA	Water	PrecSep_0	
500-145716-5	MW-05	Total/NA	Water	PrecSep_0	
500-145716-6	MW-08	Total/NA	Water	PrecSep_0	
500-145716-7	MW-09	Total/NA	Water	PrecSep_0	
500-145716-8	MW-10	Total/NA	Water	PrecSep_0	
500-145716-9	MW-11	Total/NA	Water	PrecSep_0	
500-145716-10	MW-12	Total/NA	Water	PrecSep_0	
500-145716-11	MW-15	Total/NA	Water	PrecSep_0	
500-145716-12	MW-17	Total/NA	Water	PrecSep_0	
500-145716-13	MW-18	Total/NA	Water	PrecSep_0	
500-145716-14	MW-19	Total/NA	Water	PrecSep_0	
500-145716-15	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-367857/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-367857/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-145716-10 DU	MW-12	Total/NA	Water	PrecSep_0	

Client: KPRG and Associates, Inc.

TestAmerica Job IB: 500-145716-2

Project/Site: Powerton CCR

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-367843/23-A

Matrix: Water

Analysis Batch: 371317

		Chefft Sample ID. Method Blank
		Prep Type: Total/NA
		Prep Batch: 367843
Count	Total	•

			Count	· Otai						
	MB	MB	Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1840	U	0.137	0.138	1.00	0.195	pCi/L	05/29/18 11:58	06/20/18 12:44	1

MB MB **%Yield Qualifier** Limits Carrier Prepared Analyzed Dil Fac 05/29/18 11:58 06/20/18 12:44 Ba Carrier 103 40 - 110

Lab Sample ID: LCS 160-367843/1-A

Matrix: Water

Analysis Batch: 371320

Client Sample ID: Lab Control Sample Prep Type: Total/NA **Prep Batch: 367843**

Total Spike LCS LCS %Rec. Uncert. Analyte Added Result Qual $(2\sigma + / -)$ RL**MDC** Unit %Rec Limits Radium-226 11.8 11.82 1.37 1.00 0.215 pCi/L 100 68 - 137

LCS LCS Carrier %Yield Qualifier Limits Ba Carrier 107 40 - 110

Lab Sample ID: 500-145716-10 DU Client Sample ID: MW-12

Matrix: Water

Prep Type: Total/NA **Analysis Batch: 371320 Prep Batch: 367843** Total

Sample Sample DU DU Uncert. **RER** Analyte Result Qual Result Qual $(2\sigma + / -)$ RL **MDC** Unit RER Limit Radium-226 0.690 0.198 1.00 0.4100 0.223 pCi/L 0.61

DU DU Carrier %Yield Qualifier Limits Ba Carrier 97.1 40 - 110

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-367857/23-A Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA **Analysis Batch: 371107 Prep Batch: 367857**

Total Count MB MB Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Dil Fac Analyzed Radium-228 0.05875 U 0.188 0.188 1.00 0.328 pCi/L 05/29/18 13:22 06/19/18 10:59

	MB	MB				
Carrier	%Yield	Qualifier L	.imits	Prepared	Analyzed	Dil Fac
Ba Carrier	103	4	10 - 110	05/29/18 13:22	06/19/18 10:59	1
Y Carrier	87.9	4	10 - 110	05/29/18 13:22	06/19/18 10:59	1

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 100 lpf 311-145716-2

Client Sample ID: MW-12

Prep Type: Total/NA

Project/Site: Powerton CCR

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

40 - 110

	•	ab Sample ID: LCS 160-367857/1-A									Client Sample ID: Lab Control Sample						
١	Matrix: Wate											Prep Type:	Total/NA				
ı	Analysis Bat	tch: 3712	219									Prep Batc	h: 367857				
							Total					•					
				Spike	LCS	LCS	Uncert.					%Rec.					
	Analyte			Added	Result	Qual	(2σ+/-)	RL	MDC	Unit	%Rec	Limits					
	Radium-228			8.21	7.721		0.925	1.00	0.422	pCi/L	94	56 - 140					
		LCS	LCS														
	Carrier	%Yield	Qualifier	Limits													
	Ba Carrier	107		40 - 110													

Lab Sample ID: 500-145716-10 DU

84.5

Matrix: Water

Y Carrier

Analysis Batch:	: 371219						Prep Ba	tch: 30	67857
-				Total					
	Sample Sample	DU	DU	Uncert.					RER
Analyte	Result Qual	Result	Qual	(2σ+/-)	RL	MDC Unit		RER	Limit
Radium-228	0.0505 U	0.1106	U	0.228	1.00	0.388 pCi/L		0.13	1

טט טט											
Carrier	%Yield	Qualifier	Limits								
Ba Carrier	97.1		40 - 110								
Y Carrier	82.6		40 - 110								

TestAmenea Jon 18, 311-145716-2

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

Client Sample ID: MW-01 Date Collected: 05/17/18 15:15

Date Received: 05/18/18 17:20

Lab Sample ID: 500-145716-1

TAL SL

TAL SL

Matrix: Water

Batch Dilution Batch Batch **Prepared** Method Factor Number or Analyzed **Prep Type** Type Run Analyst Lab Total/NA Prep PrecSep-21 367843 05/29/18 11:58 TJT TAL SL Total/NA 903.0 371320 06/20/18 10:42 KLS TAL SL Analysis 1 Total/NA Prep PrecSep 0 367857 05/29/18 13:22 TJT TAL SL TAL SL Total/NA Analysis 904.0 1 371219 06/19/18 10:52 RTM

Client Sample ID: MW-02 Lab Sample ID: 500-145716-2 Date Collected: 05/15/18 09:05

1

372130 06/23/18 19:42 RTM

372130 06/23/18 19:42 RTM

Matrix: Water

10

Date Received: 05/18/18 17:20

Analysis

Analysis

Ra226 Ra228

Ra226_Ra228

Total/NA

Total/NA

Batch **Batch** Dilution **Batch Prepared Prep Type** Type Method Run **Factor** Number or Analyzed Lab Analyst Total/NA PrecSep-21 367843 TJT TAL SL Prep 05/29/18 11:58 Total/NA 903.0 371320 06/20/18 10:42 TAL SL Analysis 1 KLS TAL SL Total/NA Prep PrecSep 0 367857 05/29/18 13:22 TJT Total/NA 06/19/18 10:52 RTM TAL SL Analysis 904.0 1 371219

Client Sample ID: MW-03 Lab Sample ID: 500-145716-3

1

Matrix: Water

Date Collected: 05/15/18 11:00 Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			367843	05/29/18 11:58	TJT	TAL SL
Total/NA	Analysis	903.0		1	371320	06/20/18 10:43	KLS	TAL SL
Total/NA	Prep	PrecSep_0			367857	05/29/18 13:22	TJT	TAL SL
Total/NA	Analysis	904.0		1	371219	06/19/18 10:52	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	372130	06/23/18 19:42	RTM	TAL SL

Client Sample ID: MW-04 Lab Sample ID: 500-145716-4

Date Collected: 05/15/18 12:11 **Matrix: Water** Date Received: 05/18/18 17:20

Batch Batch Dilution Batch Prepared **Prep Type** Туре Method Run Factor Number or Analyzed Lab Analyst Total/NA Prep PrecSep-21 367843 05/29/18 11:58 TJT TAL SL Total/NA Analysis 903.0 TAL SL 1 371320 06/20/18 10:43 KLS Total/NA Prep PrecSep 0 367857 05/29/18 13:22 TJT TAL SL Total/NA 904.0 TAL SL Analysis 1 371219 06/19/18 10:52 RTM TAL SL Total/NA Analysis Ra226 Ra228 1 372130 06/23/18 19:42 RTM

10

Client: KPRG and Associates, Inc.

TestAmerica Job ID: 500-145716-2

Project/Site: Powerton CCR

Client Sample ID: MW-05

Lab Sample ID: 500-145716-5

Matrix: Water

Date Collected: 05/15/18 13:31 Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			367843	05/29/18 11:58	TJT	TAL SL
Total/NA	Analysis	903.0		1	371320	06/20/18 10:43	KLS	TAL SL
Total/NA	Prep	PrecSep_0			367857	05/29/18 13:22	TJT	TAL SL
Total/NA	Analysis	904.0		1	371219	06/19/18 10:52	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	372130	06/23/18 19:42	RTM	TAL SL

Client Sample ID: MW-08 Lab Sample ID: 500-145716-6 Date Collected: 05/17/18 13:29

Matrix: Water

Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			367843	05/29/18 11:58	TJT	TAL SL
Total/NA	Analysis	903.0		1	371320	06/20/18 10:43	KLS	TAL SL
Total/NA	Prep	PrecSep_0			367857	05/29/18 13:22	TJT	TAL SL
Total/NA	Analysis	904.0		1	371219	06/19/18 10:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	372130	06/23/18 19:42	RTM	TAL SL

Client Sample ID: MW-09 Lab Sample ID: 500-145716-7 Date Collected: 05/16/18 10:19

Matrix: Water

Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			367843	05/29/18 11:58	TJT	TAL SL
Total/NA	Analysis	903.0		1	371320	06/20/18 10:43	KLS	TAL SL
Total/NA	Prep	PrecSep_0			367857	05/29/18 13:22	TJT	TAL SL
Total/NA	Analysis	904.0		1	371219	06/19/18 10:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	372130	06/23/18 19:42	RTM	TAL SL

Client Sample ID: MW-10 Lab Sample ID: 500-145716-8

Date Collected: 05/16/18 11:41 **Matrix: Water** Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			367843	05/29/18 11:58	TJT	TAL SL
Total/NA	Analysis	903.0		1	371320	06/20/18 10:43	KLS	TAL SL
Total/NA	Prep	PrecSep_0			367857	05/29/18 13:22	TJT	TAL SL
Total/NA	Analysis	904.0		1	371219	06/19/18 10:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	372130	06/23/18 19:42	RTM	TAL SL

10

Client: KPRG and Associates, Inc.

TestAmerica Job ID: 500-145716-2

Project/Site: Powerton CCR

Client Sample ID: MW-11

Date Collected: 05/16/18 13:01 Date Received: 05/18/18 17:20 Lab Sample ID: 500-145716-9

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			367843	05/29/18 11:58	TJT	TAL SL
Total/NA	Analysis	903.0		1	371320	06/20/18 10:43	KLS	TAL SL
Total/NA	Prep	PrecSep_0			367857	05/29/18 13:22	TJT	TAL SL
Total/NA	Analysis	904.0		1	371219	06/19/18 10:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	372130	06/23/18 19:42	RTM	TAL SL

Client Sample ID: MW-12 Lab Sample ID: 500-145716-10 **Matrix: Water**

Date Collected: 05/16/18 14:41

Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21	 -		367843	05/29/18 11:58	TJT	TAL SL
Total/NA	Analysis	903.0		1	371320	06/20/18 10:43	KLS	TAL SL
Total/NA	Prep	PrecSep_0			367857	05/29/18 13:22	TJT	TAL SL
Total/NA	Analysis	904.0		1	371219	06/19/18 10:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	372130	06/23/18 19:42	RTM	TAL SL

Lab Sample ID: 500-145716-11 **Client Sample ID: MW-15 Matrix: Water**

Date Collected: 05/17/18 11:58 Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			367843	05/29/18 11:58	TJT	TAL SL
Total/NA	Analysis	903.0		1	371320	06/20/18 13:17	KLS	TAL SL
Total/NA	Prep	PrecSep_0			367857	05/29/18 13:22	TJT	TAL SL
Total/NA	Analysis	904.0		1	371219	06/19/18 10:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	372130	06/23/18 19:42	RTM	TAL SL

Client Sample ID: MW-17 Lab Sample ID: 500-145716-12 **Matrix: Water**

Date Collected: 05/14/18 14:51 Date Received: 05/18/18 17:20

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			367843	05/29/18 11:58	TJT	TAL SL
Total/NA	Analysis	903.0		1	371320	06/20/18 13:17	KLS	TAL SL
Total/NA	Prep	PrecSep_0			367857	05/29/18 13:22	TJT	TAL SL
Total/NA	Analysis	904.0		1	371219	06/19/18 10:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	372130	06/23/18 19:42	RTM	TAL SL

Client: KPRG and Associates, Inc.

TestAmenea Job 10f 300-145716-2

Project/Site: Powerton CCR

Client Sample ID: MW-18

Lab Sample ID: 500-145716-13

Matrix: Water

10

Date Collected: 05/14/18 16:05 Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			367843	05/29/18 11:58	TJT	TAL SL
Total/NA	Analysis	903.0		1	371320	06/20/18 12:47	KLS	TAL SL
Total/NA	Prep	PrecSep_0			367857	05/29/18 13:22	TJT	TAL SL
Total/NA	Analysis	904.0		1	371132	06/19/18 10:57	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	372130	06/23/18 19:42	RTM	TAL SL

Client Sample ID: MW-19 Lab Sample ID: 500-145716-14

Date Collected: 05/14/18 17:35

Date Received: 05/18/18 17:20

Matrix: Water

Batch **Batch** Dilution Batch **Prepared** Prep Type Туре Method Run Factor Number or Analyzed Lab Analyst Prep Total/NA PrecSep-21 367843 05/29/18 11:58 TJT TAL SL Total/NA Analysis 903.0 1 371320 06/20/18 12:47 KLS TAL SL TAL SL Total/NA Prep PrecSep_0 367857 05/29/18 13:22 TJT Total/NA Analysis 904.0 1 371132 06/19/18 10:57 RTM TAL SL Total/NA Analysis Ra226_Ra228 1 372130 06/23/18 19:42 RTM TAL SL

Client Sample ID: Duplicate Lab Sample ID: 500-145716-15

Date Collected: 05/14/18 00:00 Matrix: Water Date Received: 05/18/18 17:20

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			367843	05/29/18 11:58	TJT	TAL SL
Total/NA	Analysis	903.0		1	371320	06/20/18 12:47	KLS	TAL SL
Total/NA	Prep	PrecSep_0			367857	05/29/18 13:22	TJT	TAL SL
Total/NA	Analysis	904.0		1	371132	06/19/18 10:57	RTM	TAL SL
Total/NA	Analysis	Ra226 Ra228		1	372130	06/23/18 19:42	RTM	TAL SL

Laboratory References:

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

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Client: KPRG and Associates, Inc.

TestAmenea 105 lpf 310-145716-2

Project/Site: Powerton CCR

Laboratory: TestAmerica Chicago

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

Aut	thority	Program	EPA Region	Identification Number	Expiration Date
Illin	ois	NELAP	5	100201	04-30-19

Laboratory: TestAmerica St. Louis

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program		EPA Region	Identification Number	Expiration Date
linois	NELAP		5	200023	11-30-18
The following analytes are included in this		rt, but accreditation/	certification is not offe	ered by the governing author	ority:
Analysis Method	Prep Method	Matrix	Analyt	е	
903.0	PrecSep-21	Water	Radiur	n-226	
	P				
904.0	PrecSep_0	Water	Radiur	m-228	

Electronic Filing: Received, Clerk's Office 07/19/2019

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Test	4r	nerica	Report To:						Bill T	o:									1 (ige 100 0.
	/1		Contact:	Richard Gna	t				Conta	act:							Labi	at # ~	- 61.49	
THE LEADER I	N ENVI	RONMENTAL TESTING	Company:	KPRG and A	ssociates, Inc	3			Comp	oany:			***				Lab L	ot# 600	7145	H4
TestAmerica	Chica	jo	Address:	14665 W. Lis	bon Rd., Sui	te 2B			Addre	988:				Æ			Packag	e Sealed	Sam	ples Sealed
2417 Bond St.				Brookfield, W	/ 53005							Ŀ	رجع	M:			Yes	No_	Yes	No
University Parl	k, 1L 60	0484	Phone:	262-781-047	5				Phone	e:		. C					Receive	ed on Ice	San	ples Intact
708-534-5200			Email:	richardg@	kprginc.co	m			Email			- - 500-	14571	6 COC	: .		Ves	No	Yes	No N/A
Fax. 708-534-	5211								PO #:			- 500-	14071	0 000				ature °C of C		7 - N
																	3.1	473	1.21	, Z,&
Sampler Nam	e:		COMPANY:			#/C	ont.										Within	Hold Time	Prese	rv. Indicated
lan John How	ieson		KPRG & Ass	ociates Inc.		Volu	me										Yes	No	Yes	No N/A
Project Name	:		TestAmerica	Project Numb	er:	Pres	erv.										фн	Check OK	Res	L ₂ Check OK
Quarterly- Por	wertor	CCR	50011612				1		tals								Yes	No	\ Ces	No N/A
Project Locati	ion:		TAT			Ě	of Cont	, g	- Total Metal	ļ		1		1 1			T S	ample Labels	and CC	C Agree
Pekin, IL			15 Days			Matrix	9	226/228	ota				0			ŀ	Yes) No	COC	not present
Lab PM:	Eric	Lang	eric,lang@	testameri	ca.com	1	#	22	-			g.	Sulfate							
Laboratory ID	MS-MSD	Client Sam	ple ID	Sampling Date	Sampling Time			903.0, 904.0 Radium	6010C, 6020A, 7470A	2540C -TDS	4500_F_C - Fluoride	SM4500_CI_E Chloride	SM4500_SO4_E - St				A	dditional Ana	ilyses / I	Remarks
- (MW-01		5-17-18	15:15	W	5	X	Х	Х	Х	Х	Х							
2		MW-02		5-15-18	09:05	W	5	Х	Х	Х	Х	Х	Х							
3		MW-03		5-15-18	11:00	W	5	Х	Х	X	Х	Х	Х					·		
4-		MW-04		5-15-18	12:11	W	5	Х	Х	Х	Х	Х	Х					-		
5		MW-05		5-15-18	13:31	W	5	Х	Х	Х	Х	X	Х							
10		MW-08		5-17-18	13:29	W	5	Х	Х	Х	Х	Х	Х							
7		MW-09		5-16-18	10:19	W	5	Х	Х	Х	Х	Х	Х							
8		MW-10		5-16-18	11:41	W	5	Х	Х	Х	Х	X	Х					-		
9		MW-11		5-16-18	13:01	W	5	Х	Х	Х	Х	Х	Х							
نا		MW-12		5-16-18	14:41	W	5	Х	Х	Х	Х	Х	Х							
- u		MW-15		5-17-18	11:58	W	5	Х	Х	Х	Х	Х	Х							
RELINQUISHED IJH	BY:	~	COMPANY: KPRG	5-/8	DATE:	17	TIME:	>	RECE	VED /	i La	ן קמי	,		COMP	7		5/18/1	8	TIME: 1720
RELINQUISHED	BY:∪		COMPANY:		DATE:		TIME:		RECEI	VED B	Y: /				COMP	ANY:		DATE:		TIME:
WW = Wastewate W = Water S = Soi! SL = Sludge MS = Miscellaneo	эг	x Key SE = Sediment SO = Solid DL = Drum Liquid DS = Drum Solid L = Leachate	Contain 1. Plastic 2. VOA Vial 3. Sterile Plasti 4. Amber Glass 5. Widemouth	ic s	reservative Kr 1. HCI, Cool to 2. H ₂ SO ₄ , Cool 3. HNO ₃ , Cool 4. NaOH, Cool 5. NaOH/Zn, O	o 4° ol to 4° l to 4° ll to 4°	4°		СОММ	ENTS:								Received Courier: Hand Deliv		8,18 X
OL = Oil		W = Wipe	6. Other		6. Cool to 4°													Bill of Lad	ng:	
A = Air		O =			7. None			'										******	1_	_of2

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Test.	4r	nerica	Report To:						Bill T	o:	_						
			Contact:	Richard Gnat	t				Conta	act:							Lab Lot # ENDANS 7/1
THE LEADER !	N ENV	IRONMENTAL TESTING	Company:	KPRG and A	ssociates, Inc	;			Com	oany:							Lab Lot # 500-145716
TestAmerica	Chica	go	Address:	14665 W. Lis	bon Rd., Suit	e 2B			Addre	ess:							Paskage Sealed Samples Sealed
2417 Bond St.				Brookfield, W	/I 53005												Yes) No Yes No
University Par	k, IL 6	0484	Phone:	262-781-047	5				Phon	e:							Received on Ice Samples Intact
708-534-5200			Email:	richardg@	kprginc.co	<u>m</u>			Emai								(Yes) No (Yes) No N/A
Fax. 708-534-	5211								PO#								Temperature °C of Cooler 2.8, 2.1, 3.1, 3.9, 4.7
Sampler Nam	ie:		COMPANY:			#/C	ont.	[T		1		Within Hold Time Preserv. Indicated
Ian John How	<i>r</i> ieson		KPRG & Ass	ociates Inc.		Volu	me			İ							Yes No Yes No N/A
Project Name			TestAmerica	Project Numb	oer:	Pres	erv.	1									pH Check OK Res CL ₂ Check OK
Quarterly- Po		n CCR	50011612	•					tais								(Yes) No (Yes) No N/A
Project Locat			TAT			ž	Ĕ		Me		l			ŀ			Sample Labels and COC Agree
Pekin, IL			15 Days			Matrix	# of Cont	226/228	- Total Metal				do do				Yes No COC not present
Lab PM:	Fric	Lang		testameric	ca.com	1 -	#	22		ĺ	ĺ	용	Sulfate				
Laboratory ID	MS-MSD	Client Sam	ple ID	Sampling Date	Sampling Time			903.0, 904.0 Radium	6010C, 6020A, 7470A	2540C -TDS	4500_F_C - Fluoride	SM4500_CI_E Chloride	SM4500_SO4_E - 8				Additional Analyses / Remarks
12		MW-17		5-14-18	14:51	w	5	Х	Х	Х	Х	Х	X				·
13		MW-18		5-14-18		W	5	Х	Х	Х	Х	Х	X				
14		MW-19		5-14-18	17:35	W	5	X	X	X	Х	Х	X				
15		Duplicates		5-14-18	<u></u>	W	5	Х	Х	Х	_X	Х	Х				
		1	····		-											-	
RELINQUISHED	PKY		COMPANY: KPRG	5-18	DATE	M	TIME:))	REGE	JEDA	(: Jz	1	,		COMP	NY:	5/18 1720
RELINQUISHED	<i>f</i> . (COMPANY:		DATE:		TIME:		RECEI	VED B	Y: /	pri			COMP	ANY:	DATE: TIME:
WW = Wastewat W = Water S = Soil SL = Sludge MS = Miscellaned	er	ix Key SE = Sediment SO = Solid DL = Drum Liquid DS = Drum Solid L = Leachate	Plastic VOA Vial Sterile Plas Amber Glas Widemouth	s	eservative Ko 1. HCl, Cool to 2. H ₂ SO ₄ , Coo 3. HNO ₃ , Coo 4. NaOH, Cool 5. NaOH/Zn, (6. Cool to 4°	o 4° of to 4° I to 4° of to 4°	4°		СОММ	ENTS:							Date Received OT 1/8 1/8 Courier: Hand Delivered
DL = Oil \ = Air		W = Wipe	6. Other		7. None				L								Bill of Lading:
- All		0 =	l		1 /. NONE												UU

STL-8208 (0600)

PCB 2013-15 Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit D Page 108 df 31 be performed (dup, spikes, etc) - no NCMs Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs Full QC needed (dups, etc) Batch QC must Full QC needed (dups, etc) Batch QC must Full QC needed (dups, etc) Batch QC must be performed (dup, spikes, etc) - no NCMs be performed (dup. spikes, etc) - no NCMs Full QC needed (dups, etc) Batch QC must Full QC needed (dups, etc) Batch QC must Full QC needed (dups, etc.) Batch QC musi be performed (dup, spikes, etc) - no NCMs be performed (dup, spikes, etc) - no NCMs be performed (dup, spikes, etc) - no NCMs TestAmerica F - TSP Dodecahyd Special Instructions/Note: Note. Since laboratory accreditations are subject to change. TestAmerica Laboratories, inc. 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 mantain accreditation in the State of Origin listed above for analysis/tests/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratories, will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, inc. Z - other (specify) R - Na2S2O3 S - H2SO4 M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 U - Acetone V - MCAA W - pH 4-5 Months Sompany Preservation Codes: G - Amchlor H - Ascorbic Acid 500-145716-2 500-104744.1 Page 1 of 2 Nitric Acid 1 - Ice J - DI Water K - EDTA E - NaHSO4 F-MeOH L-EDA Total Number of containers 3 3 3 3 3 3 3 3 Date/Time ethod of Shipment State of Origin: Illinois Analysis Requested Cooler Temperature(s) "C and Other Remarks: Special Instructions/QC Requirements Michelan Prem eric.lang@testamericainc.com × × × × × RazzeRazza_GFPC eceived by: eceived by NELAP - Illinois × × × × × × × 904.0/PrecSep_0 Standard Larget List × × Chain of Custody Record × × × × × 903.0/PrecSep_21 Standard Target List × × × × Lab PM: Lang, Eric A. E-Mail: BT=Tissue, A=Ai Preservation Code: Matrix Water Water Water Water Water Water Water Water Water Company Company (C=comp, G=qrab) Sample Type Primary Deliverable Rank: 2 Dentral 12:11 Central 13:31 Central 13:29 Central 09:05 Central 11:00 Central 10:19 Central 11:41 Central 13:01 AT Requested (days) Due Date Requested: 6/19/2018 Sample Date 5/15/18 5/15/18 5/15/18 5/15/18 5/17/18 5/16/18 5/16/18 5/17/18 5/16/18 50011612 Jate/Time. Phone: WO # Client Information (Sub Contract Lab) Deliverable Requested: I, II, III, IV, Other (specify) Custody Seal No. Sample Identification - Client ID (Lab ID) 314-298-8757(Fax)

TestAmerica Chicago

University Park, IL 60484

Phone (708) 534-5200 Fax (708) 534-5211

estAmerica Laboratories, Inc.

Shipping/Receiving

13715 Rider Trail North

314-298-8566(Tel)

State, Zip: MO, 63045

Earth City

MWG - Powerton Powerton CCR

roject Name:

WW-01 (500-145716-1) WW-02 (500-145716-2) MW-03 (500-145716-3) WW-04 (500-145716-4) WW-05 (500-145716-5) MW-08 (500-145716-6)

uished by:

Custody Seals Intact:

Possible Hazard Identification

Inconfirmed

MW-09 (500-145716-7) MW-10 (500-145716-8) MW-11 (500-145716-9)

Empty Kit Relinquished by

Ver: 09/20/2016

MW-15 (500-145716-11) MW-17 (500-145716-12) MW-18 (500-145716-13)

MW-12 (500-145716-10)

MW-19 (500-145716-14)

University Park, IL 60484

13715 Rider Trail North,

Shipping/Receiving

214-298-8566(Tel)

State, Zip: MO, 63045 Earth City

MWG - Powerton Powerton CCR

uished by:

Custody Seals Intact:

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc. Job Number: 500-145716-2

List Source: TestAmerica Chicago Login Number: 145716

List Number: 1

Creator: Sanchez, Ariel M

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	2.1, 2.8, 3.1, 3.9, 4.7
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	

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Login Sample Receipt Checklist

Client: KPRG and Associates, Inc.

Job Number: 500-145716-2

Login Number: 145716
List Source: TestAmerica St. Louis
List Number: 2
List Creation: 05/22/18 11:08 AM

Creator: Press, Nicholas B

orcator. 1 1033, Monoida B		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	12
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

2

3

4

6

0

9

11

Login Sample Receipt Checklist

Client: KPRG and Associates, Inc. Job Number: 500-145716-2

Login Number: 145716 List Source: TestAmerica St. Louis List Creation: 05/22/18 11:23 AM List Number: 3

Creator: Press, Nicholas B

erouter: 1 1000, Micholad B		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	12
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client: KPRG and Associates, Inc.

TestAmerica Job IB: 300-145716-2

Project/Site: Powerton CCR

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water Prep Type: Total/NA

			Percent Yield (Acceptance Limits)
		Ba Carrier	
Lab Sample ID	Client Sample ID	(40-110)	
500-145716-1	MW-01	98.2	
500-145716-2	MW-02	100	
500-145716-3	MW-03	96.5	
500-145716-4	MW-04	93.2	
500-145716-5	MW-05	95.3	
500-145716-6	MW-08	85.5	
500-145716-7	MW-09	92.9	
500-145716-8	MW-10	95.9	
500-145716-9	MW-11	95.0	
500-145716-10	MW-12	93.8	
500-145716-10 DU	MW-12	97.1	
500-145716-11	MW-15	97.6	
500-145716-12	MW-17	92.9	
500-145716-13	MW-18	103	
500-145716-14	MW-19	104	
500-145716-15	Duplicate	101	
LCS 160-367843/1-A	Lab Control Sample	107	
MB 160-367843/23-A	Method Blank	103	
Tracer/Carrier Legen	d		
Ba Carrier = Ba Carrie			

Method: 904.0 - Radium-228 (GFPC)

Y Carrier = Y Carrier

Matrix: Water Prep Type: Total/NA

				Percent Yield (Accepta
		Ba Carrier	Y Carrier	
Lab Sample ID	Client Sample ID	(40-110)	(40-110)	
500-145716-1	MW-01	98.2	87.1	
500-145716-2	MW-02	100	84.5	
500-145716-3	MW-03	96.5	80.7	
500-145716-4	MW-04	93.2	81.5	
500-145716-5	MW-05	95.3	86.0	
500-145716-6	MW-08	85.5	87.9	
500-145716-7	MW-09	92.9	87.1	
500-145716-8	MW-10	95.9	83.0	
500-145716-9	MW-11	95.0	88.6	
500-145716-10	MW-12	93.8	88.2	
500-145716-10 DU	MW-12	97.1	82.6	
500-145716-11	MW-15	97.6	85.6	
500-145716-12	MW-17	92.9	92.3	
500-145716-13	MW-18	103	87.5	
500-145716-14	MW-19	104	88.2	
500-145716-15	Duplicate	101	87.5	
_CS 160-367857/1-A	Lab Control Sample	107	84.5	
MB 160-367857/23-A	Method Blank	103	87.9	
Tracer/Carrier Legend				

TestAmerica Chicago

PCB 2013-15 Electronic Filing: Received, Clerk's Office 07/19/2019

Page 114 of 311 TestAmerica di caracteria di c

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 500-149809-1 Client Project/Site: Powerton CCR

For:

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

Attn: Richard Gnat

Authorized for release by: 8/24/2018 2:41:29 PM

Eric Lang, Manager of Project Management (708)534-5200

eric.lang@testamericainc.com

.....LINKS

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Have a Question?



Visit us at: 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.

Exhibit D

Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit D TestApperica Jpt JDf 5001149809-1

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

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PCB 2013-15 Exhibit D

Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica Job IB: 311-149809-1

Project/Site: Powerton CCR

Job ID: 500-149809-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-149809-1

Comments

No additional comments.

Receipt

The samples were received on 8/10/2018 4:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 3.6° C, 3.7° C, 5.2° C, 5.4° C and 6.0° C.

Metals

Method(s) 6020A: The internal standard Terbium (Tb) was used to report the elements Lead and Thallium in batch 500-445195. This was due to the LCS being spiked with the trace digestion spike which contains Bismuth

Method(s) 6020A: The CCV at line 63 and CCVL at line 38, associated with batch 500-445195 recovered above the upper control limit for Beryllium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

General Chemistry

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

3

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea Job IB: 300-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-01 Lab Sample ID: 500-149809-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.051		0.0025		mg/L	1	_	6020A	Total
									Recoverable
Boron	0.14		0.050		mg/L	1		6020A	Total
									Recoverable
Calcium	86		0.20		mg/L	1		6020A	Total
									Recoverable
Total Dissolved Solids	430		10		mg/L	1		SM 2540C	Total/NA
Chloride	48		2.0		mg/L	1		SM 4500 CI- E	Total/NA
Fluoride	0.13		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	43		10		mg/L	2		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-02 Lab Sample ID: 500-149809-2

Analyte	Result C	Qualifier RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0016	0.0010	_	mg/L		_	6020A	Total
Barium	0.067	0.0025		mg/L	1		6020A	Recoverable Total
Boron	1.5	0.25		mg/L	5		6020A	Recoverable Total
Calcium	89	0.20		mg/L	1		6020A	Recoverable Total
Total Dissolved Solids	530	10		mg/L	1		SM 2540C	Recoverable Total/NA
Chloride	54	2.0		mg/L	1		SM 4500 CI- E	Total/NA
Fluoride	0.15	0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	51	25		mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-03 Lab Sample ID: 500-149809-3

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0015	0.0010		mg/L	1	_	6020A	Total
								Recoverable
Barium	0.067	0.0025		mg/L	1		6020A	Total
								Recoverable
Boron	0.40	0.050		mg/L	1		6020A	Total
								Recoverable
Calcium	82	0.20		mg/L	1		6020A	Total
								Recoverable
Total Dissolved Solids	500	10		mg/L	1		SM 2540C	Total/NA
Chloride	67	10		mg/L	5		SM 4500 CI- E	Total/NA
Fluoride	0.22	0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	49	25		mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-04 Lab Sample ID: 500-149809-4

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac I) Method	Prep Type
Arsenic	0.0011	0.0010	mg/L		6020A	Total
						Recoverable
Barium	0.031	0.0025	mg/L	1	6020A	Total
						Recoverable
Boron	0.79	0.050	mg/L	1	6020A	Total
						Recoverable
Calcium	84	0.20	mg/L	1	6020A	Total
						Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea Job IB: 300-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-04 (Continued)

Lab Sample ID: 500-149809-4

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Molybdenum	0.0060	0.0050	mg/L		6020A	Total
Total Dissolved Solids	510	10	mg/L	1	SM 2540C	Recoverable Total/NA
Chloride	71	2.0	mg/L	1	SM 4500 CI- E	Total/NA
Fluoride	0.32	0.10	mg/L	1	SM 4500 F C	Total/NA
Sulfate	49	25	mg/L	5	SM 4500 SO4 E	Total/NA

Client Sample ID: MW-05 Lab Sample ID: 500-149809-5

Analyte	Result	Qualifier RL	MDL (Jnit	Dil Fac	D	Method	Prep Type
Barium	0.054	0.0025	r	ng/L	1	_	6020A	Total
								Recoverable
Boron	0.49	0.050	r	ng/L	1		6020A	Total
								Recoverable
Calcium	110	0.20	r	ng/L	1		6020A	Total
								Recoverable
Molybdenum	0.0069	0.0050	r	ng/L	1		6020A	Total
								Recoverable
Total Dissolved Solids	890	10	r	ng/L	1		SM 2540C	Total/NA
Chloride	120	10	r	ng/L	5		SM 4500 CI- E	Total/NA
Fluoride	0.32	0.10	r	ng/L	1		SM 4500 F C	Total/NA
Sulfate	180	50	r	ng/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-08 Lab Sample ID: 500-149809-6

Analyte	Result Qua	alifier RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0055	0.0010		mg/L	1	_	6020A	Total
								Recoverable
Barium	0.071	0.0025		mg/L	1		6020A	Total
								Recoverable
Boron	1.1	0.25		mg/L	5		6020A	Total
								Recoverable
Calcium	140	0.20		mg/L	1		6020A	Total
								Recoverable
Molybdenum	0.019	0.0050		mg/L	1		6020A	Total
								Recoverable
Total Dissolved Solids	1200	10		mg/L	1		SM 2540C	Total/NA
Chloride	270	10		mg/L	5		SM 4500 CI- E	Total/NA
Fluoride	0.32	0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	190	50		mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-09 Lab Sample ID: 500-149809-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.037		0.0025		mg/L	1	_	6020A	Total
									Recoverable
Boron	4.3		1.0		mg/L	20		6020A	Total
									Recoverable
Calcium	86		0.20		mg/L	1		6020A	Total
									Recoverable
Molybdenum	0.032		0.0050		mg/L	1		6020A	Total
									Recoverable
Selenium	0.0078		0.0025		mg/L	1		6020A	Total
									Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmenea Job IB: 300-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-09 (Continued)

Lab Sample ID: 500-149809-7

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Total Dissolved Solids	690	10	mg/L		SM 2540C	Total/NA
Chloride	39	2.0	mg/L	1	SM 4500 CI- E	Total/NA
Fluoride	0.14	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-10 Lab Sample ID: 500-149809-8

Analyte	Result	Qualifier RL	MDL Unit	Dil Fac	D Method	Prep Type
Arsenic	0.0012	0.0010	mg/L	1	6020A	Total
						Recoverable
Barium	0.22	0.0025	mg/L	1	6020A	Total
						Recoverable
Boron	0.39	0.050	mg/L	1	6020A	Total
						Recoverable
Calcium	99	0.20	mg/L	1	6020A	Total
			_	_		Recoverable
Cobalt	0.014	0.0010	mg/L	1	6020A	Total
						Recoverable
Lead	0.00079	0.00050	mg/L	1	6020A	Total
0-1						Recoverable
Selenium	0.0062	0.0025	mg/L	1	6020A	Total
Total Dissalved Colida	EEO	10	m m /I	4	CM 2540C	Recoverable
Total Dissolved Solids	550	10	mg/L	1	SM 2540C	Total/NA
Chloride	58	2.0	mg/L	1	SM 4500 CI-	
Fluoride	0.19	0.10	mg/L	1	SM 4500 F	C Total/NA
Sulfate	60	20	mg/L	4	SM 4500 SC	04 E Total/NA

Client Sample ID: MW-11 Lab Sample ID: 500-149809-9

Analyte	Result	Qualifier RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.68	0.0010	i	mg/L		_	6020A	Total
								Recoverable
Barium	3.0	0.0025	ı	mg/L	1		6020A	Total
								Recoverable
Boron	1.4	0.50	ı	mg/L	10		6020A	Total
								Recoverable
Cadmium	0.00082	0.00050	ı	mg/L	1		6020A	Total
								Recoverable
Calcium	160	0.20	ı	mg/L	1		6020A	Total
								Recoverable
Cobalt	0.0053	0.0010	ı	mg/L	1		6020A	Total
								Recoverable
Lead	0.0012	0.00050	ı	mg/L	1		6020A	Total
					_			Recoverable
Molybdenum	0.013	0.0050	ı	mg/L	1		6020A	Total
								Recoverable
Total Dissolved Solids	1000	10		mg/L	1		SM 2540C	Total/NA
Chloride	120	10	1	mg/L	5		SM 4500 CI- E	Total/NA
Fluoride	0.65	0.10	ı	mg/L	1		SM 4500 F C	Total/NA
Sulfate	220	50	ı	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-12 Lab Sample ID: 500-149809-10

This Detection Summary does not include radiochemical test results.

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 120 IBf 300-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-12 (Continued)

Lab Sample ID: 500-149809-10

Analyte	Result	Qualifier RL	MDL Unit	Dil Fac D	Method	Prep Type
Arsenic	0.12	0.0010	mg/L		6020A	Total
						Recoverable
Barium	0.15	0.0025	mg/L	1	6020A	Total
						Recoverable
Boron	0.61	0.050	mg/L	1	6020A	Total
						Recoverable
Cadmium	0.00084	0.00050	mg/L	1	6020A	Total
						Recoverable
Calcium	120	0.20	mg/L	1	6020A	Total
						Recoverable
Lead	0.00072	0.00050	mg/L	1	6020A	Total
						Recoverable
Molybdenum	0.026	0.0050	mg/L	1	6020A	Total
						Recoverable
Total Dissolved Solids	1300	10	mg/L	1	SM 2540C	Total/NA
Chloride	190	10	mg/L	5	SM 4500 CI- E	Total/NA
Fluoride	0.44	0.10	mg/L	1	SM 4500 F C	Total/NA
Sulfate	480	100	mg/L	20	SM 4500 SO4 E	Total/NA

Client Sample ID: MW-15

Lab Sample ID: 500-149809-11

Analyte	Result	Qualifier RL	MDL U	nit	Dil Fac	D	Method	Prep Type
Lithium	0.026	0.010	m	ıg/L	1	_	6010C	Total
								Recoverable
Arsenic	0.0083	0.0010	m	ıg/L	1		6020A	Total
				_	_			Recoverable
Barium	0.048	0.0025	m	ıg/L	1		6020A	Total
								Recoverable
Boron	2.3	0.50	m	ıg/L	10		6020A	Total
Calcium	200	0.20	m	να/I	1		6020A	Recoverable
Calcium	200	0.20	III	ıg/L	ı		0020A	Total
Molybdenum	0.033	0.0050	m	ıg/L	1		6020A	Recoverable Total
Worybaenam	0.033	0.0030	""	ig/L	'		0020A	Recoverable
Selenium	0.060	0.0025	m	ig/L	1		6020A	Total
	0.000	0.0020	•••	·9· =			00_0/1	Recoverable
Total Dissolved Solids	1700	10	m	ıg/L	1		SM 2540C	Total/NA
Chloride	200	10	m	ıg/L	5		SM 4500 CI- E	Total/NA
Fluoride	0.48	0.10	m	ig/L	1		SM 4500 F C	Total/NA
Sulfate	520	130		ıg/L	25		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 500-149809-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.019		0.010		mg/L	1	_	6010C	Total
A	0.007		0.0040			4		00004	Recoverable
Arsenic	0.087		0.0010		mg/L	1		6020A	Total Recoverable
Barium	0.055		0.0025		mg/L	1		6020A	Total
									Recoverable
Boron	1.3		0.50		mg/L	10		6020A	Total
Cadmium	0.00004		0.00050		m a /l	1		60204	Recoverable
Cadmium	0.00094		0.00050		mg/L	1		6020A	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 121 IBf 310-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-17 (Continued)

Lab Sample ID: 500-149809-12

Analyte	Result (Qualifier RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	170	0.20		mg/L		_	6020A	Total
								Recoverable
Cobalt	0.0015	0.0010		mg/L	1		6020A	Total
								Recoverable
Molybdenum	0.084	0.0050		mg/L	1		6020A	Total
								Recoverable
Thallium	0.0023	0.0020		mg/L	1		6020A	Total
								Recoverable
Total Dissolved Solids	1600	10		mg/L	1		SM 2540C	Total/NA
Chloride	230	10		mg/L	5		SM 4500 CI- E	Total/NA
Fluoride	0.60	0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	620	250		mg/L	50		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-18

Lab Sample ID: 500-149809-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.013		0.010		mg/L		_	6010C	Total
									Recoverable
Barium	0.12		0.0025		mg/L	1		6020A	Total
									Recoverable
Boron	0.58		0.050		mg/L	1		6020A	Total
									Recoverable
Calcium	120		0.20		mg/L	1		6020A	Total
									Recoverable
Molybdenum	0.0052		0.0050		mg/L	1		6020A	Total
									Recoverable
Total Dissolved Solids	1100		10		mg/L	1		SM 2540C	Total/NA
Chloride	230		10		mg/L	5		SM 4500 CI- E	Total/NA
Fluoride	0.57		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	270		50		mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: MW-19

Lab Sample ID: 500-149809-14

Analyte	Result	Qualifier RL	MDL Unit	Dil Fac D	Method	Prep Type
Barium	0.078	0.0025	mg/L		6020A	Total
						Recoverable
Boron	3.8	1.0	mg/L	20	6020A	Total
						Recoverable
Calcium	100	0.20	mg/L	1	6020A	Total
						Recoverable
Molybdenum	0.032	0.0050	mg/L	1	6020A	Total
						Recoverable
Selenium	0.0052	0.0025	mg/L	1	6020A	Total
						Recoverable
Total Dissolved Solids	720	10	mg/L	1	SM 2540C	Total/NA
Chloride	37	2.0	mg/L	1	SM 4500 CI- E	Total/NA
Fluoride	0.13	0.10	mg/L	1	SM 4500 F C	Total/NA
Sulfate	170	50	mg/L	10	SM 4500 SO4 E	Total/NA

Client Sample ID: Duplicate

Lab Sample ID: 500-149809-15

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Arsenic	0.0014	0.0010	mg/L		6020A	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

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Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 1221Bf 311-149809-1

Lab Sample ID: 500-149809-15

Project/Site: Powerton CCR

Client Sample ID: Duplicate (Continued)

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.067	0.0025		mg/L	1	_	6020A	Total
								Recoverable
Boron	1.6	0.50		mg/L	10		6020A	Total
								Recoverable
Calcium	91	0.20		mg/L	1		6020A	Total
								Recoverable
Total Dissolved Solids	560	10		mg/L	1		SM 2540C	Total/NA
Chloride	55	2.0		mg/L	1		SM 4500 CI- E	Total/NA
Fluoride	0.14	0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	70	20		mg/L	4		SM 4500 SO4 E	Total/NA

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 123 IB: 310-149809-1

Project/Site: Powerton CCR

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

Electronic Filing: Beceived Clerk's Office 07/19/2019 Exhibit D

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

TestAmenea 124 pf 311-149809-1

Lab Sample ID	Client Sample ID	Matrix	Collected Received
500-149809-1	MW-01	Water	08/08/18 09:49 08/10/18 16:5
500-149809-2	MW-02	Water	08/07/18 09:30 08/10/18 16:5
500-149809-3	MW-03	Water	08/07/18 10:54 08/10/18 16:5
500-149809-4	MW-04	Water	08/07/18 12:27 08/10/18 16:5
500-149809-5	MW-05	Water	08/07/18 13:30 08/10/18 16:5
500-149809-6	MW-08	Water	08/08/18 11:11 08/10/18 16:5
500-149809-7	MW-09	Water	08/08/18 12:46 08/10/18 16:5
500-149809-8	MW-10	Water	08/08/18 14:44 08/10/18 16:5
500-149809-9	MW-11	Water	08/09/18 14:03 08/10/18 16:5
500-149809-10	MW-12	Water	08/09/18 15:46 08/10/18 16:5
500-149809-11	MW-15	Water	08/09/18 11:42 08/10/18 16:5
500-149809-12	MW-17	Water	08/06/18 14:41 08/10/18 16:5
500-149809-13	MW-18	Water	08/06/18 15:46 08/10/18 16:5
500-149809-14	MW-19	Water	08/06/18 16:48 08/10/18 16:5
500-149809-15	Duplicate	Water	08/07/18 00:00 08/10/18 16:5

3

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14

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 125 IBf 300-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-01 Lab Sample ID: 500-149809-1 Date Collected: 08/08/18 09:49

Matrix: Water

Date Received: 08/10/18 16:50

Fluoride

Sulfate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		08/11/18 12:28	08/13/18 14:08	1
Method: 6020A - Metals (IC	CP/MS) - Total F	Recoverabl	e						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/11/18 12:28	08/13/18 14:01	1
Arsenic	<0.0010		0.0010		mg/L		08/11/18 12:28	08/13/18 14:01	1
Barium	0.051		0.0025		mg/L		08/11/18 12:28	08/13/18 14:01	1
Beryllium	<0.0010	^	0.0010		mg/L		08/11/18 12:28	08/13/18 14:01	1
Boron	0.14		0.050		mg/L		08/11/18 12:28	08/13/18 16:41	1
Cadmium	< 0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:01	1
Calcium	86		0.20		mg/L		08/11/18 12:28	08/13/18 14:01	1
Chromium	<0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 14:01	1
Cobalt	<0.0010		0.0010		mg/L		08/11/18 12:28	08/13/18 14:01	1
Lead	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:01	1
Molybdenum	< 0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 14:01	1
Selenium	<0.0025		0.0025		mg/L		08/11/18 12:28	08/13/18 14:01	1
Thallium	<0.0020		0.0020		mg/L		08/11/18 12:28	08/13/18 14:01	1
Method: 7470A - Mercury	(CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/14/18 11:53	08/15/18 10:30	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	430				mg/L			08/12/18 22:38	1
Chloride	48		2.0		mg/L			08/20/18 14:07	1

0.10

10

mg/L

mg/L

0.13

43

08/13/18 18:53

08/15/18 05:38

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 126 18f 300-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-02 Lab Sample ID: 500-149809-2

Date Collected: 08/07/18 09:30 Matrix: Water

Date Received: 08/10/18 16:50

Method: 6010C - Metals (ICP) - Total Recoverable
Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac

· ······· y · · ·		-,				_		· · · · · · · · · · · · · · · · · · ·	
Lithium	<0.010		0.010		mg/L		08/11/18 12:28	08/13/18 14:12	1
- Method: 6020A - Meta	als (ICP/MS) - Total F	Recoverabl	e						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/11/18 12:28	08/13/18 14:04	1
Arsenic	0.0016		0.0010		mg/L		08/11/18 12:28	08/13/18 14:04	1
Barium	0.067		0.0025		mg/L		08/11/18 12:28	08/13/18 14:04	1
Beryllium	<0.0010	Λ	0.0010		mg/L		08/11/18 12:28	08/13/18 14:04	1
Boron	1.5		0.25		mg/L		08/11/18 12:28	08/13/18 16:45	5
Cadmium	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:04	1
Calcium	89		0.20		mg/L		08/11/18 12:28	08/13/18 14:04	1
Chromium	< 0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 14:04	1
Cobalt	<0.0010		0.0010		mg/L		08/11/18 12:28	08/13/18 14:04	1
Lead	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:04	1
Molybdenum	<0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 14:04	1
Selenium	<0.0025		0.0025		mg/L		08/11/18 12:28	08/13/18 14:04	1
Thallium	<0.0020		0.0020		ma/l		08/11/18 12:28	08/13/18 14:04	1

Method: 7470A - Mercury (CVA	AA)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	0.00020	mg/L	_	08/14/18 11:53	08/15/18 10:36	1

General Chemistry Analyte	Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
Total Dissolved Solids	530	10	mg/L		08/12/18 22:43	1
Chloride	54	2.0	mg/L		08/20/18 14:08	1
Fluoride	0.15	0.10	mg/L		08/13/18 18:57	1
Sulfate	51	25	mg/L		08/15/18 05:39	5

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 327 IB: 300-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-03 Lab Sample ID: 500-149809-3 Date Collected: 08/07/18 10:54

Matrix: Water

Date Received: 08/10/18 16:50

Fluoride

Sulfate

Analyte	CP) - Total Reco	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010	Qualifier	0.010	WIDE	mg/L		08/11/18 12:28	08/13/18 14:16	1
					9. =				
Method: 6020A - Metals (IC	CP/MS) - Total F	Recoverabl	e						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/11/18 12:28	08/13/18 14:08	1
Arsenic	0.0015		0.0010		mg/L		08/11/18 12:28	08/13/18 14:08	1
Barium	0.067		0.0025		mg/L		08/11/18 12:28	08/13/18 14:08	1
Beryllium	<0.0010	^	0.0010		mg/L		08/11/18 12:28	08/13/18 14:08	1
Boron	0.40		0.050		mg/L		08/11/18 12:28	08/13/18 16:48	1
Cadmium	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:08	1
Calcium	82		0.20		mg/L		08/11/18 12:28	08/13/18 14:08	1
Chromium	< 0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 14:08	1
Cobalt	<0.0010		0.0010		mg/L		08/11/18 12:28	08/13/18 14:08	1
Lead	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:08	1
Molybdenum	< 0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 14:08	
Selenium	<0.0025		0.0025		mg/L		08/11/18 12:28	08/13/18 14:08	
Thallium	<0.0020		0.0020		mg/L		08/11/18 12:28	08/13/18 14:08	1
Method: 7470A - Mercury	(CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/14/18 11:53	08/15/18 10:38	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	500		10		mg/L			08/12/18 22:46	
Chloride	67		10		mg/L			08/20/18 14:42	5

0.10

25

mg/L

mg/L

0.22

49

08/13/18 19:00

08/15/18 05:42

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 128 IBF 300-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-04 Lab Sample ID: 500-149809-4 Date Collected: 08/07/18 12:27

Matrix: Water

Date Received: 08/10/18 16:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		08/11/18 12:28	08/13/18 14:20	1
Method: 6020A - Meta	Is (ICP/MS) - Total F	Recoverabl	e						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/11/18 12:28	08/13/18 14:12	1
Arsenic	0.0011		0.0010		mg/L		08/11/18 12:28	08/13/18 14:12	1
Barium	0.031		0.0025		mg/L		08/11/18 12:28	08/13/18 14:12	1
Beryllium	<0.0010	^	0.0010		mg/L		08/11/18 12:28	08/13/18 14:12	1
Boron	0.79		0.050		mg/L		08/11/18 12:28	08/13/18 16:52	1
Cadmium	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:12	1
Calcium	84		0.20		mg/L		08/11/18 12:28	08/13/18 14:12	1
Chromium	<0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 14:12	1
Cobalt	<0.0010		0.0010		mg/L		08/11/18 12:28	08/13/18 14:12	1
Lead	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:12	1
Molybdenum	0.0060		0.0050		mg/L		08/11/18 12:28	08/13/18 14:12	1
Selenium	<0.0025		0.0025		mg/L		08/11/18 12:28	08/13/18 14:12	1
Thallium	<0.0020		0.0020		mg/L		08/11/18 12:28	08/13/18 14:12	1
Method: 7470A - Merc	ury (CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/14/18 11:53	08/15/18 10:39	1

Mercury	<0.00020		0.00020		mg/L		08/14/18 11:53	08/15/18 10:39	1
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	510		10		mg/L			08/12/18 22:48	1
Chloride	71		2.0		mg/L			08/20/18 14:10	1
Fluoride	0.32		0.10		mg/L			08/13/18 19:03	1
Sulfate	49		25		mg/L			08/15/18 05:43	5

TestAmerica 129 IBf 311-149809-1

Project/Site: Powerton CCR

Lab Sample ID: 500-149809-5 **Client Sample ID: MW-05** Date Collected: 08/07/18 13:30

Matrix: Water

Date Received: 08/10/18 16:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		08/11/18 12:28	08/13/18 14:23	1
Method: 6020A - Meta	ls (ICP/MS) - Total F	Recoverabl	e						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/11/18 12:28	08/13/18 14:16	1
Arsenic	<0.0010		0.0010		mg/L		08/11/18 12:28	08/13/18 14:16	1
Barium	0.054		0.0025		mg/L		08/11/18 12:28	08/13/18 14:16	1
Beryllium	<0.0010	Λ	0.0010		mg/L		08/11/18 12:28	08/13/18 14:16	1
Boron	0.49		0.050		mg/L		08/11/18 12:28	08/13/18 16:56	1
Cadmium	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:16	1
Calcium	110		0.20		mg/L		08/11/18 12:28	08/13/18 14:16	1
Chromium	<0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 14:16	1
Cobalt	<0.0010		0.0010		mg/L		08/11/18 12:28	08/13/18 14:16	1
Lead	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:16	1
Molybdenum	0.0069		0.0050		mg/L		08/11/18 12:28	08/13/18 14:16	1
Selenium	<0.0025		0.0025		mg/L		08/11/18 12:28	08/13/18 14:16	1
Thallium	<0.0020		0.0020		mg/L		08/11/18 12:28	08/13/18 14:16	1
Method: 7470A - Merc	urv (CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/14/18 11:53	08/15/18 10:41	1

General Chemistry Analyte	Result Qual	ifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	890	10	mg/L			08/12/18 22:51	1
Chloride	120	10	mg/L			08/20/18 14:11	5
Fluoride	0.32	0.10	mg/L			08/13/18 19:06	1
Sulfate	180	50	mg/L			08/15/18 05:44	10

Electronic Filing: Received Clerk's Office 07/19/2019

TestAmenea 130 IBf 300-149809-1

Client: KPRG and Associates, Inc.

Project/Site: Powerton CCR

Client Sample ID: MW-08 Lab Sample ID: 500-149809-6

Date Collected: 08/08/18 11:11 **Matrix: Water**

Date Received: 08/10/18 16:50

Sulfate

Method: 6010C - Metals (I	CP) - Total Reco	verable							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		08/11/18 12:28	08/13/18 14:27	1
Method: 6020A - Metals (I	CP/MS) - Total F	Recoverabl	e						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/11/18 12:28	08/13/18 14:19	1
Arsenic	0.0055		0.0010		mg/L		08/11/18 12:28	08/13/18 14:19	1
Barium	0.071		0.0025		mg/L		08/11/18 12:28	08/13/18 14:19	1
Beryllium	<0.0010	^	0.0010		mg/L		08/11/18 12:28	08/13/18 14:19	1
Boron	1.1		0.25		mg/L		08/11/18 12:28	08/13/18 17:00	5
Cadmium	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:19	1
Calcium	140		0.20		mg/L		08/11/18 12:28	08/13/18 14:19	1
Chromium	< 0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 14:19	1
Cobalt	<0.0010		0.0010		mg/L		08/11/18 12:28	08/13/18 14:19	1
Lead	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:19	1
Molybdenum	0.019		0.0050		mg/L		08/11/18 12:28	08/13/18 14:19	1
Selenium	<0.0025		0.0025		mg/L		08/11/18 12:28	08/13/18 14:19	1
Thallium	<0.0020		0.0020		mg/L		08/11/18 12:28	08/13/18 14:19	1
Method: 7470A - Mercury	(CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/14/18 11:53	08/15/18 10:43	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1200		10		mg/L			08/12/18 22:54	1
Chloride	270		10		mg/L			08/20/18 14:12	5
Fluoride	0.32		0.10		mg/L			08/13/18 19:10	1

50

190

mg/L

08/15/18 05:45

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea Job IB: 300-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-09 Lab Sample ID: 500-149809-7 Date Collected: 08/08/18 12:46

Matrix: Water

Date Received: 08/10/18 16:50

Sulfate

Method: 6010C - Metals (IC	CP) - Total Reco	verable							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		08/11/18 12:28	08/13/18 14:32	1
Method: 6020A - Metals (I	CP/MS) - Total F	Recoverabl	e						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/11/18 12:28	08/13/18 14:34	1
Arsenic	<0.0010		0.0010		mg/L		08/11/18 12:28	08/13/18 14:34	1
Barium	0.037		0.0025		mg/L		08/11/18 12:28	08/13/18 14:34	1
Beryllium	<0.0010	^	0.0010		mg/L		08/11/18 12:28	08/13/18 14:34	1
Boron	4.3		1.0		mg/L		08/11/18 12:28	08/13/18 17:03	20
Cadmium	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:34	1
Calcium	86		0.20		mg/L		08/11/18 12:28	08/13/18 14:34	1
Chromium	<0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 14:34	1
Cobalt	<0.0010		0.0010		mg/L		08/11/18 12:28	08/13/18 14:34	1
Lead	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:34	1
Molybdenum	0.032		0.0050		mg/L		08/11/18 12:28	08/13/18 14:34	1
Selenium	0.0078		0.0025		mg/L		08/11/18 12:28	08/13/18 14:34	1
Thallium	<0.0020		0.0020		mg/L		08/11/18 12:28	08/13/18 14:34	1
Method: 7470A - Mercury	(CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/14/18 11:53	08/15/18 10:44	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	690				mg/L			08/12/18 22:56	1
Chloride	39		2.0		mg/L			08/20/18 14:16	1
Fluoride	0.14		0.10		mg/L			08/13/18 19:13	1

50

180

mg/L

08/15/18 05:46

10

Electronic Filing Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 1321Bf 300-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-10 Lab Sample ID: 500-149809-8

Matrix: Water

Date Collected: 08/08/18 14:44 Date Received: 08/10/18 16:50

Fluoride

Sulfate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		08/11/18 12:28	08/13/18 14:36	1
Method: 6020A - Metals (IC	CP/MS) - Total R	ecoverable	۵						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/11/18 12:28	08/13/18 14:38	1
Arsenic	0.0012		0.0010		mg/L		08/11/18 12:28	08/13/18 14:38	1
Barium	0.22		0.0025		mg/L		08/11/18 12:28	08/13/18 14:38	1
Beryllium	<0.0010	^	0.0010		mg/L		08/11/18 12:28	08/13/18 14:38	1
Boron	0.39		0.050		mg/L		08/11/18 12:28	08/13/18 17:07	1
Cadmium	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:38	1
Calcium	99		0.20		mg/L		08/11/18 12:28	08/13/18 14:38	1
Chromium	< 0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 14:38	1
Cobalt	0.014		0.0010		mg/L		08/11/18 12:28	08/13/18 14:38	1
Lead	0.00079		0.00050		mg/L		08/11/18 12:28	08/13/18 14:38	1
Molybdenum	< 0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 14:38	1
Selenium	0.0062		0.0025		mg/L		08/11/18 12:28	08/13/18 14:38	1
Thallium	<0.0020		0.0020		mg/L		08/11/18 12:28	08/13/18 14:38	1
Method: 7470A - Mercury	(CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/14/18 11:53	08/15/18 10:46	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	550		10		mg/L			08/12/18 22:59	1
Chloride	58		2.0		mg/L			08/20/18 14:18	1

0.10

20

0.19

60

mg/L

mg/L

8/24/2018

08/23/18 16:03

08/15/18 05:47

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 1331Bf 310-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-11 Lab Sample ID: 500-149809-9 Date Collected: 08/09/18 14:03

Matrix: Water

Date Received: 08/10/18 16:50

Sulfate

Method: 6010C - Metals (IC	•								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		08/11/18 12:28	08/13/18 14:40	1
Method: 6020A - Metals (IC	CP/MS) - Total F	Recoverabl	е						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/11/18 12:28	08/13/18 14:42	1
Arsenic	0.68		0.0010		mg/L		08/11/18 12:28	08/13/18 14:42	1
Barium	3.0		0.0025		mg/L		08/11/18 12:28	08/13/18 14:42	1
Beryllium	<0.0010	^	0.0010		mg/L		08/11/18 12:28	08/13/18 14:42	1
Boron	1.4		0.50		mg/L		08/11/18 12:28	08/13/18 17:19	10
Cadmium	0.00082		0.00050		mg/L		08/11/18 12:28	08/13/18 14:42	1
Calcium	160		0.20		mg/L		08/11/18 12:28	08/13/18 14:42	1
Chromium	< 0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 14:42	1
Cobalt	0.0053		0.0010		mg/L		08/11/18 12:28	08/13/18 14:42	1
Lead	0.0012		0.00050		mg/L		08/11/18 12:28	08/13/18 14:42	1
Molybdenum	0.013		0.0050		mg/L		08/11/18 12:28	08/13/18 14:42	1
Selenium	< 0.0025		0.0025		mg/L		08/11/18 12:28	08/13/18 14:42	1
Thallium	<0.0020		0.0020		mg/L		08/11/18 12:28	08/13/18 14:42	1
Method: 7470A - Mercury ((CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/14/18 11:53	08/15/18 10:57	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1000		10		mg/L			08/12/18 23:01	1
Chloride	120		10		mg/L			08/20/18 14:19	5
Fluoride	0.65		0.10		mg/L			08/23/18 16:06	1

50

mg/L

220

08/15/18 05:48

TestAmenea Job 18f 300-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-12 Lab Sample ID: 500-149809-10 Date Collected: 08/09/18 15:46

Matrix: Water

Date Received: 08/10/18 16:50

Fluoride

Sulfate

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010	0.010		mg/L		08/11/18 12:28	08/13/18 14:56	1
Method: 6020A - Metals (IC	CP/MS) - Total Recovera	able						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	0.0030		mg/L		08/11/18 12:28	08/13/18 14:46	1
Arsenic	0.12	0.0010		mg/L		08/11/18 12:28	08/13/18 14:46	1
Barium	0.15	0.0025		mg/L		08/11/18 12:28	08/13/18 14:46	1
Beryllium	<0.0010 ^	0.0010		mg/L		08/11/18 12:28	08/13/18 14:46	1
Boron	0.61	0.050		mg/L		08/11/18 12:28	08/13/18 17:22	1
Cadmium	0.00084	0.00050		mg/L		08/11/18 12:28	08/13/18 14:46	1
Calcium	120	0.20		mg/L		08/11/18 12:28	08/13/18 14:46	1
Chromium	<0.0050	0.0050		mg/L		08/11/18 12:28	08/13/18 14:46	1
Cobalt	<0.0010	0.0010		mg/L		08/11/18 12:28	08/13/18 14:46	1
Lead	0.00072	0.00050		mg/L		08/11/18 12:28	08/13/18 14:46	1
Molybdenum	0.026	0.0050		mg/L		08/11/18 12:28	08/13/18 14:46	1
Selenium	<0.0025	0.0025		mg/L		08/11/18 12:28	08/13/18 14:46	1
Thallium	<0.0020	0.0020		mg/L		08/11/18 12:28	08/13/18 14:46	1
Method: 7470A - Mercury (CVAA)							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	0.00020		mg/L		08/14/18 11:53	08/15/18 10:59	1
General Chemistry								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1300			mg/L			08/12/18 23:04	1
Chloride	190	10		mg/L			08/20/18 14:20	5

0.10

100

mg/L

mg/L

0.44

480

08/23/18 16:09

08/15/18 05:49

1

Electronic Filing Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 135 IBF 300-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-15 Lab Sample ID: 500-149809-11 Date Collected: 08/09/18 11:42

Matrix: Water

Date Received: 08/10/18 16:50

Fluoride

Sulfate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.026		0.010		mg/L		08/11/18 12:28	08/13/18 15:00	1
Method: 6020A - Metals (I	CP/MS) - Total F	Recoverabl	e						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/11/18 12:28	08/13/18 14:49	1
Arsenic	0.0083		0.0010		mg/L		08/11/18 12:28	08/13/18 14:49	1
Barium	0.048		0.0025		mg/L		08/11/18 12:28	08/13/18 14:49	1
Beryllium	<0.0010	^	0.0010		mg/L		08/11/18 12:28	08/13/18 14:49	1
Boron	2.3		0.50		mg/L		08/11/18 12:28	08/13/18 17:26	10
Cadmium	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:49	1
Calcium	200		0.20		mg/L		08/11/18 12:28	08/13/18 14:49	1
Chromium	<0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 14:49	1
Cobalt	<0.0010		0.0010		mg/L		08/11/18 12:28	08/13/18 14:49	1
Lead	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:49	1
Molybdenum	0.033		0.0050		mg/L		08/11/18 12:28	08/13/18 14:49	1
Selenium	0.060		0.0025		mg/L		08/11/18 12:28	08/13/18 14:49	1
Thallium	<0.0020		0.0020		mg/L		08/11/18 12:28	08/13/18 14:49	1
Method: 7470A - Mercury	(CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/14/18 11:53	08/15/18 11:00	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1700				mg/L			08/12/18 23:06	1
Chloride	200		10		mg/L			08/20/18 14:20	5

0.10

130

0.48

520

mg/L

mg/L

8/24/2018

08/23/18 16:12

08/15/18 05:50

1

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenes Job IB: 300-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-17 Lab Sample ID: 500-149809-12

Matrix: Water

Date Collected: 08/06/18 14:41 Date Received: 08/10/18 16:50

Chloride

Fluoride

Sulfate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.019		0.010		mg/L		08/11/18 12:28	08/13/18 15:04	1
- Method: 6020A - Metals (IC	P/MS) - Total R	ecoverabl	e						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/11/18 12:28	08/13/18 14:53	1
Arsenic	0.087		0.0010		mg/L		08/11/18 12:28	08/13/18 14:53	1
Barium	0.055		0.0025		mg/L		08/11/18 12:28	08/13/18 14:53	1
Beryllium	<0.0010	V	0.0010		mg/L		08/11/18 12:28	08/13/18 14:53	1
Boron	1.3		0.50		mg/L		08/11/18 12:28	08/13/18 17:30	10
Cadmium	0.00094		0.00050		mg/L		08/11/18 12:28	08/13/18 14:53	1
Calcium	170		0.20		mg/L		08/11/18 12:28	08/13/18 14:53	1
Chromium	< 0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 14:53	1
Cobalt	0.0015		0.0010		mg/L		08/11/18 12:28	08/13/18 14:53	1
Lead	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 14:53	1
Molybdenum	0.084		0.0050		mg/L		08/11/18 12:28	08/13/18 14:53	1
Selenium	<0.0025		0.0025		mg/L		08/11/18 12:28	08/13/18 14:53	1
Thallium	0.0023		0.0020		mg/L		08/11/18 12:28	08/13/18 14:53	1
- Method: 7470A - Mercury (CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/14/18 11:53	08/15/18 11:02	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1600				mg/L			08/12/18 23:09	

10

0.10

250

mg/L

mg/L

mg/L

230

0.60

620

08/20/18 14:21

08/23/18 16:24

08/15/18 05:51

5

1

Electronic Filing Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 307 IB: 300-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-18 Lab Sample ID: 500-149809-13

Matrix: Water

Date Collected: 08/06/18 15:46 Date Received: 08/10/18 16:50

Fluoride

Sulfate

Method: 6010C - Metals (IC Analyte	Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.013	0.010		mg/L		08/11/18 12:28	08/13/18 15:08	1
Method: 6020A - Metals (IC	CP/MS) - Total Red	coverable						
Analyte	, Result Qu		MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	0.0030		mg/L		08/11/18 12:28	08/13/18 14:57	1
Arsenic	<0.0010	0.0010		mg/L		08/11/18 12:28	08/13/18 14:57	1
Barium	0.12	0.0025		mg/L		08/11/18 12:28	08/13/18 14:57	1
Beryllium	<0.0010 ^	0.0010		mg/L		08/11/18 12:28	08/13/18 14:57	1
Boron	0.58	0.050		mg/L		08/11/18 12:28	08/13/18 17:34	1
Cadmium	<0.00050	0.00050		mg/L		08/11/18 12:28	08/13/18 14:57	1
Calcium	120	0.20		mg/L		08/11/18 12:28	08/13/18 14:57	1
Chromium	<0.0050	0.0050		mg/L		08/11/18 12:28	08/13/18 14:57	1
Cobalt	<0.0010	0.0010		mg/L		08/11/18 12:28	08/13/18 14:57	1
Lead	<0.00050	0.00050		mg/L		08/11/18 12:28	08/13/18 14:57	1
Molybdenum	0.0052	0.0050		mg/L		08/11/18 12:28	08/13/18 14:57	1
Selenium	<0.0025	0.0025		mg/L		08/11/18 12:28	08/13/18 14:57	1
Thallium	<0.0020	0.0020		mg/L		08/11/18 12:28	08/13/18 14:57	1
Method: 7470A - Mercury	(CVAA)							
Analyte	Result Q	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	0.00020		mg/L		08/14/18 11:53	08/15/18 11:03	1
General Chemistry								
Analyte	Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100			mg/L			08/12/18 23:12	1
Chloride	230	10		mg/L			08/20/18 14:21	5

0.10

50

0.57

270

mg/L

mg/L

08/23/18 16:32

08/22/18 05:36

1

Electronic Filing Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 138 IBf 310-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-19 Lab Sample ID: 500-149809-14 Date Collected: 08/06/18 16:48

Matrix: Water

Date Received: 08/10/18 16:50

Sulfate

Analyte	CP) - Total Reco Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Lithium	<0.010		0.010		mg/L		08/11/18 12:28	08/13/18 15:12	
	00/40) 7 (10								
Method: 6020A - Metals (IC		(ecoverabl Qualifier	e RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Analyte Antimony	<0.0030	Qualifier	0.0030	IVIDE			08/11/18 12:28	08/13/18 15:01	- Оп га
Anumony Arsenic	<0.0030		0.0030		mg/L		08/11/18 12:28	08/13/18 15:01	
					mg/L			08/13/18 15:01	
Barium	0.078		0.0025		mg/L		08/11/18 12:28		
Beryllium	<0.0010	^	0.0010		mg/L		08/11/18 12:28	08/13/18 15:01	
Boron	3.8		1.0		mg/L		08/11/18 12:28	08/13/18 17:38	2
Cadmium	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 15:01	
Calcium	100		0.20		mg/L		08/11/18 12:28	08/13/18 15:01	
Chromium	<0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 15:01	
Cobalt	<0.0010		0.0010		mg/L		08/11/18 12:28	08/13/18 15:01	
Lead	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 15:01	
Molybdenum	0.032		0.0050		mg/L		08/11/18 12:28	08/13/18 15:01	
Selenium	0.0052		0.0025		mg/L		08/11/18 12:28	08/13/18 15:01	
Thallium	<0.0020		0.0020		mg/L		08/11/18 12:28	08/13/18 15:01	
Method: 7470A - Mercury	(CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Mercury	<0.00020		0.00020		mg/L		08/14/18 11:53	08/15/18 11:05	
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total Dissolved Solids	720				mg/L			08/12/18 23:14	
Chloride	37		2.0		mg/L			08/20/18 14:43	
Fluoride	0.13		0.10		mg/L			08/23/18 16:45	

50

mg/L

170

10

08/22/18 05:37

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 139 lBf 311-149809-1

Project/Site: Powerton CCR

Fluoride

Sulfate

Client Sample ID: Duplicate Lab Sample ID: 500-149809-15

Matrix: Water

Date Collected:	08/07/18 00:00
Date Received:	08/10/18 16:50

Method: 6010C - Metals (ICAnalyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.010		0.010		mg/L		08/11/18 12:28	08/13/18 15:16	1
Method: 6020A - Metals (IC	CP/MS) - Total R	ecoverabl	e						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		08/11/18 12:28	08/13/18 15:05	1
Arsenic	0.0014		0.0010		mg/L		08/11/18 12:28	08/13/18 15:05	1
Barium	0.067		0.0025		mg/L		08/11/18 12:28	08/13/18 15:05	1
Beryllium	<0.0010	Λ	0.0010		mg/L		08/11/18 12:28	08/13/18 15:05	1
Boron	1.6		0.50		mg/L		08/11/18 12:28	08/13/18 17:41	10
Cadmium	< 0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 15:05	1
Calcium	91		0.20		mg/L		08/11/18 12:28	08/13/18 15:05	1
Chromium	< 0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 15:05	1
Cobalt	<0.0010		0.0010		mg/L		08/11/18 12:28	08/13/18 15:05	1
Lead	<0.00050		0.00050		mg/L		08/11/18 12:28	08/13/18 15:05	1
Molybdenum	< 0.0050		0.0050		mg/L		08/11/18 12:28	08/13/18 15:05	1
Selenium	<0.0025		0.0025		mg/L		08/11/18 12:28	08/13/18 15:05	1
Thallium	<0.0020		0.0020		mg/L		08/11/18 12:28	08/13/18 15:05	1
Method: 7470A - Mercury	(CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/14/18 11:53	08/15/18 11:06	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	560		10		mg/L			08/12/18 23:17	1
Chloride	55		2.0		mg/L			08/20/18 14:24	1

0.10

20

0.14

70

mg/L

mg/L

08/23/18 16:49

08/22/18 05:40

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

TestAmenea Job IB 300-149809-1

Qualifiers

Metals

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

Glossary

Cioccary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
<u>n</u>	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)

RLReporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin) **TEQ**

Electronic Filing: Received Clerk's Office 07/19/2019

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

TestAmenea Job IB: 311-149809-1

Metals

Prep Batch: 445039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-149809-1	MW-01	Total Recoverable	Water	3005A	_
500-149809-2	MW-02	Total Recoverable	Water	3005A	
500-149809-3	MW-03	Total Recoverable	Water	3005A	
500-149809-4	MW-04	Total Recoverable	Water	3005A	
500-149809-5	MW-05	Total Recoverable	Water	3005A	
500-149809-6	MW-08	Total Recoverable	Water	3005A	
500-149809-7	MW-09	Total Recoverable	Water	3005A	
500-149809-8	MW-10	Total Recoverable	Water	3005A	
500-149809-9	MW-11	Total Recoverable	Water	3005A	
500-149809-10	MW-12	Total Recoverable	Water	3005A	
500-149809-11	MW-15	Total Recoverable	Water	3005A	
500-149809-12	MW-17	Total Recoverable	Water	3005A	
500-149809-13	MW-18	Total Recoverable	Water	3005A	
500-149809-14	MW-19	Total Recoverable	Water	3005A	
500-149809-15	Duplicate	Total Recoverable	Water	3005A	
MB 500-445039/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-445039/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 445195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-149809-1	MW-01	Total Recoverable	Water	6020A	445039
500-149809-2	MW-02	Total Recoverable	Water	6020A	445039
500-149809-3	MW-03	Total Recoverable	Water	6020A	445039
500-149809-4	MW-04	Total Recoverable	Water	6020A	445039
500-149809-5	MW-05	Total Recoverable	Water	6020A	445039
500-149809-6	MW-08	Total Recoverable	Water	6020A	445039
500-149809-7	MW-09	Total Recoverable	Water	6020A	445039
500-149809-8	MW-10	Total Recoverable	Water	6020A	445039
500-149809-9	MW-11	Total Recoverable	Water	6020A	445039
500-149809-10	MW-12	Total Recoverable	Water	6020A	445039
500-149809-11	MW-15	Total Recoverable	Water	6020A	445039
500-149809-12	MW-17	Total Recoverable	Water	6020A	445039
500-149809-13	MW-18	Total Recoverable	Water	6020A	445039
500-149809-14	MW-19	Total Recoverable	Water	6020A	445039
500-149809-15	Duplicate	Total Recoverable	Water	6020A	445039
MB 500-445039/1-A	Method Blank	Total Recoverable	Water	6020A	445039
LCS 500-445039/2-A	Lab Control Sample	Total Recoverable	Water	6020A	445039

Analysis Batch: 445254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-149809-1	MW-01	Total Recoverable	Water	6010C	445039
500-149809-2	MW-02	Total Recoverable	Water	6010C	445039
500-149809-3	MW-03	Total Recoverable	Water	6010C	445039
500-149809-4	MW-04	Total Recoverable	Water	6010C	445039
500-149809-5	MW-05	Total Recoverable	Water	6010C	445039
500-149809-6	MW-08	Total Recoverable	Water	6010C	445039
500-149809-7	MW-09	Total Recoverable	Water	6010C	445039
500-149809-8	MW-10	Total Recoverable	Water	6010C	445039
500-149809-9	MW-11	Total Recoverable	Water	6010C	445039
500-149809-10	MW-12	Total Recoverable	Water	6010C	445039
500-149809-11	MW-15	Total Recoverable	Water	6010C	445039

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

TestAmerica Job IB: 300-149809-1

Metals (Continued)

Analysis Batch: 445254 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-149809-12	MW-17	Total Recoverable	Water	6010C	445039
500-149809-13	MW-18	Total Recoverable	Water	6010C	445039
500-149809-14	MW-19	Total Recoverable	Water	6010C	445039
500-149809-15	Duplicate	Total Recoverable	Water	6010C	445039
MB 500-445039/1-A	Method Blank	Total Recoverable	Water	6010C	445039
LCS 500-445039/2-A	Lab Control Sample	Total Recoverable	Water	6010C	445039

Analysis Batch: 445305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-149809-1	MW-01	Total Recoverable	Water	6020A	445039
500-149809-2	MW-02	Total Recoverable	Water	6020A	445039
500-149809-3	MW-03	Total Recoverable	Water	6020A	445039
500-149809-4	MW-04	Total Recoverable	Water	6020A	445039
500-149809-5	MW-05	Total Recoverable	Water	6020A	445039
500-149809-6	MW-08	Total Recoverable	Water	6020A	445039
500-149809-7	MW-09	Total Recoverable	Water	6020A	445039
500-149809-8	MW-10	Total Recoverable	Water	6020A	445039
500-149809-9	MW-11	Total Recoverable	Water	6020A	445039
500-149809-10	MW-12	Total Recoverable	Water	6020A	445039
500-149809-11	MW-15	Total Recoverable	Water	6020A	445039
500-149809-12	MW-17	Total Recoverable	Water	6020A	445039
500-149809-13	MW-18	Total Recoverable	Water	6020A	445039
500-149809-14	MW-19	Total Recoverable	Water	6020A	445039
500-149809-15	Duplicate	Total Recoverable	Water	6020A	445039
MB 500-445039/1-A	Method Blank	Total Recoverable	Water	6020A	445039
LCS 500-445039/2-A	Lab Control Sample	Total Recoverable	Water	6020A	445039

Prep Batch: 445342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-149809-1	MW-01	Total/NA	Water	7470A	-
500-149809-2	MW-02	Total/NA	Water	7470A	
500-149809-3	MW-03	Total/NA	Water	7470A	
500-149809-4	MW-04	Total/NA	Water	7470A	
500-149809-5	MW-05	Total/NA	Water	7470A	
500-149809-6	MW-08	Total/NA	Water	7470A	
500-149809-7	MW-09	Total/NA	Water	7470A	
500-149809-8	MW-10	Total/NA	Water	7470A	
500-149809-9	MW-11	Total/NA	Water	7470A	
500-149809-10	MW-12	Total/NA	Water	7470A	
500-149809-11	MW-15	Total/NA	Water	7470A	
500-149809-12	MW-17	Total/NA	Water	7470A	
500-149809-13	MW-18	Total/NA	Water	7470A	
500-149809-14	MW-19	Total/NA	Water	7470A	
500-149809-15	Duplicate	Total/NA	Water	7470A	
MB 500-445342/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-445342/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-149809-8 MS	MW-10	Total/NA	Water	7470A	
500-149809-8 MSD	MW-10	Total/NA	Water	7470A	
500-149809-8 DU	MW-10	Total/NA	Water	7470A	

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TestAmerica Job 10f 311 149809-1

Project/Site: Powerton CCR

Metals (Continued)

Analysis Batch: 445532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-149809-1	MW-01	Total/NA	Water	7470A	445342
500-149809-2	MW-02	Total/NA	Water	7470A	445342
500-149809-3	MW-03	Total/NA	Water	7470A	445342
500-149809-4	MW-04	Total/NA	Water	7470A	445342
500-149809-5	MW-05	Total/NA	Water	7470A	445342
500-149809-6	MW-08	Total/NA	Water	7470A	445342
500-149809-7	MW-09	Total/NA	Water	7470A	445342
500-149809-8	MW-10	Total/NA	Water	7470A	445342
500-149809-9	MW-11	Total/NA	Water	7470A	445342
500-149809-10	MW-12	Total/NA	Water	7470A	445342
500-149809-11	MW-15	Total/NA	Water	7470A	445342
500-149809-12	MW-17	Total/NA	Water	7470A	445342
500-149809-13	MW-18	Total/NA	Water	7470A	445342
500-149809-14	MW-19	Total/NA	Water	7470A	445342
500-149809-15	Duplicate	Total/NA	Water	7470A	445342
MB 500-445342/12-A	Method Blank	Total/NA	Water	7470A	445342
LCS 500-445342/13-A	Lab Control Sample	Total/NA	Water	7470A	445342
500-149809-8 MS	MW-10	Total/NA	Water	7470A	445342
500-149809-8 MSD	MW-10	Total/NA	Water	7470A	445342
500-149809-8 DU	MW-10	Total/NA	Water	7470A	445342

General Chemistry

Analysis Batch: 445061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-149809-1	MW-01	Total/NA	Water	SM 2540C	
500-149809-2	MW-02	Total/NA	Water	SM 2540C	
500-149809-3	MW-03	Total/NA	Water	SM 2540C	
500-149809-4	MW-04	Total/NA	Water	SM 2540C	
500-149809-5	MW-05	Total/NA	Water	SM 2540C	
500-149809-6	MW-08	Total/NA	Water	SM 2540C	
500-149809-7	MW-09	Total/NA	Water	SM 2540C	
500-149809-8	MW-10	Total/NA	Water	SM 2540C	
500-149809-9	MW-11	Total/NA	Water	SM 2540C	
500-149809-10	MW-12	Total/NA	Water	SM 2540C	
500-149809-11	MW-15	Total/NA	Water	SM 2540C	
500-149809-12	MW-17	Total/NA	Water	SM 2540C	
500-149809-13	MW-18	Total/NA	Water	SM 2540C	
500-149809-14	MW-19	Total/NA	Water	SM 2540C	
500-149809-15	Duplicate	Total/NA	Water	SM 2540C	
MB 500-445061/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-445061/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-149809-1 DU	MW-01	Total/NA	Water	SM 2540C	

Analysis Batch: 445284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-149809-1	MW-01	Total/NA	Water	SM 4500 F C	
500-149809-2	MW-02	Total/NA	Water	SM 4500 F C	
500-149809-3	MW-03	Total/NA	Water	SM 4500 F C	
500-149809-4	MW-04	Total/NA	Water	SM 4500 F C	

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TestAmerica Job ID: 311-149809-1

Project/Site: Powerton CCR

General Chemistry (Continued)

Analysis Batch: 445284 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-149809-5	MW-05	Total/NA	Water	SM 4500 F C	
500-149809-6	MW-08	Total/NA	Water	SM 4500 F C	
500-149809-7	MW-09	Total/NA	Water	SM 4500 F C	
MB 500-445284/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-445284/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Analysis Batch: 445449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-149809-1	MW-01	Total/NA	Water	SM 4500 SO4 E	
500-149809-2	MW-02	Total/NA	Water	SM 4500 SO4 E	
500-149809-3	MW-03	Total/NA	Water	SM 4500 SO4 E	
500-149809-4	MW-04	Total/NA	Water	SM 4500 SO4 E	
500-149809-5	MW-05	Total/NA	Water	SM 4500 SO4 E	
500-149809-6	MW-08	Total/NA	Water	SM 4500 SO4 E	
500-149809-7	MW-09	Total/NA	Water	SM 4500 SO4 E	
500-149809-8	MW-10	Total/NA	Water	SM 4500 SO4 E	
500-149809-9	MW-11	Total/NA	Water	SM 4500 SO4 E	
500-149809-10	MW-12	Total/NA	Water	SM 4500 SO4 E	
500-149809-11	MW-15	Total/NA	Water	SM 4500 SO4 E	
500-149809-12	MW-17	Total/NA	Water	SM 4500 SO4 E	
MB 500-445449/3	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-445449/4	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 446204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
500-149809-1	MW-01	Total/NA	Water	SM 4500 CI- E	
500-149809-2	MW-02	Total/NA	Water	SM 4500 CI- E	
500-149809-3	MW-03	Total/NA	Water	SM 4500 CI- E	
500-149809-4	MW-04	Total/NA	Water	SM 4500 CI- E	
500-149809-5	MW-05	Total/NA	Water	SM 4500 CI- E	
500-149809-6	MW-08	Total/NA	Water	SM 4500 CI- E	
500-149809-7	MW-09	Total/NA	Water	SM 4500 CI- E	
500-149809-8	MW-10	Total/NA	Water	SM 4500 CI- E	
500-149809-9	MW-11	Total/NA	Water	SM 4500 CI- E	
500-149809-10	MW-12	Total/NA	Water	SM 4500 CI- E	
500-149809-11	MW-15	Total/NA	Water	SM 4500 CI- E	
500-149809-12	MW-17	Total/NA	Water	SM 4500 CI- E	
500-149809-13	MW-18	Total/NA	Water	SM 4500 CI- E	
500-149809-14	MW-19	Total/NA	Water	SM 4500 CI- E	
500-149809-15	Duplicate	Total/NA	Water	SM 4500 CI- E	
MB 500-446204/4	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-446204/5	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
500-149809-7 MS	MW-09	Total/NA	Water	SM 4500 CI- E	
500-149809-7 MSD	MW-09	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 446448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-149809-13	MW-18	Total/NA	Water	SM 4500 SO4 E	
500-149809-14	MW-19	Total/NA	Water	SM 4500 SO4 E	
500-149809-15	Duplicate	Total/NA	Water	SM 4500 SO4 E	
MB 500-446448/3	Method Blank	Total/NA	Water	SM 4500 SO4 E	

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8/24/2018

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

TestAmenea Job IB. 300-149809-1

General Chemistry (Continued)

Analysis Batch: 446448 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-446448/4	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 446883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-149809-8	MW-10	Total/NA	Water	SM 4500 F C	-
500-149809-9	MW-11	Total/NA	Water	SM 4500 F C	
500-149809-10	MW-12	Total/NA	Water	SM 4500 F C	
500-149809-11	MW-15	Total/NA	Water	SM 4500 F C	
500-149809-12	MW-17	Total/NA	Water	SM 4500 F C	
500-149809-13	MW-18	Total/NA	Water	SM 4500 F C	
500-149809-14	MW-19	Total/NA	Water	SM 4500 F C	
500-149809-15	Duplicate	Total/NA	Water	SM 4500 F C	
MB 500-446883/3	Method Blank	Total/NA	Water	SM 4500 F C	
MB 500-446883/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-446883/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCS 500-446883/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-149809-12 MS	MW-17	Total/NA	Water	SM 4500 F C	
500-149809-12 MSD	MW-17	Total/NA	Water	SM 4500 F C	

TestAmerica Chicago

Electronic Filing: Reseived Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea Job IB: 300-149809-1

Project/Site: Powerton CCR

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-445039/1-A

Matrix: Water

Analysis Batch: 445254

Client Sample ID: Method Blank **Prep Type: Total Recoverable** Prep Batch: 445039 MB MB

Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac 0.010 08/11/18 12:28 08/13/18 13:52 Lithium <0.010 mg/L

Lab Sample ID: LCS 500-445039/2-A

Matrix: Water

Analysis Batch: 445254

Client Sample ID: Lab Control Sample Prep Type: Total Recoverable Prep Batch: 445039

%Rec.

Spike LCS LCS Limits Added Analyte Result Qualifier Unit %Rec Lithium 0.500 0.496 mg/L 99 80 - 120

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-445039/1-A

Matrix: Water

Analysis Batch: 445195

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

Prep Batch: 445039

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 0.0030 08/11/18 12:28 08/13/18 12:59 Antimony <0.0030 mg/L Arsenic 08/11/18 12:28 08/13/18 12:59 <0.0010 0.0010 mg/L Barium < 0.0025 0.0025 mg/L 08/11/18 12:28 08/13/18 12:59 Beryllium 0.0010 08/11/18 12:28 08/13/18 12:59 <0.0010 ^ mg/L Cadmium 0.00050 08/11/18 12:28 08/13/18 12:59 < 0.00050 mg/L Calcium <0.20 0.20 mg/L 08/11/18 12:28 08/13/18 12:59 Chromium < 0.0050 0.0050 08/11/18 12:28 08/13/18 12:59 mg/L Cobalt <0.0010 0.0010 mg/L 08/11/18 12:28 08/13/18 12:59 Lead <0.00050 0.00050 08/11/18 12:28 08/13/18 12:59 mg/L Molybdenum 08/11/18 12:28 08/13/18 12:59 < 0.0050 0.0050 mg/L Selenium < 0.0025 0.0025 mg/L 08/11/18 12:28 08/13/18 12:59

Lab Sample ID: MB 500-445039/1-A

< 0.0020

MR MR

Matrix: Water

Thallium

Analysis Batch: 445305

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

08/11/18 12:28 08/13/18 12:59

Prep Batch: 445039

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 0.050 08/11/18 12:28 08/13/18 16:33 Boron <0.050 mg/L

0.0020

mg/L

Lab Sample ID: LCS 500-445039/2-A

Matrix: Water

Analysis Batch: 445195

Client Sample ID: Lab Control Sample Prep Type: Total Recoverable Prep Batch: 445039

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Antimony	0.500	0.486		mg/L		97	80 - 120	
Arsenic	0.100	0.0987		mg/L		99	80 - 120	
Barium	2.00	2.09		mg/L		104	80 - 120	
Beryllium	0.0500	0.0526	Λ	mg/L		105	80 - 120	
Cadmium	0.0500	0.0499		mg/L		100	80 - 120	
Calcium	10.0	9.26		mg/L		93	80 - 120	
Chromium	0.200	0.199		mg/L		99	80 - 120	
Cobalt	0.500	0.512		mg/L		102	80 - 120	

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TestAmerica Job IB: 300-149809-1

Project/Site: Powerton CCR

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

Lab Sample ID: LCS 500-445039/2-A			Client Sample ID: Lab Control Sample
Matrix: Water			Prep Type: Total Recoverable
Analysis Batch: 445195			Prep Batch: 445039
	Spike	LCS LCS	%Rec.

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Lead	0.100	0.104		mg/L		104	80 - 120	
Molybdenum	1.00	0.962		mg/L		96	80 - 120	
Selenium	0.100	0.0975		mg/L		97	80 - 120	
Thallium	0.100	0.102		mg/L		102	80 - 120	

Lab Sample ID: LCS 500-445039/2-A Matrix: Water				Clie			: Lab Control Sample be: Total Recoverable
Analysis Batch: 445305	Spike	LCS	LCS				Prep Batch: 445039 %Rec.
Analyte Boron	Added 1.00	Result 0.999	Qualifier	Unit mg/L	_ D	%Rec 100	Limits

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-445342/12-A	Client Sample ID: Method Blank
Matrix: Water	Prep Type: Total/NA

Matrix: Water **Analysis Batch: 445532**

MB MB

	IVID	IAID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		08/14/18 11:53	08/15/18 10:27	1

Lab Sample ID: LCS 500-445342/13-A			Client Sample ID: Lab Control Sample								
Matrix: Water							Prep Type: Total/NA				
Analysis Batch: 445532							Prep Batch: 445342				
-	Spike	LCS	LCS				%Rec.				
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits				
Mercury	0.00200	0.00183		mg/L		91	80 - 120				

Lab Sample ID: 500-149809 Matrix: Water)-8 MS							Clie		e ID: MW-10 pe: Total/NA
Analysis Batch: 445532	Sample	Sample	Spike	MS	MS				Prep Ba	atch: 445342
Analyte	•	Qualifier	Added		Qualifier	Unit	D	%Rec	Limits	
		Qualifier			Qualifier					
Mercury	<0.00020		0.00100	0.00104		mg/L		104	75 - 125	

Lab Sample ID: 500-149809-	8 MSD							Clie	nt Samp	le ID: M	W-10
Matrix: Water									Prep Ty		
Analysis Batch: 445532									Prep B	•	
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyto	Pocult	Ouglifion	Addad	Pocult	Qualifier	Unit	_ n	% Boo	Limite	DDD	Limit

Allalyte	Result	Qualifier	Added	Resuit	Qualifier	UIIIL	ט	70KeC	LIIIIII	KPD	LIIIII
Mercury	<0.00020		0.00100	0.00110		mg/L		110	75 - 125	5	20
Lab Sample ID: 500-149809 Matrix: Water Analysis Batch: 445532	9-8 DU							Clie	ent Sampl Prep Typ Prep Ba	e: Tot	al/NA

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

Prep Batch: 445342

TestAmenea Job ID: 500-149809-1

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: MW-01

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: MW-09

Client Sample ID: MW-09

Prep Type: Total/NA

Prep Type: Total/NA

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Project/Site: Powerton CCR

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

Lab Sample ID: MB 500-445061/1

Matrix: Water

Analysis Batch: 445061

MB MB

Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac **Prepared** Total Dissolved Solids 10 <10 mg/L 08/12/18 22:23

Lab Sample ID: LCS 500-445061/2

Matrix: Water

Analysis Batch: 445061

Spike LCS LCS %Rec. Added Limits Analyte Result Qualifier Unit D %Rec Total Dissolved Solids 250 294 mg/L 118 80 - 120

Lab Sample ID: 500-149809-1 DU

Matrix: Water

Analysis Batch: 445061

	Sample	Sample	DU	DU					RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RF	PD	Limit
Total Dissolved Solids	430		448		mg/L			3	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-446204/4

Matrix: Water

Analysis Batch: 446204

MB MB

Analyte Result Qualifier **MDL** Unit Prepared Analyzed Chloride <2.0 2.0 mg/L 08/20/18 14:06

Lab Sample ID: LCS 500-446204/5

Matrix: Water

Analysis Batch: 446204

	эріке	LUS	LUS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 50.0	51.4		mg/L		103	85 - 115	_

Lab Sample ID: 500-149809-7 MS

Matrix: Water

Analysis Batch: 446204

Allalysis Datell. 440204										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	39		50.0	82.0		ma/l		86	75 125	

Lab Sample ID: 500-149809-7 MSD

Matrix: Water

Analysis Batch: 446204											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	39		50.0	83.5		mg/L		89	75 - 125	2	20

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TestAmenea Job ID: 500-149809-1

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: MW-17

Client Sample ID: MW-17

Prep Type: Total/NA

Prep Type: Total/NA

Project/Site: Powerton CCR

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-445284/31 **Matrix: Water**

Analysis Batch: 445284

MB MB

Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac D Prepared 0.10 08/13/18 18:24 Fluoride <0.10 mg/L

Lab Sample ID: LCS 500-445284/32

Matrix: Water

Analysis Batch: 445284

Spike LCS LCS %Rec. Added Limits Analyte Result Qualifier Unit %Rec Fluoride 10.0 10.3 mg/L 103 80 - 120

Lab Sample ID: MB 500-446883/3

Matrix: Water

Analysis Batch: 446883

MB MB Result Qualifier RL MDL Unit Dil Fac Analyte D Prepared Analyzed Fluoride <0.10 0.10 mg/L 08/23/18 14:41

Lab Sample ID: MB 500-446883/31

Matrix: Water

Analysis Batch: 446883

MR MR Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Fluoride <0.10 0.10 mg/L 08/23/18 16:19

Lab Sample ID: LCS 500-446883/32

Matrix: Water

Analysis Batch: 446883

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Fluoride 10.0 104 80 - 120 10.4 mg/L

Lab Sample ID: LCS 500-446883/4

Matrix: Water

Analysis Batch: 446883

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit Limits D %Rec Fluoride 10.0 10.5 mg/L 105 80 - 120

Lab Sample ID: 500-149809-12 MS

Matrix: Water

Analysis Batch: 446883

Sample Sample Spike MS MS %Rec. Result Qualifier Added Result Qualifier Limits **Analyte** Unit D %Rec Fluoride 0.60 5.00 5.80 mg/L 104 75 - 125

Lab Sample ID: 500-149809-12 MSD

Matrix: Water

Analysis Batch: 446883 Sample Sample Spike MSD MSD %Rec. **RPD** Result Qualifier Added Limits RPD Limit Analyte Result Qualifier Unit D %Rec Fluoride 0.60 5.00 5.69 102 75 - 125 2 mg/L

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PCB 2013-15

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Electronic Filing: Reseived Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica Job ID: 300-149809-1

Project/Site: Powerton CCR

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-445449/3

Matrix: Water

Analysis Batch: 445449

MB MB

Analyte Result Qualifier RL **MDL** Unit D **Prepared** Analyzed Dil Fac Sulfate 5.0 08/15/18 05:30 <5.0 mg/L

Lab Sample ID: LCS 500-445449/4

Matrix: Water

Analysis Batch: 445449

Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit %Rec Sulfate 20.0 20.2 mg/L 101 80 - 120

Lab Sample ID: MB 500-446448/3

Matrix: Water

Analysis Batch: 446448

MB MB

MDL Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac Sulfate <5.0 5.0 mg/L 08/22/18 05:28

Lab Sample ID: LCS 500-446448/4

Matrix: Water

Analysis Batch: 446448

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

Sulfate 20.0 21.8 109 80 - 120 mg/L

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TestAmerica Chicago

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Client: KPRG and Associates, Inc.

TestAmenea Job IB: 300-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-01 Lab Sample ID: 500-149809-1

Matrix: Water

Date Collected: 08/08/18 09:49 Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	445254	08/13/18 14:08	EEN	TAL CHI
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	445195	08/13/18 14:01	FXG	TAL CHI
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	445305	08/13/18 16:41	FXG	TAL CHI
Total/NA	Prep	7470A			445342	08/14/18 11:53	MJG	TAL CHI
Total/NA	Analysis	7470A		1	445532	08/15/18 10:30	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	445061	08/12/18 22:38	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		1	446204	08/20/18 14:07	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	445284	08/13/18 18:53	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		2	445449		CLB	TAL CHI
					(Start) (08/15/18 05:38		
					(End) (08/15/18 05:39		

Client Sample ID: MW-02 Lab Sample ID: 500-149809-2

Matrix: Water

Date Collected: 08/07/18 09:30 Date Received: 08/10/18 16:50

Batch **Batch** Dilution Batch Prepared **Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Lab Prep Total Recoverable 3005A 445039 08/11/18 12:28 BDE TAL CHI Total Recoverable Analysis 6010C 1 445254 08/13/18 14:12 EEN TAL CHI Total Recoverable Prep 3005A 445039 08/11/18 12:28 BDE TAL CHI Total Recoverable Analysis 6020A 1 445195 08/13/18 14:04 FXG TAL CHI Total Recoverable Prep 3005A 445039 08/11/18 12:28 BDE TAL CHI Total Recoverable Analysis 6020A 5 445305 08/13/18 16:45 FXG TAL CHI Total/NA 7470A 445342 08/14/18 11:53 MJG TAL CHI Prep Total/NA Analysis 7470A 1 445532 08/15/18 10:36 MJG TAL CHI Total/NA Analysis SM 2540C 1 445061 08/12/18 22:43 CLB TAL CHI Total/NA Analysis SM 4500 CI- E 1 446204 08/20/18 14:08 HMW TAL CHI Total/NA Analysis SM 4500 F C 445284 08/13/18 18:57 EAT TAL CHI 1 Total/NA Analysis SM 4500 SO4 E 445449 CLB TAL CHI

Client Sample ID: MW-03 Lab Sample ID: 500-149809-3

(Start) 08/15/18 05:39 (End) 08/15/18 05:40

Date Collected: 08/07/18 10:54 Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	445254	08/13/18 14:16	EEN	TAL CHI
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI

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Matrix: Water

Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmenea Job 10f 300-149809-1

Project/Site: Powerton CCR

Lab Sample ID: 500-149809-3 **Client Sample ID: MW-03**

Date Collected: 08/07/18 10:54 **Matrix: Water** Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6020A		1	445195	08/13/18 14:08	FXG	TAL CHI
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	445305	08/13/18 16:48	FXG	TAL CHI
Total/NA	Prep	7470A			445342	08/14/18 11:53	MJG	TAL CHI
Total/NA	Analysis	7470A		1	445532	08/15/18 10:38	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	445061	08/12/18 22:46	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		5	446204	08/20/18 14:42	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	445284	08/13/18 19:00	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		5	445449		CLB	TAL CHI
					(Start) (08/15/18 05:42		
					(End) (08/15/18 05:43		

Lab Sample ID: 500-149809-4 **Client Sample ID: MW-04**

Date Collected: 08/07/18 12:27 **Matrix: Water** Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH
Total Recoverable	Analysis	6010C		1	445254	08/13/18 14:20	EEN	TAL CH
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH
Total Recoverable	Analysis	6020A		1	445195	08/13/18 14:12	FXG	TAL CH
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH
Total Recoverable	Analysis	6020A		1	445305	08/13/18 16:52	FXG	TAL CH
Total/NA	Prep	7470A			445342	08/14/18 11:53	MJG	TAL CH
Total/NA	Analysis	7470A		1	445532	08/15/18 10:39	MJG	TAL CH
Total/NA	Analysis	SM 2540C		1	445061	08/12/18 22:48	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		1	446204	08/20/18 14:10	HMW	TAL CH
Total/NA	Analysis	SM 4500 F C		1	445284	08/13/18 19:03	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		5	445449		CLB	TAL CH
					(Start) 0	08/15/18 05:43		
					(End) (08/15/18 05:44		

Client Sample ID: MW-05 Lab Sample ID: 500-149809-5 Date Collected: 08/07/18 13:30 **Matrix: Water**

Date Received: 08/10/18 16:50

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	445254	08/13/18 14:23	EEN	TAL CHI
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	445195	08/13/18 14:16	FXG	TAL CHI
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	445305	08/13/18 16:56	FXG	TAL CHI

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Client: KPRG and Associates, Inc.

TestAmerica Job IB: 311-149809-1

Project/Site: Powerton CCR

Lab Sample ID: 500-149809-5 **Client Sample ID: MW-05**

Matrix: Water

Date Collected: 08/07/18 13:30 Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			445342	08/14/18 11:53	MJG	TAL CHI
Total/NA	Analysis	7470A		1	445532	08/15/18 10:41	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	445061	08/12/18 22:51	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		5	446204	08/20/18 14:11	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	445284	08/13/18 19:06	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	445449		CLB	TAL CHI
					(Start) 0	08/15/18 05:44		
					(End) (8/15/18 05:45		

Lab Sample ID: 500-149809-6 Client Sample ID: MW-08 Date Collected: 08/08/18 11:11

Date Received: 08/10/18 16:50

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	445254	08/13/18 14:27	EEN	TAL CHI
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	445195	08/13/18 14:19	FXG	TAL CHI
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		5	445305	08/13/18 17:00	FXG	TAL CHI
Total/NA	Prep	7470A			445342	08/14/18 11:53	MJG	TAL CHI
Total/NA	Analysis	7470A		1	445532	08/15/18 10:43	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	445061	08/12/18 22:54	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		5	446204	08/20/18 14:12	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	445284	08/13/18 19:10	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	445449		CLB	TAL CHI
	-				(Start) 0	8/15/18 05:45		
					(End) (08/15/18 05:46		

Client Sample ID: MW-09 Lab Sample ID: 500-149809-7 Date Collected: 08/08/18 12:46 **Matrix: Water**

Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH
Total Recoverable	Analysis	6010C		1	445254	08/13/18 14:32	EEN	TAL CH
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH
Total Recoverable	Analysis	6020A		1	445195	08/13/18 14:34	FXG	TAL CH
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH
Total Recoverable	Analysis	6020A		20	445305	08/13/18 17:03	FXG	TAL CH
Total/NA	Prep	7470A			445342	08/14/18 11:53	MJG	TAL CH
Total/NA	Analysis	7470A		1	445532	08/15/18 10:44	MJG	TAL CH
Total/NA	Analysis	SM 2540C		1	445061	08/12/18 22:56	CLB	TAL CH

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Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica Job ID: 300-149809-1

Project/Site: Powerton CCR

Client Sample ID: MW-09 Lab Sample ID: 500-149809-7 Date Collected: 08/08/18 12:46

Matrix: Water

Date Received: 08/10/18 16:50

Batch	Batch		Dilution	Batch	Prepared			
Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Analysis	SM 4500 CI- E			446204	08/20/18 14:16	HMW	TAL CHI	
Analysis	SM 4500 F C		1	445284	08/13/18 19:13	EAT	TAL CHI	
Analysis	SM 4500 SO4 E		10	445449		CLB	TAL CHI	
				(Start) 0	08/15/18 05:46			
				(End) (08/15/18 05:47			
	Type Analysis Analysis	Type Method Analysis SM 4500 CI- E Analysis SM 4500 F C	Type Method Run Analysis SM 4500 CI- E Analysis SM 4500 F C	Type Method Run Factor Analysis SM 4500 CI- E 1 Analysis SM 4500 F C 1	Type Method Run Factor Number Analysis SM 4500 CI- E 1 446204 Analysis SM 4500 F C 1 445284 Analysis SM 4500 SO4 E 10 445449 (Start) (Start) 0	Type Method Run Factor Number or Analyzed Analysis SM 4500 CI-E 1 446204 08/20/18 14:16 Analysis SM 4500 F C 1 445284 08/13/18 19:13	Type Method Run Factor Number or Analyzed Or Analyzed O8/20/18 14:16 Analyst Analysis SM 4500 CI- E 1 446204 08/20/18 14:16 HMW Analysis SM 4500 F C 1 445284 08/13/18 19:13 EAT Analysis SM 4500 SO4 E 10 445449 CLB (Start) 08/15/18 05:46 CLB	

Lab Sample ID: 500-149809-8 Client Sample ID: MW-10

Date Collected: 08/08/18 14:44 **Matrix: Water** Date Received: 08/10/18 16:50

Batch **Batch** Dilution Batch **Prepared** Туре **Prep Type** Method Run Factor Number or Analyzed Lab Analyst 3005A Total Recoverable Prep 445039 08/11/18 12:28 BDE TAL CHI Total Recoverable Analysis 6010C 1 445254 08/13/18 14:36 EEN TAL CHI Total Recoverable Prep 3005A 445039 08/11/18 12:28 BDE TAL CHI Total Recoverable Analysis 6020A 1 445195 08/13/18 14:38 FXG TAL CHI Total Recoverable Prep 3005A 445039 08/11/18 12:28 BDE TAL CHI Total Recoverable Analysis 6020A 445305 08/13/18 17:07 FXG TAL CHI 1 Total/NA 7470A 445342 08/14/18 11:53 MJG TAL CHI Prep Total/NA 7470A Analysis 1 445532 08/15/18 10:46 MJG TAL CHI Total/NA Analysis SM 2540C 1 445061 08/12/18 22:59 CLB TAL CHI Total/NA Analysis SM 4500 CI- E 446204 08/20/18 14:18 HMW TAL CHI 1 Total/NA Analysis SM 4500 F C 446883 08/23/18 16:03 EAT TAL CHI 445449 Total/NA Analysis SM 4500 SO4 E CLB TAL CHI (Start) 08/15/18 05:47 (End) 08/15/18 05:48

Client Sample ID: MW-11 Lab Sample ID: 500-149809-9

Date Collected: 08/09/18 14:03 **Matrix: Water** Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	445254	08/13/18 14:40	EEN	TAL CHI
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	445195	08/13/18 14:42	FXG	TAL CHI
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		10	445305	08/13/18 17:19	FXG	TAL CHI
Total/NA	Prep	7470A			445342	08/14/18 11:53	MJG	TAL CHI
Total/NA	Analysis	7470A		1	445532	08/15/18 10:57	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	445061	08/12/18 23:01	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		5	446204	08/20/18 14:19	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	446883	08/23/18 16:06	EAT	TAL CHI

TestAmerica Job IB: 311-149809-1

Project/Site: Powerton CCR

Lab Sample ID: 500-149809-9 **Client Sample ID: MW-11**

Date Collected: 08/09/18 14:03 **Matrix: Water** Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 SO4 E	 -	10	445449	-	CLB	TAL CHI
					(Start) 0	8/15/18 05:48		
					(End) 0	8/15/18 05:49		

Lab Sample ID: 500-149809-10 **Client Sample ID: MW-12**

Date Collected: 08/09/18 15:46 **Matrix: Water**

Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH
Total Recoverable	Analysis	6010C		1	445254	08/13/18 14:56	EEN	TAL CH
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH
Total Recoverable	Analysis	6020A		1	445195	08/13/18 14:46	FXG	TAL CH
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH
Total Recoverable	Analysis	6020A		1	445305	08/13/18 17:22	FXG	TAL CH
Total/NA	Prep	7470A			445342	08/14/18 11:53	MJG	TAL CH
Total/NA	Analysis	7470A		1	445532	08/15/18 10:59	MJG	TAL CH
Total/NA	Analysis	SM 2540C		1	445061	08/12/18 23:04	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		5	446204	08/20/18 14:20	HMW	TAL CH
Total/NA	Analysis	SM 4500 F C		1	446883	08/23/18 16:09	EAT	TAL C
Total/NA	Analysis	SM 4500 SO4 E		20	445449		CLB	TAL CH
					(Start) 0	08/15/18 05:49		
					(End) (08/15/18 05:50		

Lab Sample ID: 500-149809-11 **Client Sample ID: MW-15**

Date Collected: 08/09/18 11:42 **Matrix: Water** Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH
Total Recoverable	Analysis	6010C		1	445254	08/13/18 15:00	EEN	TAL CH
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH
Total Recoverable	Analysis	6020A		1	445195	08/13/18 14:49	FXG	TAL CH
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH
Total Recoverable	Analysis	6020A		10	445305	08/13/18 17:26	FXG	TAL CH
Total/NA	Prep	7470A			445342	08/14/18 11:53	MJG	TAL CH
Total/NA	Analysis	7470A		1	445532	08/15/18 11:00	MJG	TAL CH
Total/NA	Analysis	SM 2540C		1	445061	08/12/18 23:06	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		5	446204	08/20/18 14:20	HMW	TAL CH
Total/NA	Analysis	SM 4500 F C		1	446883	08/23/18 16:12	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		25	445449		CLB	TAL CH
					(Start) 0	08/15/18 05:50		
					(End) (08/15/18 05:51		

TestAmerica Chicago

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

TestAmerica Job IB: 311-149809-1

Client Sample ID: MW-17 Lab Sample ID: 500-149809-12 Date Collected: 08/06/18 14:41 **Matrix: Water**

Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH	
Total Recoverable	Analysis	6010C		1	445254	08/13/18 15:04	EEN	TAL CH	
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH	
Total Recoverable	Analysis	6020A		1	445195	08/13/18 14:53	FXG	TAL CH	
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH	
Total Recoverable	Analysis	6020A		10	445305	08/13/18 17:30	FXG	TAL CH	
Total/NA	Prep	7470A			445342	08/14/18 11:53	MJG	TAL CH	
Total/NA	Analysis	7470A		1	445532	08/15/18 11:02	MJG	TAL CH	
Total/NA	Analysis	SM 2540C		1	445061	08/12/18 23:09	CLB	TAL CH	
Total/NA	Analysis	SM 4500 CI- E		5	446204	08/20/18 14:21	HMW	TAL CH	
Total/NA	Analysis	SM 4500 F C		1	446883	08/23/18 16:24	EAT	TAL CH	
Total/NA	Analysis	SM 4500 SO4 E		50	445449		CLB	TAL CH	
					(Start) 0	08/15/18 05:51			
					(End) (8/15/18 05:52			

Client Sample ID: MW-18 Lab Sample ID: 500-149809-13

Date Collected: 08/06/18 15:46 **Matrix: Water** Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	445254	08/13/18 15:08	EEN	TAL CHI
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	445195	08/13/18 14:57	FXG	TAL CHI
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	445305	08/13/18 17:34	FXG	TAL CHI
Total/NA	Prep	7470A			445342	08/14/18 11:53	MJG	TAL CHI
Total/NA	Analysis	7470A		1	445532	08/15/18 11:03	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	445061	08/12/18 23:12	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		5	446204	08/20/18 14:21	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	446883	08/23/18 16:32	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	446448		CLB	TAL CHI
					(Start) (08/22/18 05:36		
					(End) (08/22/18 05:37		

Lab Sample ID: 500-149809-14 **Client Sample ID: MW-19**

Date Collected: 08/06/18 16:48 **Matrix: Water** Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6010C		1	445254	08/13/18 15:12	EEN	TAL CHI
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI

TestAmerica Chicago

TestAmenea Jo57 IB: 300-149809-1 Client: KPRG and Associates, Inc. Project/Site: Powerton CCR

Client Sample ID: MW-19 Lab Sample ID: 500-149809-14 Date Collected: 08/06/18 16:48

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6020A			445195	08/13/18 15:01	FXG	TAL CHI
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CHI
Total Recoverable	Analysis	6020A		20	445305	08/13/18 17:38	FXG	TAL CHI
Total/NA	Prep	7470A			445342	08/14/18 11:53	MJG	TAL CHI
Total/NA	Analysis	7470A		1	445532	08/15/18 11:05	MJG	TAL CHI
Total/NA	Analysis	SM 2540C		1	445061	08/12/18 23:14	CLB	TAL CHI
Total/NA	Analysis	SM 4500 CI- E		1	446204	08/20/18 14:43	HMW	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	446883	08/23/18 16:45	EAT	TAL CHI
Total/NA	Analysis	SM 4500 SO4 E		10	446448		CLB	TAL CHI
					(Start) (08/22/18 05:37		
					(End) (08/22/18 05:38		

Lab Sample ID: 500-149809-15 **Client Sample ID: Duplicate**

Matrix: Water

Date Collected: 08/07/18 00:00 Date Received: 08/10/18 16:50

Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH
Total Recoverable	Analysis	6010C		1	445254	08/13/18 15:16	EEN	TAL CH
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH
Total Recoverable	Analysis	6020A		1	445195	08/13/18 15:05	FXG	TAL CH
Total Recoverable	Prep	3005A			445039	08/11/18 12:28	BDE	TAL CH
Total Recoverable	Analysis	6020A		10	445305	08/13/18 17:41	FXG	TAL CH
Total/NA	Prep	7470A			445342	08/14/18 11:53	MJG	TAL CH
Total/NA	Analysis	7470A		1	445532	08/15/18 11:06	MJG	TAL CH
Total/NA	Analysis	SM 2540C		1	445061	08/12/18 23:17	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		1	446204	08/20/18 14:24	HMW	TAL CH
Total/NA	Analysis	SM 4500 F C		1	446883	08/23/18 16:49	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		4	446448		CLB	TAL CH
					(Start) (08/22/18 05:40		
					(End) (08/22/18 05:41		

Laboratory References:

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

PCB 2013-15

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica Job IBf 311-149809-1

Project/Site: Powerton CCR

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NFI AP	5	100201	04-30-19

Test.	Дr	nerica	Report To:						Bill	Го:												
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7		MW-09		8-8-18	12:46	W	5	Х	Х	X	Х	X	Х									
8		MW-10		8-8-18	14:44	W	5	Х	Х	Х	Х	Х	Х									7
q		MW-11		8-9-18	14:03	W	5	Х	Х	Х	Х	Х	Х									7
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WW = Wastewat		SE = Sediment	1. Plastic		1. HCI, Cool to														Received _	<u>08/10</u>	<u>>1 (b)</u>	
W = Water S = Soil		SO = Solid DL = Drum Liquid	 VOA Viai Sterile Plast 	io	2. H ₂ SO ₄ , Cool 3. HNO ₃ , Cool													ľ	Courier:			
SL = Sludge		DS = Drum Solid	Amber Glass		4. NaOH, Coo														Hand Delive	ered	\Box	
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Login Sample Receipt Checklist

Client: KPRG and Associates, Inc. Job Number: 500-149809-1

List Source: TestAmerica Chicago Login Number: 149809

List Number: 1

Creator: Sanchez, Ariel M

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.6, 3.7, 5.2, 5.4, 6.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Page 162 of 311 TestAmerica di caracteria di c

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 500-149809-2 Client Project/Site: Powerton CCR

For:

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

Attn: Richard Gnat

Authorized for release by: 9/26/2018 7:15:47 AM

Eric Lang, Manager of Project Management (708)534-5200

eric.lang@testamericainc.com

.....LINKS

Review your project results through Total Access

Have a Question?



Visit us at: 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.

Exhibit D

Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit D TestApperica 105 lDr 5001149809-2

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

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PCB 2013-15 Exhibit D

Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica Job 10f 311-149809-2

3

Project/Site: Powerton CCR

Job ID: 500-149809-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-149809-2

Comments

No additional comments.

Receipt

The samples were received on 8/10/2018 4:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 3.6° C, 3.7° C, 5.2° C, 5.4° C and 6.0° C.

RAD

Method(s) PrecSep_0: Radium 228 Prep Batch 160-382531:

Sample aliquot 280-113076-1 reduced due to potential matrix interference. Sample was black, opaque, contained heavy sediment levels, and contained plant material.

Sample aliquots 500-149809-8 and 500-149809-12 reduced due to potential matrix interference. Samples contained heavy levels of black sediment.

Sample aliguot 500-149809-9 reduced due to potential matrix interference. Sample was yellow, murky, and contained sediment.

Sample aliquot 500-149809-10 reduced due to potential matrix interference. Sample contained brown floating debris.

Sample aliquot 500-149809-13 reduced due to potential matrix interference. Sample had a strong odor similar to that of sulfur.

MW-10 (500-149809-8), MW-11 (500-149809-9), MW-12 (500-149809-10), MW-17 (500-149809-12) and MW-18 (500-149809-13)

Method(s) PrecSep-21: Radium 226 Prep Batch 160-382525:

Sample aliguot 280-113076-1 reduced due to potential matrix interference. Sample was black, opaque, contained heavy sediment levels, and contained plant material.

Sample aliquots 500-149809-8 and 500-149809-12 reduced due to potential matrix interference. Samples contained heavy levels of black sediment.

Sample aliguot 500-149809-9 reduced due to potential matrix interference. Sample was yellow, murky, and contained sediment.

Sample aliquot 500-149809-10 reduced due to potential matrix interference. Sample contained brown floating debris.

Sample aliquot 500-149809-13 reduced due to potential matrix interference. Sample had a strong odor similar to that of sulfur.

MW-10 (500-149809-8), MW-11 (500-149809-9), MW-12 (500-149809-10), MW-17 (500-149809-12) and MW-18 (500-149809-13)

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

TestAmerica Chicago 9/26/2018

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica Job IBf 300-149809-2

Project/Site: Powerton CCR

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

Electronic Filing: Beceived Clerk's Office 07/19/2019 Exhibit D

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

TestAmenea 166 pf 311-149809-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-149809-1	MW-01	Water	08/08/18 09:49	08/10/18 16:50
500-149809-2	MW-02	Water	08/07/18 09:30	08/10/18 16:50
500-149809-3	MW-03	Water	08/07/18 10:54	08/10/18 16:50
500-149809-4	MW-04	Water	08/07/18 12:27	08/10/18 16:50
500-149809-5	MW-05	Water	08/07/18 13:30	08/10/18 16:50
500-149809-6	MW-08	Water	08/08/18 11:11	08/10/18 16:50
500-149809-7	MW-09	Water	08/08/18 12:46	08/10/18 16:50
500-149809-8	MW-10	Water	08/08/18 14:44	08/10/18 16:50
500-149809-9	MW-11	Water	08/09/18 14:03	08/10/18 16:50
500-149809-10	MW-12	Water	08/09/18 15:46	08/10/18 16:50
500-149809-11	MW-15	Water	08/09/18 11:42	08/10/18 16:50
500-149809-12	MW-17	Water	08/06/18 14:41	08/10/18 16:50
500-149809-13	MW-18	Water	08/06/18 15:46	08/10/18 16:50
500-149809-14	MW-19	Water	08/06/18 16:48	08/10/18 16:50
500-149809-15	Duplicate	Water	08/07/18 00:00	08/10/18 16:50

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Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica J67 IBf 300-149809-2

Project/Site: Powerton CCR

Client Sample ID: MW-01 Lab Sample ID: 500-149809-1 Date Collected: 08/08/18 09:49

Matrix: Water

Date Received: 08/10/18 16:50

Method: 903.0 - I	Radium-226	(GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.218		0.0846	0.0868	1.00	0.0848	pCi/L	08/15/18 08:57	09/07/18 05:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					08/15/18 08:57	09/07/18 05:35	

Method: 904.0 -		` '	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.361	U	0.246	0.249	1.00	0.384	pCi/L	08/15/18 10:00	08/22/18 09:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					08/15/18 10:00	08/22/18 09:16	1
Y Carrier	93.1		40 - 110					08/15/18 10:00	08/22/18 09:16	1

Method: Ra226_Ra2	228 - Con	nbined Rad	dium-226 a	nd Radiur	n-228					
_			Count Uncert.	Total Uncert.						
Analyte Combined Radium 226 + 228	0.579	Qualifier	(2σ+/-) 0.260	(2σ+/-) 0.264	RL 5.00	MDC 0.384	Unit pCi/L	Prepared	Analyzed 09/11/18 02:43	Dil Fac

9/26/2018

Electronic Filing: Received Clark's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica J68 lpf 311-149809-2

Project/Site: Powerton CCR

Client Sample ID: MW-02 Lab Sample ID: 500-149809-2

Matrix: Water

Date Collected: 08/07/18 09:30 Date Received: 08/10/18 16:50

Method: 903.0 - F	Radium-226	(GFPC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.293		0.0924	0.0961	1.00	0.0714	pCi/L	08/15/18 08:57	09/07/18 05:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					08/15/18 08:57	09/07/18 05:35	1

Method: 904.0 -	Radium-228	(GFPC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.330	U	0.241	0.243	1.00	0.376	pCi/L	08/15/18 10:00	08/22/18 09:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					08/15/18 10:00	08/22/18 09:16	1
Y Carrier	85.6		40 - 110					08/15/18 10:00	08/22/18 09:16	1

	228 - Con	bined Ra	dium-226 a	nd Radiui	m-228					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium	0.622		0.258	0.261	5.00	0.376	pCi/L		09/11/18 02:43	1

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica Job IBf 311-149809-2

Project/Site: Powerton CCR

Lab Sample ID: 500-149809-3 Client Sample ID: MW-03 Date Collected: 08/07/18 10:54

Matrix: Water

Date Received: 08/10/18 16:50

Method: 903.0 - F	Radium-226	(GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.214		0.0803	0.0825	1.00	0.0767	pCi/L	08/15/18 08:57	09/07/18 05:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					08/15/18 08:57	09/07/18 05:35	1

Method: 904.0 -	Radium-228	(GFPC)	01	T-4-1						
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0137	U	0.191	0.191	1.00	0.341	pCi/L	08/15/18 10:00	08/22/18 09:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					08/15/18 10:00	08/22/18 09:16	1
Y Carrier	89.3		40 - 110					08/15/18 10:00	08/22/18 09:16	1

Method: Ra226_Ra2	228 - Con	nbined Ra	dium-226 a	nd Radiui	m-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.227	Ū	0.207	0.208	5.00	0.341	pCi/L	_	09/11/18 02:43	1

Electronic Filing: Received Clark's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea Job IBF 300-149809-2

Project/Site: Powerton CCR

Client Sample ID: MW-04 Lab Sample ID: 500-149809-4

Matrix: Water

Date Collected: 08/07/18 12:27 Date Received: 08/10/18 16:50

Method: 903.0 - F	Radium-226	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.198		0.0801	0.0821	1.00	0.0789	pCi/L	08/15/18 08:57	09/07/18 05:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					08/15/18 08:57	09/07/18 05:35	1

Method: 904.0 -	Radium-228	(GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0210	U	0.186	0.186	1.00	0.334	pCi/L	08/15/18 10:00	08/22/18 09:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					08/15/18 10:00	08/22/18 09:16	1
Y Carrier	90.1		40 - 110					08/15/18 10:00	08/22/18 09:16	1

Method: Ra226_Ra	228 - Con	nbined Ra	dium-226 a	nd Radiun	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.219	U	0.203	0.203	5.00	0.334	pCi/L		09/11/18 02:43	1

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica Job IBf 300-149809-2

Project/Site: Powerton CCR

Client Sample ID: MW-05 Lab Sample ID: 500-149809-5 Date Collected: 08/07/18 13:30

Matrix: Water

Date Received: 08/10/18 16:50

Method: 903.0 - R	adium-226	(GFPC)								
		` ,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.220		0.0870	0.0892	1.00	0.0905	pCi/L	08/15/18 08:57	09/07/18 05:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					08/15/18 08:57	09/07/18 05:35	1

Method: 904.0 -	Radium-228	(GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.303	U	0.263	0.265	1.00	0.423	pCi/L	08/15/18 10:00	08/22/18 09:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					08/15/18 10:00	08/22/18 09:16	1
Y Carrier	86.4		40 - 110					08/15/18 10:00	08/22/18 09:16	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radiun	n-228				
			Count	Total					
			Uncert.	Uncert.					
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.523		0.277	0.280	5.00	0.423 pCi/L		09/11/18 02:43	1

Electronic Filing: Received Clark's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 17218f 311-149809-2

Project/Site: Powerton CCR

Client Sample ID: MW-08 Lab Sample ID: 500-149809-6

Matrix: Water

Date Collected: 08/08/18 11:11 Date Received: 08/10/18 16:50

Method: 903.0 - I	Radium-226	(GFPC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.309		0.0962	0.100	1.00	0.0786	pCi/L	08/15/18 08:57	09/07/18 05:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					08/15/18 08:57	09/07/18 05:35	1
_										

Method: 904.0 -	rtaaram 220	(01.0)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0582	U	0.234	0.234	1.00	0.410	pCi/L	08/15/18 10:00	08/22/18 09:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					08/15/18 10:00	08/22/18 09:16	1
Y Carrier	80.4		40 - 110					08/15/18 10:00	08/22/18 09:16	1

Method: Ra226 Ra2	28 - Con	nbined Ra	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.367	U	0.253	0.254	5.00	0.410	pCi/L	_	09/11/18 02:43	1

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Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 1773 IBf 300-149809-2

Project/Site: Powerton CCR

Lab Sample ID: 500-149809-7 Client Sample ID: MW-09 Date Collected: 08/08/18 12:46

Matrix: Water

Date Received: 08/10/18 16:50

Method: 903.0 - F	Radium-226	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.266		0.0889	0.0921	1.00	0.0739	pCi/L	08/15/18 08:57	09/07/18 05:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					08/15/18 08:57	09/07/18 05:35	1

Method: 904.0 -	Radium-228	(GFPC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.173	Ū	0.207	0.208	1.00	0.342	pCi/L	08/15/18 10:00	08/22/18 09:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					08/15/18 10:00	08/22/18 09:16	1
Y Carrier	88.6		40 - 110					08/15/18 10:00	08/22/18 09:16	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	ınd Radiur	m-228				
_			Count	Total					
			Uncert.	Uncert.					
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC Unit	Prepared	Analyzed	Dil Fac
Combined Radium	0.440		0.225	0.227	5.00	0.342 pCi/L		09/11/18 02:43	1

Electronic Filing: Received Clark's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 174 IBf 311-149809-2

Project/Site: Powerton CCR

Client Sample ID: MW-10 Lab Sample ID: 500-149809-8

Matrix: Water

Date Collected: 08/08/18 14:44 Date Received: 08/10/18 16:50

Method: 903.0 - R	Radium-226	(GFPC)	Count Uncert.	Total Uncert.						
Analyte		Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC		Prepared	Analyzed	Dil Fac
Radium-226	0.557		0.149	0.157	1.00	0.121	pCi/L	08/15/18 08:57	09/07/18 05:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					08/15/18 08:57	09/07/18 05:35	1

Method: 904.0 -	radium-220	(0110)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0123	U	0.306	0.306	1.00	0.551	pCi/L	08/15/18 10:00	08/22/18 09:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					08/15/18 10:00	08/22/18 09:17	1
Y Carrier	80.0		40 - 110					08/15/18 10:00	08/22/18 09:17	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.545	U	0.340	0.344	5.00	0.551	pCi/L		09/11/18 02:43	1

Electronic Filing: Received Clark's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 175 IBf 311-149809-2

Project/Site: Powerton CCR

Client Sample ID: MW-11 Lab Sample ID: 500-149809-9

Matrix: Water

Date Collected: 08/09/18 14:03 Date Received: 08/10/18 16:50

	Radium-226	,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.940		0.187	0.205	1.00	0.108	pCi/L	08/15/18 08:57	09/07/18 05:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		40 - 110					08/15/18 08:57	09/07/18 05:35	

Method: 904.0 -	Radium-228	(GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.536		0.332	0.336	1.00	0.507	pCi/L	08/15/18 10:00	08/22/18 09:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		40 - 110					08/15/18 10:00	08/22/18 09:17	1
Y Carrier	87.9		40 - 110					08/15/18 10:00	08/22/18 09:17	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radiui	m-228					
_			Count Uncert.	Total Uncert.						
Analyte Combined Radium 226 + 228	Result	Qualifier	(2σ+/-) 0.381	(2σ+/-) 0.394	RL 5.00	MDC 0.507	Unit pCi/L	Prepared	Analyzed 09/11/18 02:43	Dil Fac

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 1706 IBf 300-149809-2

Project/Site: Powerton CCR

Client Sample ID: MW-12 Lab Sample ID: 500-149809-10 Date Collected: 08/09/18 15:46

Matrix: Water

Date Received: 08/10/18 16:50

Method: 903.0 - F	Radium-226	(GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.456		0.135	0.141	1.00	0.105	pCi/L	08/15/18 08:57	09/07/18 05:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					08/15/18 08:57	09/07/18 05:35	1

Method: 904.0 -	Raululli-220	(GFPC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.279	U	0.331	0.332	1.00	0.546	pCi/L	08/15/18 10:00	08/22/18 09:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					08/15/18 10:00	08/22/18 09:17	1
Y Carrier	81.9		40 - 110					08/15/18 10:00	08/22/18 09:17	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radiun	n-228					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.735		0.357	0.361	5.00	0.546	pCi/L		09/11/18 02:43	1

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica Job IBf 300-149809-2

Project/Site: Powerton CCR

Client Sample ID: MW-15 Lab Sample ID: 500-149809-11 Date Collected: 08/09/18 11:42

Matrix: Water

Date Received: 08/10/18 16:50

Method: 903.0 - I	Radium-226	(GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.246		0.0895	0.0922	1.00	0.0884	pCi/L	08/15/18 08:57	09/07/18 05:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		40 - 110					08/15/18 08:57	09/07/18 05:36	1

Method: 904.0 -	Radium-228	(GFPC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.320	U	0.212	0.214	1.00	0.323	pCi/L	08/15/18 10:00	08/22/18 09:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		40 - 110					08/15/18 10:00	08/22/18 09:17	1
Y Carrier	85.2		40 - 110					08/15/18 10:00	08/22/18 09:17	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radiun	n-228					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.566		0.230	0.233	5.00	0.323	pCi/L		09/11/18 02:43	1

9/26/2018

Electronic Filing: Received Clark's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 178 lpf 311-149809-2

Project/Site: Powerton CCR

Client Sample ID: MW-17

Date Collected: 08/06/18 14:41

Lab Sample ID: 500-149809-12

Matrix: Water

Date Collected: 08/06/18 14:41

Date Received: 08/10/18 16:50

Matrix: Water

Radium-226 0.619 0.156 0.166 1.00 0.117 pCi/L 08/15			
	repared	Analyzed	Dil Fac
Carrier %Yield Qualifier Limits Pr	15/18 08:57	09/07/18 05:36	1
	repared	Analyzed	Dil Fac
Ba Carrier 97.3 40 - 110 08/13	15/18 08:57	09/07/18 05:36	1
- Method: 904.0 - Radium-228 (GFPC)			
Count Total			
Uncert. Uncert.			

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.720		0.340	0.347	1.00	0.491	pCi/L	08/15/18 10:00	08/22/18 09:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		40 - 110					08/15/18 10:00	08/22/18 09:17	1
Y Carrier	84.1		40 - 110					08/15/18 10:00	08/22/18 09:17	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radiu	m-228					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.34		0.374	0.385	5.00	0.491	pCi/L		09/11/18 02:43	1

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Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 179 lpf 311-149809-2

Project/Site: Powerton CCR

Client Sample ID: MW-18 Lab Sample ID: 500-149809-13 Date Collected: 08/06/18 15:46

Matrix: Water

Date Received: 08/10/18 16:50

Method: 903.0 - F	Radium-226	(GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.325		0.112	0.116	1.00	0.0992	pCi/L	08/15/18 08:57	09/07/18 05:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		40 - 110					08/15/18 08:57	09/07/18 05:37	1

Method: 904.0 -	Radium-228	(GFPC)	Count	Total						
Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.695		0.365	0.371	1.00	0.541	pCi/L	08/15/18 10:00	08/22/18 09:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		40 - 110					08/15/18 10:00	08/22/18 09:18	1
Y Carrier	79.3		40 - 110					08/15/18 10:00	08/22/18 09:18	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radiun	n-228					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium	1.02		0.382	0.389	5.00	0.541	pCi/L		09/11/18 02:43	1
226 + 228										

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea Job IB: 300-149809-2

08/15/18 10:00 08/22/18 09:18

Project/Site: Powerton CCR

Client Sample ID: MW-19 Lab Sample ID: 500-149809-14

Date Collected: 08/06/18 16:48 Matrix: Water Date Received: 08/10/18 16:50

 Method: 903.0 - Radium-226 (GFPC)

 Count Total Uncert. Uncert.

 Uncert.
 Uncert.

 Analyte
 Result Qualifier
 (2σ+/-)
 RL
 MDC
 Unit
 Prepared
 Analyzed
 Dil Fac

08/15/18 08:57 0.0900 0.0932 Radium-226 0.268 1.00 0.0790 pCi/L 09/07/18 05:37 Carrier **%Yield Qualifier** Limits Prepared Analyzed Dil Fac 92.9 40 - 110 08/15/18 08:57 09/07/18 05:37 Ba Carrier

Method: 904.0 - Radium-228 (GFPC) Count Total Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac 0.287 0.292 1.00 0.415 pCi/L 08/15/18 10:00 08/22/18 09:18 Radium-228 0.567 Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac Ba Carrier 92.9 40 - 110 08/15/18 10:00 08/22/18 09:18

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228 Count Total Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac **Combined Radium** 0.835 0.301 0.307 5.00 0.415 pCi/L 09/11/18 02:43

40 - 110

226 + 228

Y Carrier

74.0

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 181 IBf 300-149809-2

Project/Site: Powerton CCR

Client Sample ID: Duplicate

Lab Sample ID: 500-149809-15

Matrix: Water

onem oumpie ib. Dupileate
Date Collected: 08/07/18 00:00
Date Received: 08/10/18 16:50

Method: 903.0 - Ra	dium-226	(GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.206		0.0779	0.0801	1.00	0.0620	pCi/L	08/15/18 08:57	09/07/18 05:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					08/15/18 08:57	09/07/18 05:38	1

Method: 904.0 -	Radium-228	(GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.204	U	0.282	0.283	1.00	0.471	pCi/L	08/15/18 10:00	08/22/18 09:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					08/15/18 10:00	08/22/18 09:18	1
Y Carrier	68.8		40 - 110					08/15/18 10:00	08/22/18 09:18	1

Method: Ra226_Ra	228 - Con	nbined Ra	dium-226 a	nd Radiun	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.410	U	0.293	0.294	5.00	0.471	pCi/L		09/11/18 02:43	1

+ 228

Electronic Filing Definitions/Gloss's Affice 07/19/2019

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

TestAmeries 182 IBf 310-149809-2

Qualifiers

Rad

escription

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
0/ D	Demont Decovery

%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)

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Electronic Filing: Received Clerk's Office 07/19/2019

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

TestAmerica 183 IBf 311-149809-2

Rad

Prep Batch: 382525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
500-149809-1	MW-01	Total/NA	Water	PrecSep-21	
500-149809-2	MW-02	Total/NA	Water	PrecSep-21	
500-149809-3	MW-03	Total/NA	Water	PrecSep-21	
500-149809-4	MW-04	Total/NA	Water	PrecSep-21	
500-149809-5	MW-05	Total/NA	Water	PrecSep-21	
500-149809-6	MW-08	Total/NA	Water	PrecSep-21	
500-149809-7	MW-09	Total/NA	Water	PrecSep-21	
500-149809-8	MW-10	Total/NA	Water	PrecSep-21	
500-149809-9	MW-11	Total/NA	Water	PrecSep-21	
500-149809-10	MW-12	Total/NA	Water	PrecSep-21	
500-149809-11	MW-15	Total/NA	Water	PrecSep-21	
500-149809-12	MW-17	Total/NA	Water	PrecSep-21	
500-149809-13	MW-18	Total/NA	Water	PrecSep-21	
500-149809-14	MW-19	Total/NA	Water	PrecSep-21	
500-149809-15	Duplicate	Total/NA	Water	PrecSep-21	
MB 160-382525/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-382525/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-149809-15 DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 382531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-149809-1	MW-01	Total/NA	Water	PrecSep_0	
500-149809-2	MW-02	Total/NA	Water	PrecSep_0	
500-149809-3	MW-03	Total/NA	Water	PrecSep_0	
500-149809-4	MW-04	Total/NA	Water	PrecSep_0	
500-149809-5	MW-05	Total/NA	Water	PrecSep_0	
500-149809-6	MW-08	Total/NA	Water	PrecSep_0	
500-149809-7	MW-09	Total/NA	Water	PrecSep_0	
500-149809-8	MW-10	Total/NA	Water	PrecSep_0	
500-149809-9	MW-11	Total/NA	Water	PrecSep_0	
500-149809-10	MW-12	Total/NA	Water	PrecSep_0	
500-149809-11	MW-15	Total/NA	Water	PrecSep_0	
500-149809-12	MW-17	Total/NA	Water	PrecSep_0	
500-149809-13	MW-18	Total/NA	Water	PrecSep_0	
500-149809-14	MW-19	Total/NA	Water	PrecSep_0	
500-149809-15	Duplicate	Total/NA	Water	PrecSep_0	
MB 160-382531/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-382531/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-149809-15 DU	Duplicate	Total/NA	Water	PrecSep_0	

Client: KPRG and Associates, Inc.

TestAmenea Job IB: 300-149809-2

Project/Site: Powerton CCR

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-382525/22-A

Matrix: Water

Carrier

Ba Carrier

Matrix: Water

Analysis Batch: 387770

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

Prep Batch: 382525

MB MB Uncert. Uncert. **Analyte** Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac Radium-226 0.1537 0.0721 0.0734 1.00 0.0777 pCi/L 08/15/18 08:57 09/07/18 05:38

Total

MB MB

%Yield Qualifier Limits 90.0 40 - 110

Count

08/15/18 08:57 09/07/18 05:38

Prepared

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

Prep Batch: 382525

Dil Fac

Analyzed

Analysis Batch: 387769 Total Spike LCS LCS %Rec. Uncert. Analyte Added Result Qual $(2\sigma + / -)$ RL**MDC** Unit %Rec Limits Radium-226 11.4 10.54 1.09 1.00 0.0673 pCi/L 93 68 - 137

LCS LCS

Lab Sample ID: LCS 160-382525/1-A

Carrier %Yield Qualifier Limits Ba Carrier 97.3 40 - 110

Lab Sample ID: 500-149809-15 DU **Client Sample ID: Duplicate**

Matrix: Water

Analysis Batch: 387770

Prep Type: Total/NA

Prep Batch: 382525

Total Sample Sample DU DU Uncert. **RER** Analyte Result Qual Result Qual $(2\sigma + / -)$ RL **MDC** Unit RER Limit Radium-226 0.206 0.2069 0.0824 1.00 0.0767 pCi/L 0

DU DU

Carrier %Yield Qualifier Limits Ba Carrier 96.5 40 - 110

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-382531/22-A

Matrix: Water

Analysis Batch: 384512

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

Prep Batch: 382531

Count Total MB MB Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Dil Fac Analyzed Radium-228 0.05685 U 0.219 0.219 1.00 0.386 pCi/L 08/15/18 10:00 08/22/18 09:18

MB MB

Carrier	%Yield Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	90.0	40 - 110	08/15/18 10:00 0	8/22/18 09:18	1
Y Carrier	82.2	40 - 110	08/15/18 10:00 08	8/22/18 09:18	1

TestAmerica Chicago

Electronic Filing: Reseived Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 185 IBf 300-149809-2

Client Sample ID: Duplicate

Prep Type: Total/NA

Project/Site: Powerton CCR

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

Lab Sample Matrix: Wate Analysis Ba	er		1/1-A					Cli	ent Sa	•	Prep Type	rol Sample e: Total/NA ch: 382531
						Total						
			Spike	LCS	LCS	Uncert.					%Rec.	
Analyte			Added	Result	Qual	(2σ+/-)	RL	MDC	Unit	%Rec	Limits	
Radium-228			11.1	11.55		1.28	1.00	0.359	pCi/L	104	56 - 140	
	LCS	LCS										
Carrier	%Yield	Qualifier	Limits									
Ba Carrier	97.3		40 - 110									
Y Carrier	88.2		40 - 110									

Lab Sample ID: 500-149809-15 DU

Matrix: Water

Analysis Bat	ch: 38451	 2							Prep Ba	tch: 38	32531
					Total						
	Sample	Sample	DU	DU	Uncert.						RER
Analyte	Result	Qual	Result	Qual	(2σ+/-)	RL	MDC	Unit		RER	Limit
Radium-228	0.204	U	 0.07311	U	0.232	1.00	0.402	pCi/L	 	0.25	1

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	96.5		40 - 110
Y Carrier	85.2		40 - 110

TestAmerica Chicago

Client: KPRG and Associates, Inc.

TestAmerica Job ID: 300-149809-2

Project/Site: Powerton CCR

Client Sample ID: MW-01

Date Collected: 08/08/18 09:49 Date Received: 08/10/18 16:50

Lab Sample ID: 500-149809-1

Matrix: Water

Matrix: Water

10

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			382525	08/15/18 08:57	JLC	TAL SL
Total/NA	Analysis	903.0		1	387769	09/07/18 05:35	KLS	TAL SL
Total/NA	Prep	PrecSep_0			382531	08/15/18 10:00	JLC	TAL SL
Total/NA	Analysis	904.0		1	384512	08/22/18 09:16	MAR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	388346	09/11/18 02:43	MAR	TAL SL

Client Sample ID: MW-02 Lab Sample ID: 500-149809-2

Date Collected: 08/07/18 09:30

Date Received: 08/10/18 16:50

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			382525	08/15/18 08:57	JLC	TAL SL
Total/NA	Analysis	903.0		1	387769	09/07/18 05:35	KLS	TAL SL
Total/NA	Prep	PrecSep_0			382531	08/15/18 10:00	JLC	TAL SL
Total/NA	Analysis	904.0		1	384512	08/22/18 09:16	MAR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	388346	09/11/18 02:43	MAR	TAL SL

Client Sample ID: MW-03 Lab Sample ID: 500-149809-3

Date Collected: 08/07/18 10:54

Date Received: 08/10/18 16:50

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			382525	08/15/18 08:57	JLC	TAL SL
Total/NA	Analysis	903.0		1	387769	09/07/18 05:35	KLS	TAL SL
Total/NA	Prep	PrecSep_0			382531	08/15/18 10:00	JLC	TAL SL
Total/NA	Analysis	904.0		1	384512	08/22/18 09:16	MAR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	388346	09/11/18 02:43	MAR	TAL SL

Client Sample ID: MW-04 Lab Sample ID: 500-149809-4 **Matrix: Water**

Date Collected: 08/07/18 12:27

Date Received: 08/10/18 16:50

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			382525	08/15/18 08:57	JLC	TAL SL
Total/NA	Analysis	903.0		1	387769	09/07/18 05:35	KLS	TAL SL
Total/NA	Prep	PrecSep_0			382531	08/15/18 10:00	JLC	TAL SL
Total/NA	Analysis	904.0		1	384512	08/22/18 09:16	MAR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	388346	09/11/18 02:43	MAR	TAL SL

TestAmerica Chicago

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Client: KPRG and Associates, Inc.

TestAmerica 187 IB: 311-149809-2

Project/Site: Powerton CCR

Client Sample ID: MW-05

Lab Sample ID: 500-149809-5

TAL SL

TAL SL

Matrix: Water

Date Collected: 08/07/18 13:30 Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			382525	08/15/18 08:57	JLC	TAL SL
Total/NA	Analysis	903.0		1	387769	09/07/18 05:35	KLS	TAL SL
Total/NA	Prep	PrecSep_0			382531	08/15/18 10:00	JLC	TAL SL
Total/NA	Analysis	904.0		1	384512	08/22/18 09:16	MAR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	388346	09/11/18 02:43	MAR	TAL SL

Lab Sample ID: 500-149809-6 Client Sample ID: MW-08 Date Collected: 08/08/18 11:11

Matrix: Water

Date Received: 08/10/18 16:50

Batch **Batch** Dilution Batch Prepared Prep Type Method Туре Run Factor Number or Analyzed Analyst Lab Total/NA PrecSep-21 Prep 382525 08/15/18 08:57 JLC TAL SL Total/NA Analysis 903.0 1 387769 09/07/18 05:35 KLS TAL SL TAL SL Total/NA Prep PrecSep_0 382531 08/15/18 10:00 JLC

Client Sample ID: MW-09 Lab Sample ID: 500-149809-7

1

1

384512 08/22/18 09:16 MAR

388346 09/11/18 02:43 MAR

Matrix: Water

Date Collected: 08/08/18 12:46 Date Received: 08/10/18 16:50

Analysis

Analysis

904.0

Ra226_Ra228

Total/NA

Total/NA

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			382525	08/15/18 08:57	JLC	TAL SL
Total/NA	Analysis	903.0		1	387769	09/07/18 05:35	KLS	TAL SL
Total/NA	Prep	PrecSep_0			382531	08/15/18 10:00	JLC	TAL SL
Total/NA	Analysis	904.0		1	384512	08/22/18 09:16	MAR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	388346	09/11/18 02:43	MAR	TAL SL

Client Sample ID: MW-10 Lab Sample ID: 500-149809-8

Date Collected: 08/08/18 14:44 **Matrix: Water**

Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			382525	08/15/18 08:57	JLC	TAL SL
Total/NA	Analysis	903.0		1	387769	09/07/18 05:35	KLS	TAL SL
Total/NA	Prep	PrecSep_0			382531	08/15/18 10:00	JLC	TAL SL
Total/NA	Analysis	904.0		1	384512	08/22/18 09:17	MAR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	388346	09/11/18 02:43	MAR	TAL SL

Client: KPRG and Associates, Inc.

TestAmerica Job ID: 311-149809-2

Project/Site: Powerton CCR

Client Sample ID: MW-11

Lab Sample ID: 500-149809-9

Matrix: Water

Date Collected: 08/09/18 14:03 Date Received: 08/10/18 16:50

	Batch	Batch	Batch D		Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			382525	08/15/18 08:57	JLC	TAL SL
Total/NA	Analysis	903.0		1	387769	09/07/18 05:35	KLS	TAL SL
Total/NA	Prep	PrecSep_0			382531	08/15/18 10:00	JLC	TAL SL
Total/NA	Analysis	904.0		1	384512	08/22/18 09:17	MAR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	388346	09/11/18 02:43	MAR	TAL SL

Lab Sample ID: 500-149809-10 Client Sample ID: MW-12 Date Collected: 08/09/18 15:46

Matrix: Water 10

Date Received: 08/10/18 16:50

Batch **Batch** Dilution Batch **Prepared** Prep Type Method Туре Run Factor Number or Analyzed Analyst Lab Total/NA PrecSep-21 TAL SL Prep 382525 08/15/18 08:57 JLC Total/NA Analysis 903.0 1 387769 09/07/18 05:35 KLS TAL SL TAL SL Total/NA Prep PrecSep_0 382531 08/15/18 10:00 JLC Total/NA Analysis 904.0 1 384512 08/22/18 09:17 MAR TAL SL Total/NA Analysis Ra226_Ra228 1 388346 09/11/18 02:43 MAR TAL SL

Client Sample ID: MW-15 Lab Sample ID: 500-149809-11

Matrix: Water

Date Collected: 08/09/18 11:42 Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	p Type Type Method Run		Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	PrecSep-21			382525	08/15/18 08:57	JLC	TAL SL
Total/NA	Analysis	903.0		1	387769	09/07/18 05:36	KLS	TAL SL
Total/NA	Prep	PrecSep_0			382531	08/15/18 10:00	JLC	TAL SL
Total/NA	Analysis	904.0		1	384512	08/22/18 09:17	MAR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	388346	09/11/18 02:43	MAR	TAL SL

Client Sample ID: MW-17 Lab Sample ID: 500-149809-12

Date Collected: 08/06/18 14:41 **Matrix: Water**

Date Received: 08/10/18 16:50

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			382525	08/15/18 08:57	JLC	TAL SL
Total/NA	Analysis	903.0		1	387769	09/07/18 05:36	KLS	TAL SL
Total/NA	Prep	PrecSep_0			382531	08/15/18 10:00	JLC	TAL SL
Total/NA	Analysis	904.0		1	384512	08/22/18 09:17	MAR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	388346	09/11/18 02:43	MAR	TAL SL

Client: KPRG and Associates, Inc.

TestAmerica Job ID: 500-149809-2

Project/Site: Powerton CCR

Client Sample ID: MW-18

Lab Sample ID: 500-149809-13

Matrix: Water

Date Collected: 08/06/18 15:46 Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			382525	08/15/18 08:57	JLC	TAL SL
Total/NA	Analysis	903.0		1	387770	09/07/18 05:37	KLS	TAL SL
Total/NA	Prep	PrecSep_0			382531	08/15/18 10:00	JLC	TAL SL
Total/NA	Analysis	904.0		1	384512	08/22/18 09:18	MAR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	388346	09/11/18 02:43	MAR	TAL SL

Client Sample ID: MW-19 Lab Sample ID: 500-149809-14

Date Collected: 08/06/18 16:48 **Matrix: Water**

Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			382525	08/15/18 08:57	JLC	TAL SL
Total/NA	Analysis	903.0		1	387770	09/07/18 05:37	KLS	TAL SL
Total/NA	Prep	PrecSep_0			382531	08/15/18 10:00	JLC	TAL SL
Total/NA	Analysis	904.0		1	384512	08/22/18 09:18	MAR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	388346	09/11/18 02:43	MAR	TAL SL

Client Sample ID: Duplicate Lab Sample ID: 500-149809-15

Date Collected: 08/07/18 00:00 **Matrix: Water** Date Received: 08/10/18 16:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			382525	08/15/18 08:57	JLC	TAL SL
Total/NA	Analysis	903.0		1	387770	09/07/18 05:38	KLS	TAL SL
Total/NA	Prep	PrecSep_0			382531	08/15/18 10:00	JLC	TAL SL
Total/NA	Analysis	904.0		1	384512	08/22/18 09:18	MAR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	388346	09/11/18 02:43	MAR	TAL SL

Laboratory References:

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

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9/26/2018

PCB 2013-15 Exhibit D

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Client: KPRG and Associates, Inc.

TestAmenea 190 lpf 310-149809-2

Project/Site: Powerton CCR

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

Laboratory: TestAmerica St. Louis

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program		EPA Region	Identification Num	nber Expiration Date
linois	NELAP		5	200023	11-30-18
The following analyte the agency does not a Analysis Method	•	ort, but the laboratory Matrix	is not certified by the		. This list may include analytes for w
	<u> </u>				
903.0	PrecSep-21	Water	Radiu	m-226	
904.0	PrecSep_0	Water	Radiu	m-228	
Ra226 Ra228		Water	Comb	ined Radium 226 + 22	20

STL-8208 (0600)

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Test.	4r	nerica	Report To:						Bill T	o:								rage	. 192 01
			Contact:	Richard Gna	t				Conta	act:							lablat# # %	1	a Cr01
THE LEADER	IN ENVI	RONMENTAL TESTING	Company:	KPRG and A	ssociates, Inc	2			Comp	pany:							Lab Lot # 50	0-14	9801
TestAmerica	Chica	go	Address:	14665 W. Lis	sbon Rd., Sui	te 2B			Addre	ess:							Package Sealed	Samp	les Sealed
2417 Bond St			-	_Brookfield,_V	VI_53005											Yes No	Yes	No	
University Par	k, IL 60	0484	Phone:	262-781-047	5				Phon	e:							Received on Ice	Sam	ples Intact
708-534-5200			Email:	richardg@	kprginc.co	<u>m</u>			Email	<u> </u>							Yes No	Yes	No N/A
Fax. 708-53 4 -	5211								PO#:	<u> </u>							Temperature °C of 0) 5.2 ,5.4
Sampler Nam	ie:		COMPANY:			#/C	ont.		T								Within Hold Time	Preser	v. Indicated
an John Hov	vieson		KPRG & Ass	ociates Inc.		Volu	me										Yes No	(Yes)	No N/A
Project Name):		TestAmerica	Project Numi	ber:	Pres	erv.						\Box				pH Sheck OK	Res CL	2 Check OK
Quarterly- Po	werto	1 CCR	50011612	-				Ì	tai				1				Yes No	Yes	No N/A
Project Locat	ion:		TAT			ĺĚ	Ö	_დ	Į≝								Sample Label	s and GO	Agree
Pekin, IL			15 Days			Matrix	of Cont	226/228	- Total Metal				_ n				Yes No	COC	not present
_ab PM:	Eric	Lang	eric.lang@	dtestameri	ca.com	1	#	22				g	Sulfate						
		Ī		1	1			1 🚊	7470A	}	je	i je	1 1		- }	- 1			
Laboratory ID	ID GSW-SW		ם		Sampling Sampling Date Time			903.0, 904.0 Radium	6020A,	2540C -TDS	4500_F_C - Fluoride	SM4500_Cl_E Chloride	SM4500_SO4_E				Additional An	alyses / R	emarks
12		MW-17		8-6-18	14:41	w	5	Х	Х	Х	Х	х	Х						_
13		MW-18		8-6-18	15:46	W	5	Х	Х	Х	х	Х	Х						
14		MW-19		8-6-18	16:48	W	5	Х	Х	Х	Х	Х	Х						
15		Duplicates		8-7-18		w	5	Х	Х	Х	Х	Х	Х						
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		<i></i>		<u> </u>	L					<u> </u>			<u> </u>			L			
ELINQUISHED	BY: C	XA-	COMPANY: KPRG	8-10-	DATE:	.:S	TIME		RIF	VE B		ا الماري			COMPA	Y: \	8/10/18	· · ·	1650
ELINQUISHED	BY:	//	COMPANY:	() 10 /	DATE:		TIME:		RECE	VED B	Y:	Just 1			COMPA	NY:	DATE:		TIME:
				·															
VW = Wastewat		x Key SE = Sediment	Contai 1. Piastic	ner Køy	reservative K				COMM	ENTS:							Date Received	08,10	18
vvv – vvastewat V = Water		SO = Solid	2. VOA Vial		2. H ₂ SO ₄ , Coo												Courier:	/	1.0
= Soil		DL = Drum Liquid	3. Sterile Plast		3. HNO ₃ , Coo	I to 4º													
L = Sludge		DS = Drum Solid	4. Amber Glas		4. NaOH, Coo		Λ0		•								Hand Deli	vered	ЦД
IS = Miscellane		L = Leachate	5. Widemouth	Giass	6. Cool to 4°	JJ01 (0	~										DW -51		•
L = Oil		W = Wipe	6. Other		7. None				L								Bill of Lad		of 2
. = Air		0 =]		/. None														_of2

STL-8208 (0600)

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Exhibit D

lient Information (Sub Contract Lab.)	Sampler:			Tab	Lab PM:			Carrier Tracking No(s):	ng No(s):	COC No:	
Alent Contact:	Phone			La	Lang, Eric A.					500-108777.1	
Shipping/Receiving				eric.la	all: :.lang@tes	tamer	E-waii; eric.lang@testamericainc.com.	State of Origin	×	Page:	
company. FestAmerica Laboratories, Inc.					Accreditations Requ	ons Rec	Accreditations Required (See note): NELAP - Illinois			Job #:	
ddress: 3715 Rider Trail North,	Due Date Requested: 9/10/2018	.pe						Analysis Dominated		Preservation Codes:	odes:
lity: Parth City	TAT Requested (days)	ays):				+	, alian	parsanhay sig		A-HCL	Σ
itale. Zlp. VO, 63045										C - Zn Acetate D - Nitric Acid	
^h none: 314-298-8566(ТеI) 314-298-8757(Fax)	PO#;				0.9					F - MeOH G - Amchlor	Q - Na2SO3 R - Na2S2O3 S - H2SO4
mail:	#OM				(0	-				H - Ascorbic Acid	
roject Name: Powerton CCR	Project #. 50011612				N 10 8				liners	J - DI Water K - EDTA L - EDA	V - MCAA W - pH 4-5 Z - other (specify)
ite: AWG - Powerton	#MOSS				eY) as		_		t conta	Other:	
ample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oll, BT=Tissue, A=Ar	Field Filtered S	2_qə2əa19\0.£08 0_qə2əa19\0.408	49226Ra228_GF		o tadmuM Isto		
		X	Preserva	Preservation Code:	X				1		Special Instructions/Note:
NW-01 (500-149809-1)	8/8/18	09:49		Water		×	×			-	Full QC needed (dups, etc.) Batch QC must
NV-02 (500-149809-2)	8/7/18	09:30		Water		-	×		2 0		be performed (dup, spikes, etc) - no NCMs Full QC needed (dups, etc) Batch QC must
NN-03 (500-149809-3)	8/7/18	10:54		Water		-	×		2 6		be performed (dup, spikes, etc) - no NCMs Full QC needed (dups, etc). Batch QC must
WV-04 (500-149809-4)	8/7/18	12:27 Control		Water		-	×		2 6	-	be performed (dup, spikes, etc) - no NCMs Full QC needed (dups, etc) Batch QC must
WV-05 (500-149809-5)	8/7/18	13:30		Water		+	×		2 0		be performed (dup, spikes, etc) - no NCMs Full QC needed (dups, etc) Batch QC must
IW-08 (500-149809-6)	8/8/18	11:11		Water		-	×		2 0		be performed (dup, spikes, etc) - no NCMs Full QC needed (dups, etc). Batch QC must
IW-09 (500-149809-7)	8/8/18	12:46		Water		+	× ×		0 0		be performed (dup, spikes, etc) - no NCMs Full QC needed (dups, etc) Batch OC must
IW-10 (500-149809-8)	8/8/18	14:44		Water			< ×		200		be performed (dup, spikes, etc) - no NCMs Full QC needed (dups, etc) Batch QC must
IW-11 (500-149809-9)	8/9/18	14:03 Central		Water	Î	-	×		0 6		be performed (dup, spikes, etc) - no NCMs Full QC needed (dups, etc) Batch QC must
tote: Since laboratory accreditations are subject to change. TestAmerica Laboratories, Inc. 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 accreditation in the State of Origin listed above for analysis/lests/matrix being analyzed, the shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica aboratories, inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, inc.	Laboratories, Inc. places the ov lysis/fests/matrix being analyzed e ourrent to date, return the sign	vnership of m	athod, analyte a must be shipp.	accreditation ad back to the g to said comp	compliance L TestAmerica	pon out laborate stAmeri	subcontract laboraty or other instruct	stories. This sample shipmions will be provided. Any c.	ent is forwarded under o	be performed (duy chain-of-custody. If th status should be bro	De performed (dup, spikes, etc) - no NCMs sin-of-custody. If the laboratory does not status should be brought to TestAmerica
ossible Hazard Identification					Samp	le Dis	posal (A fee n	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	amples are retain	t nedt tandel ha	
nconfirmed						Return	Return To Client	Disposal By Lah	ab DArchi	Archive For	3
eliverable Requested: I, II, III, IV, Other (specify)	Primary Deliveral	ble Rank: 2			Specie	al Instr	Special Instructions/QC Requirements:	quirements:		5	Sundan
mpty Kit Relinquished by:	11	Date:			Time:		1	Method o	Method of Shipment.		
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elinquished by:	Date/Time:			Company	Re	Received by	. Ac		Park Plant		
Custody Seals Intact: Custody Seal No.:			1		1				Date/ I'me:		Company
					3	oler Ter	Cooler Temperature(s) °C and Other Remarks.	d Other Remarks:			

Chain of Custody Record

University Park, IL 60484 Phone (708) 534-5200 Fax (708) 534-5211

TestAmerica Chicago 2417 Bond Street

University Park, IL 60484 2417 Bond Street

Shipping/Receiving

State, Zip: MO, 63045 Earth City

Page 33 of 36

MWG - Powerton Powerton CCR

slinquished by:

Empty Kit Relii

Jnconfirmed

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Client: KPRG and Associates, Inc. Job Number: 500-149809-2

Login Number: 149809 List Source: TestAmerica Chicago

List Number: 1

Creator: Sanchez, Ariel M

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.6, 3.7, 5.2, 5.4, 6.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Job Number: 500-149809-2

Login Number: 149809 List Source: TestAmerica St. Louis List Creation: 08/14/18 11:55 AM List Number: 2

Creator: Hellm, Michael

Client: KPRG and Associates, Inc.

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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.	False	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	16.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s 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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	









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Client: KPRG and Associates, Inc.

TestAmerica 197 lpf 311-149809-2

Project/Site: Powerton CCR

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water Prep Type: Total/NA

cceptance Limits)

Method: 904.0 - Radium-228 (GFPC)

Y Carrier = Y Carrier

Matrix: Water Prep Type: Total/NA

				Percent Yield (Acceptance Limits)
		Ba Carrier		
Lab Sample ID	Client Sample ID	(40-110)	(40-110)	
500-149809-1	MW-01	93.5	93.1	
500-149809-2	MW-02	94.1	85.6	
500-149809-3	MW-03	101	89.3	
500-149809-4	MW-04	93.2	90.1	
500-149809-5	MW-05	95.0	86.4	
500-149809-6	MW-08	95.0	80.4	
500-149809-7	MW-09	95.9	88.6	
500-149809-8	MW-10	95.0	80.0	
500-149809-9	MW-11	93.8	87.9	
500-149809-10	MW-12	91.2	81.9	
500-149809-11	MW-15	95.6	85.2	
500-149809-12	MW-17	97.3	84.1	
500-149809-13	MW-18	95.6	79.3	
500-149809-14	MW-19	92.9	74.0	
500-149809-15	Duplicate	90.9	68.8	
500-149809-15 DU	Duplicate	96.5	85.2	
LCS 160-382531/1-A	Lab Control Sample	97.3	88.2	
	Method Blank	90.0	82.2	

TestAmerica Chicago

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Appendix B Alternate Source Demonstration April 12, 2018

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ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

ALTERNATE SOURCE DEMONSTRATION CCR GROUNDWATER MONITORING POWERTON GENERATING STATION

April 12, 2018

Ms. Sharene Shealey Midwest Generation, LLC 529 E. Romeo Road Romeoville, IL 60446

VIA E-MAIL

Re: Alternate Source Demonstration

Powerton Generating Station – Ash Basins

Dear Ms. Shealey:

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 ash pond monitoring wells located at the Midwest Generation, LLC (Midwest Generation) Powerton Generating Station. The wells sampled were selected by Midwest Generation to meet the monitoring requirements of the CCR Rule for the Ash Surge Basin and the Ash By-pass Basin. The monitoring well network around these ponds consists of ten monitoring wells (MW-01 [upgradient], MW-08, MW-09 [upgradient], MW-11, MW-12, MW-15, MW-17, MW-18 and MW-19 [upgradient]) as shown on Figure 1. It is noted that upgradient monitoring well, MW-19 was more recently installed (October 2016) and is still in the process of having the first full eight rounds of detection monitoring data being collected. Since it is an upgradient well, it was not included in the statistical comparisons but the data is considered in evaluations provided within this report as appropriate.

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

Exhibit D

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Ms. Sharene Shealey, Midwest Generation, LLC

Re: Alternate Source Demonstration – Powerton Generating Station Ash Basins

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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 SanitasTM statistical software package and provided in the Statistical Evaluation Summary – 2017 CCR Groundwater Monitoring Powerton Generating Station dated January 12, 2018. The following conclusion/recommendations were provided:

"The completed detection monitoring statistical evaluations have determined that there are 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 exceedances 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. 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."

This report summarizes the results of the Alternate Source Demonstration in accordance with 40 CFR 257.94(e)(2) completed for the Powerton Generating Station Ash Surge Basin (ASB) and Ash By-pass Basin (ABB). The report is structured to provide a documentation of field investigation activities, a summary of 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 January 12, 2018 submittal are provided in Attachment 1 for reference.

DOCUMENTATION OF FIELD ACTIVITIES

To assist in evaluating a potential alternate source, both basin water and ash samples were collected. One water sample was collected from the ASB and one water sample was collected from the ABB. The water samples were collected 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 for each of the two basins (ASB and ABB). The composite samples consisted of a series of equivalent grab samples from across the length of the basin, from the inlet area to the 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 each basin. The composite samples were transferred directly into laboratory prepared containers, placed on ice and shipped to the analytical laboratory under a completed chain-of-custody. The ash sediment samples were analyzed using the Leaching Environmental Assessment Framework (LEAF) test using Method 1313. Under this method, each 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

Exhibit D

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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 pond water and the ash LEAF Test analyses are provided in Tables 1 and 2, respectively. A review of Tables 1 and 2 indicates that the Natural pH of the ash leachate ranges from 8.5 in the ASB to 8.8 in the ABB. Both of these are slightly higher than the pH values from the corresponding pond water samples (8.2 to 8.4, respectively). This suggests that the pond water samples may not be fully representative of equilibrium conditions of expected pore water within the ash sediment but fairly close. Based on this observation, the focus of this analysis will rely mostly on the results of the LEAF Test data and in particular the data from the "Natural pH" samples, although the pond water data may be brought into consideration as necessary.

The remaining analytical constituent LEAF Test data are illustrated in graphical form on Figures 2 through 9 as a function of pH. On those figures are also plotted the results of the "Natural pH" test samples and the up- and downgradient monitoring well data from the August 2017 sampling event (the initial detection monitoring event which was compared to established statistical background). For values reported as not-detected, one-half of the detection limit was used on the curves. In general, the following observations are made:

- Boron The LEAF Test curves for boron vary between the ABB and the ASB in two ways. First, the ABB ash consistently shows higher boron concentrations across all pH ranges. Second, The ABB ash curve indicates a decrease in boron concentration with increasing pH to a pH level of 8 after which point there appears to be a slight increase in boron concentration. The ASB ash curve indicates a continual decrease in boron concentration with increasing pH. The Natural pH sample data for both the ABB and ASB plot close to where it would be expected on the specific LEAF Test curves. The boron concentrations at all downgradient monitoring wells plot lower than the boron concentration noted for the Natural pH test analysis for the ABB but above the Natural pH test analysis for the ASB.
- Sulfate The LEAF Test curves for sulfate vary between the ABB and the ASB in two ways. First, the ABB ash consistently shows higher sulfate concentrations across all pH ranges. Second, the ABB ash curve indicates an overall decreasing trend in sulfate concentration with increasing pH. The ASB curve indicates no general correlation between pH and sulfate concentrations. The Natural pH samples for each basin plot close to the expected range for sulfate based on their pH as compared to the two LEAF Test curves. The monitoring well data sulfate concentrations generally plot (except for upgradient/side-gradient well MW-01) between the ASB and ABB concentrations.
- Chloride There were some non-detect values within the LEAF Test chloride data. For these cases, one-half of the noted detection limit was used for graphing purposes. The chloride concentrations do not appear to be a function of pH with a

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relatively narrow range of concentrations. The Natural pH test data corresponds well with the LEAF Test curve. The upgradient monitoring well data plot slightly above the curves and all downgradient well data show elevated chloride levels relative to the LEAF Test data.

- Fluoride There were some non-detect values within the LEAF Test chloride data. For these cases, one-half of the noted detection limit was used for graphing purposes. The LEAF Test curves for the ABB and ASB vary with the ABB showing a correlation of fluoride with pH and the ASB curve indicating no correlation. The Natural pH test data plot on or close to the respective LEAF Test curves. The upgradient and downgradient monitoring well data all plot within a cluster with a narrow range if concentrations.
- Calcium The calcium leachate concentration is a function of pH with decreasing concentrations with increasing pH. The Natural pH sample data for both basins plot close to where it would be expected on the LEAF Test curve with calcium concentrations ranging from 35 to 130 mg/l. Monitoring well concentrations of calcium range from 85 to 190 mg/l, with higher concentrations in upgradient wells.
- ORP The oxidation-reduction potential (ORP) is a known function of pH with ORP generally decreasing with increasing pH. This is reflected in the LEAF Test curves. The Natural pH sample data for both basins plot closely with their respective ash leachate curves. There is a wide range of ORP in monitoring wells within a narrow pH range.
- Specific Conductance (SC) The SC measurements have a clear correlation with pH with measurements decreasing from a pH of 2 to a pH of 10 and then again increasing sharply as a pH of 13 is approached. The SC values of the Natural pH sample both plot close to, but slightly below, their respective LEAF Test curves. The specific conductivity values in both the up- and downgradient monitoring wells plots below the Natural pH test data.
- Total Dissolved Solids (TDS) The TDS LEAF Test curves mimic the SC curves with concentrations decreasing to a pH of just over 10 and then increasing as pH increases. The TDS values of the Natural pH samples both plot near, but slightly below, their respective LEAF Test curves. The TDS concentrations in the upgradient wells generally plotted within or above the range of Natural pH sample concentrations.

ALTERNATE SOURCE EVALUATOIN OF THE SSI PARAMETERS

Boron and sulfate are both conservative compounds once in dissolved phase and are accepted indicator parameters of coal ash leachate. Based on the discussions above, the ABB and the ABS have slightly different boron and sulfate profiles, with the ABB consistently showing higher concentrations of both constituents. Therefore, the subsequent data evaluations will focus on basin specific monitoring wells.

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Ash By-pass Basin (ABB)

Relative to the ABB, monitoring wells MW-09 and MW-19 are considered local upgradient monitoring points and wells MW-11 and MW-12 are the immediate downgradient monitoring points. It is noted that all of these monitoring wells are completed within areas of historical fill material placement which includes ash. For statistical evaluation purposes, well MW-01 was also considered for representation of background. This well is located to the east and north (mostly side-gradient) within an area that did not include historic ash placement. Downgradient monitoring well MW-11 is screened within the gravelly sand unit and indicated potential SSIs in the August 2017 sampling for boron, sulfate, chloride, fluoride, and TDS. Downgradient well MW-12 is screened within a silty clay unit and indicated potential SSIs in the August 2017 sampling for sulfate, chloride, calcium, fluoride and TDS.

Boron

Relative to the noted potential boron exceedance at MW-11, the measured concentration in the monitoring well was 2.2 mg/l. This is above the established background PL of 1 mg/l based on background data from well MW-01. However, the boron concentrations in the more local upgradient wells MW-09 and MW-19 ranged from 3.5 to 3.8 mg/l (it is noted that these wells are screened within an area that contains some historic fill mixed with ash). The boron concentration in the Natural pH test sample for the ABB was 3.7. Since the local upgradient monitoring well and the ABB ash leachate boron concentrations are basically the same, KPRG used an Illinois Environmental Protection Agency (IEPA) recognized, two-dimensional analytical model identified within the Tiered Approach to Corrective Action Objectives (TACO) for simple advection-dispersion based constituent transport. A starting boron concentration of 3.65 mg/l (average of MW-09 and MW-19 concentrations) was assumed starting at a point between the two upgradient wells. The estimated boron concentration at well MW-11 was 0.18 mg/l based on this calculation (see Attachment 3). It is noted that this calculation conservatively assumes that the constituent is migrating from the upgradient wells to the downgradient wells through a "clean/unimpacted" zone of aquifer which does not contain any other source of boron. If this residual estimated concentration of boron is mixed with Natural pH test leachate from the ABB a resulting concentration estimate of boron would be 1.94 mg/l. Therefore, there appears to be some additional source of boron is affecting the downgradient wells, however, some potential contribution from the ABB cannot be ruled out at this time.

<u>Sulfate</u>

Both downgradient monitoring wells MW-11 and MW-12 had potential SSIs for sulfate with a PL based on side-gradient well MW-01 of 107 mg/l. The range of sulfate concentration in more local upgradient monitoring wells (MW-09 and MW-19) was 150 to 160 mg/l and in the ABB ash

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Natural pH test it was 910 mg/l. The downgradient monitoring well sulfate concentrations were 310 and 520 mg/l. Using the same two-dimensional advection dispersion model noted above with a starting sulfate concentration of 155 mg/l at a point between the two local upgradient monitoring wells would project an estimated sulfate concentration at the downgradient monitoring wells of approximately 7.42 mg/l. As noted above, this calculation conservatively assumes that the constituent is migrating from the upgradient wells to the downgradient wells through a "clean/unimpacted" zone of aquifer which does not contain any additional source of sulfate. If this residual estimated concentration of sulfate is mixed with Natural pH test leachate from the ABB a resulting concentration estimate of sulfate would be approximately 459 mg/l which is within the range of concentrations detected within the downgradient monitoring wells. Based on this distribution of concentrations, a potential contribution of sulfate from the ABB cannot be ruled out at this time.

Chloride

Both downgradient monitoring wells MW-11 and MW-12 had potential SSIs for chloride with a PL based on side-gradient well MW-01 of 136 mg/l. The chloride concentration in both local upgradient monitoring wells (MW-09 and MW-19) was 36 mg/l and in the ABB ash Natural pH test it was 27 mg/l. The downgradient monitoring well chloride concentrations were 83 and 180 mg/l. Based on this distribution of concentrations, the ABB does not appear to be the source of elevated chloride in downgradient monitoring wells.

Calcium

Downgradient monitoring well MW-12 had a potential SSI for calcium with a PL based on side-gradient well MW-01 of 136 mg/l. The range of calcium concentration in the more local upgradient monitoring wells was 85 to 97 mg/l and in the ABB ash Natural pH test it was 130 mg/l. The downgradient monitoring well MW-12 calcium concentrations was 140 (just above the PL). Based on this distribution of concentrations, the ABB does not appear to be the source of elevated calcium in well MW-12.

Fluoride

Both downgradient monitoring wells MW-11 and MW-12 had potential SSIs for fluoride with a pooled PL (using data from wells MW-01 and MW-09) of 0.24 mg/l. The range of fluoride concentration in just the local upgradient monitoring wells was 0.14 to 0.16 mg/l and in the ABB ash Natural pH test it was 2.8 mg/l. The two downgradient monitoring well fluoride concentrations were both 0.52 mg/l. Based on this distribution of concentrations, a potential contribution of fluoride from the ABB cannot be ruled out at this time.

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TDS

Both downgradient monitoring wells MW-11 and MW-12 had potential SSIs for TDS with a pooled PL (using data from wells MW-01 and MW-09) of 788 mg/l. The range of TDS concentration in just the local upgradient monitoring wells was 630 to 700 mg/l and in the ABB ash Natural pH test it was 1,500 mg/l. The downgradient monitoring well TDS concentrations were 1,100 and 1,400 mg/l. Based on this distribution of concentrations, a potential contribution of TDS from the ABB cannot be ruled out at this time.

Although some of the evaluations provided above suggest that the ABB leachate may be contributing to some elevated detections of various compounds, it must also be considered that the ABB (as well as the ASB) was just recently relined in 2015 and that some residual impacts may still be present within the aquifer from past operations prior to relining. This is supported by the observed distribution of pH measurements. The measured pH in local upgradient monitoring wells ranged from 7.2 to 7.3 and in the ABB Natural pH test it was 8.8. The pH in the downgradient wells ranged from 7.23 to 7.24 which is basically unchanged from the upgradient well measurements. If the current ABB is in fact contributing over time to elevated concentrations of other indicator parameters, it would be expected to see some consistent increase in the pH in the downgradient wells associated with an ongoing contribution of additional hydroxyl ion. This is not evident in the data, however, pH alone cannot be the determining factor in this analysis.

Discussions with Powerton Station personnel indicate that a tear in the liner was identified by maintenance personnel on August 31, 2018. It is believed the tear occurred sometime in the first part of August, however, the exact time of occurrence cannot be determined. This tear has been subsequently repaired by the liner installation contractor (see picture of repair in Attachment 4). The monitoring event which detected the potential SSIs being discussed above was completed during the last week of August 2018, prior to the repair of the tear. The data are therefore consistent with site events suggesting that a release may have been detected as a result of the tear and it is expected that SSI parameter concentrations at the downgradient well locations will return to historical level trends within the wells.

Ash Surge Basin (ASB)

Relative to the ASB, monitoring wells MW-09 and MW-19 are upgradient, however, wells MW-11 and MW-12 may also be considered upgradient of the basin (they are downgradient wells for the ABB and located generally between the two basins). Wells MW-11 and MW-12 are considered the "more local" upgradient wells in the discussions below. Wells MW-8, MW-15, MW-17 and MW-18 are the immediate downgradient monitoring wells. It is noted that all of these monitoring wells are completed within areas of historical fill mixed with ash placement. For statistical evaluation purposes, well MW-01 was also considered for representation of background. Downgradient monitoring well MW-18 is screened through the silty clay unit and into the sandy gravel unit and for the August 2017 sampling indicated

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potential SSIs for sulfate, chloride, fluoride, TDS and pH. The remaining three downgradient monitoring wells are screened within the silty clay unit and for the August 2017 sampling had potential SSIs of boron, sulfate, chloride, calcium, fluoride and TDS.

<u>Boron</u>

Relative to the noted potential boron SSIs at wells MW-08, MW-15 and MW-17 the range of boron concentrations was 1.2 to 2.2 mg/l. This is above the established background PL of 1 mg/l based on background data from well MW-01. The boron concentrations in local upgradient wells MW-11 and MW-12 ranged from 0.78 to 2.2 mg/l suggesting little to no change in the downgradient concentrations. The boron concentration in the Natural pH test sample for the ASB was 0.36 mg/l. Based on the distribution of boron concentrations, the elevated boron in downgradient monitoring wells is not likely to be associated with potential leakage from the ASB and therefore, reflect an alternate source particularly when considered in conjunction with the discussions below for the other SSI exceedances.

Sulfate

All downgradient monitoring wells had potential SSIs for sulfate with a PL based on side-gradient well MW-01 of 107 mg/l. The range of sulfate concentration in more local upgradient monitoring wells was 310 to 520 mg/l and in the ASB ash Natural pH test it was 87 mg/l. The downgradient monitoring well sulfate concentrations ranged from 300 to 640 mg/l. Based on the distribution of sulfate concentrations, the elevated sulfate in downgradient monitoring wells are not attributed to potential leakage from the ASB and therefore, are reflective of an alternate source.

Chloride

All downgradient monitoring wells had potential SSIs for chloride with a PL based on side-gradient well MW-01 of 136 mg/l. The range of chloride concentration in both local upgradient monitoring wells was 83 to 180 mg/l and in the ASB ash Natural pH test it was 6.5 mg/l. The downgradient monitoring well chloride concentrations ranged from 200 to 360 mg/l. Based on the distribution of chloride concentrations, the elevated chloride in downgradient monitoring wells are not attributed to potential leakage from the ASB and therefore, are reflective of an alternate source.

Calcium

Downgradient monitoring wells MW-08, MW-15 and MW-17 had potential SSIs for calcium with a PL based on side-gradient well MW-01 of 136 mg/l. The range of calcium concentration in more local upgradient monitoring wells was 130 to 140 mg/l and in the ASB ash Natural pH test it was 35 mg/l. The downgradient monitoring well calcium concentrations ranged from 150 to 190 mg/l. Based on the distribution of calcium concentrations, the elevated calcium in downgradient monitoring wells are not associated

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with potential leakage from the ASB and therefore, are reflective of an alternate source.

Fluoride

All downgradient monitoring wells had potential SSIs for fluoride with a pooled PL (using data from wells MW-01 and MW-09) of 0.24 mg/l. The fluoride concentration in both of the local upgradient monitoring wells was 0.52 mg/l and in the ASB ash Natural pH test it was 0.21 mg/l. The downgradient monitoring well fluoride concentrations ranged from 0.47 to 0.64 mg/l. Based on the distribution of fluoride concentrations, the elevated fluoride in downgradient monitoring wells are not associated with potential leakage from the ASB and therefore, are reflective of an alternate source.

TDS

All downgradient monitoring wells had potential SSIs for TDS with a pooled PL (using data from wells MW-01 and MW-09) of 788 mg/l. The range of TDS concentration in just the local upgradient monitoring wells was 1,100 to 1,400 mg/l and in the ASB ash Natural pH test it was 200 mg/l. The downgradient monitoring well TDS concentrations ranged from 1,200 to 1,900 mg/l. Based on the distribution of fluoride concentrations, the elevated fluoride in downgradient monitoring wells are not associated with potential leakage from the ASB and therefore, are reflective of an alternate source.

<u>p</u>H

Downgradient monitoring well MW-18 had a potential SSI for pH with a pooled PL (using data from wells MW-01 and MW-09) of 7.73 to 6.63. The pH at local upgradient monitoring wells ranged from 7.23 to 7.34 and in the ASB ash Natural pH test it was 8.5. The pH at downgradient well MW-18 was 7.81. A pH of 7.81 is fairly neutral and within a general expected range of natural groundwater. In addition, based on the discussions provided above, there is no definitive indication from the other indicator parameters that there may be leakage from the ASB. Therefore, the slightly elevated pH at well location MW-18 is likely a natural anomaly..

CONCLUSIONS/RECOMMENDATIONS

Based on the discussions provided above, it is not believed that the ASB is the source of downgradient monitoring well SSIs and that there is an alternate source(s) of impacts. However, the data relative to the ABB is not as definitive and when all the observations for boron, sulfate, fluoride and TDS relative to the ABB are combined, potential contribution of leachate from the ABB to the local downgradient groundwater impacts cannot be ruled out at this time, particularly when considering the identification of a tear in the liner at the end of August 2018 (which has subsequently been repaired). Since the monitoring well network for the ABB and the ASB are somewhat integrated, it is

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recommended that this site 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

Richard R. Gnat, P.G.

Principal

Timothy Stohner, P.E.

Project Manager/Sr. Engineer

cc: David Bacher, NRG

Mark Kelly, Midwest Generation 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 April 12, 2018, that the information contained in this report is accurate to the best of my knowledge.

Certified by:

Date: April 12, 2018

Timothy Stohner, P.E.

Illinois Professional Engineer Registration No.: 062.057635

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FIGURES



Figure 2. Boron Concentration vs. pH Value - Powerton Station

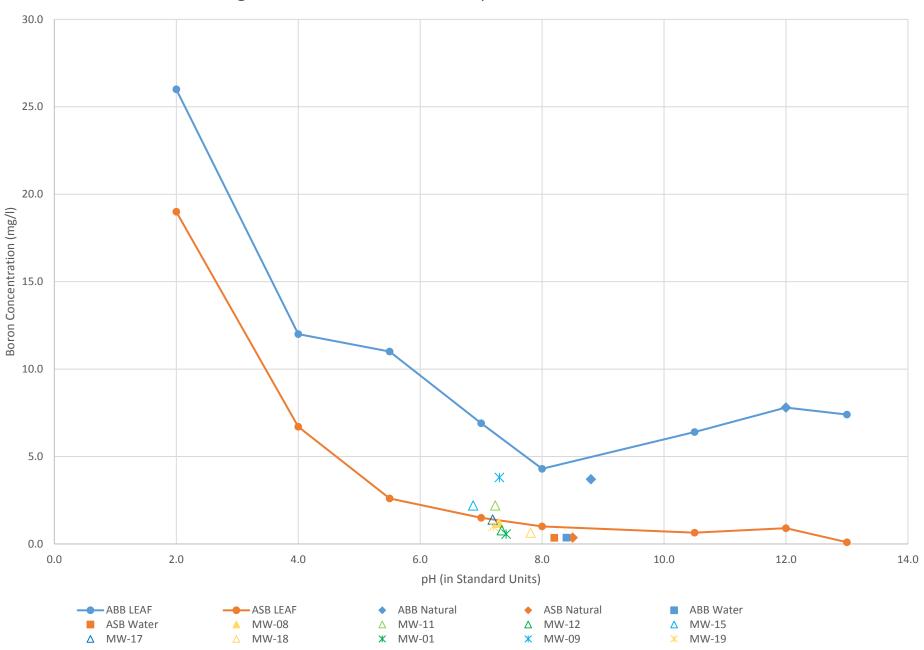


Figure 3. Sulfate Concentration vs. pH Value - Powerton Station

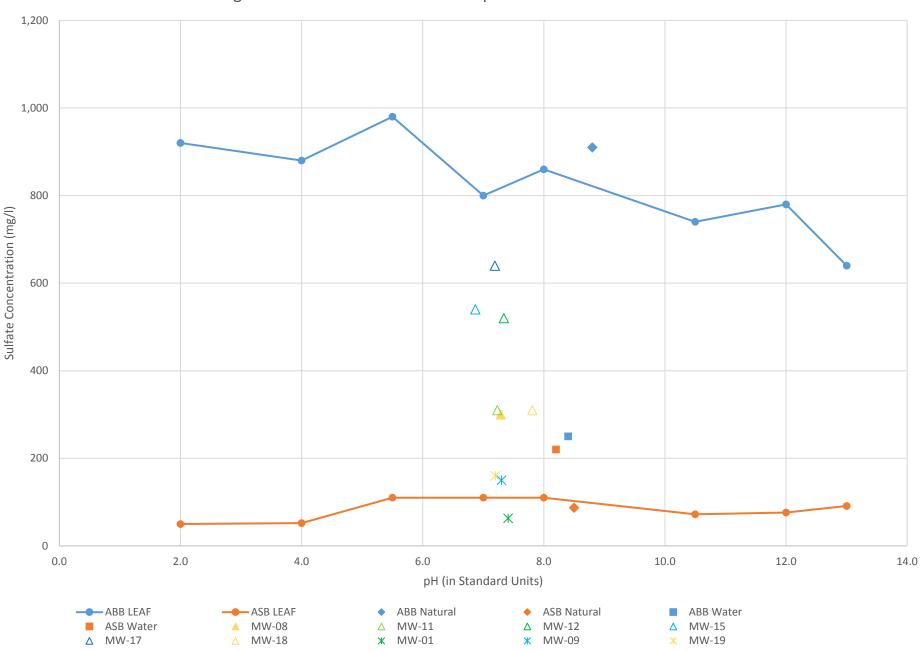


Figure 4. Chloride Concentration vs. pH Value - Powerton Station

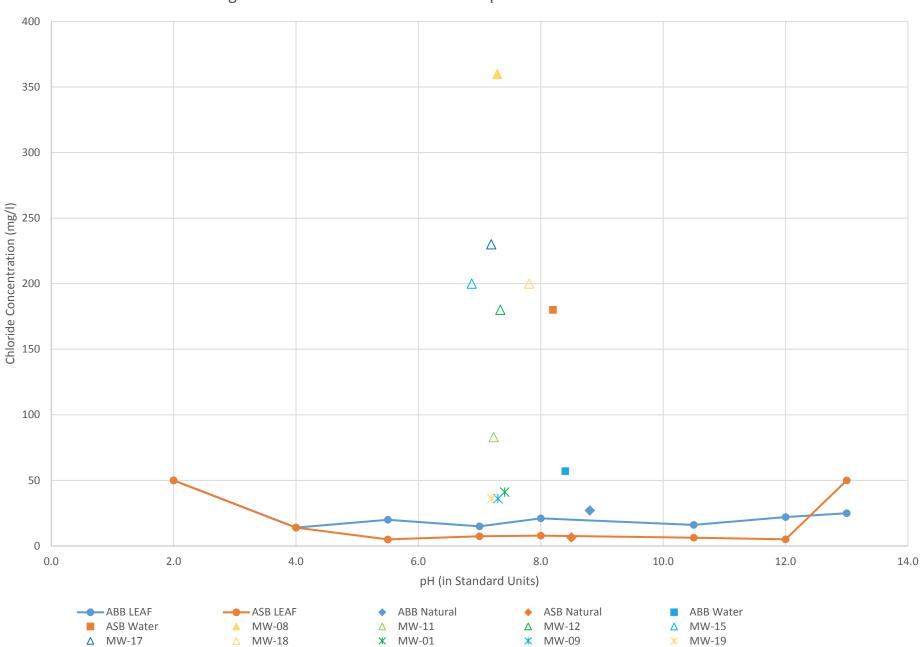


Figure 5. Flouride Concentration vs. pH Value - Powerton Station

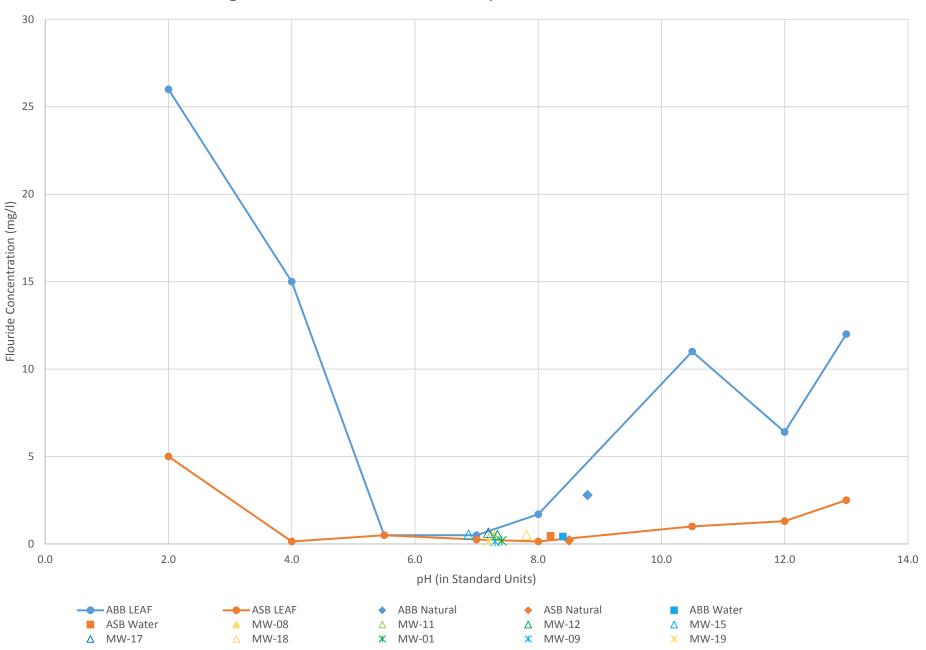


Figure 6. Calcium Concentration vs. pH Value - Powerton Station

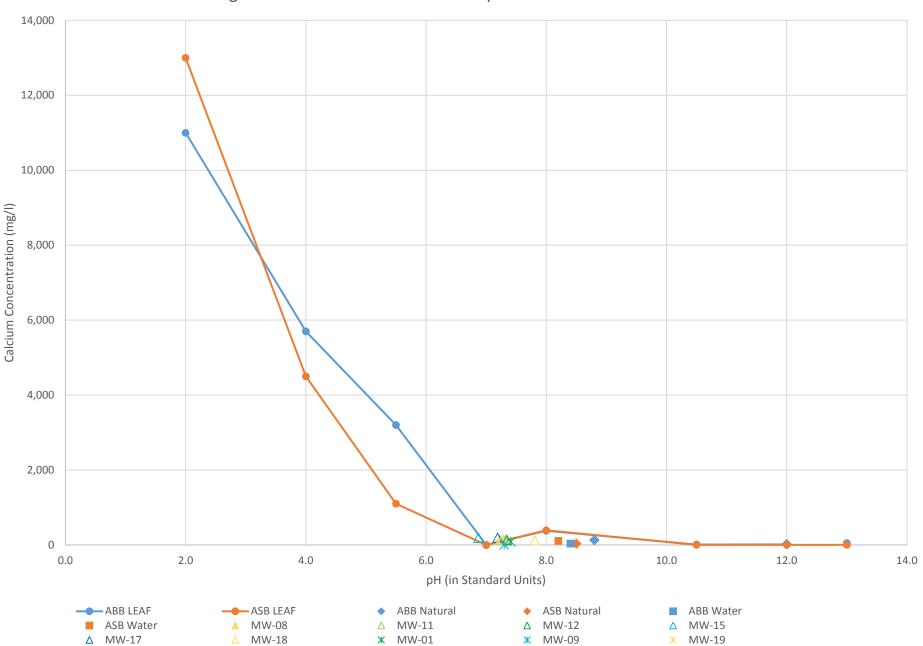


Figure 7. ORP Concentration vs. pH Value - Powerton Station

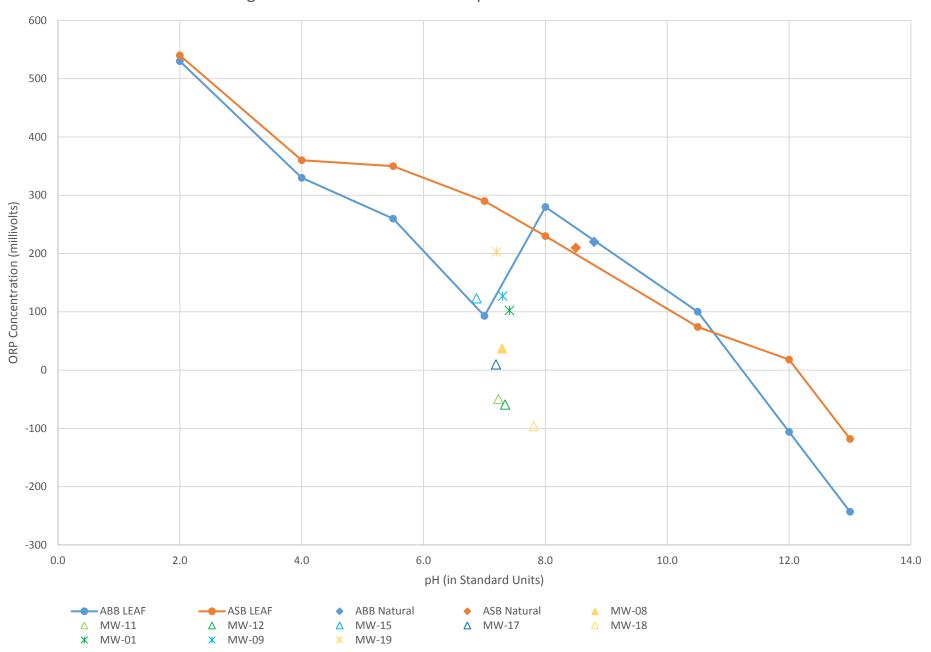


Figure 8. Specific Conductivity vs. pH Value - Powerton Station

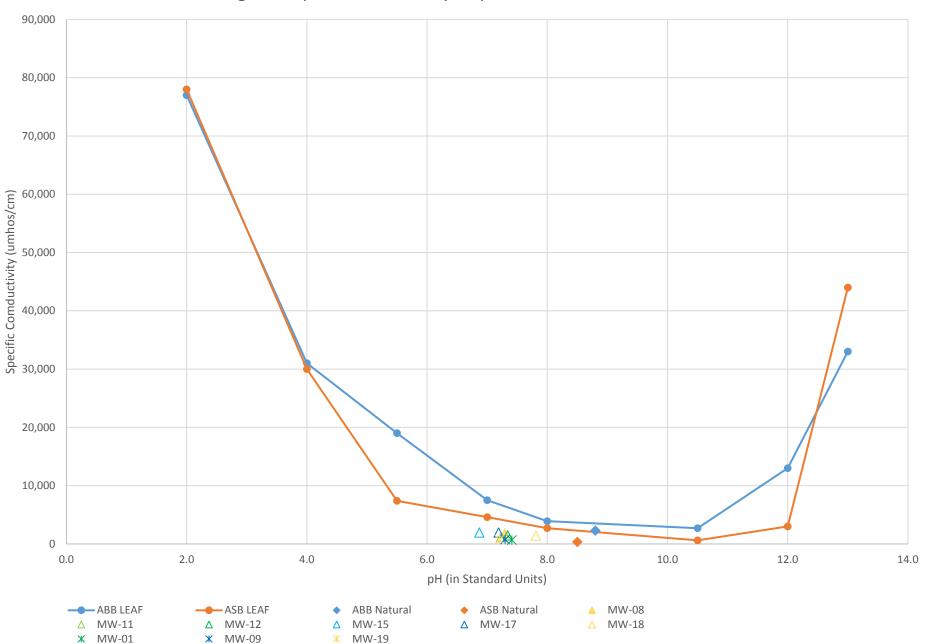
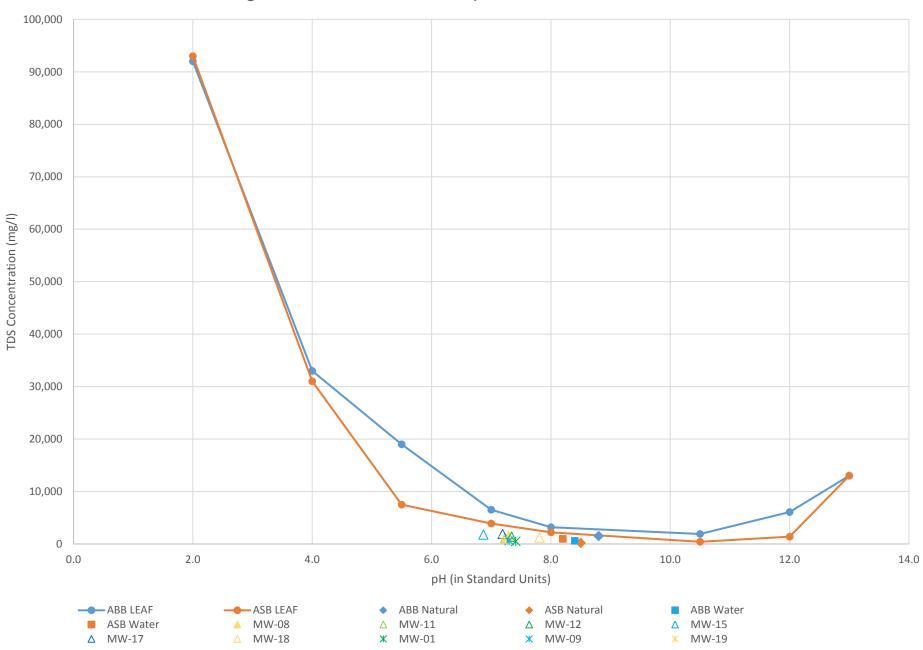


Figure 9. TDS Concentration vs. pH Value - Powerton Station



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TABLES

Table 1. Pond Water Results - Midwest Generation Powerton Station, Pekin, Illinois

Sample:		Ash Bypass	Ash Surge
PARAMETER	UNITS	Basin (ABB) Water	Basin (ASB) Water
Boron	mg/L	0.36	0.35
Calcium	mg/L	36	110
Chloride	mg/L	57	180
Fluoride	mg/L	0.43	0.46
рН	SU	8.4	8.2
Sulfate	mg/L	250	220
TDS	mg/L	590	950

Notes: Units are as noted. TDS - Total Dissolved Solids

Table 2. LEAF Test Results from Ash Samples - Midwest Generation Powerton Station, Pekin, Illinois

Sample: ABB ASH	1	LEAF TEST TARGETED pH VALUES								
PARAMETER	UNITS	13.0	12.0	10.5	8.0	7.0	5.5	4.0	2.0	Natural*
Boron	mg/L	7.4	7.8	6.4	4.3	6.9	11	12	26	3.7
Calcium	mg/L	48	17	10	380	<0.5	3,200	5,700	11,000	130
Chloride	mg/L	<50	22	16	21	15	20	<25	<100	27
Fluoride	mg/L	12	6.4	11	1.7	<1.0	<1.0	15	26	2.8
ORP	millivolts	-243	-106	100	280	93	260	330	530	220
рН	SU	12.7	12.5	10.5	8.0	7.2	5.9	4.3	2.3	8.8
Spec Cond	umhos/cm	33,000	13,000	2,700	3,900	7,500	19,000	31,000	77,000	2,300
Sulfate	mg/L	640	780	740	860	800	980	880	920	910
TDS	mg/L	13,000	6,100	1,900	3,200	6,500	19,000	33,000	92,000	1,500

Sample: ASB ASF	1				LEAF TEST	TARGETED	pH VALUES			
PARAMETER	UNITS	13.0	12.0	10.5	8.0	7.0	5.5	4.0	2.0	Natural*
Boron	mg/L	0.10	0.90	0.65	1.0	1.5	2.6	6.7	19	0.36
Calcium	mg/L	3.0	1.3	2.6	390	<0.5	1,100	4,500	13,000	35
Chloride	mg/L	<50	5.1	6.3	7.9	7.4	<10	<25	<100	6.5
Fluoride	mg/L	<5.0	1.3	1.0	<0.25	<0.50	<1.0	<2.5	<10	0.21
ORP	millivolts	-118	18	74	230	290	350	360	540	210
рН	SU	12.7	11.9	10.3	7.6	6.7	5.2	3.8	2.8 H	8.5
Spec Cond	umhos/cm	44,000	3,000	620	2,700	4,600	7,400	30,000	78,000	340
Sulfate	mg/L	91	76	72	110	110	110	52	<100	87 F1
TDS	mg/L	13,000	1,400	410	2,200	3,900	7,500	31,000	93,000	200

Notes: Units are as noted.

H - Sample was prepped or analyzed beyond the specified holding time

ORP - Oxidation Reduction Potential

F1 - MS and/or MSD Recovery is outside acceptable limits

Spec Cond - Specific Conductivity

TDS - Total Dissolved Solids

ABB - Ash By-pass Basin

TDS - Total Dissolved Solids ASB - Ash Surge Basin Natural - pH of ash as measured in the laboratory prior to any pH test modifications.

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<u>ATTACHMENT 1</u> Statistical Data Evaluation Tables – January 12, 2018

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Table 1. Detection Monitoring Appendix III Groundwater Analytical Results - 3rd Quarter 2017 and Resample - Midwest Generation, LLC, Powerton Station, 223 of 311

Well	Date	Boron	Calcium	Chloride	Fluoride	pН	Sulfate	Total Dissolved Solids
	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
MW-01	11/16/2016	0.18	97	39	0.21	7.22	32	500
(S)	2/14/2017	0.18	120	55	0.17	7.30	60	550
up-gradient	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
	Pred. Limit*	1.0	142	81	0.25	7.90-6.58	115	648
	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
	11/18/2015	2.0	63	Н 31	H 0.19	7.15	Н 110	H 440
	2/25/2016	2.3	77	36	0.19	7.34	120	500
	5/19/2016	2.0	73	38	0.17	7.30	100	520
	8/17/2016	2.7	74	39	0.15	7.32	120	750
MW-09	11/17/2016	4.5	85	38	0.13	7.37	110	630
(S)	2/15/2017	4.1	84	38	0.13	6.94	160	620
up-gradient	5/3/2017	3.5	85	38	0.17	7.48	170	680
	6/21/2017	3.3	82	38	0.14	7.63	180	760
	Pred. Limit*	6.19	103	39	0.24	7.99-6.64	236	1000
	8/25/2017	3.8	85	36	0.14	7.3	150	630
	11/8/2017	4	89	37	0.13	6.92	190	650
	11/18/2016	3.8	89	38	0.13	7.34	120	670
	2/15/2017	4.7	88	37	0.13	7.50	180	630
MW-19^	5/5/2017	3.3	88	38	0.14	7.51	160	640
(S) up-gradient	6/21/2017	2.3	110	35	0.12	7.30	170	690
up-gradient	8/28/2017	3.5	97	36	0.16	7.20	160	700
	11/6/2017	4.5	86	35	0.17	7.26	190	640
	11/18/2015	1.5	160	H 170	H 0.44	7.61	H 470	H 1300
	2/25/2016	1.7	160	200	0.30	7.00	280	1100
	5/18/2016	1.7	160	140	0.34	7.67	300	1200
	8/17/2016	1.0	150	230	0.35	7.33	360	1400
MW-08	11/15/2016	1.2	140	290	0.33	6.90	230	1300
(CL)	2/16/2017	1.5	150	460	0.28	7.00	230	1500
down-gradient	5/2/2017	0.55	140	300	0.33	7.30	320	1300
	6/21/2017	1.2	160	490	0.3	7.27	350	1700
	Pred. Limit	1.0	136	77	0.24**	7.73-6.83**	107	788**
	8/29/2017	<u>1.2</u>	<u>150</u>	<u>360</u>	<u>0.47</u>	7.29	300	<u>1500</u>
	11/8/2017	0.68	130	<u>260</u>	0.45	7.27	<u>270</u>	1200

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

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

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

FI - MS and/or MSD Recovery outside of limits.

Pred. Limit - Prediction Limit

H - Sample was prepped or analyzed beyond the specified holding time.

^ Recently installed upgradient well. Insufficient rounds of sampling for statistical evaluation at this time.

Italics Date - First round of Detection Monitoring and resample after statistical background establishment.

S - Sandy Unit

S -CL -

Silty Clay Unit

** - Based on pooled background from MW-01/MW-09. All others based on MW-01 as background. Bold - Potential statistically significant increase.

Table 1. Detection Monitoring Appendix III Groundwater Analytical Results - 3rd Quarter 2017 and Resample - Midwest Generation, LLC, Powerton Station, 224 of 311

Well	Date	Boron	Calcium	Ch	loride	Flu	oride	pH	Su	ılfate	Total Di	ssolved Solids
	11/18/2015	1.7	110	Н	54	Н	0.55	7.06	Н	160	Н	670
	2/26/2016	1.5	140		120		0.55	7.25		220		850
	5/20/2016	1.6	140		120		0.56	7.10		210		920
	8/17/2016	1.0	130		93		0.67	7.08		180		910
MW-11	11/17/2016	1.2	140		130		0.44	7.21		240		1100
(S)	2/16/2017	1.6	140		110		0.40	6.62		260		910
down-gradient	5/3/2017	1.3	160		160		0.42	7.36		440		1300
	6/22/2017	1.2	140		120		0.60	7.21		260		1000
	Pred. Limit	1.0	136		77		0.24**	7.73-6.83**		107		788**
	8/29/2017	<u>2.2</u>	130		<u>83</u>		0.52	7.23		310		<u>1100</u>
	11/9/2017	<u>1.5</u>	<u>140</u>		<u>100</u>		<u>0.59</u>	6.96		<u>230</u>		<u>970</u>
	11/19/2015	0.94	160	Н	220	H	0.57	7.12	Н	650	Н	1400
	2/26/2016	0.42	130		200		0.40	7.96		530	<u> </u>	1200
	5/20/2016	0.65	150		200		0.49	7.28		550		1400
	8/18/2016	0.69	170		200		0.49	7.06		620		1600
MW-12	11/18/2016	0.83	140		180		0.46	7.34		340		1300
(CL) down-gradient	2/16/2017	0.48	140		190		0.37	7.54		630		1300
down-gradient	5/3/2017 6/22/2017	0.49	120 130		190 190		0.37	7.47 7.36		500	-	1200 1400
		1.0	136		77		0.48	7.73-6.83**		580 107		788**
	Pred. Limit 8/29/2017	0.78	140		180		0.52	7.34		520		1400
	11/10/2017	0.78	130		170		0.48	7.34		370		1200
	11/18/2015	1.5	270	Н	210	Н	0.53	6.55	Н	1400	Н	2400
	2/25/2016	2.0	240	11	110	11	0.61	6.84	11	640	11	1700
	5/19/2016	2.7	320		240		0.53	6.83		1200		2800
	8/18/2016	1.5	200	F1	170		0.54	6.96		660		1900
MW-15	11/17/2016	1.3	120	1.1	180		0.47	6.91		560		1900
(CL)	2/17/2017	1.9	200		190		0.43	7.24		670		1700
down-gradient	5/4/2017	1.5	180		190		0.57	7.35		670		1700
_	6/21/2017	1.6	180		200		0.56	7.3		530		1600
	Pred. Limit	1.0	136		77		0.24**	7.73-6.83**		107		788**
	8/29/2017	2.2	190		200		0.53	6.87		540		1800
	11/10/2017	1.6	170		180		0.63	7.09		530		1500
	11/19/2015	1.6	210	Н	230	Н	0.43	7.11	Н	850	Н	1800
	2/22/2016	1.8	290		280		0.55	7.19		960		2100
	5/18/2016	1.4	200		230		0.64	7.02		700		1800
	8/15/2016	1.1	220		220		0.60	7.08		860		2100
MW-17	11/14/2016	1.5	200		210		0.56	7.26		560		2000
(CL)	2/13/2017	1.6	190		230		0.56	6.84		770		1600
down-gradient	5/4/2017	1.2	170		210		0.61	7.29		720		1500
	6/22/2017	0.95	150		230		0.72	7.38		580		1600
	Pred. Limit	1.0	136		77		0.24**	7.73-6.83**		107		788**
	8/29/2017	<u>1.4</u>	<u>190</u>		230		0.64	7.19		<u>640</u>		<u>1900</u>
	11/6/2017	<u>1.7</u>	<u>190</u>		<u>240</u>		0.62	7.27		<u>840</u>		<u>1800</u>
	11/19/2015	0.80	140	Н	220	H	0.66	7.62	Н	310	Н	1200
	2/22/2016	0.76	150		220		0.68	7.06		310	1	1200
	5/18/2016	0.72	120		230		0.71	7.68		230		1200
	8/15/2016	0.67	130		210		0.64	7.52		330		1300
MW-18	11/18/2016	0.94	130		200		0.58	7.69		250	1	1300
(S)	2/15/2017	0.56	140		190		0.50	7.81		340	1	1200
down-gradient	5/5/2017	0.46	130		180		0.52	8.12		360		1100
	6/21/2017	0.53	120		190		0.51	8.1		320		1200
	Pred. Limit	1.0	136		77		0.24**	7.73-6.83**		107		788**
	8/28/2017	0.65	120		200		0.53	7.81		310		1200
	11/6/2017	0.67	120	l	190	l	0.57	<u>7.74</u>		400		1200

** - Based on pooled background from MW-01/MW-09. All others based on MW-01 as background. Bold - Potential statistically significant increase.

V- Serial dilution exceeds control limits.

Notes:

* - Intrawell Prediction Limit. All others are interwell comparisons.
All units are in mg/l except pH is in standard units.

F1 - MS and/or MSD Recovery outside of limits.

Pred. Limit - Prediction Limit

H - Sample was prepped or analyzed beyond the specified holding time. ^- Recently installed upgradient well. Insufficient rounds of sampling for statistical evaluation at this time.

Italics Date - First round of Detection Monitoring and resample after statistical background establishment.

CL -Silty Clay Unit PCB 2013-15 Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit D Page 225 of 311

ATTACHMENT 2 Analytical Data Packages

PCB 2013-15 Electronic Filing: Received, Clerk's Office 07/19/2019

Page 226 of 311 TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 500-139619-1 Client Project/Site: Powerton CCR

For:

KPRG and Associates, Inc. 14665 West Lisbon Road, Suite 2B Brookfield, Wisconsin 53005

Attn: Richard Gnat

RILL K

Authorized for release by: 1/26/2018 2:21:05 PM Richard Wright, Senior Project Manager richard.wright@testamericainc.com

Designee for

Eric Lang, Manager of Project Management (708)534-5200

eric.lang@testamericainc.com



Review your project results through Total Access

Have a Question?



Visit us at: 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.

Exhibit D

Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit D TestApperica2121/7 IDF 5001139619-1

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

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PCB 2013-15 Exhibit D

Electronic Filing: Received Clark's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmenea 308 IB 300-139619-1

Project/Site: Powerton CCR

Job ID: 500-139619-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-139619-1

Comments

No additional comments.

Receipt

The samples were received on 1/12/2018 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3° C.

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

General Chemistry

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

3

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 309 IBF 300-139619-1

Project/Site: Powerton CCR

Client Sample ID: ABB Lab Sample ID: 500-139619-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.36		0.050		mg/L		_	6020A	Total
									Recoverable
Calcium	36		0.20		mg/L	1		6020A	Total
									Recoverable
рН	8.4	HF	0.2		SU	1		9040C	Total/NA
Total Dissolved Solids	590		10		mg/L	1		SM 2540C	Total/NA
Chloride	57		2.0		mg/L	1		SM 4500 CI- E	Total/NA
Fluoride	0.43		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	250		50		mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: ASB Lab Sample ID: 500-139619-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.35		0.050		mg/L		_	6020A	Total
									Recoverable
Calcium	110		0.20		mg/L	1		6020A	Total
									Recoverable
pH	8.2	HF	0.2		SU	1		9040C	Total/NA
Total Dissolved Solids	950		10		mg/L	1		SM 2540C	Total/NA
Chloride	180		10		mg/L	5		SM 4500 CI- E	Total/NA
Fluoride	0.46		0.10		mg/L	1		SM 4500 F C	Total/NA
Sulfate	220		50		mg/L	10		SM 4500 SO4 E	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 330 IBF 310-139619-1

Project/Site: Powerton CCR

Method	Method Description	Protocol	Laboratory
6020A	Metals (ICP/MS)	SW846	TAL CHI
9040C	pH	SW846	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
SM 4500 CI- E	Chloride, Total	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
SM 4500 SO4 E	Sulfate, Total	SM	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 = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

1/26/2018

PCB 2013-15 Electronic Filing: Beceived Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmenea 301 IB: 310-139619-1

Project/Site: Powerton CCR

Lab Sample ID	Client Sample ID	Matrix	Collected Received
500-139619-1	ABB	Water	01/11/18 09:35 01/12/18 09:40
500-139619-2	ASB	Water	01/11/18 09:50 01/12/18 09:40

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Electronic Filing: Received Clark's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 3321Bf 311-139619-1

Project/Site: Powerton CCR

Client Sample ID: ABB

Lab Sample ID: 500-139619-1

Matrix: Water

Date Collected: 01/11/18 09:35 Date Received: 01/12/18 09:40

Method: 6020A - Metals (ICP/MS) - Total Recoverable									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.36		0.050		mg/L		01/12/18 14:46	01/15/18 13:24	1
Calcium	36		0.20		mg/L		01/12/18 14:46	01/15/18 13:24	1
_									

General Chemistry Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	8.4	HF	0.2	SU			01/12/18 16:00	1
Total Dissolved Solids	590		10	mg/L			01/14/18 23:52	1
Chloride	57		2.0	mg/L			01/18/18 21:46	1
Fluoride	0.43		0.10	mg/L			01/25/18 11:33	1
Sulfate	250		50	mg/L			01/18/18 07:16	10

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PCB 2013-15

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 303 IBf 311-139619-1

Project/Site: Powerton CCR

Lab Sample ID: 500-139619-2 **Client Sample ID: ASB** Date Collected: 01/11/18 09:50

Matrix: Water

Date Received: 01/12/18 09:40

Method: 6020A - Metals (ICP/M	S) - Total Re	ecoverable						
Analyte	Result	Qualifier RI	_ MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.35	0.05	<u> </u>	mg/L		01/12/18 14:46	01/15/18 13:27	1
Calcium	110	0.2)	mg/L		01/12/18 14:46	01/15/18 13:27	1

_										
	General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
li	Н	8.2	HF	0.2		SU			01/12/18 16:04	1
1	Total Dissolved Solids	950		10		mg/L			01/14/18 23:55	1
(Chloride	180		10		mg/L			01/18/18 22:24	5
1	luoride	0.46		0.10		mg/L			01/25/18 11:36	1
5	Sulfate	220		50		mg/L			01/18/18 07:19	10

Electronic Filing Perfectives / Glors's Office 07/19/2019

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

TestAmenea 334 IBF 310-139619-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
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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)

RLReporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin) **TEQ**

TestAmerica Chicago

1/26/2018

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

TestAmenea 335 IBf. 310-139619-1

Metals

Prep	Bato	h: 41	16709
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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139619-1	ABB	Total Recoverable	Water	3005A	
500-139619-2	ASB	Total Recoverable	Water	3005A	
MB 500-416709/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-416709/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 416965

ı	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
į	500-139619-1	ABB	Total Recoverable	Water	6020A	416709
,	500-139619-2	ASB	Total Recoverable	Water	6020A	416709
ı	MB 500-416709/1-A	Method Blank	Total Recoverable	Water	6020A	416709
l	LCS 500-416709/2-A	Lab Control Sample	Total Recoverable	Water	6020A	416709

General Chemistry

Analysis Batch: 416763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139619-1	ABB	Total/NA	Water	SM 2540C	
500-139619-2	ASB	Total/NA	Water	SM 2540C	
MB 500-416763/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-416763/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 416975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method P	rep Batch
500-139619-1	ABB	Total/NA	Water	9040C	
500-139619-2	ASB	Total/NA	Water	9040C	
500-139619-1 DU	ABB	Total/NA	Water	9040C	
500-139619-2 DU	ASB	Total/NA	Water	9040C	

Analysis Batch: 417213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139619-1	ABB	Total/NA	Water	SM 4500 SO4 E	
500-139619-2	ASB	Total/NA	Water	SM 4500 SO4 E	
MB 500-417213/3	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 500-417213/4	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
500-139619-1 MS	ABB	Total/NA	Water	SM 4500 SO4 E	
500-139619-1 MSD	ABB	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 417327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139619-1	ABB	Total/NA	Water	SM 4500 CI- E	
500-139619-2	ASB	Total/NA	Water	SM 4500 CI- E	
MB 500-417327/12	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 500-417327/13	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 418006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-139619-1	ABB	Total/NA	Water	SM 4500 F C	
500-139619-2	ASB	Total/NA	Water	SM 4500 F C	
MB 500-418006/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-418006/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

TestAmerica Chicago

1/26/2018

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Client: KPRG and Associates, Inc.

TestAmerica 306 IB: 300-139619-1

Client Sample ID: Lab Control Sample

Client Sample ID: ABB

Client Sample ID: ASB

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

10

Project/Site: Powerton CCR

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-416709/1-A **Matrix: Water**

Analysis Batch: 416965

Client Sample ID: Method Blank Prep Type: Total Recoverable Prep Batch: 416709

MB MB

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.050	0.050	mg/L		01/12/18 14:46	01/15/18 12:57	1
Calcium	<0.20	0.20	mg/L		01/12/18 14:46	01/15/18 12:57	1

Lab Sample ID: LCS 500-416709/2-A

Matrix: Water	P	rep Typ	oe: Total I	Recoverable				
Analysis Batch: 416965							Prep Ba	atch: 416709
_	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Boron	1.00	0.988		mg/L		99	80 - 120	
Calcium	10.0	9.54		mg/L		95	80 - 120	

Method: 9040C - pH

Lab Sample ID: 500-139619-1 DU

Matrix: Water

Analysis Batch: 416975

	Sample	Sample	DU	DU					RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D		RPD	Limit
рН	8.4	HF	 8.4		SU		 	0.2	

Lab Sample ID: 500-139619-2 DU

Matrix: Water

Analysis Batch: 416975

Analysis Buton: 410010	Sample	Sample	DU	DU				RPD	ſ
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit	:
рН	8.2	HF	8.3		SU		0.4		

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

Lab Sample ID: MB 500-416763/1

Matrix: Water

Analysis Batch: 416763

MB MB

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10	10	mg/L			01/14/18 22:56	1

Lab Sample ID: LCS 500-416763/2

Matrix: Water

Analysis Batch: 416763

7 manyolo Batom 110100	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Total Dissolved Solids	250	278		mg/L		111	80 - 120	

TestAmerica Chicago

Client: KPRG and Associates, Inc.

TestAmenea 307 IB: 300-139619-1

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: ABB

Prep Type: Total/NA

Project/Site: Powerton CCR

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-417327/12

Matrix: Water

Analysis Batch: 417327

MB MB

Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac D **Prepared** 2.0 01/18/18 21:40 Chloride <2.0 mg/L

Lab Sample ID: LCS 500-417327/13

Matrix: Water

Analysis Batch: 417327

Spike LCS LCS %Rec. Added Limits Analyte Result Qualifier Unit %Rec Chloride 50.0 51.3 mg/L 103 85 - 115

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-418006/3

Matrix: Water

Analysis Batch: 418006

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Fluoride 0.10 01/25/18 11:20 <0.10 mg/L

Lab Sample ID: LCS 500-418006/4

Matrix: Water

Analysis Batch: 418006

LCS LCS Spike %Rec. Analyte Added Result Qualifier %Rec Limits Unit Fluoride 10.0 10.1 mg/L 101 80 - 120

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 500-417213/3

Matrix: Water

Analysis Batch: 417213

MB MB Analyte Result Qualifier RI **MDL** Unit D Dil Fac Prepared Analyzed Sulfate <5.0 5.0 mg/L 01/18/18 07:10

Lab Sample ID: LCS 500-417213/4

Matrix: Water

Analysis Batch: 417213

Spike LCS LCS %Rec. Added Result Qualifier **Analyte** Unit D %Rec Limits Sulfate 20.0 20.6 mg/L 103 80 - 120

Lab Sample ID: 500-139619-1 MS

Matrix: Water

Analysis Batch: 417213

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Sulfate 250 400 671 mg/L 106 75 - 125

TestAmerica Chicago

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PCB 2013-15

Client Sample ID: ABB

Prep Type: Total/NA

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmeriea 308 IB: 300-139619-1

Project/Site: Powerton CCR

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

Lab Sample ID: 500-139619-1 MSD

Matrix: Water

Analysis Batch: 417213

,	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Sulfate	250		400	602		mg/L		89	75 - 125	11	20

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Exhibit D

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

TestAmerica 309 ID: 300-139619-1

Date Received: 01/12/18 09:40

Client Sample ID: ABB Lab Sample ID: 500-139619-1 Date Collected: 01/11/18 09:35

Matrix: Water

Batch Batch Dilution Batch Prepared **Prep Type** Method Type Run **Factor** Number or Analyzed Analyst Lab Total Recoverable Prep 3005A 416709 01/12/18 14:46 BDE TAL CHI Total Recoverable 6020A 416965 01/15/18 13:24 FXG TAL CHI Analysis 1 Total/NA Analysis 9040C 416975 TAL CHI (Start) 01/12/18 16:00 (End) 01/12/18 16:02 Total/NA Analysis SM 2540C 416763 01/14/18 23:52 CLB TAL CHI TAL CHI Total/NA Analysis SM 4500 CI- E 1 417327 01/18/18 21:46 HMW Total/NA TAL CHI Analysis SM 4500 F C 1 418006 01/25/18 11:33 EAT Total/NA Analysis SM 4500 SO4 E 10 417213 TAL CHI (Start) 01/18/18 07:16

Lab Sample ID: 500-139619-2 Client Sample ID: ASB

(End) 01/18/18 07:17

Date Collected: 01/11/18 09:50 **Matrix: Water**

Date Received: 01/12/18 09:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			416709	01/12/18 14:46	BDE	TAL CH
Total Recoverable	Analysis	6020A		1	416965	01/15/18 13:27	FXG	TAL CH
Total/NA	Analysis	9040C		1	416975		SMO	TAL CH
					(Start) 0	1/12/18 16:04		
					(End) (1/12/18 16:06		
Total/NA	Analysis	SM 2540C		1	416763	01/14/18 23:55	CLB	TAL CH
Total/NA	Analysis	SM 4500 CI- E		5	417327	01/18/18 22:24	HMW	TAL CH
Total/NA	Analysis	SM 4500 F C		1	418006	01/25/18 11:36	EAT	TAL CH
Total/NA	Analysis	SM 4500 SO4 E		10	417213		CLB	TAL CH
					(Start) 0	1/18/18 07:19		
					(End) (1/18/18 07:20		

Laboratory References:

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

TestAmerica Chicago

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc.

TestAmerica 340 IBf 311-139619-1

Project/Site: Powerton CCR

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-18

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THE LEADER IN EN

MS - Miscellaneous OL - Oil

A – Air

O - Other

THE P	LEADER IN ENVIRONMEN 2417 Bond Street, University Park, hone: 708.534.5200 Fax: 708	TAL TESTING IL 60484 .534.5211	Conf Com Addi Addi Phor Fax: E-Mi	ress:					Contact: _ Company: Address: _ Address: _	-	ffice 0			L C P	ab Job #:	Custo Page 2 dy Number: of	2013-15 dy Record
Client K	PRG&Assoc.	Client Project # 🧸	2351	7		rvative	3	8			ļ						Preservative Key 1. HCL, Cool to 4° 2. H2SO4, Cool to 4°
Project Loca Sampler	NRG Ition/State TL LR/MW	Lab Project #			-	meter	ر ۲۵	, FL, PH,						500		}	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		Sam Date	pling Time	# of Containers	Matrix	8	52,00						300	0-139619 C	COC	Comments
1	ABB		1/11/18	0935		W	×	×								•	
2	ASB		1/11/18	0950	2	ω	X	X_									
													-				
Turnaround	Time Required (Business Days)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Sampl	le Dispos	sal	,									
	2 Days 5 Days 7 D Due Date	ays10 Days1	15 Days	Other		Return	to Client		oosal by Lab	Arc	chive for	Months	(A fee may	be assessed if sa	mples are ret	ained ionger th	nan 1 month)
Relinquished I	when it	G 1	Date Oate Oate	16	ime 3 Z ime 2 CQ		Received By Received By	wil!	Samo	Company Company Company	ALLE	Date Date Date	12/18	Time 3 C	0	Lab Courier Shipped and Delivered	FX Priority
WW - Waste W - Water S - Soil SL - Sludge MS - Miscel	SO – Soil L – Leachate WI – Wipe	Client Comm	ents								Lab Commen	ts:					

TAL-4124502 (12/02) 018

PCB 2013-15 Electronic Filing: Received, Clerk's Office 07/19/2019 Page 242 of 311

Login Sample Receipt Checklist

List Source: TestAmerica Chicago Login Number: 139619

List Number: 1

Creator: Scott, Sherri L

Client: KPRG and Associates, Inc.

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.3
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	

Exhibit D

Job Number: 500-139619-1

TestAmerica Page 243 of 311

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-74121-1

Client Project/Site: Midwest Generation

For:

KPRG and Associates, Inc. 14665 West Lisbon Road, Suite 2B Brookfield, Wisconsin 53005

Attn: Richard Gnat

Carw & Cambu

Authorized for release by: 3/5/2018 1:48:28 PM

Carrie Gamber, Senior Project Manager (412)963-2428

carrie.gamber@testamericainc.com

.....LINKS

Review your project results through

Total Access

Have a Question?



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.

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PCB 2013-15

Exhibit D

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PCB 2013-15

Electronic Filing: Received, Clerk's Office 07/19/2019 Exhibit D Testpaggica 44bJP3180-74121-1

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

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Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 9D: 180-74121-1

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Job ID: 180-74121-1

Laboratory: TestAmerica Pittsburgh

Narrative

CASE NARRATIVE

Client: KPRG and Associates, Inc.

Project: Midwest Generation

Report Number: 180-74121-1

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 01/12/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.8 C.

IC

Several samples were diluted due to the nature of the sample matrix. Elevated reporting limits (RLs) were provided. The dilutions were dependent on conductivity pre-screen of the samples.

Sulfate failed the recovery criteria low for the MS/MSD of sample ASB - NATURAL (180-74121-22) in batch 180-236373.

METALS

The following sample were digested at a diluted level due to the nature of the sample matrix: ABB - PH 13.0 (180-74121-2), ABB - PH 12.0 (180-74121-3), ABB - PH 2.0 (180-74121-10). Elevated reporting limits (RLs) are provided.

Several samples were diluted due to the nature of the sample matrix and/or to bring the concentration of boron and calcium within the linear range. Elevated reporting limits (RLs) are provided.

GENERAL CHEMISTRY

Due to the matrix, the initial volumes used for several samples deviated from the standard procedure for TDS.

The Conductivity of the sample was greater than that of what the instrument could detect. The sample result was reported as >100000 umhos/cm (>100 MS), since the method states that for conductivity the sample can not be diluted. B02 (180-74121-24).

The pH for the following sample was outside the instrument calibration range of pH 2 to pH 13 . The sample results was < 0 pH SU units therefore the result was reported as <1.00: B02 (180-74121-24).

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 05.3110-74121-1

Qualifiers

HPLC/IC

F1 MS and/or MSD Recovery 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 repor	rt.
--	-----

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)

TestAmerica Pittsburgh

3/5/2018

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 1D: 180-74121-1

Laboratory: TestAmerica Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

hority	Program		EPA Region	Identification Number	Expiration Date
nois	NELAP		5	200005	06-30-18
The following analytes	s are included in this repo	rt, but are not accre	dited/certified under	this accreditation/certification	n:
Analysis Method	Prep Method	Matrix	Analy	te	
SM 2510B		Solid	Speci	fic Conductance	
SM 2540C		Solid	Total	Dissolved Solids	
The following analytes	are included in this repo	rt, but accreditation/	certification is not of	fered by the governing author	ority:
Analysis Method	Prep Method	Matrix	Analy	to	
,a., o.oo	i icp incliida	IVICUIA	Allaly	ic	
2540G		Solid		ent Moisture	
	i rep intettiou		Perce		

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PCB 2013-15

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 95.3110-74121-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-74121-1	ABB - PRETEST	Solid	01/11/18 09:40 0	01/12/18 09:10
180-74121-2	ABB - PH 13.0	Solid	01/11/18 09:40 0	01/12/18 09:10
180-74121-3	ABB - PH 12.0	Solid	01/11/18 09:40 0	01/12/18 09:10
180-74121-4	ABB - PH 10.5	Solid	01/11/18 09:40 0	01/12/18 09:10
180-74121-6	ABB - PH 8.0	Solid	01/11/18 09:40 0	01/12/18 09:10
180-74121-7	ABB - PH 7.0	Solid	01/11/18 09:40 0	01/12/18 09:10
180-74121-8	ABB - PH 5.5	Solid	01/11/18 09:40 0	01/12/18 09:10
180-74121-9	ABB - PH 4.0	Solid	01/11/18 09:40 0	01/12/18 09:10
180-74121-10	ABB - PH 2.0	Solid	01/11/18 09:40 0	01/12/18 09:10
180-74121-11	ABB- NATURAL	Solid	01/11/18 09:40 0	01/12/18 09:10
180-74121-12	ASB - PRETEST	Solid	01/11/18 09:55 0	01/12/18 09:10
180-74121-13	ASB - PH 13.0	Solid	01/11/18 09:55 0	01/12/18 09:10
180-74121-14	ASB- PH 12.0	Solid	01/11/18 09:55 0	01/12/18 09:10
180-74121-15	ASB - PH 10.5	Solid	01/11/18 09:55 0	01/12/18 09:10
180-74121-17	ASB - PH 8.0	Solid	01/11/18 09:55 0	01/12/18 09:10
180-74121-18	ASB - PH 7.0	Solid	01/11/18 09:55 0	01/12/18 09:10
180-74121-19	ASB - PH 5.5	Solid	01/11/18 09:55 0	01/12/18 09:10
180-74121-20	ASB - PH 4.0	Solid	01/11/18 09:55 0	01/12/18 09:10
180-74121-21	ASB - PH 2.0	Solid	01/11/18 09:55 0	01/12/18 09:10
180-74121-22	ASB - NATURAL	Solid	01/11/18 09:55 0	01/12/18 09:10
180-74121-23	B01	Solid	01/11/18 00:00 0	01/12/18 09:10
180-74121-24	B02	Solid	01/11/18 00:00 0	01/12/18 09:10
180-74121-25	B03	Solid	01/11/18 00:00 0	01/12/18 09:10
180-74121-26	ABB - AIR DRIED	Solid	01/11/18 09:40 0	01/12/18 09:10
180-74121-27	ASB - AIR DRIED	Solid	01/11/18 09:55 0	01/12/18 09:10

PCB 2013-15

Electronic Filing: Received Clerk's Office 07/19/2019 Exhibit D

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 95.311

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

Protocol References:

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

SM22 = SM22

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

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Exhibit D

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 250 of 311 180-74121-1

Client Sample ID: ABB - PRETEST

Date Collected: 01/11/18 09:40 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74121-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	2540G at ID: NOEQUIP		1			234952	01/24/18 06:29	CLL	TAL PIT
Leach	Leach	1313			42.3 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 13:38	MTW	TAL PIT
Leach	Leach	1313			42.3 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 13:44	MTW	TAL PIT
Leach	Leach	1313			42.3 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1	-		237380	02/12/18 13:50	MTW	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	237733	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1	-		237737	02/16/18 12:32	MTW	TAL PIT

Client Sample ID: ABB - PH 13.0

Date Collected: 01/11/18 09:40

Lab Sample ID: 180-74121-2

Matrix: Solid

Date Received: 01/12/18 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			42.3 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2000		50			236553	02/09/18 20:54	CMR	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			5 mL	50 mL	236440	02/08/18 11:28	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: A		1			236729	02/10/18 00:22	WTR	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			5 mL	50 mL	236440	02/08/18 11:28	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: M		1			236828	02/13/18 03:15	WTR	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			236465	02/07/18 12:01	MTW	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1	-		236475	02/07/18 11:39	MTW	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	4 mL	100 mL	237078	02/15/18 14:59	KXW	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B at ID: NOEQUIP		1			236472	02/07/18 11:37	MTW	TAL PIT

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 9D. 180-74121-1

Client Sample ID: ABB - PH 12.0

Date Collected: 01/11/18 09:40 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74121-3

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A at ID: CHIC2100A		10			236732	02/13/18 06:23	MJH	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			5 mL	50 mL	236807	02/13/18 13:38	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A at ID: M		1			237198	02/15/18 22:06	WTR	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 13:47	MTW	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2510B at ID: NOEQUIP		1			237425	02/12/18 13:26	MTW	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	10 mL	100 mL	237078	02/15/18 14:59	KXW	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2580B at ID: NOEQUIP		1			237422	02/12/18 13:25	MTW	TAL PIT

Client Sample ID: ABB - PH 10.5

Date Collected: 01/11/18 09:40 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74121-4

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			42.3 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2000		5			237859	02/26/18 15:10	MJH	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2000		50			237859	02/26/18 15:26	MJH	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237311	02/19/18 13:03	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: A		1			237590	02/21/18 01:08	WTR	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237311	02/19/18 13:03	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: M		1			237713	02/22/18 04:12	WTR	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			237737	02/16/18 12:27	MTW	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1			237752	02/16/18 12:33	MTW	TAL PIT

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 350 of 311

Client Sample ID: ABB - PH 10.5

Date Collected: 01/11/18 09:40 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74121-4

Matrix: Solid

Prep Type Leach Leach	Batch Type Leach Analysis Instrumen	Batch Method 1313 SM 2540C It ID: NOEQUIP	Run	Factor 1	Amount 42.3 g 50 mL	Amount 400 mL 100 mL	Batch Number 237165 237329	Prepared or Analyzed 02/14/18 08:00 02/19/18 15:41	Analyst LWM KXW	Lab TAL PIT TAL PIT
Leach	Leach	1313			42.3 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B at ID: NOEQUIP		1			237751	02/16/18 12:36	MTW	TAL PIT

Lab Sample ID: 180-74121-6 Client Sample ID: ABB - PH 8.0 **Matrix: Solid**

Date Collected: 01/11/18 09:40

Date Received: 01/12/18 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	EPA 9056A		2.5			236732	02/13/18 06:39	MJH	TAL PIT
	Instrumer	nt ID: CHIC2100A								
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	EPA 9056A		25			236732	02/13/18 06:54	MJH	TAL PIT
	Instrumer	nt ID: CHIC2100A								
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236807	02/13/18 13:38	KA	TAL PIT
Leach	Analysis	EPA 6020A		1			237198	02/15/18 22:02	WTR	TAL PIT
	Instrumer	nt ID: M								
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	EPA 9040C		1			237380	02/12/18 13:41	MTW	TAL PIT
	Instrumer	nt ID: NOEQUIP								
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	SM 2510B		1			237425	02/12/18 13:21	MTW	TAL PIT
	Instrumer	nt ID: NOEQUIP								
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	SM 2540C		1	25 mL	100 mL	237078	02/15/18 14:59	KXW	TAL PIT
	Instrumer	nt ID: NOEQUIP								
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT

Client Sample ID: ABB - PH 7.0

Analysis

SM 2580B

Instrument ID: NOEQUIP

Date Collected: 01/11/18 09:40

Leach

Date Received: 01/12/18 09:10

Lab Sample ID:	180-74121-7
	Matrix: Solid

02/12/18 13:19 MTW

237422

TAL PIT

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1313			42.3 g	400 mL	237761			TAL PIT
Leach	Analysis Instrumen	EPA 9056A t ID: CHICS2000		10			237859	02/26/18 08:41	MJH	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	237761	02/21/18 10:00	LWM	TAL PIT

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 353 95.3130-74121-1

Client Sample ID: ABB - PH 7.0

Date Collected: 01/11/18 09:40 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74121-7

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2000		100	·		237859	02/26/18 10:34	MJH	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	237761	02/21/18 10:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237767	02/23/18 12:01	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: A		1			237942	02/24/18 17:22	WTR	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	237761	02/21/18 10:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237767	02/23/18 12:01	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: M		10			238052	02/27/18 09:55	WTR	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	237761	02/21/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			237772	02/23/18 10:06	MTW	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	237761	02/21/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1			237776	02/23/18 10:08	MTW	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	237761	02/21/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	25 mL	100 mL	238055	02/27/18 15:07	KXW	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	237761	02/21/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B at ID: NOEQUIP		1			237774	02/23/18 10:06	MTW	TAL PIT

Client Sample ID: ABB - PH 5.5

Date Collected: 01/11/18 09:40 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74121-8

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A nt ID: CHIC2100A		10			236732	02/13/18 07:09	MJH	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236807	02/13/18 13:38	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A nt ID: M		10			237323	02/16/18 20:24	WTR	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C nt ID: NOEQUIP		1			237380	02/12/18 13:53	MTW	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2510B nt ID: NOEQUIP		1			237425	02/12/18 13:31	MTW	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2540C nt ID: NOEQUIP		1	10 mL	100 mL	237078	02/15/18 14:59	KXW	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT

TestAmerica Pittsburgh

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 95.3110-74121-1

Client Sample ID: ABB - PH 5.5

Date Collected: 01/11/18 09:40 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74121-8

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab	
Leach	Analysis	SM 2580B		1			237422	02/12/18 13:32	MTW	TAL PIT	_
	Instrument	ID: NOEQUIP									

Client Sample ID: ABB - PH 4.0 Lab Sample ID: 180-74121-9

Date Collected: 01/11/18 09:40 Date Received: 01/12/18 09:10 Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
₋each	Leach	1313			42.3 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
_each	Analysis	EPA 9056A		25			236377	02/08/18 19:08	MJH	TAL PIT
	Instrumer	nt ID: CHIC2100A								
_each	Leach	1313			42.3 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
_each	Prep	3010A			50 mL	50 mL	236440	02/08/18 11:28	KA	TAL PIT
_each	Analysis	EPA 6020A		10			236828	02/13/18 03:19	WTR	TAL PIT
	Instrumer	nt ID: M								
_each	Leach	1313			42.3 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
₋each	Analysis	EPA 9040C		1			236465	02/07/18 12:16	MTW	TAL PIT
	Instrumer	nt ID: NOEQUIP								
_each	Leach	1313			42.3 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
_each	Analysis	SM 2510B		1			236475	02/07/18 12:05	MTW	TAL PIT
	Instrumer	nt ID: NOEQUIP								
_each	Leach	1313			42.3 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
_each	Analysis	SM 2540C		1	5 mL	100 mL	236785	02/13/18 10:45	KXW	TAL PIT
	Instrumer	nt ID: NOEQUIP								
.each	Leach	1313			42.3 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
_each	Analysis	SM 2580B		1			236472	02/07/18 11:58	MTW	TAL PIT

Client Sample ID: ABB - PH 2.0

Date Collected: 01/11/18 09:40

Lab Sample ID: 180-74121-10

Matrix: Solid

Date Received: 01/12/18 09:10

Instrument ID: NOEQUIP

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			42.3 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis	EPA 9056A		100	1 mL	1.0 mL	237598	02/22/18 11:00	MJH	TAL PI
	Instrumer	t ID: CHICS2000								
Leach	Leach	1313			42.3 g	400 mL	237381	02/17/18 10:00	LWM	TAL PI
Leach	Prep	3010A			5 mL	50 mL	237767	02/23/18 12:01	KA	TAL PI
Leach	Analysis	EPA 6020A		10			237942	02/24/18 17:11	WTR	TAL PI
	Instrumer	nt ID: A								
Leach	Leach	1313			42.3 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Prep	3010A			5 mL	50 mL	237767	02/23/18 12:01	KA	TAL PIT
Leach	Analysis	EPA 6020A		10			238052	02/27/18 09:41	WTR	TAL PI
	Instrumer	nt ID: M								

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Jop 95 3110-74121-1

Client Sample ID: ABB - PH 2.0

Date Collected: 01/11/18 09:40 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74121-10

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			42.3 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			237531	02/19/18 10:25	MTW	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1			237553	02/19/18 10:30	MTW	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	2 mL	100 mL	237940	02/26/18 14:33	KXW	TAL PIT
Leach	Leach	1313			42.3 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B It ID: NOEQUIP		1			237550	02/19/18 10:27	MTW	TAL PIT

Client Sample ID: ABB- NATURAL

Date Collected: 01/11/18 09:40

Lab Sample ID: 180-74121-11

Matrix: Solid

Date Received: 01/12/18 09:10 **Batch** Batch Dil Initial **Final Batch** Prepared **Prep Type** Type Method Run Factor Amount Amount Number or Analyzed **Analyst** Lab 1313 42.3 g 400 mL 236165 02/05/18 11:30 LWM TAL PIT Leach Leach Leach Analysis **EPA 9056A** 236373 02/08/18 08:53 MJH TAL PIT 1 Instrument ID: CHICS2100B Leach 1313 42.3 g 400 mL 236165 02/05/18 11:30 LWM TAL PIT Leach Leach Analysis **EPA 9056A** 10 236373 02/08/18 09:08 MJH TAL PIT Instrument ID: CHICS2100B Leach Leach 1313 42.3 g 400 mL 236165 02/05/18 11:30 LWM TAL PIT Leach Prep 3010A 50 mL 50 mL 236437 02/08/18 11:22 KA TAL PIT Leach Analysis **EPA 6020A** 236729 02/09/18 22:54 WTR TAL PIT Instrument ID: A Leach 1313 42.3 g 400 mL 236165 02/05/18 11:30 LWM TAL PIT Leach 50 mL 3010A 50 mL 236437 TAL PIT Leach Prep 02/08/18 11:22 KA Leach Analysis **EPA 6020A** 236828 02/13/18 00:44 WTR TAL PIT Instrument ID: M 1313 236165 02/05/18 11:30 LWM TAL PIT Leach Leach 42.3 g 400 mL **EPA 9040C** 236465 Leach Analysis 02/07/18 12:19 MTW TAL PIT Instrument ID: NOEQUIP Leach Leach 1313 42.3 g 400 mL 236165 02/05/18 11:30 LWM TAL PIT 236475 02/07/18 12:09 MTW TAL PIT Leach Analysis SM 2510B 1 Instrument ID: NOEQUIP 42.3 g 400 mL 236165 02/05/18 11:30 LWM TAL PIT Leach 1313 Leach Leach Analysis SM 2540C 100 mL 100 mL 236785 02/13/18 10:45 KXW TAL PIT Instrument ID: NOEQUIP Leach 1313 400 mL 236165 02/05/18 11:30 LWM TAL PIT Leach 42.3 g Leach Analysis SM 2580B 1 236472 02/07/18 12:03 MTW TAL PIT Instrument ID: NOEQUIP

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 356 95.3180-74121-1

Client Sample ID: ASB - PRETEST

Date Collected: 01/11/18 09:55 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74121-12

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	2540G at ID: NOEQUIP		1			234952	01/24/18 06:29	CLL	TAL PIT
Leach	Leach	1313			40.4 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 13:59	MTW	TAL PIT
Leach	Leach	1313			40.4 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 14:03	MTW	TAL PIT
Leach	Leach	1313			40.4 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 14:12	MTW	TAL PIT
Leach	Leach	1313			40.4 g	950 mL	237107	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 14:15	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237733	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			237737	02/16/18 12:43	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237733	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			237737	02/16/18 12:49	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			237531	02/19/18 10:31	MTW	TAL PIT

Client Sample ID: ASB - PH 13.0

Date Collected: 01/11/18 09:55 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74121-13

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A nt ID: CHICS2000		50			236553	02/09/18 21:26	CMR	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236440	02/08/18 11:28	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A nt ID: A		1			236729	02/10/18 00:27	WTR	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236440	02/08/18 11:28	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A nt ID: M		1			236828	02/13/18 03:24	WTR	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C nt ID: NOEQUIP		1			236465	02/07/18 11:52	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 9D: 180-74121-1

Client Sample ID: ASB - PH 13.0

Date Collected: 01/11/18 09:55 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74121-13

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Analysis Instrumer	SM 2510B at ID: NOEQUIP		1			236475	02/07/18 11:32	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	3 mL	100 mL	236825	02/13/18 15:26	KXW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2580B at ID: NOEQUIP		1			236472	02/07/18 11:29	MTW	TAL PIT

Lab Sample ID: 180-74121-14 Client Sample ID: ASB- PH 12.0

Date Collected: 01/11/18 09:55

Date Received: 01/12/18 09:10

Dran Tura	Batch	Batch Method	Dun	Dil	Initial	Final	Batch Number	Prepared	Amalyat	l ab
Prep Type	Type		Run	Factor	Amount	Amount		or Analyzed	Analyst LWM	Lab
Leach	Leach	1313		-	40.4 g	400 mL	237165	02/14/18 08:00		TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2000		5			237859	02/26/18 15:42	MJH	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237311	02/19/18 13:03	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: A		1			237590	02/21/18 01:11	WTR	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237311	02/19/18 13:03	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: M		1			237713	02/22/18 04:16	WTR	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			237737	02/16/18 12:38	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1			237752	02/16/18 12:40	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	25 mL	100 mL	237329	02/19/18 15:41	KXW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237165	02/14/18 08:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B at ID: NOEQUIP		1			237751	02/16/18 12:44	MTW	TAL PIT

Client Sample ID: ASB - PH 10.5

Date Collected: 01/11/18 09:55

Date Received: 01/12/18 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.4 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT

TestAmerica Pittsburgh

Lab Sample ID: 180-74121-15

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Matrix: Solid

Matrix: Solid

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

Date Received: 01/12/18 09:10

TestAmerica 358 95.3110-74121-1

Lab Sample ID: 180-74121-15 Client Sample ID: ASB - PH 10.5 Date Collected: 01/11/18 09:55

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Analysis Instrumer	EPA 9056A at ID: CHICS2000		1	1 mL	1.0 mL	237598	02/22/18 13:55	MJH	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A at ID: CHICS2000		5	1 mL	1.0 mL	237598	02/22/18 14:11	MJH	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237537	02/21/18 11:22	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A at ID: A		1			237821	02/23/18 11:37	RSK	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237537	02/21/18 11:22	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A nt ID: M		1			238052	02/26/18 21:24	WTR	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C nt ID: NOEQUIP		1			237531	02/19/18 10:06	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2510B at ID: NOEQUIP		1	-		237553	02/19/18 10:12	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2540C nt ID: NOEQUIP		1	100 mL	100 mL	237940	02/26/18 14:33	KXW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237381	02/17/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2580B nt ID: NOEQUIP		1	-		237550	02/19/18 10:06	MTW	TAL PIT

Client Sample ID: ASB - PH 8.0

Lab Sample ID: 180-74121-17 Date Collected: 01/11/18 09:55 **Matrix: Solid**

Date Received: 01/12/18 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.4 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	EPA 9056A		2.5			236732	02/13/18 07:40	MJH	TAL PIT
	Instrumer	t ID: CHIC2100A								
Leach	Leach	1313			40.4 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236807	02/13/18 13:38	KA	TAL PIT
Leach	Analysis	EPA 6020A		1			237198	02/15/18 22:16	WTR	TAL PIT
	Instrumer	nt ID: M								
Leach	Leach	1313			40.4 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	EPA 9040C		1			237380	02/12/18 14:09	MTW	TAL PIT
	Instrumer	t ID: NOEQUIP								
Leach	Leach	1313			40.4 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	SM 2510B		1			237425	02/12/18 13:52	MTW	TAL PIT
	Instrumer	it ID: NOEQUIP								
Leach	Leach	1313			40.4 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 9D 3110-74121-1

Client Sample ID: ASB - PH 8.0

Date Collected: 01/11/18 09:55 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74121-17

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Analysis	SM 2540C		1	50 mL	100 mL	237078	02/15/18 14:59	KXW	TAL PIT
	Instrumer	t ID: NOEQUIP								
Leach	Leach	1313			40.4 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	SM 2580B		1			237422	02/12/18 13:51	MTW	TAL PIT
	Instrumer	t ID: NOEQUIP								

Client Sample ID: ASB - PH 7.0

Date Collected: 01/11/18 09:55

Date Received: 01/12/18 09:10

Lab Sample ID: 180-74121-18

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.4 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A at ID: CHIC2100A		2.5			236732	02/13/18 10:28	MJH	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A at ID: CHICS2000		5			236891	02/14/18 14:01	MJH	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236807	02/13/18 13:38	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A at ID: M		1			237198	02/15/18 22:20	WTR	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 14:06	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2510B at ID: NOEQUIP		1			237425	02/12/18 13:47	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	25 mL	100 mL	237078	02/15/18 14:59	KXW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	SM 2580B		1			237422	02/12/18 13:44	MTW	TAL PIT

Client Sample ID: ASB - PH 5.5

Instrument ID: NOEQUIP

Date Collected: 01/11/18 09:55

Date Received: 01/12/18 09:10

Lab Samp	le ID:	180-7	412	21-19	
			. =		

Matrix: Solid

- I	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.4 g	400 mL	238030	02/26/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A at ID: CHICS2000		10			238212	03/01/18 08:38	MJH	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	238030	02/26/18 10:00	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	238166	02/28/18 13:51	KA	TAL PIT

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 360 95.3130-74121-1

Client Sample ID: ASB - PH 5.5

Date Collected: 01/11/18 09:55 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74121-19

Matrix: Solid

Bran Tuna	Batch	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Prep Type	Type		_ Kuii		Amount	Alliount		•	Analyst	
Leach	Analysis Instrumen	EPA 6020A at ID: M		10			238310	03/01/18 01:11	WTR	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	238030	02/26/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			238129	02/28/18 09:00	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	238030	02/26/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1			238130	02/28/18 09:00	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	238030	02/26/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	25 mL	100 mL	238132	02/28/18 10:41	KXW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	238030	02/26/18 10:00	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B at ID: NOEQUIP		1			238131	02/28/18 09:00	MTW	TAL PIT

Lab Sample ID: 180-74121-20 Client Sample ID: ASB - PH 4.0

Date Collected: 01/11/18 09:55 **Matrix: Solid** Date Received: 01/12/18 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A at ID: CHIC2100A		25			236377	02/08/18 19:38	MJH	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236440	02/08/18 11:28	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: M		10			236828	02/13/18 03:29	WTR	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			236465	02/07/18 11:46	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1			236475	02/07/18 11:29	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	5 mL	100 mL	236785	02/13/18 10:45	KXW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B at ID: NOEQUIP		1	-		236472	02/07/18 11:25	MTW	TAL PIT

Exhibit D

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmenca Job 95.3180-74121-1

Client Sample ID: ASB - PH 2.0

Date Collected: 01/11/18 09:55 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74121-21

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.4 g	400 mL	237539	02/19/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9056A t ID: CHICS2000		100			237721	02/23/18 10:54	MJH	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237539	02/19/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237582	02/21/18 15:34	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A t ID: A		50			237942	02/24/18 17:19	WTR	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237539	02/19/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237582	02/21/18 15:34	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A t ID: M		50			238052	02/26/18 22:37	WTR	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237539	02/19/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C t ID: NOEQUIP		1			237560	02/21/18 10:17	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237539	02/19/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B t ID: NOEQUIP		1	· ·		237563	02/21/18 10:17	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237539	02/19/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	2 mL	100 mL	237940	02/26/18 14:33	KXW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	237539	02/19/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B t ID: NOEQUIP		1	-		237562	02/21/18 10:17	MTW	TAL PIT

Client Sample ID: ASB - NATURAL

Date Collected: 01/11/18 09:55 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74121-22

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A at ID: CHICS2100B		1			236373	02/08/18 09:56	MJH	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236437	02/08/18 11:22	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A nt ID: A		1			236729	02/09/18 22:57	WTR	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236437	02/08/18 11:22	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A nt ID: M		1			236828	02/13/18 01:01	WTR	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C nt ID: NOEQUIP		1			236465	02/07/18 12:23	MTW	TAL PIT
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 262 95.3180-74121-1

Client Sample ID: ASB - NATURAL

Date Collected: 01/11/18 09:55 Date Received: 01/12/18 09:10 Lab Sample ID: 180-74121-22

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Analysis	SM 2510B		1			236475	02/07/18 12:12	MTW	TAL PIT
	Instrumer	t ID: NOEQUIP								
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis	SM 2540C		1	100 mL	100 mL	236785	02/13/18 10:45	KXW	TAL PIT
	Instrumer	t ID: NOEQUIP								
Leach	Leach	1313			40.4 g	400 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis	SM 2580B		1			236472	02/07/18 12:07	MTW	TAL PIT
	Instrumer	t ID: NOEQUIP								

Client Sample ID: B01 Lab Sample ID: 180-74121-23

Date Collected: 01/11/18 00:00 Matrix: Solid

Date Received: 01/12/18 09:10

	Batch	Batch	_	Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			1.0 g	2000 mL	236165	02/05/18 11:30		TAL PIT
Leach	Analysis Instrumer	EPA 9056A at ID: CHICS2100B		1			236373	02/08/18 08:37	MJH	TAL PIT
Leach	Leach	1313			1.0 g	2000 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236437	02/08/18 11:22	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A at ID: A		1			236729	02/09/18 22:51	WTR	TAL PIT
Leach	Leach	1313			1.0 g	2000 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236437	02/08/18 11:22	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A at ID: M		1			236828	02/13/18 00:39	WTR	TAL PIT
Leach	Leach	1313			1.0 g	2000 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			236465	02/07/18 13:39	MTW	TAL PIT
Leach	Leach	1313			1.0 g	2000 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2510B at ID: NOEQUIP		1			236475	02/07/18 13:54	MTW	TAL PIT
Leach	Leach	1313			1.0 g	2000 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	236785	02/13/18 10:45	KXW	TAL PIT
Leach	Leach	1313			1.0 g	2000 mL	236165	02/05/18 11:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2580B at ID: NOEQUIP		1			236472	02/07/18 13:52	MTW	TAL PIT

Client Sample ID: B02 Lab Sample ID: 180-74121-24

Date Collected: 01/11/18 00:00 Date Received: 01/12/18 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			1.0 g	400 mL	237539	02/19/18 08:30	LWM	TAL PIT

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Matrix: Solid

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 363 95.3130-74121-1

Lab Sample ID: 180-74121-24 Client Sample ID: B02 Date Collected: 01/11/18 00:00

Matrix: Solid

Date Received: 01/12/18 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Analysis Instrumen	EPA 9056A at ID: CHICS2000		250			237721	02/23/18 11:25	MJH	TAL PIT
Leach	Leach	1313			1.0 g	400 mL	237539	02/19/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237582	02/21/18 15:34	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: A		1			237821	02/23/18 12:33	RSK	TAL PIT
Leach	Leach	1313			1.0 g	400 mL	237539	02/19/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	237582	02/21/18 15:34	KA	TAL PIT
Leach	Analysis Instrumen	EPA 6020A at ID: M		1			238052	02/26/18 22:42	WTR	TAL PIT
Leach	Leach	1313			1.0 g	400 mL	237539	02/19/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	EPA 9040C at ID: NOEQUIP		1			237560	02/21/18 10:23	MTW	TAL PIT
Leach	Leach	1313			1.0 g	400 mL	237539	02/19/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2510B at ID: NOEQUIP		1			237563	02/21/18 10:21	MTW	TAL PIT
Leach	Leach	1313			1.0 g	400 mL	237539	02/19/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	1 mL	100 mL	237940	02/26/18 14:33	KXW	TAL PIT
Leach	Leach	1313			1.0 g	400 mL	237539	02/19/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumen	SM 2580B at ID: NOEQUIP		1			237562	02/21/18 10:23	MTW	TAL PIT

Client Sample ID: B03 Lab Sample ID: 180-74121-25 **Matrix: Solid**

Date Collected: 01/11/18 00:00 Date Received: 01/12/18 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Leach	1313			1.0 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A at ID: CHIC2100A		50			236732	02/13/18 10:59	MJH	TAL PIT
Leach	Leach	1313			1.0 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9056A at ID: CHICS2000		100			236891	02/14/18 14:17	MJH	TAL PIT
Leach	Leach	1313			1.0 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Prep	3010A			50 mL	50 mL	236807	02/13/18 13:38	KA	TAL PIT
Leach	Analysis Instrumer	EPA 6020A at ID: M		1			237198	02/15/18 21:57	WTR	TAL PIT
Leach	Leach	1313			1.0 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	EPA 9040C at ID: NOEQUIP		1			237380	02/12/18 15:47	MTW	TAL PIT
Leach	Leach	1313			1.0 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis Instrumer	SM 2510B at ID: NOEQUIP		1			237425	02/12/18 15:44	MTW	TAL PIT
Leach	Leach	1313			1.0 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT

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TestAmerica Job 95:180-74121-1

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

Client Sample ID: B03

Lab Sample ID: 180-74121-25 Date Collected: 01/11/18 00:00

Matrix: Solid

Date Received: 01/12/18 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Leach	Analysis	SM 2540C		1	3 mL	100 mL	237078	02/15/18 14:59	KXW	TAL PIT
	Instrumer	nt ID: NOEQUIP								
Leach	Leach	1313			1.0 g	400 mL	236722	02/10/18 08:30	LWM	TAL PIT
Leach	Analysis	SM 2580B		1			237422	02/12/18 15:47	MTW	TAL PIT
	Instrumer	nt ID: NOEQUIP								

Client Sample ID: ABB - AIR DRIED

Lab Sample ID: 180-74121-26 Date Collected: 01/11/18 09:40

Matrix: Solid

Date Received: 01/12/18 09:10

Batch Batch Dil Initial Final **Batch** Prepared Method **Prep Type** Type Run **Factor Amount Amount** Number or Analyzed Analyst Lab Total/NA Analysis 2540G 235778 02/01/18 13:28 RMA TAL PIT Instrument ID: NOEQUIP

Client Sample ID: ASB - AIR DRIED

Lab Sample ID: 180-74121-27 Date Collected: 01/11/18 09:55 **Matrix: Solid**

Date Received: 01/12/18 09:10

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			235778	02/01/18 13:28	RMA	TAL PIT
	Instrument	ID: NOEQUIP								

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Leach

LWM = Larry Matko

Batch Type: Prep

KA = Kayla Kalamasz

Batch Type: Analysis

CLL = Cheryl Loheyde

CMR = Carl Reagle

KXW = Kaitlyn White

MJH = Matthew Hartman

MTW = Michael Wesoloski

RMA = Rachel Aguiar

RSK = Robert Kurtz

WTR = Bill Reinheimer

Client: KPRG and Associates, Inc.

TestAmerica Job 9D: 180-74121-1

Project/Site: Midwest Generation

Client Sample ID: ABB - PRETEST

Date Collected: 01/11/18 09:40 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74121-1

Matrix: Solid

General Chemistry									
Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	46.7		0.1		%			01/24/18 06:29	1
Percent Solids	53.3		0.1		%			01/24/18 06:29	1

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	7.5	0.1	SU			02/12/18 13:38	1
pH	12.6	0.1	SU			02/12/18 13:44	1
pH	3.8	0.1	SU			02/12/18 13:50	1
pH	4.0	0.1	SU			02/16/18 12:32	1

Client Sample ID: ABB - PH 13.0 Lab Sample ID: 180-74121-2

Date Collected: 01/11/18 09:40

Date Received: 01/12/18 09:10

Matrix: Solid

Matrix: Solid

Method: EPA 9056A - Anions, Ion Chromatography - Leach Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Chloride <50 50 mg/L 02/09/18 20:54 50 **Fluoride** 12 5.0 mg/L 02/09/18 20:54 50 **Sulfate** 640 50 mg/L 02/09/18 20:54 50

Method: EPA 6020A - Metals (I	CP/MS) - Leach	1						
Analyte	Result Quali	lifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	7400	800		ug/L		02/08/18 11:28	02/13/18 03:15	1
Calcium	48000	5000		ug/L		02/08/18 11:28	02/10/18 00:22	1

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	12.7	0.1		SU			02/07/18 12:01	1
Specific Conductance	33000	1.0		umhos/cm			02/07/18 11:39	1
Total Dissolved Solids	13000	250		mg/L			02/15/18 14:59	1
Oxidation Reduction Potential	- 243	10		millivolts			02/07/18 11:37	1

Client Sample ID: ABB - PH 12.0 Lab Sample ID: 180-74121-3

Date Collected: 01/11/18 09:40 Date Received: 01/12/18 09:10

Method: EPA 9056A - Anions	, Ion Chromatography - I	Leach					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22	10	mg/L			02/13/18 06:23	10
Fluoride	6.4	1.0	mg/L			02/13/18 06:23	10
Sulfate	780	10	mg/L			02/13/18 06:23	10

Method: EPA 6020A - Metals	(ICP/MS) - Leach						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Boron	7800	800	ug/L		02/13/18 13:38	02/15/18 22:06	1
Calcium	17000	5000	ug/L		02/13/18 13:38	02/15/18 22:06	1

General Chemistry - Leach									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
рН	12.5		0.1		SU			02/12/18 13:47	1
Specific Conductance	13000		1.0		umhos/cm			02/12/18 13:26	1

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Client: KPRG and Associates, Inc.

TestAmerica Job 9D: 180-74121-1

Project/Site: Midwest Generation

Client Sample ID: ABB - PH 12.0

Date Collected: 01/11/18 09:40 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74121-3

Matrix: Solid

General Chemistry - Leach (C	ontinued)					
Analyte	Result	Qualifier	RL	MDL	Unit	

Analyte	Result	Qualifier	NL.	MIDL	Ullit	D	riepaieu	Allalyzeu	DII Fac
Total Dissolved Solids	6100		100		mg/L			02/15/18 14:59	1
Oxidation Reduction Potential	- 106		10		millivolts			02/12/18 13:25	1

Lab Sample ID: 180-74121-4 Client Sample ID: ABB - PH 10.5

Date Collected: 01/11/18 09:40 Date Received: 01/12/18 09:10

Matrix: Solid

Method: EPA 9056A - Anions, Ion Chromatography - Leach

Analyte	Result Qu	ualifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16	5.0	mg/L			02/26/18 15:10	5
Fluoride	11	0.50	mg/L			02/26/18 15:10	5
Sulfate	740	50	mg/L			02/26/18 15:26	50

Method: EPA 6020A - Metals (ICP/MS) - Leach Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Boron 6400 80 ug/L 02/19/18 13:03 02/22/18 04:12 Calcium 10000 500 ug/L 02/19/18 13:03 02/21/18 01:08

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	10.5	0.1	SU			02/16/18 12:27	1
Specific Conductance	2700	1.0	umhos/cm			02/16/18 12:33	1
Total Dissolved Solids	1900	20	mg/L			02/19/18 15:41	1
Oxidation Reduction Potential	100	10	millivolts			02/16/18 12:36	1

Client Sample ID: ABB - PH 8.0 Lab Sample ID: 180-74121-6

Date Collected: 01/11/18 09:40	Matrix: Solid
Date Received: 01/12/18 09:10	

Method: EPA 9056A - Anio	ns, Ion Chromatogr	raphy - Leach					
Analyte	Result Quali	ifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21	2.5	mg/L			02/13/18 06:39	2.5
Fluoride	1.7	0.25	mg/L			02/13/18 06:39	2.5
Sulfate	860	25	mg/L			02/13/18 06:54	25

Method: EPA 6020A - Metals ((ICP/MS) - Leach							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	4300	80		ug/L		02/13/18 13:38	02/15/18 22:02	1
Calcium	380000	500		ug/L		02/13/18 13:38	02/15/18 22:02	1

General Chemistry - Leach Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0		0.1		SU			02/12/18 13:41	1
Specific Conductance	3900		1.0		umhos/cm			02/12/18 13:21	1
Total Dissolved Solids	3200		40		mg/L			02/15/18 14:59	1
Oxidation Reduction Potential	280		10		millivolts			02/12/18 13:19	1

3/5/2018

SU

mg/L

mg/L

millivolts

umhos/cm

millivolts

Client: KPRG and Associates, Inc.

TestAmerica Job 9D: 180-74121-1

Project/Site: Midwest Generation

Client Sample ID: ABB - PH 7.0

Date Collected: 01/11/18 09:40 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74121-7

Matrix: Solid

Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15		10		mg/L			02/26/18 08:41	10
Fluoride	<1.0		1.0		mg/L			02/26/18 08:41	10
Sulfate	800		100		mg/L			02/26/18 10:34	100
Method: EPA 6020A - M	Metals (ICP/MS) - Lea Result (RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: FPA 6020A - N	Metals (ICP/MS) - Lea	ach							
Analyte	,		RL 800	MDL	Unit ug/L	<u>D</u>	Prepared 02/23/18 12:01	Analyzed 02/27/18 09:55	Dil Fac
	Result C			MDL		<u>D</u>			
Analyte Boron	Result 6 6900 <500		800	MDL	ug/L	<u>D</u>	02/23/18 12:01	02/27/18 09:55	

0.1

1.0

40

10

7.2

7500

6500

19000

260

93

Client Sample ID: ABB - PH 5.5

Date Collected: 01/11/18 09:40

Oxidation Reduction Potential

Specific Conductance

Total Dissolved Solids

pН

Date Received: 01/12/18 09:10

Lab Sample ID: 180-74121-8

Matrix: Solid

02/23/18 10:06

02/23/18 10:08

02/27/18 15:07

02/23/18 10:06

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20		10		mg/L			02/13/18 07:09	10
Fluoride	<1.0		1.0		mg/L			02/13/18 07:09	10
Sulfate	980		10		mg/L			02/13/18 07:09	10
Boron	11000		800		ug/L		02/13/18 13:38	02/16/18 20:24	10
Analyte		Qualifier	RL	MDL		_ D	Prepared	Analyzed	Dil Fac
Calcium	3200000		5000		ug/L		02/13/18 13:38	02/16/18 20:24	10
<u>-</u>									
General Chemistry - Leac	h								
		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
General Chemistry - Leac Analyte pH		Qualifier	RL	MDL	Unit SU	_ D	Prepared	Analyzed 02/12/18 13:53	Dil Fac

100

10

Client Sample ID: ABB - PH 4.0

Date Collected: 01/11/18 09:40

Oxidation Reduction Potential

Total Dissolved Solids

Date Received: 01/12/18 09:10

Lab Sample ID: 180-74121-9

02/15/18 14:59

02/12/18 13:32

Matrix: Solid

Method: EPA 9056A Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<25	25	mg/L			02/08/18 19:08	25
Fluoride	15	2.5	mg/L			02/08/18 19:08	25
Sulfate	880	25	mg/L			02/08/18 19:08	25
Method: EPA 6020A	- Metals (ICP/MS) - Leach						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Boron	12000	800	ug/L		02/08/18 11:28	02/13/18 03:19	10

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1

TestAmerica Job 9D: 180-74121-1

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

Client Sample ID: ABB - PH 4.0

Date Collected: 01/11/18 09:40 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74121-9

Lab Sample ID: 180-74121-10

Lab Sample ID: 180-74121-11

Matrix: Solid

Matrix: Solid

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	5700000		5000		ug/L		02/08/18 11:28	02/13/18 03:19	10
General Chemistry - Leach									
	Descrit	Qualifier	RL	MDL	Unit	D.	Prepared	Analyzed	Dil Fac
Analyte	Result	Qualifier	NL.	IVIDE	Offic	U	riepaieu	Allalyzeu	Diriac

31000 1.0 umhos/cm 02/07/18 12:05 **Specific Conductance** 200 **Total Dissolved Solids** mg/L 02/13/18 10:45 33000 **Oxidation Reduction Potential** 330 10 millivolts 02/07/18 11:58

Client Sample ID: ABB - PH 2.0

Date Collected: 01/11/18 09:40

Date Received: 01/12/18 09:10

Method: EPA 9056A - Anions	s, Ion Chromat	tography - L	each						
Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<100		100		mg/L			02/22/18 11:00	100
Fluoride	26		10		mg/L			02/22/18 11:00	100
Sulfate	920		100		mg/L			02/22/18 11:00	100

Method: EPA 6020A - Metals (ICP/MS) - Leach									
Analyte	Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac			
Boron	26000	8000	ug/L	02/23/18 12:01	02/27/18 09:41	10			
Calcium	11000000	50000	ug/L	02/23/18 12:01	02/24/18 17:11	10			

General Chemistry - Leach Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	2.3		0.1		SU	'		02/19/18 10:25	1
Specific Conductance	77000		1.0		umhos/cm			02/19/18 10:30	1
Total Dissolved Solids	92000		500		mg/L			02/26/18 14:33	1
Oxidation Reduction Potential	530		10		millivolts			02/19/18 10:27	1

Client Sample ID: ABB- NATURAL

Date Collected: 01/11/18 09:40

Date Received: 01/12/18 09:10

Method: EPA 9056A - Anions, Ion Chromatography - Leach								
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	27	1.0	mg/L			02/08/18 08:53	1	
Fluoride	2.8	0.10	mg/L			02/08/18 08:53	1	
Sulfate	910	10	mg/L			02/08/18 09:08	10	

Method: EPA 6020A - Metals (ICP/MS) - Leach									
	Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Boron	3700	80		ug/L		02/08/18 11:22	02/13/18 00:44	1
	Calcium	130000	500		ug/L		02/08/18 11:22	02/09/18 22:54	1

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	8.8	0.1	SU			02/07/18 12:19	1
Specific Conductance	2300	1.0	umhos/cm			02/07/18 12:09	1
Total Dissolved Solids	1500	10	mg/L			02/13/18 10:45	1

TestAmerica Pittsburgh

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TestAmerica Job 9D: 180-74121-1

Client: KPRG and Associates, Inc.

Project/Site: Midwest Generation

Client Sample ID: ABB- NATURAL Lab Sample ID: 180-74121-11

Date Collected: 01/11/18 09:40 Date Received: 01/12/18 09:10

Matrix: Solid

02/12/18 14:12

02/12/18 14:15

02/16/18 12:43

02/16/18 12:49

02/19/18 10:31

General Chemistry - Leach (C	ontinued)								
Analyte	Result Q	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxidation Reduction Potential	220		10		millivolts			02/07/18 12:03	1

Client Sample ID: ASB - PRETEST Lab Sample ID: 180-74121-12

Date Collected: 01/11/18 09:55 **Matrix: Solid**

Date Received: 01/12/18 09:10

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	35.7		0.1		%			01/24/18 06:29	1
Percent Solids	64.3		0.1		%			01/24/18 06:29	1
General Chemistry - Leach									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	12.8		0.1		SU			02/12/18 13:59	1
На	3.8		0.1		SU			02/12/18 14:03	1

0.1

0.1

0.1

0.1

0.1

3.9

12.6

12.4

3.5

3.1

SU

SU

SU

SU

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Lab Sample ID: 180-74121-13 Client Sample ID: ASB - PH 13.0

Date Collected: 01/11/18 09:55 **Matrix: Solid**

Date Received: 01/12/18 09:10

pН

pН

pН

pН

pН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<50		50		mg/L			02/09/18 21:26	50
Fluoride	<5.0		5.0		mg/L			02/09/18 21:26	50
Sulfate	91		50		mg/L			02/09/18 21:26	50
Method: EPA 6020A	- Metals (ICP/MS) - L	each							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100		80		ug/L		02/08/18 11:28	02/13/18 03:24	1

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	12.7	0.1	SU			02/07/18 11:52	1
Specific Conductance	44000	1.0	umhos/cm	ı		02/07/18 11:32	1
Total Dissolved Solids	13000	330	mg/L			02/13/18 15:26	1
Oxidation Reduction Potential	- 118	10	millivolts			02/07/18 11:29	1

Client Sample ID: ASB- PH 12.0 Lab Sample ID: 180-74121-14

Date Collected: 01/11/18 09:55 Date Received: 01/12/18 09:10

Method: EPA 9056A - Anions,	Ion Chroma	tography -	Leach						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.1		5.0		mg/L			02/26/18 15:42	5
Fluoride	1.3		0.50		mg/L			02/26/18 15:42	5

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Matrix: Solid

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 700 9f.3110-74121-1

Client Sample ID: ASB- PH 12.0

Date Collected: 01/11/18 09:55

Date Received: 01/12/18 09:10

Lab Sample ID: 180-74121-14

Matrix: Solid

Method: EPA 9056A - Anions, Ion Chromatography - Leach (Continued)

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	76	5.0	mg/L			02/26/18 15:42	5

Method: EPA 6020A - Metals (I	CP/MS) - Lo	each							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	900		80		ug/L		02/19/18 13:03	02/22/18 04:16	1
Calcium	1300		500		ug/L		02/19/18 13:03	02/21/18 01:11	1

General Chemistry - Leach Analyte	Result Qua	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	11.9	0.1		SU			02/16/18 12:38	1
Specific Conductance	3000	1.0		umhos/cm			02/16/18 12:40	1
Total Dissolved Solids	1400	40		mg/L			02/19/18 15:41	1
Oxidation Reduction Potential	18	10		millivolts			02/16/18 12:44	1

Client Sample ID: ASB - PH 10.5

Date Collected: 01/11/18 09:55

Lab Sample ID: 180-74121-15

Matrix: Solid

Date Collected: 01/11/18 09:55
Date Received: 01/12/18 09:10

Method: EPA 9056A	- Anions, Ion Chromatography	y - Leach					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.3	1.0	mg/L			02/22/18 13:55	1
Fluoride	1.0	0.10	mg/L			02/22/18 13:55	1
Sulfate	72	5.0	mg/L			02/22/18 14:11	5

Method: EPA 6020A - Metals (ICP/MS) - Leach										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Boron	650		80		ug/L		02/21/18 11:22	02/26/18 21:24	1	
Calcium	2600		500		ug/L		02/21/18 11:22	02/23/18 11:37	1	

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	10.3	0.1	SU			02/19/18 10:06	1
Specific Conductance	620	1.0	umhos	s/cm		02/19/18 10:12	1
Total Dissolved Solids	410	10	mg/L			02/26/18 14:33	1
Oxidation Reduction Potential	74	10	millivo	lts		02/19/18 10:06	1

Client Sample ID: ASB - PH 8.0 Lab Sample ID: 180-74121-17

Date Collected: 01/11/18 09:55 Date Received: 01/12/18 09:10

Method: EPA 9056A - Anions, Ion Chromatography - Leach											
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	7.9		2.5		mg/L			02/13/18 07:40	2.5		
Fluoride	<0.25		0.25		mg/L			02/13/18 07:40	2.5		
Sulfate	110		2.5		mg/L			02/13/18 07:40	2.5		

Method: EPA 6020A - Metals (ICP/MS) - Leach									
Analyte	Result Quali	lifier RL	MDL Un	it D	Prepared	Analyzed	Dil Fac		
Boron	1000	80	ug	/L	02/13/18 13:38	02/15/18 22:16	1		
Calcium	390000	500	ug.	/L	02/13/18 13:38	02/15/18 22:16	1		

TestAmerica Pittsburgh

Matrix: Solid

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 700 96.3110-74121-1

Client Sample ID: ASB - PH 8.0

Date Collected: 01/11/18 09:55 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74121-17

Matrix: Solid

General Chemistry - Leach Analyte	Result Qualif	ier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6	0.1	SU			02/12/18 14:09	1
Specific Conductance	2700	1.0	umhos/cn	1		02/12/18 13:52	1
Total Dissolved Solids	2200	20	mg/L			02/15/18 14:59	1
Oxidation Reduction Potential	230	10	millivolts			02/12/18 13:51	1

Client Sample ID: ASB - PH 7.0 Lab Sample ID: 180-74121-18

Date Collected: 01/11/18 09:55 Date Received: 01/12/18 09:10 Matrix: Solid

Method: EPA 9056A - Anions, Ion Chromatography - Leach									
	Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
	Chloride	7.4	2.5	mg/L			02/13/18 10:28	2.5	
	Fluoride	<0.50	0.50	mg/L			02/14/18 14:01	5	
	Sulfate	110	2.5	mg/L			02/13/18 10:28	2.5	

Method: EPA 6020A - Metals (ICP/MS) - Leach									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1500		80		ug/L		02/13/18 13:38	02/15/18 22:20	1
Calcium	680000		500		ug/L		02/13/18 13:38	02/15/18 22:20	1

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.7	0.1		SU			02/12/18 14:06	1
Specific Conductance	4600	1.0		umhos/cm			02/12/18 13:47	1
Total Dissolved Solids	3900	40		mg/L			02/15/18 14:59	1
Oxidation Reduction Potential	290	10		millivolts			02/12/18 13:44	1

Lab Sample ID: 180-74121-19 Client Sample ID: ASB - PH 5.5 **Matrix: Solid**

Date Collected: 01/11/18 09:55 Date Received: 01/12/18 09:10

Method: EPA 9056A - Anions, Ion Chromatography - Leach								
	Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	<10	10	mg/L			03/01/18 08:38	10
	Fluoride	<1.0	1.0	mg/L			03/01/18 08:38	10
	Sulfate	110	10	mg/L			03/01/18 08:38	10

Method: EPA 6020A	Method: EPA 6020A - Metals (ICP/MS) - Leach										
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac				
Boron	2600	800	ug/L		02/28/18 13:51	03/01/18 01:11	10				
Calcium	1100000	5000	ug/L		02/28/18 13:51	03/01/18 01:11	10				

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
pH	5.2	0.1	SU			02/28/18 09:00	1
Specific Conductance	7400	1.0	umhos/cm			02/28/18 09:00	1
Total Dissolved Solids	7500	40	mg/L			02/28/18 10:41	1
Oxidation Reduction Potential	350	10	millivolts			02/28/18 09:00	1

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Client: KPRG and Associates, Inc.

TestAmerica Job 9D: 180-74121-1

Project/Site: Midwest Generation

Client Sample ID: ASB - PH 4.0

Date Collected: 01/11/18 09:55 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74121-20

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<25		25		mg/L			02/08/18 19:38	25
Fluoride	<2.5		2.5		mg/L			02/08/18 19:38	25
Sulfate	52		25		mg/L			02/08/18 19:38	25
Method: EPA 6020A - Metals (ICP/MS) - L	each							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	6700		800		ug/L		02/08/18 11:28	02/13/18 03:29	10
Calcium	4500000		5000		ug/L		02/08/18 11:28	02/13/18 03:29	10
General Chemistry - Leach									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	3.8		0.1		SU			02/07/18 11:46	1
Specific Conductance	30000		1.0		umhos/cm			02/07/18 11:29	1
Total Dissolved Solids	31000		200		mg/L			02/13/18 10:45	1
Oxidation Reduction Potential	360		10		millivolts			02/07/18 11:25	1

Client Sample ID: ASB - PH 2.0

Date Collected: 01/11/18 09:55

Date Received: 01/12/18 09:10

Lab Sample ID: 180-74121-21

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<100		100		mg/L			02/23/18 10:54	100
Fluoride	<10		10		mg/L			02/23/18 10:54	100
Sulfate	<100		100		mg/L			02/23/18 10:54	100
- Method: EPA 6020A - Metals ((ICP/MS) - L	each							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	19000		4000		ug/L		02/21/18 15:34	02/26/18 22:37	50
Calcium	13000000		25000		ug/L		02/21/18 15:34	02/24/18 17:19	50
General Chemistry - Leach									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	2.8	H	0.1		SU			02/21/18 10:17	1
Specific Conductance	78000		1.0		umhos/cm			02/21/18 10:17	1
Total Dissolved Solids	93000		500		mg/L			02/26/18 14:33	1
Oxidation Reduction Potential	540		10		millivolts			02/21/18 10:17	1

Client Sample ID: ASB - NATURAL

Date Collected: 01/11/18 09:55

Date Received: 01/12/18 09:10

Lab Sample ID: 180-74121-22 **Matrix: Solid**

Method: EPA 9056A - Anions	, Ion Chromatograph	y - Leach						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.5	1.0		mg/L			02/08/18 09:56	1
Fluoride	0.21	0.10		mg/L			02/08/18 09:56	1
Sulfate	87 F1	1.0		mg/L			02/08/18 09:56	1
Method: EPA 6020A - Metals	(ICP/MS) - Leach							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	360	80		ug/L		02/08/18 11:22	02/13/18 01:01	1

TestAmerica Pittsburgh

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 95 3110-74121-1

Client Sample ID: ASB - NATURAL

Date Collected: 01/11/18 09:55 Date Received: 01/12/18 09:10

Lab Sample ID: 180-74121-22

Matrix: Solid

Method: EPA 6020A - Metals (ICP/MS) - Leach (Continued) Result Qualifier RLMDL **Analyte** Unit D Prepared Analyzed

Dil Fac 500 02/08/18 11:22 Calcium 35000 ug/L 02/09/18 22:57

General Chemistry - Leach Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 0.1 SU 02/07/18 12:23 pН 8.5 umhos/cm 02/07/18 12:12 **Specific Conductance** 340 1.0 200 10 mg/L 02/13/18 10:45 **Total Dissolved Solids** 10 millivolts 02/07/18 12:07 **Oxidation Reduction Potential** 210

Client Sample ID: B01 Lab Sample ID: 180-74121-23 Date Collected: 01/11/18 00:00 Matrix: Solid

Date Received: 01/12/18 09:10

Method: EPA 9056A - Anions, Ion Chromatography - Leach Analyte Result Qualifier RI MDL Unit D Prepared Analyzed Dil Fac Chloride <1.0 1.0 mg/L 02/08/18 08:37 Fluoride <0.10 0.10 02/08/18 08:37 mg/L 02/08/18 08:37 Sulfate 1.0 <1.0 mg/L

Method: EPA 6020A - Metals (ICP/MS) - Leach Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac Boron <80 80 ug/L 02/08/18 11:22 02/13/18 00:39 <500 500 02/08/18 11:22 02/09/18 22:51 Calcium ug/L

General Chemistry - Leach Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac pН 5.9 0.1 SU 02/07/18 13:39 **Specific Conductance** 1.0 umhos/cm 02/07/18 13:54 1.7 mq/L 02/13/18 10:45 **Total Dissolved Solids** 10 19 10 **Oxidation Reduction Potential** 400 millivolts 02/07/18 13:52

Client Sample ID: B02 Lab Sample ID: 180-74121-24

Date Collected: 01/11/18 00:00 Date Received: 01/12/18 09:10

Method: EPA 9056A - Anions, Ion Chromatography - Leach

Analyte Result Qualifier MDL Unit D Dil Fac RL Prepared Analyzed Chloride <250 250 02/23/18 11:25 250 mg/L Fluoride <25 25 mg/L 02/23/18 11:25 250 Sulfate <250 250 mg/L 02/23/18 11:25 250

Method: EPA 6020A - Metals (ICP/MS) - Leach **MDL** Unit Dil Fac Analyte Result Qualifier RL D Prepared Analyzed Boron <80 80 ug/L 02/21/18 15:34 02/26/18 22:42 **Calcium** 1200 500 ug/L 02/21/18 15:34 02/23/18 12:33

General Chemistry - Leach Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 0.1 SU рН <0.1 Н 02/21/18 10:23 **Specific Conductance** > 100000 1.0 umhos/cm 02/21/18 10:21 1 **Total Dissolved Solids** 3400 1000 mg/L 02/26/18 14:33

TestAmerica Pittsburgh

Matrix: Solid

TestAmerica Job 9D: 180-74121-1

Project/Site: Midwest Generation

Client Sample ID: B02

Lab Sample ID: 180-74121-24 Date Collected: 01/11/18 00:00

Matrix: Solid

Matrix: Solid

Matrix: Solid

Matrix: Solid

Date Received: 01/12/18 09:10

General Chemistry - Leach (Continued)									
Analyte	Result Qu	ualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxidation Reduction Potential	580		10		millivolts			02/21/18 10:23	1

Lab Sample ID: 180-74121-25 Client Sample ID: B03

Date Collected: 01/11/18 00:00

Date Received: 01/12/18 09:10

Method: EPA 9056A - Anions, Ion Chromatography - Leach								
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<50	50	mg/L			02/13/18 10:59	50	
Fluoride	<10	10	mg/L			02/14/18 14:17	100	
Sulfate	<50	50	mg/L			02/13/18 10:59	50	

Method: EPA 6020A - Metals (IC	CP/MS) - Leach						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Boron	<80	80	ug/L		02/13/18 13:38	02/15/18 21:57	1
Calcium	<500	500	ug/L		02/13/18 13:38	02/15/18 21:57	1

General Chemistry - Leach Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	12.9	0.1		SU			02/12/18 15:47	1
Specific Conductance	41000	1.0		umhos/cm			02/12/18 15:44	1
Total Dissolved Solids	10000	330		mg/L			02/15/18 14:59	1
Oxidation Reduction Potential	- 22	10		millivolts			02/12/18 15:47	1

Client Sample ID: ABB - AIR DRIED Lab Sample ID: 180-74121-26

Date Collected: 01/11/18 09:40 Date Received: 01/12/18 09:10

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.4		0.1		%			02/01/18 13:28	1
Percent Solids	94.6		0.1		%			02/01/18 13:28	1

Lab Sample ID: 180-74121-27 Client Sample ID: ASB - AIR DRIED

Date Collected: 01/11/18 09:55 Date Received: 01/12/18 09:10

General Chemistry Analyte	Result Qualifier	RL	MDL U	nit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	1.1	0.1	%				02/01/18 13:28	1
Percent Solids	98.9	0.1	%				02/01/18 13:28	1

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 9D: 180-74121-1

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-236373/6

Matrix: Solid

Analysis Batch: 236373

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

	MB	MB					
Analyte	Result (Qualifier RL	MDL U	nit D	Prepared	Analyzed	Dil Fac
Chloride	<1.0	1.0	m	g/L		02/08/18 06:17	1
Fluoride	<0.10	0.10	m	g/L		02/08/18 06:17	1
Sulfate	<1.0	1.0	m	g/L		02/08/18 06:17	1

Lab Sample ID: LCS 180-236373/5

Matrix: Solid

Analysis Batch: 236373

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit Limits D %Rec Chloride 25.0 25.0 mg/L 80 - 120 100 Fluoride 1.25 1.02 mg/L 82 80 - 120 Sulfate 25.0 24.0 mg/L 96 80 - 120

Lab Sample ID: MB 180-236377/17

Matrix: Solid

Analysis Batch: 236377

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

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample

ı		MB	MB							
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	<1.0		1.0		mg/L			02/08/18 09:27	1
	Fluoride	<0.10		0.10		mg/L			02/08/18 09:27	1
	Sulfate	<1.0		1.0		mg/L			02/08/18 09:27	1

Lab Sample ID: LCS 180-236377/16

Matrix: Solid

Analysis Batch: 236377

	Spike	LCS	LCS			%Rec.	
Analyte	Added	Result	Qualifier U	nit D	%Rec	Limits	
Chloride	25.0	25.0	m	ng/L	100	80 - 120	
Fluoride	1.25	1.18	m	ng/L	94	80 - 120	
Sulfate	25.0	24.1	m	ng/L	96	80 - 120	

Analysis Batch: 236553

Sulfate	25.0	24.1	mg/L	96 80 - 120	
Lab Sample ID: MB 180-236553/16				Client Sample ID: Method	l Blank
Matrix: Solid				Prep Type: To	otal/NA

	MD	1410							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.0		1.0		mg/L			02/09/18 16:56	1
Fluoride	<0.10		0.10		mg/L			02/09/18 16:56	1
Sulfate	<1.0		1.0		mg/L			02/09/18 16:56	1

MD MD

Lab Sample ID: LCS 180-236553/15

Matrix: Solid

Analysis Batch: 236553

Analysis Buton. 200000								
-	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	25.0	25.9		mg/L		103	80 - 120	
Fluoride	1.25	1.20		mg/L		96	80 - 120	
Sulfate	25.0	22.0		mg/L		88	80 - 120	

TestAmerica Pittsburgh

Prep Type: Total/NA

Client: KPRG and Associates, Inc.

TestAmerica Job 9D 3110-74121-1

Project/Site: Midwest Generation

Method: EPA 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-236732/6

Matrix: Solid

Analysis Batch: 236732

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.0		1.0		mg/L			02/13/18 05:33	1
Fluoride	<0.10		0.10		mg/L			02/13/18 05:33	1
Sulfate	<1.0		1.0		mg/L			02/13/18 05:33	1

Lab Sample ID: LCS 180-236732/5

Matrix: Solid

Analysis Batch: 236732

	Spike	LCS	LCS				%Rec.	
	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	25.0	25.9		mg/L		103	80 - 120	
	1.25	1.25		mg/L		100	80 - 120	
	25.0	25.1		mg/L		100	80 - 120	

Lab Sample ID: MB 180-236891/6

Matrix: Solid

Analyte Chloride Fluoride Sulfate

Analysis Batch: 236891

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

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample

	MB N	MB						
Analyte	Result (Qualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.0	1.0		mg/L			02/14/18 11:05	1
Fluoride	<0.10	0.10		mg/L			02/14/18 11:05	1
Sulfate	<1.0	1.0		mg/L			02/14/18 11:05	1

Lab Sample ID: LCS 180-236891/5

Matrix: Solid

Analysis Batch: 236891

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	50.0	51.9		mg/L		104	80 - 120	
Fluoride	2.50	2.58		mg/L		103	80 - 120	
Sulfate	50.0	49.2		mg/L		98	80 - 120	

Analysis Batch: 237598

Surate _	50.0	49.2	mg/L	98 80 - 120	
Lab Sample ID: MB 180-237598/6				Client Sample ID: Method Blar	ık
Matrix: Solid				Pren Type: Total/N	Δ

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.0		1.0		mg/L			02/22/18 08:13	1
Fluoride	<0.10		0.10		mg/L			02/22/18 08:13	1
Sulfate	<1.0		1.0		mg/L			02/22/18 08:13	1

Lab Sample ID: LCS 180-237598/5

Matrix: Solid

Analysis Batch: 237598

/ manyolo Zatom Zoroco	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 25.0	25.4		mg/L		102	80 - 120	
Fluoride	1.25	1.20		mg/L		96	80 - 120	
Sulfate	25.0	21.2		mg/L		85	80 - 120	

TestAmerica Pittsburgh

Prep Type: Total/NA

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 9D: 180-74121-1

Method: EPA 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-237721/6

Matrix: Solid

Analysis Batch: 237721

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

	MR	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.0		1.0		mg/L			02/23/18 07:16	1
Fluoride	<0.10		0.10		mg/L			02/23/18 07:16	1
Sulfate	<1.0		1.0		mg/L			02/23/18 07:16	1

Lab Sample ID: LCS 180-237721/5

Matrix: Solid

Analysis Batch: 237721

Spike	LCS					%Rec.	
 Added		Qualifier	Unit	D	%Rec 104	Limits	
25.0 1.25	26.0 1.24		mg/L mg/L		104	80 ₋ 120 80 - 120	

mg/L

Lab Sample ID: MB 180-237859/6

Matrix: Solid

Analyte Chloride Fluoride Sulfate

Analysis Batch: 237859

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

80 - 120

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample

87

мв мв Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Chloride <1.0 1.0 mg/L 02/26/18 08:06 Fluoride < 0.10 0.10 mg/L 02/26/18 08:06 Sulfate 1.0 mg/L 02/26/18 08:06 <1.0

21.9

25.0

Lab Sample ID: LCS 180-237859/5

Matrix: Solid

Analysis Batch: 237859

7 man , 010 = 410 m = 01 000	Spike	LCS	LCS				%Rec.	
Analyte	Added	_	Qualifier	Unit	D	%Rec	Limits	
Chloride	25.0	26.4		mg/L		106	80 - 120	
Fluoride	1.25	1.23		mg/L		99	80 - 120	
Sulfate	25.0	22.5		mg/L		90	80 - 120	

Analysis Batch: 238212

Sulfate	25.0	22.5	mg/L	90 80 - 120	
Lab Sample ID: MB 180-238212/6				Client Sample ID: Metho	d Blank
Matrix: Solid				Prep Type: T	otal/NA

	1410	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.0		1.0		mg/L			03/01/18 06:47	1
Fluoride	<0.10		0.10		mg/L			03/01/18 06:47	1
Sulfate	<1.0		1.0		mg/L			03/01/18 06:47	1

MD MD

Lab Sample ID: LCS 180-238212/5

Matrix: Solid

Analysis Batch: 238212

Analysis Baton. 200212	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	50.0	52.6		mg/L		105	80 - 120	
Fluoride	2.50	2.55		mg/L		102	80 - 120	
Sulfate	50.0	49.8		mg/L		100	80 - 120	

TestAmerica Pittsburgh

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Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Leach

Prep Type: Total/NA

Prep Batch: 236437

Prep Batch: 236437

Prep Batch: 236437

Method: EPA 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 180-74121-22 MS Client Sample ID: ASB - NATURAL **Matrix: Solid Prep Type: Leach**

Analysis Batch: 236373

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	6.5		25.0	31.7		mg/L		101	80 - 120	
Fluoride	0.21		1.25	1.44		mg/L		98	80 - 120	
Sulfate	87	F1	25.0	107	F1	mg/L		78	80 - 120	

Lab Sample ID: 180-74121-22 MSD Client Sample ID: ASB - NATURAL

Matrix: Solid

Analysis Batch: 236373

•	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	6.5		25.0	31.5		mg/L		100	80 - 120	0	15
Fluoride	0.21		1.25	1.44		mg/L		98	80 - 120	0	15
Sulfate	87	F1	25.0	106	F1	mg/L		76	80 - 120	1	15

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

Lab Sample ID: MB 180-236437/1-A **Client Sample ID: Method Blank**

Matrix: Solid

Analysis Batch: 236729

MB MB

Analyte	Result Qualif	fier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<500	500	ug/L		02/08/18 11:22	02/09/18 22:43	1

Lab Sample ID: MB 180-236437/1-A **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Solid

Boron

Calcium

Analysis Batch: 236828

MB MB

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Boron	<80	80	ug/L		02/08/18 11:22	02/13/18 00:25	1

Lab Sample ID: LCS 180-236437/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Total/NA**

Analysis Batch: 236729

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits 50000 Calcium 53100 ug/L 106 80 - 120

Lab Sample ID: LCS 180-236437/2-A **Client Sample ID: Lab Control Sample Matrix: Solid**

Prep Type: Total/NA **Analysis Batch: 236828** Prep Batch: 236437 Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit Limits D %Rec

1000

50000

Lab Sample ID: LCSD 180-236437/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 236729 Prep Batch: 236437** Spike LCSD LCSD %Rec. **RPD** Added Result Qualifier Unit Limits RPD Analyte D %Rec Limit

1010

52500

ug/L

ug/L

101

105

80 - 120

80 - 120

TestAmerica Pittsburgh

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

Boron

TestAmerica 700 95.3180-74121-1

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

Lab Sample ID: LCSD 180-236437 Matrix: Solid Analysis Batch: 236828	7/3-A						C	lient S	Sam	ple		Control Sa Prep Type Prep Bato	Tot	al/NA
			Spike		LCSD	LCS	D					%Rec.		RPD
Analyte			Added		Result	Qua	lifier	Unit		D	%Rec	Limits	RPD	Limit
Boron			1000		1030			ug/L		_	103	80 - 120	2	20
Lab Sample ID: MB 180-236440/1-	·A									Clie	nt Samp	le ID: Met	nod	Blank
Matrix: Solid												Prep Type	Tot	al/NA
Analysis Batch: 236729												Prep Batc	h: 2	36440
	MB	MB												
Analyte	Result	Qualifier		RL	I	MDL	Unit		D	Pı	epared	Analyzed		Dil Fac
Calcium	<500			500			ug/L		_	02/0	8/18 11:28	02/10/18 00	04	1
Lab Sample ID: MB 180-236440/1-	·A									Clie	nt Samp	le ID: Met	nod	Blank
Matrix: Solid											- 1	Prep Type	Tot	al/NA
Analysis Batch: 236828												Prep Bato	h: 2	36440
	MB	MB										•		
Analyte	Result	Qualifier		RL	ı	MDL	Unit		D	Pı	epared	Analyzed		Dil Fac
Boron	<80			80	-		ug/L		_	02/0	8/18 11:28	02/13/18 02	47	1

Lab Sample ID: LCS 180-236440/2-A				Clie	ent Sar	nple ID): Lab Control Sample
Matrix: Solid							Prep Type: Total/NA
Analysis Batch: 236729							Prep Batch: 236440
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Calcium	50000	52800		ug/L		106	80 - 120

<80

Lab Sample ID: LCS 180-236440/2-A Matrix: Solid Analysis Batch: 236828	Spike	LCS	LCS	Clie	ent Sai	mple ID	Prep Type: Total/NA Prep Batch: 236440 %Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Boron	1000	916		ug/L		92	80 - 120

Lab Sample ID: LCSD 180-236440/3-A				Client Sa	ample	ID: Lab	Control	Sample	Dup
Matrix: Solid							Prep Ty	pe: Tot	al/NA
Analysis Batch: 236729							Prep Ba	itch: 23	36440
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Calcium	50000	51500		ug/L		103	80 - 120	2	20

Lab Sample ID: LCSD 180-236440/3-A			Client Sample ID: Lab Control Sample Dup								
Matrix: Solid							Prep Ty	e: Tot	al/NA		
Analysis Batch: 236828				Prep Batch: 2364					36440		
	Spike	LCSD	LCSD				%Rec.		RPD		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit		
Boron	1000	917		ug/L		92	80 - 120	0	20		

Lab Sample ID: MB 180-236807/1-A						C	lient Sam	ple ID: Method	l Blank
Matrix: Solid								Prep Type: To	otal/NA
Analysis Batch: 237198								Prep Batch:	236807
	MB	MB							
Analyte Re	esult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

ug/L

TestAmerica Pittsburgh

02/13/18 13:38 02/15/18 21:43

10

Client: KPRG and Associates, Inc.

TestAmerica 300 0f 311 TestAmerica 300 0f 311

Project/Site: Midwest Generation

Method: EPA 6020A - Metals	(ICP/MS)	(Continued)
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Lab Sample ID: MB 180-236807/1-A	Client Sample ID: Method Blank
Matrix: Solid	Prep Type: Total/NA
Analysis Batch: 237198	Prep Batch: 236807

MB MB

Analyte	Result Qu	ualifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<500	500	ug/L		02/13/18 13:38	02/15/18 21:43	1

Lab Sample ID: LCS 180-236807/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Total/NA Analysis Batch: 237198 Prep Batch: 236807** 109 109 %Rac Snika

	Spike	LOS	LUJ				/oixec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Boron	1000	866		ug/L	_	87	80 - 120	
Calcium	50000	46700		ug/L		93	80 - 120	

Lab Sample ID: LCSD 180-236807/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA **Prep Batch: 236807 Analysis Batch: 237198** LCSD LCSD Spike %Rec. **RPD** Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Boron 1000 879 ug/L 88 80 - 120 20 Calcium 50000 46500 ug/L 93 80 - 120 20

Lab Sample ID: MB 180-237311/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 237590 Prep Batch: 237311 MB MB

RL **MDL** Unit **Analyte** Result Qualifier Prepared Analyzed Dil Fac 500 02/19/18 13:03 02/21/18 00:31 Calcium <500 ug/L

Lab Sample ID: MB 180-237311/1-A **Client Sample ID: Method Blank Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 237713 Prep Batch: 237311 MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Boron <80 80 ug/L 02/19/18 13:03 02/22/18 03:08

Lab Sample ID: LCS 180-237311/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA **Prep Batch: 237311** Analysis Batch: 237590

7 manyolo 2 atom 20. 000	Sp	ke LCS	LCS			%Rec.	
Analyte	Ado	ed Result	Qualifier Un	nit D	%Rec	Limits	
Calcium	500	48400	ug	ı/L	97	80 - 120	

Lab Sample ID: LCS 180-237311/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Analysis Batch: 237713 Prep Batch: 237311

Analysis Datch. 2011 10							i ieb D	atcii. 2 3/311
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Boron	1000	1010		ug/L		101	80 - 120	

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 300 9b.3180-74121-1

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

Lab Sample ID: LCSD 180 Matrix: Solid	-237311/3-A						C	Client	Sam	ple		Control Prep Ty		
Analysis Batch: 237590												Prep Ba		
7 maryone Datom 201000			Spike		LCSD	LCS	SD					%Rec.		RPD
Analyte			Added		Result	Qua	alifier	Unit		D	%Rec	Limits	RPD	Limit
Calcium			50000		48200			ug/L		_	96	80 - 120	0	20
Lab Sample ID: LCSD 180	-237311/3-A						C	Client	Sam	ple	ID: Lab	Control	Sampl	e Dup
Matrix: Solid												Prep Ty	pe: Tof	tal/NA
Analysis Batch: 237713												Prep Ba	itch: 2	37311
			Spike		LCSD	LCS	SD					%Rec.		RPD
Analyte			Added		Result	Qua	alifier	Unit		D	%Rec	Limits	RPD	Limit
Boron			1000		1020			ug/L		_	102	80 - 120	0	20
Lab Sample ID: MB 180-23	37537/1-A								(Clie	nt Sam	ole ID: M	ethod	Blank
Matrix: Solid												Prep Ty	pe: Tot	tal/NA
Analysis Batch: 237821												Prep Ba	itch: 2	37537
	MB	MB												
Analyte	Result	Qualifier		RL		MDL	Unit		D	P	repared	Analy	zed	Dil Fac
Calcium	<500			500			ug/L			02/2	1/18 11:22	02/23/18	11:29	1
Lab Sample ID: MB 180-23	37537/1-A									Clie	nt Sam	ole ID: M	ethod	Blank
Matrix: Solid												Prep Ty	pe: Tof	tal/NA
Analysis Batch: 238052												Prep Ba	itch: 2	37537
	MB	MB												
Analyte	Result	Qualifier		RL		MDL	Unit		D	P	repared	Analyz	<u>zed</u>	Dil Fac

Analyte	Result C	Qualifier R	_ MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<80	8	<u> </u>	ug/L		02/21/18 11:22	02/26/18 21:10	1
Lab Sample ID: LCS 180-2375 Matrix: Solid	37/2-A				Clien	•	Lab Control S Prep Type: To	•

Analysis Batch: 237821 Prep Batch: 237537 Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Calcium 50000 55300 80 - 120 ug/L 111

Lab Sample ID: LCS 180-237537/2-A		Client Sample ID: Lab Control Sample							
Matrix: Solid							Prep Type: Total/NA		
Analysis Batch: 238052							Prep Batch: 237537		
	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Boron	1000	1010		ug/L		101	80 - 120		

Lab Sample ID: LCSD 180-237537/3-A	Client Sample ID: Lab Control Sample Dup									
Matrix: Solid							Prep Type: Total/NA			
Analysis Batch: 237821							Prep Ba	itch: 23	37537	
	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Calcium	50000	55200		ug/L		110	80 - 120	0	20	

Lab Sample ID: LCSD 180-237537/3-A Matrix: Solid	Client Sample ID: Lab Control Sample Prep Type: Tota									
Analysis Batch: 238052	Our Hor						Prep Ba		37537	
Analyte	Spike Added	_	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
Boron	1000	1060		ug/L		106	80 - 120	5	20	

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TestAmerica Job 95 3110-74121-1

Client Sample ID: Method Blank

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

%Rec.

Limits

%Rec.

%Rec.

Limits

%Rec.

Limits

80 - 120

Client Sample ID: Method Blank

Client Sample ID: Method Blank

02/23/18 12:01 02/24/18 16:45

80 - 120

Client Sample ID: Lab Control Sample

80 - 120

Prep Type: Total/NA

Prep Batch: 237582

Prep Type: Total/NA

Prep Batch: 237582

Prep Type: Total/NA

Prep Batch: 237582

Prep Type: Total/NA

Prep Batch: 237582

Prep Type: Total/NA

Prep Batch: 237582

Prep Type: Total/NA

Prep Batch: 237582

Prep Type: Total/NA

Prep Batch: 237767

Prep Type: Total/NA

Prep Batch: 237767

RPD

RPD

RPD

Limit

RPD

Limit

Dil Fac

20

10

Project/Site: Midwest Generation

Lab Sample ID: MB 180-237582/1-A

Matrix: Solid

Analysis Batch: 237821

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Calcium 500 ug/L 02/21/18 15:34 02/23/18 12:07 <500

Lab Sample ID: MB 180-237582/1-A

Matrix: Solid

Calcium

Analyte

Calcium

Boron

Boron

Matrix: Solid

Analysis Batch: 238052

MB MB

MDL Unit Result Qualifier Analyte RI Prepared Analyzed Dil Fac 80 Boron <80 ug/L 02/21/18 15:34 02/26/18 22:14

Lab Sample ID: LCS 180-237582/2-A

Matrix: Solid

Lab Sample ID: LCS 180-237582/2-A

Analysis Batch: 237821

Analyte

Analysis Batch: 238052

Added

50000

Spike

Spike

Added

1000

Spike

Added

50000

Spike

Added

1000

54400

LCS LCS

LCSD LCSD

LCSD LCSD

1000

Result Qualifier

MDL Unit

ug/L

54900

Result Qualifier

LCS LCS

Result Qualifier

Result Qualifier 992

Unit ug/L

Unit

ug/L

Unit

ug/L

Unit

ug/L

%Rec Limits

%Rec

%Rec

Prepared

100

110

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Lab Control Sample Dup

%Rec

109

80 - 120

Lab Sample ID: LCSD 180-237582/3-A **Matrix: Solid**

Matrix: Solid

Analysis Batch: 237821

Analyte

Lab Sample ID: LCSD 180-237582/3-A

Analysis Batch: 238052

Analyte

Lab Sample ID: MB 180-237767/1-A

Matrix: Solid

Analysis Batch: 237942

Analyte

Calcium Lab Sample ID: MB 180-237767/1-A

Matrix: Solid

Analysis Batch: 238052

MB MB Analyte Result Qualifier Boron <80

MB MB Result Qualifier

<500

MDL Unit ug/L

Prepared 02/23/18 12:01 02/27/18 09:22

Analyzed

Analyzed Dil Fac

TestAmerica Pittsburgh

RL

500

RL

Client: KPRG and Associates, Inc.

TestAmerica 300 95.3130-74121-1

Project/Site: Midwest Generation

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

Lab Sample ID: LCS 180-237767/2-A	Client Sample ID: Lab Control Sample								
Matrix: Solid							Prep Type: Total/NA		
Analysis Batch: 237942							Prep Batch: 237767		
	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Calcium	50000	51800		ug/L		104	80 - 120		

Lab Sample ID: LCS 180-237767/2-A Matrix: Solid Analysis Batch: 238052				Clie	ent Sar	nple ID	D: Lab Control Sample Prep Type: Total/NA Prep Batch: 237767	1
Analysis Batch. 230002	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Boron	1000	970		ug/L		97	80 - 120	-

Lab Sample ID: LCSD 180-237767/3-A	Client Sample ID: Lab Control Sample Dup									
Matrix: Solid							Prep Ty	pe: Tot	al/NA	
Analysis Batch: 237942							Prep Ba	atch: 23	37767	
	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Calcium	50000	52100		ug/L		104	80 - 120	1	20	

Lab Sample ID: LCSD 180-237767/3-A			(Client	Sample	ID: Lat	Control	Sample	Dup
Matrix: Solid							Prep Ty	pe: Tot	al/NA
Analysis Batch: 238052							Prep Ba	atch: 23	37767
•	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Boron	1000	1000		ug/L		100	80 - 120	3	20

Lab Sample ID: MB 180-238166/1-A Matrix: Solid Analysis Batch: 238310	Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 238166
MB MB	1 10p Batom 200 100

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<80		80		ug/L		02/28/18 13:51	03/01/18 01:20	1
Calcium	<500		500		ug/L		02/28/18 13:51	03/01/18 01:20	1

Lab Sample ID: LCS 180-238166/2-A				Cli	ent Sar	nple ID): Lab Control Sample	е
Matrix: Solid							Prep Type: Total/NA	4
Analysis Batch: 238310							Prep Batch: 23816	6
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Boron	1000	1130		ug/L		113	80 - 120	_
Calcium	50000	48700		ug/L		97	80 - 120	

Lab Sample ID: LCSD 180-238166/3-A			C	Client	Sample	ID: Lab	Control		
Matrix: Solid							Prep Ty	pe: Tot	al/NA
Analysis Batch: 238310							Prep B	atch: 23	38166
-	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Boron	1000	1100		ug/L		110	80 - 120	3	20
Calcium	50000	47900		ug/L		96	80 - 120	2	20

TestAmerica Pittsburgh

Electronic Filing: Received Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

Lab Sample ID: LCS 180-237737/1

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TestAmerica 360 95.3130-74121-1

Method: EPA 9040C - pH

Lab Sample ID: LCS 180-236465/1				Clie	nt Sa	mple ID	: Lab Control Sample
Matrix: Solid							Prep Type: Total/NA
Analysis Batch: 236465	Spike	ıcs	LCS				%Rec.
Analyte	Added	_	Qualifier	Unit	D	%Rec	Limits
pH		7.0	Qualifier	SU		100	99 - 101
- -	7.00	7.0		30		100	99 - 101
Lab Sample ID: LCS 180-236465/24				Clie	nt Sa	mple ID	: Lab Control Sample
Matrix: Solid							Prep Type: Total/NA
Analysis Batch: 236465							
•	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
рН	7.00	7.0		SU		100	99 - 101
Lab Sample ID: LCS 180-236465/47				Clie	nt Sa	mple ID	: Lab Control Sample
Matrix: Solid						•	Prep Type: Total/NA
Analysis Batch: 236465							71.
•	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
рН	7.00	7.0		SU		100	99 - 101
Lab Sample ID: LCS 180-237380/1				Clie	nt Sa	mple ID	: Lab Control Sample
Matrix: Solid							Prep Type: Total/NA
Analysis Batch: 237380							
, , , , , , , , , , , , , , , , , , , ,	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
рН	7.00	7.0		SU		100	99 - 101
Lab Sample ID: LCS 180-237531/1				Clie	nt Sa	mple ID	: Lab Control Sample
Matrix: Solid							Prep Type: Total/NA
Analysis Batch: 237531							71
, , , , , , , , , , , , , , , , , , , ,	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
pH	7.00	7.0		SU		100	99 - 101
Lab Sample ID: LCS 180-237560/1				Clie	nt Sa	mple ID	: Lab Control Sample
Matrix: Solid						•	Prep Type: Total/NA
							• • •

Alialysis Datell. 20	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
pН	 7.00	7.0		SU		100	99 - 101	

Matrix: Solid							Prep Ty	pe: Total/NA	¥.
Analysis Batch: 237737									
•	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
pH	7.00	7.0		SU		100	99 - 101		-

Lab Sample ID. LCS 100-23/1/2/1				CII	ienit Sai	libie ir	. Lab Control Sample
Matrix: Solid							Prep Type: Total/NA
Analysis Batch: 237772							
•	Spike	LCS	LCS				%Rec.
Δnalvte	habhΔ	Result	Qualifier	Unit	D	%Rec	l imite

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TestAmerica Pittsburgh

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Dil Fac

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TestAmerica Jop 95 3110-74121-1

Client Sample ID: Method Blank

Client Sample ID: Method Blank

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample

Prepared

Analyzed

02/07/18 11:58

Client Sample ID: Lab Control Sample

Project/Site: Midwest Generation

Lab Sample ID: LCS 180-238129/1

Matrix: Solid

Analysis Batch: 238129

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits 7.00 SU 100 99 - 101 pН 7.0

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 180-236475/17

Matrix: Solid

Analysis Batch: 236475

MB MB

Analyte Result Qualifier RL **MDL** Unit Specific Conductance <1.0 1.0 umhos/cm

Lab Sample ID: MB 180-236475/2

Matrix: Solid

Analysis Batch: 236475

MB MB Analyte

MDL Unit Result Qualifier RL D **Prepared** Analyzed Dil Fac Specific Conductance <1.0 1.0 umhos/cm 02/07/18 11:03

Lab Sample ID: MB 180-236475/43

Matrix: Solid

Analysis Batch: 236475

MR MR

Result Qualifier RL **MDL** Unit **Prepared** Analyzed Dil Fac Specific Conductance <1.0 1.0 umhos/cm 02/07/18 13:32

Lab Sample ID: LCS 180-236475/1

Matrix: Solid

Analysis Batch: 236475

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Specific Conductance 84.0 85.1 101 90 - 110 umhos/cm

Lab Sample ID: LCS 180-236475/16

Matrix: Solid

Analysis Batch: 236475

Spike LCS LCS %Rec. Added Result Qualifier Analyte Unit %Rec Limits umhos/cm Specific Conductance 84.0 85.0 101 90 - 110

Lab Sample ID: LCS 180-236475/42

Matrix: Solid

Analysis Batch: 236475

LCS LCS Spike %Rec. Added Limits **Analyte** Result Qualifier Unit %Rec Specific Conductance 84.0 85.1 umhos/cm 101 90 - 110

TestAmerica Pittsburgh

Electronic Filing: Reseived Clerk's Office 07/19/2019

Client: KPRG and Associates, Inc.

TestAmerica Job 05:311

Project/Site: Midwest Generation

Method: SM 2510B - Conductivity, Specific Conductance (Continued)

Lab Sample ID: MB 180-237425/2 Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 237425

MB MB Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac **Prepared** 1.0 02/12/18 10:05 Specific Conductance umhos/cm <1.0

Lab Sample ID: LCS 180-237425/1 **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 237425

Spike LCS LCS %Rec. Added Limits Analyte Result Qualifier Unit %Rec Specific Conductance 84.0 85.0 umhos/cm 101 90 - 110

Lab Sample ID: MB 180-237553/2 **Client Sample ID: Method Blank Prep Type: Total/NA**

Matrix: Solid

Analysis Batch: 237553

MB MB

RL **MDL** Unit Dil Fac Analyte Result Qualifier Prepared Analyzed Specific Conductance <1.0 1.0 umhos/cm 02/19/18 10:06

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 180-237553/1 Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237553

Spike LCS LCS %Rec. Added Result Qualifier %Rec Limits Unit Specific Conductance 84.0 88.6 105 90 - 110 umhos/cm

Lab Sample ID: MB 180-237563/2 **Client Sample ID: Method Blank Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 237563

MR MR

Analyte Result Qualifier RL **MDL** Unit Dil Fac Prepared Analyzed Specific Conductance 1.0 02/21/18 10:04 <1.0 umhos/cm

Lab Sample ID: LCS 180-237563/1 **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 237563

Spike LCS LCS %Rec. Added Result Qualifier Analyte Unit %Rec Limits Specific Conductance 84.0 79.9 umhos/cm 95 90 - 110

Lab Sample ID: MB 180-237752/2 Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 237752

MB MB RL **MDL** Unit Analyte Result Qualifier Prepared Analyzed Dil Fac Specific Conductance <1.0 1.0 umhos/cm 02/16/18 08:07

Lab Sample ID: LCS 180-237752/1 **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 237752

LCS LCS Spike %Rec. Added Limits Analyte Result Qualifier Unit D %Rec Specific Conductance 84.0 101 90 - 110 umhos/cm

TestAmerica Pittsburgh

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10

Prep Type: Total/NA

Prep Type: Total/NA

3/5/2018

Client: KPRG and Associates, Inc.

TestAmerica Job 95 3110-74121-1

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Analyzed

02/13/18 15:26

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

10

Project/Site: Midwest Generation

Lab Sample ID: MB 180-237776/2

Matrix: Solid

Analysis Batch: 237776

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Specific Conductance 1.0 umhos/cm 02/23/18 10:04 <10

Lab Sample ID: LCS 180-237776/1

Matrix: Solid

Analysis Batch: 237776

LCS LCS Spike %Rec. Added Result Qualifier Analyte Unit %Rec Limite Specific Conductance 84.0 88.5 umhos/cm 105 90 - 110

Lab Sample ID: MB 180-238130/2

Matrix: Solid

Analysis Batch: 238130

MB MB

RL **MDL** Unit Analyte Result Qualifier Analyzed Dil Fac Prepared Specific Conductance <1.0 1.0 umhos/cm 02/28/18 09:00

Lab Sample ID: LCS 180-238130/1

Matrix: Solid

Analysis Batch: 238130

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits 84.0 89.5 umhos/cm 107 90 - 110

Specific Conductance

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

Lab Sample ID: MB 180-236785/2

Matrix: Solid

Analysis Batch: 236785

MR MR

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 10 02/13/18 10:45 Total Dissolved Solids mg/L <10

Lab Sample ID: LCS 180-236785/1

Matrix: Solid

Analysis Batch: 236785

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D Limits %Rec 339 **Total Dissolved Solids** 388 mg/L 114 80 - 120

Lab Sample ID: MB 180-236825/2

Matrix: Solid

Analysis Batch: 236825

MB MB

RL Analyte Result Qualifier **MDL** Unit 10 mg/L

Total Dissolved Solids <10

Prepared

TestAmerica Pittsburgh

Dil Fac

10

Client: KPRG and Associates, Inc.

TestAmerica Job 15: 180-74121-1

Project/Site: Midwest Generation

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

Lab Sample ID: LCS 180-236825/1 **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 236825

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits **Total Dissolved Solids** 339 364 mg/L 107 80 - 120

Lab Sample ID: MB 180-237078/2

Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 237078

MB MB

Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac Prepared **Total Dissolved Solids** 10 02/15/18 14:59 <10 mg/L

Lab Sample ID: LCS 180-237078/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237078

Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit D %Rec Total Dissolved Solids 339 342 mg/L 101 80 - 120

Lab Sample ID: MB 180-237329/2 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237329

MR MR

Result Qualifier RL **MDL** Unit **Prepared** Dil Fac Analyzed Total Dissolved Solids <10 10 mg/L 02/19/18 15:41

Lab Sample ID: LCS 180-237329/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237329

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit %Rec Limits Total Dissolved Solids 339 330 97 80 - 120 mg/L

Lab Sample ID: MB 180-237940/2 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237940

MB MB Result Qualifier RL MDL Unit Prepared Analyte D Analyzed Dil Fac 10 **Total Dissolved Solids** mg/L 02/26/18 14:33 <10

Lab Sample ID: LCS 180-237940/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 237940

Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit %Rec **Total Dissolved Solids** 339 338 mg/L 100 80 - 120

Lab Sample ID: MB 180-238055/2 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 238055

MB MB RL MDL Unit Analyte Result Qualifier D Prepared Analyzed Dil Fac **Total Dissolved Solids** 10 mg/L 02/27/18 15:07 <10

TestAmerica Pittsburgh

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Leach

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Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: ABB - PH 4.0

Client Sample ID: Lab Control Sample

Project/Site: Midwest Generation

Lab Sample ID: LCS 180-238055/1

Matrix: Solid

Analysis Batch: 238055

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Total Dissolved Solids 339 360 mg/L 106 80 - 120

Lab Sample ID: MB 180-238132/2

Matrix: Solid

Analysis Batch: 238132

MB MB

MDL Unit Result Qualifier RLAnalyte **Prepared** Analyzed Dil Fac Total Dissolved Solids 10 <10 mg/L 02/28/18 10:41

Lab Sample ID: LCS 180-238132/1

Matrix: Solid

Analysis Batch: 238132

LCS LCS Spike %Rec. Added Result Qualifier Limits Analyte Unit %Rec **Total Dissolved Solids** 339 366 mg/L 108 80 - 120

Lab Sample ID: 180-74121-9 DU

Matrix: Solid

Analysis Batch: 236785

DU DU **RPD** Sample Sample Analyte Result Qualifier Result Qualifier Unit Limit **Total Dissolved Solids** 33000 32500 mg/L

Lab Sample ID: 180-74121-20 DU

Matrix: Solid

Analysis Batch: 236785

DU DU RPD Sample Sample Analyte Result Qualifier Result Qualifier Unit Limit Total Dissolved Solids 31000 31200 mg/L

Lab Sample ID: 180-74121-13 DU

Matrix: Solid

Analysis Batch: 236825

DU DU **RPD** Sample Sample Analyte Result Qualifier Result Qualifier Unit **RPD** Limit Total Dissolved Solids 13000 13900 mg/L

Method: SM 2580B - Reduction-Oxidation (REDOX) Potential

Lab Sample ID: LCS 180-236472/1

Matrix: Solid

Analysis Batch: 236472

Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit %Rec 475 Oxidation Reduction Potential 467 millivolts 98 90 - 110

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Client Sample ID: ASB - PH 4.0 **Prep Type: Leach**

Client Sample ID: ASB - PH 13.0 **Prep Type: Leach**

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

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Analyte

Oxidation Reduction Potential

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Method: SM 2580B - Reduction-Oxidation (REDOX) Potential (Continued)

Lab Sample ID: LCS 180-236472/13				Clien	t Sa	mple ID	: Lab Control Sample
Matrix: Solid							Prep Type: Total/NA
Analysis Batch: 236472							
	Spike	_	LCS				%Rec.
Analyte	Added		Qualifier	Unit	_ D	%Rec	Limits
Oxidation Reduction Potential	475	465		millivolts		98	90 - 110
Lab Sample ID: LCS 180-236472/36				Clien	t Sa	mple ID	: Lab Control Sample
Matrix: Solid							Prep Type: Total/NA
Analysis Batch: 236472							
•	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Oxidation Reduction Potential	475	463		millivolts		97	90 - 110
_ab Sample ID: LCS 180-237422/1				Clien	t Sai	mple ID	: Lab Control Sample
Watrix: Solid							Prep Type: Total/NA
Analysis Batch: 237422							
many old Buttoni Bol HAR	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Oxidation Reduction Potential	475	466	-	millivolts		98	90 - 110
ah Camada ID. I CC 400 227550/4				Clien	4 0 -	In ID	. I ah Camtual Camania
Lab Sample ID: LCS 180-237550/1				Cilen	t Sai	mpie iu	: Lab Control Sample
Matrix: Solid							Prep Type: Total/NA
Analysis Batch: 237550	Cuilca	1.00	1.00				0/ Doo
Amalida	Spike		LCS	l lmi4	_	0/ Dag	%Rec.
Analyte Oxidation Reduction Potential	Added	469	Qualifier	Unit millivolts	_ D	%Rec 99	Limits
Oxidation Reduction Potential	475	409		HIIIIVOIIS		99	90 - 110
Lab Sample ID: LCS 180-237562/1				Clien	t Sa	mple ID	: Lab Control Sample
Matrix: Solid							Prep Type: Total/NA
Analysis Batch: 237562							
•	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Oxidation Reduction Potential	475	472		millivolts		99	90 - 110
Lab Sample ID: LCS 180-237751/1				Clien	t Sai	mple ID	: Lab Control Sample
Matrix: Solid							Prep Type: Total/NA
Analysis Batch: 237751							
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Oxidation Reduction Potential	475	467		millivolts		98	90 - 110
Lab Sample ID: LCS 180-237774/1				Clion	t Cai	mnle ID	: Lab Control Sample
Matrix: Solid				Olicii	Coa	ilipic ib	Prep Type: Total/NA
Analysis Batch: 237774							riep Type. Totalita
Alialysis Datcii. 237774	Spike	LCS	LCS				%Rec.
Analyte	Added		Qualifier	Unit	D	%Rec	Limits
Oxidation Reduction Potential		473	- Guanner	millivolts		100	90 - 110
	710	470				.50	
Lab Sample ID: LCS 180-238131/1				Clien	t Sa	mple ID	: Lab Control Sample
Matrix: Solid						-	Prep Type: Total/NA
Analysis Batch: 238131							
-	Spike	LCS	LCS				%Rec.

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Limits

90 - 110

D %Rec

99

Result Qualifier Unit

millivolts

468

Added

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica Job 9D: 180-74121-1

HPLC/IC

Leach Batch: 236165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-2	ABB - PH 13.0	Leach	Solid	1313	_
180-74121-9	ABB - PH 4.0	Leach	Solid	1313	
180-74121-11	ABB- NATURAL	Leach	Solid	1313	
180-74121-13	ASB - PH 13.0	Leach	Solid	1313	
180-74121-20	ASB - PH 4.0	Leach	Solid	1313	
180-74121-22	ASB - NATURAL	Leach	Solid	1313	
180-74121-23	B01	Leach	Solid	1313	
180-74121-22 MS	ASB - NATURAL	Leach	Solid	1313	
180-74121-22 MSD	ASB - NATURAL	Leach	Solid	1313	

Analysis Batch: 236373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-11	ABB- NATURAL	Leach	Solid	EPA 9056A	236165
180-74121-11	ABB- NATURAL	Leach	Solid	EPA 9056A	236165
180-74121-22	ASB - NATURAL	Leach	Solid	EPA 9056A	236165
180-74121-23	B01	Leach	Solid	EPA 9056A	236165
MB 180-236373/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-236373/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	
180-74121-22 MS	ASB - NATURAL	Leach	Solid	EPA 9056A	236165
180-74121-22 MSD	ASB - NATURAL	Leach	Solid	EPA 9056A	236165

Analysis Batch: 236377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-9	ABB - PH 4.0	Leach	Solid	EPA 9056A	236165
180-74121-20	ASB - PH 4.0	Leach	Solid	EPA 9056A	236165
MB 180-236377/17	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-236377/16	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Analysis Batch: 236553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-2	ABB - PH 13.0	Leach	Solid	EPA 9056A	236165
180-74121-13	ASB - PH 13.0	Leach	Solid	EPA 9056A	236165
MB 180-236553/16	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-236553/15	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Leach Batch: 236722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-3	ABB - PH 12.0	Leach	Solid	1313	
180-74121-6	ABB - PH 8.0	Leach	Solid	1313	
180-74121-8	ABB - PH 5.5	Leach	Solid	1313	
180-74121-17	ASB - PH 8.0	Leach	Solid	1313	
180-74121-18	ASB - PH 7.0	Leach	Solid	1313	
180-74121-25	B03	Leach	Solid	1313	

Analysis Batch: 236732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-3	ABB - PH 12.0	Leach	Solid	EPA 9056A	236722
180-74121-6	ABB - PH 8.0	Leach	Solid	EPA 9056A	236722
180-74121-6	ABB - PH 8.0	Leach	Solid	EPA 9056A	236722
180-74121-8	ABB - PH 5.5	Leach	Solid	EPA 9056A	236722
180-74121-17	ASB - PH 8.0	Leach	Solid	EPA 9056A	236722

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TestAmerica Job 1D: 180-74121-1

HPLC/IC (Continued)

Amaluata	Datala	226722	(Cantinual)	
Anaivsis	Batch:	230/32	(Continued)	ı

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-18	ASB - PH 7.0	Leach	Solid	EPA 9056A	236722
180-74121-25	B03	Leach	Solid	EPA 9056A	236722
MB 180-236732/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-236732/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Analysis Batch: 236891

Lab Sample ID 180-74121-18	Client Sample ID ASB - PH 7.0	Prep Type Leach	Matrix Solid	Method EPA 9056A	Prep Batch 236722
180-74121-25	B03	Leach	Solid	EPA 9056A	236722
MB 180-236891/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-236891/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Leach Batch: 237165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-4	ABB - PH 10.5	Leach	Solid	1313	
180-74121-14	ASB- PH 12.0	Leach	Solid	1313	

Leach Batch: 237381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-10	ABB - PH 2.0	Leach	Solid	1313	
180-74121-15	ASB - PH 10.5	Leach	Solid	1313	

Leach Batch: 237539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-21	ASB - PH 2.0	Leach	Solid	1313	
180-74121-24	B02	Leach	Solid	1313	

Analysis Batch: 237598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-10	ABB - PH 2.0	Leach	Solid	EPA 9056A	237381
180-74121-15	ASB - PH 10.5	Leach	Solid	EPA 9056A	237381
180-74121-15	ASB - PH 10.5	Leach	Solid	EPA 9056A	237381
MB 180-237598/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-237598/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Analysis Batch: 237721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-21	ASB - PH 2.0	Leach	Solid	EPA 9056A	237539
180-74121-24	B02	Leach	Solid	EPA 9056A	237539
MB 180-237721/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-237721/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Leach Batch: 237761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-7	ABB - PH 7.0	Leach	Solid	1313	

Analysis Batch: 237859

Lab Sample ID 180-74121-4	Client Sample ID ABB - PH 10.5	Prep Type Leach	Matrix Solid	Method EPA 9056A	Prep Batch 237165
180-74121-4	ABB - PH 10.5	Leach	Solid	EPA 9056A	237165
180-74121-7	ABB - PH 7.0	Leach	Solid	EPA 9056A	237761

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HPLC/IC (Continued)

Analysis Batch: 237859 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-7	ABB - PH 7.0	Leach	Solid	EPA 9056A	237761
180-74121-14	ASB- PH 12.0	Leach	Solid	EPA 9056A	237165
MB 180-237859/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-237859/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Leach Batch: 238030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-19	ASB - PH 5.5	Leach	Solid	1313	

Analysis Batch: 238212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-19	ASB - PH 5.5	Leach	Solid	EPA 9056A	238030
MB 180-238212/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-238212/5	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Metals

Leach Batch: 236165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-2	ABB - PH 13.0	Leach	Solid	1313	
180-74121-9	ABB - PH 4.0	Leach	Solid	1313	
180-74121-11	ABB- NATURAL	Leach	Solid	1313	
180-74121-13	ASB - PH 13.0	Leach	Solid	1313	
180-74121-20	ASB - PH 4.0	Leach	Solid	1313	
180-74121-22	ASB - NATURAL	Leach	Solid	1313	
180-74121-23	B01	Leach	Solid	1313	

Prep Batch: 236437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-11	ABB- NATURAL	Leach	Solid	3010A	236165
180-74121-22	ASB - NATURAL	Leach	Solid	3010A	236165
180-74121-23	B01	Leach	Solid	3010A	236165
MB 180-236437/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-236437/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-236437/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

Prep Batch: 236440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-2	ABB - PH 13.0	Leach	Solid	3010A	236165
180-74121-9	ABB - PH 4.0	Leach	Solid	3010A	236165
180-74121-13	ASB - PH 13.0	Leach	Solid	3010A	236165
180-74121-20	ASB - PH 4.0	Leach	Solid	3010A	236165
MB 180-236440/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-236440/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-236440/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

Leach Batch: 236722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-3	ABB - PH 12.0	Leach	Solid	1313	
180-74121-6	ABB - PH 8.0	Leach	Solid	1313	

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Metals (Continued)

Leach Batch: 236722 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-8	ABB - PH 5.5	Leach	Solid	1313	
180-74121-17	ASB - PH 8.0	Leach	Solid	1313	
180-74121-18	ASB - PH 7.0	Leach	Solid	1313	
180-74121-25	B03	Leach	Solid	1313	

Analysis Batch: 236729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-2	ABB - PH 13.0	Leach	Solid	EPA 6020A	236440
180-74121-11	ABB- NATURAL	Leach	Solid	EPA 6020A	236437
180-74121-13	ASB - PH 13.0	Leach	Solid	EPA 6020A	236440
180-74121-22	ASB - NATURAL	Leach	Solid	EPA 6020A	236437
180-74121-23	B01	Leach	Solid	EPA 6020A	236437
MB 180-236437/1-A	Method Blank	Total/NA	Solid	EPA 6020A	236437
MB 180-236440/1-A	Method Blank	Total/NA	Solid	EPA 6020A	236440
LCS 180-236437/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	236437
LCS 180-236440/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	236440
LCSD 180-236437/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	236437
LCSD 180-236440/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	236440

Prep Batch: 236807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-3	ABB - PH 12.0	Leach	Solid	3010A	236722
180-74121-6	ABB - PH 8.0	Leach	Solid	3010A	236722
180-74121-8	ABB - PH 5.5	Leach	Solid	3010A	236722
180-74121-17	ASB - PH 8.0	Leach	Solid	3010A	236722
180-74121-18	ASB - PH 7.0	Leach	Solid	3010A	236722
180-74121-25	B03	Leach	Solid	3010A	236722
MB 180-236807/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-236807/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-236807/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

Analysis Batch: 236828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-2	ABB - PH 13.0	Leach	Solid	EPA 6020A	236440
180-74121-9	ABB - PH 4.0	Leach	Solid	EPA 6020A	236440
180-74121-11	ABB- NATURAL	Leach	Solid	EPA 6020A	236437
180-74121-13	ASB - PH 13.0	Leach	Solid	EPA 6020A	236440
180-74121-20	ASB - PH 4.0	Leach	Solid	EPA 6020A	236440
180-74121-22	ASB - NATURAL	Leach	Solid	EPA 6020A	236437
180-74121-23	B01	Leach	Solid	EPA 6020A	236437
MB 180-236437/1-A	Method Blank	Total/NA	Solid	EPA 6020A	236437
MB 180-236440/1-A	Method Blank	Total/NA	Solid	EPA 6020A	236440
LCS 180-236437/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	236437
LCS 180-236440/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	236440
LCSD 180-236437/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	236437
LCSD 180-236440/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	236440

Leach Batch: 237165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-4	ABB - PH 10.5	Leach	Solid	1313	
180-74121-14	ASB- PH 12.0	Leach	Solid	1313	

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Analysis Batch: 237198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-3	ABB - PH 12.0	Leach	Solid	EPA 6020A	236807
180-74121-6	ABB - PH 8.0	Leach	Solid	EPA 6020A	236807
180-74121-17	ASB - PH 8.0	Leach	Solid	EPA 6020A	236807
180-74121-18	ASB - PH 7.0	Leach	Solid	EPA 6020A	236807
180-74121-25	B03	Leach	Solid	EPA 6020A	236807
MB 180-236807/1-A	Method Blank	Total/NA	Solid	EPA 6020A	236807
LCS 180-236807/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	236807
LCSD 180-236807/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	236807

Prep Batch: 237311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-4	ABB - PH 10.5	Leach	Solid	3010A	237165
180-74121-14	ASB- PH 12.0	Leach	Solid	3010A	237165
MB 180-237311/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-237311/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-237311/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

Analysis Batch: 237323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-8	ABB - PH 5.5	Leach	Solid	EPA 6020A	236807

Leach Batch: 237381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-10	ABB - PH 2.0	Leach	Solid	1313	
180-74121-15	ASB - PH 10.5	Leach	Solid	1313	

Prep Batch: 237537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-15	ASB - PH 10.5	Leach	Solid	3010A	237381
MB 180-237537/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-237537/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-237537/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

Leach Batch: 237539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-21	ASB - PH 2.0	Leach	Solid	1313	<u> </u>
180-74121-24	B02	Leach	Solid	1313	

Prep Batch: 237582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-21	ASB - PH 2.0	Leach	Solid	3010A	237539
180-74121-24	B02	Leach	Solid	3010A	237539
MB 180-237582/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-237582/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-237582/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

Analysis Batch: 237590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-4	ABB - PH 10.5	Leach	Solid	EPA 6020A	237311
180-74121-14	ASB- PH 12.0	Leach	Solid	EPA 6020A	237311
MB 180-237311/1-A	Method Blank	Total/NA	Solid	EPA 6020A	237311
LCS 180-237311/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	237311
LCSD 180-237311/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	237311

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TestAmerica Job 1D. 180-74121-1

Analysis Batch: 237713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-4	ABB - PH 10.5	Leach	Solid	EPA 6020A	237311
180-74121-14	ASB- PH 12.0	Leach	Solid	EPA 6020A	237311
MB 180-237311/1-A	Method Blank	Total/NA	Solid	EPA 6020A	237311
LCS 180-237311/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	237311
LCSD 180-237311/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	237311

Leach Batch: 237761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-7	ABB - PH 7.0	Leach	Solid	1313	

Prep Batch: 237767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-7	ABB - PH 7.0	Leach	Solid	3010A	237761
180-74121-10	ABB - PH 2.0	Leach	Solid	3010A	237381
MB 180-237767/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-237767/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-237767/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

Analysis Batch: 237821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-15	ASB - PH 10.5	Leach	Solid	EPA 6020A	237537
180-74121-24	B02	Leach	Solid	EPA 6020A	237582
MB 180-237537/1-A	Method Blank	Total/NA	Solid	EPA 6020A	237537
MB 180-237582/1-A	Method Blank	Total/NA	Solid	EPA 6020A	237582
LCS 180-237537/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	237537
LCS 180-237582/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	237582
LCSD 180-237537/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	237537
LCSD 180-237582/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	237582

Analysis Batch: 237942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-7	ABB - PH 7.0	Leach	Solid	EPA 6020A	237767
180-74121-10	ABB - PH 2.0	Leach	Solid	EPA 6020A	237767
180-74121-21	ASB - PH 2.0	Leach	Solid	EPA 6020A	237582
MB 180-237767/1-A	Method Blank	Total/NA	Solid	EPA 6020A	237767
LCS 180-237767/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	237767
LCSD 180-237767/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	237767

Leach Batch: 238030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-19	ASB - PH 5.5	Leach	Solid	1313	

Analysis Batch: 238052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-7	ABB - PH 7.0	Leach	Solid	EPA 6020A	237767
180-74121-10	ABB - PH 2.0	Leach	Solid	EPA 6020A	237767
180-74121-15	ASB - PH 10.5	Leach	Solid	EPA 6020A	237537
180-74121-21	ASB - PH 2.0	Leach	Solid	EPA 6020A	237582
180-74121-24	B02	Leach	Solid	EPA 6020A	237582
MB 180-237537/1-A	Method Blank	Total/NA	Solid	EPA 6020A	237537
MB 180-237582/1-A	Method Blank	Total/NA	Solid	EPA 6020A	237582
MB 180-237767/1-A	Method Blank	Total/NA	Solid	EPA 6020A	237767
LCS 180-237537/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	237537

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Metals (Continued)

Analysis Batch: 238052 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-237582/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	237582
LCS 180-237767/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	237767
LCSD 180-237537/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	237537
LCSD 180-237582/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	237582
LCSD 180-237767/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	237767

Prep Batch: 238166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-19	ASB - PH 5.5	Leach	Solid	3010A	238030
MB 180-238166/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-238166/2-A	Lab Control Sample	Total/NA	Solid	3010A	
LCSD 180-238166/3-A	Lab Control Sample Dup	Total/NA	Solid	3010A	

Analysis Batch: 238310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Pr	ep Batch
180-74121-19	ASB - PH 5.5	Leach	Solid	EPA 6020A	238166
MB 180-238166/1-A	Method Blank	Total/NA	Solid	EPA 6020A	238166
LCS 180-238166/2-A	Lab Control Sample	Total/NA	Solid	EPA 6020A	238166
LCSD 180-238166/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 6020A	238166

General Chemistry

Analysis Batch: 234952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-1	ABB - PRETEST	Total/NA	Solid	2540G	
180-74121-12	ASB - PRETEST	Total/NA	Solid	2540G	

Analysis Batch: 235778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-26	ABB - AIR DRIED	Total/NA	Solid	2540G	
180-74121-27	ASB - AIR DRIED	Total/NA	Solid	2540G	

Leach Batch: 236165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-2	ABB - PH 13.0	Leach	Solid	1313	
180-74121-9	ABB - PH 4.0	Leach	Solid	1313	
180-74121-11	ABB- NATURAL	Leach	Solid	1313	
180-74121-13	ASB - PH 13.0	Leach	Solid	1313	
180-74121-20	ASB - PH 4.0	Leach	Solid	1313	
180-74121-22	ASB - NATURAL	Leach	Solid	1313	
180-74121-23	B01	Leach	Solid	1313	
180-74121-9 DU	ABB - PH 4.0	Leach	Solid	1313	
180-74121-13 DU	ASB - PH 13.0	Leach	Solid	1313	
180-74121-20 DU	ASB - PH 4.0	Leach	Solid	1313	

Analysis Batch: 236465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-2	ABB - PH 13.0	Leach	Solid	EPA 9040C	236165
180-74121-9	ABB - PH 4.0	Leach	Solid	EPA 9040C	236165
180-74121-11	ABB- NATURAL	Leach	Solid	EPA 9040C	236165

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General Chemistry (Continued)

Analysis Batch: 236465 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-13	ASB - PH 13.0	Leach	Solid	EPA 9040C	236165
180-74121-20	ASB - PH 4.0	Leach	Solid	EPA 9040C	236165
180-74121-22	ASB - NATURAL	Leach	Solid	EPA 9040C	236165
180-74121-23	B01	Leach	Solid	EPA 9040C	236165
LCS 180-236465/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	
LCS 180-236465/24	Lab Control Sample	Total/NA	Solid	EPA 9040C	
LCS 180-236465/47	Lab Control Sample	Total/NA	Solid	EPA 9040C	

Analysis Batch: 236472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-2	ABB - PH 13.0	Leach	Solid	SM 2580B	236165
180-74121-9	ABB - PH 4.0	Leach	Solid	SM 2580B	236165
180-74121-11	ABB- NATURAL	Leach	Solid	SM 2580B	236165
180-74121-13	ASB - PH 13.0	Leach	Solid	SM 2580B	236165
180-74121-20	ASB - PH 4.0	Leach	Solid	SM 2580B	236165
180-74121-22	ASB - NATURAL	Leach	Solid	SM 2580B	236165
180-74121-23	B01	Leach	Solid	SM 2580B	236165
LCS 180-236472/1	Lab Control Sample	Total/NA	Solid	SM 2580B	
LCS 180-236472/13	Lab Control Sample	Total/NA	Solid	SM 2580B	
LCS 180-236472/36	Lab Control Sample	Total/NA	Solid	SM 2580B	

Analysis Batch: 236475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-2	ABB - PH 13.0	Leach	Solid	SM 2510B	236165
180-74121-9	ABB - PH 4.0	Leach	Solid	SM 2510B	236165
180-74121-11	ABB- NATURAL	Leach	Solid	SM 2510B	236165
180-74121-13	ASB - PH 13.0	Leach	Solid	SM 2510B	236165
180-74121-20	ASB - PH 4.0	Leach	Solid	SM 2510B	236165
180-74121-22	ASB - NATURAL	Leach	Solid	SM 2510B	236165
180-74121-23	B01	Leach	Solid	SM 2510B	236165
MB 180-236475/17	Method Blank	Total/NA	Solid	SM 2510B	
MB 180-236475/2	Method Blank	Total/NA	Solid	SM 2510B	
MB 180-236475/43	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-236475/1	Lab Control Sample	Total/NA	Solid	SM 2510B	
LCS 180-236475/16	Lab Control Sample	Total/NA	Solid	SM 2510B	
LCS 180-236475/42	Lab Control Sample	Total/NA	Solid	SM 2510B	

Leach Batch: 236722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-3	ABB - PH 12.0	Leach	Solid	1313	
180-74121-6	ABB - PH 8.0	Leach	Solid	1313	
180-74121-8	ABB - PH 5.5	Leach	Solid	1313	
180-74121-17	ASB - PH 8.0	Leach	Solid	1313	
180-74121-18	ASB - PH 7.0	Leach	Solid	1313	
180-74121-25	B03	Leach	Solid	1313	

Analysis Batch: 236785

Lab Sample ID 180-74121-9	Client Sample ID ABB - PH 4.0	Prep Type Leach	Matrix Solid	Method SM 2540C	Prep Batch 236165
180-74121-11	ABB- NATURAL	Leach	Solid	SM 2540C	236165
180-74121-20	ASB - PH 4.0	Leach	Solid	SM 2540C	236165

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Analysis Batch: 236785 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-22	ASB - NATURAL	Leach	Solid	SM 2540C	236165
180-74121-23	B01	Leach	Solid	SM 2540C	236165
MB 180-236785/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-236785/1	Lab Control Sample	Total/NA	Solid	SM 2540C	
180-74121-9 DU	ABB - PH 4.0	Leach	Solid	SM 2540C	236165
180-74121-20 DU	ASB - PH 4.0	Leach	Solid	SM 2540C	236165

Analysis Batch: 236825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-13	ASB - PH 13.0	Leach	Solid	SM 2540C	236165
MB 180-236825/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-236825/1	Lab Control Sample	Total/NA	Solid	SM 2540C	
180-74121-13 DU	ASB - PH 13.0	Leach	Solid	SM 2540C	236165

Analysis Batch: 237078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-2	ABB - PH 13.0	Leach	Solid	SM 2540C	236165
180-74121-3	ABB - PH 12.0	Leach	Solid	SM 2540C	236722
180-74121-6	ABB - PH 8.0	Leach	Solid	SM 2540C	236722
180-74121-8	ABB - PH 5.5	Leach	Solid	SM 2540C	236722
180-74121-17	ASB - PH 8.0	Leach	Solid	SM 2540C	236722
180-74121-18	ASB - PH 7.0	Leach	Solid	SM 2540C	236722
180-74121-25	B03	Leach	Solid	SM 2540C	236722
MB 180-237078/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-237078/1	Lab Control Sample	Total/NA	Solid	SM 2540C	

Leach Batch: 237107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-1	ABB - PRETEST	Leach	Solid	1313	_
180-74121-1	ABB - PRETEST	Leach	Solid	1313	
180-74121-1	ABB - PRETEST	Leach	Solid	1313	
180-74121-12	ASB - PRETEST	Leach	Solid	1313	
180-74121-12	ASB - PRETEST	Leach	Solid	1313	
180-74121-12	ASB - PRETEST	Leach	Solid	1313	
180-74121-12	ASB - PRETEST	Leach	Solid	1313	

Leach Batch: 237165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-4	ABB - PH 10.5	Leach	Solid	1313	
180-74121-14	ASB- PH 12.0	Leach	Solid	1313	

Analysis Batch: 237329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-4	ABB - PH 10.5	Leach	Solid	SM 2540C	237165
180-74121-14	ASB- PH 12.0	Leach	Solid	SM 2540C	237165
MB 180-237329/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-237329/1	Lab Control Sample	Total/NA	Solid	SM 2540C	

Analysis Batch: 237380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-1	ABB - PRETEST	Leach	Solid	EPA 9040C	237107

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General Chemistry (Continued)

Analysis Batch: 237380 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-1	ABB - PRETEST	Leach	Solid	EPA 9040C	237107
180-74121-1	ABB - PRETEST	Leach	Solid	EPA 9040C	237107
180-74121-3	ABB - PH 12.0	Leach	Solid	EPA 9040C	236722
180-74121-6	ABB - PH 8.0	Leach	Solid	EPA 9040C	236722
180-74121-8	ABB - PH 5.5	Leach	Solid	EPA 9040C	236722
180-74121-12	ASB - PRETEST	Leach	Solid	EPA 9040C	237107
180-74121-12	ASB - PRETEST	Leach	Solid	EPA 9040C	237107
180-74121-12	ASB - PRETEST	Leach	Solid	EPA 9040C	237107
180-74121-12	ASB - PRETEST	Leach	Solid	EPA 9040C	237107
180-74121-17	ASB - PH 8.0	Leach	Solid	EPA 9040C	236722
180-74121-18	ASB - PH 7.0	Leach	Solid	EPA 9040C	236722
180-74121-25	B03	Leach	Solid	EPA 9040C	236722
LCS 180-237380/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	

Leach Batch: 237381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-10	ABB - PH 2.0	Leach	Solid	1313	
180-74121-12	ASB - PRETEST	Leach	Solid	1313	
180-74121-15	ASB - PH 10.5	Leach	Solid	1313	

Analysis Batch: 237422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-3	ABB - PH 12.0	Leach	Solid	SM 2580B	236722
180-74121-6	ABB - PH 8.0	Leach	Solid	SM 2580B	236722
180-74121-8	ABB - PH 5.5	Leach	Solid	SM 2580B	236722
180-74121-17	ASB - PH 8.0	Leach	Solid	SM 2580B	236722
180-74121-18	ASB - PH 7.0	Leach	Solid	SM 2580B	236722
180-74121-25	B03	Leach	Solid	SM 2580B	236722
LCS 180-237422/1	Lah Control Sample	Total/NA	Solid	SM 2580B	

Analysis Batch: 237425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-3	ABB - PH 12.0	Leach	Solid	SM 2510B	236722
180-74121-6	ABB - PH 8.0	Leach	Solid	SM 2510B	236722
180-74121-8	ABB - PH 5.5	Leach	Solid	SM 2510B	236722
180-74121-17	ASB - PH 8.0	Leach	Solid	SM 2510B	236722
180-74121-18	ASB - PH 7.0	Leach	Solid	SM 2510B	236722
180-74121-25	B03	Leach	Solid	SM 2510B	236722
MB 180-237425/2	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-237425/1	Lab Control Sample	Total/NA	Solid	SM 2510B	

Analysis Batch: 237531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-10	ABB - PH 2.0	Leach	Solid	EPA 9040C	237381
180-74121-12	ASB - PRETEST	Leach	Solid	EPA 9040C	237381
180-74121-15	ASB - PH 10.5	Leach	Solid	EPA 9040C	237381
LCS 180-237531/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	

Leach Batch: 237539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-21	ASB - PH 2.0	Leach	Solid	1313	

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General Chemistry (Continued)

Leach	Batch:	237539	(Continued)
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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-24	B02	Leach	Solid	1313	

Analysis Batch: 237550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-10	ABB - PH 2.0	Leach	Solid	SM 2580B	237381
180-74121-15	ASB - PH 10.5	Leach	Solid	SM 2580B	237381
LCS 180-237550/1	Lab Control Sample	Total/NA	Solid	SM 2580B	

Analysis Batch: 237553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-10	ABB - PH 2.0	Leach	Solid	SM 2510B	237381
180-74121-15	ASB - PH 10.5	Leach	Solid	SM 2510B	237381
MB 180-237553/2	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-237553/1	Lab Control Sample	Total/NA	Solid	SM 2510B	

Analysis Batch: 237560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-21	ASB - PH 2.0	Leach	Solid	EPA 9040C	237539
180-74121-24	B02	Leach	Solid	EPA 9040C	237539
LCS 180-237560/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	

Analysis Batch: 237562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-21	ASB - PH 2.0	Leach	Solid	SM 2580B	237539
180-74121-24	B02	Leach	Solid	SM 2580B	237539
LCS 180-237562/1	Lab Control Sample	Total/NA	Solid	SM 2580B	

Analysis Batch: 237563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-21	ASB - PH 2.0	Leach	Solid	SM 2510B	237539
180-74121-24	B02	Leach	Solid	SM 2510B	237539
MB 180-237563/2	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-237563/1	Lab Control Sample	Total/NA	Solid	SM 2510B	

Leach Batch: 237733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-1	ABB - PRETEST	Leach	Solid	1313	<u> </u>
180-74121-12	ASB - PRETEST	Leach	Solid	1313	
180-74121-12	ASB - PRETEST	Leach	Solid	1313	

Analysis Batch: 237737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-1	ABB - PRETEST	Leach	Solid	EPA 9040C	237733
180-74121-4	ABB - PH 10.5	Leach	Solid	EPA 9040C	237165
180-74121-12	ASB - PRETEST	Leach	Solid	EPA 9040C	237733
180-74121-12	ASB - PRETEST	Leach	Solid	EPA 9040C	237733
180-74121-14	ASB- PH 12.0	Leach	Solid	EPA 9040C	237165
LCS 180-237737/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-4	ABB - PH 10.5	Leach	Solid	SM 2580B	237165
180-74121-14	ASB- PH 12.0	Leach	Solid	SM 2580B	237165
LCS 180-237751/1	Lab Control Sample	Total/NA	Solid	SM 2580B	

Analysis Batch: 237752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-4	ABB - PH 10.5	Leach	Solid	SM 2510B	237165
180-74121-14	ASB- PH 12.0	Leach	Solid	SM 2510B	237165
MB 180-237752/2	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-237752/1	Lab Control Sample	Total/NA	Solid	SM 2510B	

Leach Batch: 237761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-7	ABB - PH 7.0	Leach	Solid	1313	

Analysis Batch: 237772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-7	ABB - PH 7.0	Leach	Solid	EPA 9040C	237761
LCS 180-237772/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	

Analysis Batch: 237774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-7	ABB - PH 7.0	Leach	Solid	SM 2580B	237761
LCS 180-237774/1	Lab Control Sample	Total/NA	Solid	SM 2580B	

Analysis Batch: 237776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-7	ABB - PH 7.0	Leach	Solid	SM 2510B	237761
MB 180-237776/2	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-237776/1	Lab Control Sample	Total/NA	Solid	SM 2510B	

Analysis Batch: 237940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-10	ABB - PH 2.0	Leach	Solid	SM 2540C	237381
180-74121-15	ASB - PH 10.5	Leach	Solid	SM 2540C	237381
180-74121-21	ASB - PH 2.0	Leach	Solid	SM 2540C	237539
180-74121-24	B02	Leach	Solid	SM 2540C	237539
MB 180-237940/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-237940/1	Lab Control Sample	Total/NA	Solid	SM 2540C	

Leach Batch: 238030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-19	ASB - PH 5.5	Leach	Solid	1313	

Analysis Batch: 238055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-7	ABB - PH 7.0	Leach	Solid	SM 2540C	237761
MB 180-238055/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-238055/1	Lab Control Sample	Total/NA	Solid	SM 2540C	

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Client: KPRG and Associates, Inc. Project/Site: Midwest Generation

TestAmerica 304 95 3110-74121-1

General Chemistry (Continued)

Analysis Batch: 238129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-19	ASB - PH 5.5	Leach	Solid	EPA 9040C	238030
LCS 180-238129/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	

Analysis Batch: 238130

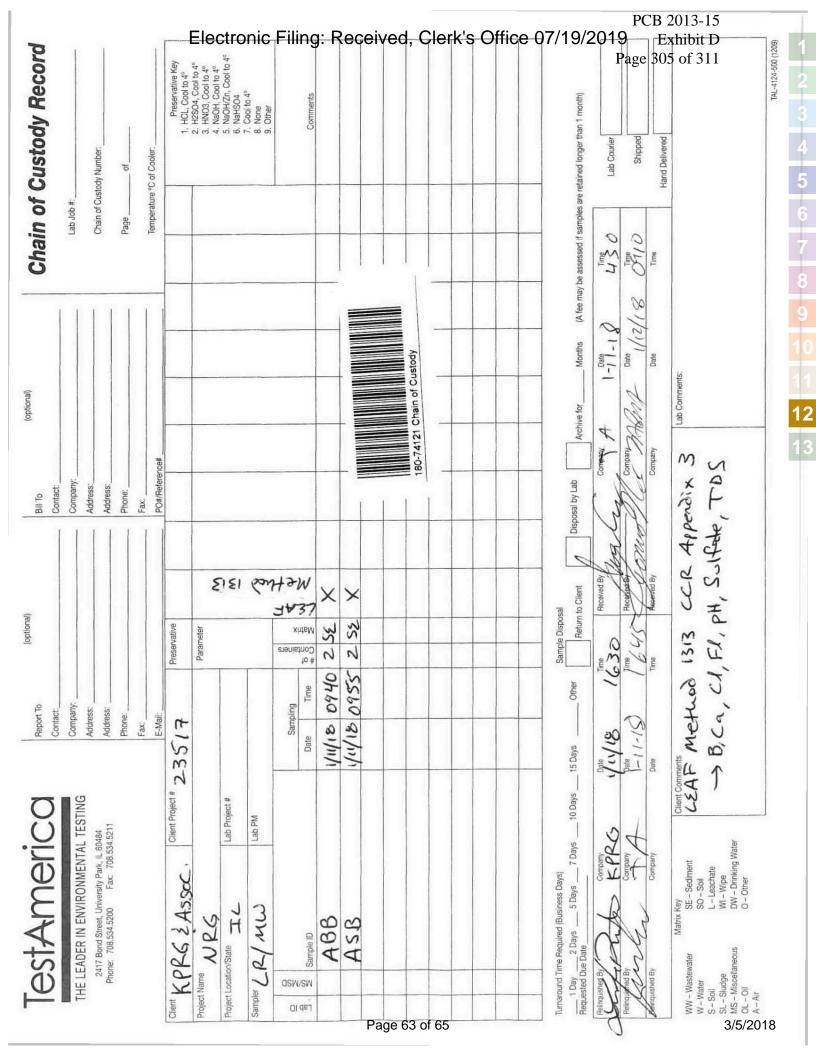
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-19	ASB - PH 5.5	Leach	Solid	SM 2510B	238030
MB 180-238130/2	Method Blank	Total/NA	Solid	SM 2510B	
LCS 180-238130/1	Lab Control Sample	Total/NA	Solid	SM 2510B	

Analysis Batch: 238131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-19	ASB - PH 5.5	Leach	Solid	SM 2580B	238030
LCS 180-238131/1	Lab Control Sample	Total/NA	Solid	SM 2580B	

Analysis Batch: 238132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-74121-19	ASB - PH 5.5	Leach	Solid	SM 2540C	238030
MB 180-238132/2	Method Blank	Total/NA	Solid	SM 2540C	
LCS 180-238132/1	Lab Control Sample	Total/NA	Solid	SM 2540C	



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Uncorrected temp Thermometer ID

Initials 13

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3/5/2018

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Client: KPRG and Associates, Inc.

Job Number: 180-74121-1

Login Number: 74121

List Source: TestAmerica Pittsburgh

List Number: 1 Creator: Neri, Tom

oreator. Nerr, Torri		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	

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<u>ATTACHMENT 3</u> Analytical Model Calculations

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SITE NAME: Powerton Station

ADDRESS: 13082 E Manito Rd.

Pekin, IL 61554

LPC NUMBER:

LOCATION: Ash Pond Well

RISK-BASED CORRECTIVE ACTION (RBCA) GROUNDWATER COMPONENT OF THE GROUNDWATER INGESTION EXPOSURE ROUTE TIER 2 EVALUATION

CONTAMINANT:

OOM FAMILITATE			Boron-525 silt clay	Boron-525 sand	Sulfate-525 SC	Sulfate-525 sand
		dist along centerline of plume in gw flow dir to N	, , , , , , , , , ,			
	X (cm)	property boundary	16002	16002	16002	
R16	ALPHA _x (cm)	longitudinal dispersivity	1600.2	1600.2	1600.2	1600.2
R17	ALPHA _y (cm)	transverse dispersivity	533.4	533.4	533.4	533.4
R18	ALPHA _z (cm)	vertical dispersivity	80.01	80.01	80.01	80.01
	LAMBDA (1/d)	first order degradation constant*	0	0	0	0
R19	U (cm/d)	specific discharge	0.058	450.075	0.058	
	K (cm/d)	hydraulic conductivity (site specific)	0.863778816	10033.52832	0.863778816	
	i (cm/cm) THETA, (cm ³ /cm ³)	hydraulic gradient (site specific), 11/8/17	0.0267	0.0157	0.0267	
	• • • • •	total soil porosity (site specific)	0.4	0.35	0.4	
	THETA _{as} (cm ³ /cm ³)	volumetric air content (surface soil <1 m)	0.14	0.14	0.14	
	THETA _{ws} (cm ³ /cm ³)	volumetric water content (surface soil <1 m) source width perpendicular to gw flow dir in horiz		0.18	0.18	
	S _w (cm)	plane- source width perpendicular to gw flow dir in	5334	5334	5334	5334
	S _d (cm)	vertical plane (default)	200	200	200	200
	BETA _y	R15 input	0.456	0.456	0.456	0.456
	BETA _z	R15 input steady-state attenuation along centerline of	0.088	0.088	0.088	0.088
R15	C _x /C _{source}	dissolve plume	4.79E-02	4.79E-02	4.79E-02	4.79E-02
	RHO _s (g/cm ³)	soil bulk density (default)	1.5	1.5		
R20	k _s (cm ³ /g)	soil water sorption coefficient	1.1	1.1	1.1	
	K _{oc} (cm ³ /g)	organic carbon partition coefficient	0	0	0	
	1.00 (0 /9)	organic carbon content of soil (subsurface	Ŭ	Ŭ	·	
	f _{oc} (g/g)	default)	0.002	0.002	0.002	0.002
	H'	Henry's Law constant	0.002	0.002	0.002	
R24	U _{aw} (cm/yr)	groundwater Darcy velocity	8.42	57497.13		
	DELTA _{aw} (cm)	gw mixing zone thickness (default)	200	200	200	
	W (cm)	width of source area parallel to dir gw-	3048	3048	3048	
	I (cm/yr)	infiltration rate	30	30	30	
R14	LF _{sw} (kg _{soil} /L _{water})	leaching factor	0.8048532	0.0064664	0.8048532	0.0064664
		greatest potential concentration of contaminant				
	C _{source} (mg/L)	at source	3.65	3.65	155	155
	GW _{comp} (mg/L)	gw objective at compliance point (Class I)	2	2		
	GW _{comp} (mg/L)	gw objective at compliance point (Class II)	2	2		
R26	C _x (mg/L)	dissolved concentration along centerline at property boundary	1.7477E-01	1.7477E-01	7.4216E+00	7.4216E+00
	C _s (mg/kg)	Soil source concentration				
	X (feet)	Distance to POC	525	525	525	525

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ATTACHMENT 4
Photo-documentation of Repaired Tear in the Ash By-Pass Basin

