Annual Groundwater Monitoring Report

Southwestern Electric Power Company

H. W. Pirkey Power Plant

Landfill CCR Unit

CN600126767; RN100214287

Registration No: CCR104

Hallsville, Texas

January 31, 2026

Prepared by:
American Electric Power Service Corporation
1 Riverside Plaza
Columbus, Ohio 43215

SOUTHWESTERN ELECTRIC POWER COMPANY℠

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Page

Table of Contents

I. Summary 2

II. Groundwater Monitoring Well Locations and Identification Numbers 4

III. Monitoring Wells Installed or Decommissioned 5

IV. Groundwater Quality Data and Static Water Elevation Data, With Flow Rate and Direction and Discussion 5

V. Groundwater Quality Data Statistical Analysis 5

VI. Alternate Source Demonstration 6

VII. Discussion About Transition Between Monitoring Requirements or Alternate Monitoring Frequency 6

VIII. Other Information Required 6

IX. Description of Any Problems Encountered in 2025 and Actions Taken 6

X. A Projection of Key Activities for the Upcoming Year 6

Appendix 1- Groundwater Data Tables and Figures

Appendix 2- Statistical Analysis

Appendix 3- Alternate Source Demonstrations

Appendix 4- Notices for Monitoring Program Transitions

Appendix 5- Well Installation/Decommissioning Logs – N/A

Appendix 6- Groundwater Monitoring Field and Laboratory Results

Abbreviations:
ASD - Alternate Source Demonstration
CCR – Coal Combustion Residual
GWPS - Groundwater protection standards
SSI - Statistically Significant Increase
SSL - Statistically Significant Level
TCEQ – Texas Commission on Environmental Quality

I. Summary

This *Annual Groundwater Monitoring Report* (Report) has been prepared to report the status of activities for the preceding year for the Landfill (LF) Coal Combustion Residual (CCR) unit at Pirkey Power Plant. Southwestern Electric Power Company is wholly-owned subsidiary of American Electric Power Company (AEP). The Texas Commission on Environmental Quality's (TCEQ's) CCR rule requires that the Annual Groundwater Monitoring Report be posted to the operating record for the preceding year no later than January 31, 2026.

In general, the following activities were completed:

- At the start of the current annual reporting period, the LF was operating under the Detection monitoring program.
- At the end of the current annual reporting period, the LF was operating under the Detection monitoring program.
- Assessment Monitoring sampling was initiated on April 3, 2018;
- An alternate source for the statistically significant increases (SSI) over background that caused this unit to transition to assessment monitoring was identified in a report (Alternative Source Demonstration Report Federal CCR Rule) on January 7, 2020. As a result, the unit is returned to detection monitoring;
- Groundwater samples were collected for AD-8, AD-12, AD-16, AD-23, AD-27, AD-34 and AD-36 in April and September 2025 and analyzed for Appendix III, as specified in 30 TAC §352.941 *et seq.* and AEP's *Groundwater Sampling and Analysis Plan (2021)*.
- Groundwater data underwent various validation tests, including tests for completeness, valid values, transcription errors, and consistent units.
- A successful ASD for the 2nd semi-annual 2024 potential SSIs (boron and chloride) was certified on March 28, 2025, and submitted to TCEQ April 1, 2025, for approval.
- During the 1st semi-annual 2025 sampling event (April 2025) with confirmation sampling conducted in June 2025:

  The following Appendix III parameters exceeded background on September 26, 2025:

  - Boron at AD-23 and AD-36
  - Calcium at AD-36
  - Chloride at AD-23 and AD-36
  - Fluoride at AD-36
  - Sulfate at AD-36

- A successful ASDs for the 1st semi-annual 2025 potential SSIs (boron, calcium, chloride, fluoride, and sulfate) was certified on December 23, 2025, and submitted to TCEQ December 24, 2025, for approval.
- During the 2nd semi-annual 2025 sampling event (September 2025) with confirmation sampling conducted in November 2025:

  The following Appendix III parameters exceeded background December 29, 2025:

  - Boron at AD-23 and AD-36
  - Chloride at AD-23 and AD-36
  - Fluoride at AD-36
- Pirkey Power Plant submitted a Notice of SSI over background to TCEQ January 5, 2025, which indicated an alternative source demonstration would be conducted. An alternative source demonstration report will be prepared and certified and submitted to TCEQ's Executive Director for review within 90 days of the SSI determination.
- The background data was re-established on January 25, 2024.
- A statistical process in accordance with 30 TAC §352.931 to evaluate groundwater data was updated, certified, and posted to AEP's CCR website in 2021 titled: AEP's *Statistical Analysis Plan (*Geosyntec 2021). The statistical process was guided by USEPA's *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* ("Unified Guidance," USEPA, 2009).

The major components of this annual report, to the extent applicable at this time, are presented in sections that follow:

- A map, aerial photograph or a drawing showing the LF CCR unit(s), all groundwater monitoring wells and monitoring well identification numbers;
- All of the monitoring data collected, including the rate and direction of groundwater flow, plus a summary showing the number of samples collected per monitoring well, the dates the samples were collected and whether the sample was collected as part of detection monitoring or assessment monitoring programs (Attached as **Appendix 1**);
- Statistical comparison of monitoring data to determine if there have been SSI(s) or SSL(s) (Attached as **Appendix 2**);
- A discussion of whether any alternate source demonstrations were performed, and the conclusions (Attached as **Appendix 3**);
- A summary of any transition between monitoring programs, or an alternate monitoring frequency, for example the date and circumstances for transitioning from detection

monitoring to assessment monitoring, in addition to identifying the constituents detected at a SSI over background concentrations (Attached as **Appendix 4**);

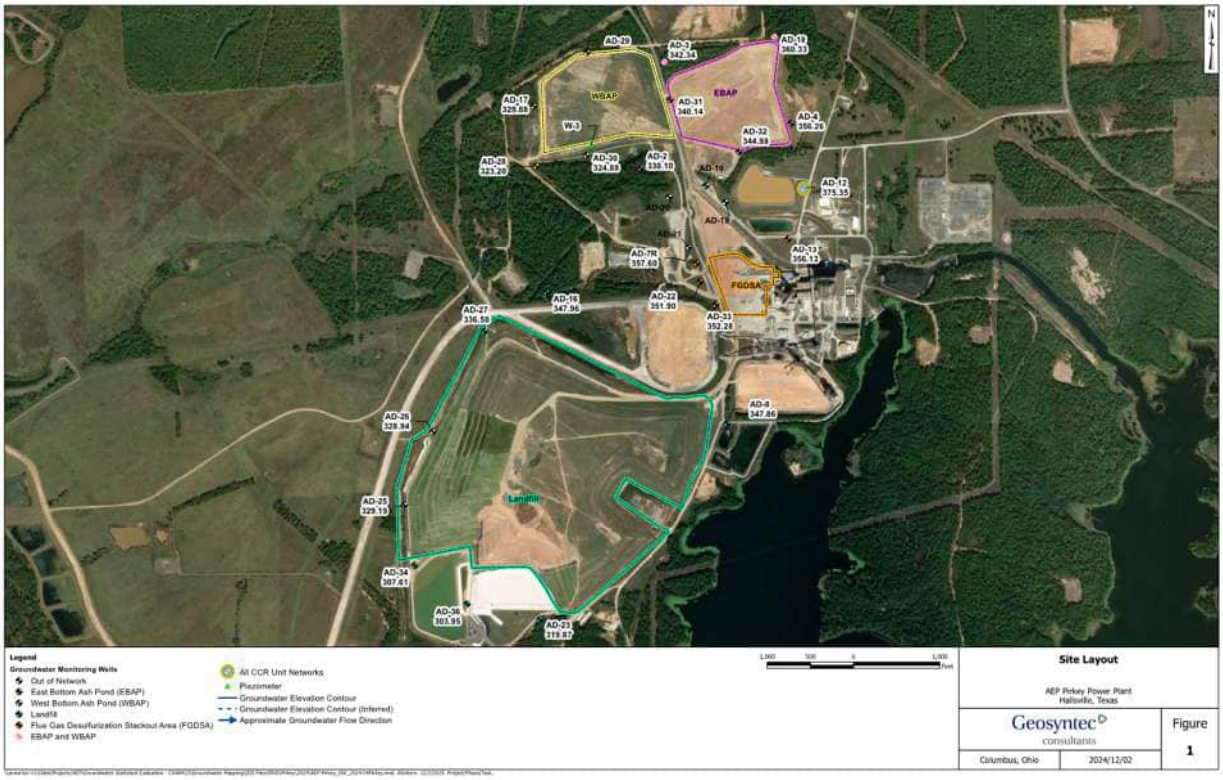
- Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a statement as to why that happened (Attached as **Appendix 5**);
- Other information required to be included in the annual report such as field sheets, analytical reports, etc. (Attached as **Appendix 6**)

In addition, this report summarizes key actions completed, and where applicable, describes any problems encountered and actions taken to resolve those problems. The report includes a projection of key activities for the upcoming year.

II. Groundwater Monitoring Well Locations and Identification Numbers

The figure that follows depicts the PE-certified groundwater monitoring network, the monitoring well locations and their corresponding identification numbers.

Landfill Monitoring Wells	
Upgradient	Downgradient
AD-8	AD-23
AD-12	AD-34
AD-16	AD-35 (decommissioned 2018)
AD-27	AD-36 (installed 2019)



III. Monitoring Wells Installed or Decommissioned

There were no new groundwater monitoring wells installed during 2025. The network design is summarized in the *Groundwater Monitoring Network Design Report* (January 2021) and is posted at the CCR website for Pirkey Power Plant's LF. That network design report, viewable on the AEP CCR web site, discusses the facility location, the hydrogeological setting, the hydrostratigraphic units, the uppermost aquifer, downgradient monitoring well locations and the upgradient monitoring well locations.

IV. Groundwater Quality Data and Static Water Elevation Data, With Flow Rate and Direction and Discussion

Appendix 1 contains tables showing the groundwater quality data collected during the establishment of background quality, and during detection and assessment monitoring. The groundwater velocity calculations, groundwater flow direction, and potentiometric maps developed after each sampling event are shown in **Appendix 1**.

As required by the detection monitoring rules, 30 TAC §352.941 *et seq,* two rounds of sampling were conducted in June and October including all 30 TAC §352 Appendix III parameters.

The groundwater flow rate and direction for the confirmatory sampling events reflect that seen during the semi-annual sampling events.

Detection monitoring will continue in 2026.

V. Groundwater Quality Data Statistical Analysis

Appendix 2 contains the statistical analysis report(s).

During the 1st semi-annual 2025 sampling event (April 2025) with confirmation sampling conducted in June 2025:

The following Appendix III parameters exceeded background September 26, 2025:

- Boron at AD-23 and AD-36
- Calcium at AD-36
- Chloride at AD-23 and AD-36
- Fluoride at AD-36
- Sulfate ad AD-36

During the 2nd semi-annual 2025 sampling event (September 2025) with confirmation sampling conducted in November 2025:

The following Appendix III parameters exceeded background December 29, 2025:

- Boron at AD-23 and AD-36

- Chloride at AD-23 and AD-36
- Fluoride at AD-36

VI. Alternate Source Demonstration

A successful ASDs for the SSIs over background for the 2nd semi-annual 2024 boron and chloride was certified on March 28, 2025, and submitted to TCEQ April 1, 2025, for approval.

A successful ASD for the SSIs over background for the 1st semi-annual 2025 boron, calcium, chloride, fluoride, and sulfate was certified on December 23, 2025, and submitted to TCEQ December 24, 2025, for approval.

Pirkey Power Plant submitted a Notice of SSI over background to TCEQ January 5, 2025, which indicated an alternative source demonstration would be conducted. An alternative source demonstration report will be prepared and certified and submitted to TCEQ's Executive Director for review within 90 days of the SSI determination.

VII. Discussion About Transition Between Monitoring Requirements or Alternate Monitoring Frequency

No transition was made during the reporting period and the CCR Unit remained in detection monitoring.

Regarding defining an alternate monitoring frequency, the groundwater velocity and monitoring well production are high enough at this facility that no modification to the semiannual assessment monitoring frequency is needed.

VIII. Other Information Required

The background data was re-established on January 25, 2024.

As required by the CCR detection monitoring rules in 30 TAC §352.941, sampling all LF CCR wells for the 30 TAC §352 Appendix III parameters were completed in 2025.

IX. Description of Any Problems Encountered in 2025 and Actions Taken

No significant problems were encountered. The low flow sampling effort went smoothly and the schedule was met to support the annual groundwater report preparation covering the year 2025groundwater monitoring activities.

X. A Projection of Key Activities for the Upcoming Year

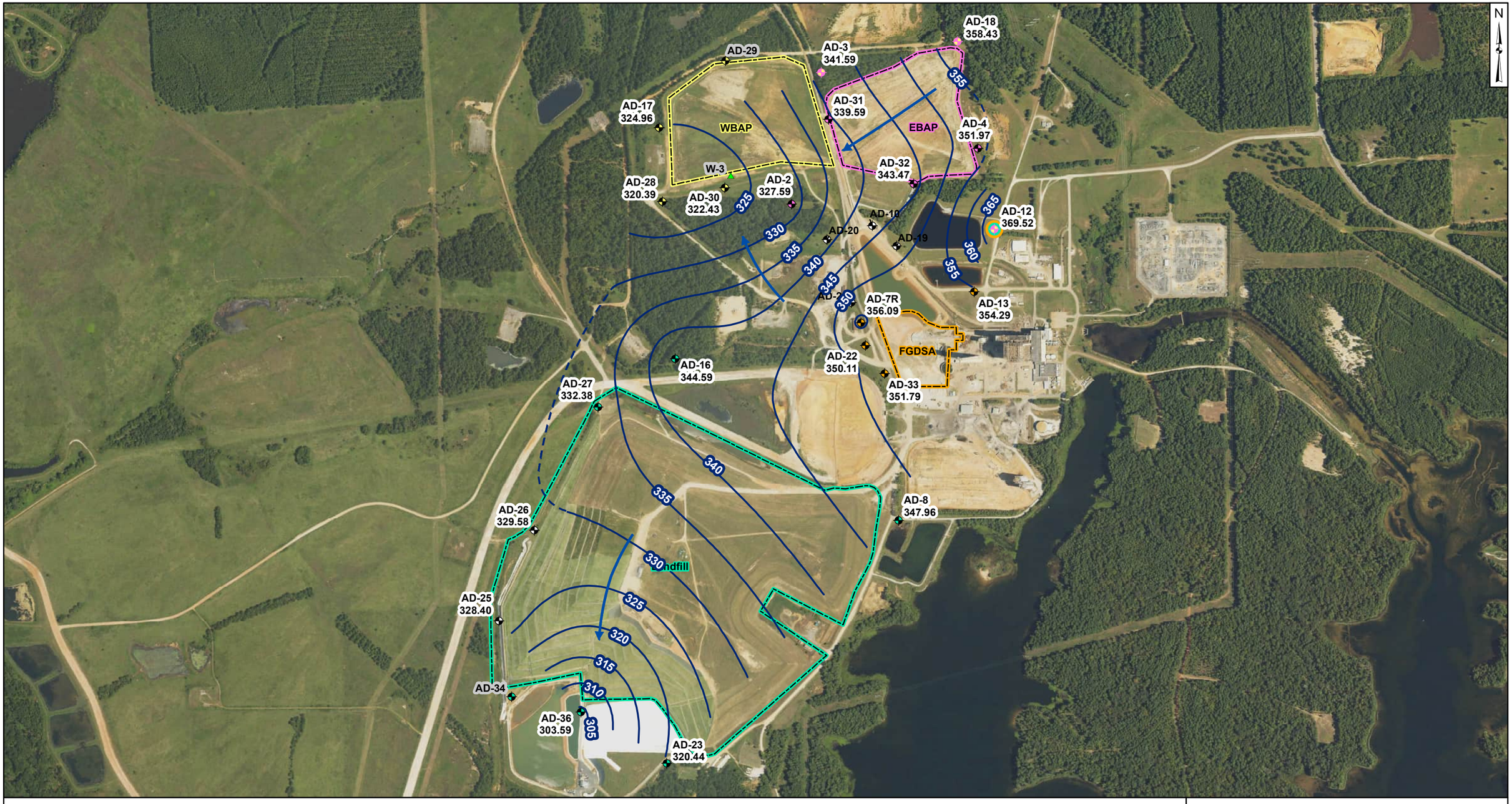
Key activities for the next year include:

- Detection monitoring sampling will be conducted;
- Conduct groundwater sampling events for all constituents listed in 30 TAC §352 Appendix III as required by 30 TAC 352.941;

- Perform statistical analysis on the sampling results for the 30 TAC §352 Appendix III parameters as required by 30 TAC 352.941;
- Evaluation of the detection monitoring results from a statistical analysis viewpoint, looking for any SSIs over background;
- Completed ASDs, as needed;
- Responding to any new data received in light of TCEQ CCR rule requirements;
- Preparation of the next annual groundwater report.

APPENDIX 1

Potentiometric Maps and Tables follow, showing the groundwater monitoring data collected, the rate and direction of groundwater flow, and a summary showing the number of samples collected per monitoring well. The dates that the samples were collected also is shown.



Legend

Groundwater Monitoring Wells

- Out of Network
- East Bottom Ash Pond (EBAP)
- West Bottom Ash Pond (WBAP)
- Landfill
- Flue Gas Desulfurization Stackout Area (FGDSA)
- EBAP and WBAP
- All CCR Unit Networks
- Piezometer
- Groundwater Elevation Contour
- Groundwater Elevation Contour (Inferred)
- Approximate Groundwater Flow Direction

Notes

1. Monitoring well coordinates and water levels (collected on April 21, 22, and 23, 2025) provided by AEP.
2. Site features based on information available in coal combustion residuals (CCR) Groundwater Monitoring Well Network Evaluation Update (Arcadis 2022) provided by AEP.
3. Groundwater elevation units are feet above mean sea level (ft msl).
4. Wells AD-10, AD-19, AD-20, AD-21, AD-29, and W-3 were not gauged during the April 2025 event.
5. AD-7R replaced AD-7, which was abandoned on September 12, 2023.
6. Wells shaded in gray are within the network but not used for contouring.
7. Well AD-34 had artesian characteristics during this event and was not used for contouring.
8. AD-35 was abandoned on November 13, 2018 and is not shown on the map.
9. Removal of CCR plus one foot of material for the WBAP was completed for on July 26, 2022.
10. Removal of CCR plus one foot of material for the EBAP was completed on July 20, 2023.
11. Removal of CCR plus one foot of material for the FGDSA was completed on September 18, 2023.
12. Map is updated to incorporate Landfill survey data collected on May 1, 2024.
13. Aerial imagery provided by the TxGIO DataHub (dated 2024).

1,000 500 0 1,000 Feet

Beth Ann Gross

December 23, 2025
Geosyntec Consultants, Inc.
Texas Firm Registration
No. 1182

STATE OF TEXAS
BETH ANN GROSS
79864
LICENSED
PROFESSIONAL ENGINEER

Potentiometric Contours: Uppermost Aquifer April 2025

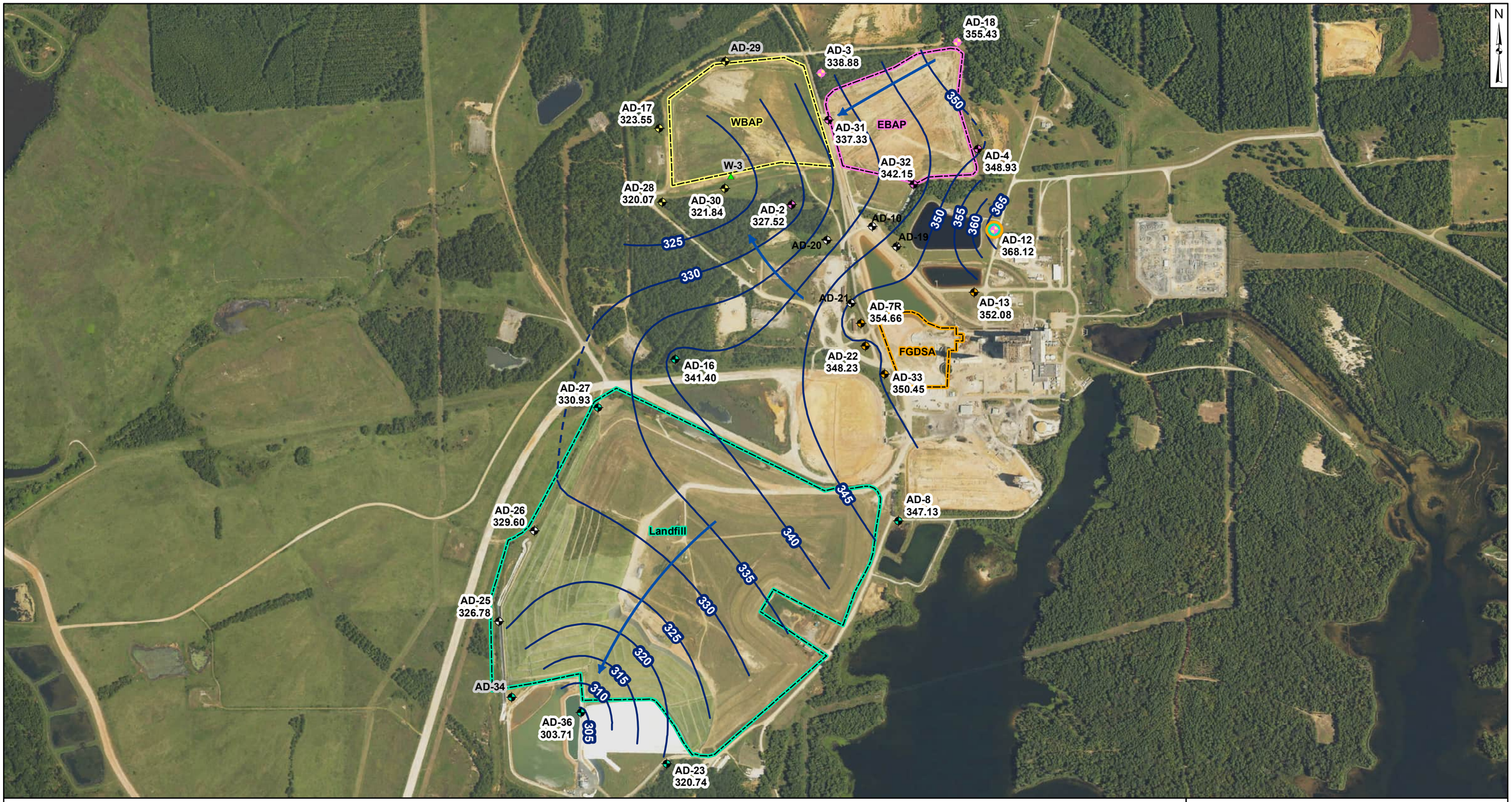
AEP Pirkey Power Plant
Hallsville, Texas

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Columbus, Ohio | 2025/10/28

Figure 1

A:\Projects\AEP\Groundwater Statistical Evaluation - CHA8423\Groundwater Mapping\GIS Files\MXD\Pirkey\2025\AEP-Pirkey_GW_2025-04Pirkey.mxd. okiemute.commander. 10/28/2025. CHA8500B/12/01_04.



Legend

Groundwater Monitoring Wells

- Out of Network
- East Bottom Ash Pond (EBAP)
- West Bottom Ash Pond (WBAP)
- Landfill
- Flue Gas Desulfurization Stackout Area (FGDSA)
- EBAP and WBAP
- All CCR Unit Networks
- Piezometer
- Groundwater Elevation Contour
- Groundwater Elevation Contour (Inferred)
- Approximate Groundwater Flow Direction

Notes

1. Monitoring well coordinates and water levels (collected from September 8-10, 2025) provided by AEP.
2. Site features based on information available in coal combustion residuals (CCR) Groundwater Monitoring Well Network Evaluation Update (Arcadis 2022) provided by AEP.
3. Groundwater elevation units are feet above mean sea level (ft msl).
4. Wells AD-29 and W-3 were not gauged during the September 2025 event.
5. AD-7R replaced AD-7, which was abandoned on September 12, 2023.
6. Wells shaded in gray are within the network but not used for contouring.
7. Well AD-34 had artesian characteristics during this event and was not used for contouring.
8. AD-35 was abandoned on November 13, 2018 and is not shown on the map.
9. Removal of CCR plus one foot of material for the WBAP was completed for on July 26, 2022.
10. Removal of CCR plus one foot of material for the EBAP was completed on July 20, 2023.
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12. Map is updated to incorporate Landfill survey data collected on May 1, 2024.
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1,000 500 0 1,000 Feet

Beth Ann Gross

January 19, 2026
Geosyntec Consultants, Inc.
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Potentiometric Contours: Uppermost Aquifer
September 2025

AEP Pirkey Power Plant
Hallsville, Texas

Geosyntec consultants

Columbus, Ohio | 2026/01/15

Figure 2

A:\Projects\AEP\Groundwater Statistical Evaluation - CHA8423\Groundwater Mapping\GIS Files\MXD\Pirkey\2025\AEP-Pirkey_GW_2025-09Pirkey.mxd. okiemute.commander. 1/15/2026. CHA8500B/12/01_04.

Table 1. Groundwater Elevation Data Summary
Pirkey Power Plant

Geosyntec Consultants

Unit	All Units	East Bottom Ash Pond					West Bottom Ash Pond				
Gradient	Upgradient	Upgradient		Downgradient			Upgradient		Downgradient		
Well	AD-12	AD-4	AD-18	AD-2	AD-31	AD-32	AD-3	AD-18	AD-17	AD-28	AD-30
Jan-2016	371.05	359.16	360.52	328.55	346.60	352.32	347.03	360.52	--	321.39	323.70
May-2016	372.17	360.07	359.26	328.35	348.21	352.74	348.04	359.26	329.38	321.82	324.26
Jul-2016	365.68	352.34	356.99	327.46	345.46	348.53	346.00	356.99	325.93	320.44	322.49
Jan-2017	365.11	353.27	357.06	327.65	343.78	347.44	344.19	357.06	324.70	320.27	322.23
Feb-2017	368.79	355.32	359.21	327.96	344.53	348.44	345.53	359.21	326.27	320.59	322.88
Apr-2017	372.97	356.62	358.63	329.09	344.58	349.09	345.53	358.63	326.27	320.69	322.88
Aug-2017	367.68	353.58	358.23	327.63	343.57	349.73	343.49	358.23	324.18	320.07	322.04
Mar-2018	370.57	359.04	360.00	328.36	344.10	351.42	344.56	360.00	327.13	321.79	323.29
Aug-2018	357.99	350.39	355.99	326.99	342.73	347.58	343.28	355.99	324.12	319.93	321.70
Feb-2019	372.43	360.40	354.61	329.21	348.31	352.86	348.36	354.61	331.11	321.86	324.54
May-2019	373.12	361.18	360.74	328.91	349.68	354.14	349.37	360.74	331.66	322.61	325.21
Aug-2019	361.90	354.10	357.09	327.60	346.63	353.12	346.08	357.09	326.45	320.40	322.63
Mar-2020	373.10	360.56	360.58	329.23	346.95	352.55	347.22	360.58	336.07	321.98	323.94
Jun-2020	381.55	360.25	359.98	328.06	347.95	352.87	347.76	359.98	328.04	321.28	323.40
Nov-2020	361.86	349.70	354.98	327.57	342.84	346.13	342.89	354.98	324.36	319.99	321.90
Mar-2021	373.52	359.14	359.99	329.00	346.24	350.30	346.58	359.99	329.37	322.06	324.19
May-2021	375.56	360.45	360.46	329.57	347.27	351.28	347.46	360.46	329.03	323.10	324.94
Jul-2021	--	--	--	--	--	--	--	--	--	--	--
Nov-2021	358.32	351.40	355.55	327.36	342.79	348.72	342.60	355.55	323.77	319.98	321.80
Jan-2022	--	--	--	--	--	--	--	--	--	--	--
Mar-2022	373.28	359.58	359.17	328.17	344.58	351.73	344.19	359.17	325.80	321.05	323.14
Jun-2022	360.55	351.31	356.01	327.07	342.36	349.94	342.22	356.01	323.48	320.11	321.54
Aug-2022	--	--	--	--	--	--	341.84	--	--	--	--
Nov-2022	363.46	351.15	355.11	327.52	341.97	348.00	340.85	355.11	322.61	319.73	321.81
Feb-2023	368.74	356.04	359.57	328.12	344.34	349.48	--	359.57	--	--	--
Mar-2023	--	--	--	--	--	--	--	--	--	--	--
Jun-2023	369.17	352.66	357.96	327.55	340.46	343.36	341.82	357.96	325.13	320.45	322.07
Aug-2023	362.47	347.25	354.17	326.59	337.74	341.46	--	354.17	--	--	--
Oct-2023	360.29	--	352.80	--	--	--	338.07	352.80	322.93	319.77	321.28
Feb-2024	373.17	355.11	358.88	328.15	339.09	343.76	340.74	358.88	325.69	321.50	323.96
Apr-2024	375.35	356.26	360.33	330.10	340.14	344.98	342.34	360.33	329.88	323.20	324.88
Jun-2024	--	--	--	--	--	--	--	--	--	--	--
Sep-2024	365.57	347.56	354.66	327.11	337.52	342.02	339.08	354.66	323.59	320.21	321.42
Nov-2024	--	--	--	--	--	--	--	--	--	--	--
Feb-2025	374.77	355.86	359.60	328.73	339.37	344.74	341.32	359.60	327.05	321.58	324.07
Apr-2025	369.52	351.97	358.43	327.59	339.59	343.47	341.59	358.43	324.96	320.39	322.43
Jun-2025	370.19	--	359.21	327.90	340.09	344.67	342.35	359.21	325.30	320.84	322.81
Sep-2025	368.12	348.93	355.43	327.52	337.33	342.15	338.88	355.43	323.55	320.07	321.84
Nov-2025	362.12	349.09	353.39	327.21	336.54	341.97	338.69	353.39	323.12	319.83	321.21

Table 1. Groundwater Elevation Data Summary
Pirkey Power Plant

Unit	FGD Stackout Area					Landfill					
Gradient	Upgradient	Downgradient				Upgradient			Downgradient		
Well	AD-13	AD-7	AD-7R	AD-22	AD-33	AD-8	AD-16	AD-27	AD-23	AD-34	AD-36
Jan-2016	354.15	349.31		350.29	351.13	347.21	347.68	--	321.23	307.61	--
May-2016	355.11	349.98		350.83	351.62	348.03	350.97	335.29	321.98	307.61	--
Jul-2016	352.31	347.54		347.55	349.88	347.10	343.32	331.47	321.97	307.61	--
Jan-2017	352.01	347.04		347.20	348.56	345.74	343.09	330.04	320.99	307.61	--
Feb-2017	352.81	347.96		348.52	349.32	346.00	344.54	331.59	321.00	307.61	--
Apr-2017	352.68	347.87		348.45	349.25	345.81	344.69	331.24	320.85	307.61	--
Aug-2017	352.62	347.40		347.37	349.31	346.31	342.71	330.05	320.77	307.61	--
Mar-2018	353.25	348.46		349.62	350.10	346.11	344.63	332.49	320.17	307.61	--
Aug-2018	349.14	344.57		344.05	347.23	345.24	340.03	328.61	320.31	306.66	--
Feb-2019	355.63	350.21		350.90	351.99	348.05	351.21	335.03	320.88	307.61	--
May-2019	355.87	350.82		351.99	352.95	348.60	351.92	336.53	320.99	307.61	--
Aug-2019	350.87	346.85		346.70	349.96	347.33	343.92	330.71	321.29	305.87	303.16
Mar-2020	355.71	350.64		351.80	352.68	--	--	--	--	307.61	303.21
Jun-2020	355.17	350.25		350.95	352.54	348.61	349.39	--	320.79	307.61	303.78
Nov-2020	350.93	346.45		346.12	348.71	346.63	343.07	329.77	320.83	307.00	302.88
Mar-2021	355.22	350.13		351.33	351.84	--	--	--	--	--	--
May-2021	356.42	350.97		352.31	352.95	348.58	350.52	337.25	320.32	307.61	302.22
Jul-2021	--	--		--	--	--	--	--	--	307.61	302.42
Nov-2021	349.43	345.08		345.25	348.40	346.48	341.99	329.69	320.49	307.20	301.66
Jan-2022	--	--		--	--	--	--	--	320.00	307.61	--
Mar-2022	353.99	348.66		349.66	350.15	--	--	--	--	307.61	--
Jun-2022	349.75	345.35		345.49	348.35	346.27	342.41	330.10	319.87	307.00	301.49
Aug-2022	--	--		--	--	--	--	--	319.81	306.84	301.35
Nov-2022	349.93	345.56		345.20	347.43	344.23	341.65	328.48	319.72	307.61	301.35
Feb-2023	353.36	348.68		349.47	350.18	--	--	--	319.56	307.61	301.51
Mar-2023	354.24	--		350.03	350.48	--	--	--	--	--	--
Jun-2023	352.47	347.83		348.29	349.81	346.88	342.44	332.67	320.13	307.61	299.99
Aug-2023	--	--		--	--	--	--	--	320.39	307.61	302.91
Oct-2023	348.85	--		344.70	346.93	345.07	339.45	328.43	320.35	307.61	300.48
Feb-2024	354.43	--	355.99	350.17	350.60	347.86	--	--	--	--	302.62
Apr-2024	356.13	--	357.60	351.90	352.28	347.98	347.96	336.50	319.87	--	303.95
Jun-2024	--	--	--	--	--	--	--	--	320.44	--	303.81
Sep-2024	351.47	--	354.12	347.55	349.73	347.02	342.00	329.87	320.82	--	303.37
Nov-2024	--	--	353.57	346.93	--	--	--	--	320.61	--	303.31
Feb-2025	354.42	--	357.17	351.56	352.29	--	--	--	--	--	--
Apr-2025	354.29	--	356.09	350.11	351.79	347.96	344.59	332.38	320.44	307.61	303.59
Jun-2025	--	--	357.37	351.59	352.99	348.68	--	--	320.72	307.61	303.90
Sep-2025	352.08	--	354.66	348.23	350.45	347.13	341.40	330.93	320.74	307.61	303.71
Nov-2025	350.47	--	354.38	346.70	348.61	346.04	340.99	330.07	320.53	307.61	303.59

Notes:
1. Groundwater elevation measured in feet below ground surface.
2. AD-7R added to the FGD Stackout Area in certified monitoring network in December 2023.

Table 1: Residence Time Calculation Summary
Pirkey Landfill

Geosyntec Consultants, Inc.

			2025-02 [3]		2025-04		2025-06 [3]		2025-09		2025-11 [3]	
CCR Management Unit	Monitoring Well	Well Diameter (inches)	Groundwater Velocity (ft/year)	Groundwater Residence Time (days)	Groundwater Velocity (ft/year)	Groundwater Residence Time (days)	Groundwater Velocity (ft/year)	Groundwater Residence Time (days)	Groundwater Velocity (ft/year)	Groundwater Residence Time (days)	Groundwater Velocity (ft/year)	Groundwater Residence Time (days)
Landfill	AD-8 [1]	4.0	NC	NC	7.6	16.1	11.7	10.4	7.2	16.8	14.7	8.3
	AD-12 [1]	4.0	45.3	2.7	38.7	3.1	29.7	4.1	31.3	3.9	57.8	2.1
	AD-16 [1]	2.0	NC	NC	21.4	2.8	NC	NC	19.1	3.2	19.7	3.1
	AD-23 [2]	2.0	NC	NC	21.4	2.8	19.8	3.1	20.9	2.9	9.8	6.2
	AD-27 [1]	2.0	NC	NC	10.9	5.6	NC	NC	13.2	4.6	10.9	5.6
	AD-34 [2]	2.0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	AD-36 [2]	2.0	NC	NC	24.7	2.5	20.8	2.9	23.5	2.6	22.1	2.8

Notes:
[1] - Background Well
[2] - Downgradient Well
[3] - Verification event
NC - Not Calculated

Table 1. Groundwater Data Summary: AD-8
Pirkey - LF
Appendix III Constituents

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
5/10/2016	Background	1.58	109	9	< 0.083 U1	6.1	181	432
7/13/2016	Background	0.775	20.7	13	2	6.2	131	280
9/08/2016	Background	1.04	50.7	12	2	5.1	121	285
10/12/2016	Background	0.793	20.8	13	2	3.7	184	276
11/15/2016	Background	0.769	17.2	13	3	3.7	208	296
1/11/2017	Background	0.734	18.6	13	3	3.6	228	280
2/28/2017	Background	0.777	18.1	10	2	3.7	157	250
4/11/2017	Background	0.779	17.1	12	3	3.9	168	284
8/23/2017	Detection	0.411	19.4	9	0.587 J1	3.9	56	110
3/21/2018	Assessment	1.03	56.1	8	1.1987	5.7	140	278
8/20/2018	Assessment	0.714	14.5	18	5.1991	3.7	168	300
2/28/2019	Assessment	1.05	103	6.83	0.40	5.7	175	462
5/21/2019	Assessment	1.11	85.5	4.48	0.33	5.9	127	296
8/13/2019	Detection	0.818	27.6	12.7	3.39	4.6	128	260
6/03/2020	Detection	0.783	74.4	11.5	2.45	5.8	196	396
11/03/2020	Detection	0.822	18.5	15.8	2.50	4.1	119	237
5/26/2021	Detection	0.986	93.4	3.28	0.35	5.9	168	390
11/17/2021	Detection	0.693	21.9 M1, P3	15.4	2.31	4.2	97.2	220
6/22/2022	Detection	1.04	37.2 M1	17.0	2.85	5.0	117	270
11/14/2022	Detection	1.03	17.9	23.1	2.04	4.5	119	240
6/27/2023	Detection	0.994	92.7	6.97	0.31	5.8	182	410
10/18/2023	Detection	1.11	19.6	21.9	2.26	4.2	99.4	230
4/23/2024	Detection	0.999	87.7	4.81	0.28	5.3	168	390
9/18/2024	Detection	1.61	61.6	17.5	0.40	5.9	116	290
4/22/2025	Detection	0.805	63.3	7.58	0.36	5.6	136	270
9/09/2025	Detection	1.06	66.0	5.85	0.36	5.9	103	280

Table 1. Groundwater Data Summary: AD-8
Pirkey - LF
Appendix IV Constituents

Geosyntec Consultants, Inc.

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
5/10/2016	Background	< 0.93 U1	< 1.05 U1	38	1	< 0.07 U1	1	1.80288 J1	0.9155	< 0.083 U1	1.02541 J1	< 0.00013 U1	0.027	< 0.29 U1	15	1.19926 J1
7/13/2016	Background	< 0.93 U1	1.16508 J1	61	7	0.175996 J1	1	20	6.75	2	1.46729 J1	0.032	0.211	< 0.29 U1	< 0.99 U1	< 0.86 U1
9/08/2016	Background	< 0.93 U1	< 1.05 U1	48	2	< 0.07 U1	0.835837 J1	9	1.658	2	< 0.68 U1	0.018	0.048	< 0.29 U1	3.84567 J1	< 0.86 U1
10/12/2016	Background	< 0.93 U1	1.46586 J1	61	6	< 0.07 U1	0.74214 J1	18	6.72	2	2.30733 J1	0.032	0.112	< 0.29 U1	2.51464 J1	< 0.86 U1
11/15/2016	Background	< 0.93 U1	< 1.05 U1	52	6	0.118693 J1	0.805286 J1	18	6.14	3	2.85553 J1	0.03	0.16	< 0.29 U1	< 0.99 U1	< 0.86 U1
1/11/2017	Background	< 0.93 U1	1.53134 J1	60	6	0.108717 J1	2	18	6.29	3	2.99592 J1	0.032	0.157	< 0.29 U1	1.4083 J1	< 0.86 U1
2/28/2017	Background	< 0.93 U1	1.68597 J1	52	6	0.13889 J1	0.633257 J1	18	7.64	2	3.26919 J1	0.031	0.153	< 0.29 U1	1.78549 J1	< 0.86 U1
4/11/2017	Background	< 0.93 U1	< 1.05 U1	51	6	0.128137 J1	0.887504 J1	19	5.56	3	2.44168 J1	0.031	0.01068 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
3/21/2018	Assessment	< 0.93 U1	< 1.05 U1	37.9	2.57	< 0.07 U1	< 0.23 U1	9.38	2.499	1.1987	0.95 J1	0.01503	0.049	< 0.29 U1	27.68	< 0.86 U1
8/20/2018	Assessment	0.02 J1	4.05	33.4	4.55	0.18	0.759	15.9	0.145	5.1991	4.46	0.0221	0.105	0.02 J1	9.8	0.083
2/28/2019	Assessment	< 0.4 U1	< 0.6 U1	46.8	< 0.4 U1	< 0.2 U1	< 0.8 U1	0.8 J1	1.066	0.40	< 0.4 U1	0.002 J1	< 0.005 U1	< 8 U1	30.8	< 2 U1
5/21/2019	Assessment	< 0.4 U1	1 J1	42.8	1 J1	< 0.2 U1	< 0.8 U1	< 0.4 U1	1.786	0.33	< 0.4 U1	0.0003 J1	0.009 J1	< 8 U1	23.9	< 0.1 U1

Table 1. Groundwater Data Summary: AD-12
Pirkey - LF
Appendix III Constituents

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
5/11/2016	Background	0.03	0.362	5	< 0.083 U1	4.4	4	94
7/13/2016	Background	0.03	0.26	6	< 0.083 U1	3.1	4	75
9/07/2016	Background	0.04	0.343	6	< 0.083 U1	3.9	7	63
10/12/2016	Background	0.03	0.271	7	1	3.4	8	92
11/14/2016	Background	0.04	0.331	8	< 0.083 U1	2.6	6	80
1/11/2017	Background	0.03	0.315	7	< 0.083 U1	4.8	6	76
2/28/2017	Background	0.04	0.434	5	< 0.083 U1	3.6	4	50
4/11/2017	Background	0.05	0.299	6	0.2565 J1	4.7	7	72
8/23/2017	Detection	0.0495	0.245	6	0.213 J1	4.8	6	52
3/21/2018	Assessment	0.01397	0.269	5	< 0.083 U1	4.2	3	< 2 U1
8/20/2018	Assessment	0.017	0.338	10	< 0.083 U1	4.4	4	94
2/27/2019	Assessment	0.03 J1	0.4 J1	6.08	0.09	5.2	3.6	36
5/21/2019	Assessment	0.020	0.3 J1	6.30	0.09	4.1	4.0	80
8/12/2019	Detection	< 0.02 U1	0.278	7.24	0.06 J1	4.9	2.6	90
3/10/2020	Detection	0.02 J1	0.3 J1	6.08	0.10	4.9	3.7	62
6/02/2020	Detection	< 0.02 U1	0.2 J1	5.63	0.10	4.0	3.9	91
11/02/2020	Detection	0.03 J1	0.3 J1	4.65	0.08	4.3	3.3	74
3/08/2021	Detection	0.01 J1	0.2 J1	6.46	0.11	4.1	3.8	68
5/24/2021	Detection	0.032 J1	0.2 J1	5.54	0.12	4.2	5.46	70
11/15/2021	Detection	0.012 J1	0.28	8.03	0.07	3.5	2.90	90
3/28/2022	Detection	0.021 J1	0.20	6.10	0.07	3.9	3.80	60 L1
6/20/2022	Detection	0.042 J1	0.32	7.59	0.09	4.3	4.81	80
11/15/2022	Detection	0.013 J1	0.36	8.03	0.08	4.7	3.39	70
2/27/2023	Detection	0.021 J1	0.34	6.51	0.07	3.8	3.90	70
6/26/2023	Detection	0.019 J1	0.21	4.68	0.06	4.6	2.9	80
8/23/2023	Detection	0.017 J1	0.22	4.74	0.07	3.8	3.5	75
10/17/2023	Detection	0.015 J1	0.27	6.74	0.07	3.8	2.7	58
2/19/2024	Detection	0.016 J1	0.27	5.87	0.11	3.2	3.1	60
4/22/2024	Detection	0.015 J1	0.18	4.86	0.08	3.4	4.2	60
9/16/2024	Detection	0.018 J1	0.23	4.45	0.07	3.0	3.1	60
2/03/2025	Detection	0.029 J1	0.23	4.94	0.08	3.2	3.1	80
4/21/2025	Detection	0.020 J1	0.17	4.58	0.08	3.2	2.7	70
9/08/2025	Detection	0.081	0.18	4.61	0.07	3.5	3.11	70

Table 1. Groundwater Data Summary: AD-12
Pirkey - LF
Appendix IV Constituents

Geosyntec Consultants, Inc.

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
5/11/2016	Background	< 0.93 U1	< 1.05 U1	26	0.219521 J1	< 0.07 U1	0.710981 J1	1.58207 J1	0.2073	< 0.083 U1	< 0.68 U1	< 0.00013 U1	< 0.005 U1	< 0.29 U1	1.73953 J1	< 0.86 U1
7/13/2016	Background	< 0.93 U1	< 1.05 U1	23	0.190337 J1	< 0.07 U1	0.68835 J1	1.29444 J1	2.909	< 0.083 U1	< 0.68 U1	0.008	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
9/07/2016	Background	< 0.93 U1	< 1.05 U1	30	0.232192 J1	< 0.07 U1	0.353544 J1	1.66591 J1	0.881	< 0.083 U1	< 0.68 U1	0.01	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
10/12/2016	Background	< 0.93 U1	< 1.05 U1	27	0.149553 J1	< 0.07 U1	0.529033 J1	1.56632 J1	0.257	1	< 0.68 U1	0.012	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
11/14/2016	Background	< 0.93 U1	< 1.05 U1	28	0.152375 J1	< 0.07 U1	0.32826 J1	1.47282 J1	0.767	< 0.083 U1	< 0.68 U1	0.013	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
1/11/2017	Background	< 0.93 U1	< 1.05 U1	23	0.126621 J1	< 0.07 U1	0.650158 J1	1.09495 J1	1.536	< 0.083 U1	< 0.68 U1	0.01	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
2/28/2017	Background	< 0.93 U1	< 1.05 U1	26	0.149219 J1	< 0.07 U1	0.325811 J1	1.29984 J1	0.416	< 0.083 U1	< 0.68 U1	0.009	< 0.005 U1	< 0.29 U1	< 0.99 U1	0.994913 J1
4/11/2017	Background	< 0.93 U1	< 1.05 U1	24	0.159412 J1	< 0.07 U1	0.416007 J1	1.33344 J1	0.3895	0.2565 J1	< 0.68 U1	0.008	0.01364 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
3/21/2018	Assessment	< 0.93 U1	< 1.05 U1	25.82	0.16 J1	< 0.07 U1	1.05	1.49 J1	0.784	< 0.083 U1	< 0.68 U1	0.00722	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
8/20/2018	Assessment	< 0.01 U1	0.11	27.8	0.159	0.01 J1	0.330	1.72	1.128	< 0.083 U1	0.089	0.0143	< 0.005 U1	0.04 J1	0.1	0.04 J1
2/27/2019	Assessment	< 0.4 U1	< 0.6 U1	22.5	< 0.4 U1	< 0.2 U1	< 0.8 U1	1.37	0.225	0.09	< 0.4 U1	0.00688	< 0.005 U1	< 8 U1	< 0.6 U1	< 2 U1
5/21/2019	Assessment	< 0.4 U1	< 0.6 U1	21.7	< 0.4 U1	< 0.2 U1	< 0.8 U1	1.15	0.201	0.09	< 0.4 U1	0.00576	< 0.005 U1	< 8 U1	< 0.6 U1	< 0.1 U1

Table 1. Groundwater Data Summary: AD-16
Pirkey - LF
Appendix III Constituents

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
5/10/2016	Background	0.02	1.21	8	< 0.083 U1	3.9	16	116
7/14/2016	Background	0.03	2	9	< 0.083 U1	3.8	45	148
9/08/2016	Background	0.03	1.83	9	< 0.083 U1	3.9	33	133
10/13/2016	Background	0.03	1.15	9	< 0.083 U1	3.9	16	124
11/14/2016	Background	0.03	1.58	9	< 0.083 U1	4.4	23	124
1/12/2017	Background	0.02	1.76	10	< 0.083 U1	3.7	43	112
3/01/2017	Background	0.03	1.29	9	< 0.083 U1	3.2	22	108
4/10/2017	Background	0.02	1.21	11	< 0.083 U1	3.4	24	106
8/24/2017	Detection	0.03648	0.945	12	< 0.083 U1	4.3	14	96
3/22/2018	Assessment	0.0171	1.03	14	< 0.083 U1	4.0	13	96
8/21/2018	Assessment	0.020	1.17	17	< 0.083 U1	4.0	15	128
2/27/2019	Assessment	0.03 J1	0.704	20.3	0.07 J1	4.1	17.7	76
5/23/2019	Assessment	0.022	1.06	20.8	0.06 J1	4.6	26.9	128
8/15/2019	Detection	< 0.02 U1	0.874	20.0	0.06 J1	5.1	15.4	110
6/03/2020	Detection	< 0.02 U1	0.872	21.7	0.11	4.7	13.3	122
11/03/2020	Detection	< 0.02 U1	0.817	19.9	0.07	4.4	11.0	105
5/26/2021	Detection	0.016 J1	0.8	23.2	0.13	4.4	7.36	120
11/17/2021	Detection	0.206	0.94	22.3	0.07	4.3	9.64	110
6/22/2022	Detection	0.021 J1	1.80	24.7	0.10	4.5	9.58	110
11/14/2022	Detection	0.024 J1	0.91	25.2	0.07	4.3	6.68	90
6/27/2023	Detection	0.016 J1	0.79	28.9	0.08	4.4	7.3	120
10/18/2023	Detection	0.026 J1	1.13	22.0	0.07	4.2	9.3	97
4/24/2024	Detection	0.013 J1	1.13	26.1	0.09	4.7	14.8	120
9/17/2024	Detection	0.015 J1	0.95	32.5	0.08	4.9	11.0	120
4/21/2025	Detection	0.015 J1	0.88	29.2	0.12	4.5	10.2	120
9/10/2025	Detection	0.019 J1	1.02	30.5	0.08	4.7	8.80	110

Table 1. Groundwater Data Summary: AD-16
Pirkey - LF
Appendix IV Constituents

Geosyntec Consultants, Inc.

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
5/10/2016	Background	< 0.93 U1	1.83497 J1	61	0.453643 J1	0.0817904 J1	1	4.23727 J1	1.294	< 0.083 U1	< 0.68 U1	0.006	0.01506 J1	< 0.29 U1	2.26113 J1	1.3697 J1
7/14/2016	Background	< 0.93 U1	< 1.05 U1	64	0.565692 J1	< 0.07 U1	1	6	1.438	< 0.083 U1	< 0.68 U1	0.036	0.02395 J1	1.1177 J1	< 0.99 U1	< 0.86 U1
9/08/2016	Background	8	< 1.05 U1	70	0.810547 J1	0.0926258 J1	2	8	1.931	< 0.083 U1	< 0.68 U1	0.032	0.00753 J1	< 0.29 U1	< 0.99 U1	1.75243 J1
10/13/2016	Background	< 0.93 U1	1.52475 J1	56	0.250902 J1	< 0.07 U1	1	3.33761 J1	1.843	< 0.083 U1	< 0.68 U1	0.033	< 0.005 U1	< 0.29 U1	1.70284 J1	< 0.86 U1
11/14/2016	Background	< 0.93 U1	< 1.05 U1	55	0.38481 J1	< 0.07 U1	0.561291 J1	4.34297 J1	2.123	< 0.083 U1	< 0.68 U1	0.028	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
1/12/2017	Background	< 0.93 U1	< 1.05 U1	58	0.70928 J1	< 0.07 U1	0.406161 J1	8	2.629	< 0.083 U1	< 0.68 U1	0.031	0.01045 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
3/01/2017	Background	< 0.93 U1	1.50766 J1	76	0.487946 J1	< 0.07 U1	0.558767 J1	5	1.417	< 0.083 U1	< 0.68 U1	0.021	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
4/10/2017	Background	< 0.93 U1	< 1.05 U1	77	0.435552 J1	< 0.07 U1	0.822329 J1	5	0.932	< 0.083 U1	< 0.68 U1	0.019	0.00733 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
3/22/2018	Assessment	< 0.93 U1	< 1.05 U1	83.66	0.27 J1	< 0.07 U1	1.59	3.6 J1	2.11	< 0.083 U1	< 0.68 U1	0.02224	0.018 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
8/21/2018	Assessment	0.03 J1	0.42	69.0	0.213	0.03	0.211	3.78	1.92	< 0.083 U1	0.082	0.0347	0.014 J1	< 0.02 U1	0.1	0.051
2/27/2019	Assessment	< 0.4 U1	7.74	56.2	< 0.4 U1	< 0.2 U1	< 0.8 U1	3.21	0.848	0.07 J1	< 0.4 U1	0.0154	0.011 J1	< 8 U1	< 0.6 U1	< 2 U1
5/23/2019	Assessment	< 0.4 U1	5.80	83.4	< 0.4 U1	< 0.2 U1	< 0.8 U1	3.16	1.957	0.06 J1	< 0.4 U1	0.0227	< 0.005 U1	< 8 U1	< 0.6 U1	< 0.1 U1

Table 1. Groundwater Data Summary: AD-23
Pirkey - LF
Appendix III Constituents

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
5/10/2016	Background	0.01	0.535	4	< 0.083 U1	4.0	10	72
7/13/2016	Background	0.03	0.317	4	< 0.083 U1	2.7	11	59
9/08/2016	Background	0.02	0.26	5	< 0.083 U1	3.5	12	64
10/12/2016	Background	0.03	0.321	6	< 0.083 U1	3.7	13	68
11/15/2016	Background	0.03	0.249	5	< 0.083 U1	3.5	14	100
1/11/2017	Background	0.02	0.319	6	< 0.083 U1	3.7	13	60
2/28/2017	Background	0.03	0.217	4	< 0.083 U1	4.0	9	48
4/11/2017	Background	0.03	0.543	7	0.2688 J1	4.2	11	76
8/23/2017	Detection	0.04021	0.276	6	0.198 J1	4.1	11	64
12/21/2017	Detection	0.04498	0.469	--	--	--	--	--
3/21/2018	Assessment	0.01762	0.227	4	< 0.083 U1	3.9	10	72
8/20/2018	Assessment	0.017	0.247	9	< 0.083 U1	3.8	11	92
2/28/2019	Assessment	0.02 J1	0.3 J1	6.94	0.04 J1	5.1	7.2	70
5/23/2019	Assessment	0.017	0.3 J1	6.82	0.04 J1	4.8	9.1	54
8/13/2019	Detection	< 0.02 U1	0.325	7.12	0.03 J1	5.0	7.4	126
1/27/2020	Detection	--	--	--	--	4.3	--	70 J1
6/03/2020	Detection	< 0.02 U1	0.2 J1	7.08	0.07	4.3	8.5	65
11/04/2020	Detection	< 0.02 U1	0.2 J1	6.97	0.05 J1	3.9	7.9	71
5/26/2021	Detection	0.023 J1	0.3	6.94	0.06	3.6	7.90	70
11/17/2021	Detection	0.045 J1	0.22	7.11	0.05 J1	3.9	7.84	70
1/26/2022	Detection	0.040 J1	--	--	--	4.1	--	--
6/22/2022	Detection	0.057	0.25	7.32	0.07	3.6	9.52	80
8/30/2022	Detection	0.032 J1	--	--	--	3.9	--	--
11/14/2022	Detection	0.078	0.24	7.49	0.06	4.5	8.03	80
2/28/2023	Detection	0.049 J1	--	--	--	4.4	--	--
6/27/2023	Detection	0.061	0.44	7.55	0.04 J1	4.5	7.7	70
8/23/2023	Detection	0.026 J1	--	--	--	4.4	--	--
10/18/2023	Detection	0.051	0.26	7.99	0.05 J1	4.0	7.7	44 J1
4/24/2024	Detection	0.207	0.22	8.65	0.06	3.7	7.1	70
6/26/2024	Detection	0.242	--	--	--	3.4	--	--
9/18/2024	Detection	0.229	0.20	9.03	0.05 J1	3.0	7.1	60
11/06/2024	Detection	0.279	--	9.44	--	3.8	--	--
4/23/2025	Detection	0.424	0.21	10.4	0.05 J1	4.3	4.7	40 J1
6/11/2025	Detection	0.464	--	11.0	--	4.3	--	--
9/10/2025	Detection	0.525	0.19	11.1	0.04 J1	4.1	7.44	60
11/17/2025	Detection	0.343	--	10.6	--	4.1	--	--

Table 1. Groundwater Data Summary: AD-23
Pirkey - LF
Appendix IV Constituents

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
5/10/2016	Background	2.89148 J1	1.65098 J1	48	0.186855 J1	0.0739811 J1	2	2.29646 J1	6.86	< 0.083 U1	< 0.68 U1	0.000135818 J1	0.01188 J1	< 0.29 U1	1.91991 J1	< 0.86 U1
7/13/2016	Background	3.79558 J1	< 1.05 U1	48	0.192156 J1	0.0925427 J1	2	2.72879 J1	5.69	< 0.083 U1	< 0.68 U1	0.006	0.01721 J1	1.34973 J1	2.00038 J1	< 0.86 U1
9/08/2016	Background	< 0.93 U1	< 1.05 U1	53	0.20435 J1	< 0.07 U1	5	2.01019 J1	6.68	< 0.083 U1	2.23756 J1	0.006	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
10/12/2016	Background	1.29835 J1	7	120	0.463688 J1	0.13648 J1	41	3.91303 J1	12.89	< 0.083 U1	31	1.01	0.095	0.563586 J1	2.10924 J1	< 0.86 U1
11/15/2016	Background	< 0.93 U1	< 1.05 U1	50	0.129296 J1	< 0.07 U1	6	1.66943 J1	7.54	< 0.083 U1	3.21271 J1	0.006	0.02438 J1	0.403857 J1	1.34763 J1	< 0.86 U1
1/11/2017	Background	< 0.93 U1	2.03681 J1	73	0.159 J1	< 0.07 U1	15	2.25934 J1	8.06	< 0.083 U1	11	0.009	0.092	< 0.29 U1	< 0.99 U1	< 0.86 U1
2/28/2017	Background	1.65681 J1	< 1.05 U1	41	0.116844 J1	< 0.07 U1	0.295768 J1	1.05228 J1	5.74	< 0.083 U1	< 0.68 U1	0.005	< 0.005 U1	< 0.29 U1	1.3076 J1	< 0.86 U1
4/11/2017	Background	< 0.93 U1	3.9673 J1	86	0.318917 J1	0.107977 J1	22	2.60853 J1	10.31	0.2688 J1	15	0.01	0.118	0.31517 J1	< 0.99 U1	< 0.86 U1
3/21/2018	Assessment	< 0.93 U1	< 1.05 U1	56.1	0.17 J1	< 0.07 U1	5.7	1.09 J1	7.55	< 0.083 U1	3.52 J1	0.00709	0.02 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
8/20/2018	Assessment	0.03 J1	0.87	53.5	0.147	0.01 J1	1.77	0.803	11	< 0.083 U1	4.79	0.00634	0.025	0.07 J1	1.0	0.176
2/28/2019	Assessment	< 0.4 U1	1 J1	46.9	< 0.4 U1	< 0.2 U1	4.16	1 J1	6.14	0.04 J1	3.46	0.00646	0.035	< 8 U1	1 J1	< 2 U1
5/23/2019	Assessment	< 0.4 U1	0.7 J1	56.4	< 0.4 U1	< 0.2 U1	3 J1	0.7 J1	9.66	0.04 J1	8.99	0.00537	0.058 J1	< 8 U1	< 0.6 U1	0.2 J1

Table 1. Groundwater Data Summary: AD-27
Pirkey - LF
Appendix III Constituents

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
5/11/2016	Background	0.02	4.41	8	0.6176 J1	3.9	51	198
7/13/2016	Background	0.03	4.43	8	< 0.083 U1	2.7	54	192
9/08/2016	Background	0.03	4.17	8	< 0.083 U1	2.9	52	196
10/12/2016	Background	0.03	4.09	8	< 0.083 U1	3.0	58	216
11/15/2016	Background	0.03	4.52	8	< 0.083 U1	3.5	92	216
1/11/2017	Background	0.02	3.74	9	< 0.083 U1	4.1	58	180
3/01/2017	Background	0.03	4.31	8	< 0.083 U1	2.8	56	216
4/10/2017	Background	0.03	4.01	9	< 0.083 U1	3.3	54	180
8/24/2017	Detection	0.0358	3.58	9	0.197 J1	3.7	52	168
3/22/2018	Assessment	0.03901	5.58	11	< 0.083 U1	3.9	78	192
8/21/2018	Assessment	0.024	4.58	10	< 0.083 U1	3.5	65	196
2/28/2019	Assessment	0.07 J1	4.02	11.7	0.20	4.7	52.8	42
5/23/2019	Assessment	0.023	3.89	11.4	0.20	4.4	55.2	204
8/16/2019	Detection	0.02 J1	3.94	10.5	0.18	3.9	53.2	198
6/03/2020	Detection	0.03 J1	3.55	12.8	0.25	4.2	54.6	219
11/03/2020	Detection	0.03 J1	3.45	10.8	0.19	3.6	53.1	196
5/26/2021	Detection	0.029 J1	3.6	13.5	0.25	3.5	50.8	230
11/17/2021	Detection	0.040 J1	3.76	11.6	0.20	3.7	56.4	190 P1
6/22/2022	Detection	0.028 J1	3.88	12.5	0.22	3.3	57.2	210
11/14/2022	Detection	0.034 J1	3.79	12.7	0.20	4.0	59.4	180
6/27/2023	Detection	0.032 J1	3.86	13.6	0.14	4.2	59.9	210
10/18/2023	Detection	0.040 J1	3.76	12.1	0.19	3.4	61.5	180
4/24/2024	Detection	0.037 J1	3.89	14.4	0.16	3.6	60.4	200
9/18/2024	Detection	0.052	3.80	12.7	0.15	3.2	60.6	200
4/23/2025	Detection	0.083	3.67	12.5	0.22	3.6	49.8	130
9/10/2025	Detection	0.137	3.96	14.0	0.24	3.3	60.5	210

Table 1. Groundwater Data Summary: AD-27
Pirkey - LF
Appendix IV Constituents

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
5/11/2016	Background	1.20808 J1	2.15232 J1	43	5	0.431235 J1	0.87101 J1	20	2.031	0.6176 J1	< 0.68 U1	0.066	< 0.005 U1	< 0.29 U1	1.10872 J1	< 0.86 U1
7/13/2016	Background	0.956365 J1	1.27952 J1	45	5	0.434627 J1	2	21	2.406	< 0.083 U1	< 0.68 U1	0.097	0.02241 J1	0.434679 J1	< 0.99 U1	< 0.86 U1
9/08/2016	Background	< 0.93 U1	< 1.05 U1	47	6	0.398469 J1	2	20	2.71	< 0.083 U1	< 0.68 U1	0.095	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
10/12/2016	Background	< 0.93 U1	2.14429 J1	46	5	0.424977 J1	2	20	4.43	< 0.083 U1	< 0.68 U1	0.096	< 0.005 U1	< 0.29 U1	1.35863 J1	< 0.86 U1
11/15/2016	Background	< 0.93 U1	< 1.05 U1	41	5	0.419182 J1	2	22	3.69	< 0.083 U1	< 0.68 U1	0.095	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
1/11/2017	Background	< 0.93 U1	1.56781 J1	46	5	0.30207 J1	1	18	2.62	< 0.083 U1	< 0.68 U1	0.1	0.00659 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
3/01/2017	Background	< 0.93 U1	< 1.05 U1	43	5	0.286804 J1	2	21	3.48	< 0.083 U1	< 0.68 U1	0.1	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
4/10/2017	Background	< 0.93 U1	< 1.05 U1	45	5	0.414787 J1	0.954802 J1	21	2.58	< 0.083 U1	< 0.68 U1	0.104	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
3/22/2018	Assessment	< 0.93 U1	< 1.05 U1	40.53	5.29	0.48 J1	3.09	25.63	2.808	< 0.083 U1	< 0.68 U1	0.108	0.012 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
8/21/2018	Assessment	0.02 J1	1.71	39.5	4.90	0.46	1.14	24.6	2.619	< 0.083 U1	0.296	0.0921	0.006 J1	0.07 J1	3.7	0.137
2/28/2019	Assessment	< 0.4 U1	1 J1	39.5	5.32	0.5 J1	< 0.8 U1	18.9	2.95	0.20	< 0.4 U1	0.0892	< 0.005 U1	< 8 U1	2 J1	< 2 U1
5/23/2019	Assessment	< 0.4 U1	< 0.6 U1	41.0	5.22	0.3 J1	< 0.8 U1	19.9	3.93	0.20	< 0.4 U1	0.0885	< 0.005 U1	< 8 U1	0.6 J1	0.2 J1

Table 1. Groundwater Data Summary: AD-34
Pirkey - LF
Appendix III Constituents

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
5/10/2016	Background	0.08	37.8	7	< 0.083 U1	4.0	974	1516
7/13/2016	Background	0.111	33.2	8	< 0.083 U1	3.6	837	1396
9/08/2016	Background	0.09	39.5	8	< 0.083 U1	3.3	870	1520
10/12/2016	Background	0.09	35.8	7	0.6272 J1	3.6	1084	1464
11/15/2016	Background	0.1	36.3	7	0.9978 J1	3.7	1006	1428
1/11/2017	Background	0.07	39.9	8	< 0.083 U1	3.2	1334	1378
2/28/2017	Background	0.08	37	6	< 0.083 U1	3.7	993	1402
4/10/2017	Background	0.09	38.2	8	0.5241 J1	3.0	1016	1490
8/23/2017	Detection	0.107	36.2	7	0.619 J1	3.7	1231	1128
12/21/2017	Detection	--	--	8	0.6669 J1	--	1020	1260
3/21/2018	Assessment	0.171	40.1	6	< 0.083 U1	3.7	956	1424
8/20/2018	Assessment	0.067	37.0	10	< 0.083 U1	3.7	1064	1462
2/27/2019	Assessment	0.08 J1	39.9	7.64	0.86	2.9	970	1470
5/21/2019	Assessment	0.060	42.0	7.34	0.69	3.3	1080	1154
8/13/2019	Detection	0.070	39.8	7.46	1.13	3.7	1060	1648
1/27/2020	Detection	--	--	--	0.9	3.6	--	1550
3/11/2020	Detection	--	--	--	--	3.6	--	--
6/03/2020	Detection	0.058	40.1	7.68	1.22	3.4	1150	1620
7/15/2020	Detection	--	--	--	1.39	4.1	--	1510
11/04/2020	Detection	0.060	39.5	7.10	0.82	3.4	1090	1670
5/26/2021	Detection	0.063	39.7	7.44	2.1	2.9	1110	1670
7/27/2021	Detection	--	--	--	0.82	3.2	--	--
11/17/2021	Detection	0.069	45.8	7.09	1.11	3.1	1280	1850
1/26/2022	Detection	--	42.6	--	--	3.4	--	1720 S7
3/29/2022	Detection	0.061	45.1 M1	7.40	0.99	3.6	1290	1840 L1
6/22/2022	Detection	0.066	45.8	7.38	1.20	3.7	1260	1750
8/30/2022	Detection	--	46.0	--	--	4.0	--	1650
11/14/2022	Detection	0.067	44.6	7.47	0.44	3.5	1250	1720
2/28/2023	Detection	--	41.9	--	--	3.8	--	1640
6/27/2023	Detection	0.057	40.1	7.18	0.63	3.7	1230	1710
8/23/2023	Detection	--	--	--	--	3.8	--	1560
10/18/2023	Detection	0.057	34.6	7.33	0.74	3.3	1160	1620
4/24/2024	Detection	0.057	40.5	7.32	0.69	3.7	1150	1650
9/18/2024	Detection	< 0.07 U1	43.0	7.20	0.54	4.0	1160	1620
4/23/2025	Detection	0.08 J1	42.2	7.65	1.39	3.9	1110	1600 S7
9/09/2025	Detection	0.063	39.2	7.54	1.17	4.0	955	1670

Table 1. Groundwater Data Summary: AD-34
Pirkey - LF
Appendix IV Constituents

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
5/10/2016	Background	< 0.93 U1	12	72	3	6	34	301	9.64	< 0.083 U1	12	0.176	0.105	0.688222 J1	< 0.99 U1	< 0.86 U1
7/13/2016	Background	< 0.93 U1	25	177	4	6	81	296	7.75	< 0.083 U1	39	0.183	0.313	2.11044 J1	7	< 0.86 U1
9/08/2016	Background	< 0.93 U1	9	31	3	8	12	306	7.91	< 0.083 U1	1.01746 J1	0.158	0.064	< 0.29 U1	< 0.99 U1	< 0.86 U1
10/12/2016	Background	< 0.93 U1	10	39	3	5	15	297	10.12	0.6272 J1	3.69632 J1	0.174	0.036	< 0.29 U1	< 0.99 U1	< 0.86 U1
11/15/2016	Background	< 0.93 U1	7	23	2	8	6	292	13.21	0.9978 J1	< 0.68 U1	0.154	0.025	< 0.29 U1	4.50827 J1	< 0.86 U1
1/11/2017	Background	< 0.93 U1	6	29	2	7	8	284	11.90	< 0.083 U1	< 0.68 U1	0.164	0.032	< 0.29 U1	< 0.99 U1	< 0.86 U1
2/28/2017	Background	< 0.93 U1	7	11	2	6	< 0.23 U1	294	9.87	< 0.083 U1	< 0.68 U1	0.158	< 0.005 U1	< 0.29 U1	< 0.99 U1	< 0.86 U1
4/10/2017	Background	< 0.93 U1	4.49903 J1	23	2	11	7	299	2.407	0.5241 J1	< 0.68 U1	0.167	0.0164 J1	< 0.29 U1	< 0.99 U1	< 0.86 U1
3/21/2018	Assessment	< 0.93 U1	6.51	10.6	2.24	11.97	< 0.23 U1	279	8.85	< 0.083 U1	< 0.68 U1	0.156	< 0.005 U1	< 0.29 U1	3.24 J1	< 0.86 U1
8/20/2018	Assessment	0.01 J1	14.4	7.77	1.77	4.34	0.977	249	10.17	< 0.083 U1	1.32	0.114	0.005 J1	0.03 J1	13.0	0.070
2/27/2019	Assessment	< 0.4 U1	15.9	9.93	2.42	4.57	0.9 J1	260	8.56	0.86	1 J1	0.153	0.015 J1	< 8 U1	14.8	< 2 U1
5/21/2019	Assessment	< 0.4 U1	12.7	10.5	2.25	4.48	0.8 J1	272	10.82	0.69	1 J1	0.158	< 0.005 U1	< 8 U1	4.9	< 0.1 U1

Table 1. Groundwater Data Summary: AD-36
Pirkey - LF
Appendix III Constituents

Collection Date	Monitoring Program	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
		mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
8/13/2019	Background	0.065	0.240	9.46	0.05 J1	4.7	2.2	92
1/27/2020	Background	0.056	0.304	8.65	0.05 J1	4.7	3.5	40 J1
3/11/2020	Background	0.05 J1	0.2 J1	8.44	0.06	5.0	3.7	60 J1
4/15/2020	Background	0.054	0.2 J1	8.40	0.05 J1	3.6	3.7	40 J1
5/13/2020	Background	0.055	0.2 J1	8.56	0.05 J1	4.1	3.4	40 J1
6/03/2020	Background	0.052	0.2 J1	8.52	0.07	4.6	3.3	65
6/16/2020	Background	0.064	0.2 J1	8.39	0.05 J1	4.6	3.6	50 J1
7/01/2020	Background	0.059	0.3 J1	--	--	4.9	--	52
7/15/2020	Background	--	--	8.09	0.08	5.0	3.7	--
11/04/2020	Detection	0.068	0.2 J1	7.99	0.06 J1	4.6	3.1	57
5/26/2021	Detection	0.057	0.6	10.6	0.10	4.0	4.08	60
7/27/2021	Detection	--	0.3	8.67	0.07	3.9	--	--
11/17/2021	Detection	0.070	0.25	8.97	0.05 J1	4.0	2.89	50 P1
6/22/2022	Detection	0.059	0.38	10.1	0.09	4.6	5.00	60
8/30/2022	Detection	--	0.28	10.3	0.07	4.9	3.00	--
11/14/2022	Detection	0.068	0.28	11.1	0.07	4.5	2.93	50
2/28/2023	Detection	--	--	11.7	--	4.5	--	--
6/27/2023	Detection	0.067	0.88	11.1	0.06	4.0	3.6	60 P1
8/23/2023	Detection	--	1.22	11.8	--	4.2	--	--
10/18/2023	Detection	0.081	0.76	12.4	0.07	4.2	3.1	52
2/20/2024	Detection	0.055	--	14.0	--	4.1	--	--
4/23/2024	Detection	0.053	0.75	14.8	0.08	4.7	2.9	60
6/26/2024	Detection	--	--	14.2	--	3.6	--	--
9/18/2024	Detection	0.082	0.77	15.7	0.08	3.6	2.8	50
11/06/2024	Detection	0.085	--	16.3	--	3.9	--	--
4/22/2025	Detection	--	--	--	--	4.5	--	--
4/23/2025	Detection	0.079	1.34	17.0	0.11	--	6.2	< 20 S12, U1
6/11/2025	Detection	0.143	8.54	15.0	0.37	4.5	45.3	--
9/08/2025	Detection	--	--	18.8	0.12	--	4.99	60
9/09/2025	Detection	0.099	1.43	--	--	4.2	--	--
11/17/2025	Detection	0.114	1.20	19.5	0.10	4.7	3.75	--

Table 1. Groundwater Data Summary: AD-36
Pirkey - LF
Appendix IV Constituents

Geosyntec Consultants, Inc.

Collection Date	Monitoring Program	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pCi/L	mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L
8/13/2019	Background	< 0.02 U1	0.15	10.8	0.234	< 0.01 U1	0.203	0.901	1.298	0.05 J1	< 0.05 U1	0.0161	< 0.005 U1	< 0.4 U1	0.09 J1	< 0.1 U1
1/27/2020	Background	< 0.02 U1	0.14	9.94	0.191	0.01 J1	0.09 J1	0.762	1.096	0.05 J1	< 0.05 U1	0.00277	< 0.2 U1	< 0.4 U1	0.07 J1	< 0.1 U1
3/11/2020	Background	< 0.02 U1	0.09 J1	10.2	0.184	< 0.01 U1	< 0.04 U1	0.760	4.056	0.06	< 0.05 U1	0.00246	< 0.002 U1	< 0.4 U1	0.1 J1	< 0.1 U1
4/15/2020	Background	< 0.02 U1	0.10	10.1	0.179	< 0.01 U1	0.1 J1	0.770	2.84	0.05 J1	< 0.05 U1	0.00210	0.003 J1	0.8 J1	0.09 J1	< 0.1 U1
5/13/2020	Background	< 0.02 U1	0.15	10.2	0.194	< 0.01 U1	0.247	0.750	2.346	0.05 J1	< 0.05 U1	0.00266	0.004 J1	< 0.4 U1	0.08 J1	< 0.1 U1
6/03/2020	Background	< 0.02 U1	0.11	9.81	0.204	< 0.01 U1	0.08 J1	0.683	0.692	0.07	< 0.05 U1	0.00262	0.005 J1	< 0.4 U1	0.09 J1	< 0.1 U1
6/16/2020	Background	< 0.02 U1	0.11	9.75	0.173	< 0.01 U1	0.214	0.723	0.885	0.05 J1	0.08 J1	0.00254	0.003 J1	1 J1	0.1 J1	< 0.1 U1
7/01/2020	Background	< 0.02 U1	0.09 J1	9.72	0.179	< 0.01 U1	0.09 J1	0.681	1.171	--	< 0.05 U1	0.00268	0.004 J1	< 0.4 U1	0.06 J1	< 0.1 U1
7/15/2020	Background	--	--	--	--	--	--	--	--	0.08	--	--	--	--	--	--

Notes:
1. Combined radium values were calculated from the sum of the reported radium-226 and radium-228 results.
Radium data quality flags were not included. Reported negative radium-226 or radium-228 results were replaced with zero.
--: Not analyzed
<: Non-detect value. Analytes which were not detected are shown as less than the method detection limit (MDL) followed by a 'U1' flag.
In analytical data prior to 5/18/2021, U1 flags were reported as U in the analytical report.
J1: Concentration estimated. Analyte was detected between the method detection limit and the reporting limit.
In analytical data prior to 5/18/2021, J1 flags were reported as J in the analytical report.
L1: The associated laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) recovery was outside acceptance limits.
M1: The associated matrix spike (MS) or matrix spike duplicate (MSD) recovery was outside acceptance limits
P1: The precision between duplicate results was above acceptance limits.
P3: The precision on the matrix spike duplicate (MSD) was above acceptance limits.
S7: Sample did not achieve constant weight.
S12: Residue weight is below the method criteria but was already analyzed with 100mL.
mg/L: milligrams per liter
pCi/L: picocuries per liter
SU: standard unit
µg/L: micrograms per liter

APPENDIX 2

Where applicable, shown in this appendix are the results from statistical analyses, and a description of the statistical analysis method chosen.

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Memorandum

Date:	September 26, 2025
To:	David Miller (AEP)
Copies to:	Pryce Warren (AEP)
From:	Allison Kreinberg (Geosyntec)
Subject:	Evaluation of Detection Monitoring Data at Pirkey Plant's Landfill

In accordance with the Texas Commission on Environmental Quality's (TCEQ's) regulations regarding the disposal of coal combustion residuals (CCR) in landfills and surface impoundments (30 TAC 352, "CCR rule"), the first semiannual detection monitoring event of 2025 at the Landfill, an existing CCR unit at the Pirkey Power Plant in Hallsville, Texas, was completed on April 23, 2025. Based on the results, a two-of-two verification sampling was completed on June 11, 2025.

A data quality review of the laboratory analytical reports was completed to assess if the laboratory data analysis for this semiannual detection monitoring event met the objectives outlined in TCEQ Draft Technical Guidance No. 32 related to groundwater sampling and analysis[1]. The reported analytical results were determined usable for supporting project objectives, as documented in the review memoranda provided in Attachment A.

Background values (prediction limits) for the LF were originally calculated in January 2018 and have been periodically updated as sufficient data becomes available. An alternative source demonstration (ASD) was certified on January 7, 2020 which resulted in a revision from interwell tests to intrawell tests for the pH, sulfate, and TDS prediction limits. After a minimum of four additional detection monitoring events, the results of those events were compared to the existing background, and the dataset was updated as appropriate. Revised upper prediction limits (UPLs) were calculated for each Appendix III parameter to represent background values. Lower prediction limits (LPLs) were also calculated for pH. Details on the most recent calculation of

[1] TCEQ. Topic: Coal Combustion Residuals (CCR) Groundwater Monitoring and Corrective Action: Draft Technical Guidance No. 32. May 2020.

these revised background values are described in Geosyntec's *Statistical Analysis Summary* report, dated January 25, 2024.

To achieve an acceptably high statistical power while maintaining a site-wide false-positive rate (SWFPR) of 10% per year or less, prediction limits were calculated based on a one-of-two retesting procedure. With this procedure, a statistically significant increase (SSI) is only concluded if both samples in a series of two exceeds the UPL (or are below the LPL for pH). In practice, if the initial result did not exceed the UPL, a second sample was not collected or analyzed.

Detection monitoring results and the relevant background values are compared in Table 1. Noted exceedances are described in the list below.

- Boron concentrations were above the intrawell UPL of 0.0612 mg/L in both the initial (0.424 mg/L) and second (0.464 mg/L) samples collected at AD-23. Boron concentrations were above the intrawell UPL of 0.0747 mg/L in both the initial (0.079 mg/L) and second (0.143 mg/L) samples collected at AD-36. Therefore, SSIs over background are concluded for boron at AD-23 and AD-36.

- Calcium concentrations were above the intrawell UPL of 1.22 mg/L in both the initial (1.34 mg/L) and second (8.54 mg/L) samples collected at AD-36. Therefore, an SSI over background is concluded for calcium at AD-36.

- Chloride concentrations were above the intrawell UPL of 8.92 mg/L in both the initial (10.4 mg/L) and second (11.0 mg/L) samples collected at AD-23. Chloride concentrations were above the intrawell UPL of 11.8 mg/L in both the initial (17.0 mg/L) and second (15.0 mg/L) samples collected at AD-36. Therefore, SSIs over background are concluded for chloride at AD-23 and AD-36.

- Fluoride concentrations were above the intrawell UPL of 0.0980 mg/L in both the initial (0.11 mg/L) and second (0.37 mg/L) samples collected at AD-36. Therefore, an SSI over background is concluded for fluoride at AD-36.

- Sulfate concentrations were above the intrawell UPL of 4.77 mg/L in both the initial (6.2 mg/L) and second (45.3 mg/L) samples collected at AD-36. Therefore, an SSI over background is concluded for sulfate at AD-36.

In response to the exceedances noted above, the Pirkey LF will either transition to assessment monitoring or an ASD for boron, calcium, chloride, fluoride, and sulfate will be conducted in accordance with 30 TAC 352.931. The statistical analysis was conducted in accordance with 30 TAC 352.931 and completed within 90 days of sampling and analysis. A certification of these statistics by a qualified professional engineer is provided in Attachment B.

Table 1. Detection Monitoring Data Evaluation
Detection Summary Memorandum
Pirkey - Landfill

Analyte	Unit	Description	AD-23		AD-34	AD-36	
			4/23/2025	6/11/2025	4/23/2025	4/22/2025	6/11/2025
Boron	mg/L	Intrawell Background Value (UPL)	0.0612		0.108	0.0747	
		Analytical Result	**0.424**	**0.464**	0.08	**0.079**	**0.143**
Calcium	mg/L	Intrawell Background Value (UPL)	0.503		46.1	1.22	
		Analytical Result	0.21	--	42.2	**1.34**	**8.54**
Chloride	mg/L	Intrawell Background Value (UPL)	8.92		8.97	11.8	
		Analytical Result	**10.4**	**11.0**	7.65	**17.0**	**15.0**
Fluoride	mg/L	Intrawell Background Value (UPL)	0.156		1.58	0.0980	
		Analytical Result	0.05	--	1.39	**0.11**	**0.37**
pH	SU	Intrawell Background Value (UPL)	5.0		4.1	5.2	
		Intrawell Background Value (LPL)	3.1		2.9	3.7	
		Analytical Result	4.3	--	3.9	4.5	--
Sulfate	mg/L	Intrawell Background Value (UPL)	13.6		1,340	4.77	
		Analytical Result	4.7	--	1,110	**6.2**	**45.3**
Total Dissolved Solids	mg/L	Intrawell Background Value (UPL)	104		1,840	84.9	
		Analytical Result	40	--	1,600	<20	--

Notes:
1. Bold values exceed the background value.
2. Background values are shaded gray.
LPL: lower prediction limit
mg/L: milligrams per liter
SU: standard units
UPL: upper prediction limit

ATTACHMENT A
Data Quality Review Memoranda

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Memorandum

Date:	September 2, 2025
To:	David Miller (AEP)
Copies to:	Pryce Warren (AEP)
From:	Allison Kreinberg (Geosyntec)
Subject:	Data Quality Review – Pirkey Power Plant April 2025 Sampling Event

This memorandum summarizes the findings of a data quality review for groundwater samples collected at the Pirkey Power Plant in Hallsville, Texas in April 2025. The groundwater samples were collected to comply with the Texas Commission on Environmental Quality's (TCEQ's) regulations regarding the disposal of coal combustion residuals (CCRs) in landfills and surface impoundments (Title 30 Chapter 352, "CCR Rule"). 40 CFR 257 Appendix III and IV constituents were analyzed.

The following sample data groups (SDGs) were associated with the groundwater samples collected during the April 2025 sampling event and are reviewed in this memorandum:

- Dolan Chemical Laboratory (Groveport, Ohio) Job ID # 251095
- Dolan Chemical Laboratory (Groveport, Ohio) Job ID # 251109

The data included in these SDGs were reviewed to assess if they met the objectives outlined in TCEQ Draft Technical Guideline No. 32[1] prior to submittal of this data to TCEQ.

The following data quality issues were identified:

- As reported in SDG 251109, antimony, calcium, and chromium were detected in the field blank sample "Field Blank" collected on 4/23/25. The estimated detected antimony concentration (0.0.067 µg/L) and estimated detected chromium concentration (0.23 µg/L)

[1] TCEQ. Topic: Coal Combustion Residuals (CCR) Groundwater Monitoring and Corrective Action: Technical Guidance No. 32. May 2020.

in the field blank were more than 10% of the detected values for antimony and chromium in all groundwater samples that had detectable levels of those constituents, which could result in high bias in the antimony and chromium results for those groundwater samples. The estimated detected calcium concentration in the field blank (0.02 mg/L) was more than 10% of the detected value for calcium in sample AD-12, which could result in high bias in the calcium result for sample AD-12.

- As reported in SDG 251109, barium, calcium, chromium, and lithium were detected in the equipment blank sample "Equipment Blank" collected on 4/22/25. The estimated detected calcium concentration in the equipment blank (0.02 mg/L) was more than 10% of the detected value for calcium in sample AD-12, which could result in high bias in the calcium result for sample AD-12. The detected chromium concentration in the equipment blank (0.36 µg/L) was more than 10% of the detected values for chromium in all groundwater samples, which could result in high bias in the chromium results for all groundwater samples.

- As reported in SDG 251109, the relative percent difference (RPD) for lead concentrations from parent sample "AD-33" and duplicate sample "Duplicate 1" was 29%. The AD-33 result for lead should be considered estimated.

- As reported in SDG 251095, samples "AD-30" and "AD-34" collected on 4/22/2025 and 4/23/2025, respectively, for total dissolved solids (TDS) were flagged S7: sample did not achieve constant weight. Sample "AD-36" collected on 4/23/2025 for TDS was flagged S12: residue weight is below the method criteria but was already analyzed with 100 mL.

- As reported in SDG 251109, laboratory QC sample ICPMS MS had a MS recovery for lithium above the acceptable limit of 125%. Samples associated with this laboratory QC sample were flagged M1: the associated MS or MSD recovery was outside acceptance limits.

- Radium-226 in the laboratory control sample (LCS) sample "PB25043002" was outside acceptance limits. Samples associated with that QC batch on SDG 251109 were flagged L1: the associated LCS or laboratory control sample (LCSD) recovery was outside acceptance limits. Duplicates were not available for analysis with this batch. Samples associated with this QC batch on SDG 251109 were flagged O3: insufficient sample was received to perform duplicate analysis with this sample batch. The associated results should be considered estimated.

- The percent recovery for radium-228 in the LCSD sample "PB25050106" (74.5%) was below the acceptable limit of 75%. Samples associated with that QC batch on SDG 251109 were flagged L1: the associated LCS or LCSD recovery was outside acceptance limits.

Based on these findings, the majority of the data reported in these SDGs are considered accurate and complete. Although the QC failures mentioned above will result in some limitations of data use since the affected results are considered estimated or have elevated reporting limits, the data are considered usable for supporting project objectives.

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Memorandum

Date:	September 17, 2025
To:	David Miller (AEP)
Copies to:	Pryce Warren (AEP)
From:	Allison Kreinberg (Geosyntec)
Subject:	Data Quality Review – Pirkey Power Plant June 2025 Verification Resampling Event

This memorandum summarizes the findings of a data quality review for groundwater samples collected at the Pirkey Power Plant in Hallsville, Texas in June 2025. The groundwater samples were collected to comply with the Texas Commission on Environmental Quality's (TCEQ's) regulations regarding the disposal of coal combustion residuals (CCRs) in landfills and surface impoundments (Title 30 Chapter 352, "CCR Rule"). Select 40 CFR 257 Appendix III constituents were analyzed.

The following sample data group (SDG) was associated with the groundwater samples collected during the November 2024 verification resampling event and is reviewed in this memorandum:

- Dolan Chemical Laboratory (Groveport, Ohio) Job ID # 251530

The data included in this SDG was reviewed to assess if it met the objectives outlined in TCEQ Draft Technical Guideline No. 32[1] prior to submittal of this data to TCEQ.

No data quality issues were identified. Based on these findings, the data reported in this SDG is considered accurate and complete.

[1] TCEQ. Topic: Coal Combustion Residuals (CCR) Groundwater Monitoring and Corrective Action: Technical Guidance No. 32. May 2020.

ATTACHMENT B

Certification by a Qualified Professional Engineer

CERTIFICATION BY QUALIFIED PROFESSIONAL ENGINEER

I certify that the selected statistical method, described above and in the January 25, 2024 *Statistical Analysis Summary* report, is appropriate for evaluating the groundwater monitoring data for the Pirkey Landfill CCR management area and that the requirements of 30 TAC 352.931(a) have been met.



David Anthony Miller

Printed Name of Licensed Professional Engineer

David Anthony Miller

Signature

112498	**Texas**	**09.26.2025**
License Number	Licensing State	Date

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Memorandum

Date:	December 23, 2025
To:	David Miller (AEP)
Copies to:	Pryce Warren (AEP)
From:	Allison Kreinberg (Geosyntec)
Subject:	Evaluation of Detection Monitoring Data at Pirkey Plant's Landfill

In accordance with the Texas Commission on Environmental Quality's (TCEQ's) regulations regarding the disposal of coal combustion residuals (CCR) in landfills and surface impoundments (30 TAC 352, "CCR rule"), the second semiannual detection monitoring event of 2025 at the Landfill, an existing CCR unit at the Pirkey Power Plant in Hallsville, Texas, was completed on September 9–10, 2025. Based on the results, a two-of-two verification sampling was completed on November 17, 2025.

A data quality review of the laboratory analytical reports was completed to assess if the laboratory data analysis for this semiannual detection monitoring event met the objectives outlined in TCEQ Draft Technical Guidance No. 32 related to groundwater sampling and analysis[1]. The reported analytical results were determined usable for supporting project objectives, as documented in the review memoranda provided in Attachment A.

Background values (prediction limits) for the LF were originally calculated in January 2018 and have been periodically updated as sufficient data becomes available. An alternative source demonstration (ASD) was certified on January 7, 2020 which resulted in a revision from interwell tests to intrawell tests for the pH, sulfate, and TDS prediction limits. After a minimum of four additional detection monitoring events, the results of those events were compared to the existing background, and the dataset was updated as appropriate. Revised upper prediction limits (UPLs) were calculated for each Appendix III parameter to represent background values. Lower prediction limits (LPLs) were also calculated for pH. Details on the most recent calculation of

[1] TCEQ. Topic: Coal Combustion Residuals (CCR) Groundwater Monitoring and Corrective Action: Draft Technical Guidance No. 32. May 2020.

these revised background values are described in Geosyntec's *Statistical Analysis Summary* report, dated January 25, 2024.

To achieve an acceptably high statistical power while maintaining a site-wide false-positive rate (SWFPR) of 10% per year or less, prediction limits were calculated based on a one-of-two retesting procedure. With this procedure, a statistically significant increase (SSI) is only concluded if both samples in a series of two exceeds the UPL (or are below the LPL for pH). In practice, if the initial result did not exceed the UPL, a second sample was not collected or analyzed.

Detection monitoring results and the relevant background values are compared in Table 1. Noted exceedances are described in the list below.

- Boron concentrations were above the intrawell UPL of 0.0612 mg/L in both the initial (0.525 mg/L) and second (0.343 mg/L) samples collected at AD-23. Boron concentrations were above the intrawell UPL of 0.0747 mg/L in both the initial (0.099 mg/L) and second (0.114 mg/L) samples collected at AD-36. Therefore, SSIs over background are concluded for boron at AD-23 and AD-36.

- Chloride concentrations were above the intrawell UPL of 8.92 mg/L in both the initial (11.1 mg/L) and second (10.6 mg/L) samples collected at AD-23. Chloride concentrations were above the intrawell UPL of 11.8 mg/L in both the initial (18.8 mg/L) and second (19.5 mg/L) samples collected at AD-36. Therefore, SSIs over background are concluded for chloride at AD-23 and AD-36.

- Fluoride concentrations were above the intrawell UPL of 0.098 mg/L in both the initial (0.12 mg/L) and second (0.10 mg/L) samples collected at AD-36. Therefore, an SSI over background is concluded for fluoride at AD-36.

In response to the exceedances noted above, the Pirkey LF will either transition to assessment monitoring or an ASD for boron, chloride, and fluoride will be conducted in accordance with 30 TAC 352.931. The statistical analysis was conducted in accordance with 30 TAC 352.931 and completed within 90 days of sampling and analysis. A certification of these statistics by a qualified professional engineer is provided in Attachment B.

Table 1. Detection Monitoring Data Evaluation
Detection Summary Memorandum
Pirkey - Landfill

Analyte	Unit	Description	AD-23		AD-34	AD-36	
			9/10/2025	11/17/2025	9/9/2025	9/9/2025	11/17/2025
Boron	mg/L	Intrawell Background Value (UPL)	0.0612		0.108	0.0747	
		Analytical Result	**0.525**	**0.343**	0.063	**0.099**	**0.114**
Calcium	mg/L	Intrawell Background Value (UPL)	0.503		46.1	1.22	
		Analytical Result	0.19	--	39.2	**1.43**	1.20
Chloride	mg/L	Intrawell Background Value (UPL)	8.92		8.97	11.8	
		Analytical Result	**11.1**	**10.6**	7.54	**18.8**	**19.5**
Fluoride	mg/L	Intrawell Background Value (UPL)	0.156		1.58	0.098	
		Analytical Result	0.04	--	1.17	**0.12**	**0.10**
pH	SU	Intrawell Background Value (UPL)	5.0		4.1	5.2	
		Intrawell Background Value (LPL)	3.1		2.9	3.7	
		Analytical Result	4.1	--	4.0	4.2	--
Sulfate	mg/L	Intrawell Background Value (UPL)	13.6		1,340	4.77	
		Analytical Result	7.44	--	955	**4.99**	3.75
Total Dissolved Solids	mg/L	Intrawell Background Value (UPL)	104		1,840	84.9	
		Analytical Result	60	--	1,670	60	--

Notes:
1. Bold values exceed the background value.
2. Background values are shaded gray.
LPL: lower prediction limit
mg/L: milligrams per liter
SU: standard units
UPL: upper prediction limit

ATTACHMENT A
Data Quality Review Memoranda

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Memorandum

Date:	December 22, 2025
To:	David Miller (AEP)
Copies to:	Pryce Warren (AEP)
From:	Allison Kreinberg (Geosyntec)
Subject:	Data Quality Review – Pirkey Power Plant September 2025 Sampling Event

This memorandum summarizes the findings of a data quality review for groundwater samples collected at the Pirkey Power Plant in Hallsville, Texas in September 2025. The groundwater samples were collected to comply with the Texas Commission on Environmental Quality's (TCEQ's) regulations regarding the disposal of coal combustion residuals (CCRs) in landfills and surface impoundments (Title 30 Chapter 352, "CCR Rule"). 40 CFR 257 Appendix III and IV constituents were analyzed.

The following sample data groups (SDGs) were associated with the groundwater samples collected during the September 2025 sampling event and are reviewed in this memorandum:

- Dolan Chemical Laboratory (Groveport, Ohio) Job ID # 252381
- Dolan Chemical Laboratory (Groveport, Ohio) Job ID # 252382
- Dolan Chemical Laboratory (Groveport, Ohio) Job ID # 252402

The data included in these SDGs were reviewed to assess if they met the objectives outlined in TCEQ Draft Technical Guideline No. 32[1] prior to submittal of this data to TCEQ.

The following data quality issues were identified:

- As reported in SDG 252402, antimony, calcium, and chromium were detected in the field blank sample "Field Blank" collected on 9/9/25. The estimated detected antimony

[1] TCEQ. Topic: Coal Combustion Residuals (CCR) Groundwater Monitoring and Corrective Action: Technical Guidance No. 32. May 2020.

concentration (0.05 µg/L) in the field blank were more than 10% of the detected values for antimony in all groundwater samples that had detectable levels of antimony, which could result in high bias in the antimony results for those groundwater samples. The estimated detected calcium concentration in the field blank (0.03 mg/L) was more than 10% of the detected values for calcium in samples AD-12, AD-18, and AD-23, which could result in high bias in the calcium results for samples AD-12, AD-18, and AD-23. The estimated detected chromium concentration (0.25 µg/L) in the field blank were more than 10% of the detected values for chromium in samples AD-2, AD-3, AD-4, AD-7R, AD-12, AD-13, AD-17, AD-22, AD-28, AD-30, AD-31, AD-32, AD-33, and Duplicate, which could result in high bias in the chromium results for those groundwater samples.

- As reported in SDG 252402, antimony, chromium, and cobalt were detected in the equipment blank sample "Equipment Blank" collected on 9/9/25. The estimated detected antimony (0.03 µg/L) and the detected chromium (0.39 µg/L) concentrations in the equipment blank were more than 10% of the detected value for antimony and chromium in all groundwater samples that had detectable levels of those constituents, which could result in high bias in the antimony and chromium results for those groundwater samples.

- As reported in SDG 252402, the relative percent difference (RPD) for lithium concentrations from parent sample "AD-13" and duplicate sample "Duplicate" was 32%. The AD-13 result for lithium should be considered estimated.

- As reported in SDG 252402, sample "AD-18" collected on 9/10/2025 for radium-226 was flagged R2: carrier recovery was outside acceptance limits.

- As reported in SDG 252402, a laboratory quality control (QC) method blank (MB) was detected for radium-228 above the acceptable limit of 0.95 pCi/L. Samples associated with this laboratory QC sample were flagged B1: analyte detected in MB at or above the method criteria.

- As reported in SDG 252402, the laboratory QC sample ICPMS matrix spike (MS) and ICPMS matrix spike duplicate (MSD) had recoveries for beryllium below the acceptable limit of 75%. Sample "AD-31" associated with these laboratory QC samples was flagged M1: the associated MS or MSD recovery was outside acceptance limits.

- As reported in SDG 252402, the laboratory control sample duplicate (LCSD) recovery for radium-228 (67.6%) in QC sample "PB25092302" was below the acceptance limit of 75%. Samples associated with that QC batch on SDG 252402 were flagged L1: the associated laboratory control sample (LCS) or LCSD recovery was outside acceptance limits. The

LCSD RPD for radium-228 (32.1) was above the acceptable limit of 25. The associated samples were flagged P2: the precision on the LCSD was above acceptance limits. The associated results should be considered estimated.

Based on these findings, the majority of the data reported in these SDGs are considered accurate and complete. Although the QC failures mentioned above will result in some limitations of data use since the affected results are considered estimated or have elevated reporting limits, the data are considered usable for supporting project objectives.

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Memorandum

Date:	December 23, 2025
To:	David Miller (AEP)
Copies to:	Pryce Warren (AEP)
From:	Allison Kreinberg (Geosyntec)
Subject:	Data Quality Review – Pirkey Power Plant November 2025 Verification Resampling Event

This memorandum summarizes the findings of a data quality review for groundwater samples collected at the Pirkey Power Plant in Hallsville, Texas in November 2025. The groundwater samples were collected to comply with the Texas Commission on Environmental Quality's (TCEQ's) regulations regarding the disposal of coal combustion residuals (CCRs) in landfills and surface impoundments (Title 30 Chapter 352, "CCR Rule"). Select 40 CFR 257 Appendix III constituents were analyzed.

The following sample data group (SDG) was associated with the groundwater samples collected during the November 2025 verification resampling event and is reviewed in this memorandum:

- Dolan Chemical Laboratory (Groveport, Ohio) Job ID # 252978

The data included in this SDG was reviewed to assess if it met the objectives outlined in TCEQ Draft Technical Guideline No. 32[1] prior to submittal of this data to TCEQ.

No data quality issues were identified. Based on these findings, the data reported in this SDG is considered accurate and complete.

[1] TCEQ. Topic: Coal Combustion Residuals (CCR) Groundwater Monitoring and Corrective Action: Technical Guidance No. 32. May 2020.

ATTACHMENT B

Certification by a Qualified Professional Engineer

CERTIFICATION BY QUALIFIED PROFESSIONAL ENGINEER

I certify that the selected statistical method, described above and in the January 25, 2024 *Statistical Analysis Summary* report, is appropriate for evaluating the groundwater monitoring data for the Pirkey Landfill CCR management area and that the requirements of 30 TAC 352.931(a) have been met.



David Anthony Miller

Printed Name of Licensed Professional Engineer



Signature

112498	**Texas**	**12.29.2025**
License Number	Licensing State	Date

APPENDIX 3

Alternative Source Demonstrations

Geosyntec consultants

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AMERICAN ELECTRIC POWER

BOUNDLESS ENERGY

ALTERNATIVE SOURCE DEMONSTRATION REPORT

2024 2nd SEMIANNUAL EVENT
TEXAS STATE CCR RULE

H.W. Pirkey Power Plant Landfill
Registration No. CCR 104
Hallsville, Texas

Prepared for

American Electric Power
1 Riverside Plaza
Columbus, Ohio 43215-2372

Prepared by

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500 West Wilson Bridge Road, Suite 250
Worthington, Ohio 43085

Project CHA8495B

March 2025

Geosyntec consultants

TABLE OF CONTENTS

1. INTRODUCTION AND SUMMARY 1
   1.1 CCR Rule Requirements 1
   1.2 Demonstration of Alternative Sources 2

2. SUMMARY OF SITE CONDITIONS 3
   2.1 Landfill Design and Construction 3
   2.2 Regional Geology / Site Hydrogeology 3
   2.3 Groundwater Monitoring Network and Flow Conditions 3

3. ALTERNATIVE SOURCE DEMONSTRATION 5
   3.1 Proposed Alternative Source 5
      3.1.1 Boron 5
      3.1.2 Chloride 6
   3.2 Sampling Requirements 7

4. CONCLUSIONS AND RECOMMENDATIONS 8

5. REFERENCES 9

LIST OF TABLES

Table 1 Detection Monitoring Data Evaluation

LIST OF FIGURES

Figure 1 Potentiometric Contours: Uppermost Aquifer. September 2024.

Figure 2 Landfill Location Relative to Former Lignite Mine Area

Figure 3 Boron Time Series Graph

Figure 4 Sulfate Time Series Graph

Figure 5 Piper Diagram

Figure 6 Chloride Time Series Graph

Figure 7 Harrison County Chloride Concentrations in Shallow (<60’ Depth) Wells

Figure 8 Non-CCR Pond Construction Photograph

Figure 9 AD-36 Location Photograph

LIST OF ATTACHMENTS

Attachment A Groundwater Analytical Data

Attachment B Geologic Cross Sections C-C' and D-D'

Attachment C Ground-Water Resources of Harrison County, Texas

Attachment D February 2023 Pirkey Landfill Leachate Laboratory Analytical Report

Attachment E AD-36 Boring Log and Well Construction Diagram

Attachment F Certification by a Qualified Professional Engineer

ACRONYMS AND ABBREVIATIONS

AEP	American Electric Power
ASD	alternative source demonstration
CCR	coal combustion residuals
EPRI	Electric Power Research Institute
HDPE	high-density polyethylene
LPL	lower prediction limit
mg/L	milligrams per liter
SSI	statistically significant increase
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
UPL	upper prediction limit

1. INTRODUCTION AND SUMMARY

This alternative source demonstration (ASD) report has been prepared to address statistically significant increases (SSIs) for boron and chloride in the groundwater monitoring network at the H.W. Pirkey Plant Landfill (Landfill) in Hallsville, Texas, following the second semiannual detection monitoring event of 2024. The H.W. Pirkey Plant has four coal combustion residuals (CCR) storage units regulated by the Texas Commission on Environmental Quality (TCEQ) under Registration No. CCR104, including the Landfill (**Figure 1**). The western side of the Landfill overlies a former lignite mining area, as shown on **Figure 2**.

Background groundwater concentrations for the Landfill were initially calculated in January 2018 with data from at least eight monitoring events (Geosyntec 2018). Upper prediction limits (UPLs) were calculated for each Appendix III parameter to represent background values. Lower prediction limits (LPLs) were also calculated for pH.

Because of the presence of lignite mine spoils within the screened interval at downgradient well AD-34, an ASD was certified on January 7, 2020 which resulted in a switch in the groundwater monitoring network statistics from interwell tests to intrawell tests for evaluation of pH, sulfate, and total dissolved solids prediction limits for all wells (Geosyntec 2020). The intrawell prediction limits were updated once sufficient data could be incorporated into the background data set (Geosyntec 2021). After a minimum of four additional detection monitoring events were completed, the prediction limits were recalculated based on a one-of-two retesting procedure to maintain an appropriate site-wide false positive rate (Geosyntec 2024a). With this procedure, an SSI is concluded only if both samples in a series of two exceed the UPL or, in the case of pH, are below the LPL.

The second semiannual detection monitoring event of 2024 was performed in September 2024, and the results were compared to the calculated prediction limits in accordance with Texas Administrative Code (TAC) Title 30, §352.941(a) [30 TAC §352.941(a)]. Where initial exceedances were identified, verification resampling was completed in November 2024. Following verification resampling, SSIs were identified for boron and chloride at wells AD-23 and AD-36 by intrawell analysis (Geosyntec 2024b). A summary of the detection monitoring analytical results for the downgradient compliance wells and the calculated prediction limits to which they were compared is provided in **Table 1**. The laboratory analytical reports can be found in **Attachment A**.

1.1 CCR Rule Requirements

TCEQ regulations regarding detection monitoring programs for CCR landfills and surface impoundments provide owners and operators with the option to make an ASD when an SSI is identified:

> In making a demonstration under this section, the owner or operator must . . . within 90 days of making a determination of an SSI over the background value for any Appendix III constituent adopted by reference in §352.1421 of this title, submit a report prepared and certified in accordance with §352.4 of this title (relating to Engineering and Geoscientific Information), to the executive director, and any local pollution agency with jurisdiction that has requested to be notified, demonstrating that a source other than a coal combustion residuals unit caused the SSI or that the SSI resulted from error in sampling, analysis,

statistical evaluation, or natural variation in groundwater quality. (30 TAC §352.941(c)(2)).

Pursuant to 30 TAC §352.941(c)(2), Geosyntec Consultants, Inc. (Geosyntec) has prepared this ASD report on behalf of American Electric Power (AEP) to document that the SSIs identified for boron and chloride in the groundwater monitoring network for the Landfill are from a source other than the Landfill.

1.2 Demonstration of Alternative Sources

An evaluation was completed to assess possible alternative sources to which the identified SSIs could be attributed. Alternative sources were categorized into the following five types, based on methods provided by the Electric Power Research Institute (EPRI 2017):

- ASD Type I: Sampling Causes
- ASD Type II: Laboratory Causes
- ASD Type III: Statistical Evaluation Causes
- ASD Type IV: Natural Variation
- ASD Type V: Alternative Sources (i.e., anthropogenic impacts)

A demonstration was conducted to show that the SSIs identified for boron and chloride were based on a Type IV cause and not by a release from the Pirkey Landfill.

2. SUMMARY OF SITE CONDITIONS

The Landfill design and construction, regional geology and site hydrogeology, and groundwater monitoring network and flow conditions are described below.

2.1 Landfill Design and Construction

The Pirkey Landfill was designed to receive CCR materials including fly ash, bottom ash, economizer ash, and stabilized flue gas desulfurization sludge (Arcadis 2022). The Landfill consists of cells which have been constructed periodically since 1984, when the first cell was developed at the northeastern corner of the Landfill. The most recent cell that has been developed was constructed at the southeast corner of the Landfill beginning in 2018. The Landfill is now approximately 134 acres in size.

The Landfill was constructed within an unnamed tributary creek, and the base of the Landfill is partially excavated into the creek bed (Arcadis 2022). Earthen embankments were installed around portions of the Landfill to control stormwater flow. Leachate is drained from the Landfill via bottom area drains and collection pipes installed at the base of the Landfill. From previous investigations of the Landfill summarized by Arcadis (2022), the Landfill was constructed with an engineered liner. The initial cells included a 3-foot thick compacted soil liner. In 1995, the design was modified to include a 60-mil thick high-density polyethylene (HDPE) geomembrane liner overlying a geosynthetic clay liner. The most recent cell was constructed with a single-composite liner system consisting of, from top to bottom: a 2-foot thick leachate drainage layer; a 60-mil thick HDPE geomembrane liner; and a 2-foot thick compacted clay liner (Akron Consulting, LLC 2022).

As of July 2024, the 2018 expansion is the only cell still actively receiving waste. The approximate area of active waste placement is shown in **Figure 2**. The remainder of the Landfill is either considered closed and covered by a final vegetative cover or closure turf material or considered inactive with temporary soil cover (GEI 2024).

2.2 Regional Geology / Site Hydrogeology

The Landfill is positioned on an outcrop of the Eocene-age Recklaw Formation, which consists predominantly of clay and fine-grained sand (Arcadis 2022). The Recklaw Formation is underlain by the Carrizo Sand, which crops out in the topographically lower southern portion of the plant. The Carrizo Sand consists of fine- to medium-grained sand interbedded with silt and clay.

The Landfill monitoring well network monitors groundwater within the uppermost aquifer, which was defined by Arcadis (2022) as very-fine- to fine-grained clayey and silty sand located below and adjacent to the Landfill, between an elevation of approximately 270 and 330 feet above mean sea level. Cross sections and a cross-section location map from the Monitoring Well Network Report (Arcadis 2022) are provided as **Attachment B**. Geologic cross sections C-C' and D-D' show the subsurface structure of the uppermost aquifer (indicated as clayey silty sand, brown to gray) underlying the Landfill. These geologic cross sections also demonstrate lateral continuity of the uppermost aquifer, spanning both directions underneath the entire length of the Landfill.

2.3 Groundwater Monitoring Network and Flow Conditions

The Landfill monitoring well network consists of upgradient monitoring wells AD-8, AD-12, AD-16, and AD-27, and downgradient compliance wells AD-23, AD-34, and AD-36. AD-36 was

installed in April 2019 (after the initial monitoring well network was already in place) as a replacement for well AD-35, which was decommissioned in November 2018 due to the Landfill expansion (Arcadis 2022). The groundwater flow direction near the Landfill is southwesterly (**Figure 1**). Seasonal variability in groundwater flow direction has not been observed since the monitoring well network was installed.

3. ALTERNATIVE SOURCE DEMONSTRATION

The ASD evaluation method and proposed alternative source of boron and chloride in AD-23 and AD-36, and the future groundwater sampling requirements are described below.

3.1 Proposed Alternative Source

An initial review of site geochemistry, site historical data, and laboratory quality assurance and quality control data did not identify an alternative source for boron or chloride due to Type I (sampling), Type II (laboratory), Type III (statistical evaluation), or Type V (anthropogenic impact) issues. Groundwater sampling, laboratory analysis, and statistical evaluations were generally completed in accordance with 30 TAC §352.931(a) and the draft TCEQ guidance for groundwater monitoring (TCEQ 2020). Based on a review of groundwater data and recent site construction events, the SSIs for boron and chloride were attributed to natural variation associated with naturally occurring aqueous boron and chloride concentrations within the aquifer unit beneath the Landfill, which is a Type IV (natural variation) issue.

3.1.1 Boron

SSIs for boron were observed at downgradient monitoring wells AD-23 and AD-36 (**Table 1**). Boron concentrations at AD-23 from the initial sampling event (0.229 milligrams per liter [mg/L]) and verification sampling event (0.279 mg/L) exceeded the intrawell UPL of 0.0612 mg/L, and boron concentrations at AD-36 from the initial sampling event (0.082 mg/L) and verification sampling event (0.085 mg/L) exceeded the intrawell UPL of 0.0747 mg/L.

Boron concentrations at AD-23 and AD-36 have been within the range of those observed at Landfill background wells since monitoring began (**Figure 3**). Upgradient background well AD-8 consistently has greater boron concentrations than all Landfill compliance wells, including AD-23 and AD-36. Given that the uppermost aquifer unit is horizontally continuous in the area surrounding the Landfill (**Attachment B**), migration of boron from this upgradient location to downgradient compliance wells is possible.

Aqueous sulfate trends at AD-23 and AD-36 do not support a release from the Landfill. Sulfate is considered to be an indicator parameter for potential CCR releases due to frequently elevated concentrations in CCR source material and limited chemical attenuation along groundwater flow paths. A review of sulfate concentrations at compliance wells of interest indicates that neither well displays an increasing trend and that sulfate concentrations at both wells appear to be stable (**Figure 4**). A leachate sample collected in February 2023 from the Landfill collection system contained a reported aqueous sulfate concentration of 329 mg/L (**Attachment D**), which is over an order of magnitude higher than sulfate concentrations observed at AD-23 and AD-36. If Landfill leachate were impacting groundwater quality at downgradient wells, an increase in sulfate concentrations in compliance well groundwater would also be expected due to the effect of physical mixing.

Major ion geochemistry of AD-23 and AD-36 groundwater also does not support a release from the Landfill. Major ion chemistry at both wells over time is illustrated on a Piper diagram (**Figure 5**). The Piper diagram shows trends in major ion chemistry over time by indicating the relative proportion of individual major cations and anions. A Landfill release would be expected to cause notable changes in the major ion signature of AD-23 or AD-36 groundwater by causing the groundwater major ion distribution to alter to reflect that of the Landfill leachate. Both wells show

general geochemical stability over time and do not demonstrate geochemical shifts toward the Landfill leachate sample (**Figure 6**), indicating that the geochemistry is not changing appreciably as would be expected in the event of a Landfill release.

It is noted that groundwater boron concentrations at all well locations discussed are lower than the Texas Risk Reduction Program (TRRP) Class I residential ingestion pathway limit ($^{GW}GW_{Ing}$) of 4.9 mg/L (TCEQ 2009; TCEQ 2025), and the recent groundwater boron concentrations at AD-23 and AD-36 range from approximately 20 to 60 times less than the TRRP limit. Further, TCEQ established a Texas-specific soil background concentration of 30 milligrams per kilogram of boron in 30 TAC §350.51(m). Given the abundance of boron in Texas soils, some contribution of boron to groundwater from the aquifer is anticipated.

3.1.2 Chloride

SSIs for chloride were observed at monitoring wells AD-23 and AD-36 (**Table 1**). Chloride concentrations at AD-23 from the initial sampling event (9.03 mg/L) and verification sampling event (9.44 mg/L) exceeded the intrawell UPL of 8.92 mg/L, and chloride concentrations at AD-36 from the initial sampling event (15.7 mg/L) and verification sampling event (16.3 mg/L) exceeded the intrawell UPL of 11.8 mg/L.

Although chloride concentrations have been slightly increasing at wells AD-23 and AD-36 since mid-2023, similar increases in chloride have also been observed at upgradient monitoring wells AD-16 and AD-27 (**Figure 6**). Aqueous chloride concentrations from both wells with chloride exceedances detected during the second semiannual initial and verification monitoring events were less than concentrations reported for upgradient wells AD-8 and AD-16 (**Figure 6**).

Despite minor increases in chloride at AD-23 and AD-36, concentrations still fall within the range observed for background chloride from monitoring wells upgradient of the Landfill. Notable chloride increases within the background groundwater over variable time periods are occasionally observed and reflect natural fluctuations in aqueous chloride within the aquifer unit. Within 2024, background well AD-8 experienced a chloride concentration increase of 12.7 mg/L between April and September sampling events, and background well AD-16 experienced a chloride concentration increase of 6.4 mg/L between April and September sampling events. These chloride concentration increases observed in background monitoring wells are similar to or greater than the intrawell chloride UPLs at both wells with exceedances (**Table 1**). These same fluctuations in chloride concentrations would be expected to occur in downgradient groundwater as well.

Regional scale sampling data from shallow wells located in Harrison County (**Attachment C**, Broom and Myers 1966) provide further support for evidence of naturally occurring chloride concentrations exceeding those observed at the site. At the time of publication in 1966, chloride concentrations were reported for 44 samples from 27 wells screened at depths less than 60 feet. Of these 44 samples, 18 were below the AD-23 UPL of 8.92 mg/L (the lower of both AD-23 and AD-36 UPLs). The majority of the samples were above 20 mg/L, which is higher than the chloride concentrations reported at AD-23 and AD-36 to date (**Figure 7**). These data indicate that chloride concentrations vary within groundwater at comparable depths at the regional scale.

As discussed above, sulfate concentration trends at AD-23 and AD-36 do not support a release from the Landfill and major ion chemistry at both locations does not reflect an influence from Landfill leachate and instead demonstrates relative geochemical stability (**Figure 5**). Based on the

above evaluation, the variability of chloride in groundwater at AD-23 and AD-36 should not be attributed to the Landfill.

Further, although protective concentration levels have not been established for chloride in groundwater through the TRRP program; the TRRP protective concentration level tables (TCEQ 2025) list a secondary maximum contaminant level (MCL) for chloride of 250 mg/L. A secondary MCL is a non-enforceable guideline regulating containments that may cause cosmetic effects or aesthetic effects in drinking water. The recent chloride concentrations observed at AD-23 and AD-36 range from approximately15 to 25 times less than the secondary MCL.

3.1.2.1 Effect of Construction Activities

While the chloride concentrations found at AD-36 are indicative of a Type IV source, additional anthropogenic activities may be contributing factors at this location. As discussed in previous ASDs (Geosyntec 2023; Geosyntec 2024c; Geosyntec 2024d), several construction activities were completed in the vicinity of AD-36 in late 2022 and early 2023, including extensive earthwork and construction to support the installation of an evaporation system associated with plant closure at the brine pond immediately adjacent to well AD-36. An area of the non-CCR pond immediately adjacent to AD-36 was bermed and lined to support its use as brine storage, as shown in the photograph provided in **Figure 8**. The location of AD-36 relative to the recently constructed brine storage area is shown in **Figure 9**.

Well AD-36 is screened from 5-15 feet below ground surface, as shown in the boring log and well construction diagram provided as **Attachment E**. Given the proximity of the screen of well AD-36 to the ground surface and the previous construction activities occurring immediately adjacent to AD-36 within the non-CCR pond, these construction activities potentially resulted in changes to the groundwater composition at AD-36 (e.g., impacts from meteoric or surface water infiltration, infiltration of water used as dust suppressant on the adjacent gravel road).

3.2 Sampling Requirements

As the ASD presented above supports the position that the identified SSIs were not due to a release from the Pirkey Landfill, the unit will remain in the detection monitoring program. Groundwater at the unit will continue to be sampled for Appendix III parameters semiannually.

4. CONCLUSIONS AND RECOMMENDATIONS

The preceding information serves as the ASD prepared in accordance with 30 TAC §352.941(c)(2) and supports the position that the SSIs for boron and chloride identified during detection monitoring in September 2024 were not due to a release from the Landfill. The identified SSIs were instead attributed to naturally occurring aqueous boron and chloride concentrations found within the aquifer. Therefore, no further action is warranted, and the Pirkey Landfill will remain in the detection monitoring program. Certification of this ASD by a qualified professional engineer is provided in **Attachment F.**

5. REFERENCES

Akron Consulting, LLC. 2022. 2018 Landfill Cell – Liner and Leachate Collection Construction Certification. January.

Arcadis. 2022. Landfill – CCR Groundwater Monitoring Well Network Evaluation Update. H.W. Pirkey Power Plant. January.

Broom, M.E., and B.N. Myers. 1966. Report 27 – Ground-Water Resources of Harrison County, Texas. Texas Water Development Board. United States Geological Survey. August.

EPRI. 2017. Guidelines for Development of Alternative Source Demonstrations at Coal Combustion Residual Sites. 3002010920. Electric Power Research Institute. October.

GEI. 2024. 2024 Annual Inspection Report. CCR Landfill, H.W. Pirkey Power Plant, Hallsville, Texas. July.

Geosyntec. 2018. Statistical Analysis Summary – Landfill. H.W. Pirkey Power Plant. Hallsville, Texas. Geosyntec Consultants, Inc. January.

Geosyntec. 2020. Alternative Source Demonstration Report – Federal CCR Rule. H.W. Pirkey Plant Landfill. Hallsville, Texas. Geosyntec Consultants, Inc. January.

Geosyntec. 2021. Statistical Analysis Summary – Background Update Calculations. H.W. Pirkey Plant Landfill. Hallsville, Texas. Geosyntec Consultants, Inc. October.

Geosyntec. 2023. Alternative Source Demonstration Report – Texas State CCR Rule. H. W. Pirkey Plant Landfill. Hallsville, Texas. Geosyntec Consultants, Inc. September.

Geosyntec. 2024a. Statistical Analysis Summary – Background Update Calculations. H.W. Pirkey Plant Landfill. Hallsville, Texas. Geosyntec Consultants, Inc. January.

Geosyntec. 2024b. Evaluation of Detection Monitoring Data at Pirkey Plant's Landfill. December.

Geosyntec. 2024c. Alternative Source Demonstration Report – Texas State CCR Rule. H. W. Pirkey Plant Landfill. Hallsville, Texas. Geosyntec Consultants, Inc. March.

Geosyntec. 2024d. Alternative Source Demonstration Report – Texas State CCR Rule. H. W. Pirkey Plant Landfill. Hallsville, Texas. Geosyntec Consultants, Inc. December.

TCEQ. 2009. *Toxicity Factors and Chemical/Physical Properties*. Texas Commission on Environmental Quality, Remediation Division. RG-366/TRRP-19. March.

TCEQ. 2020. Coal Combustion Residuals Groundwater Monitoring and Corrective Action Draft Technical Guideline No. 32. Topic: Coal Combustion Residuals (CCR) Groundwater Monitoring and Corrective Action. Texas Commission on Environmental Quality, Waste Permits Division. May.

TCEQ. 2025. *Update to Texas Risk Reduction Program (TRRP) Protective Concentration Limits and Chemical/Physical Properties*. Texas Commission on Environmental Quality, Remediation Division. Feb 6.

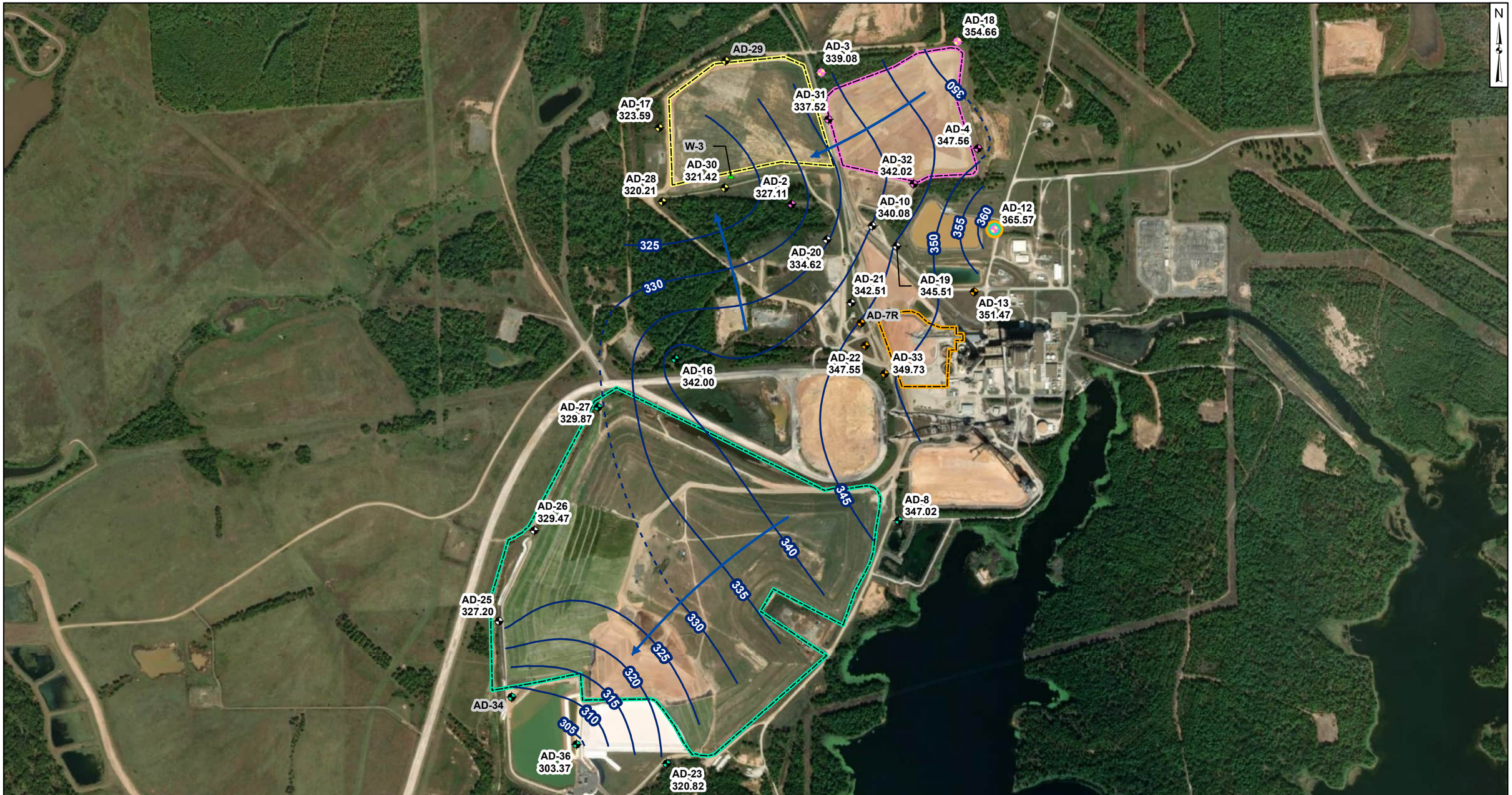
TABLES

Table 1. Detection Monitoring Data Summary
Alternative Source Demonstration
Pirkey – Landfill

Analyte	Unit	Description	AD-23		AD-34	AD-36	
			9/18/2024	11/6/2024	9/18/2024	9/18/2024	11/6/2024
Boron	mg/L	Intrawell Background Value (UPL)	0.0612		0.108	0.0747	
		Analytical Result	**0.229**	**0.279**	0.07	**0.082**	**0.085**
Calcium	mg/L	Intrawell Background Value (UPL)	0.503		46.1	1.22	
		Analytical Result	0.20	--	43.0	0.77	--
Chloride	mg/L	Intrawell Background Value (UPL)	8.92		8.97	11.8	
		Analytical Result	**9.03**	**9.44**	7.32	**15.7**	**16.3**
Fluoride	mg/L	Intrawell Background Value (UPL)	0.156		1.58	0.0980	
		Analytical Result	0.05	--	0.54	0.08	--
pH	SU	Intrawell Background Value (UPL)	5.0		4.1	5.2	
		Intrawell Background Value (LPL)	3.1		2.9	3.7	
		Analytical Result	3.0	3.8	3.7	3.6	3.9
Sulfate	mg/L	Intrawell Background Value (UPL)	13.6		1,340	4.77	
		Analytical Result	7.1	--	1,150	2.8	--
Total Dissolved Solids	mg/L	Intrawell Background Value (UPL)	104		1,840	84.9	
		Analytical Result	60	--	1620	50	--

Notes:
1. Bold values exceed the background value.
2. Background values are shaded gray.
LPL: lower prediction limit
mg/L: milligrams per liter
SU: standard units
UPL: upper prediction limit

FIGURES



Legend

Groundwater Monitoring Wells

- Out of Network
- East Bottom Ash Pond (EBAP)
- West Bottom Ash Pond (WBAP)
- Landfill
- Flue Gas Desulfurization Stackout Area (FGDSA)
- EBAP and WBAP
- All CCR Unit Networks
- Piezometer
- Groundwater Elevation Contour
- Groundwater Elevation Contour (Inferred)
- Approximate Groundwater Flow Direction

Notes

1. Monitoring well coordinates and water levels (collected on September 16, 17, and 18, 2024) provided by AEP.
2. Site features based on information available in coal combustion residuals (CCR) Groundwater Monitoring Well Network Evaluation Update (Arcadis 2022) provided by AEP.
3. Groundwater elevation units are feet above mean sea level (ft msl).
4. Wells AD-29 and W-3 were not gauged during the September 2024 event.
5. AD-7R replaced AD-7, which was abandoned on September 12, 2023.
6. Wells shaded in gray were not used for contouring.
7. Well AD-34 had artesian characteristics during this event and was not used for contouring.
8. AD-35 was abandoned on November 13, 2018 and is not shown on the map.
9. Removal of CCR plus one foot of material for the WBAP was completed for on July 26, 2022.
10. Removal of CCR plus one foot of material for the EBAP was completed on July 20, 2023, for the East Pond.
11. Removal of CCR plus one foot of material for the FGDSA was completed on September 18, 2023.
12. Map is updated to incorporate Landfill survey data collected on May 1, 2024.
13. Aerial imagery provided by ESRI, dated September 19, 2023.

1,000 500 0 1,000 Feet

Beth Ann Gross

January 10, 2025
Geosyntec Consultants, Inc.
Texas Firm Registration
No. 1182

STATE OF TEXAS
BETH ANN GROSS
79864
LICENSED
PROFESSIONAL ENGINEER

Potentiometric Contours: Uppermost Aquifer September 2024

AEP Pirkey Power Plant
Hallsville, Texas

Geosyntec consultants

Columbus, Ohio | 2024/12/24

Figure **1**

A:\Projects\AEP\Groundwater Statistical Evaluation - CHA8423\Groundwater Mapping\GIS Files\MXD\Pirkey\2024\AEP-Pirkey_GW_2024-09Pirkey.mxd. Okiemute.Commander. 12/24/2024. Project/Phase/Task.



Legend

- Upgradient Well
- Downgradient Well
- Out of Network Well
- Abandoned Well
- Former Lignite Mine
- Waste Placement
- Landfill

Notes

- Monitoring well coordinate data provided by AEP.
- AD-35 was abandoned on November 13, 2018.
- Active Waste Placement location is approximate.
- Aerial imagery provided by ESRI, dated September 19, 2023.

1,000 500 0 1,000 Feet

Landfill Location Relative to Former Lignite Mine Area

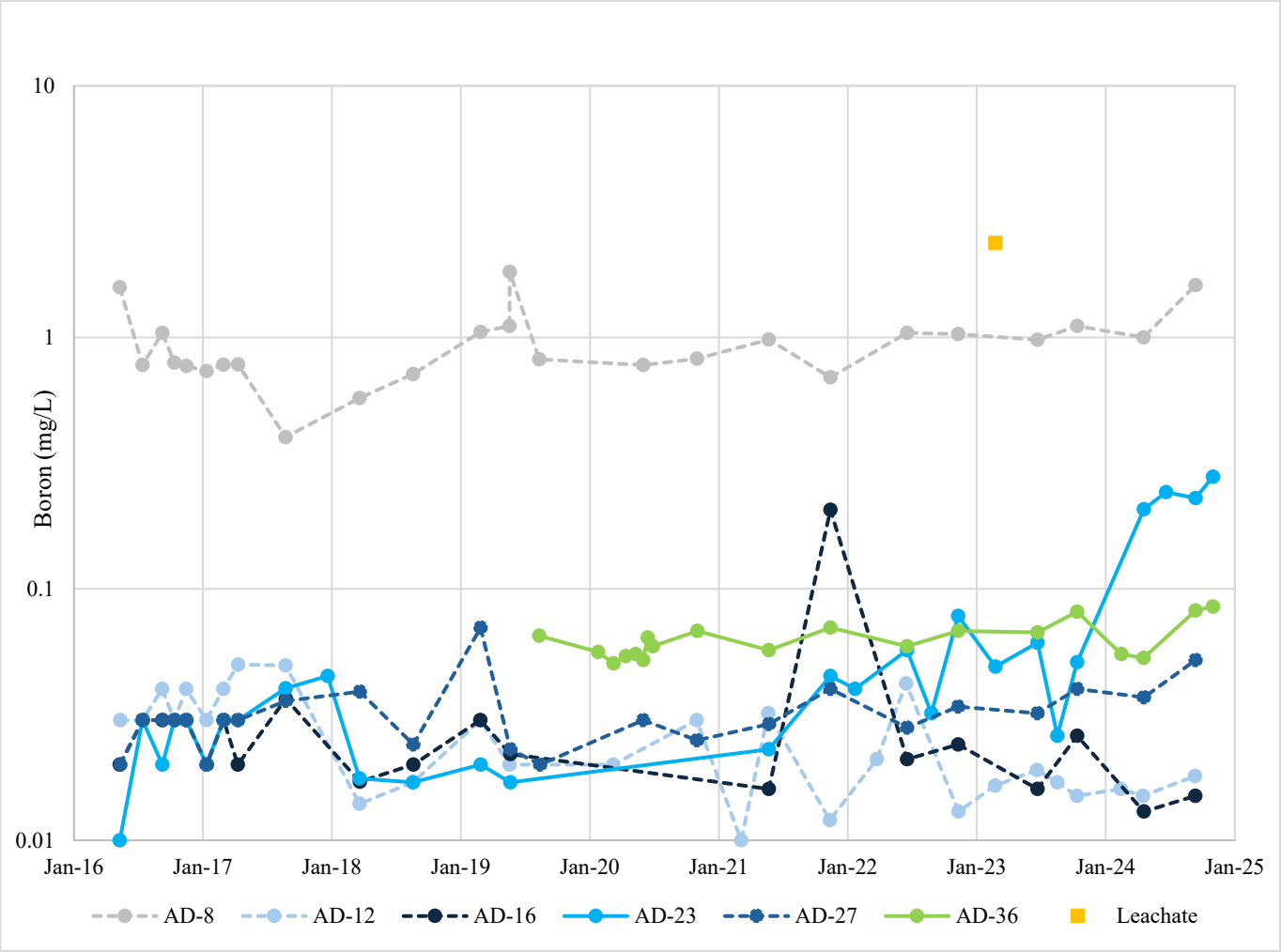
AEP Pirkey Power Plant
Hallsville, Texas

Geosyntec consultants

Columbus, Ohio | 2025/03/27

Figure **2**

M:\Projects\AEP\Groundwater Statistical Evaluation - CHA8423\Groundwater Mapping\GIS Files\MXD\Pirkey\Pirkey LF ASD Site Layout waste placement_updated active zone.mxd. HDuff. 3/27/2025. Project/Phase/Task.



Notes:

1. Boron concentrations are shown in milligrams per liter (mg/L).
2. Background monitoring wells are shown with dashed lines.
3. Boron concentrations are plotted on a logarithmic scale.
4. Leachate sample was collected on 2/28/2023.

Boron Time Series Graph

Pirkey Landfill

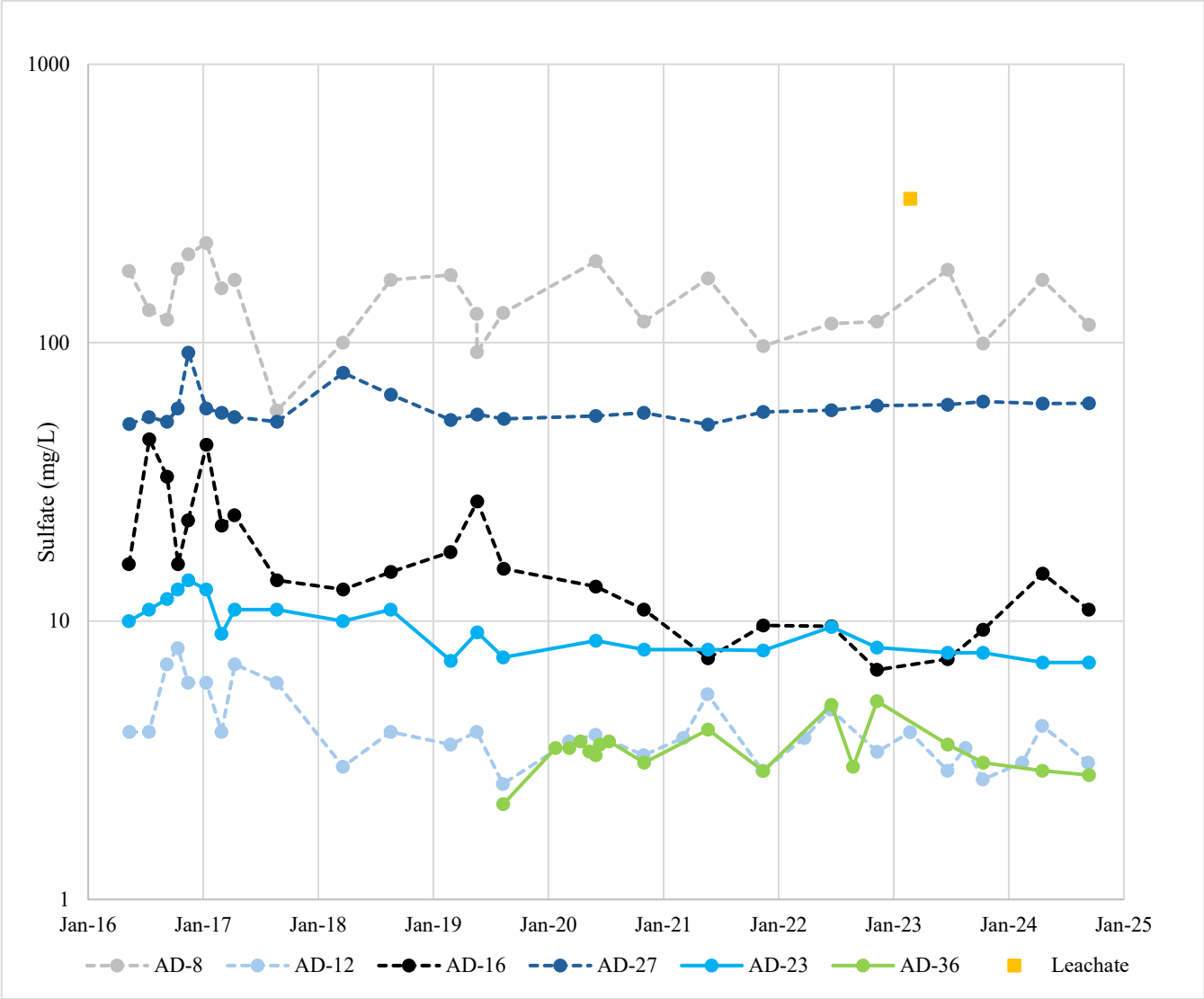
Geosyntec consultants

AMERICAN ELECTRIC POWER

Figure 3

Columbus, Ohio

March 2025



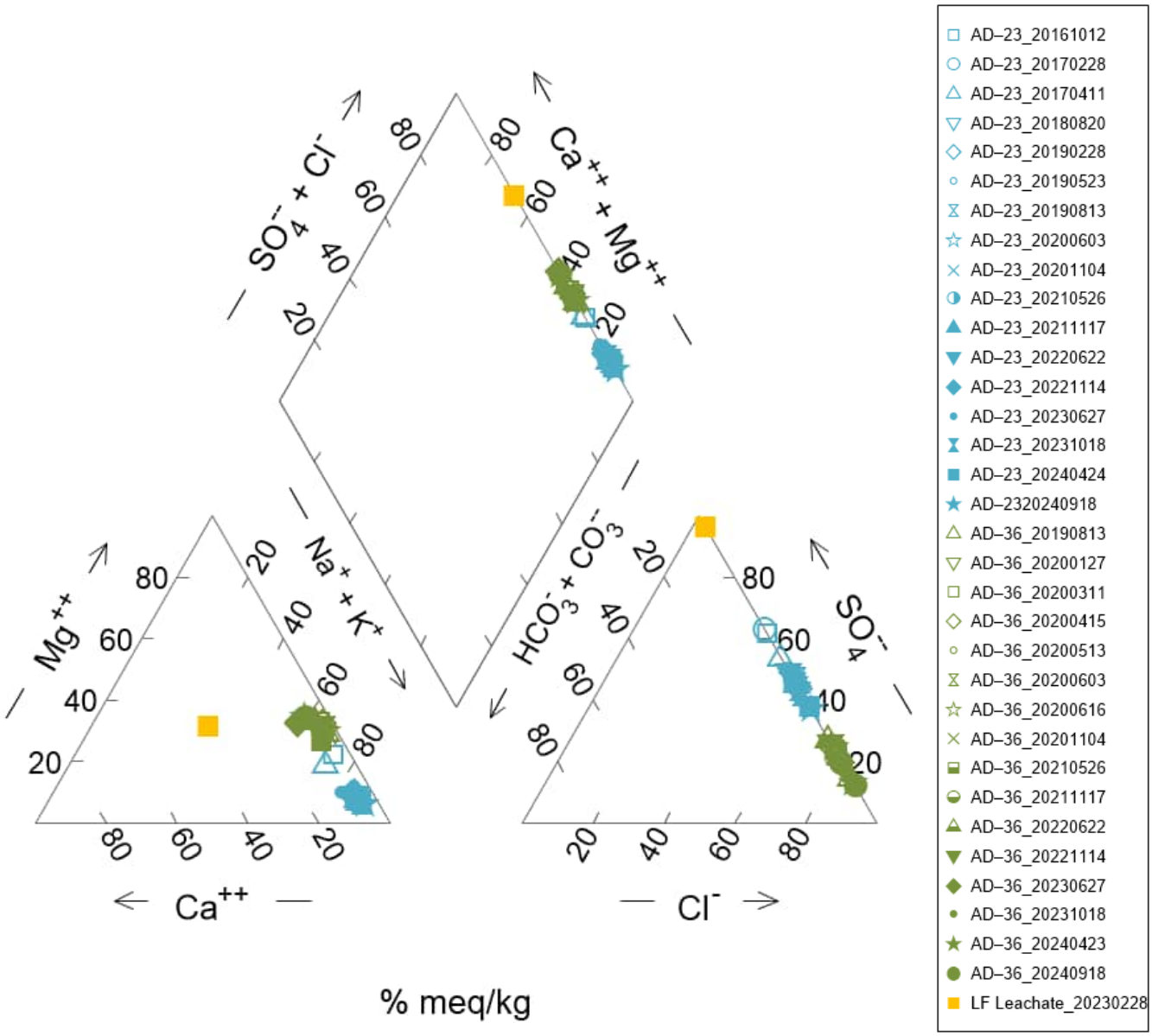
Notes:
1. Sulfate concentrations are shown in milligrams per liter (mg/L).
2. Background monitoring wells are shown with dashed lines.
3. Sulfate concentrations are plotted on a logarithmic scale.
4. Leachate sample was collected on 2/28/2023.

Sulfate Time Series Graph
Pirkey Landfill

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AMERICAN ELECTRIC POWER | March 2025

Figure 4



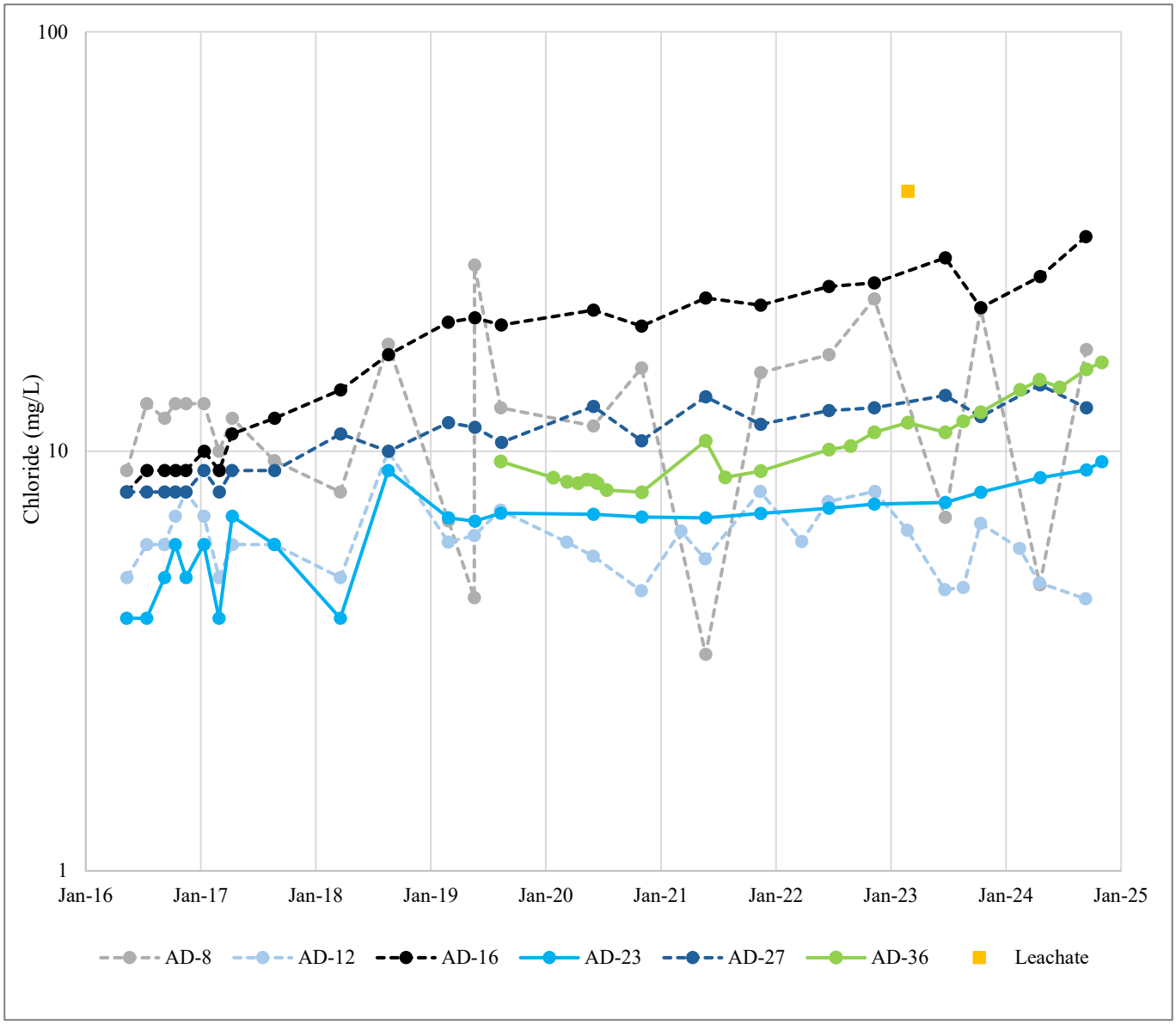
Notes:
1. AD-23 and AD-36 groundwater samples are plotted in units of percentage milliequivalents per kilogram of water (% meq/kg).
2. All groundwater samples contained total alkalinity at values below the analytical method detection limit. Alkalinity values of 0 % meq/kg were used in the Piper plot.
3. Landfill (LF) leachate sample was collected on February 28, 2023.

Piper Diagram
Pirkey Landfill

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Columbus, Ohio | March 2025

Figure **5**



Notes:
1. Chloride concentrations are shown in milligrams per liter (mg/L).
2. Background monitoring wells are shown with dashed lines.
3. Leachate sample was collected on 2/28/2023.

Chloride Time Series Graph
Pirkey Landfill

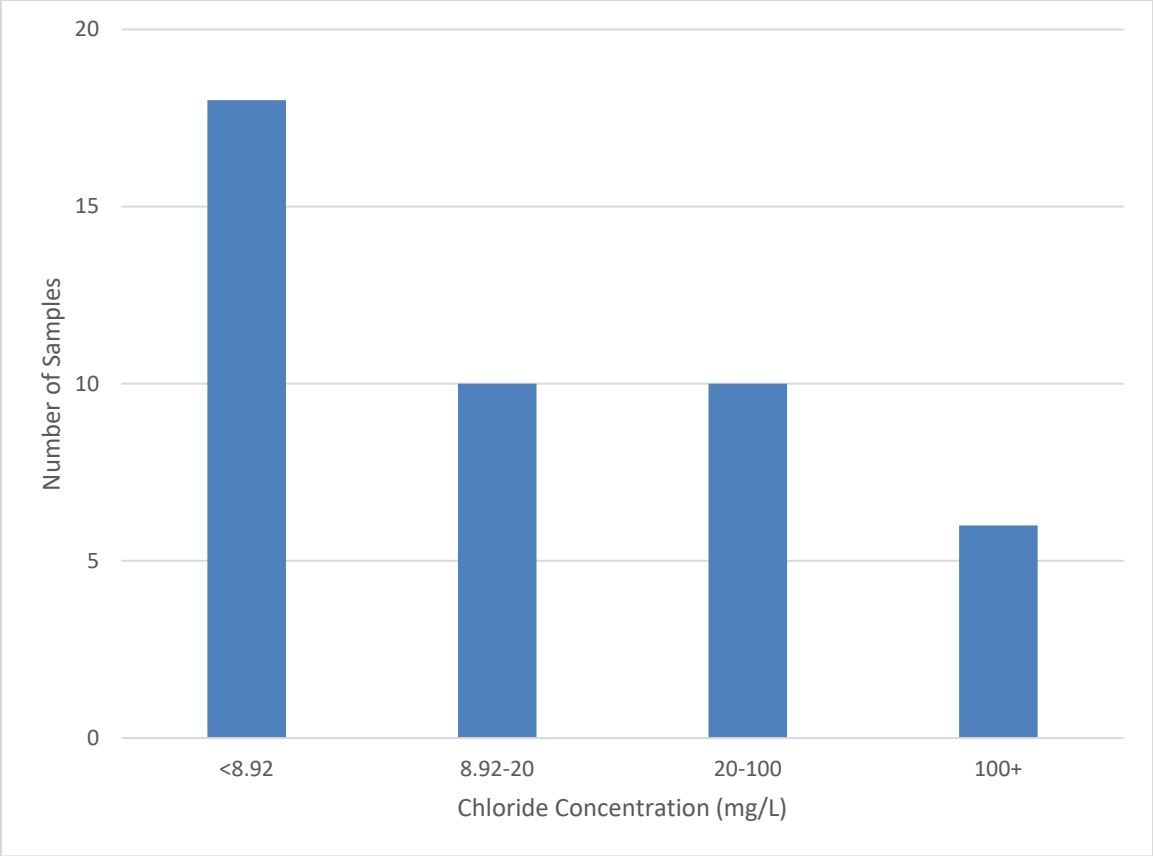
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Figure 6

Columbus, Ohio

March 2025



Notes:
1. Chloride concentrations are shown in milligrams per liter (mg/L).
2. Chloride analytical data shown for 44 groundwater samples collected from 27 groundwater wells screened at a depth of less than 60 feet below ground surface.
3. From Broom and Myers (Texas Water Development Board), 1966 (provided as **Attachment C).**

Harrison County Chloride Concentrations in Shallow (<60' Depth Wells)
Pirkey Landfill

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Columbus, Ohio | March 2025



Notes:
1. Photograph illustrating the construction of a lined brine tank immediately adjacent to monitoring well AD-36.
2. The photograph was taken looking south on July 28, 2023.

Non-CCR Pond Construction Photograph
Pirkey Landfill

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Columbus, Ohio

March 2025

Figure
8



Notes:
1. Photograph depicting the location of AD-36 relative to the newly constructed brine tank portion of the non-CCR pond.
2. The photograph was taken looking northwest on August 28, 2023.

AD-36 Location Photograph
Pirkey Landfill

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Columbus, Ohio | March 2025

Figure **9**

ATTACHMENT A
Groundwater Analytical Data

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241393 **Customer: Pirkey Power Station** **Date Reported: 06/05/2024**

Customer Sample ID: AD-2
Customer Description:
Lab Number: 241393-001
Preparation:
Date Collected: 04/23/2024 09:21 EDT
Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.44	mg/L	2	0.10	0.02		CRJ	05/09/2024 18:59	EPA 300.1 -1997, Rev. 1.0
Chloride	31.2	mg/L	2	0.06	0.02		CRJ	05/09/2024 18:59	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.27	mg/L	2	0.06	0.02		CRJ	05/09/2024 18:59	EPA 300.1 -1997, Rev. 1.0
Sulfate	309	mg/L	10	3.0	0.6		CRJ	05/09/2024 15:09	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	570	mg/L	1	50	20		ELT	04/29/2024 06:46	SM 2540C-2015

Customer Sample ID: AD-3
Customer Description:
Lab Number: 241393-002
Preparation:
Date Collected: 04/23/2024 12:04 EDT
Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.08	mg/L	2	0.10	0.02	J1	CRJ	05/09/2024 15:41	EPA 300.1 -1997, Rev. 1.0
Chloride	5.83	mg/L	2	0.06	0.02		CRJ	05/09/2024 15:41	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.05	mg/L	2	0.06	0.02	J1	CRJ	05/09/2024 15:41	EPA 300.1 -1997, Rev. 1.0
Sulfate	28.5	mg/L	2	0.6	0.1		CRJ	05/09/2024 15:41	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	160	mg/L	1	50	20		ELT	04/29/2024 06:54	SM 2540C-2015

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Job ID: 241393 **Customer: Pirkey Power Station** **Date Reported: 06/05/2024**

Customer Sample ID: AD-4
Customer Description:
Lab Number: 241393-003
Preparation:
Date Collected: 04/24/2024 10:31 EDT
Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.32	mg/L	2	0.10	0.02		CRJ	05/09/2024 16:14	EPA 300.1 -1997, Rev. 1.0
Chloride	3.97	mg/L	2	0.06	0.02		CRJ	05/09/2024 16:14	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.07	mg/L	2	0.06	0.02		CRJ	05/09/2024 16:14	EPA 300.1 -1997, Rev. 1.0
Sulfate	20.3	mg/L	2	0.6	0.1		CRJ	05/09/2024 16:14	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	140	mg/L	1	50	20		ELT	04/29/2024 06:54	SM 2540C-2015

Customer Sample ID: AD-7R
Customer Description:
Lab Number: 241393-004
Preparation:
Date Collected: 04/22/2024 10:25 EDT
Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.61	mg/L	2	0.10	0.02		CRJ	05/09/2024 16:47	EPA 300.1 -1997, Rev. 1.0
Chloride	20.6	mg/L	2	0.06	0.02		CRJ	05/09/2024 16:47	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.16	mg/L	2	0.06	0.02		CRJ	05/09/2024 16:47	EPA 300.1 -1997, Rev. 1.0
Sulfate	73.6	mg/L	2	0.6	0.1		CRJ	05/09/2024 16:47	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	220	mg/L	1	50	20		ELT	04/29/2024 06:54	SM 2540C-2015

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241393 **Customer: Pirkey Power Station** **Date Reported: 06/05/2024**

Customer Sample ID: AD-8 Customer Description:
Lab Number: 241393-005 Preparation:
Date Collected: 04/23/2024 11:11 EDT Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.60	mg/L	2	0.10	0.02		CRJ	05/09/2024 18:26	EPA 300.1 -1997, Rev. 1.0
Chloride	4.81	mg/L	2	0.06	0.02		CRJ	05/09/2024 18:26	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.28	mg/L	2	0.06	0.02		CRJ	05/09/2024 18:26	EPA 300.1 -1997, Rev. 1.0
Sulfate	168	mg/L	10	3.0	0.6		CRJ	05/09/2024 17:53	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	126	mg/L	1	20	5		MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	390	mg/L	1	50	20		ELT	04/29/2024 06:54	SM 2540C-2015

Customer Sample ID: AD-12 Customer Description:
Lab Number: 241393-006 Preparation:
Date Collected: 04/22/2024 10:44 EDT Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.07	mg/L	2	0.10	0.02	J1	CRJ	05/09/2024 21:44	EPA 300.1 -1997, Rev. 1.0
Chloride	4.86	mg/L	2	0.06	0.02		CRJ	05/09/2024 21:44	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.08	mg/L	2	0.06	0.02		CRJ	05/09/2024 21:44	EPA 300.1 -1997, Rev. 1.0
Sulfate	4.2	mg/L	2	0.6	0.1		CRJ	05/09/2024 21:44	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	60	mg/L	1	50	20		ELT	04/29/2024 07:00	SM 2540C-2015

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241393 **Customer: Pirkey Power Station** **Date Reported: 06/05/2024**

Customer Sample ID: AD-13 Customer Description:
Lab Number: 241393-007 Preparation:
Date Collected: 04/22/2024 09:20 EDT Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.27	mg/L	2	0.10	0.02		CRJ	05/09/2024 20:38	EPA 300.1 -1997, Rev. 1.0
Chloride	42.2	mg/L	10	0.3	0.1		CRJ	05/09/2024 20:05	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.34	mg/L	2	0.06	0.02		CRJ	05/09/2024 20:38	EPA 300.1 -1997, Rev. 1.0
Sulfate	84.9	mg/L	2	0.6	0.1		CRJ	05/09/2024 20:38	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	220	mg/L	1	50	20		ELT	04/29/2024 07:00	SM 2540C-2015

Customer Sample ID: AD-16 Customer Description:
Lab Number: 241393-008 Preparation:
Date Collected: 04/24/2024 12:04 EDT Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.18	mg/L	2	0.10	0.02		CRJ	05/10/2024 01:01	EPA 300.1 -1997, Rev. 1.0
Chloride	26.1	mg/L	2	0.06	0.02		CRJ	05/10/2024 01:01	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.09	mg/L	2	0.06	0.02		CRJ	05/10/2024 01:01	EPA 300.1 -1997, Rev. 1.0
Sulfate	14.8	mg/L	2	0.6	0.1		CRJ	05/10/2024 01:01	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	120	mg/L	1	50	20		ELT	04/29/2024 07:00	SM 2540C-2015

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4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241393 **Customer: Pirkey Power Station** **Date Reported: 06/05/2024**

Customer Sample ID: AD-17
Customer Description:
Lab Number: 241393-009
Preparation:
Date Collected: 04/23/2024 11:16 EDT
Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.10	mg/L	2	0.10	0.02		CRJ	05/10/2024 01:34	EPA 300.1 -1997, Rev. 1.0
Chloride	6.44	mg/L	2	0.06	0.02		CRJ	05/10/2024 01:34	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.09	mg/L	2	0.06	0.02		CRJ	05/10/2024 01:34	EPA 300.1 -1997, Rev. 1.0
Sulfate	2.1	mg/L	2	0.6	0.1		CRJ	05/10/2024 01:34	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	40	mg/L	1	50	20	J1	ELT	04/29/2024 07:00	SM 2540C-2015

Customer Sample ID: AD-18
Customer Description:
Lab Number: 241393-010
Preparation:
Date Collected: 04/23/2024 11:58 EDT
Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.07	mg/L	2	0.10	0.02	J1	CRJ	05/10/2024 02:07	EPA 300.1 -1997, Rev. 1.0
Chloride	5.39	mg/L	2	0.06	0.02		CRJ	05/10/2024 02:07	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.02	mg/L	2	0.06	0.02	J1	CRJ	05/10/2024 02:07	EPA 300.1 -1997, Rev. 1.0
Sulfate	7.2	mg/L	2	0.6	0.1		CRJ	05/10/2024 02:07	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	90	mg/L	1	50	20		ELT	04/29/2024 07:08	SM 2540C-2015

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Job ID: 241393 **Customer: Pirkey Power Station** **Date Reported: 06/05/2024**

Customer Sample ID: AD-22
Customer Description:
Lab Number: 241393-011
Preparation:
Date Collected: 04/22/2024 11:22 EDT
Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.40	mg/L	2	0.10	0.02		CRJ	05/10/2024 04:19	EPA 300.1 -1997, Rev. 1.0
Chloride	70.5	mg/L	25	0.8	0.3		CRJ	05/10/2024 03:46	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.75	mg/L	2	0.06	0.02		CRJ	05/10/2024 04:19	EPA 300.1 -1997, Rev. 1.0
Sulfate	360	mg/L	25	8	2		CRJ	05/10/2024 03:46	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	610	mg/L	1	50	20		ELT	04/29/2024 07:08	SM 2540C-2015

Customer Sample ID: AD-23
Customer Description:
Lab Number: 241393-012
Preparation:
Date Collected: 04/24/2024 12:05 EDT
Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.25	mg/L	2	0.10	0.02		CRJ	05/10/2024 02:40	EPA 300.1 -1997, Rev. 1.0
Chloride	8.65	mg/L	2	0.06	0.02		CRJ	05/10/2024 02:40	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.06	mg/L	2	0.06	0.02		CRJ	05/10/2024 02:40	EPA 300.1 -1997, Rev. 1.0
Sulfate	7.1	mg/L	2	0.6	0.1		CRJ	05/10/2024 02:40	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	70	mg/L	1	50	20		ELT	04/29/2024 07:08	SM 2540C-2015

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241393 **Customer: Pirkey Power Station** **Date Reported: 06/05/2024**

Customer Sample ID: AD-27 Customer Description:
Lab Number: 241393-013 Preparation:
Date Collected: 04/24/2024 09:30 EDT Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.39	mg/L	2	0.10	0.02		CRJ	05/10/2024 05:25	EPA 300.1 -1997, Rev. 1.0
Chloride	14.4	mg/L	2	0.06	0.02		CRJ	05/10/2024 05:25	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.16	mg/L	2	0.06	0.02		CRJ	05/10/2024 05:25	EPA 300.1 -1997, Rev. 1.0
Sulfate	60.4	mg/L	2	0.6	0.1		CRJ	05/10/2024 05:25	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	200	mg/L	1	50	20		ELT	04/29/2024 07:08	SM 2540C-2015

Customer Sample ID: AD-28 Customer Description:
Lab Number: 241393-014 Preparation:
Date Collected: 04/23/2024 10:28 EDT Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.09	mg/L	2	0.10	0.02	J1	CRJ	05/10/2024 07:36	EPA 300.1 -1997, Rev. 1.0
Chloride	3.90	mg/L	2	0.06	0.02		CRJ	05/10/2024 07:36	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.79	mg/L	2	0.06	0.02		CRJ	05/10/2024 07:36	EPA 300.1 -1997, Rev. 1.0
Sulfate	24.7	mg/L	2	0.6	0.1		CRJ	05/10/2024 07:36	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	100	mg/L	1	50	20		ELT	04/29/2024 07:17	SM 2540C-2015

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241393 **Customer: Pirkey Power Station** **Date Reported: 06/05/2024**

Customer Sample ID: AD-30
Customer Description:
Lab Number: 241393-015
Preparation:
Date Collected: 04/23/2024 09:43 EDT
Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.16	mg/L	2	0.10	0.02		CRJ	05/10/2024 06:30	EPA 300.1 -1997, Rev. 1.0
Chloride	12.2	mg/L	2	0.06	0.02		CRJ	05/10/2024 06:30	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.05	mg/L	2	0.06	0.02	J1	CRJ	05/10/2024 06:30	EPA 300.1 -1997, Rev. 1.0
Sulfate	104	mg/L	10	3.0	0.6		CRJ	05/10/2024 05:58	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	220	mg/L	1	50	20		ELT	04/29/2024 07:17	SM 2540C-2015

Customer Sample ID: AD-31
Customer Description:
Lab Number: 241393-016
Preparation:
Date Collected: 04/22/2024 12:20 EDT
Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.25	mg/L	2	0.10	0.02		CRJ	05/10/2024 13:57	EPA 300.1 -1997, Rev. 1.0
Chloride	16.8	mg/L	2	0.06	0.02		CRJ	05/10/2024 13:57	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.10	mg/L	2	0.06	0.02		CRJ	05/10/2024 13:57	EPA 300.1 -1997, Rev. 1.0
Sulfate	79.8	mg/L	2	0.6	0.1		CRJ	05/10/2024 13:57	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	250	mg/L	1	50	20		ELT	04/29/2024 07:17	SM 2540C-2015

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241393 **Customer: Pirkey Power Station** **Date Reported: 06/05/2024**

Customer Sample ID: AD-32 Customer Description:
Lab Number: 241393-017 Preparation:
Date Collected: 04/22/2024 11:33 EDT Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.42	mg/L	2	0.10	0.02		CRJ	05/10/2024 15:03	EPA 300.1 -1997, Rev. 1.0
Chloride	10.6	mg/L	2	0.06	0.02		CRJ	05/10/2024 15:03	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.32	mg/L	2	0.06	0.02		CRJ	05/10/2024 15:03	EPA 300.1 -1997, Rev. 1.0
Sulfate	67.0	mg/L	2	0.6	0.1		CRJ	05/10/2024 15:03	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	190	mg/L	1	50	20		ELT	04/29/2024 07:17	SM 2540C-2015

Customer Sample ID: AD-33 Customer Description:
Lab Number: 241393-018 Preparation:
Date Collected: 04/22/2024 12:13 EDT Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.36	mg/L	2	0.10	0.02		CRJ	05/10/2024 19:26	EPA 300.1 -1997, Rev. 1.0
Chloride	9.97	mg/L	2	0.06	0.02		CRJ	05/10/2024 19:26	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.27	mg/L	2	0.06	0.02		CRJ	05/10/2024 19:26	EPA 300.1 -1997, Rev. 1.0
Sulfate	65.7	mg/L	2	0.6	0.1		CRJ	05/10/2024 19:26	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	180	mg/L	1	50	20		ELT	04/29/2024 07:24	SM 2540C-2015

Dolan Chemical Laboratory
4001 Bixby Road
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Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241393 **Customer: Pirkey Power Station** **Date Reported: 06/05/2024**

Customer Sample ID: AD-34 Customer Description:
Lab Number: 241393-019 Preparation:
Date Collected: 04/24/2024 11:11 EDT Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.21	mg/L	5	0.25	0.05	J1	CRJ	05/10/2024 16:42	EPA 300.1 -1997, Rev. 1.0
Chloride	7.32	mg/L	5	0.15	0.05		CRJ	05/10/2024 16:42	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.69	mg/L	5	0.15	0.05		CRJ	05/10/2024 16:42	EPA 300.1 -1997, Rev. 1.0
Sulfate	1150	mg/L	50	15	3		CRJ	05/10/2024 16:09	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	1650	mg/L	1	50	20		ELT	04/29/2024 07:24	SM 2540C-2015

Customer Sample ID: AD-36 Customer Description:
Lab Number: 241393-020 Preparation:
Date Collected: 04/23/2024 10:20 EDT Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.59	mg/L	2	0.10	0.02		CRJ	05/10/2024 19:59	EPA 300.1 -1997, Rev. 1.0
Chloride	14.8	mg/L	2	0.06	0.02		CRJ	05/10/2024 19:59	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.08	mg/L	2	0.06	0.02		CRJ	05/10/2024 19:59	EPA 300.1 -1997, Rev. 1.0
Sulfate	2.9	mg/L	2	0.6	0.1		CRJ	05/10/2024 19:59	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	60	mg/L	1	50	20		ELT	04/29/2024 07:24	SM 2540C-2015

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241393 **Customer: Pirkey Power Station** **Date Reported: 06/05/2024**

Customer Sample ID: Duplicate 1
Lab Number: 241393-021
Date Collected: 04/22/2024 15:00 EDT

Customer Description:
Preparation:
Date Received: 04/26/2024 10:00 EDT

Ion Chromatography

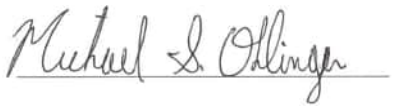
Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.61	mg/L	2	0.10	0.02		CRJ	05/10/2024 18:20	EPA 300.1 -1997, Rev. 1.0
Chloride	20.8	mg/L	2	0.06	0.02		CRJ	05/10/2024 18:20	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.15	mg/L	2	0.06	0.02		CRJ	05/10/2024 18:20	EPA 300.1 -1997, Rev. 1.0
Sulfate	76.5	mg/L	2	0.6	0.1		CRJ	05/10/2024 18:20	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/29/2024 15:40	SM 2320B-2011
TDS, Filterable Residue	230	mg/L	1	50	20		ELT	04/29/2024 07:37	SM 2540C-2015

Report Verification

This report and the above data have been confirmed by the following analyst.



Michael Ohlinger, Chemist
Email: msohlinger@aep.com
Phone: 614-836-4184
Audinet: 8-210-4184

THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF THE LABORATORY. ALL TEST RESULTS MEET ALL OF THE REQUIREMENTS OF THE ACCREDITING AUTHORITY, UNLESS OTHERWISE NOTED. ALL TIMES LISTED ARE IN THE EASTERN TIME ZONE.

Data Qualifer Legend

U1 - Not detected at or below method detection limit (MDL).
J1 - Concentration estimated. Analyte was detected between the method detection limit and the reporting limit.

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-2
Lab Number: 241410-001
Date Collected: 04/23/2024 09:21 EDT

Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/07/2024 19:31	EPA 200.8-1994, Rev. 5.4
Arsenic	2.05	µg/L	1	0.10	0.03		GES	05/07/2024 19:31	EPA 200.8-1994, Rev. 5.4
Barium	14.8	µg/L	1	0.20	0.05		GES	05/07/2024 19:31	EPA 200.8-1994, Rev. 5.4
Beryllium	1.03	µg/L	5	0.25	0.04		GES	05/08/2024 08:29	EPA 200.8-1994, Rev. 5.4
Boron	3.18	mg/L	1	0.050	0.007		GES	05/07/2024 19:31	EPA 200.8-1994, Rev. 5.4
Cadmium	0.135	µg/L	1	0.020	0.004		GES	05/07/2024 19:31	EPA 200.8-1994, Rev. 5.4
Calcium	4.51	mg/L	1	0.05	0.02		GES	05/07/2024 19:31	EPA 200.8-1994, Rev. 5.4
Chromium	0.54	µg/L	1	0.30	0.07		GES	05/07/2024 19:31	EPA 200.8-1994, Rev. 5.4
Cobalt	33.0	µg/L	1	0.020	0.005		GES	05/07/2024 19:31	EPA 200.8-1994, Rev. 5.4
Lead	0.65	µg/L	1	0.20	0.05		GES	05/07/2024 19:31	EPA 200.8-1994, Rev. 5.4
Lithium	0.0739	mg/L	5	0.0015	0.0003		GES	05/08/2024 08:29	EPA 200.8-1994, Rev. 5.4
Magnesium	9.21	mg/L	1	0.100	0.009		GES	05/07/2024 19:31	EPA 200.8-1994, Rev. 5.4
Mercury	56	ng/L	1	5	2		RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 19:31	EPA 200.8-1994, Rev. 5.4
Potassium	1.43	mg/L	1	0.10	0.01		GES	05/07/2024 19:31	EPA 200.8-1994, Rev. 5.4
Selenium	6.51	µg/L	1	0.50	0.04		GES	05/07/2024 19:31	EPA 200.8-1994, Rev. 5.4
Sodium	111	mg/L	1	0.20	0.02		GES	05/07/2024 19:31	EPA 200.8-1994, Rev. 5.4
Strontium	0.0635	mg/L	1	0.00200	0.00005		GES	05/07/2024 19:31	EPA 200.8-1994, Rev. 5.4
Thallium	0.13	µg/L	1	0.20	0.02	J1	GES	05/07/2024 19:31	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.55	pCi/L	0.13	0.16		ST	05/21/2024 09:02	SW-846 9315-1986, Rev. 0
Carrier Recovery	91.9	%						
Radium-228	1.63	pCi/L	0.17	0.50		TTP	05/24/2024 13:03	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	83.4	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-2
Lab Number: 241410-001-01
Date Collected: 04/23/2024 09:21 EDT

Customer Description:
Preparation: Dissolved
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.023	µg/L	1	0.100	0.008	J1	GES	05/07/2024 19:36	EPA 200.8-1994, Rev. 5.4
Arsenic	2.06	µg/L	1	0.10	0.03		GES	05/07/2024 19:36	EPA 200.8-1994, Rev. 5.4
Barium	15.5	µg/L	1	0.20	0.05		GES	05/07/2024 19:36	EPA 200.8-1994, Rev. 5.4
Beryllium	1.10	µg/L	5	0.25	0.04		GES	05/08/2024 08:34	EPA 200.8-1994, Rev. 5.4
Cadmium	0.138	µg/L	1	0.020	0.004		GES	05/07/2024 19:36	EPA 200.8-1994, Rev. 5.4
Chromium	0.54	µg/L	1	0.30	0.07		GES	05/07/2024 19:36	EPA 200.8-1994, Rev. 5.4
Cobalt	34.1	µg/L	1	0.020	0.005		GES	05/07/2024 19:36	EPA 200.8-1994, Rev. 5.4
Iron	0.198	mg/L	1	0.020	0.003		GES	05/07/2024 19:36	EPA 200.8-1994, Rev. 5.4
Lead	0.73	µg/L	1	0.20	0.05		GES	05/07/2024 19:36	EPA 200.8-1994, Rev. 5.4
Lithium	0.0784	mg/L	5	0.0015	0.0003		GES	05/08/2024 08:34	EPA 200.8-1994, Rev. 5.4
Manganese	0.112	mg/L	1	0.00100	0.00007		GES	05/07/2024 19:36	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 19:36	EPA 200.8-1994, Rev. 5.4
Selenium	6.84	µg/L	1	0.50	0.04		GES	05/07/2024 19:36	EPA 200.8-1994, Rev. 5.4
Thallium	0.13	µg/L	1	0.20	0.02	J1	GES	05/07/2024 19:36	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-3
Lab Number: 241410-002
Date Collected: 04/23/2024 12:04 EDT

Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/07/2024 19:41	EPA 200.8-1994, Rev. 5.4
Arsenic	0.25	µg/L	1	0.10	0.03		GES	05/07/2024 19:41	EPA 200.8-1994, Rev. 5.4
Barium	65.2	µg/L	1	0.20	0.05		GES	05/07/2024 19:41	EPA 200.8-1994, Rev. 5.4
Beryllium	0.24	µg/L	5	0.25	0.04	J1	GES	05/08/2024 08:39	EPA 200.8-1994, Rev. 5.4
Boron	0.038	mg/L	1	0.050	0.007	J1	GES	05/07/2024 19:41	EPA 200.8-1994, Rev. 5.4
Cadmium	0.017	µg/L	1	0.020	0.004	J1	GES	05/07/2024 19:41	EPA 200.8-1994, Rev. 5.4
Calcium	4.32	mg/L	1	0.05	0.02		GES	05/07/2024 19:41	EPA 200.8-1994, Rev. 5.4
Chromium	0.24	µg/L	1	0.30	0.07	J1	GES	05/07/2024 19:41	EPA 200.8-1994, Rev. 5.4
Cobalt	3.57	µg/L	1	0.020	0.005		GES	05/07/2024 19:41	EPA 200.8-1994, Rev. 5.4
Lead	0.05	µg/L	1	0.20	0.05	J1	GES	05/07/2024 19:41	EPA 200.8-1994, Rev. 5.4
Lithium	0.0599	mg/L	5	0.0015	0.0003		GES	05/08/2024 08:39	EPA 200.8-1994, Rev. 5.4
Magnesium	1.93	mg/L	1	0.100	0.009		GES	05/07/2024 19:41	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 19:41	EPA 200.8-1994, Rev. 5.4
Potassium	2.28	mg/L	1	0.10	0.01		GES	05/07/2024 19:41	EPA 200.8-1994, Rev. 5.4
Selenium	0.06	µg/L	1	0.50	0.04	J1	GES	05/07/2024 19:41	EPA 200.8-1994, Rev. 5.4
Sodium	8.66	mg/L	1	0.20	0.02		GES	05/07/2024 19:41	EPA 200.8-1994, Rev. 5.4
Strontium	0.0298	mg/L	1	0.00200	0.00005		GES	05/07/2024 19:41	EPA 200.8-1994, Rev. 5.4
Thallium	0.05	µg/L	1	0.20	0.02	J1	GES	05/07/2024 19:41	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.66	pCi/L	0.13	0.15		ST	05/21/2024 09:02	SW-846 9315-1986, Rev. 0
Carrier Recovery	100	%						
Radium-228	1.15	pCi/L	0.15	0.46		TTP	05/24/2024 13:03	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	87.3	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-3
Customer Description:
Lab Number: 241410-002-01
Preparation: Dissolved
Date Collected: 04/23/2024 12:04 EDT
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.017	µg/L	1	0.100	0.008	J1	GES	05/07/2024 19:47	EPA 200.8-1994, Rev. 5.4
Arsenic	0.22	µg/L	1	0.10	0.03		GES	05/07/2024 19:47	EPA 200.8-1994, Rev. 5.4
Barium	67.0	µg/L	1	0.20	0.05		GES	05/07/2024 19:47	EPA 200.8-1994, Rev. 5.4
Beryllium	0.26	µg/L	5	0.25	0.04		GES	05/08/2024 08:45	EPA 200.8-1994, Rev. 5.4
Cadmium	0.017	µg/L	1	0.020	0.004	J1	GES	05/07/2024 19:47	EPA 200.8-1994, Rev. 5.4
Chromium	0.28	µg/L	1	0.30	0.07	J1	GES	05/07/2024 19:47	EPA 200.8-1994, Rev. 5.4
Cobalt	3.78	µg/L	1	0.020	0.005		GES	05/07/2024 19:47	EPA 200.8-1994, Rev. 5.4
Iron	1.21	mg/L	1	0.020	0.003		GES	05/07/2024 19:47	EPA 200.8-1994, Rev. 5.4
Lead	0.11	µg/L	1	0.20	0.05	J1	GES	05/07/2024 19:47	EPA 200.8-1994, Rev. 5.4
Lithium	0.0633	mg/L	5	0.0015	0.0003		GES	05/08/2024 08:45	EPA 200.8-1994, Rev. 5.4
Manganese	0.0427	mg/L	1	0.00100	0.00007		GES	05/07/2024 19:47	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 19:47	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	05/07/2024 19:47	EPA 200.8-1994, Rev. 5.4
Thallium	0.05	µg/L	1	0.20	0.02	J1	GES	05/07/2024 19:47	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-4	Customer Description:
Lab Number: 241410-003	Preparation:
Date Collected: 04/24/2024 10:31 EDT	Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.014	µg/L	1	0.100	0.008	J1	GES	05/07/2024 19:52	EPA 200.8-1994, Rev. 5.4
Arsenic	0.44	µg/L	1	0.10	0.03		GES	05/07/2024 19:52	EPA 200.8-1994, Rev. 5.4
Barium	97.2	µg/L	1	0.20	0.05		GES	05/07/2024 19:52	EPA 200.8-1994, Rev. 5.4
Beryllium	0.64	µg/L	5	0.25	0.04		GES	05/08/2024 08:50	EPA 200.8-1994, Rev. 5.4
Boron	0.017	mg/L	1	0.050	0.007	J1	GES	05/07/2024 19:52	EPA 200.8-1994, Rev. 5.4
Cadmium	0.020	µg/L	1	0.020	0.004		GES	05/07/2024 19:52	EPA 200.8-1994, Rev. 5.4
Calcium	2.26	mg/L	1	0.05	0.02		GES	05/07/2024 19:52	EPA 200.8-1994, Rev. 5.4
Chromium	0.31	µg/L	1	0.30	0.07		GES	05/07/2024 19:52	EPA 200.8-1994, Rev. 5.4
Cobalt	5.95	µg/L	1	0.020	0.005		GES	05/07/2024 19:52	EPA 200.8-1994, Rev. 5.4
Lead	0.06	µg/L	1	0.20	0.05	J1	GES	05/07/2024 19:52	EPA 200.8-1994, Rev. 5.4
Lithium	0.0395	mg/L	5	0.0015	0.0003		GES	05/08/2024 08:50	EPA 200.8-1994, Rev. 5.4
Magnesium	1.18	mg/L	1	0.100	0.009		GES	05/07/2024 19:52	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 19:52	EPA 200.8-1994, Rev. 5.4
Potassium	2.36	mg/L	1	0.10	0.01		GES	05/07/2024 19:52	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	05/07/2024 19:52	EPA 200.8-1994, Rev. 5.4
Sodium	8.05	mg/L	1	0.20	0.02		GES	05/07/2024 19:52	EPA 200.8-1994, Rev. 5.4
Strontium	0.0189	mg/L	1	0.00200	0.00005		GES	05/07/2024 19:52	EPA 200.8-1994, Rev. 5.4
Thallium	0.07	µg/L	1	0.20	0.02	J1	GES	05/07/2024 19:52	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.67	pCi/L	0.13	0.18		ST	05/21/2024 09:02	SW-846 9315-1986, Rev. 0
Carrier Recovery	106	%						
Radium-228	1.12	pCi/L	0.19	0.60		TTP	05/24/2024 13:03	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	79.0	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-4
Lab Number: 241410-003-01
Date Collected: 04/24/2024 10:31 EDT

Customer Description:
Preparation: Dissolved
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.014	µg/L	1	0.100	0.008	J1	GES	05/07/2024 19:57	EPA 200.8-1994, Rev. 5.4
Arsenic	<0.03	µg/L	1	0.10	0.03	U1	GES	05/07/2024 19:57	EPA 200.8-1994, Rev. 5.4
Barium	96.5	µg/L	1	0.20	0.05		GES	05/07/2024 19:57	EPA 200.8-1994, Rev. 5.4
Beryllium	0.66	µg/L	5	0.25	0.04		GES	05/08/2024 08:55	EPA 200.8-1994, Rev. 5.4
Cadmium	0.011	µg/L	1	0.020	0.004	J1	GES	05/07/2024 19:57	EPA 200.8-1994, Rev. 5.4
Chromium	0.28	µg/L	1	0.30	0.07	J1	GES	05/07/2024 19:57	EPA 200.8-1994, Rev. 5.4
Cobalt	5.86	µg/L	1	0.020	0.005		GES	05/07/2024 19:57	EPA 200.8-1994, Rev. 5.4
Iron	0.025	mg/L	1	0.020	0.003		GES	05/07/2024 19:57	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	05/07/2024 19:57	EPA 200.8-1994, Rev. 5.4
Lithium	0.0411	mg/L	5	0.0015	0.0003		GES	05/08/2024 08:55	EPA 200.8-1994, Rev. 5.4
Manganese	0.0497	mg/L	1	0.00100	0.00007		GES	05/07/2024 19:57	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 19:57	EPA 200.8-1994, Rev. 5.4
Selenium	0.05	µg/L	1	0.50	0.04	J1	GES	05/07/2024 19:57	EPA 200.8-1994, Rev. 5.4
Thallium	0.07	µg/L	1	0.20	0.02	J1	GES	05/07/2024 19:57	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-7R
Lab Number: 241410-004
Date Collected: 04/22/2024 10:25 EDT

Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/07/2024 20:02	EPA 200.8-1994, Rev. 5.4
Arsenic	0.38	µg/L	1	0.10	0.03		GES	05/07/2024 20:02	EPA 200.8-1994, Rev. 5.4
Barium	41.3	µg/L	1	0.20	0.05		GES	05/07/2024 20:02	EPA 200.8-1994, Rev. 5.4
Beryllium	2.37	µg/L	5	0.25	0.04		GES	05/08/2024 09:00	EPA 200.8-1994, Rev. 5.4
Boron	0.049	mg/L	1	0.050	0.007	J1	GES	05/07/2024 20:02	EPA 200.8-1994, Rev. 5.4
Cadmium	0.310	µg/L	1	0.020	0.004		GES	05/07/2024 20:02	EPA 200.8-1994, Rev. 5.4
Calcium	3.37	mg/L	1	0.05	0.02		GES	05/07/2024 20:02	EPA 200.8-1994, Rev. 5.4
Chromium	0.23	µg/L	1	0.30	0.07	J1	GES	05/07/2024 20:02	EPA 200.8-1994, Rev. 5.4
Cobalt	20.9	µg/L	1	0.020	0.005		GES	05/07/2024 20:02	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	05/07/2024 20:02	EPA 200.8-1994, Rev. 5.4
Lithium	0.0790	mg/L	5	0.0015	0.0003		GES	05/08/2024 09:00	EPA 200.8-1994, Rev. 5.4
Magnesium	5.03	mg/L	1	0.100	0.009		GES	05/07/2024 20:02	EPA 200.8-1994, Rev. 5.4
Mercury	<4	ng/L	2	10	4	U1	RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 20:02	EPA 200.8-1994, Rev. 5.4
Potassium	1.99	mg/L	1	0.10	0.01		GES	05/07/2024 20:02	EPA 200.8-1994, Rev. 5.4
Selenium	1.00	µg/L	1	0.50	0.04		GES	05/07/2024 20:02	EPA 200.8-1994, Rev. 5.4
Sodium	23.4	mg/L	1	0.20	0.02		GES	05/07/2024 20:02	EPA 200.8-1994, Rev. 5.4
Strontium	0.0366	mg/L	1	0.00200	0.00005		GES	05/07/2024 20:02	EPA 200.8-1994, Rev. 5.4
Thallium	0.14	µg/L	1	0.20	0.02	J1	GES	05/07/2024 20:02	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.16	pCi/L	0.18	0.16		ST	05/21/2024 09:02	SW-846 9315-1986, Rev. 0
Carrier Recovery	99.8	%						
Radium-228	1.46	pCi/L	0.18	0.55		TTP	05/24/2024 13:03	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	87.3	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-7R
Lab Number: 241410-004-01
Date Collected: 04/22/2024 10:25 EDT

Customer Description:
Preparation: Dissolved
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/07/2024 20:07	EPA 200.8-1994, Rev. 5.4
Arsenic	0.37	µg/L	1	0.10	0.03		GES	05/07/2024 20:07	EPA 200.8-1994, Rev. 5.4
Barium	41.7	µg/L	1	0.20	0.05		GES	05/07/2024 20:07	EPA 200.8-1994, Rev. 5.4
Beryllium	1.96	µg/L	1	0.050	0.007		GES	05/07/2024 20:07	EPA 200.8-1994, Rev. 5.4
Cadmium	0.318	µg/L	1	0.020	0.004		GES	05/07/2024 20:07	EPA 200.8-1994, Rev. 5.4
Chromium	0.25	µg/L	1	0.30	0.07	J1	GES	05/07/2024 20:07	EPA 200.8-1994, Rev. 5.4
Cobalt	21.0	µg/L	1	0.020	0.005		GES	05/07/2024 20:07	EPA 200.8-1994, Rev. 5.4
Iron	5.21	mg/L	1	0.020	0.003		GES	05/07/2024 20:07	EPA 200.8-1994, Rev. 5.4
Lead	0.06	µg/L	1	0.20	0.05	J1	GES	05/07/2024 20:07	EPA 200.8-1994, Rev. 5.4
Lithium	0.0678	mg/L	1	0.00030	0.00006		GES	05/07/2024 20:07	EPA 200.8-1994, Rev. 5.4
Manganese	0.0649	mg/L	1	0.00100	0.00007		GES	05/07/2024 20:07	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 20:07	EPA 200.8-1994, Rev. 5.4
Selenium	1.03	µg/L	1	0.50	0.04		GES	05/07/2024 20:07	EPA 200.8-1994, Rev. 5.4
Thallium	0.14	µg/L	1	0.20	0.02	J1	GES	05/07/2024 20:07	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-8
Lab Number: 241410-005
Date Collected: 04/23/2024 11:11 EDT

Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.999	mg/L	1	0.050	0.007		GES	05/07/2024 20:12	EPA 200.8-1994, Rev. 5.4
Calcium	87.7	mg/L	1	0.05	0.02		GES	05/07/2024 20:12	EPA 200.8-1994, Rev. 5.4
Magnesium	6.27	mg/L	1	0.100	0.009		GES	05/07/2024 20:12	EPA 200.8-1994, Rev. 5.4
Potassium	1.19	mg/L	1	0.10	0.01		GES	05/07/2024 20:12	EPA 200.8-1994, Rev. 5.4
Sodium	11.5	mg/L	1	0.20	0.02		GES	05/07/2024 20:12	EPA 200.8-1994, Rev. 5.4
Strontium	0.526	mg/L	1	0.00200	0.00005		GES	05/07/2024 20:12	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-12
Lab Number: 241410-006
Date Collected: 04/22/2024 10:44 EDT

Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.009	µg/L	1	0.100	0.008	J1	GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4
Arsenic	0.09	µg/L	1	0.10	0.03	J1	GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4
Barium	19.3	µg/L	1	0.20	0.05		GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4
Beryllium	0.121	µg/L	1	0.050	0.007		GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4
Boron	0.015	mg/L	1	0.050	0.007	J1	GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4
Cadmium	0.007	µg/L	1	0.020	0.004	J1	GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4
Calcium	0.18	mg/L	1	0.05	0.02		GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4
Chromium	0.34	µg/L	1	0.30	0.07		GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4
Cobalt	1.08	µg/L	1	0.020	0.005		GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4
Lead	0.08	µg/L	1	0.20	0.05	J1	GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4
Lithium	0.00462	mg/L	1	0.00030	0.00006		GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4
Magnesium	0.342	mg/L	1	0.100	0.009		GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4
Potassium	0.20	mg/L	1	0.10	0.01		GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4
Selenium	0.31	µg/L	1	0.50	0.04	J1	GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4
Sodium	3.75	mg/L	1	0.20	0.02		GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4
Strontium	0.00203	mg/L	1	0.00200	0.00005		GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	05/07/2024 20:17	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.83	pCi/L	0.15	0.14		ST	05/21/2024 09:02	SW-846 9315-1986, Rev. 0
Carrier Recovery	106	%						
Radium-228	1.79	pCi/L	0.21	0.64		TTP	05/24/2024 13:03	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	74.6	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-12
Customer Description:
Lab Number: 241410-006-01
Preparation: Dissolved
Date Collected: 04/22/2024 10:44 EDT
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.037	µg/L	1	0.100	0.008	J1	GES	05/07/2024 21:34	EPA 200.8-1994, Rev. 5.4
Arsenic	0.07	µg/L	1	0.10	0.03	J1	GES	05/07/2024 21:34	EPA 200.8-1994, Rev. 5.4
Barium	19.5	µg/L	1	0.20	0.05		GES	05/07/2024 21:34	EPA 200.8-1994, Rev. 5.4
Beryllium	0.129	µg/L	1	0.050	0.007		GES	05/07/2024 21:34	EPA 200.8-1994, Rev. 5.4
Cadmium	0.007	µg/L	1	0.020	0.004	J1	GES	05/07/2024 21:34	EPA 200.8-1994, Rev. 5.4
Chromium	0.25	µg/L	1	0.30	0.07	J1	GES	05/07/2024 21:34	EPA 200.8-1994, Rev. 5.4
Cobalt	1.07	µg/L	1	0.020	0.005		GES	05/07/2024 21:34	EPA 200.8-1994, Rev. 5.4
Iron	0.020	mg/L	1	0.020	0.003		GES	05/07/2024 21:34	EPA 200.8-1994, Rev. 5.4
Lead	0.12	µg/L	1	0.20	0.05	J1	GES	05/07/2024 21:34	EPA 200.8-1994, Rev. 5.4
Lithium	0.00490	mg/L	1	0.00030	0.00006		GES	05/07/2024 21:34	EPA 200.8-1994, Rev. 5.4
Manganese	0.00313	mg/L	1	0.00100	0.00007		GES	05/07/2024 21:34	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 21:34	EPA 200.8-1994, Rev. 5.4
Selenium	0.26	µg/L	1	0.50	0.04	J1	GES	05/07/2024 21:34	EPA 200.8-1994, Rev. 5.4
Thallium	0.02	µg/L	1	0.20	0.02	J1	GES	05/07/2024 21:34	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-13
Lab Number: 241410-007
Date Collected: 04/22/2024 09:20 EDT

Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/07/2024 21:39	EPA 200.8-1994, Rev. 5.4
Arsenic	0.54	µg/L	1	0.10	0.03		GES	05/07/2024 21:39	EPA 200.8-1994, Rev. 5.4
Barium	34.9	µg/L	1	0.20	0.05		GES	05/07/2024 21:39	EPA 200.8-1994, Rev. 5.4
Beryllium	0.163	µg/L	1	0.050	0.007		GES	05/07/2024 21:39	EPA 200.8-1994, Rev. 5.4
Boron	0.066	mg/L	1	0.050	0.007		GES	05/07/2024 21:39	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	05/07/2024 21:39	EPA 200.8-1994, Rev. 5.4
Calcium	10.6	mg/L	1	0.05	0.02		GES	05/07/2024 21:39	EPA 200.8-1994, Rev. 5.4
Chromium	0.22	µg/L	1	0.30	0.07	J1	GES	05/07/2024 21:39	EPA 200.8-1994, Rev. 5.4
Cobalt	46.2	µg/L	1	0.020	0.005		GES	05/07/2024 21:39	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	05/07/2024 21:39	EPA 200.8-1994, Rev. 5.4
Lithium	0.135	mg/L	1	0.00030	0.00006		GES	05/07/2024 21:39	EPA 200.8-1994, Rev. 5.4
Magnesium	13.2	mg/L	1	0.100	0.009		GES	05/07/2024 21:39	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 21:39	EPA 200.8-1994, Rev. 5.4
Potassium	4.83	mg/L	1	0.10	0.01		GES	05/07/2024 21:39	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	05/07/2024 21:39	EPA 200.8-1994, Rev. 5.4
Sodium	19.9	mg/L	1	0.20	0.02		GES	05/08/2024 10:01	EPA 200.8-1994, Rev. 5.4
Strontium	0.0787	mg/L	1	0.00200	0.00005		GES	05/07/2024 21:39	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	05/07/2024 21:39	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.65	pCi/L	0.15	0.23		ST	05/21/2024 09:02	SW-846 9315-1986, Rev. 0
Carrier Recovery	92.6	%						
Radium-228	2.02	pCi/L	0.20	0.59		TTP	05/24/2024 13:03	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	86.1	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-13
Customer Description:
Lab Number: 241410-007-01
Preparation: Dissolved
Date Collected: 04/22/2024 09:20 EDT
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/07/2024 21:45	EPA 200.8-1994, Rev. 5.4
Arsenic	0.32	µg/L	1	0.10	0.03		GES	05/07/2024 21:45	EPA 200.8-1994, Rev. 5.4
Barium	33.9	µg/L	1	0.20	0.05		GES	05/07/2024 21:45	EPA 200.8-1994, Rev. 5.4
Beryllium	0.151	µg/L	1	0.050	0.007		GES	05/07/2024 21:45	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	05/07/2024 21:45	EPA 200.8-1994, Rev. 5.4
Chromium	0.19	µg/L	1	0.30	0.07	J1	GES	05/07/2024 21:45	EPA 200.8-1994, Rev. 5.4
Cobalt	44.9	µg/L	1	0.020	0.005		GES	05/07/2024 21:45	EPA 200.8-1994, Rev. 5.4
Iron	33.8	mg/L	1	0.020	0.003		GES	05/07/2024 21:45	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	05/07/2024 21:45	EPA 200.8-1994, Rev. 5.4
Lithium	0.133	mg/L	1	0.00030	0.00006		GES	05/07/2024 21:45	EPA 200.8-1994, Rev. 5.4
Manganese	0.447	mg/L	1	0.00100	0.00007		GES	05/07/2024 21:45	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 21:45	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	05/07/2024 21:45	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	05/07/2024 21:45	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-16
Customer Description:
Lab Number: 241410-008
Preparation:
Date Collected: 04/24/2024 12:04 EDT
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.013	mg/L	1	0.050	0.007	J1	GES	05/07/2024 21:50	EPA 200.8-1994, Rev. 5.4
Calcium	1.13	mg/L	1	0.05	0.02		GES	05/07/2024 21:50	EPA 200.8-1994, Rev. 5.4
Magnesium	2.37	mg/L	1	0.100	0.009		GES	05/07/2024 21:50	EPA 200.8-1994, Rev. 5.4
Potassium	1.53	mg/L	1	0.10	0.01		GES	05/07/2024 21:50	EPA 200.8-1994, Rev. 5.4
Sodium	13.5	mg/L	1	0.20	0.02		GES	05/08/2024 10:12	EPA 200.8-1994, Rev. 5.4
Strontium	0.0135	mg/L	1	0.00200	0.00005		GES	05/07/2024 21:50	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-17
Lab Number: 241410-009
Date Collected: 04/23/2024 12:16 EDT

Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4
Arsenic	0.09	µg/L	1	0.10	0.03	J1	GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4
Barium	47.6	µg/L	1	0.20	0.05		GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4
Beryllium	0.221	µg/L	1	0.050	0.007		GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4
Boron	0.020	mg/L	1	0.050	0.007	J1	GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4
Cadmium	0.011	µg/L	1	0.020	0.004	J1	GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4
Calcium	0.04	mg/L	1	0.05	0.02	J1	GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4
Chromium	0.37	µg/L	1	0.30	0.07		GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4
Cobalt	1.99	µg/L	1	0.020	0.005		GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4
Lithium	0.00705	mg/L	1	0.00030	0.00006		GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4
Magnesium	0.899	mg/L	1	0.100	0.009		GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4
Mercury	51	ng/L	4	20	8		RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4
Potassium	0.15	mg/L	1	0.10	0.01		GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4
Selenium	0.11	µg/L	1	0.50	0.04	J1	GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4
Sodium	3.85	mg/L	1	0.20	0.02		GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4
Strontium	0.00224	mg/L	1	0.00200	0.00005		GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	05/07/2024 21:55	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.45	pCi/L	0.11	0.15		ST	05/21/2024 09:02	SW-846 9315-1986, Rev. 0
Carrier Recovery	101	%						
Radium-228	1.35	pCi/L	0.15	0.44		TTP	05/24/2024 13:02	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	83.0	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-17
Customer Description:
Lab Number: 241410-009-01
Preparation: Dissolved
Date Collected: 04/23/2024 11:16 EDT
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/07/2024 22:00	EPA 200.8-1994, Rev. 5.4
Arsenic	0.05	µg/L	1	0.10	0.03	J1	GES	05/07/2024 22:00	EPA 200.8-1994, Rev. 5.4
Barium	46.3	µg/L	1	0.20	0.05		GES	05/07/2024 22:00	EPA 200.8-1994, Rev. 5.4
Beryllium	0.196	µg/L	1	0.050	0.007		GES	05/07/2024 22:00	EPA 200.8-1994, Rev. 5.4
Cadmium	0.010	µg/L	1	0.020	0.004	J1	GES	05/07/2024 22:00	EPA 200.8-1994, Rev. 5.4
Chromium	0.38	µg/L	1	0.30	0.07		GES	05/07/2024 22:00	EPA 200.8-1994, Rev. 5.4
Cobalt	1.95	µg/L	1	0.020	0.005		GES	05/07/2024 22:00	EPA 200.8-1994, Rev. 5.4
Iron	0.004	mg/L	1	0.020	0.003	J1	GES	05/07/2024 22:00	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	05/07/2024 22:00	EPA 200.8-1994, Rev. 5.4
Lithium	0.00647	mg/L	1	0.00030	0.00006		GES	05/07/2024 22:00	EPA 200.8-1994, Rev. 5.4
Manganese	0.00240	mg/L	1	0.00100	0.00007		GES	05/07/2024 22:00	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 22:00	EPA 200.8-1994, Rev. 5.4
Selenium	0.09	µg/L	1	0.50	0.04	J1	GES	05/07/2024 22:00	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	05/07/2024 22:00	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-18
Lab Number: 241410-010
Date Collected: 04/23/2024 11:58 EDT

Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/07/2024 22:05	EPA 200.8-1994, Rev. 5.4
Arsenic	0.19	µg/L	1	0.10	0.03		GES	05/07/2024 22:05	EPA 200.8-1994, Rev. 5.4
Barium	76.6	µg/L	1	0.20	0.05		GES	05/07/2024 22:05	EPA 200.8-1994, Rev. 5.4
Beryllium	0.083	µg/L	1	0.050	0.007		GES	05/07/2024 22:05	EPA 200.8-1994, Rev. 5.4
Boron	0.008	mg/L	1	0.050	0.007	J1	GES	05/07/2024 22:05	EPA 200.8-1994, Rev. 5.4
Cadmium	0.010	µg/L	1	0.020	0.004	J1	GES	05/07/2024 22:05	EPA 200.8-1994, Rev. 5.4
Calcium	0.19	mg/L	1	0.05	0.02		GES	05/07/2024 22:05	EPA 200.8-1994, Rev. 5.4
Chromium	0.32	µg/L	1	0.30	0.07		GES	05/07/2024 22:05	EPA 200.8-1994, Rev. 5.4
Cobalt	0.851	µg/L	1	0.020	0.005		GES	05/07/2024 22:05	EPA 200.8-1994, Rev. 5.4
Lead	0.06	µg/L	1	0.20	0.05	J1	GES	05/07/2024 22:05	EPA 200.8-1994, Rev. 5.4
Lithium	0.0130	mg/L	1	0.00030	0.00006		GES	05/07/2024 22:05	EPA 200.8-1994, Rev. 5.4
Magnesium	0.294	mg/L	1	0.100	0.009		GES	05/07/2024 22:05	EPA 200.8-1994, Rev. 5.4
Mercury	8	ng/L	1	5	2		RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 22:05	EPA 200.8-1994, Rev. 5.4
Potassium	0.74	mg/L	1	0.10	0.01		GES	05/07/2024 22:05	EPA 200.8-1994, Rev. 5.4
Selenium	0.11	µg/L	1	0.50	0.04	J1	GES	05/07/2024 22:05	EPA 200.8-1994, Rev. 5.4
Sodium	5.64	mg/L	1	0.20	0.02		GES	05/08/2024 10:27	EPA 200.8-1994, Rev. 5.4
Strontium	0.00415	mg/L	1	0.00200	0.00005		GES	05/07/2024 22:05	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	05/07/2024 22:05	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.42	pCi/L	0.11	0.18		ST	05/21/2024 09:02	SW-846 9315-1986, Rev. 0
Carrier Recovery	104	%						
Radium-228	0.57	pCi/L	0.13	0.42		TTP	05/24/2024 13:02	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	85.9	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-18
Lab Number: 241410-010-01
Date Collected: 04/23/2024 11:58 EDT

Customer Description:
Preparation: Dissolved
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.020	µg/L	1	0.100	0.008	J1	GES	05/07/2024 22:10	EPA 200.8-1994, Rev. 5.4
Arsenic	0.07	µg/L	1	0.10	0.03	J1	GES	05/07/2024 22:10	EPA 200.8-1994, Rev. 5.4
Barium	80.5	µg/L	1	0.20	0.05		GES	05/07/2024 22:10	EPA 200.8-1994, Rev. 5.4
Beryllium	0.084	µg/L	1	0.050	0.007		GES	05/07/2024 22:10	EPA 200.8-1994, Rev. 5.4
Cadmium	0.011	µg/L	1	0.020	0.004	J1	GES	05/07/2024 22:10	EPA 200.8-1994, Rev. 5.4
Chromium	0.41	µg/L	1	0.30	0.07		GES	05/07/2024 22:10	EPA 200.8-1994, Rev. 5.4
Cobalt	0.921	µg/L	1	0.020	0.005		GES	05/07/2024 22:10	EPA 200.8-1994, Rev. 5.4
Iron	0.031	mg/L	1	0.020	0.003		GES	05/07/2024 22:10	EPA 200.8-1994, Rev. 5.4
Lead	0.07	µg/L	1	0.20	0.05	J1	GES	05/07/2024 22:10	EPA 200.8-1994, Rev. 5.4
Lithium	0.0135	mg/L	1	0.00030	0.00006		GES	05/07/2024 22:10	EPA 200.8-1994, Rev. 5.4
Manganese	0.00407	mg/L	1	0.00100	0.00007		GES	05/07/2024 22:10	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 22:10	EPA 200.8-1994, Rev. 5.4
Selenium	0.08	µg/L	1	0.50	0.04	J1	GES	05/07/2024 22:10	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	05/07/2024 22:10	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-22	Customer Description:
Lab Number: 241410-011	Preparation:
Date Collected: 04/22/2024 11:22 EDT	Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/07/2024 22:15	EPA 200.8-1994, Rev. 5.4
Arsenic	3.54	µg/L	1	0.10	0.03		GES	05/07/2024 22:15	EPA 200.8-1994, Rev. 5.4
Barium	16.2	µg/L	1	0.20	0.05		GES	05/07/2024 22:15	EPA 200.8-1994, Rev. 5.4
Beryllium	7.53	µg/L	1	0.050	0.007	M1	GES	05/07/2024 22:15	EPA 200.8-1994, Rev. 5.4
Boron	0.064	mg/L	1	0.050	0.007		GES	05/07/2024 22:15	EPA 200.8-1994, Rev. 5.4
Cadmium	1.22	µg/L	1	0.020	0.004		GES	05/07/2024 22:15	EPA 200.8-1994, Rev. 5.4
Calcium	13.5	mg/L	1	0.05	0.02		GES	05/07/2024 22:15	EPA 200.8-1994, Rev. 5.4
Chromium	0.43	µg/L	1	0.30	0.07		GES	05/07/2024 22:15	EPA 200.8-1994, Rev. 5.4
Cobalt	99.3	µg/L	1	0.020	0.005	M1	GES	05/07/2024 22:15	EPA 200.8-1994, Rev. 5.4
Lead	0.23	µg/L	1	0.20	0.05		GES	05/07/2024 22:15	EPA 200.8-1994, Rev. 5.4
Lithium	0.146	mg/L	1	0.00030	0.00006	M1	GES	05/07/2024 22:15	EPA 200.8-1994, Rev. 5.4
Magnesium	19.9	mg/L	1	0.100	0.009		GES	05/07/2024 22:15	EPA 200.8-1994, Rev. 5.4
Mercury	66	ng/L	4	20	8		RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 22:15	EPA 200.8-1994, Rev. 5.4
Potassium	3.81	mg/L	1	0.10	0.01		GES	05/07/2024 22:15	EPA 200.8-1994, Rev. 5.4
Selenium	11.9	µg/L	1	0.50	0.04		GES	05/07/2024 22:15	EPA 200.8-1994, Rev. 5.4
Sodium	90.3	mg/L	5	1.0	0.1		GES	05/08/2024 10:37	EPA 200.8-1994, Rev. 5.4
Strontium	0.129	mg/L	1	0.00200	0.00005		GES	05/07/2024 22:15	EPA 200.8-1994, Rev. 5.4
Thallium	0.20	µg/L	1	0.20	0.02		GES	05/07/2024 22:15	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.78	pCi/L	0.23	0.17		ST	05/21/2024 09:02	SW-846 9315-1986, Rev. 0
Carrier Recovery	95.0	%						
Radium-228	1.24	pCi/L	0.14	0.40	O2, P2	TTP	06/05/2024 13:38	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	56.2	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-22
Customer Description:
Lab Number: 241410-011-01
Preparation: Dissolved
Date Collected: 04/22/2024 11:22 EDT
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.015	µg/L	1	0.100	0.008	J1	GES	05/07/2024 22:31	EPA 200.8-1994, Rev. 5.4
Arsenic	3.76	µg/L	1	0.10	0.03		GES	05/07/2024 22:31	EPA 200.8-1994, Rev. 5.4
Barium	16.7	µg/L	1	0.20	0.05		GES	05/07/2024 22:31	EPA 200.8-1994, Rev. 5.4
Beryllium	7.18	µg/L	1	0.050	0.007		GES	05/07/2024 22:31	EPA 200.8-1994, Rev. 5.4
Cadmium	1.30	µg/L	1	0.020	0.004		GES	05/07/2024 22:31	EPA 200.8-1994, Rev. 5.4
Chromium	0.44	µg/L	1	0.30	0.07		GES	05/07/2024 22:31	EPA 200.8-1994, Rev. 5.4
Cobalt	106	µg/L	1	0.020	0.005		GES	05/07/2024 22:31	EPA 200.8-1994, Rev. 5.4
Iron	17.8	mg/L	1	0.020	0.003		GES	05/07/2024 22:31	EPA 200.8-1994, Rev. 5.4
Lead	0.23	µg/L	1	0.20	0.05		GES	05/07/2024 22:31	EPA 200.8-1994, Rev. 5.4
Lithium	0.141	mg/L	1	0.00030	0.00006		GES	05/07/2024 22:31	EPA 200.8-1994, Rev. 5.4
Manganese	0.347	mg/L	1	0.00100	0.00007		GES	05/07/2024 22:31	EPA 200.8-1994, Rev. 5.4
Mercury	9	ng/L	1	5	2		RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/07/2024 22:31	EPA 200.8-1994, Rev. 5.4
Selenium	12.1	µg/L	1	0.50	0.04		GES	05/07/2024 22:31	EPA 200.8-1994, Rev. 5.4
Thallium	0.24	µg/L	1	0.20	0.02		GES	05/07/2024 22:31	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-23
Customer Description:
Lab Number: 241410-012
Preparation:
Date Collected: 04/24/2024 12:05 EDT
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.207	mg/L	1	0.050	0.007		GES	05/08/2024 00:14	EPA 200.8-1994, Rev. 5.4
Calcium	0.22	mg/L	1	0.05	0.02		GES	05/08/2024 00:14	EPA 200.8-1994, Rev. 5.4
Magnesium	0.197	mg/L	1	0.100	0.009		GES	05/08/2024 00:14	EPA 200.8-1994, Rev. 5.4
Potassium	2.51	mg/L	1	0.10	0.01		GES	05/08/2024 00:14	EPA 200.8-1994, Rev. 5.4
Sodium	3.54	mg/L	1	0.20	0.02		GES	05/08/2024 12:25	EPA 200.8-1994, Rev. 5.4
Strontium	0.00254	mg/L	1	0.00200	0.00005		GES	05/08/2024 00:14	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-27
Lab Number: 241410-013
Date Collected: 04/24/2024 09:30 EDT

Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.037	mg/L	1	0.050	0.007	J1	GES	05/08/2024 00:19	EPA 200.8-1994, Rev. 5.4
Calcium	3.89	mg/L	1	0.05	0.02		GES	05/08/2024 00:19	EPA 200.8-1994, Rev. 5.4
Magnesium	4.97	mg/L	1	0.100	0.009		GES	05/08/2024 00:19	EPA 200.8-1994, Rev. 5.4
Potassium	1.87	mg/L	1	0.10	0.01		GES	05/08/2024 00:19	EPA 200.8-1994, Rev. 5.4
Sodium	8.79	mg/L	1	0.20	0.02		GES	05/08/2024 12:30	EPA 200.8-1994, Rev. 5.4
Strontium	0.0560	mg/L	1	0.00200	0.00005		GES	05/08/2024 00:19	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-28
Lab Number: 241410-014
Date Collected: 04/23/2024 10:28 EDT

Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4
Arsenic	0.12	µg/L	1	0.10	0.03		GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4
Barium	121	µg/L	1	0.20	0.05		GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4
Beryllium	0.770	µg/L	1	0.050	0.007		GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4
Boron	0.290	mg/L	1	0.050	0.007		GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4
Cadmium	0.055	µg/L	1	0.020	0.004		GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4
Calcium	1.19	mg/L	1	0.05	0.02		GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4
Chromium	0.38	µg/L	1	0.30	0.07		GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4
Cobalt	13.0	µg/L	1	0.020	0.005		GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4
Lead	0.07	µg/L	1	0.20	0.05	J1	GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4
Lithium	0.0179	mg/L	1	0.00030	0.00006		GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4
Magnesium	2.81	mg/L	1	0.100	0.009		GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4
Mercury	13	ng/L	1	5	2		RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4
Potassium	0.61	mg/L	1	0.10	0.01		GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4
Selenium	0.33	µg/L	1	0.50	0.04	J1	GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4
Sodium	5.13	mg/L	1	0.20	0.02		GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4
Strontium	0.0209	mg/L	1	0.00200	0.00005		GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	05/08/2024 00:24	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.56	pCi/L	0.13	0.22		ST	05/21/2024 09:02	SW-846 9315-1986, Rev. 0
Carrier Recovery	98.4	%						
Radium-228	0.99	pCi/L	0.19	0.60	O2, P2	TTP	06/05/2024 13:38	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	75.8	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-28
Customer Description:
Lab Number: 241410-014-01
Preparation: Dissolved
Date Collected: 04/23/2024 10:28 EDT
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/08/2024 00:29	EPA 200.8-1994, Rev. 5.4
Arsenic	0.10	µg/L	1	0.10	0.03		GES	05/08/2024 00:29	EPA 200.8-1994, Rev. 5.4
Barium	124	µg/L	1	0.20	0.05		GES	05/08/2024 00:29	EPA 200.8-1994, Rev. 5.4
Beryllium	0.755	µg/L	1	0.050	0.007		GES	05/08/2024 00:29	EPA 200.8-1994, Rev. 5.4
Cadmium	0.052	µg/L	1	0.020	0.004		GES	05/08/2024 00:29	EPA 200.8-1994, Rev. 5.4
Chromium	0.22	µg/L	1	0.30	0.07	J1	GES	05/08/2024 00:29	EPA 200.8-1994, Rev. 5.4
Cobalt	13.0	µg/L	1	0.020	0.005		GES	05/08/2024 00:29	EPA 200.8-1994, Rev. 5.4
Iron	0.008	mg/L	1	0.020	0.003	J1	GES	05/08/2024 00:29	EPA 200.8-1994, Rev. 5.4
Lead	0.05	µg/L	1	0.20	0.05	J1	GES	05/08/2024 00:29	EPA 200.8-1994, Rev. 5.4
Lithium	0.0186	mg/L	1	0.00030	0.00006		GES	05/08/2024 00:29	EPA 200.8-1994, Rev. 5.4
Manganese	0.0382	mg/L	1	0.00100	0.00007		GES	05/08/2024 00:29	EPA 200.8-1994, Rev. 5.4
Mercury	5	ng/L	1	5	2		RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/08/2024 00:29	EPA 200.8-1994, Rev. 5.4
Selenium	0.27	µg/L	1	0.50	0.04	J1	GES	05/08/2024 00:29	EPA 200.8-1994, Rev. 5.4
Thallium	0.02	µg/L	1	0.20	0.02	J1	GES	05/08/2024 00:29	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-30
Lab Number: 241410-015
Date Collected: 04/23/2024 09:43 EDT

Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/08/2024 00:34	EPA 200.8-1994, Rev. 5.4
Arsenic	0.15	µg/L	1	0.10	0.03		GES	05/08/2024 00:34	EPA 200.8-1994, Rev. 5.4
Barium	49.9	µg/L	1	0.20	0.05		GES	05/08/2024 00:34	EPA 200.8-1994, Rev. 5.4
Beryllium	0.122	µg/L	1	0.050	0.007		GES	05/08/2024 00:34	EPA 200.8-1994, Rev. 5.4
Boron	1.13	mg/L	1	0.050	0.007		GES	05/08/2024 00:34	EPA 200.8-1994, Rev. 5.4
Cadmium	0.012	µg/L	1	0.020	0.004	J1	GES	05/08/2024 00:34	EPA 200.8-1994, Rev. 5.4
Calcium	0.38	mg/L	1	0.05	0.02		GES	05/08/2024 00:34	EPA 200.8-1994, Rev. 5.4
Chromium	0.42	µg/L	1	0.30	0.07		GES	05/08/2024 00:34	EPA 200.8-1994, Rev. 5.4
Cobalt	3.30	µg/L	1	0.020	0.005		GES	05/08/2024 00:34	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	05/08/2024 00:34	EPA 200.8-1994, Rev. 5.4
Lithium	0.00736	mg/L	1	0.00030	0.00006		GES	05/08/2024 00:34	EPA 200.8-1994, Rev. 5.4
Magnesium	1.72	mg/L	1	0.100	0.009		GES	05/08/2024 00:34	EPA 200.8-1994, Rev. 5.4
Mercury	23	ng/L	1	5	2		RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/08/2024 00:34	EPA 200.8-1994, Rev. 5.4
Potassium	0.70	mg/L	1	0.10	0.01		GES	05/08/2024 00:34	EPA 200.8-1994, Rev. 5.4
Selenium	0.30	µg/L	1	0.50	0.04	J1	GES	05/08/2024 00:34	EPA 200.8-1994, Rev. 5.4
Sodium	56.1	mg/L	1	0.20	0.02		GES	05/08/2024 12:45	EPA 200.8-1994, Rev. 5.4
Strontium	0.00645	mg/L	1	0.00200	0.00005		GES	05/08/2024 00:34	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	05/08/2024 00:34	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.21	pCi/L	0.08	0.16		ST	05/21/2024 11:31	SW-846 9315-1986, Rev. 0
Carrier Recovery	92.4	%						
Radium-228	0.68	pCi/L	0.17	0.54	O2, P2	TTP	06/05/2024 13:38	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	83.0	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-30
Customer Description:
Lab Number: 241410-015-01
Preparation: Dissolved
Date Collected: 04/23/2024 09:43 EDT
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/08/2024 00:39	EPA 200.8-1994, Rev. 5.4
Arsenic	0.11	µg/L	1	0.10	0.03		GES	05/08/2024 00:39	EPA 200.8-1994, Rev. 5.4
Barium	48.3	µg/L	1	0.20	0.05		GES	05/08/2024 00:39	EPA 200.8-1994, Rev. 5.4
Beryllium	0.124	µg/L	1	0.050	0.007		GES	05/08/2024 00:39	EPA 200.8-1994, Rev. 5.4
Cadmium	0.010	µg/L	1	0.020	0.004	J1	GES	05/08/2024 00:39	EPA 200.8-1994, Rev. 5.4
Chromium	0.32	µg/L	1	0.30	0.07		GES	05/08/2024 00:39	EPA 200.8-1994, Rev. 5.4
Cobalt	3.34	µg/L	1	0.020	0.005		GES	05/08/2024 00:39	EPA 200.8-1994, Rev. 5.4
Iron	0.005	mg/L	1	0.020	0.003	J1	GES	05/08/2024 00:39	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	05/08/2024 00:39	EPA 200.8-1994, Rev. 5.4
Lithium	0.00741	mg/L	1	0.00030	0.00006		GES	05/08/2024 00:39	EPA 200.8-1994, Rev. 5.4
Manganese	0.0147	mg/L	1	0.00100	0.00007		GES	05/08/2024 00:39	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/08/2024 00:39	EPA 200.8-1994, Rev. 5.4
Selenium	0.30	µg/L	1	0.50	0.04	J1	GES	05/08/2024 00:39	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	05/08/2024 00:39	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-31
Lab Number: 241410-016
Date Collected: 04/22/2024 12:20 EDT

Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/08/2024 00:44	EPA 200.8-1994, Rev. 5.4
Arsenic	0.44	µg/L	1	0.10	0.03		GES	05/08/2024 00:44	EPA 200.8-1994, Rev. 5.4
Barium	33.3	µg/L	1	0.20	0.05		GES	05/08/2024 00:44	EPA 200.8-1994, Rev. 5.4
Beryllium	1.04	µg/L	5	0.25	0.04		GES	05/08/2024 12:56	EPA 200.8-1994, Rev. 5.4
Boron	0.022	mg/L	1	0.050	0.007	J1	GES	05/08/2024 00:44	EPA 200.8-1994, Rev. 5.4
Cadmium	0.064	µg/L	1	0.020	0.004		GES	05/08/2024 00:44	EPA 200.8-1994, Rev. 5.4
Calcium	2.45	mg/L	1	0.05	0.02		GES	05/08/2024 00:44	EPA 200.8-1994, Rev. 5.4
Chromium	0.55	µg/L	1	0.30	0.07		GES	05/08/2024 00:44	EPA 200.8-1994, Rev. 5.4
Cobalt	9.38	µg/L	1	0.020	0.005		GES	05/08/2024 00:44	EPA 200.8-1994, Rev. 5.4
Lead	0.31	µg/L	1	0.20	0.05		GES	05/08/2024 00:44	EPA 200.8-1994, Rev. 5.4
Lithium	0.0792	mg/L	5	0.0015	0.0003		GES	05/08/2024 12:56	EPA 200.8-1994, Rev. 5.4
Magnesium	3.62	mg/L	1	0.100	0.009		GES	05/08/2024 00:44	EPA 200.8-1994, Rev. 5.4
Mercury	430	ng/L	10	50	20		RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/08/2024 00:44	EPA 200.8-1994, Rev. 5.4
Potassium	1.52	mg/L	1	0.10	0.01		GES	05/08/2024 00:44	EPA 200.8-1994, Rev. 5.4
Selenium	0.51	µg/L	1	0.50	0.04		GES	05/08/2024 00:44	EPA 200.8-1994, Rev. 5.4
Sodium	31.0	mg/L	5	1.0	0.1		GES	05/08/2024 12:56	EPA 200.8-1994, Rev. 5.4
Strontium	0.0357	mg/L	1	0.00200	0.00005		GES	05/08/2024 00:44	EPA 200.8-1994, Rev. 5.4
Thallium	0.09	µg/L	1	0.20	0.02	J1	GES	05/08/2024 00:44	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.42	pCi/L	0.11	0.16		ST	05/21/2024 11:31	SW-846 9315-1986, Rev. 0
Carrier Recovery	93.2	%						
Radium-228	2.12	pCi/L	0.17	0.48	O2, P2	TTP	06/05/2024 13:38	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	84.1	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-31
Customer Description:
Lab Number: 241410-016-01
Preparation: Dissolved
Date Collected: 04/22/2024 12:20 EDT
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.027	µg/L	1	0.100	0.008	J1	GES	05/08/2024 00:49	EPA 200.8-1994, Rev. 5.4
Arsenic	0.29	µg/L	1	0.10	0.03		GES	05/08/2024 00:49	EPA 200.8-1994, Rev. 5.4
Barium	32.4	µg/L	1	0.20	0.05		GES	05/08/2024 00:49	EPA 200.8-1994, Rev. 5.4
Beryllium	1.02	µg/L	5	0.25	0.04		GES	05/08/2024 13:01	EPA 200.8-1994, Rev. 5.4
Cadmium	0.063	µg/L	1	0.020	0.004		GES	05/08/2024 00:49	EPA 200.8-1994, Rev. 5.4
Chromium	0.38	µg/L	1	0.30	0.07		GES	05/08/2024 00:49	EPA 200.8-1994, Rev. 5.4
Cobalt	9.05	µg/L	1	0.020	0.005		GES	05/08/2024 00:49	EPA 200.8-1994, Rev. 5.4
Iron	0.125	mg/L	1	0.020	0.003		GES	05/08/2024 00:49	EPA 200.8-1994, Rev. 5.4
Lead	0.31	µg/L	1	0.20	0.05		GES	05/08/2024 00:49	EPA 200.8-1994, Rev. 5.4
Lithium	0.0780	mg/L	5	0.0015	0.0003		GES	05/08/2024 13:01	EPA 200.8-1994, Rev. 5.4
Manganese	0.0230	mg/L	1	0.00100	0.00007		GES	05/08/2024 00:49	EPA 200.8-1994, Rev. 5.4
Mercury	17	ng/L	1	5	2		RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/08/2024 00:49	EPA 200.8-1994, Rev. 5.4
Selenium	0.44	µg/L	1	0.50	0.04	J1	GES	05/08/2024 00:49	EPA 200.8-1994, Rev. 5.4
Thallium	0.09	µg/L	1	0.20	0.02	J1	GES	05/08/2024 00:49	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-32
Lab Number: 241410-017
Date Collected: 04/22/2024 11:33 EDT

Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/08/2024 00:55	EPA 200.8-1994, Rev. 5.4
Arsenic	3.46	µg/L	1	0.10	0.03		GES	05/08/2024 00:55	EPA 200.8-1994, Rev. 5.4
Barium	40.3	µg/L	1	0.20	0.05		GES	05/08/2024 00:55	EPA 200.8-1994, Rev. 5.4
Beryllium	0.449	µg/L	1	0.050	0.007		GES	05/08/2024 00:55	EPA 200.8-1994, Rev. 5.4
Boron	0.231	mg/L	1	0.050	0.007		GES	05/08/2024 00:55	EPA 200.8-1994, Rev. 5.4
Cadmium	0.035	µg/L	1	0.020	0.004		GES	05/08/2024 00:55	EPA 200.8-1994, Rev. 5.4
Calcium	5.63	mg/L	1	0.05	0.02		GES	05/08/2024 00:55	EPA 200.8-1994, Rev. 5.4
Chromium	0.34	µg/L	1	0.30	0.07		GES	05/08/2024 00:55	EPA 200.8-1994, Rev. 5.4
Cobalt	13.2	µg/L	1	0.020	0.005		GES	05/08/2024 00:55	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	05/08/2024 00:55	EPA 200.8-1994, Rev. 5.4
Lithium	0.0567	mg/L	1	0.00030	0.00006		GES	05/08/2024 00:55	EPA 200.8-1994, Rev. 5.4
Magnesium	6.18	mg/L	1	0.100	0.009		GES	05/08/2024 00:55	EPA 200.8-1994, Rev. 5.4
Mercury	180	ng/L	20	100	40		RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/08/2024 00:55	EPA 200.8-1994, Rev. 5.4
Potassium	2.65	mg/L	1	0.10	0.01		GES	05/08/2024 00:55	EPA 200.8-1994, Rev. 5.4
Selenium	0.48	µg/L	1	0.50	0.04	J1	GES	05/08/2024 00:55	EPA 200.8-1994, Rev. 5.4
Sodium	19.6	mg/L	1	0.20	0.02		GES	05/08/2024 13:06	EPA 200.8-1994, Rev. 5.4
Strontium	0.0806	mg/L	1	0.00200	0.00005		GES	05/08/2024 00:55	EPA 200.8-1994, Rev. 5.4
Thallium	0.07	µg/L	1	0.20	0.02	J1	GES	05/08/2024 00:55	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.48	pCi/L	0.12	0.21		ST	05/21/2024 11:31	SW-846 9315-1986, Rev. 0
Carrier Recovery	92.3	%						
Radium-228	1.16	pCi/L	0.17	0.51	O2, P2	TTP	06/05/2024 13:38	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	83.0	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-32
Customer Description:
Lab Number: 241410-017-01
Preparation: Dissolved
Date Collected: 04/22/2024 11:33 EDT
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.018	µg/L	1	0.100	0.008	J1	GES	05/08/2024 01:00	EPA 200.8-1994, Rev. 5.4
Arsenic	2.44	µg/L	1	0.10	0.03		GES	05/08/2024 01:00	EPA 200.8-1994, Rev. 5.4
Barium	40.1	µg/L	1	0.20	0.05		GES	05/08/2024 01:00	EPA 200.8-1994, Rev. 5.4
Beryllium	0.472	µg/L	1	0.050	0.007		GES	05/08/2024 01:00	EPA 200.8-1994, Rev. 5.4
Cadmium	0.037	µg/L	1	0.020	0.004		GES	05/08/2024 01:00	EPA 200.8-1994, Rev. 5.4
Chromium	0.21	µg/L	1	0.30	0.07	J1	GES	05/08/2024 01:00	EPA 200.8-1994, Rev. 5.4
Cobalt	13.1	µg/L	1	0.020	0.005		GES	05/08/2024 01:00	EPA 200.8-1994, Rev. 5.4
Iron	10.9	mg/L	1	0.020	0.003	M1	GES	05/08/2024 01:00	EPA 200.8-1994, Rev. 5.4
Lead	0.07	µg/L	1	0.20	0.05	J1	GES	05/08/2024 01:00	EPA 200.8-1994, Rev. 5.4
Lithium	0.0569	mg/L	1	0.00030	0.00006	M1	GES	05/08/2024 01:00	EPA 200.8-1994, Rev. 5.4
Manganese	0.0827	mg/L	1	0.00100	0.00007		GES	05/08/2024 01:00	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/08/2024 01:00	EPA 200.8-1994, Rev. 5.4
Selenium	0.47	µg/L	1	0.50	0.04	J1	GES	05/08/2024 01:00	EPA 200.8-1994, Rev. 5.4
Thallium	0.07	µg/L	1	0.20	0.02	J1	GES	05/08/2024 01:00	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-33
Lab Number: 241410-018
Date Collected: 04/22/2024 12:13 EDT

Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/08/2024 02:17	EPA 200.8-1994, Rev. 5.4
Arsenic	1.00	µg/L	1	0.10	0.03		GES	05/08/2024 02:17	EPA 200.8-1994, Rev. 5.4
Barium	42.2	µg/L	1	0.20	0.05		GES	05/08/2024 02:17	EPA 200.8-1994, Rev. 5.4
Beryllium	1.31	µg/L	1	0.050	0.007		GES	05/08/2024 02:17	EPA 200.8-1994, Rev. 5.4
Boron	0.141	mg/L	1	0.050	0.007		GES	05/08/2024 02:17	EPA 200.8-1994, Rev. 5.4
Cadmium	0.058	µg/L	1	0.020	0.004		GES	05/08/2024 02:17	EPA 200.8-1994, Rev. 5.4
Calcium	2.08	mg/L	1	0.05	0.02		GES	05/08/2024 02:17	EPA 200.8-1994, Rev. 5.4
Chromium	0.23	µg/L	1	0.30	0.07	J1	GES	05/08/2024 02:17	EPA 200.8-1994, Rev. 5.4
Cobalt	11.0	µg/L	1	0.020	0.005		GES	05/08/2024 02:17	EPA 200.8-1994, Rev. 5.4
Lead	0.27	µg/L	1	0.20	0.05		GES	05/08/2024 02:17	EPA 200.8-1994, Rev. 5.4
Lithium	0.0199	mg/L	1	0.00030	0.00006		GES	05/08/2024 02:17	EPA 200.8-1994, Rev. 5.4
Magnesium	4.36	mg/L	1	0.100	0.009		GES	05/08/2024 02:17	EPA 200.8-1994, Rev. 5.4
Mercury	6600	ng/L	100	500	200		RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/08/2024 02:17	EPA 200.8-1994, Rev. 5.4
Potassium	0.26	mg/L	1	0.10	0.01		GES	05/08/2024 02:17	EPA 200.8-1994, Rev. 5.4
Selenium	3.18	µg/L	1	0.50	0.04		GES	05/08/2024 02:17	EPA 200.8-1994, Rev. 5.4
Sodium	17.7	mg/L	1	0.20	0.02		GES	05/08/2024 14:23	EPA 200.8-1994, Rev. 5.4
Strontium	0.0350	mg/L	1	0.00200	0.00005		GES	05/08/2024 02:17	EPA 200.8-1994, Rev. 5.4
Thallium	0.04	µg/L	1	0.20	0.02	J1	GES	05/08/2024 02:17	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.73	pCi/L	0.15	0.18		ST	05/21/2024 11:31	SW-846 9315-1986, Rev. 0
Carrier Recovery	87.2	%						
Radium-228	0.88	pCi/L	0.12	0.38	O2, P2	TTP	06/05/2024 13:38	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	89.1	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-33
Customer Description:
Lab Number: 241410-018-01
Preparation: Dissolved
Date Collected: 04/22/2024 12:13 EDT
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.030	µg/L	1	0.100	0.008	J1	GES	05/08/2024 02:22	EPA 200.8-1994, Rev. 5.4
Arsenic	1.04	µg/L	1	0.10	0.03		GES	05/08/2024 02:22	EPA 200.8-1994, Rev. 5.4
Barium	42.7	µg/L	1	0.20	0.05		GES	05/08/2024 02:22	EPA 200.8-1994, Rev. 5.4
Beryllium	1.28	µg/L	1	0.050	0.007		GES	05/08/2024 02:22	EPA 200.8-1994, Rev. 5.4
Cadmium	0.058	µg/L	1	0.020	0.004		GES	05/08/2024 02:22	EPA 200.8-1994, Rev. 5.4
Chromium	0.23	µg/L	1	0.30	0.07	J1	GES	05/08/2024 02:22	EPA 200.8-1994, Rev. 5.4
Cobalt	11.3	µg/L	1	0.020	0.005		GES	05/08/2024 02:22	EPA 200.8-1994, Rev. 5.4
Iron	0.015	mg/L	1	0.020	0.003	J1	GES	05/08/2024 02:22	EPA 200.8-1994, Rev. 5.4
Lead	0.29	µg/L	1	0.20	0.05		GES	05/08/2024 02:22	EPA 200.8-1994, Rev. 5.4
Lithium	0.0194	mg/L	1	0.00030	0.00006		GES	05/08/2024 02:22	EPA 200.8-1994, Rev. 5.4
Manganese	0.00682	mg/L	1	0.00100	0.00007		GES	05/08/2024 02:22	EPA 200.8-1994, Rev. 5.4
Mercury	890	ng/L	20	100	40		RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/08/2024 02:22	EPA 200.8-1994, Rev. 5.4
Selenium	3.36	µg/L	1	0.50	0.04		GES	05/08/2024 02:22	EPA 200.8-1994, Rev. 5.4
Thallium	0.04	µg/L	1	0.20	0.02	J1	GES	05/08/2024 02:22	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-34
Customer Description:
Lab Number: 241410-019
Preparation:
Date Collected: 04/24/2024 11:11 EDT
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.057	mg/L	1	0.050	0.007		GES	05/08/2024 02:27	EPA 200.8-1994, Rev. 5.4
Calcium	40.5	mg/L	1	0.05	0.02		GES	05/08/2024 02:27	EPA 200.8-1994, Rev. 5.4
Magnesium	34.9	mg/L	1	0.100	0.009		GES	05/08/2024 02:27	EPA 200.8-1994, Rev. 5.4
Potassium	6.93	mg/L	1	0.10	0.01		GES	05/08/2024 02:27	EPA 200.8-1994, Rev. 5.4
Sodium	15.8	mg/L	1	0.20	0.02		GES	05/08/2024 14:33	EPA 200.8-1994, Rev. 5.4
Strontium	0.437	mg/L	1	0.00200	0.00005		GES	05/08/2024 02:27	EPA 200.8-1994, Rev. 5.4

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: AD-36
Lab Number: 241410-020
Date Collected: 04/23/2024 10:20 EDT
Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.053	mg/L	1	0.050	0.007		GES	05/08/2024 02:32	EPA 200.8-1994, Rev. 5.4
Calcium	0.75	mg/L	1	0.05	0.02		GES	05/08/2024 02:32	EPA 200.8-1994, Rev. 5.4
Magnesium	2.28	mg/L	1	0.100	0.009		GES	05/08/2024 02:32	EPA 200.8-1994, Rev. 5.4
Potassium	1.56	mg/L	1	0.10	0.01		GES	05/08/2024 02:32	EPA 200.8-1994, Rev. 5.4
Sodium	6.51	mg/L	1	0.20	0.02		GES	05/08/2024 14:38	EPA 200.8-1994, Rev. 5.4
Strontium	0.0113	mg/L	1	0.00200	0.00005		GES	05/08/2024 02:32	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: Duplicate 1
Lab Number: 241410-021
Date Collected: 04/22/2024 15:00 EDT
Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/08/2024 02:37	EPA 200.8-1994, Rev. 5.4
Arsenic	0.37	µg/L	1	0.10	0.03		GES	05/08/2024 02:37	EPA 200.8-1994, Rev. 5.4
Barium	41.0	µg/L	1	0.20	0.05		GES	05/08/2024 02:37	EPA 200.8-1994, Rev. 5.4
Beryllium	1.93	µg/L	1	0.050	0.007		GES	05/08/2024 02:37	EPA 200.8-1994, Rev. 5.4
Boron	0.048	mg/L	1	0.050	0.007	J1	GES	05/08/2024 02:37	EPA 200.8-1994, Rev. 5.4
Cadmium	0.311	µg/L	1	0.020	0.004		GES	05/08/2024 02:37	EPA 200.8-1994, Rev. 5.4
Calcium	3.32	mg/L	1	0.05	0.02		GES	05/08/2024 02:37	EPA 200.8-1994, Rev. 5.4
Chromium	0.27	µg/L	1	0.30	0.07	J1	GES	05/08/2024 02:37	EPA 200.8-1994, Rev. 5.4
Cobalt	20.6	µg/L	1	0.020	0.005		GES	05/08/2024 02:37	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	05/08/2024 02:37	EPA 200.8-1994, Rev. 5.4
Lithium	0.0639	mg/L	1	0.00030	0.00006		GES	05/08/2024 02:37	EPA 200.8-1994, Rev. 5.4
Magnesium	4.93	mg/L	1	0.100	0.009		GES	05/08/2024 02:37	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/06/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/08/2024 02:37	EPA 200.8-1994, Rev. 5.4
Potassium	1.99	mg/L	1	0.10	0.01		GES	05/08/2024 02:37	EPA 200.8-1994, Rev. 5.4
Selenium	1.06	µg/L	1	0.50	0.04		GES	05/08/2024 02:37	EPA 200.8-1994, Rev. 5.4
Sodium	25.9	mg/L	1	0.20	0.02		GES	05/08/2024 14:43	EPA 200.8-1994, Rev. 5.4
Strontium	0.0360	mg/L	1	0.00200	0.00005		GES	05/08/2024 02:37	EPA 200.8-1994, Rev. 5.4
Thallium	0.14	µg/L	1	0.20	0.02	J1	GES	05/08/2024 02:37	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: Duplicate 1
Lab Number: 241410-021-01
Date Collected: 04/22/2024 15:00 EDT

Customer Description:
Preparation: Dissolved
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/08/2024 02:42	EPA 200.8-1994, Rev. 5.4
Arsenic	0.37	µg/L	1	0.10	0.03		GES	05/08/2024 02:42	EPA 200.8-1994, Rev. 5.4
Barium	40.1	µg/L	1	0.20	0.05		GES	05/08/2024 02:42	EPA 200.8-1994, Rev. 5.4
Beryllium	1.99	µg/L	1	0.050	0.007		GES	05/08/2024 02:42	EPA 200.8-1994, Rev. 5.4
Cadmium	0.313	µg/L	1	0.020	0.004		GES	05/08/2024 02:42	EPA 200.8-1994, Rev. 5.4
Chromium	0.25	µg/L	1	0.30	0.07	J1	GES	05/08/2024 02:42	EPA 200.8-1994, Rev. 5.4
Cobalt	20.6	µg/L	1	0.020	0.005		GES	05/08/2024 02:42	EPA 200.8-1994, Rev. 5.4
Iron	5.10	mg/L	1	0.020	0.003		GES	05/08/2024 02:42	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	05/08/2024 02:42	EPA 200.8-1994, Rev. 5.4
Lithium	0.0655	mg/L	1	0.00030	0.00006		GES	05/08/2024 02:42	EPA 200.8-1994, Rev. 5.4
Manganese	0.0630	mg/L	1	0.00100	0.00007		GES	05/08/2024 02:42	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/06/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/08/2024 02:42	EPA 200.8-1994, Rev. 5.4
Selenium	1.00	µg/L	1	0.50	0.04		GES	05/08/2024 02:42	EPA 200.8-1994, Rev. 5.4
Thallium	0.14	µg/L	1	0.20	0.02	J1	GES	05/08/2024 02:42	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: Equipment Blank
Lab Number: 241410-022
Date Collected: 04/23/2024 10:53 EDT

Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/08/2024 02:48	EPA 200.8-1994, Rev. 5.4
Arsenic	<0.03	µg/L	1	0.10	0.03	U1	GES	05/08/2024 02:48	EPA 200.8-1994, Rev. 5.4
Barium	<0.05	µg/L	1	0.20	0.05	U1	GES	05/08/2024 02:48	EPA 200.8-1994, Rev. 5.4
Beryllium	<0.007	µg/L	1	0.050	0.007	U1	GES	05/08/2024 02:48	EPA 200.8-1994, Rev. 5.4
Boron	<0.007	mg/L	1	0.050	0.007	U1	GES	05/08/2024 02:48	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	05/08/2024 02:48	EPA 200.8-1994, Rev. 5.4
Calcium	<0.02	mg/L	1	0.05	0.02	U1	GES	05/08/2024 02:48	EPA 200.8-1994, Rev. 5.4
Chromium	0.23	µg/L	1	0.30	0.07	J1	GES	05/08/2024 02:48	EPA 200.8-1994, Rev. 5.4
Cobalt	0.007	µg/L	1	0.020	0.005	J1	GES	05/08/2024 02:48	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	05/08/2024 02:48	EPA 200.8-1994, Rev. 5.4
Lithium	<0.00006	mg/L	1	0.00030	0.00006	U1	GES	05/08/2024 02:48	EPA 200.8-1994, Rev. 5.4
Magnesium	<0.009	mg/L	1	0.100	0.009	U1	GES	05/08/2024 02:48	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/08/2024 02:48	EPA 200.8-1994, Rev. 5.4
Potassium	<0.01	mg/L	1	0.10	0.01	U1	GES	05/08/2024 02:48	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	05/08/2024 02:48	EPA 200.8-1994, Rev. 5.4
Sodium	<0.02	mg/L	1	0.20	0.02	U1	GES	05/08/2024 14:54	EPA 200.8-1994, Rev. 5.4
Strontium	<0.00005	mg/L	1	0.00200	0.00005	U1	GES	05/08/2024 02:48	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	05/08/2024 02:48	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Customer Sample ID: Field Blank
Lab Number: 241410-023
Date Collected: 04/23/2024 10:56 EDT

Customer Description:
Preparation:
Date Received: 04/29/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	05/08/2024 02:53	EPA 200.8-1994, Rev. 5.4
Arsenic	<0.03	µg/L	1	0.10	0.03	U1	GES	05/08/2024 02:53	EPA 200.8-1994, Rev. 5.4
Barium	0.10	µg/L	1	0.20	0.05	J1	GES	05/08/2024 02:53	EPA 200.8-1994, Rev. 5.4
Beryllium	<0.007	µg/L	1	0.050	0.007	U1	GES	05/08/2024 02:53	EPA 200.8-1994, Rev. 5.4
Boron	<0.007	mg/L	1	0.050	0.007	U1	GES	05/08/2024 02:53	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	05/08/2024 02:53	EPA 200.8-1994, Rev. 5.4
Calcium	<0.02	mg/L	1	0.05	0.02	U1	GES	05/08/2024 02:53	EPA 200.8-1994, Rev. 5.4
Chromium	0.26	µg/L	1	0.30	0.07	J1	GES	05/08/2024 02:53	EPA 200.8-1994, Rev. 5.4
Cobalt	0.025	µg/L	1	0.020	0.005		GES	05/08/2024 02:53	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	05/08/2024 02:53	EPA 200.8-1994, Rev. 5.4
Lithium	<0.00006	mg/L	1	0.00030	0.00006	U1	GES	05/08/2024 02:53	EPA 200.8-1994, Rev. 5.4
Magnesium	<0.009	mg/L	1	0.100	0.009	U1	GES	05/08/2024 02:53	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/01/2024 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	05/08/2024 02:53	EPA 200.8-1994, Rev. 5.4
Potassium	<0.01	mg/L	1	0.10	0.01	U1	GES	05/08/2024 02:53	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	05/08/2024 02:53	EPA 200.8-1994, Rev. 5.4
Sodium	<0.02	mg/L	1	0.20	0.02	U1	GES	05/08/2024 14:59	EPA 200.8-1994, Rev. 5.4
Strontium	<0.00005	mg/L	1	0.00200	0.00005	U1	GES	05/08/2024 02:53	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	05/08/2024 02:53	EPA 200.8-1994, Rev. 5.4

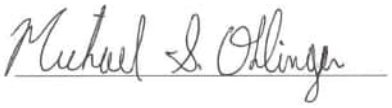
Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241410 **Customer: Pirkey Power Station** **Date Reported: 06/11/2024**

Report Verification

This report and the above data have been confirmed by the following analyst.



Michael Ohlinger, Chemist
Email: msohlinger@aep.com
Phone: 614-836-4184
Audinet: 8-210-4184

THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF THE LABORATORY. ALL TEST RESULTS MEET ALL OF THE REQUIREMENTS OF THE ACCREDITING AUTHORITY, UNLESS OTHERWISE NOTED. ALL TIMES LISTED ARE IN THE EASTERN TIME ZONE.

Data Qualifer Legend

U1 - Not detected at or below method detection limit (MDL).
J1 - Concentration estimated. Analyte was detected between the method detection limit and the reporting limit.
M1 - The associated matrix spike (MS) or matrix spike duplicate (MSD) recovery was outside acceptance limits.
O2 - Client did not provide additional bottles; therefore, the MS and duplicate are missing in this batch.
P2 - The precision on the laboratory control sample duplicate (LCSD) was above acceptance limits.

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 241961 **Customer: Pirkey Power Station** **Date Reported: 07/26/2024**

Customer Sample ID: AD-23
Lab Number: 241961-001
Date Collected: 06/26/2024 09:42 EDT
Customer Description:
Preparation:
Date Received: 06/27/2024 10:00 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.242	mg/L	1	0.050	0.007		GES	07/03/2024 10:09	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-36
Lab Number: 241961-002
Date Collected: 06/26/2024 10:04 EDT
Customer Description:
Preparation:
Date Received: 06/27/2024 10:00 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	14.2	mg/L	2	0.06	0.02		CRJ	07/09/2024 11:46	EPA 300.1 -1997, Rev. 1.0

Report Verification

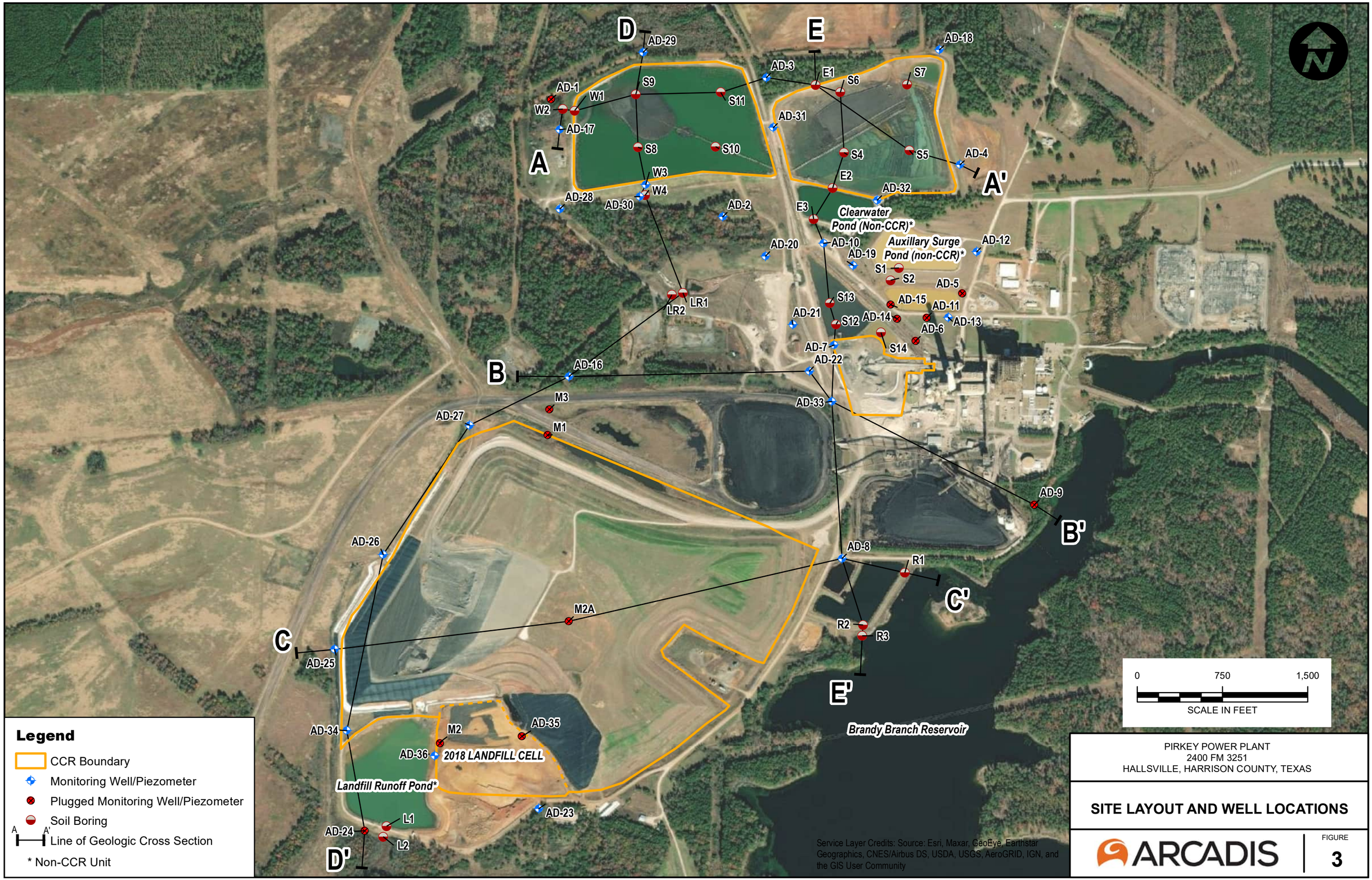
This report and the above data have been confirmed by the following analyst.



Michael Ohlinger, Chemist
Email: msohlinger@aep.com
Phone: 614-836-4184
Audinet: 8-210-4184

THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF THE LABORATORY. ALL TEST RESULTS MEET ALL OF THE REQUIREMENTS OF THE ACCREDITING AUTHORITY, UNLESS OTHERWISE NOTED. ALL TIMES LISTED ARE IN THE EASTERN TIME ZONE.

ATTACHMENT B
Geologic Cross Sections C-C' and D-D'



PIRKEY POWER PLANT
2400 FM 3251
HALLSVILLE, HARRISON COUNTY, TEXAS

SITE LAYOUT AND WELL LOCATIONS

ARCADIS

FIGURE
3

Document Path: T:_ENV\AEP\Pirkey Plant\MXD\Updated\Figure 3 - Site Layout and Well Locations.mxd

WEST

C

EAST

C'

LANDFILL

Approximate lateral extent of the former lignite mine

ELEVATION (FEET MSL)

370'
360'
350'
340'
330'
320'
310'
300'
290'

AD-25

CLAYEY SAND

SANDY CLAY

LANDFILL
LOW-PERMEABILITY LINER
(CLAY, PVC, OR HDPE)

CCR FILL
(HEIGHT VARIES)

AD-8

R1

SILTY SANDY CLAY.

CLAYEY SILTY SAND.

SILTY SANDY CLAY.

CLAYEY SILTY SAND, BROWN TO GRAY.

M2A
(PLUGGED)

Figure modified by Geosyntec, 2022. Original file from: Arcadis, 2022. Landfill - CCR Groundwater Monitoring Well Network Evaluation Update - H.W. Pirkey Power Plant

0 500'
HORIZONTAL SCALE

STATE OF TEXAS
Kenneth J. Brandner
Geology
1787
LICENSED
PROFESSIONAL SCIENTIST

1-20-22

LEGEND

MONITORING WELL SCREENED INTERVAL

WATER LEVEL IN MONITORING WELL (MAY 2021)

BASE OF CCR UNIT

PIRKEY POWER PLANT
2400 FM 3251
HALLSVILLE, HARRISON COUNTY, TEXAS

CROSS SECTION
C - C'

ARCADIS Design & Consultancy for natural and built assets

FIGURE
6

CITY: DIV/GROUP: DB: LD: AM: PD: TM: TR: LYR:ON=*;OFF=*REF*
G:\Active Projects\AEP\30117944 - Pirkey 2022\Figures-Maps\Figure 6 Cross Section C-C'.dwg LAYOUT: MODEL SAVED: 2/22/2016 11:19 AM ACADVER: 24.0S (LMS TECH)
(LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: --- PLOTTED: 1/13/2022 11:01 AM BY: LEASE, DIANA

NORTH

D

SOUTH

D'

WEST BOTTOM ASH POND

PERIMETER BERM (EL. 357') (A)

W3 (PW-3)

AD-29

WATER AND CCR FILL (A)

S9

S8

COHESIVE FILL (B)

AD-30

SILTY SANDY CLAY, RED/BROWN/GRAY.

LR-1

AD-16

SILTY SANDY CLAY, TAN TO GRAY.

AD-27

LANDFILL

LANDFILL RUNOFF POND (NON-CCR UNIT) (C)

Approximate lateral extent of the former lignite mine

SILTY CLAYEY SAND

AD-26

CLAYEY SAND

SANDY CLAY, BROWN.

LANDFILL LOW-PERMEABILITY LINER (CLAY, PVC, OR HDPE)

CLAY, GRAY

AD-34

CLAY W/CLAYEY SAND STREAKS, ORANGE/BROWN.

AD-24

CLAY, GRAY

SANDY CLAY AND CLAYEY GRAVEL, GRAY.

CLAYEY SILTY SAND, BROWN TO GRAY, VERY FINE GRAINED.

BLACK LIGNITE

ELEVATION (FEET MSL)

360' 350' 340' 330' 320' 310' 300' 290' 280' 270'

0 600'

HORIZONTAL SCALE

STATE OF TEXAS
Kenneth J. Brandner
Geology
1787
LICENSED PROFESSIONAL GEOSCIENTIST

1-2022

Figure modified by Geosyntec, 2022. Original file from: Arcadis, 2022. Landfill - CCR Groundwater Monitoring Well Network Evaluation Update - H.W. Pirkey Power Plant

LEGEND

- MONITORING WELL SCREENED INTERVAL
- WATER LEVEL IN MONITORING WELL (MAY 2021)
- BASE OF CCR UNIT

NOTES:

A) TOP OF WEST BOTTOM ASH POND PERIMETER BERM ELEVATION IS 357', OPERATING LEVEL IS 354' (JOHNSON & PACE, MAY 2011); BASE ELEVATION OF WEST BOTTOM ASH POND IS 347' (SARGENT & LUNDY, JANUARY 1983).
B) COMPACTED COHESIVE SOIL FROM ELEVATION 344' TO 347' (SARGENT &LUNDY SEPTEMBER 1984; AMEC, AUGUST 2011).
C) LANDFILL RUNOFF POND PERIMETER BERM APPROXIMATE ELEVATION 302' MSL, BASE OF LANDFILL RUNOFF POND APPROXIMATE ELEVATION 286' MSL. NORMAL OPERATING LEVEL 288' MSL (JOHNSON & PACE MAY 2011).

PIRKEY POWER PLANT
2400 FM 3251
HALLSVILLE, HARRISON COUNTY, TEXAS

CROSS SECTION
D - D'

ARCADIS Design & Consultancy for natural and built assets

FIGURE 7

CITY: DIV/GROUP: DB: LD: AM: PD: TM: TR: LYR:On=*;OFF=*REF* G:\Active Projects\AEP\30117944 - Pirkey 2022\Figures-Maps\Figure 7 Cross Section D-D'.dwg LAYOUT: MODEL SAVED: 2/22/2016 11:20 AM ACADVER: 24.0S (LMS TECH) PAGESETUP:— PLOTSTYLETABLE:— PLOTTED: 1/13/2022 11:07 AM BY: LEASE, DIANA

ATTACHMENT C
Ground-Water Resources of Harrison County, Texas

TEXAS WATER DEVELOPMENT BOARD

REPORT 27

GROUND-WATER RESOURCES OF HARRISON COUNTY, TEXAS

By

M. E. Broom and B. N. Myers
United States Geological Survey

Prepared by the U.S. Geological Survey
in cooperation with the
Texas Water Development Board
and the
Harrison County Commissioners Court

August 1966

Table 7.--Chemical analyses of water from wells and springs in Harrison County

(Analyses given are in parts per million except specific conductance, pH, percent sodium, sodium adsorption ratio, and residual sodium carbonate.)

	Well	Depth of well (ft)	Date of collection	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids	Hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio (SAR)	Residual sodium carbonate (RSC)	Specific conductance (micromhos at 25°C)	pH
	LK-35-11-901	16	Jan. 29, 1942	--	--	--	6.8	17	*36	0.0	97	32	--	22	--	211	85	--	--	--	--	--
	902	101	Oct. 20, 1964	43	10	--	21	14	*19	3	112	23	0.1	.0	--	233	110	28	0.8	0.00	337	5.0
	19-301	39	Jan. 29, 1942	--	--	--	21	[b]	*30	134	3	4.5	.2	[c]	--	126	55	--	--	--	--	--
	501	35	do	--	--	--	[a]	[b]	*22	12	10	16	--	26	--	85	16	--	--	--	--	--
	601	32	do	--	--	--	15	15	*90	18	2	196	.1	[c]	--	328	99	--	--	--	--	--
	20-401	18	do	--	--	--	8.8	[b]	*3.7	6	3	14	.2	[c]	--	40	25	--	--	--	--	--
	402	850	July 2, 1964	15	1.5	--	6.0	2.2	235 4.0	272	11	221	.4	3.8	0.29	633	24	95	21	3.98	1,160	7.4
†	403	583	July 6, 1964	14	3.4	--	6.2	2.3	394 4.1	288	.0	455	.3	2.8	.32	1,020	25	97	34	4.22	1,870	7.5
	501	36	July 2, 1964	--	.01	--	--	--	--	25	--	6.1	--	--	--	--	30	--	--	.00	98	6.2
	502	310	Oct. 21, 1964	10	.67	--	13	5.2	*345	312	.0	388	.6	.8	--	916	54	93	20	4.03	1,700	7.3
	801	61	Jan. 29, 1942	--	--	--	6.0	4.4	*26	37	30	20	.3	[c]	--	105	33	--	--	--	--	--
	901	34	do	--	--	--	[a]	[b]	*13	6	10	12	--	[c]	--	41	5	--	--	--	--	--
	21-901	16	Jan. 30, 1942	--	--	--	[a]	[b]	*15	6	3	24	.1	[c]	--	49	11	--	--	--	--	--
	902	Spring	do	--	--	--	[a]	[b]	*8.7	12	2	4.5	.1	[c]	--	22	0	--	--	--	--	--
	22-403	260	Aug. 7, 1964	12	.08	0.04	4.0	1.7	125 2.2	274	54	8.8	.3	.0	.77	344	17	93	1.3	4.15	563	7.9
	501	30	Feb. 11, 1942	--	--	--	[a]	3.6	*4.4	18	2	3.0	.1	[c]	--	29	17	--	--	--	--	--
	504	365	Oct. 23, 1964	13	.26	--	2.5	.2	*123	282	30	9.0	.2	.2	--	317	7	97	20	4.48	506	7.9
	505	45	Feb. 11, 1942	--	--	--	14	[b]	*5.8	55	2	4.5	--	[c]	--	55	41	--	--	--	--	--
	601	17	do	--	--	--	[a]	[b]	*5.1	12	2	3.0	.1	[c]	--	18	6	--	--	--	--	--
[e]	704	215	Sept. 16, 1964	17	--	--	28	10	*110	166	164	22	.4	3	--	436	111	--	--	--	691	7.5
	705	215	June 22, 1964	23	.48	--	8.5	4.6	87 5.4	172	48	31	.1	5.8	.25	299	40	80	6.0	2.02	485	6.5
	706	316	Dec. 30, 1960	13	--	--	1.0	.1	*146	235	98	18	.2	.0	--	392	3	99	37	--	651	8.1
	706	316	June 22, 1964	13	.15	--	1.8	.1	150 1.7	240	107	19	.2	3.0	.31	414	5	98	29	3.83	672	7.8
	707	200	do	17	.19	--	10	3.4	163 5.6	162	221	24	.1	9.8	.21	534	39	89	11	1.88	837	6.9
	23-502	315	Oct. 27, 1941	--	--	--	[a]	[b]	*128	256	25	38	.4	[c]	--	320	11	--	--	--	--	--
	502	315	June 17, 1964	25	1.0	--	7.2	2.7	*115	232	32	37	.2	2.2	--	335	29	90	9.3	3.22	538	7.2
	602	133	Feb. 21, 1942	--	--	--	6.8	3.6	*174	360	10	74	.1	[c]	--	446	32	--	--	--	--	--

See footnotes at end of table.

Table 7.--Chemical analyses of water from wells and springs in Harrison County--Continued

Well	Depth of well (ft)	Date of collection	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids	Hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio (SAR)	Residual sodium carbonate (RSC)	Specific conductance (micromhos at 25°C)	pH
LK-35-23-701	--	Oct. 28, 1941	--	--	--	a/	b/	*234	354	4	168	--	c/	--	587	22	--	--	--	--	--
801	430	Feb. 21, 1942	--	--	--	10	b/	*142	299	30	44	0.1	c/	--	375	31	--	--	--	--	--
801	430	July 17, 1964	13	0.16	0.01	7.2	1.9	144 2.0	307	21	47	.0	1.8	0.18	389	26	92	12	4.51	661	8.0
902	105	Oct. 27, 1941	--	--	--	24	20	*91	262	42	52	.2	c/	--	367	142	--	--	--	--	--
24-101	103	Oct. 28, 1941	--	--	--	a/	b/	*121	220	23	50	--	c/	--	305	11	--	--	--	--	--
401	103	Nov. 3, 1941	--	--	--	a/	b/	*108	201	31	34	.3	c/	--	275	11	--	--	--	--	--
701	36	Feb. 12, 1942	--	--	--	a/	4.9	*26	6	17	34	.2	c/	--	91	20	--	--	--	--	--
27-301	16	Jan. 29, 1942	--	--	--	a/	b/	*6.7	6	2	11	.1	c/	--	29	10	--	--	--	--	--
302	424	Oct. 21, 1964	6.8	2.1	--	4.2	1.1	*271	284	1.2	262	.3	.0	--	687	15	98	30	4.35	1,260	8.2
901	274	July 24, 1964	43	6.6	.04	48	3.0	42 3.7	215	41	9.3	.0	.8	.16	297	132	40	1.6	.88	443	7.4
28-101	25	Jan. 30, 1942	--	--	--	a/	b/	*12	12	3	8.0	.2	c/	--	32	0	--	--	--	--	--
102	200	Oct. 22, 1964	30	11	--	12	7.5	*31	105	27	10	.1	.2	--	170	61	53	1.7	.50	255	6.2
402	30	Jan. 28, 1942	--	--	--	a/	b/	*9.0	6	10	4.0	--	c/	--	32	5	--	--	--	--	--
802	242	June 12, 1964	10	.09	--	2.8	.7	*99	176	63	9.7	.1	2.5	--	275	10	96	14	2.69	448	7.8
803	205	Oct. 17, 1941	--	--	--	2.8	1.7	*114	156	105	17	--	0	--	331	14	--	--	--	--	--
803	205	June 12, 1964	11	.21	--	2.5	.9	*110	152	94	16	.1	4.0	--	314	10	96	15	2.29	507	7.6
804	245	do	10	.09	--	1.5	.5	*110	160	89	13	.1	3.8	--	307	6	98	20	2.51	495	7.5
902	250	Oct. 17, 1941	--	--	--	9.6	6.1	*59	98	69	18	.1	c/	--	210	49	--	--	--	--	--
903	272	do	--	--	--	14	7.3	*47	79	69	21	.3	c/	--	197	65	--	--	--	--	--
29-102	240	July 29, 1964	11	.32	.00	1.5	1.1	254 2.1	647	8.0	8.2	2.4	3.2	.61	610	8	98	39	10.4	992	8.1
103	590	do	13	.36	--	1.5	.6	229 1.2	511	36	40	.7	1.2	.57	575	6	99	41	8.26	955	8.2
201	600	do	13	.05	--	.5	.5	207 .9	408	52	47	.5	2.0	.56	525	3	99	52	6.63	875	8.1
301	37	Jan. 30, 1942	--	--	--	a/	b/	*17	6	26	8.0	.1	c/	--	56	7	--	--	--	--	--
401	23	Feb. 17, 1942	--	--	--	a/	b/	*4.4	6	8	5.0	.3	c/	--	24	12	--	--	--	--	--
501	30	Jan. 30, 1942	--	--	--	a/	6.1	*17	18	20	25	.2	c/	--	81	34	--	--	--	--	--
701	25	Jan. 28, 1942	--	--	--	a/	b/	*11	6	3	14	.1	c/	--	37	7	--	--	--	--	--
703	220	July 30, 1964	11	.12	.01	3.0	.9	*196	378	108	7.0	.7	3.2	--	516	11	97	26	5.98	822	8.0
802	30	Jan. 28, 1942	--	--	--	6.0	4.4	*22	0	10	24	--	50	--	116	33	--	--	--	--	--

See footnotes at end of table.

Table 7.--Chemical analyses of water from wells and springs in Harrison County--Continued

Well	Depth of well (ft)	Date of collection	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids	Hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio (SAR)	Residual sodium carbonate (RSC)	Specific conductance (micromhos at 25°C)	pH
LK-35-29-902	444	Oct. 23, 1964	12	0.12	--	1.8	0.4	*246	564	62	7.9	1.1	0.2	--	608	6	99	44	9.14	968	8.3
903	315	Oct. 28, 1960	12	--	--	7.5	3.5	122 3.6	267	63	10	.4	2.5	--	356	33	88	9.2	--	574	7.5
904	410	Aug. 5, 1964	12	.12	0.01	.8	.0	170 1.1	417	23	4.1	.4	.2	0.53	417	2	99	52	6.79	681	8.2
906	248	Nov. 18, 1941	--	d/ 35	--	22	9.0	*11	0	23	64	--	c/	--	129	91	--	--	--	--	--
907	192	do	--	d/ 55	--	23	24	*45	0	50	182	0	c/	--	324	155	--	--	--	--	--
908	201	do	--	d/ 50	--	19	24	*84	0	88	185	--	c/	--	400	145	--	--	--	--	--
909	111	do	--	d/ 55	--	20	20	*46	0	81	208	--	c/	--	377	132	--	--	--	--	--
910	50	do	--	d/ 2.5	--	10	b/	*17	12	4	42	--	c/	--	82	37	--	--	--	--	--
911	128	do	--	d/ 15	--	20	13	*16	85	46	14	.2	c/	--	151	103	--	--	--	--	--
912	125	do	--	d/ 15	--	44	25	*5.3	116	100	16	--	c/	--	247	210	--	--	--	--	--
30-401	610	Nov. 17, 1941	--	--	--	10	5.4	*4.8	6	40	8.0	.2	c/	--	71	48	--	--	--	--	--
402	300	Nov. 12, 1941	--	--	--	a/	6.6	*16	24	42	7.0	.1	c/	--	88	39	--	--	--	--	--
e/ 403	300	Dec. --, 1944	31	2	.08	8	5	*22	18	53	12	f/	f/	--	144	41	--	f/	--	--	5.6
405	300	Nov. 12, 1941	--	--	--	10	5.4	*2.8	0	96	6.5	0	c/	--	121	48	--	--	--	--	--
e/ 405	300	Dec. --, 1944	32	4.1	.07	7	4	*7	0	55	11	f/	f/	--	108	34	--	f/	--	--	4.0
406	240	Nov. 12, 1941	--	--	--	7.6	9.0	*2.5	31	26	6.5	.2	c/	--	67	56	--	--	--	--	--
e/ 406	240	Dec. --, 1944	30	2.3	g/	9	9	*5	24	34	11	.4	f/	--	100	60	--	f/	--	--	6.3
e/ 408	479	July 22, 1940	29	.6	.1	43	9	*84	201	112	32	--	2.2	--	400	145	--	f/	--	--	7.4
408	479	Nov. 12, 1941	--	--	--	6	11	*109	195	103	20	0	c/	--	345	62	--	--	--	--	--
e/ 408	479	Dec. --, 1944	24	1.1	.13	40	9	*79	199	111	21	.44	1.8	--	407	137	--	f/	--	--	7.6
701	323	Nov. 18, 1941	--	--	--	104	9	*23	275	100	12	.3	c/	--	383	296	--	--	--	--	--
702	351	Nov. 13, 1941	--	--	--	15	b/	*100	189	77	16	.2	c/	--	302	40	--	--	--	--	--
e/ 702	351	Dec. --, 1944	14	.04	h/	12	3	*104	201	71	21	.5	f/	--	305	43	--	f/	--	--	7.8
e/ 703	375	July 22, 1940	24	.4	--	32	9	*90	195	94	39	f/	f/	--	370	117	--	f/	--	--	7.2
703	375	Nov. 12, 1941	--	--	--	10	3.9	*89	165	77	15	.2	c/	--	276	42	--	--	--	--	--
e/ 703	375	Dec. --, 1944	24	.14	.08	33	7	*73	189	75	27	.4	f/	--	308	112	--	f/	--	--	7.9
704	473	Nov. 12, 1941	--	--	--	18	b/	*103	177	100	18	.1	c/	--	328	51	--	--	--	--	--
e/ 704	473	Dec. --, 1944	22	.14	.09	27	6	*95	195	100	25	.4	f/	--	380	92	--	f/	--	--	7.9

See footnotes at end of table.

Table 7.--Chemical analyses of water from wells and springs in Harrison County--Continued

Well	Depth of well (ft)	Date of collection	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids	Hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio (SAR)	Residual sodium carbonate (RSC)	Specific conductance (micromhos at 25°C)	pH
LK-35-30-803	24	Feb. 17, 1942	--	--	--	13	36	*36	12	146	69	0.1	c/	--	308	183	--	--	--	--	--
804	364	Oct. 23, 1964	22	1.4	--	21	7.2	*60	152	26	42	.2	1.8	--	255	82	61	2.9	0.85	421	7.1
901	31	Feb. 9, 1942	--	--	--	a/	6.1	*5.1	37	3	4	.1	c/	--	39	29	--	--	--	--	--
31-302	205	Feb. 14, 1942	--	--	--	a/	4.9	*11	49	2	1	.4	c/	--	53	20	--	--	--	--	--
601	17	Feb. 12, 1942	--	--	--	118	56	*108	232	2	401	.3	c/	--	800	525	--	--	--	--	--
701	28	Feb. 9, 1942	--	--	--	a/	b/	*18	12	17	20	--	c/	--	76	22	--	--	--	--	--
702	411	June 22, 1964	50	59	--	44	42	52 5.8	0	106	217	.1	.8	0.03	518	282	27	1.3	.00	931	4.0
703	792	Dec. 30, 1960	15	--	--	16	4.7	83 3.3	221	23	24	.2	3.0	--	281	59	74	4.7	--	464	7.4
703	792	July 10, 1964	17	.23	--	16	4.4	80 3.2	217	24	23	.2	4.8	.18	280	58	74	4.6	2.40	467	7.5
708	27	Feb. 9, 1942	--	--	--	a/	b/	*10	6	2	8.5	--	c/	--	46	12	--	--	--	--	--
709	415	June 22, 1964	14	.04	--	2.0	.2	141 1.5	316	3.2	38	.3	2.5	.34	358	6	97	25	5.06	607	8.0
801	19	Feb. 12, 1942	--	--	--	a/	11	*81	31	20	129	.2	c/	--	259	52	--	--	--	--	--
32-501	18	do	--	--	--	23	6	*14	85	11	9.5	.1	c/	--	104	67	--	--	--	--	--
35-201	304	Nov. 4, 1941	--	--	--	a/	b/	*79	165	46	7.5	.4	c/	--	220	22	--	--	--	--	--
601	450	July 24, 1964	8.1	1.1	0.00	4.5	1.7	686 3.1	564	1.8	760	--	.8	.49	1,740	18	99	70	8.88	3,170	7.7
604	500	do	12	.70	.01	4.5	1.5	447 2.3	664	4.8	305	1.4	4.2	.55	1,110	17	98	47	10.5	1,930	7.9
36-101	35	Jan. 27, 1942	--	--	--	a/	b/	*40	18	60	14	--	c/	--	129	12	--	--	--	--	--
201	32	do	--	--	--	a/	b/	*10	12	2	3.5	--	c/	--	32	3	--	--	--	--	--
202	26	do	--	--	--	6.0	7.1	*86	6	2	88	1.2	120	--	313	44	--	--	--	--	--
301	20	Jan. 28, 1942	--	--	--	a/	b/	*12	12	3	12	.1	c/	--	37	5	--	--	--	--	--
401	27	Nov. 4, 1941	--	--	--	a/	b/	*3.9	6	7	5.0	--	c/	--	22	11	--	--	--	--	--
501	28	Jan. 27, 1942	--	--	--	a/	3.6	*3.5	6	2	5.5	--	c/	--	30	17	--	--	--	--	--
601	220	July 28, 1964	12	.14	.01	3.0	.9	187 1.9	456	29	13	.5	2.5	.65	474	11	97	25	7.25	779	8.0
701	18	Jan. 27, 1942	--	--	--	17	13	*44	18	10	91	--	50	--	234	98	--	--	--	--	--
901	--	Nov. 14, 1941	--	--	--	a/	b/	*291	695	3	44	--	c/	--	684	2	--	--	--	--	--
37-101	465	Jan. 28, 1942	--	--	--	a/	b/	*2.1	6	2	7.5	.1	c/	--	25	17	--	--	--	--	--
401	22	do	--	--	--	a/	b/	*6.9	6	2	3.0	.1	c/	--	20	0	--	--	--	--	--
402	370	Aug. 3, 1964	17	--	--	3.0	1.1	*238	606	.8	20	1.6	.5	--	580	12	98	30	9.69	940	7.7

See footnotes at end of table.

Table 7.--Chemical analyses of water from wells and springs in Harrison County--Continued

Well	Depth of well (ft)	Date of collection	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids	Hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio (SAR)	Residual sodium carbonate (RSC)	Specific conductance (micromhos at 25°C)	pH
LK-35-37-601	6	Feb. 14, 1942	--	--	--	130	83	*143	0	899	101	0.8	c/	--	1,361	666	--	--	--	--	--
701	25	Nov. 4, 1941	--	--	--	a/	6.6	*6.2	24	2	18	--	c/	--	48	34	--	--	--	--	--
801	200	Aug. 3, 1964	12	0.09	--	2.5	1.0	*301	723	.6	46	2.4	0.2	--	722	10	98	41	11.6	1,200	8.1
802	429	do	13	.07	0.00	.8	.5	283 1.1	608	.2	63	1.3	2.2	1.0	685	4	99	62	8.89	1,150	8.5
803	420	do	12	.1	--	.8	.7	*272	629	3.4	52	1.2	.8	--	652	5	99	53	10.2	1,100	8.2
38-101	43	Feb. 17, 1942	--	--	--	23	3.6	*25	122	15	7.0	--	c/	--	134	72	--	--	--	--	--
602	150	Feb. 13, 1942	--	--	--	a/	b/	*115	262	10	28	.1	c/	--	289	17	--	--	--	--	--
603	--	Nov. 4, 1941	--	--	--	a/	b/	*186	415	5	50	.3	c/	--	448	12	--	--	--	--	--
701	105	do	--	--	--	52	39	*35	372	2	41	--	c/	--	352	289	--	--	--	--	--
801	73	Nov. 14, 1941	--	--	--	128	155	*364	756	238	620	.1	c/	--	1,883	956	--	--	--	--	--
802	91	do	--	--	--	31	15	*174	519	12	57	--	c/	--	544	139	--	--	--	--	--
803	--	do	--	--	--	30	b/	*118	153	7	148	.8	c/	--	389	87	--	--	--	--	--
804	--	do	--	--	--	a/	b/	*173	433	4	24	--	c/	--	419	17	--	--	--	--	--
39-201	33	Feb. 13, 1942	--	--	--	a/	b/	4.8	12	4	4.5	.1	c/	--	25	12	--	--	--	--	--
301	190	July 13, 1964	--	.62	--	--	--	--	348	--	40	--	--	--	--	100	--	--	3.70	694	7.4
304	247	Oct. 6, 1964	23	2.2	--	20	8.3	*100	290	6.0	40	.2	.0	--	341	84	72	4.7	3.07	610	6.9
401	35	Feb. 17, 1942	--	--	--	20	18	*140	67	67	127	.2	156	--	561	126	--	--	--	--	--
605	245	Oct. 6, 1964	11	.05	--	1.5	.4	*169	362	28	33	.2	.2	--	421	5	99	33	5.83	641	7.8
801	259	Aug. 11, 1964	57	3.8	--	18	3.9	*15	108	.0	2.7	.2	.0	--	150	61	34	.8	.55	181	6.4
902	280	do	62	6.3	--	11	4.5	*26	102	.2	13	.2	.0	--	167	46	55	1.7	.75	210	6.4
40-101	205	July 10, 1964	11	.04	--	2.0	.7	179 1.1	368	5.8	60	.2	5.0	.45	447	8	98	28	5.87	752	8.0
102	208	Oct. 20, 1964	11	.06	--	4.5	1.7	*197	396	.8	85	.3	.0	--	495	18	96	20	6.13	845	8.0
201	135	July 10, 1964	11	.66	--	13	3.8	304 2.1	396	200	132	.2	.2	.50	862	48	93	19	5.53	1,400	7.9
204	151	Oct. 29, 1941	--	--	--	16	16	*172	262	77	130	--	c/	--	540	105	--	--	--	--	--
204	151	June 18, 1964	14	1.3	--	32	9.7	*178	272	78	143	.1	.0	--	589	120	76	7.1	2.06	1,000	7.4
206	150	do	15	.05	--	30	10	*294	256	136	282	.1	5.6	--	899	116	85	12	1.88	1,530	7.9
207	170	Oct. 31, 1941	--	--	--	13	15	*177	293	77	112	--	--	--	538	94	--	--	--	--	--
401	40	Feb. 13, 1942	--	--	--	a/	b/	*18	12	23	7.5	.1	c/	--	58	6	--	--	--	--	--

See footnotes at end of table.

Table 7.--Chemical analyses of water from wells and springs in Harrison County--Continued

Well	Depth of well (ft)	Date of collection	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids	Hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio (SAR)	Residual sodium carbonate (RSC)	Specific conductance (micromhos at 25°C)	pH
LK-35-40-402	190	Oct. 6, 1964	19	0.64	--	43	12	*130	328	115	35	0.2	1.8	--	517	157	64	4.5	2.24	812	7.1
501	22	Feb. 13, 1942	--	--	--	8.4	b/	*45	92	10	24	.9	c/	--	136	26	--	--	--	--	--
502	158	Oct. 20, 1964	3.5	1.2	--	10	59	*492	622	.2	585	.1	1.0	--	1,460	268	80	13	4.85	2,550	8.8
704	25	Feb. 13, 1942	--	--	--	10	7.3	*84	37	8	141	--	c/	--	268	55	--	--	--	--	--
46-202	147	Nov. 14, 1941	--	--	--	7.6	b/	*119	317	8	12	.3	c/	--	304	26	--	--	--	--	--
47-201	310	Aug. 11, 1964	34	.46	0.02	2.0	.5	103 1.0	246	.0	24	.1	.0	0.11	286	7	96	17	3.89	443	7.8

* Sodium and potassium calculated as sodium (Na).
† Well 35-20-403 Phosphate (PO_4), 0.17.
a/ Less than 5 ppm.
b/ Less than 3 ppm.
c/ Less than 20 ppm.
d/ Iron determination on same date by Atlas Chemical Industries, Inc.
e/ Analyses by Texas State Dept. of Health.
f/ Less than 0.4 ppm.
g/ Less than 0.05 ppm.

ATTACHMENT D
February 2023 Pirkey Landfill Leachate Laboratory Analytical Report

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 230659 **Customer: Pirkey Power Station** **Date Reported: 04/06/2023**

Customer Sample ID: EBAP
Customer Description: TG-32
Lab Number: 230659-003
Preparation:
Date Collected: 03/01/2023 00:23 EST
Date Received: 03/02/2023 10:30 EST

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.59	mg/L	5	0.25	0.05		CRJ	03/16/2023 13:42	EPA 300.1 -1997, Rev. 1.0
Chloride	84.5	mg/L	5	0.10	0.05		CRJ	03/16/2023 13:42	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.56	mg/L	5	0.15	0.05		CRJ	03/16/2023 13:42	EPA 300.1 -1997, Rev. 1.0
Sulfate	2780	mg/L	100	20	3		CRJ	03/16/2023 19:11	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	03/03/2023 11:26	SM 2320B-2011
TDS, Filterable Residue	3900	mg/L	20	1000	400		SDW	03/07/2023 10:50	SM 2540C-2015

Customer Sample ID: Leachate
Customer Description: TG-32
Lab Number: 230659-004
Preparation:
Date Collected: 02/28/2023 10:55 EST
Date Received: 03/02/2023 10:30 EST

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	1.82	mg/L	5	0.25	0.05		CRJ	03/16/2023 14:15	EPA 300.1 -1997, Rev. 1.0
Chloride	41.7	mg/L	5	0.10	0.05		CRJ	03/16/2023 14:15	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.47	mg/L	5	0.15	0.05		CRJ	03/16/2023 14:15	EPA 300.1 -1997, Rev. 1.0
Sulfate	329	mg/L	50	10	2		CRJ	03/16/2023 21:23	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	94	mg/L	1	20	5		MGK	03/03/2023 11:26	SM 2320B-2011
TDS, Filterable Residue	600	mg/L	20	1000	400	J1	SDW	03/03/2023 12:09	SM 2540C-2015

ATTACHMENT E
AD-36 Boring Log and Well Construction Diagram

SOIL/WELL BORING LOG

Auckland Consulting LLC

TBPE Firm No. F16721

Project: Pirkey Power Station
Harrison County

Drilling Co.: C&S Lease

Driller: Buford E. Collier

Drilling Method: Hollow Stem Auger

STATE OF TEXAS
JOHN J. TAYNTOR
99202
LICENSED
PROFESSIONAL ENGINEER

04/30/20
19

Well/Boring #:	AD-36	Date Drilled:	4/24/19
Depth of Boring/well:	15 feet	Diameter of Boring:	8.25 inches
Length of Screen:	10 feet	Diameter of Screen:	2 inches
Length of Casing:	5 feet	Diameter of Casing:	2 inches
Filter Pack:	20/40	Slot Size:	0.010 inches
Logged By:	John J. Tayntor	Screen Material:	Sch 40 PVC

- Concrete/cement
- Clay
- Silty Sand
- Bentonite
- Silty Clay
- Sandy Clay
- Well Screen
- Sand
- Lignite
- Gravel
- ▽ - Initial Water Level

Depth Feet	GEOLOGIC DESCRIPTION	Lithology Classification	PID ppm	Depth Feet	Well Completion and Lithology	Remarks
0.0						
	Fill - Reddish Brown, Sandy Lean Clay (CL) with gravel	CL/Fill		0-9		
5.0						
	Reddish Brown and Tan, Clayey Sand (SC), with gravel	SC		9-11		
10.0	Reddish brown, Sandy Lean Clay (CL), few gravel	CL		11-14		
	Reddish brown, Clayey Sand (SC), with gravel	SC		14-15		
15.0	Well TD = 15 feet.					

*Soil descriptions based on visual observations and intervals are approximate.
MW Location Coordinates: N6871017.4, E3202874.4

ATTACHMENT F
Certification by a Qualified Professional Engineer

CERTIFICATION BY A QUALIFIED PROFESSIONAL ENGINEER

I certify that the above described alternative source demonstration is appropriate for evaluating the groundwater monitoring data for the Pirkey Landfill CCR management area and that the requirements of 30 TAC §352.941(c)(2) have been met.



Beth Ann Gross
Printed Name of Licensed Professional Engineer

Beth Ann Gross
Signature

Geosyntec Consultants
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Texas Registered Engineering Firm
No. F-1182

79864	Texas	March 28, 2025
License Number	Licensing State	Date

Geosyntec consultants

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AMERICAN ELECTRIC POWER

BOUNDLESS ENERGY

ALTERNATIVE SOURCE DEMONSTRATION REPORT

2025 1st SEMIANNUAL EVENT

TEXAS STATE CCR RULE

H.W. Pirkey Power Plant Landfill

Registration No. CCR 104

Hallsville, Texas

Prepared for

American Electric Power
1 Riverside Plaza
Columbus, Ohio 43215-2372

Prepared by

Geosyntec Consultants, Inc.
500 West Wilson Bridge Road, Suite 250
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Project CHA1147I

December 2025

Geosyntec consultants

TABLE OF CONTENTS

1. INTRODUCTION AND SUMMARY 1
   1.1 CCR Rule Requirements 1
   1.2 Demonstration of Alternative Sources 2

2. SUMMARY OF SITE CONDITIONS 3
   2.1 Landfill Design and Construction 3
   2.2 Regional Geology / Site Hydrogeology 3
   2.3 Groundwater Monitoring Network and Flow Conditions 3

3. ALTERNATIVE SOURCE DEMONSTRATION 5
   3.1 Proposed Alternative Source 5
      3.1.1 Comparison to Background Concentrations 5
      3.1.2 Comparison to Historical Regional Concentrations 6
      3.1.3 Leachate Mixing Assessment 6
   3.2 Sampling Requirements 7

4. CONCLUSIONS AND RECOMMENDATIONS 8

5. REFERENCES 9

LIST OF TABLES

Table 1 Detection Monitoring Data Summary

Table 2 Interwell Prediction Limit Data Comparison

Table 3 Average and Maximum Historical Monitoring Data

LIST OF FIGURES

Figure 1 Potentiometric Contours: Uppermost Aquifer. April 2025.

Figure 2 Landfill Location Relative to Former Lignite Mine Area

Figure 3 Box and Whisker Plots – Landfill Monitoring Network

Figure 4 AD-23-Leachate Piper Diagram Mixing Model

Figure 5 AD-36-Leachate Piper Diagram Mixing Model

LIST OF ATTACHMENTS

Attachment A Groundwater Analytical Data

Attachment B Arcadis Geologic Cross Sections

Attachment C Interwell Prediction Limits Statistical Calculations

Attachment D Ground-Water Resources of Harrison County, Texas

Attachment E February 2023 Pirkey Landfill Leachate Laboratory Analytical Report

Attachment F Certification by a Qualified Professional Engineer

ACRONYMS AND ABBREVIATIONS

AEP	American Electric Power
ASD	alternative source demonstration
CCR	coal combustion residuals
COC	constituents of concern
EPRI	Electric Power Research Institute
HDPE	high-density polyethylene
LPL	lower prediction limit
mg/L	milligrams per liter
SSI	statistically significant increase
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TRRP	Texas Risk Reduction Program
UPL	upper prediction limit

1. INTRODUCTION AND SUMMARY

This alternative source demonstration (ASD) report has been prepared to address statistically significant increases (SSIs) for boron, calcium, chloride, fluoride, and sulfate in the groundwater monitoring network at the H.W. Pirkey Plant Landfill (Landfill) in Hallsville, Texas, following the first semiannual detection monitoring event of 2025. The H.W. Pirkey Plant has four coal combustion residuals (CCR) storage units regulated by the Texas Commission on Environmental Quality (TCEQ) under Registration No. CCR104, including the Landfill (**Figure 1**). The western side of the Landfill overlies a former lignite mining area, as shown on **Figure 2**.

Background groundwater concentrations for the Landfill were initially calculated in January 2018 with data from at least eight monitoring events (Geosyntec 2018). Upper prediction limits (UPLs) were calculated for each Appendix III parameter to represent background values. Lower prediction limits (LPLs) were also calculated for pH. Because of the presence of lignite mine spoils within the screened interval at downgradient well AD-34, an ASD was certified on January 7, 2020 which resulted in a switch in the groundwater monitoring network statistics from interwell tests to intrawell tests for evaluation of pH, sulfate, and total dissolved solids prediction limits for all wells (Geosyntec 2020). After a minimum of four additional detection monitoring events were completed, the prediction limits were recalculated based on a one-of-two retesting procedure to maintain an appropriate site-wide false positive rate (Geosyntec 2021; Geosyntec 2024). With this procedure, an SSI is concluded only if both samples in a series of two exceed the UPL or, in the case of pH, are below the LPL.

The first semiannual detection monitoring event of 2025 was performed in April 2025, and the results were compared to the calculated prediction limits in accordance with Texas Administrative Code (TAC) Title 30, §352.941(a) [30 TAC §352.941(a)]. Where initial exceedances were identified, verification resampling was completed in June 2025. Following verification resampling, SSIs were identified for boron and chloride at well AD-23 and boron, calcium, chloride, fluoride, and sulfate at AD-36 by intrawell analysis (Geosyntec 2025). Based on the identified SSIs for the first semiannual event of 2025, boron, calcium, chloride, fluoride, and sulfate are the constituents of concern (COCs) addressed in this ASD.

A summary of the detection monitoring analytical results for the downgradient compliance wells and the calculated prediction limits to which they were compared is provided in **Table 1**.

1.1 CCR Rule Requirements

TCEQ regulations regarding detection monitoring programs for CCR landfills and surface impoundments provide owners and operators with the option to make an ASD when an SSI is identified:

> In making a demonstration under this section, the owner or operator must . . . within 90 days of making a determination of an SSI over the background value for any Appendix III constituent adopted by reference in §352.1421 of this title, submit a report prepared and certified in accordance with §352.4 of this title (relating to Engineering and Geoscientific Information), to the executive director, and any local pollution agency with jurisdiction that has requested to be notified, demonstrating that a source other than a coal combustion residuals unit caused the SSI or that the SSI resulted from error in sampling, analysis,

statistical evaluation, or natural variation in groundwater quality. (30 TAC §352.941(c)(2)).

Pursuant to 30 TAC §352.941(c)(2), Geosyntec Consultants, Inc. (Geosyntec) has prepared this ASD report to document that the SSIs identified for boron and chloride at well AD-23 and for boron, calcium, chloride, fluoride, and sulfate at well AD-36 are from a source other than the Landfill.

1.2 Demonstration of Alternative Sources

An evaluation was completed to assess possible alternative sources to which the identified SSIs could be attributed. Alternative sources were categorized into the following five types, based on methods provided by the Electric Power Research Institute (EPRI 2017):

- ASD Type I: Sampling Causes
- ASD Type II: Laboratory Causes
- ASD Type III: Statistical Evaluation Causes
- ASD Type IV: Natural Variation
- ASD Type V: Alternative Sources (i.e., anthropogenic impacts)

A demonstration was conducted to show that the identified SSIs were based on a Type IV cause and not by a release from the Pirkey Landfill.

2. SUMMARY OF SITE CONDITIONS

The Landfill design and construction, regional geology and site hydrogeology, and groundwater monitoring network and flow conditions are described below.

2.1 Landfill Design and Construction

The Pirkey Landfill was designed to receive CCR materials including fly ash, bottom ash, economizer ash, and stabilized flue gas desulfurization sludge (Arcadis 2022). The Landfill consists of cells which have been constructed periodically since 1984, when the first cell was developed at the northeastern corner of the Landfill. The most recent cell that has been developed was constructed at the southeast corner of the Landfill beginning in 2018. The Landfill is now approximately 134 acres in size.

The Landfill was constructed within an unnamed tributary creek, and the base of the Landfill is partially excavated into the creek bed (Arcadis 2022). Earthen embankments were installed around portions of the Landfill to control stormwater flow. Leachate is drained from the Landfill via bottom area drains and collection pipes installed at the base of the Landfill. From previous investigations of the Landfill summarized by Arcadis (2022), the Landfill was constructed with an engineered liner. The initial cells included a 3-foot thick compacted soil liner. In 1995, the design was modified to include a 60-mil thick high-density polyethylene (HDPE) geomembrane liner overlying a geosynthetic clay liner. The most recent cell was constructed with a single-composite liner system consisting of, from top to bottom: a 2-foot thick leachate drainage layer; a 60-mil thick HDPE geomembrane liner; and a 2-foot thick compacted clay liner (Akron Consulting, LLC 2022).

As of July 2024, the 2018 expansion is the only cell still actively receiving waste. The approximate area of active waste placement is shown in **Figure 2**. The remainder of the Landfill is either considered closed and covered by a final vegetative cover or closure turf material or considered inactive with temporary soil cover (GEI 2024).

2.2 Regional Geology / Site Hydrogeology

The Landfill is positioned on an outcrop of the Eocene-age Recklaw Formation, which consists predominantly of clay and fine-grained sand (Arcadis 2022). The Recklaw Formation is underlain by the Carrizo Sand, which crops out in the topographically lower southern portion of the plant. The Carrizo Sand consists of fine- to medium-grained sand interbedded with silt and clay.

The Landfill monitoring well network monitors groundwater within the uppermost aquifer, which was defined by Arcadis (2022) as very-fine- to fine-grained clayey and silty sand located below and adjacent to the Landfill, between an elevation of approximately 270 and 330 feet above mean sea level.

2.3 Groundwater Monitoring Network and Flow Conditions

The monitoring well network for the Landfill monitors groundwater within the uppermost aquifer. Geologic cross sections C-C’ and D-D’ from Arcadis (2022), provided as **Attachment A**, show the subsurface geometry of the uppermost aquifer (indicated as clayey silty sand, brown to gray) underlying the Landfill. These geologic cross sections also demonstrate lateral continuity of the uppermost aquifer, spanning both directions underneath the entire length of the Landfill. The Landfill monitoring well network consists of upgradient monitoring wells AD-8, AD-12, AD-16,

and AD-27, and downgradient compliance wells AD-23, AD-34, and AD-36. AD-36 was installed in April 2019 (after the initial monitoring well network was already in place) as a replacement for well AD-35, which was decommissioned in November 2018 due to the Landfill expansion (Arcadis 2022). The groundwater flow direction near the Landfill is southwesterly (**Figure 1**). Seasonal variability in groundwater flow direction has not been observed since the monitoring well network was installed.

3. ALTERNATIVE SOURCE DEMONSTRATION

The ASD evaluation method and proposed alternative source of the identified COCs (boron and chloride at well AD-23 and boron, calcium, chloride, fluoride, and sulfate at well AD-36) and the future groundwater sampling requirements are described below.

3.1 Proposed Alternative Source

An initial review of site geochemistry, site historical data, and laboratory quality assurance and quality control data did not identify an alternative source for the COCs due to Type I (sampling), Type II (laboratory), Type III (statistical evaluation), or Type V (anthropogenic impact) issues. Groundwater sampling, laboratory analysis, and statistical evaluations were generally completed in accordance with 30 TAC §352.931(a) and the draft TCEQ guidance for groundwater monitoring (TCEQ 2020). Based on a review of groundwater data and recent site construction events, the SSIs for these COCs were attributed to natural variation associated with the aquifer unit beneath the Landfill, which is a Type IV issue.

3.1.1 Comparison to Background Concentrations

A review of COC concentrations at both AD-23 and AD-36 monitoring found that they are within the range of concentrations reported at the upgradient monitoring wells in the groundwater monitoring network (**Figure 3**). The upgradient locations have a range of reported results, with at least one upgradient location having a greater mean concentration compared to downgradient wells AD-23 and AD-36 for each COC. Given that the uppermost aquifer unit is horizontally continuous in the area surrounding the Landfill (**Attachment A**), migration of the COCs from upgradient locations to downgradient wells is possible. Therefore, the COC concentrations reported at AD-23 and AD-36 are within the expected range attributable to natural variation within the aquifer.

This finding is further supported by a statistical comparison of the downgradient results of interest to interwell prediction limits, which pool data from multiple background locations to establish a site-specific background value. While interwell prediction limits were previously determined to be inappropriate for the Landfill due to the influence of mine spoils on downgradient well AD-36 (Geosyntec 2020), the comparison is completed here to further assess concentrations at downgradient wells AD-23 and AD-36 compared to background. Interwell prediction limits were calculated using data from AD-8, AD-12, AD-16, and AD-27 from May 2016 through April 2025 (**Attachment B**).[1] A comparison of the COCs at AD-23 and AD-36 to the calculated interwell prediction limits found that all COC concentrations are below the calculated background values based on the pooled background dataset (**Table 2**). This further supports the conclusion that the reported COC concentrations at AD-23 and AD-36 are within the expected range for the Site based on comparison to background groundwater chemistry.

In addition to being comparable to background concentrations, the groundwater boron concentrations at AD-23 and AD-36 and fluoride concentrations at AD-36 are an order of

[1] Outliers identified by Tukey's test were removed from the background dataset prior to calculation of the prediction limits. An analysis of variance (ANOVA) test was not completed; while initial background calculations identified significant variability in the background dataset for all Appendix III parameters except pH (Geosyntec 2018), ANOVA tests were not completed in this assessment as the calculation of background value reflective of this variability was a goal of the calculations.

magnitude lower than the Texas Risk Reduction Program (TRRP) Class I residential ingestion pathway limits ($^{GW}GW_{Ing}$) of 4.9 milligrams per liter (mg/L) for boron and 4.0 mg/L for fluoride (TCEQ 2009; updated TCEQ 2025). Residential ingestion pathway limits have not been established for calcium, chloride, or sulfate as they are not necessarily of concern from a human health standpoint (TCEQ 2025). However, the reported chloride concentrations at AD-23 and AD-36 and sulfate concentrations at AD-36 are an order of magnitude lower than the secondary maximum contaminant levels for these constituents, both of which are 250 mg/L (TCEQ 2025).

3.1.2 Comparison to Historical Regional Concentrations

Regional scale sampling data from shallow wells located in Harrison County (**Attachment C**, Broom and Myers 1966) provide further support for evidence of naturally occurring COC concentrations (excluding boron, which did not have available data) exceeding those observed at the site. At the time of publication in 1966 (approximately 20 years prior to initiation of operations at the Pirkey Plant), the average COC concentrations from wells screened at depths less than 60 feet were all greater than the recent concentrations reported at AD-23 and AD-36 (**Table 3**). These data indicate that calcium, chloride, fluoride, and sulfate concentrations vary regionally within groundwater at comparable depths.

While boron data was not reported in the shallow wells, TCEQ established a Texas-specific soil median background concentration of 30 milligrams per kilogram of boron in 30 TAC §350.51(m). Given the abundance of boron in Texas soils, some contribution of boron to groundwater from the aquifer is anticipated.

3.1.3 Leachate Mixing Assessment

The potential for Landfill leachate mixing to account for geochemical changes to groundwater at monitoring wells AD-23 and AD-36 was evaluated using a physical mixing assessment. Piper diagrams were created for AD-23 (**Figure 4**) and AD-36 (**Figure 5**) which display the relative proportions of major cations and anions in aqueous samples compared to the composition of the Landfill leachate. Groundwater data from well AD-23 collected in October 2016 and data collected from well AD-36 in August 2019 (the first sample collected from each location that contained less than 15% ionic charge imbalance error) were used to represent initial conditions at the monitoring locations (100% groundwater), and Landfill leachate data collected in February 2023 was used to represent the potential source of COCs to the wells of interest. The laboratory analytical report for the February 2023 Landfill leachate sample is provided as **Attachment D**. Geochemist's Workbench® was used to mix the initial groundwater sample for each well with the leachate sample at varying ratios in order to evaluate the changes in groundwater geochemistry that would be expected under varying leachate infiltration conditions. The outputs of the mixing modeling were compared to the subsequent groundwater samples at each well of interest that had an ionic charge imbalance less than 15%, indicating high sample quality.

As illustrated in **Figures 4 and 5**, the mixing models indicate infiltration of Landfill leachate is expected to result in increases to the relative proportions of calcium (major cation) and sulfate (major anion). In contrast to the mixing model outputs, AD-23 groundwater has demonstrated stability with regards to major cation relative proportions and a gradual decrease in relative sulfate proportions associated with a gradual increase in chloride dominance. Likewise, AD-36 groundwater has also demonstrated major cation stability and general stability in major anion relative proportions. Infiltration of leachate is predicted to result in contrasting changes to major ion relative proportions relative to the observed trends at both wells of interest since monitoring

began. The inconsistency between recently collected data at AD-23 and AD-36 and the mixing model outputs for both wells of interest indicates that changes in COC concentrations at these wells are a function of a source other than Landfill leachate infiltration.

3.2 Sampling Requirements

As the ASD presented above supports the position that the identified SSIs were not due to a release from the Pirkey Landfill, the unit will remain in the detection monitoring program. Groundwater at the unit will continue to be sampled for Appendix III parameters semiannually.

4. CONCLUSIONS AND RECOMMENDATIONS

The preceding information serves as the ASD prepared in accordance with 30 TAC §352.941(c)(2) and supports the position that the SSIs for boron and chloride at well AD-23 and boron, calcium, chloride, fluoride, and sulfate at well AD-36 identified during semiannual detection monitoring in April 2025 were not due to a release from the Landfill. The identified SSIs were instead attributed to natural groundwater chemical variability within the aquifer unit. Therefore, no further action is warranted, and the Pirkey Landfill will remain in the detection monitoring program. Certification of this ASD by a qualified professional engineer is provided in **Attachment E.**

5. REFERENCES

Akron Consulting, LLC. 2022. 2018 Landfill Cell – Liner and Leachate Collection Construction Certification. January.

Arcadis. 2022. Landfill – CCR Groundwater Monitoring Well Network Evaluation Update. H.W. Pirkey Power Plant. January.

Broom, M.E., and B.N. Myers. 1966. Report 27 – Ground-Water Resources of Harrison County, Texas. Texas Water Development Board. United States Geological Survey. August.

GEI. 2024. 2024 Annual Inspection Report. CCR Landfill, H.W. Pirkey Power Plant, Hallsville, Texas. July.

EPRI. 2017. Guidelines for Development of Alternative Source Demonstrations at Coal Combustion Residual Sites. 3002010920. Electric Power Research Institute. October.

Geosyntec. 2018. Statistical Analysis Summary – Landfill. H.W. Pirkey Power Plant. Hallsville, Texas. Geosyntec Consultants, Inc. January.

Geosyntec. 2020. Alternative Source Demonstration Report – Federal CCR Rule. H.W. Pirkey Plant Landfill. Hallsville, Texas. Geosyntec Consultants, Inc. January.

Geosyntec. 2021. Statistical Analysis Summary – Background Update Calculations. H.W. Pirkey Plant Landfill. Hallsville, Texas. Geosyntec Consultants, Inc. October.

Geosyntec. 2023. Alternative Source Demonstration Report – Texas State CCR Rule. H. W. Pirkey Plant Landfill. Hallsville, Texas. Geosyntec Consultants, Inc. September.

Geosyntec. 2024a. Statistical Analysis Summary – Background Update Calculations. H.W. Pirkey Plant Landfill. Hallsville, Texas. Geosyntec Consultants, Inc. January.

Geosyntec. 2024c. Alternative Source Demonstration Report – Texas State CCR Rule. H. W. Pirkey Plant Landfill. Hallsville, Texas. Geosyntec Consultants, Inc. March.

Geosyntec. 2025. Evaluation of Detection Monitoring Data at Pirkey Plant's Landfill. September

TAC. 2020. Texas Administrative Code, Title 30, Part 1, Chapter 352: Coal Combustion Residuals Waste Management. May 22.

TCEQ. 2009. *Toxicity Factors and Chemical/Physical Properties*. Texas Commission on Environmental Quality, Remediation Division. RG-366/TRRP-19. March.

TCEQ. 2020. Coal Combustion Residuals Groundwater Monitoring and Corrective Action Draft Technical Guideline No. 32. Topic: Coal Combustion Residuals (CCR) Groundwater Monitoring and Corrective Action. Texas Commission on Environmental Quality, Waste Permits Division. May.

TCEQ. 2025. *Update to Texas Risk Reduction Program (TRRP) Protective Concentration Limits and Chemical/Physical Properties*. Texas Commission on Environmental Quality, Remediation Division. February 6.

TABLES

Table 1. Detection Monitoring Data Summary
Alternative Source Demonstration Report
Pirkey - Landfill

Analyte	Unit	Description	AD-23		AD-34	AD-36	
			4/23/2025	6/11/2025	4/23/2025	4/22/2025	6/11/2025
Boron	mg/L	Intrawell Background Value (UPL)	0.0612		0.108	0.0747	
		Analytical Result	**0.424**	**0.464**	0.08	**0.079**	**0.143**
Calcium	mg/L	Intrawell Background Value (UPL)	0.503		46.1	1.22	
		Analytical Result	0.21	--	42.2	**1.34**	**8.54**
Chloride	mg/L	Intrawell Background Value (UPL)	8.92		8.97	11.8	
		Analytical Result	**10.4**	**11.0**	7.65	**17.0**	**15.0**
Fluoride	mg/L	Intrawell Background Value (UPL)	0.156		1.58	0.0980	
		Analytical Result	0.05	--	1.39	**0.11**	**0.37**
pH	SU	Intrawell Background Value (UPL)	5.0		4.1	5.2	
		Intrawell Background Value (LPL)	3.1		2.9	3.7	
		Analytical Result	4.3	--	3.9	4.5	--
Sulfate	mg/L	Intrawell Background Value (UPL)	13.6		1,340	4.77	
		Analytical Result	4.7	--	1,110	**6.2**	**45.3**
Total Dissolved Solids	mg/L	Intrawell Background Value (UPL)	104		1,840	84.9	
		Analytical Result	40	--	1,600	<20	--

Notes:
1. Bold values exceed the background value.
2. Background values are shaded gray.
LPL: lower prediction limit
mg/L: milligrams per liter
SU: standard units
UPL: upper prediction limit

Table 2. Interwell Prediction Limit Data Comparison
Alternative Source Demonstration Report
Pirkey - Landfill

Analyte	Unit	Description	AD-23		AD-36	
			4/23/2025	6/11/2025	4/23/2025*	6/11/2025
Boron	mg/L	Interwell Background Value (UPL)	1.61			
		Analytical Result	0.424	0.464	0.079	0.143
Calcium	mg/L	Interwell Background Value (UPL)	109			
		Analytical Result	0.21	--	1.34	8.54
Chloride	mg/L	Interwell Background Value (UPL)	23.4			
		Analytical Result	10.4	11.0	17.0	15.0
Fluoride	mg/L	Interwell Background Value (UPL)	5.20			
		Analytical Result	0.05	--	0.11	0.37
pH	SU	Interwell Background Value (UPL)	5.7			
		Interwell Background Value (LPL)	2.6			
		Analytical Result	4.3	--	4.5	--
Sulfate	mg/L	Interwell Background Value (UPL)	228			
		Analytical Result	4.7	--	6.2	45.3
Total Dissolved Solids	mg/L	Interwell Background Value (UPL)	462			
		Analytical Result	40	--	<20	--

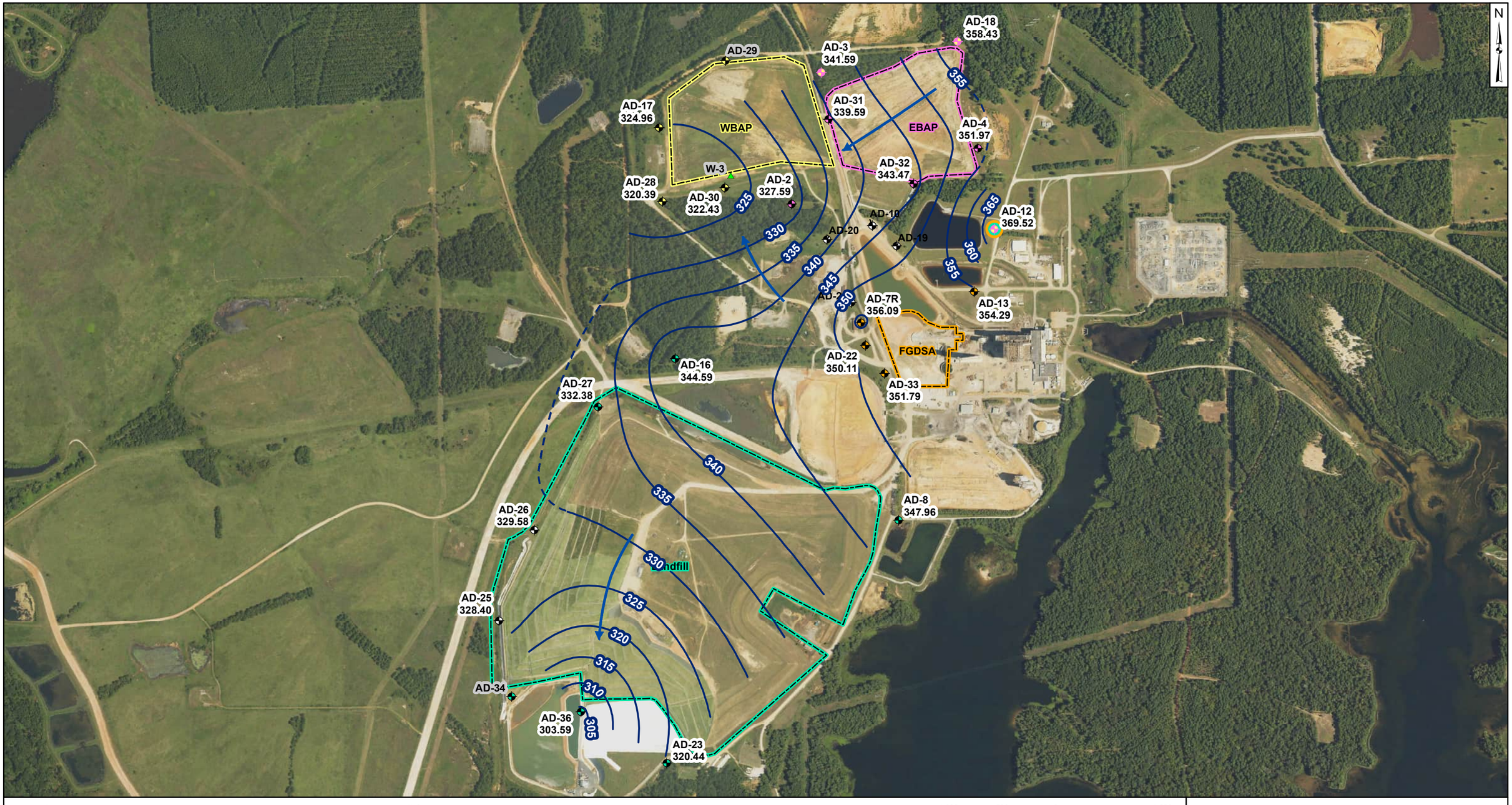
Notes:
1. Bold values exceed the background value.
2. Background values are shaded gray.
3. Compliance well AD-36 is not shown, as no statisticlly significant increases were identified during the first semiannual event of 2025.
*: well purged dry and sampled the following day. pH collected on 4/22/2025
LPL: lower prediction limit
mg/L: milligrams per liter
SU: standard units
UPL: upper prediction limit

Table 3. Average and Maximum Historical Monitoring Data
Alternative Source Demonstration Report
Pirkey – Landfill

Analyte	Historical Data		AD-23		AD-36	
	Average	Maximum	Average	Maximum	Average	Maximum
Calcium	26.5	130	-	-	0.791	8.54
Chloride	40.5	401	6.96	11.0	11.1	17.0
Fluoride	0.242	1.20	-	-	0.082	0.370
Sulfate	36.1	899	-	-	5.58	45.3

Notes:
1. Historical data found in the Harrison County Groundwater Data 1966 report for wells screened at depths less than 60 feet below ground surface.
2. Average and maximum results for AD-23 and AD-36 were calculated using analytical results collected between 2017 and 2025.
3. Only well-analyte pairs where statistically significant increases were identified during the first semiannual event of 2025 are shown.
4. All results are shown in milligrams per liter (mg/L).

FIGURES



Legend

Groundwater Monitoring Wells

- Out of Network
- East Bottom Ash Pond (EBAP)
- West Bottom Ash Pond (WBAP)
- Landfill
- Flue Gas Desulfurization Stackout Area (FGDSA)
- EBAP and WBAP
- All CCR Unit Networks
- Piezometer
- Groundwater Elevation Contour
- Groundwater Elevation Contour (Inferred)
- Approximate Groundwater Flow Direction

Notes

1. Monitoring well coordinates and water levels (collected on April 21, 22, and 23, 2025) provided by AEP.
2. Site features based on information available in coal combustion residuals (CCR) Groundwater Monitoring Well Network Evaluation Update (Arcadis 2022) provided by AEP.
3. Groundwater elevation units are feet above mean sea level (ft msl).
4. Wells AD-10, AD-19, AD-20, AD-21, AD-29, and W-3 were not gauged during the April 2025 event.
5. AD-7R replaced AD-7, which was abandoned on September 12, 2023.
6. Wells shaded in gray are within the network but not used for contouring.
7. Well AD-34 had artesian characteristics during this event and was not used for contouring.
8. AD-35 was abandoned on November 13, 2018 and is not shown on the map.
9. Removal of CCR plus one foot of material for the WBAP was completed for on July 26, 2022.
10. Removal of CCR plus one foot of material for the EBAP was completed on July 20, 2023.
11. Removal of CCR plus one foot of material for the FGDSA was completed on September 18, 2023.
12. Map is updated to incorporate Landfill survey data collected on May 1, 2024.
13. Aerial imagery provided by the TxGIO DataHub (dated 2024).

1,000 500 0 1,000 Feet

Beth Ann Gross

December 23, 2025
Geosyntec Consultants, Inc.
Texas Firm Registration
No. 1182

STATE OF TEXAS
BETH ANN GROSS
79864
LICENSED
PROFESSIONAL ENGINEER

Potentiometric Contours: Uppermost Aquifer April 2025

AEP Pirkey Power Plant
Hallsville, Texas

Geosyntec consultants

Columbus, Ohio | 2025/10/28

Figure 1

A:\Projects\AEP\Groundwater Statistical Evaluation - CHA8423\Groundwater Mapping\GIS Files\MXD\Pirkey\2025\AEP-Pirkey_GW_2025-04Pirkey.mxd. okiemute.commander. 10/28/2025. CHA8500B/12/01_04.



Legend

- Upgradient Well
- Downgradient Well
- Out of Network Well
- Abandoned Well
- Former Lignite Mine
- Waste Placement
- Landfill

Notes

- Monitoring well coordinate data provided by AEP.
- AD-35 was abandoned on November 13, 2018.
- Active Waste Placement location is approximate.
- Aerial imagery provided by ESRI, dated September 19, 2023.

1,000 500 0 1,000 Feet

Landfill Location Relative to Former Lignite Mine Area

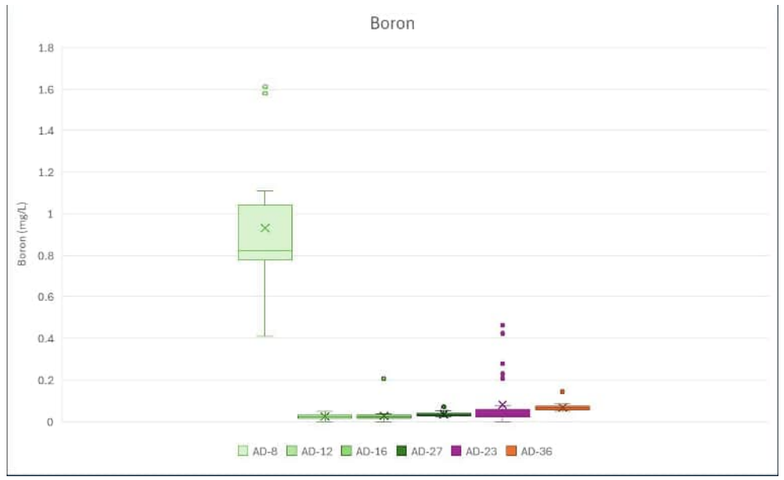
AEP Pirkey Power Plant
Hallsville, Texas

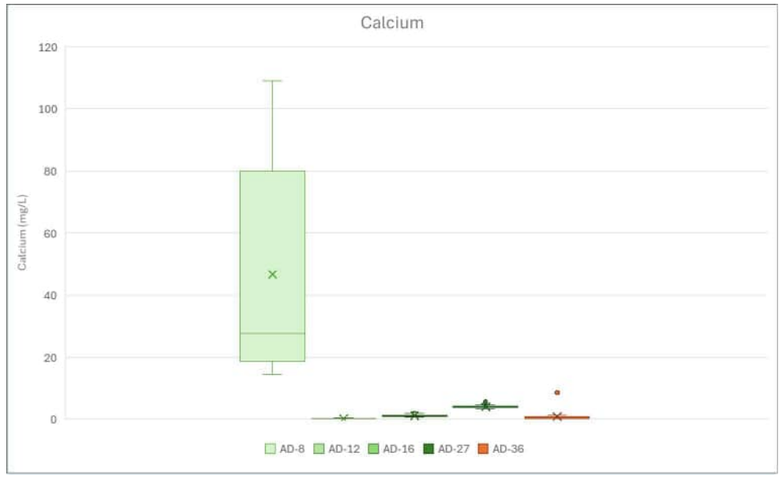
Geosyntec consultants

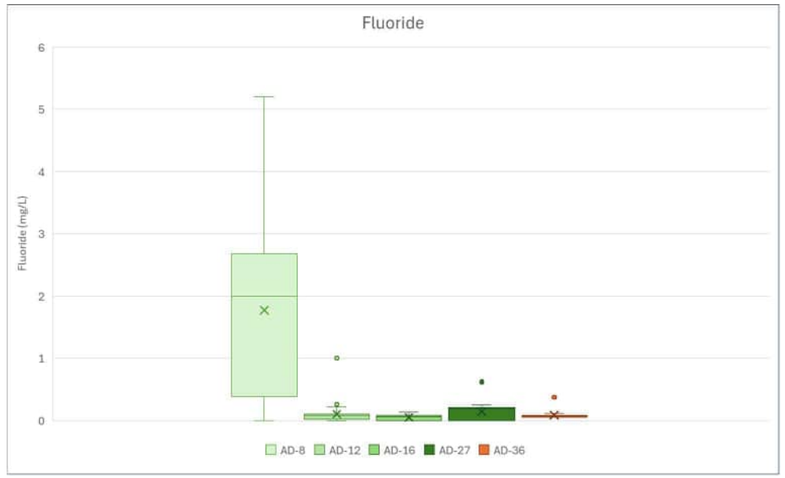
Columbus, Ohio | 2025/12/17

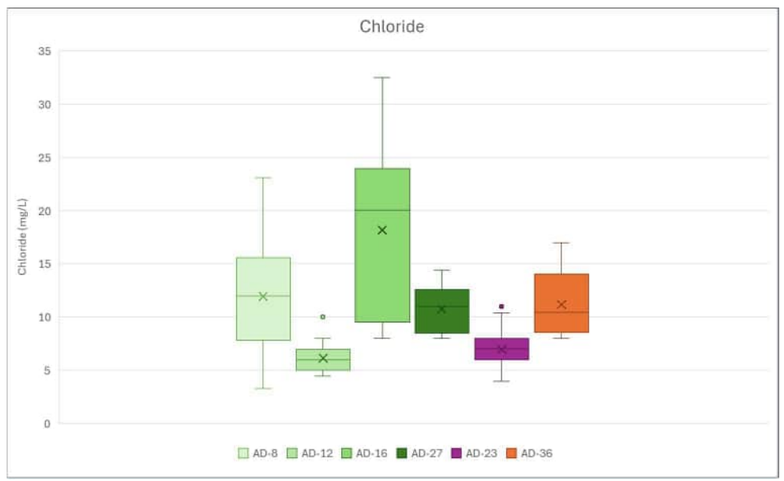
Figure **2**

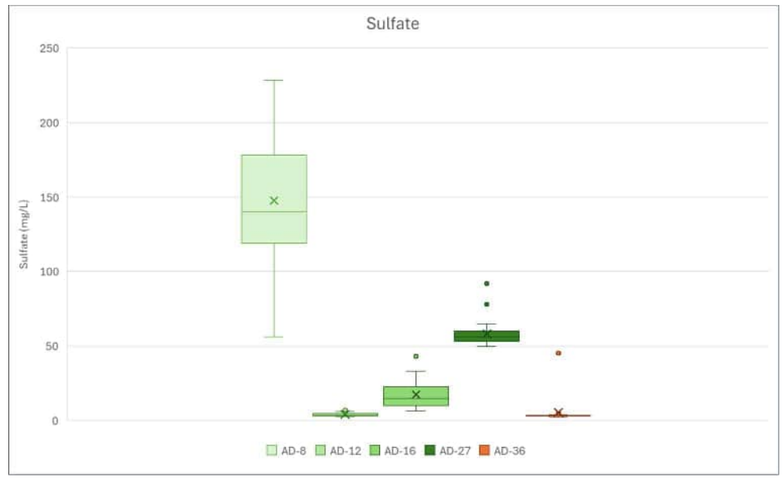
A:\Projects\AEP\Groundwater Statistical Evaluation - CHA8423\Groundwater Mapping\GIS Files\MXD\Pirkey\Pirkey LF ASD Site Layout waste placement_updated active zone.mxd. okiemute.commander. 12/17/2025. Project/Phase/Task.











Notes:

1. Only downgradient well-analyte pairs where statistically significant increases were identified during the first semiannual event of 2025 are shown.
2. Upgradient locations (AD-8, AD-12, AD-16, and AD-27) are shown in shades of green.
3. All results are shown in milligrams per liter (mg/L).

Box-and-Whisker Plots - Landfill Monitoring Network

Pirkey Landfill

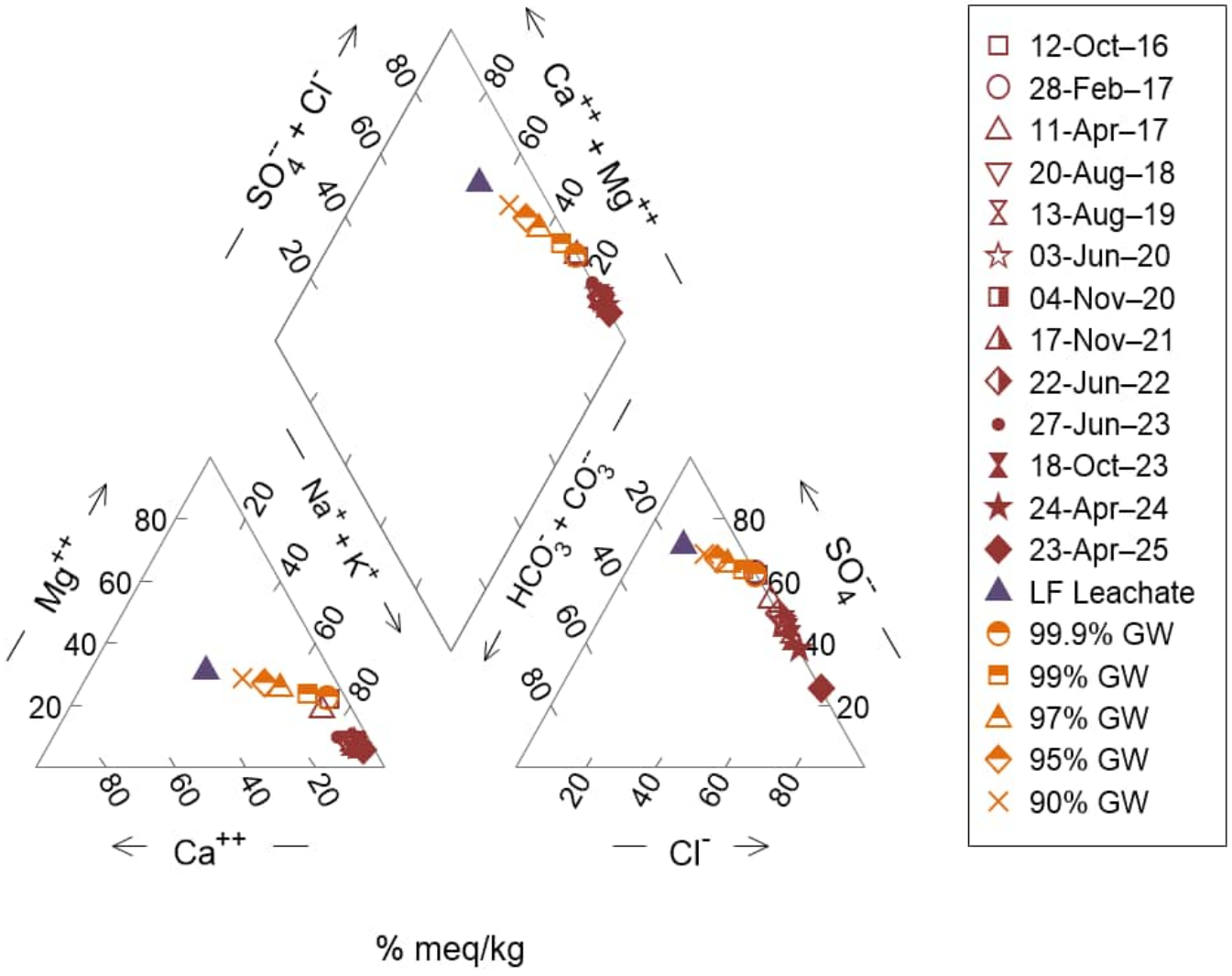
Geosyntec consultants

AMERICAN ELECTRIC POWER

Columbus, OH

December 2025

Figure **3**



% meq/kg

Notes:
1. Samples with greater than 15% charge imbalance are not included on the Piper diagram.
2. Landfill leachate is represented by the purple triangle.
3. Red samples represent AD-23 groundwater samples with less than 15% charge imbalance from the beginning of data collection to the present.
4. Mixing model outputs are represented by the orange symbols.
5. % meq/kg: percent milliequivalents per kilogram

AD-23-Leachate Piper Diagram Mixing Model
Turk Landfill

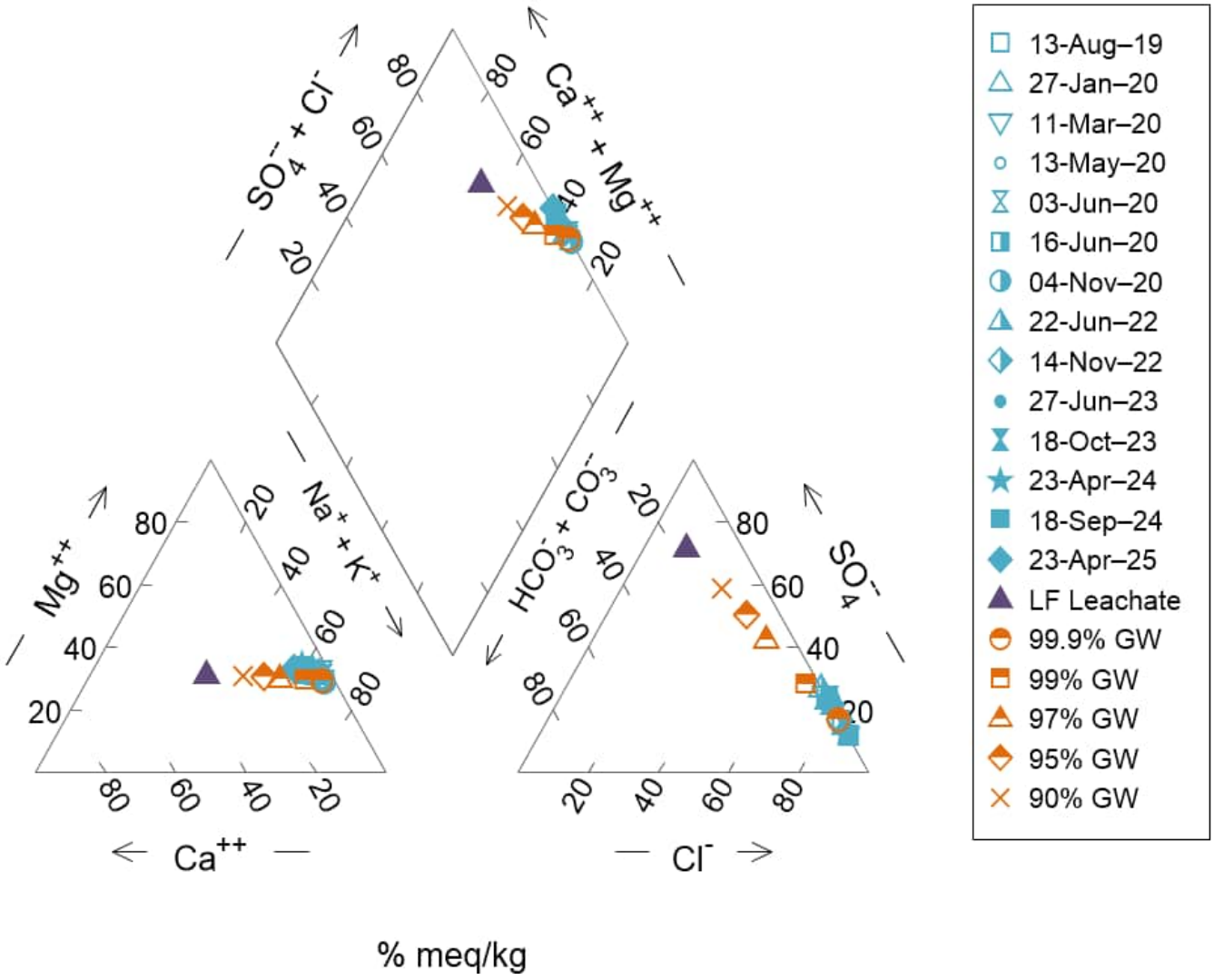
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AMERICAN ELECTRIC POWER

Figure 4

Columbus, Ohio

December 2025



Notes:

1. Samples with greater than 15% charge imbalance are not included on the Piper diagram.
2. Landfill leachate is represented by the purple triangle.
3. Blue samples represent AD-36 groundwater samples with less than 15% charge imbalance from the beginning of data collection to the present.
4. Mixing model outputs are represented by the orange symbols.
5. % meq/kg: percent milliequivalents per kilogram

AD-36-Leachate Piper Diagram Mixing Model
Turk Landfill

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Columbus, Ohio | December 2025

Figure 5

ATTACHMENT A
Groundwater Analytical Data

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252381 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-31
Lab Number: 252381-001
Date Collected: 09/08/2025 12:31 EDT
Customer Description:
Preparation:
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.22	mg/L	2	0.10	0.02		JCF	09/19/2025 18:43	EPA 300.1 -1997, Rev. 1.0
Chloride	14.0	mg/L	2	0.06	0.02		JCF	09/19/2025 18:43	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.10	mg/L	2	0.06	0.02		JCF	09/19/2025 18:43	EPA 300.1 -1997, Rev. 1.0
Sulfate	69.5	mg/L	2	0.60	0.04		JCF	09/19/2025 18:43	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	260	mg/L	1	50	20		BLB	09/15/2025 07:06	SM 2540C-2020

Customer Sample ID: AD-30
Lab Number: 252381-002
Date Collected: 09/09/2025 09:44 EDT
Customer Description:
Preparation:
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.23	mg/L	2	0.10	0.02		JCF	09/19/2025 19:06	EPA 300.1 -1997, Rev. 1.0
Chloride	16.8	mg/L	2	0.06	0.02		JCF	09/19/2025 19:06	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.04	mg/L	2	0.06	0.02	J1	JCF	09/19/2025 19:06	EPA 300.1 -1997, Rev. 1.0
Sulfate	91.1	mg/L	2	0.60	0.04		JCF	09/19/2025 19:06	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	J8, U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	210	mg/L	1	50	20		BLB	09/15/2025 07:06	SM 2540C-2020

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252381 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-28
Customer Description:
Lab Number: 252381-003
Preparation:
Date Collected: 09/09/2025 10:29 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.09	mg/L	2	0.10	0.02	J1	JCF	09/19/2025 19:29	EPA 300.1 -1997, Rev. 1.0
Chloride	4.79	mg/L	2	0.06	0.02		JCF	09/19/2025 19:29	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.62	mg/L	2	0.06	0.02		JCF	09/19/2025 19:29	EPA 300.1 -1997, Rev. 1.0
Sulfate	22.7	mg/L	2	0.60	0.04		JCF	09/19/2025 19:29	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	100	mg/L	1	50	20		BLB	09/15/2025 07:06	SM 2540C-2020

Customer Sample ID: AD-27
Customer Description:
Lab Number: 252381-004
Preparation:
Date Collected: 09/10/2025 09:25 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.36	mg/L	2	0.10	0.02		JCF	09/19/2025 19:51	EPA 300.1 -1997, Rev. 1.0
Chloride	14.0	mg/L	2	0.06	0.02		JCF	09/19/2025 19:51	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.24	mg/L	2	0.06	0.02		JCF	09/19/2025 19:51	EPA 300.1 -1997, Rev. 1.0
Sulfate	60.5	mg/L	2	0.60	0.04		JCF	09/19/2025 19:51	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	210	mg/L	1	50	20		BLB	09/15/2025 06:39	SM 2540C-2020

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252381 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-32
Customer Description:
Lab Number: 252381-005
Preparation:
Date Collected: 09/08/2025 11:36 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.29	mg/L	2	0.10	0.02		JCF	09/19/2025 20:37	EPA 300.1 -1997, Rev. 1.0
Chloride	10.1	mg/L	2	0.06	0.02		JCF	09/19/2025 20:37	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.34	mg/L	2	0.06	0.02		JCF	09/19/2025 20:37	EPA 300.1 -1997, Rev. 1.0
Sulfate	53.0	mg/L	2	0.60	0.04		JCF	09/19/2025 20:37	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	7	mg/L	1	20	5	J8, J1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	170	mg/L	1	50	20		BLB	09/15/2025 06:39	SM 2540C-2020

Customer Sample ID: AD-33
Customer Description:
Lab Number: 252381-006
Preparation:
Date Collected: 09/08/2025 12:23 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.72	mg/L	2	0.10	0.02		JCF	09/19/2025 21:00	EPA 300.1 -1997, Rev. 1.0
Chloride	11.3	mg/L	2	0.06	0.02		JCF	09/19/2025 21:00	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.31	mg/L	2	0.06	0.02		JCF	09/19/2025 21:00	EPA 300.1 -1997, Rev. 1.0
Sulfate	49.1	mg/L	2	0.60	0.04		JCF	09/19/2025 21:00	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	170	mg/L	1	50	20		BLB	09/15/2025 06:45	SM 2540C-2020

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Job ID: 252381 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-34
Customer Description:
Lab Number: 252381-007
Preparation:
Date Collected: 09/09/2025 09:14 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.16	mg/L	5	0.25	0.05	J1	JCF	09/19/2025 22:53	EPA 300.1 -1997, Rev. 1.0
Chloride	7.54	mg/L	5	0.15	0.05		JCF	09/19/2025 22:53	EPA 300.1 -1997, Rev. 1.0
Fluoride	1.17	mg/L	5	0.15	0.05		JCF	09/19/2025 22:53	EPA 300.1 -1997, Rev. 1.0
Sulfate	955	mg/L	50	15	1		JCF	09/19/2025 22:31	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	1670	mg/L	1	50	20		BLB	09/15/2025 07:06	SM 2540C-2020

Customer Sample ID: AD-36
Customer Description:
Lab Number: 252381-008
Preparation:
Date Collected: 09/08/2025 09:57 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.92	mg/L	2	0.10	0.02		JCF	09/19/2025 21:22	EPA 300.1 -1997, Rev. 1.0
Chloride	18.8	mg/L	2	0.06	0.02		JCF	09/19/2025 21:22	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.12	mg/L	2	0.06	0.02		JCF	09/19/2025 21:22	EPA 300.1 -1997, Rev. 1.0
Sulfate	4.99	mg/L	2	0.60	0.04		JCF	09/19/2025 21:22	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	J8, U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	60	mg/L	1	50	20		BLB	09/15/2025 06:45	SM 2540C-2020

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252381 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: Duplicate
Lab Number: 252381-009
Date Collected: 09/09/2025 13:00 EDT

Customer Description:
Preparation:
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

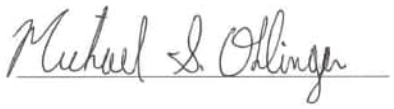
Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.28	mg/L	2	0.10	0.02		JCF	09/19/2025 21:45	EPA 300.1 -1997, Rev. 1.0
Chloride	24.8	mg/L	2	0.06	0.02		JCF	09/19/2025 21:45	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.37	mg/L	2	0.06	0.02		JCF	09/19/2025 21:45	EPA 300.1 -1997, Rev. 1.0
Sulfate	41.5	mg/L	2	0.60	0.04		JCF	09/19/2025 21:45	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	51	mg/L	1	20	5		MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	220	mg/L	1	50	20		BLB	09/15/2025 07:12	SM 2540C-2020

Report Verification

This report and the above data have been confirmed by the following analyst.



Michael Ohlinger, Chemist
Email: msohlinger@aep.com
Phone: 614-836-4184
Audinet: 8-210-4184

THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF THE LABORATORY. ALL TEST RESULTS MEET ALL OF THE REQUIREMENTS OF THE ACCREDITING AUTHORITY, UNLESS OTHERWISE NOTED. ALL TIMES LISTED ARE IN THE EASTERN TIME ZONE.

Data Qualifer Legend

U1 - Not detected at or below method detection limit (MDL).
J1 - Concentration estimated. Analyte was detected between the method detection limit and the reporting limit.
J8 - Concentration estimated. Per the method, this Low Alkalinity sample (< 20 mg/L) was titrated to a fixed pH 4.4.

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252382 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-12
Lab Number: 252382-001
Date Collected: 09/08/2025 10:38 EDT
Customer Description:
Preparation:
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.25	mg/L	2	0.10	0.02		CRJ	09/30/2025 16:57	EPA 300.1 -1997, Rev. 1.0
Chloride	4.61	mg/L	2	0.06	0.02		CRJ	09/30/2025 16:57	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.07	mg/L	2	0.06	0.02		CRJ	09/30/2025 16:57	EPA 300.1 -1997, Rev. 1.0
Sulfate	3.11	mg/L	2	0.60	0.04		CRJ	09/30/2025 16:57	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	J8, U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	70	mg/L	1	50	20		BLB	09/15/2025 07:12	SM 2540C-2020

Customer Sample ID: AD-8
Lab Number: 252382-002
Date Collected: 09/09/2025 10:45 EDT
Customer Description:
Preparation:
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.74	mg/L	2	0.10	0.02		CRJ	09/30/2025 17:43	EPA 300.1 -1997, Rev. 1.0
Chloride	5.85	mg/L	2	0.06	0.02		CRJ	09/30/2025 17:43	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.36	mg/L	2	0.06	0.02		CRJ	09/30/2025 17:43	EPA 300.1 -1997, Rev. 1.0
Sulfate	103	mg/L	10	3.0	0.2		CRJ	09/30/2025 17:20	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	90	mg/L	1	20	5		MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	280	mg/L	1	50	20		BLB	09/15/2025 07:12	SM 2540C-2020

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252382 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-7R
Customer Description:
Lab Number: 252382-003
Preparation:
Date Collected: 09/08/2025 10:36 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	1.36	mg/L	2	0.10	0.02		CRJ	09/30/2025 18:28	EPA 300.1 -1997, Rev. 1.0
Chloride	27.5	mg/L	2	0.06	0.02		CRJ	09/30/2025 18:28	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.14	mg/L	2	0.06	0.02		CRJ	09/30/2025 18:28	EPA 300.1 -1997, Rev. 1.0
Sulfate	34.1	mg/L	2	0.60	0.04		CRJ	09/30/2025 18:28	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	180	mg/L	1	50	20		BLB	09/15/2025 07:56	SM 2540C-2020

Customer Sample ID: AD-4
Customer Description:
Lab Number: 252382-004
Preparation:
Date Collected: 09/10/2025 11:03 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.21	mg/L	2	0.10	0.02		CRJ	09/30/2025 20:00	EPA 300.1 -1997, Rev. 1.0
Chloride	3.91	mg/L	2	0.06	0.02		CRJ	09/30/2025 20:00	EPA 300.1 -1997, Rev. 1.0
Fluoride	<0.02	mg/L	2	0.06	0.02	U1	CRJ	09/30/2025 20:00	EPA 300.1 -1997, Rev. 1.0
Sulfate	19.0	mg/L	2	0.60	0.04		CRJ	09/30/2025 20:00	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	J8, U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	150	mg/L	1	50	20		BLB	09/15/2025 06:45	SM 2540C-2020

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252382 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-3
Customer Description:
Lab Number: 252382-005
Preparation:
Date Collected: 09/09/2025 12:21 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.08	mg/L	2	0.10	0.02	J1	CRJ	09/30/2025 19:14	EPA 300.1 -1997, Rev. 1.0
Chloride	6.41	mg/L	2	0.06	0.02		CRJ	09/30/2025 19:14	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.07	mg/L	2	0.06	0.02		CRJ	09/30/2025 19:14	EPA 300.1 -1997, Rev. 1.0
Sulfate	31.5	mg/L	2	0.60	0.04		CRJ	09/30/2025 19:14	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	J8, U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	150	mg/L	1	50	20		BLB	09/15/2025 07:56	SM 2540C-2020

Customer Sample ID: AD-2
Customer Description:
Lab Number: 252382-006
Preparation:
Date Collected: 09/09/2025 11:31 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.42	mg/L	2	0.10	0.02		CRJ	09/30/2025 20:23	EPA 300.1 -1997, Rev. 1.0
Chloride	25.4	mg/L	2	0.06	0.02		CRJ	09/30/2025 20:23	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.26	mg/L	2	0.06	0.02		CRJ	09/30/2025 20:23	EPA 300.1 -1997, Rev. 1.0
Sulfate	271	mg/L	10	3.0	0.2		CRJ	10/01/2025 09:14	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	520	mg/L	1	50	20		BLB	09/15/2025 06:45	SM 2540C-2020

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
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Audinet: 210-4221

Job ID: 252382 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-13 Customer Description:
Lab Number: 252382-007 Preparation:
Date Collected: 09/08/2025 09:32 EDT Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.26	mg/L	2	0.10	0.02		CRJ	09/30/2025 23:04	EPA 300.1 -1997, Rev. 1.0
Chloride	26.1	mg/L	2	0.06	0.02		CRJ	09/30/2025 23:04	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.39	mg/L	2	0.06	0.02		CRJ	09/30/2025 23:04	EPA 300.1 -1997, Rev. 1.0
Sulfate	44.5	mg/L	2	0.60	0.04		CRJ	09/30/2025 23:04	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	49	mg/L	1	20	5		MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	210	mg/L	1	50	20		BLB	09/15/2025 06:52	SM 2540C-2020

Customer Sample ID: AD-16 Customer Description:
Lab Number: 252382-008 Preparation:
Date Collected: 09/10/2025 12:05 EDT Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.22	mg/L	2	0.10	0.02		CRJ	09/30/2025 23:27	EPA 300.1 -1997, Rev. 1.0
Chloride	30.5	mg/L	2	0.06	0.02		CRJ	09/30/2025 23:27	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.08	mg/L	2	0.06	0.02		CRJ	09/30/2025 23:27	EPA 300.1 -1997, Rev. 1.0
Sulfate	8.80	mg/L	2	0.60	0.04		CRJ	09/30/2025 23:27	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	110	mg/L	1	50	20		BLB	09/15/2025 07:56	SM 2540C-2020

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Audinet: 210-4221

Job ID: 252382 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-17 Customer Description:
Lab Number: 252382-009 Preparation:
Date Collected: 09/09/2025 11:25 EDT Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.22	mg/L	2	0.10	0.02		CRJ	09/30/2025 23:49	EPA 300.1 -1997, Rev. 1.0
Chloride	20.0	mg/L	2	0.06	0.02		CRJ	09/30/2025 23:49	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.18	mg/L	2	0.06	0.02		CRJ	09/30/2025 23:49	EPA 300.1 -1997, Rev. 1.0
Sulfate	2.84	mg/L	2	0.60	0.04		CRJ	09/30/2025 23:49	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	60	mg/L	1	50	20		BLB	09/15/2025 07:56	SM 2540C-2020

Customer Sample ID: AD-18 Customer Description:
Lab Number: 252382-010 Preparation:
Date Collected: 09/10/2025 09:42 EDT Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.06	mg/L	2	0.10	0.02	J1	CRJ	10/01/2025 00:12	EPA 300.1 -1997, Rev. 1.0
Chloride	5.92	mg/L	2	0.06	0.02		CRJ	10/01/2025 00:12	EPA 300.1 -1997, Rev. 1.0
Fluoride	<0.02	mg/L	2	0.06	0.02	U1	CRJ	10/01/2025 00:12	EPA 300.1 -1997, Rev. 1.0
Sulfate	7.57	mg/L	2	0.60	0.04		CRJ	10/01/2025 00:12	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	150	mg/L	1	50	20		BLB	09/15/2025 08:03	SM 2540C-2020

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Audinet: 210-4221

Job ID: 252382 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-22
Customer Description:
Lab Number: 252382-011
Preparation:
Date Collected: 09/08/2025 11:20 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.65	mg/L	2	0.10	0.02		CRJ	10/01/2025 01:21	EPA 300.1 -1997, Rev. 1.0
Chloride	84.9	mg/L	25	0.8	0.3		CRJ	10/01/2025 00:58	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.21	mg/L	2	0.06	0.02		CRJ	10/01/2025 01:21	EPA 300.1 -1997, Rev. 1.0
Sulfate	221	mg/L	25	7.5	0.5		CRJ	10/01/2025 00:58	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	J8, U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	530	mg/L	1	50	20		BLB	09/15/2025 06:52	SM 2540C-2020

Customer Sample ID: AD-23
Customer Description:
Lab Number: 252382-012
Preparation:
Date Collected: 09/10/2025 12:23 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.34	mg/L	2	0.10	0.02		CRJ	10/01/2025 02:07	EPA 300.1 -1997, Rev. 1.0
Chloride	11.1	mg/L	2	0.06	0.02		CRJ	10/01/2025 02:07	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.04	mg/L	2	0.06	0.02	J1	CRJ	10/01/2025 02:07	EPA 300.1 -1997, Rev. 1.0
Sulfate	7.44	mg/L	2	0.60	0.04		CRJ	10/01/2025 02:07	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	60	mg/L	1	50	20		BLB	09/15/2025 08:03	SM 2540C-2020

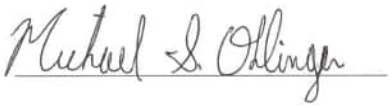
Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252382 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Report Verification

This report and the above data have been confirmed by the following analyst.



Michael Ohlinger, Chemist
Email: msohlinger@aep.com
Phone: 614-836-4184
Audinet: 8-210-4184

THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF THE LABORATORY. ALL TEST RESULTS MEET ALL OF THE REQUIREMENTS OF THE ACCREDITING AUTHORITY, UNLESS OTHERWISE NOTED. ALL TIMES LISTED ARE IN THE EASTERN TIME ZONE.

Data Qualifer Legend

J8 - Concentration estimated. Per the method, this Low Alkalinity sample (< 20 mg/L) was titrated to a fixed pH 4.4.
U1 - Not detected at or below method detection limit (MDL).
J1 - Concentration estimated. Analyte was detected between the method detection limit and the reporting limit.

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-2
Lab Number: 252402-001
Date Collected: 09/09/2025 11:31 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.1	µg/L	5	0.5	0.1	U1	GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Arsenic	1.7	µg/L	5	0.5	0.2		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Barium	14.2	µg/L	5	1.0	0.3		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Beryllium	0.9	µg/L	5	0.3	0.1		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Boron	2.82	mg/L	5	0.25	0.03		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Cadmium	0.13	µg/L	5	0.10	0.02		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Calcium	4.1	mg/L	5	0.5	0.1		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Chromium	0.5	µg/L	5	1.5	0.4	J1	GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Cobalt	31.3	µg/L	5	0.15	0.05		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Lead	0.8	µg/L	5	1.0	0.3	J1	GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Lithium	0.0828	mg/L	5	0.0015	0.0004		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Magnesium	8.36	mg/L	5	0.50	0.05		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Mercury	55	ng/L	20	10	4		JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	<0.3	µg/L	5	2.5	0.3	U1	GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Potassium	1.6	mg/L	5	0.5	0.1		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Selenium	6.7	µg/L	5	2.5	0.2		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Sodium	111	mg/L	5	1.0	0.1		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Strontium	0.0561	mg/L	5	0.0100	0.0003		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Thallium	0.1	µg/L	5	1.0	0.1	J1	GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.96	pCi/L	0.35	0.58		TTP	09/19/2025 09:46	SW-846 9315-1986, Rev. 0
Carrier Recovery	83.8	%						
Radium-228	1.19	pCi/L	0.19	0.58	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	79.7	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-2 Dissolved
Customer Description:
Lab Number: 252402-001-01
Preparation: Dissolved
Date Collected: 09/09/2025 11:31 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.1	µg/L	5	0.5	0.1	U1	GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Arsenic	1.9	µg/L	5	0.5	0.2		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Barium	13.9	µg/L	5	1.0	0.3		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Beryllium	0.9	µg/L	5	0.3	0.1		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Cadmium	0.13	µg/L	5	0.10	0.02		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Chromium	0.8	µg/L	5	1.5	0.4	J1	GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Cobalt	32.3	µg/L	5	0.15	0.05		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Iron	0.81	mg/L	5	0.10	0.02		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Lead	0.8	µg/L	5	1.0	0.3	J1	GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Lithium	0.0820	mg/L	5	0.0015	0.0004		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Manganese	0.118	mg/L	5	0.0050	0.0005		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Mercury	6	ng/L	10	5	2		JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	<0.3	µg/L	5	2.5	0.3	U1	GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Selenium	7.5	µg/L	5	2.5	0.2		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Thallium	0.1	µg/L	5	1.0	0.1	J1	GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-3
Lab Number: 252402-002
Date Collected: 09/09/2025 12:21 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Arsenic	0.84	µg/L	1	0.10	0.03		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Barium	63.4	µg/L	1	0.20	0.05		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Beryllium	0.19	µg/L	1	0.05	0.02		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Boron	0.045	mg/L	1	0.050	0.006	J1	GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Cadmium	0.014	µg/L	1	0.020	0.004	J1	GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Calcium	4.48	mg/L	1	0.10	0.02		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Chromium	0.61	µg/L	1	0.30	0.07		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Cobalt	4.68	µg/L	1	0.03	0.01		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Lead	0.38	µg/L	1	0.20	0.05		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Lithium	0.0564	mg/L	1	0.00030	0.00007		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Magnesium	2.53	mg/L	1	0.10	0.01		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Mercury	5	ng/L	10	5	2		JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	0.07	µg/L	1	0.50	0.05	J1	GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Potassium	2.58	mg/L	1	0.10	0.02		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Selenium	0.06	µg/L	1	0.50	0.04	J1	GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Sodium	9.75	mg/L	1	0.20	0.02		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Strontium	0.0300	mg/L	1	0.00200	0.00006		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Thallium	0.04	µg/L	1	0.20	0.02	J1	GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	2.24	pCi/L	0.36	0.33		TTP	09/19/2025 09:46	SW-846 9315-1986, Rev. 0
Carrier Recovery	83.0	%						
Radium-228	1.30	pCi/L	0.15	0.43	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	88.7	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-3 Dissolved
Customer Description:
Lab Number: 252402-002-01
Preparation: Dissolved
Date Collected: 09/09/2025 12:21 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Arsenic	0.25	µg/L	1	0.10	0.03		GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Barium	64.1	µg/L	1	0.20	0.05		GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Beryllium	0.17	µg/L	1	0.05	0.02		GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Cadmium	0.014	µg/L	1	0.020	0.004	J1	GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Chromium	0.40	µg/L	1	0.30	0.07		GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Cobalt	4.76	µg/L	1	0.03	0.01		GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Iron	3.49	mg/L	1	0.020	0.003		GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Lithium	0.0584	mg/L	1	0.00030	0.00007		GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Manganese	0.0633	mg/L	1	0.0010	0.0001		GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Mercury	3	ng/L	10	5	2	J1	JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Selenium	0.05	µg/L	1	0.50	0.04	J1	GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Thallium	0.04	µg/L	1	0.20	0.02	J1	GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-4
Lab Number: 252402-003
Date Collected: 09/10/2025 11:03 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Arsenic	1.95	µg/L	1	0.10	0.03		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Barium	114	µg/L	1	0.20	0.05		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Beryllium	0.25	µg/L	1	0.05	0.02		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Boron	0.013	mg/L	1	0.050	0.006	J1	GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Cadmium	0.020	µg/L	1	0.020	0.004		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Calcium	2.21	mg/L	1	0.10	0.02		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Chromium	0.55	µg/L	1	0.30	0.07		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Cobalt	3.26	µg/L	1	0.03	0.01		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Lead	0.30	µg/L	1	0.20	0.05		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Lithium	0.0236	mg/L	1	0.00030	0.00007		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Magnesium	0.59	mg/L	1	0.10	0.01		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Mercury	9	ng/L	10	5	2		JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Potassium	2.08	mg/L	1	0.10	0.02		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Selenium	0.09	µg/L	1	0.50	0.04	J1	GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Sodium	6.25	mg/L	1	0.20	0.02		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Strontium	0.0176	mg/L	1	0.00200	0.00006		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Thallium	0.09	µg/L	1	0.20	0.02	J1	GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.47	pCi/L	0.14	0.29		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	59.5	%						
Radium-228	1.28	pCi/L	0.16	0.50	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	83.9	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-4 Dissolved
Customer Description:
Lab Number: 252402-003-01
Preparation: Dissolved
Date Collected: 09/10/2025 11:03 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Arsenic	0.16	µg/L	1	0.10	0.03		GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Barium	113	µg/L	1	0.20	0.05		GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Beryllium	0.21	µg/L	1	0.05	0.02		GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Cadmium	0.019	µg/L	1	0.020	0.004	J1	GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Chromium	0.45	µg/L	1	0.30	0.07		GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Cobalt	3.40	µg/L	1	0.03	0.01		GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Iron	3.08	mg/L	1	0.020	0.003		GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Lead	0.05	µg/L	1	0.20	0.05	J1	GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Lithium	0.0229	mg/L	1	0.00030	0.00007		GES	09/24/2025 10:06	EPA 200.8-1994, Rev. 5.4
Manganese	0.0308	mg/L	1	0.0010	0.0001		GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	10	5	2	U1	JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Selenium	0.05	µg/L	1	0.50	0.04	J1	GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Thallium	0.09	µg/L	1	0.20	0.02	J1	GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-7R
Lab Number: 252402-004
Date Collected: 09/08/2025 10:36 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Arsenic	0.99	µg/L	1	0.10	0.03		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Barium	60.1	µg/L	1	0.20	0.05		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Beryllium	1.35	µg/L	1	0.05	0.02		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Boron	0.566	mg/L	1	0.050	0.006		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Cadmium	0.336	µg/L	1	0.020	0.004		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Calcium	2.46	mg/L	1	0.10	0.02		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Chromium	0.27	µg/L	1	0.30	0.07	J1	GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Cobalt	15.2	µg/L	1	0.03	0.01		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Lead	0.22	µg/L	1	0.20	0.05		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Lithium	0.0358	mg/L	1	0.00030	0.00007		GES	09/24/2025 10:12	EPA 200.8-1994, Rev. 5.4
Magnesium	4.54	mg/L	1	0.10	0.01		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Mercury	101	ng/L	20	10	4		JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Potassium	1.45	mg/L	1	0.10	0.02		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Selenium	4.10	µg/L	1	0.50	0.04		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Sodium	20.2	mg/L	1	0.20	0.02		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Strontium	0.0301	mg/L	1	0.00200	0.00006		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Thallium	0.13	µg/L	1	0.20	0.02	J1	GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	2.64	pCi/L	0.27	0.24		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	91.8	%						
Radium-228	2.15	pCi/L	0.15	0.40	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	89.4	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-7R Dissolved
Customer Description:
Lab Number: 252402-004-01
Preparation: Dissolved
Date Collected: 09/08/2025 10:36 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Arsenic	1.02	µg/L	1	0.10	0.03		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Barium	60.2	µg/L	1	0.20	0.05		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Beryllium	1.29	µg/L	1	0.05	0.02		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Cadmium	0.346	µg/L	1	0.020	0.004		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Chromium	0.27	µg/L	1	0.30	0.07	J1	GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Cobalt	15.5	µg/L	1	0.03	0.01		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Iron	1.25	mg/L	1	0.020	0.003		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Lead	0.23	µg/L	1	0.20	0.05		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Lithium	0.0362	mg/L	1	0.00030	0.00007		GES	09/24/2025 10:17	EPA 200.8-1994, Rev. 5.4
Manganese	0.0389	mg/L	1	0.0010	0.0001		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Mercury	18	ng/L	10	5	2		JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Selenium	4.18	µg/L	1	0.50	0.04		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Thallium	0.12	µg/L	1	0.20	0.02	J1	GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-8
Customer Description:
Lab Number: 252402-005
Preparation:
Date Collected: 09/09/2025 10:45 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	1.06	mg/L	1	0.050	0.006		GES	09/22/2025 16:06	EPA 200.8-1994, Rev. 5.4
Calcium	66.0	mg/L	1	0.10	0.02		GES	09/22/2025 16:06	EPA 200.8-1994, Rev. 5.4
Magnesium	4.72	mg/L	1	0.10	0.01		GES	09/22/2025 16:06	EPA 200.8-1994, Rev. 5.4
Potassium	1.71	mg/L	1	0.10	0.02		GES	09/22/2025 16:06	EPA 200.8-1994, Rev. 5.4
Sodium	8.08	mg/L	1	0.20	0.02		GES	09/22/2025 16:06	EPA 200.8-1994, Rev. 5.4
Strontium	0.398	mg/L	1	0.00200	0.00006		GES	09/22/2025 16:06	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-12
Lab Number: 252402-006
Date Collected: 09/08/2025 10:38 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Arsenic	0.09	µg/L	1	0.10	0.03	J1	GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Barium	17.2	µg/L	1	0.20	0.05		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Beryllium	0.12	µg/L	1	0.05	0.02		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Boron	0.081	mg/L	1	0.050	0.006		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Cadmium	0.006	µg/L	1	0.020	0.004	J1	GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Calcium	0.18	mg/L	1	0.10	0.02		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Chromium	0.81	µg/L	1	0.30	0.07		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Cobalt	0.95	µg/L	1	0.03	0.01		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Lead	0.10	µg/L	1	0.20	0.05	J1	GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Lithium	0.00589	mg/L	1	0.00030	0.00007		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Magnesium	0.30	mg/L	1	0.10	0.01		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Mercury	5	ng/L	10	5	2		JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Potassium	0.16	mg/L	1	0.10	0.02		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Selenium	0.20	µg/L	1	0.50	0.04	J1	GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Sodium	3.41	mg/L	1	0.20	0.02		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Strontium	0.00169	mg/L	1	0.00200	0.00006	J1	GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Thallium	0.02	µg/L	1	0.20	0.02	J1	GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.13	pCi/L	0.16	0.15		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	112	%						
Radium-228	0.77	pCi/L	0.15	0.48	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	80.2	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-12 Dissolved
Customer Description:
Lab Number: 252402-006-01
Preparation: Dissolved
Date Collected: 09/08/2025 10:38 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Arsenic	0.05	µg/L	1	0.10	0.03	J1	GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Barium	17.2	µg/L	1	0.20	0.05		GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Beryllium	0.12	µg/L	1	0.05	0.02		GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Cadmium	0.006	µg/L	1	0.020	0.004	J1	GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Chromium	0.40	µg/L	1	0.30	0.07		GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Cobalt	1.10	µg/L	1	0.03	0.01		GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Iron	0.016	mg/L	1	0.020	0.003	J1	GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Lead	0.06	µg/L	1	0.20	0.05	J1	GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Lithium	0.00583	mg/L	1	0.00030	0.00007		GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Manganese	0.0027	mg/L	1	0.0010	0.0001		GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Mercury	3	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Selenium	0.20	µg/L	1	0.50	0.04	J1	GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-13
Lab Number: 252402-007
Date Collected: 09/08/2025 09:32 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Arsenic	1.85	µg/L	1	0.10	0.03		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Barium	36.8	µg/L	1	0.20	0.05		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Beryllium	0.14	µg/L	1	0.05	0.02		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Boron	0.058	mg/L	1	0.050	0.006		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Calcium	6.11	mg/L	1	0.10	0.02		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Chromium	0.27	µg/L	1	0.30	0.07	J1	GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Cobalt	34.8	µg/L	1	0.03	0.01		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Lithium	0.140	mg/L	20	0.006	0.001		GES	09/22/2025 10:51	EPA 200.8-1994, Rev. 5.4
Magnesium	8.69	mg/L	1	0.10	0.01		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Mercury	3	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Potassium	4.33	mg/L	1	0.10	0.02		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Sodium	13.6	mg/L	1	0.20	0.02		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Strontium	0.0320	mg/L	1	0.00200	0.00006		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.60	pCi/L	0.21	0.19		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	93.1	%						
Radium-228	1.40	pCi/L	0.17	0.50	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	86.6	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-13 Dissolved
Lab Number: 252402-007-01
Date Collected: 09/08/2025 09:32 EDT

Customer Description:
Preparation: Dissolved
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Arsenic	1.53	µg/L	1	0.10	0.03		GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Barium	36.1	µg/L	1	0.20	0.05		GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Beryllium	0.13	µg/L	1	0.05	0.02		GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Chromium	0.25	µg/L	1	0.30	0.07	J1	GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Cobalt	34.4	µg/L	1	0.03	0.01		GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Iron	28.3	mg/L	1	0.020	0.003		GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Lithium	0.140	mg/L	20	0.006	0.001		GES	09/22/2025 10:57	EPA 200.8-1994, Rev. 5.4
Manganese	0.279	mg/L	1	0.0010	0.0001		GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Mercury	2	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-16
Lab Number: 252402-008
Date Collected: 09/10/2025 12:05 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.019	mg/L	1	0.050	0.006	J1	GES	09/18/2025 11:10	EPA 200.8-1994, Rev. 5.4
Calcium	1.02	mg/L	1	0.10	0.02		GES	09/18/2025 11:10	EPA 200.8-1994, Rev. 5.4
Magnesium	1.98	mg/L	1	0.10	0.01		GES	09/18/2025 11:10	EPA 200.8-1994, Rev. 5.4
Potassium	1.18	mg/L	1	0.10	0.02		GES	09/18/2025 11:10	EPA 200.8-1994, Rev. 5.4
Sodium	16.6	mg/L	1	0.20	0.02		GES	09/18/2025 11:10	EPA 200.8-1994, Rev. 5.4
Strontium	0.0127	mg/L	1	0.00200	0.00006		GES	09/18/2025 11:10	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-17
Lab Number: 252402-009
Date Collected: 09/09/2025 11:25 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.02	µg/L	1	0.10	0.02	J1	GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Arsenic	0.12	µg/L	1	0.10	0.03		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Barium	128	µg/L	1	0.20	0.05		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Beryllium	0.37	µg/L	1	0.05	0.02		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Boron	0.040	mg/L	1	0.050	0.006	J1	GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Cadmium	0.032	µg/L	1	0.020	0.004		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Calcium	0.35	mg/L	1	0.10	0.02		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Chromium	0.45	µg/L	1	0.30	0.07		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Cobalt	5.68	µg/L	1	0.03	0.01		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Lead	0.06	µg/L	1	0.20	0.05	J1	GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Lithium	0.0167	mg/L	1	0.00030	0.00007		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Magnesium	1.98	mg/L	1	0.10	0.01		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Mercury	123	ng/L	10	5	2		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Potassium	0.49	mg/L	1	0.10	0.02		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Selenium	0.35	µg/L	1	0.50	0.04	J1	GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Sodium	7.33	mg/L	1	0.20	0.02		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Strontium	0.00784	mg/L	1	0.00200	0.00006		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Thallium	0.02	µg/L	1	0.20	0.02	J1	GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.80	pCi/L	0.22	0.23		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	92.5	%						
Radium-228	1.79	pCi/L	0.16	0.44	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	94.6	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-17 Dissolved
Customer Description:
Lab Number: 252402-009-01
Preparation: Dissolved
Date Collected: 09/09/2025 11:25 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Arsenic	0.10	µg/L	1	0.10	0.03		GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Barium	136	µg/L	1	0.20	0.05		GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Beryllium	0.38	µg/L	1	0.05	0.02		GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Cadmium	0.034	µg/L	1	0.020	0.004		GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Chromium	0.36	µg/L	1	0.30	0.07		GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Cobalt	6.05	µg/L	1	0.03	0.01		GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Iron	0.014	mg/L	1	0.020	0.003	J1	GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Lead	0.06	µg/L	1	0.20	0.05	J1	GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Lithium	0.0170	mg/L	1	0.00030	0.00007		GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Manganese	0.0144	mg/L	1	0.0010	0.0001		GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Mercury	2	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Selenium	0.34	µg/L	1	0.50	0.04	J1	GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Thallium	0.02	µg/L	1	0.20	0.02	J1	GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-18
Lab Number: 252402-010
Date Collected: 09/10/2025 09:42 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.04	µg/L	1	0.10	0.02	J1	GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Arsenic	2.87	µg/L	1	0.10	0.03		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Barium	87.7	µg/L	1	0.20	0.05		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Beryllium	0.11	µg/L	1	0.05	0.02		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Boron	0.015	mg/L	1	0.050	0.006	J1	GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Cadmium	0.012	µg/L	1	0.020	0.004	J1	GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Calcium	0.23	mg/L	1	0.10	0.02		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Chromium	3.43	µg/L	1	0.30	0.07		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Cobalt	1.04	µg/L	1	0.03	0.01		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Lead	1.47	µg/L	1	0.20	0.05		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Lithium	0.0151	mg/L	1	0.00030	0.00007		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Magnesium	0.41	mg/L	1	0.10	0.01		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Mercury	32	ng/L	10	5	2		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	0.12	µg/L	1	0.50	0.05	J1	GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Potassium	0.83	mg/L	1	0.10	0.02		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Selenium	0.87	µg/L	1	0.50	0.04		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Sodium	4.96	mg/L	1	0.20	0.02		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Strontium	0.00645	mg/L	1	0.00200	0.00006		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Thallium	0.06	µg/L	1	0.20	0.02	J1	GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.06	pCi/L	0.13	0.11	R2	TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	137	%						
Radium-228	1.24	pCi/L	0.17	0.53	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	90.2	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-18 Dissolved
Customer Description: PK_AD18
Lab Number: 252402-010-01
Preparation: Dissolved
Date Collected: 09/10/2025 09:42 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Arsenic	0.05	µg/L	1	0.10	0.03	J1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Barium	76.9	µg/L	1	0.20	0.05		GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Beryllium	0.07	µg/L	1	0.05	0.02		GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Cadmium	0.010	µg/L	1	0.020	0.004	J1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Chromium	0.24	µg/L	1	0.30	0.07	J1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Cobalt	0.89	µg/L	1	0.03	0.01		GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Iron	0.010	mg/L	1	0.020	0.003	J1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Lithium	0.0159	mg/L	1	0.00030	0.00007		GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Manganese	0.0029	mg/L	1	0.0010	0.0001		GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Mercury	3	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Selenium	0.07	µg/L	1	0.50	0.04	J1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-22
Lab Number: 252402-011
Date Collected: 09/08/2025 11:20 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Arsenic	0.80	µg/L	1	0.10	0.03		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Barium	17.3	µg/L	1	0.20	0.05		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Beryllium	1.81	µg/L	1	0.05	0.02		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Boron	0.023	mg/L	1	0.050	0.006	J1	GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Cadmium	0.465	µg/L	1	0.020	0.004		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Calcium	9.16	mg/L	1	0.10	0.02		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Chromium	0.54	µg/L	1	0.30	0.07		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Cobalt	54.0	µg/L	1	0.03	0.01		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Lead	0.08	µg/L	1	0.20	0.05	J1	GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Lithium	0.101	mg/L	20	0.006	0.001		GES	09/22/2025 11:16	EPA 200.8-1994, Rev. 5.4
Magnesium	13.1	mg/L	1	0.10	0.01		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Mercury	100	ng/L	100	50	20		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Potassium	2.99	mg/L	1	0.10	0.02		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Selenium	2.61	µg/L	1	0.50	0.04		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Sodium	84.4	mg/L	1	0.20	0.02		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Strontium	0.0761	mg/L	1	0.00200	0.00006		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Thallium	0.13	µg/L	1	0.20	0.02	J1	GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.04	pCi/L	0.16	0.17		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	93.2	%						
Radium-228	1.56	pCi/L	0.20	0.62	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	86.2	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-22 Dissolved
Customer Description:
Lab Number: 252402-011-01
Preparation: Dissolved
Date Collected: 09/08/2025 11:20 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Arsenic	0.82	µg/L	1	0.10	0.03		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Barium	17.7	µg/L	1	0.20	0.05		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Beryllium	1.69	µg/L	1	0.05	0.02		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Cadmium	0.450	µg/L	1	0.020	0.004		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Chromium	0.53	µg/L	1	0.30	0.07		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Cobalt	58.7	µg/L	1	0.03	0.01		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Iron	26.6	mg/L	1	0.020	0.003		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Lead	0.08	µg/L	1	0.20	0.05	J1	GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Lithium	0.109	mg/L	20	0.006	0.001		GES	09/22/2025 11:22	EPA 200.8-1994, Rev. 5.4
Manganese	0.290	mg/L	1	0.0010	0.0001		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Mercury	23	ng/L	10	5	2		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Selenium	2.51	µg/L	1	0.50	0.04		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Thallium	0.13	µg/L	1	0.20	0.02	J1	GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-23
Customer Description:
Lab Number: 252402-012
Preparation:
Date Collected: 09/10/2025 12:23 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.525	mg/L	1	0.050	0.006		GES	09/18/2025 12:54	EPA 200.8-1994, Rev. 5.4
Calcium	0.19	mg/L	1	0.10	0.02		GES	09/18/2025 12:54	EPA 200.8-1994, Rev. 5.4
Magnesium	0.17	mg/L	1	0.10	0.01		GES	09/18/2025 12:54	EPA 200.8-1994, Rev. 5.4
Potassium	2.96	mg/L	1	0.10	0.02		GES	09/18/2025 12:54	EPA 200.8-1994, Rev. 5.4
Sodium	5.90	mg/L	1	0.20	0.02		GES	09/18/2025 12:54	EPA 200.8-1994, Rev. 5.4
Strontium	0.00190	mg/L	1	0.00200	0.00006	J1	GES	09/18/2025 12:54	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
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Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-27
Customer Description:
Lab Number: 252402-013
Preparation:
Date Collected: 09/10/2025 09:25 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.137	mg/L	1	0.050	0.006		GES	09/18/2025 13:00	EPA 200.8-1994, Rev. 5.4
Calcium	3.96	mg/L	1	0.10	0.02		GES	09/18/2025 13:00	EPA 200.8-1994, Rev. 5.4
Magnesium	5.09	mg/L	1	0.10	0.01		GES	09/18/2025 13:00	EPA 200.8-1994, Rev. 5.4
Potassium	2.06	mg/L	1	0.10	0.02		GES	09/18/2025 13:00	EPA 200.8-1994, Rev. 5.4
Sodium	11.9	mg/L	1	0.20	0.02		GES	09/18/2025 13:00	EPA 200.8-1994, Rev. 5.4
Strontium	0.0598	mg/L	1	0.00200	0.00006		GES	09/18/2025 13:00	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-28	Customer Description:
Lab Number: 252402-014	Preparation:
Date Collected: 09/09/2025 10:29 EDT	Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.14	µg/L	1	0.10	0.02		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Arsenic	0.23	µg/L	1	0.10	0.03		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Barium	125	µg/L	1	0.20	0.05		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Beryllium	0.53	µg/L	1	0.05	0.02		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Boron	0.327	mg/L	1	0.050	0.006		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Cadmium	0.051	µg/L	1	0.020	0.004		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Calcium	1.54	mg/L	1	0.10	0.02		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Chromium	0.62	µg/L	1	0.30	0.07		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Cobalt	13.7	µg/L	1	0.03	0.01		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Lead	0.20	µg/L	1	0.20	0.05		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Lithium	0.0289	mg/L	1	0.00030	0.00007		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Magnesium	3.06	mg/L	1	0.10	0.01		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Mercury	21	ng/L	10	5	2		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Potassium	0.82	mg/L	1	0.10	0.02		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Selenium	0.25	µg/L	1	0.50	0.04	J1	GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Sodium	5.93	mg/L	1	0.20	0.02		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Strontium	0.0213	mg/L	1	0.00200	0.00006		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.26	pCi/L	0.18	0.17		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	94.7	%						
Radium-228	1.94	pCi/L	0.19	0.56	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	86.9	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-28 Dissolved
Customer Description: PK_AD28
Lab Number: 252402-014-01
Preparation: Dissolved
Date Collected: 09/09/2025 10:29 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.02	µg/L	1	0.10	0.02	J1	GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Arsenic	0.08	µg/L	1	0.10	0.03	J1	GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Barium	125	µg/L	1	0.20	0.05		GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Beryllium	0.54	µg/L	1	0.05	0.02		GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Cadmium	0.057	µg/L	1	0.020	0.004		GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Chromium	0.38	µg/L	1	0.30	0.07		GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Cobalt	13.9	µg/L	1	0.03	0.01		GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Iron	0.045	mg/L	1	0.020	0.003		GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Lead	0.12	µg/L	1	0.20	0.05	J1	GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Lithium	0.0290	mg/L	1	0.00030	0.00007		GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Manganese	0.0545	mg/L	1	0.0010	0.0001		GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Mercury	8	ng/L	10	5	2		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Selenium	0.20	µg/L	1	0.50	0.04	J1	GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-30
Lab Number: 252402-015
Date Collected: 09/09/2025 09:44 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Arsenic	0.13	µg/L	1	0.10	0.03		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Barium	51.8	µg/L	1	0.20	0.05		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Beryllium	0.07	µg/L	1	0.05	0.02		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Boron	1.18	mg/L	1	0.050	0.006		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Cadmium	0.006	µg/L	1	0.020	0.004	J1	GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Calcium	0.50	mg/L	1	0.10	0.02		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Chromium	0.52	µg/L	1	0.30	0.07		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Cobalt	3.15	µg/L	1	0.03	0.01		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Lithium	0.0117	mg/L	1	0.00030	0.00007		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Magnesium	1.62	mg/L	1	0.10	0.01		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Mercury	16	ng/L	20	10	4		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Potassium	0.76	mg/L	1	0.10	0.02		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Selenium	0.26	µg/L	1	0.50	0.04	J1	GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Sodium	51.0	mg/L	1	0.20	0.02	M1	GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Strontium	0.00695	mg/L	1	0.00200	0.00006		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	17.30	pCi/L	0.88	0.30		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	75.0	%						
Radium-228	1.04	pCi/L	0.14	0.41	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	90.9	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-30 Dissolved
Customer Description: PK_AD30
Lab Number: 252402-015-01
Preparation: Dissolved
Date Collected: 09/09/2025 09:44 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Arsenic	0.09	µg/L	1	0.10	0.03	J1	GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Barium	45.0	µg/L	1	0.20	0.05		GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Beryllium	0.07	µg/L	1	0.05	0.02		GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Cadmium	0.006	µg/L	1	0.020	0.004	J1	GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Chromium	0.55	µg/L	1	0.30	0.07		GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Cobalt	3.02	µg/L	1	0.03	0.01		GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Iron	0.087	mg/L	1	0.020	0.003		GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Lithium	0.0115	mg/L	1	0.00030	0.00007		GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Manganese	0.0140	mg/L	1	0.0010	0.0001		GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Mercury	3	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Selenium	0.24	µg/L	1	0.50	0.04	J1	GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Thallium	0.07	µg/L	1	0.20	0.02	J1	GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
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Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-31
Lab Number: 252402-016
Date Collected: 09/08/2025 12:31 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.10	µg/L	1	0.10	0.02		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Arsenic	1.26	µg/L	1	0.10	0.03		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Barium	36.5	µg/L	1	0.20	0.05		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Beryllium	0.75	µg/L	1	0.05	0.02	M1	GES	09/29/2025 14:01	EPA 200.8-1994, Rev. 5.4
Boron	0.023	mg/L	1	0.050	0.006	J1	GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Cadmium	0.054	µg/L	1	0.020	0.004		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Calcium	2.09	mg/L	1	0.10	0.02		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Chromium	2.24	µg/L	1	0.30	0.07		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Cobalt	8.06	µg/L	1	0.03	0.01		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Lead	1.07	µg/L	1	0.20	0.05		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Lithium	0.0894	mg/L	10	0.0030	0.0007		GES	09/22/2025 22:17	EPA 200.8-1994, Rev. 5.4
Magnesium	3.03	mg/L	1	0.10	0.01		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Mercury	610	ng/L	100	50	20		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	0.06	µg/L	1	0.50	0.05	J1	GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Potassium	1.62	mg/L	1	0.10	0.02		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Selenium	0.85	µg/L	1	0.50	0.04		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Sodium	26.4	mg/L	1	0.20	0.02	M1	GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Strontium	0.0311	mg/L	1	0.00200	0.00006		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Thallium	0.10	µg/L	1	0.20	0.02	J1	GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	2.91	pCi/L	0.26	0.11		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	111	%						
Radium-228	1.71	pCi/L	0.17	0.51	L1, P2	TTP	09/29/2025 16:28	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	86.8	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-31 Dissolved
Customer Description: PK_AD31
Lab Number: 252402-016-01
Preparation: Dissolved
Date Collected: 09/08/2025 12:31 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.02	µg/L	1	0.10	0.02	J1	GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Arsenic	0.19	µg/L	1	0.10	0.03		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Barium	28.3	µg/L	1	0.20	0.05		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Beryllium	0.74	µg/L	1	0.05	0.02	M1	GES	09/29/2025 15:12	EPA 200.8-1994, Rev. 5.4
Cadmium	0.054	µg/L	1	0.020	0.004		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Chromium	0.41	µg/L	1	0.30	0.07		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Cobalt	7.98	µg/L	1	0.03	0.01		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Iron	0.151	mg/L	1	0.020	0.003		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Lead	0.30	µg/L	1	0.20	0.05		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Lithium	0.0882	mg/L	10	0.0030	0.0007		GES	09/22/2025 22:34	EPA 200.8-1994, Rev. 5.4
Manganese	0.0215	mg/L	1	0.0010	0.0001		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Mercury	3	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	0.06	µg/L	1	0.50	0.05	J1	GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Selenium	0.50	µg/L	1	0.50	0.04		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Thallium	0.12	µg/L	1	0.20	0.02	J1	GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-32
Lab Number: 252402-017
Date Collected: 09/08/2025 11:36 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.11	µg/L	1	0.10	0.02		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Arsenic	9.77	µg/L	1	0.10	0.03		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Barium	46.0	µg/L	1	0.20	0.05		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Beryllium	0.07	µg/L	1	0.05	0.02		GES	09/29/2025 15:28	EPA 200.8-1994, Rev. 5.4
Boron	0.081	mg/L	1	0.050	0.006		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Calcium	6.03	mg/L	1	0.10	0.02		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Chromium	0.39	µg/L	1	0.30	0.07		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Cobalt	14.4	µg/L	1	0.03	0.01		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Lead	0.08	µg/L	1	0.20	0.05	J1	GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Lithium	0.0629	mg/L	1	0.00030	0.00007		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Magnesium	6.50	mg/L	1	0.10	0.01		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Mercury	2480	ng/L	100	50	20		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	0.09	µg/L	1	0.50	0.05	J1	GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Potassium	3.13	mg/L	1	0.10	0.02		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Selenium	0.17	µg/L	1	0.50	0.04	J1	GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Sodium	14.7	mg/L	1	0.20	0.02		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Strontium	0.0720	mg/L	1	0.00200	0.00006		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Thallium	0.08	µg/L	1	0.20	0.02	J1	GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.42	pCi/L	0.10	0.17		ST	10/10/2025 11:15	SW-846 9315-1986, Rev. 0
Carrier Recovery	81.8	%						
Radium-228	1.02	pCi/L	0.16	0.51	L1, P2	TTP	09/29/2025 16:28	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	90.0	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

AMERICAN ELECTRIC POWER

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Water Analysis Report

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-32 Dissolved
Customer Description: PK_AD32
Lab Number: 252402-017-01
Preparation: Dissolved
Date Collected: 09/08/2025 11:36 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Arsenic	3.99	µg/L	1	0.10	0.03		GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Barium	44.4	µg/L	1	0.20	0.05		GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Beryllium	0.04	µg/L	1	0.05	0.02	J1	GES	09/29/2025 15:33	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Chromium	0.60	µg/L	1	0.30	0.07		GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Cobalt	14.7	µg/L	1	0.03	0.01		GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Iron	19.0	mg/L	1	0.020	0.003		GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Lithium	0.0646	mg/L	1	0.00030	0.00007		GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Manganese	0.131	mg/L	1	0.0010	0.0001		GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Mercury	4	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Selenium	0.05	µg/L	1	0.50	0.04	J1	GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Thallium	0.05	µg/L	1	0.20	0.02	J1	GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
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Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-33
Lab Number: 252402-018
Date Collected: 09/08/2025 12:23 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Arsenic	0.93	µg/L	1	0.10	0.03		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Barium	40.9	µg/L	1	0.20	0.05		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Beryllium	1.23	µg/L	1	0.05	0.02		GES	09/29/2025 15:39	EPA 200.8-1994, Rev. 5.4
Boron	0.135	mg/L	1	0.050	0.006		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Cadmium	0.052	µg/L	1	0.020	0.004		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Calcium	1.69	mg/L	1	0.10	0.02		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Chromium	0.28	µg/L	1	0.30	0.07	J1	GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Cobalt	10.0	µg/L	1	0.03	0.01		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Lead	0.31	µg/L	1	0.20	0.05		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Lithium	0.0212	mg/L	1	0.00030	0.00007		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Magnesium	3.86	mg/L	1	0.10	0.01		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Mercury	6000	ng/L	1000	500	200		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Potassium	0.28	mg/L	1	0.10	0.02		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Selenium	3.79	µg/L	1	0.50	0.04		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Sodium	16.1	mg/L	1	0.20	0.02		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Strontium	0.0297	mg/L	1	0.00200	0.00006		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Thallium	0.05	µg/L	1	0.20	0.02	J1	GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.42	pCi/L	0.10	0.19		ST	10/10/2025 11:15	SW-846 9315-1986, Rev. 0
Carrier Recovery	93.6	%						
Radium-228	1.37	pCi/L	0.15	0.44	L1, P2	TTP	09/29/2025 16:28	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	88.5	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

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Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-33 Dissolved
Customer Description: PK_AD33
Lab Number: 252402-018-01
Preparation: Dissolved
Date Collected: 09/08/2025 12:23 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Arsenic	0.93	µg/L	1	0.10	0.03		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Barium	41.0	µg/L	1	0.20	0.05		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Beryllium	1.22	µg/L	1	0.05	0.02		GES	09/29/2025 15:44	EPA 200.8-1994, Rev. 5.4
Cadmium	0.055	µg/L	1	0.020	0.004		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Chromium	0.39	µg/L	1	0.30	0.07		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Cobalt	10.4	µg/L	1	0.03	0.01		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Iron	0.012	mg/L	1	0.020	0.003	J1	GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Lead	0.32	µg/L	1	0.20	0.05		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Lithium	0.0212	mg/L	1	0.00030	0.00007		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Magnesium	3.98	mg/L	1	0.10	0.01		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Manganese	0.0063	mg/L	1	0.0010	0.0001		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Mercury	210	ng/L	50	30	10		JLD	10/07/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Selenium	4.00	µg/L	1	0.50	0.04		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Thallium	0.04	µg/L	1	0.20	0.02	J1	GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-34
Customer Description:
Lab Number: 252402-019
Preparation:
Date Collected: 09/09/2025 09:14 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.063	mg/L	1	0.050	0.006		GES	09/22/2025 18:50	EPA 200.8-1994, Rev. 5.4
Calcium	39.2	mg/L	1	0.10	0.02		GES	09/22/2025 18:50	EPA 200.8-1994, Rev. 5.4
Magnesium	34.2	mg/L	1	0.10	0.01		GES	09/22/2025 18:50	EPA 200.8-1994, Rev. 5.4
Potassium	7.19	mg/L	1	0.10	0.02		GES	09/22/2025 18:50	EPA 200.8-1994, Rev. 5.4
Sodium	14.6	mg/L	1	0.20	0.02		GES	09/22/2025 18:50	EPA 200.8-1994, Rev. 5.4
Strontium	0.407	mg/L	1	0.00200	0.00006		GES	09/22/2025 18:50	EPA 200.8-1994, Rev. 5.4

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Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-36
Lab Number: 252402-020
Date Collected: 09/09/2025 09:57 EDT
Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.099	mg/L	1	0.050	0.006		GES	09/22/2025 18:55	EPA 200.8-1994, Rev. 5.4
Calcium	1.43	mg/L	1	0.10	0.02		GES	09/22/2025 18:55	EPA 200.8-1994, Rev. 5.4
Magnesium	2.80	mg/L	1	0.10	0.01		GES	09/22/2025 18:55	EPA 200.8-1994, Rev. 5.4
Potassium	1.93	mg/L	1	0.10	0.02		GES	09/22/2025 18:55	EPA 200.8-1994, Rev. 5.4
Sodium	7.26	mg/L	1	0.20	0.02		GES	09/22/2025 18:55	EPA 200.8-1994, Rev. 5.4
Strontium	0.0147	mg/L	1	0.00200	0.00006		GES	09/22/2025 18:55	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: Duplicate
Lab Number: 252402-021
Date Collected: 09/08/2025 13:00 EDT
Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Arsenic	1.85	µg/L	1	0.10	0.03		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Barium	35.4	µg/L	1	0.20	0.05		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Beryllium	0.15	µg/L	1	0.05	0.02		GES	09/29/2025 15:50	EPA 200.8-1994, Rev. 5.4
Boron	0.048	mg/L	1	0.050	0.006	J1	GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Calcium	5.68	mg/L	1	0.10	0.02		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Chromium	0.30	µg/L	1	0.30	0.07		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Cobalt	33.7	µg/L	1	0.03	0.01		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Lithium	0.101	mg/L	1	0.00030	0.00007		GES	09/24/2025 10:23	EPA 200.8-1994, Rev. 5.4
Magnesium	8.29	mg/L	1	0.10	0.01		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Mercury	3	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Potassium	4.16	mg/L	1	0.10	0.02		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Sodium	13.5	mg/L	1	0.20	0.02		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Strontium	0.0307	mg/L	1	0.00200	0.00006		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
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Water Analysis Report

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: Duplicate Dissolved
Customer Description: PK_DUP
Lab Number: 252402-021-01
Preparation: Dissolved
Date Collected: 09/08/2025 13:00 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Arsenic	1.55	µg/L	1	0.10	0.03		GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Barium	35.1	µg/L	1	0.20	0.05		GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Beryllium	0.13	µg/L	1	0.05	0.02		GES	09/29/2025 15:55	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Chromium	0.32	µg/L	1	0.30	0.07		GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Cobalt	34.2	µg/L	1	0.03	0.01		GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Iron	28.3	mg/L	1	0.020	0.003		GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Lithium	0.101	mg/L	1	0.00030	0.00007		GES	09/24/2025 10:28	EPA 200.8-1994, Rev. 5.4
Manganese	0.276	mg/L	1	0.0010	0.0001		GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Mercury	3	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: Equipment Blank
Customer Description:
Lab Number: 252402-022
Preparation:
Date Collected: 09/09/2025 10:20 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.03	µg/L	1	0.10	0.02	J1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Arsenic	<0.03	µg/L	1	0.10	0.03	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Barium	<0.05	µg/L	1	0.20	0.05	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Beryllium	<0.02	µg/L	1	0.05	0.02	U1	GES	09/29/2025 16:01	EPA 200.8-1994, Rev. 5.4
Boron	<0.006	mg/L	1	0.050	0.006	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Calcium	<0.02	mg/L	1	0.10	0.02	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Chromium	0.39	µg/L	1	0.30	0.07		GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Cobalt	0.01	µg/L	1	0.03	0.01	J1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Lithium	<0.00007	mg/L	1	0.00030	0.00007	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Magnesium	<0.01	mg/L	1	0.10	0.01	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	10	5	2	U1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Potassium	<0.02	mg/L	1	0.10	0.02	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Sodium	<0.02	mg/L	1	0.20	0.02	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Strontium	<0.00006	mg/L	1	0.00200	0.00006	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: Field Blank
Customer Description:
Lab Number: 252402-023
Preparation:
Date Collected: 09/09/2025 10:21 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.05	µg/L	1	0.10	0.02	J1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Arsenic	<0.03	µg/L	1	0.10	0.03	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Barium	<0.05	µg/L	1	0.20	0.05	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Beryllium	<0.02	µg/L	1	0.05	0.02	U1	GES	09/29/2025 16:06	EPA 200.8-1994, Rev. 5.4
Boron	<0.006	mg/L	1	0.050	0.006	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Calcium	0.03	mg/L	1	0.10	0.02	J1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Chromium	0.25	µg/L	1	0.30	0.07	J1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Cobalt	<0.01	µg/L	1	0.03	0.01	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Lithium	<0.00007	mg/L	1	0.00030	0.00007	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Magnesium	<0.01	mg/L	1	0.10	0.01	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	10	5	2	U1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Potassium	<0.02	mg/L	1	0.10	0.02	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Sodium	<0.02	mg/L	1	0.20	0.02	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Strontium	<0.00006	mg/L	1	0.00200	0.00006	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4

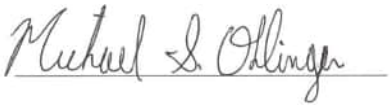
Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Report Verification

This report and the above data have been confirmed by the following analyst.



Michael Ohlinger, Chemist
Email: msohlinger@aep.com
Phone: 614-836-4184
Audinet: 8-210-4184

THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF THE LABORATORY. ALL TEST RESULTS MEET ALL OF THE REQUIREMENTS OF THE ACCREDITING AUTHORITY, UNLESS OTHERWISE NOTED. ALL TIMES LISTED ARE IN THE EASTERN TIME ZONE.

Data Qualifer Legend

U1 - Not detected at or below method detection limit (MDL).
J1 - Concentration estimated. Analyte was detected between the method detection limit and the reporting limit.
B1 - Analyte detected in method blank (MB) at or above the method criteria.
R2 - Carrier recovery was outside acceptance limits.
M1 - The associated matrix spike (MS) or matrix spike duplicate (MSD) recovery was outside acceptance limits.
L1 - The associated laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) recovery was outside acceptance limits.
P2 - The precision on the laboratory control sample duplicate (LCSD) was above acceptance limits.

Water Analysis Report

Reissued

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252978 **Customer: Pirkey Power Station** **Date Reported: 12/22/2025**

Customer Sample ID: Leachate **Customer Description:**
Lab Number: 252978-001 **Preparation:**
Date Collected: 11/17/2025 10:03 EST **Date Received: 11/20/2025 10:30 EST**

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	562	mg/L	50	1.5	0.5		JCF	11/21/2025 12:24	EPA 300.1 -1997, Rev. 1.0
Sulfate	2130	mg/L	50	15	1		JCF	11/21/2025 12:24	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Calcium	761	mg/L	50	5	1	Q5, M1	GES	12/02/2025 17:59	EPA 200.8-1994, Rev. 5.4
Magnesium	17.6	mg/L	50	5.0	0.5	Q5, M1	GES	12/02/2025 17:59	EPA 200.8-1994, Rev. 5.4
Potassium	127	mg/L	50	5	1	Q5, M1	GES	12/02/2025 17:59	EPA 200.8-1994, Rev. 5.4
Sodium	706	mg/L	50	10	1	Q5, M1	GES	12/02/2025 17:59	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	411	mg/L	1	20	5		MGK	11/24/2025 09:36	SM 2320B-2021
Bicarbonate Alkalinity	347	mg/L	1	20	5	Q14	MGK	11/24/2025 09:36	SM 4500 CO2D-2011

Customer Sample ID: Brine Pond **Customer Description:**
Lab Number: 252978-002 **Preparation:**
Date Collected: 11/17/2025 10:26 EST **Date Received: 11/20/2025 10:30 EST**

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	1230	mg/L	500	15	5		JCF	11/21/2025 13:32	EPA 300.1 -1997, Rev. 1.0
Sulfate	11700	mg/L	500	150	10		JCF	11/21/2025 13:32	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Calcium	241	mg/L	50	5	1	Q5, M1	GES	12/02/2025 18:16	EPA 200.8-1994, Rev. 5.4
Magnesium	145	mg/L	50	5.0	0.5	Q5, M1	GES	12/02/2025 18:16	EPA 200.8-1994, Rev. 5.4
Potassium	241	mg/L	50	5	1	Q5, M1	GES	12/02/2025 18:16	EPA 200.8-1994, Rev. 5.4
Sodium	5710	mg/L	50	10	1	Q5, M1	GES	12/02/2025 18:16	EPA 200.8-1994, Rev. 5.4

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	366	mg/L	1	20	5		MGK	11/24/2025 09:36	SM 2320B-2021
Bicarbonate Alkalinity	331	mg/L	1	20	5	Q14	MGK	11/24/2025 09:36	SM 4500 CO2D-2011

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Reissued

Job ID: 252978 **Customer: Pirkey Power Station** **Date Reported: 12/22/2025**

Customer Sample ID: AD-23
Customer Description:
Lab Number: 252978-003
Preparation:
Date Collected: 11/17/2025 11:32 EST
Date Received: 11/20/2025 10:30 EST

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Chloride	10.6	mg/L	2	0.06	0.02		JCF	11/21/2025 14:18	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.343	mg/L	1	0.050	0.006		GES	12/03/2025 14:59	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-36
Customer Description:
Lab Number: 252978-004
Preparation:
Date Collected: 11/17/2025 10:51 EST
Date Received: 11/20/2025 10:30 EST

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.84	mg/L	2	0.10	0.02		JCF	11/21/2025 14:41	EPA 300.1 -1997, Rev. 1.0
Chloride	19.5	mg/L	2	0.06	0.02		JCF	11/21/2025 14:41	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.10	mg/L	2	0.06	0.02		JCF	11/21/2025 14:41	EPA 300.1 -1997, Rev. 1.0
Sulfate	3.75	mg/L	2	0.60	0.04		JCF	11/21/2025 14:41	EPA 300.1 -1997, Rev. 1.0

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.114	mg/L	1	0.050	0.006		GES	12/03/2025 15:15	EPA 200.8-1994, Rev. 5.4
Calcium	1.20	mg/L	1	0.10	0.02		GES	12/03/2025 15:15	EPA 200.8-1994, Rev. 5.4

252978
Job Comments:

Original report issued 12/9/25. Report reissued 12/22/25 with boron added to 252978-004.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

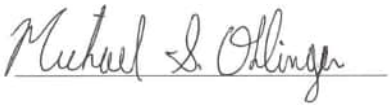
Water Analysis Report

Reissued

Job ID: 252978 **Customer: Pirkey Power Station** **Date Reported: 12/22/2025**

Report Verification

This report and the above data have been confirmed by the following analyst.



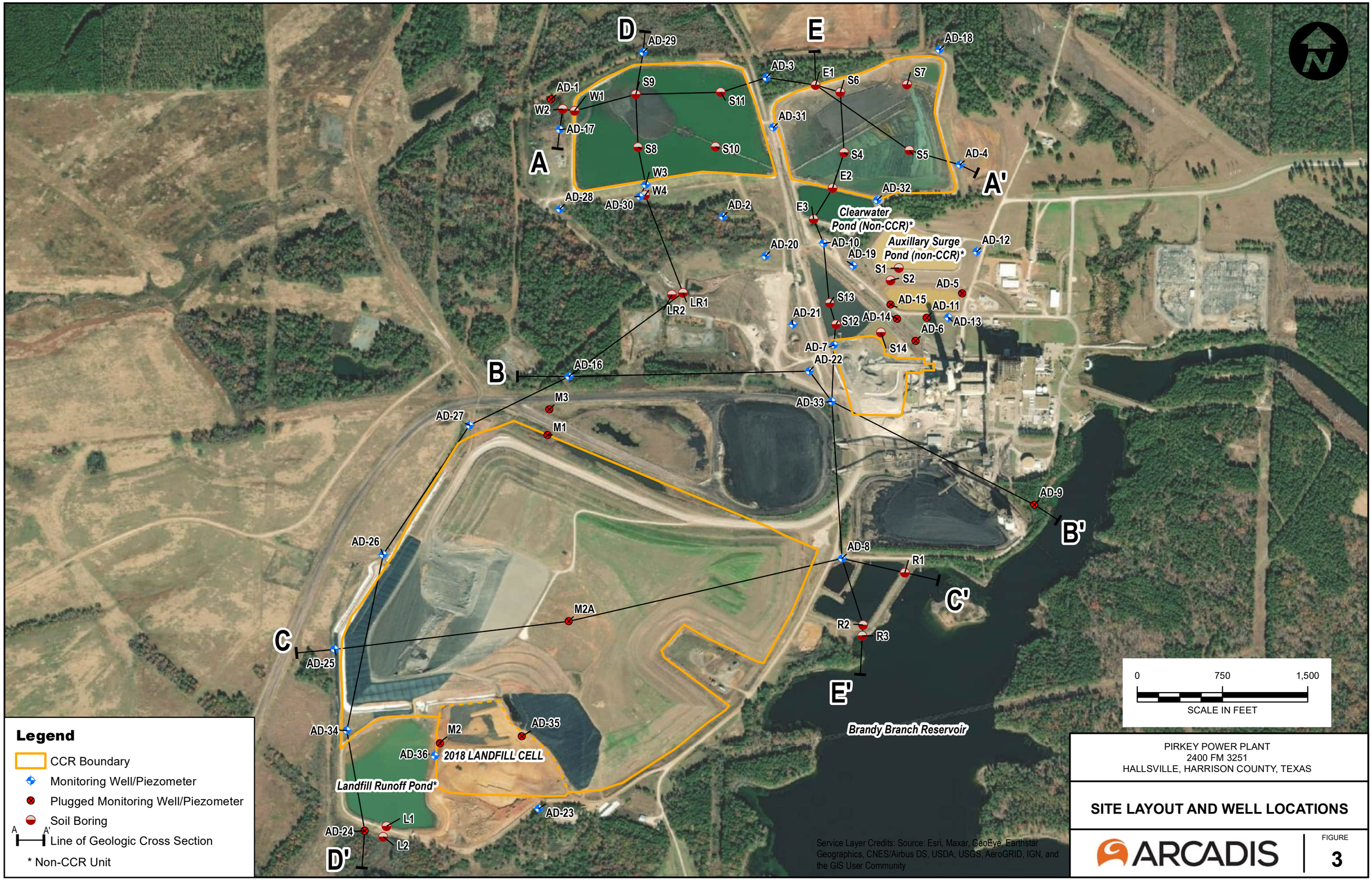
Michael Ohlinger, Chemist
Email: msohlinger@aep.com
Phone: 614-836-4184
Audinet: 8-210-4184

THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF THE LABORATORY. ALL TEST RESULTS MEET ALL OF THE REQUIREMENTS OF THE ACCREDITING AUTHORITY, UNLESS OTHERWISE NOTED. ALL TIMES LISTED ARE IN THE EASTERN TIME ZONE.

Data Qualifer Legend

Q5 - Sample was received with improper chemical preservation.
M1 - The associated matrix spike (MS) or matrix spike duplicate (MSD) recovery was outside acceptance limits.
Q14 - This analyte and method are not included on the primary Laboratory Scope of TNI Accreditation.

ATTACHMENT B
Arcadis Geologic Cross Sections



PIRKEY POWER PLANT
2400 FM 3251
HALLSVILLE, HARRISON COUNTY, TEXAS

SITE LAYOUT AND WELL LOCATIONS

ARCADIS

FIGURE
3

Document Path: T:_ENV\AEP\Pirkey Plant\MXD\Updated\Figure 3 - Site Layout and Well Locations.mxd

WEST

C

EAST

C'

LANDFILL

Approximate lateral extent of the former lignite mine

ELEVATION (FEET MSL)

370'
360'
350'
340'
330'
320'
310'
300'
290'

AD-25

CLAYEY SAND

SANDY CLAY

LANDFILL
LOW-PERMEABILITY LINER
(CLAY, PVC, OR HDPE)

CCR FILL
(HEIGHT VARIES)

AD-8

R1

SILTY SANDY CLAY.

CLAYEY SILTY SAND.

SILTY SANDY CLAY.

CLAYEY SILTY SAND, BROWN TO GRAY.

M2A
(PLUGGED)

Figure modified by Geosyntec, 2022. Original file from: Arcadis, 2022. Landfill - CCR Groundwater Monitoring Well Network Evaluation Update - H.W. Pirkey Power Plant

0 500'
HORIZONTAL SCALE

STATE OF TEXAS
Kenneth J. Brandner
Geology
1787
LICENSED
PROFESSIONAL SCIENTIST

1-20-22

LEGEND

MONITORING WELL SCREENED INTERVAL

WATER LEVEL IN MONITORING WELL (MAY 2021)

BASE OF CCR UNIT

PIRKEY POWER PLANT
2400 FM 3251
HALLSVILLE, HARRISON COUNTY, TEXAS

CROSS SECTION
C - C'

ARCADIS Design & Consultancy for natural and built assets

FIGURE
6

CITY: DIV/GROUP: DB: LD: AM: PD: TM: TR: LYR:ON=*;OFF=*REF*
G:\Active Projects\AEP\30117944 - Pirkey 2022\Figures-Maps\Figure 6 Cross Section C-C'.dwg LAYOUT: MODEL SAVED: 2/22/2016 11:19 AM ACADVER: 24.0S (LMS TECH)
(LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: --- PLOTTED: 1/13/2022 11:01 AM BY: LEASE, DIANA

NORTH

D

SOUTH

D'

WEST BOTTOM ASH POND

PERIMETER BERM (EL. 357') (A)

W3 (PW-3)

AD-29

WATER AND CCR FILL (A)

S9

S8

COHESIVE FILL (B)

AD-30

SILTY SANDY CLAY, RED/BROWN/GRAY.

LR-1

AD-16

SILTY SANDY CLAY, TAN TO GRAY.

AD-27

LANDFILL

LANDFILL RUNOFF POND (NON-CCR UNIT) (C)

Approximate lateral extent of the former lignite mine

SILTY CLAYEY SAND

AD-26

CLAYEY SAND

SANDY CLAY, BROWN.

LANDFILL LOW-PERMEABILITY LINER (CLAY, PVC, OR HDPE)

CLAY, GRAY

AD-34

CLAY W/CLAYEY SAND STREAKS, ORANGE/BROWN.

AD-24

CLAY, GRAY

SANDY CLAY AND CLAYEY GRAVEL, GRAY.

CLAYEY SILTY SAND, BROWN TO GRAY, VERY FINE GRAINED.

BLACK LIGNITE

ELEVATION (FEET MSL)

360' 350' 340' 330' 320' 310' 300' 290' 280' 270'

0 600'

HORIZONTAL SCALE

STATE OF TEXAS
Kenneth J. Brandner
Geology
1787
LICENSED PROFESSIONAL GEOSCIENTIST

1-2022

Figure modified by Geosyntec, 2022. Original file from: Arcadis, 2022. Landfill - CCR Groundwater Monitoring Well Network Evaluation Update - H.W. Pirkey Power Plant

LEGEND

- MONITORING WELL SCREENED INTERVAL
- WATER LEVEL IN MONITORING WELL (MAY 2021)
- BASE OF CCR UNIT

NOTES:

A) TOP OF WEST BOTTOM ASH POND PERIMETER BERM ELEVATION IS 357', OPERATING LEVEL IS 354' (JOHNSON & PACE, MAY 2011); BASE ELEVATION OF WEST BOTTOM ASH POND IS 347' (SARGENT & LUNDY, JANUARY 1983).
B) COMPACTED COHESIVE SOIL FROM ELEVATION 344' TO 347' (SARGENT &LUNDY SEPTEMBER 1984; AMEC, AUGUST 2011).
C) LANDFILL RUNOFF POND PERIMETER BERM APPROXIMATE ELEVATION 302' MSL, BASE OF LANDFILL RUNOFF POND APPROXIMATE ELEVATION 286' MSL. NORMAL OPERATING LEVEL 288' MSL (JOHNSON & PACE MAY 2011).

PIRKEY POWER PLANT
2400 FM 3251
HALLSVILLE, HARRISON COUNTY, TEXAS

CROSS SECTION
D - D'

ARCADIS Design & Consultancy for natural and built assets

FIGURE 7

CITY: DIV/GROUP: DB: LD: AM: PD: TM: TR: LYR:On=*;OFF=*REF* G:\Active Projects\AEP\30117944 - Pirkey 2022\Figures-Maps\Figure 7 Cross Section D-D'.dwg LAYOUT: MODEL SAVED: 2/22/2016 11:20 AM ACADVER: 24.0S (LMS TECH) PAGESETUP:— PLOTSTYLETABLE:— PLOTTED: 1/13/2022 11:07 AM BY: LEASE, DIANA

ATTACHMENT C
Interwell Prediction Limits
Statistical Calculations

Prediction Limit

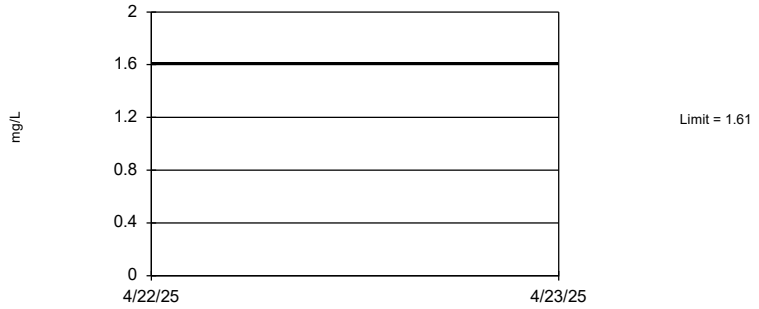
Pirkey Plant Client: AEP Data: 20251205_Pirkey_LF_Sanitas Printed 12/8/2025, 9:23 AM

Constituent	Well	Upper Lim.	Lower Lim.	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	n/a	1.61	n/a	1 future	n/a	107	n/a	n/a	4.673	n/a	n/a	0.009259	NP Inter (normality)
Calcium (mg/L)	n/a	109	n/a	1 future	n/a	107	n/a	n/a	0	n/a	n/a	0.009259	NP Inter (normality)
Chloride (mg/L)	n/a	23.38	n/a	1 future	n/a	107	2.297	0.5124	0	None	ln(x)	0.05	Param Inter
Fluoride (mg/L)	n/a	5.199	n/a	1 future	n/a	107	n/a	n/a	27.1	n/a	n/a	0.009259	NP Inter (normality)
pH (SU)	n/a	5.737	2.592	1 future	n/a	107	4.164	0.7896	0	None	No	0.025	Param Inter
Sulfate (mg/L)	n/a	228	n/a	1 future	n/a	107	n/a	n/a	0	n/a	n/a	0.009259	NP Inter (normality)
Total Dissolved Solids (mg/L)	n/a	462	n/a	1 future	n/a	107	n/a	n/a	0.9346	n/a	n/a	0.009259	NP Inter (normality)

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Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 107 background values. 4.673% NDs. Report alpha = 0.009259. Assumes 1 future value. Seasonality was not detected with 95% confidence.

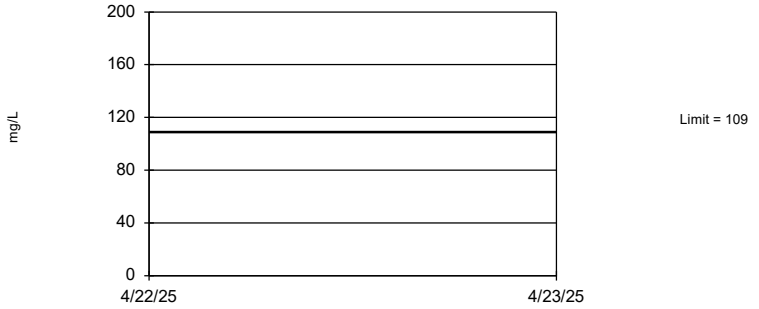
Constituent: Boron Analysis Run 12/8/2025 9:06 AM

Pirkey Plant Client: AEP Data: 20251205_Pirkey_LF_Sanitas

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Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 107 background values. Report alpha = 0.009259. Assumes 1 future value. Seasonality was not detected with 95% confidence.

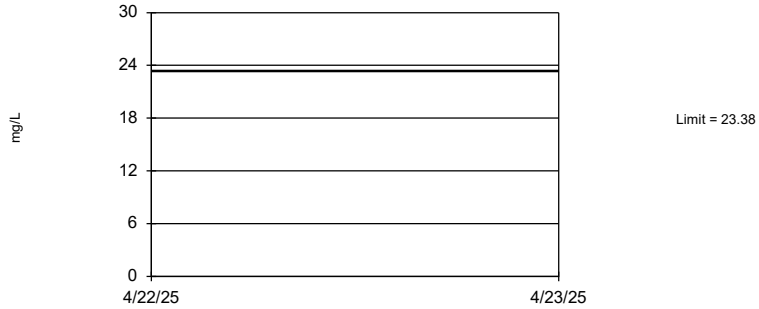
Constituent: Calcium Analysis Run 12/8/2025 9:06 AM

Pirkey Plant Client: AEP Data: 20251205_Pirkey_LF_Sanitas

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Prediction Limit

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=2.297, Std. Dev.=0.5124, n=107. Seasonality was not detected with 95% confidence. Normality test: Chi Squared @alpha = 0.05, calculated = 8.047, critical = 14.07. Report alpha = 0.05. Assumes 1 future value.

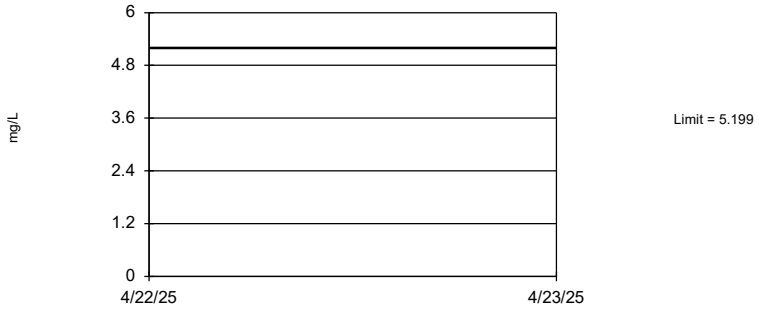
Constituent: Chloride Analysis Run 12/8/2025 9:06 AM

Pirkey Plant Client: AEP Data: 20251205_Pirkey_LF_Sanitas

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Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 107 background values. 27.1% NDs. Report alpha = 0.009259. Assumes 1 future value. Seasonality was not detected with 95% confidence.

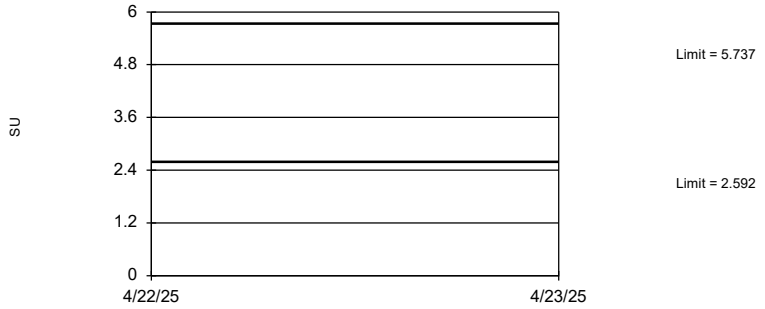
Constituent: Fluoride Analysis Run 12/8/2025 9:06 AM

Pirkey Plant Client: AEP Data: 20251205_Pirkey_LF_Sanitas

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Prediction Limit

Interwell Parametric



Background Data Summary: Mean=4.164, Std. Dev.=0.7896, n=107. Seasonality was not detected with 95% confidence. Normality test: Chi Squared @alpha = 0.05, calculated = 4.869, critical = 14.07. Report alpha = 0.05. Assumes 1 future value.

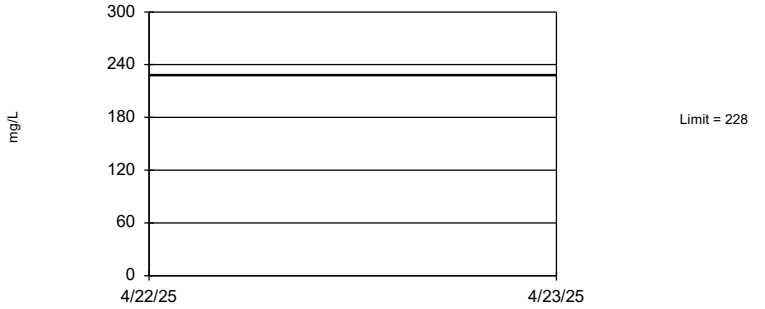
Constituent: pH Analysis Run 12/8/2025 9:06 AM

Pirkey Plant Client: AEP Data: 20251205_Pirkey_LF_Sanitas

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Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 107 background values. Report alpha = 0.009259. Assumes 1 future value. Seasonality was not detected with 95% confidence.

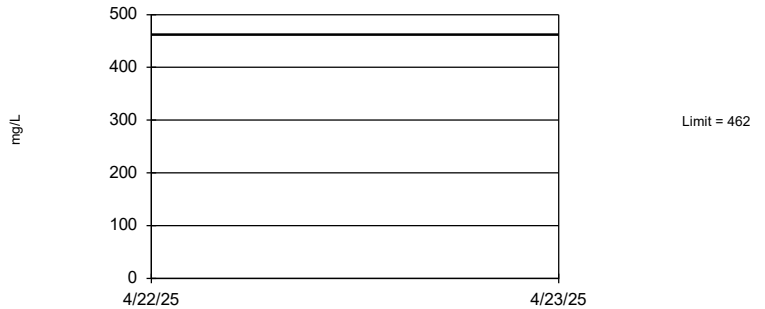
Constituent: Sulfate Analysis Run 12/8/2025 9:06 AM

Pirkey Plant Client: AEP Data: 20251205_Pirkey_LF_Sanitas

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Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 107 background values. 0.9346% NDs. Report alpha = 0.009259. Assumes 1 future value. Seasonality was not detected with 95% confidence.

Constituent: Total Dissolved Solids Analysis Run 12/8/2025 9:06 AM

Pirkey Plant Client: AEP Data: 20251205_Pirkey_LF_Sanitas

ATTACHMENT D
Ground-Water Resources of Harrison County, Texas

TEXAS WATER DEVELOPMENT BOARD

REPORT 27

GROUND-WATER RESOURCES OF HARRISON COUNTY, TEXAS

By

M. E. Broom and B. N. Myers
United States Geological Survey

Prepared by the U.S. Geological Survey
in cooperation with the
Texas Water Development Board
and the
Harrison County Commissioners Court

August 1966

Table 7.--Chemical analyses of water from wells and springs in Harrison County

(Analyses given are in parts per million except specific conductance, pH, percent sodium, sodium adsorption ratio, and residual sodium carbonate.)

	Well	Depth of well (ft)	Date of collection	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids	Hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio (SAR)	Residual sodium carbonate (RSC)	Specific conductance (micromhos at 25°C)	pH
	LK-35-11-901	16	Jan. 29, 1942	--	--	--	6.8	17	*36	0.0	97	32	--	22	--	211	85	--	--	--	--	--
	902	101	Oct. 20, 1964	43	10	--	21	14	*19	3	112	23	0.1	.0	--	233	110	28	0.8	0.00	337	5.0
	19-301	39	Jan. 29, 1942	--	--	--	21	[b]	*30	134	3	4.5	.2	[c]	--	126	55	--	--	--	--	--
	501	35	do	--	--	--	[a]	[b]	*22	12	10	16	--	26	--	85	16	--	--	--	--	--
	601	32	do	--	--	--	15	15	*90	18	2	196	.1	[c]	--	328	99	--	--	--	--	--
	20-401	18	do	--	--	--	8.8	[b]	*3.7	6	3	14	.2	[c]	--	40	25	--	--	--	--	--
	402	850	July 2, 1964	15	1.5	--	6.0	2.2	235 4.0	272	11	221	.4	3.8	0.29	633	24	95	21	3.98	1,160	7.4
†	403	583	July 6, 1964	14	3.4	--	6.2	2.3	394 4.1	288	.0	455	.3	2.8	.32	1,020	25	97	34	4.22	1,870	7.5
	501	36	July 2, 1964	--	.01	--	--	--	--	25	--	6.1	--	--	--	--	30	--	--	.00	98	6.2
	502	310	Oct. 21, 1964	10	.67	--	13	5.2	*345	312	.0	388	.6	.8	--	916	54	93	20	4.03	1,700	7.3
	801	61	Jan. 29, 1942	--	--	--	6.0	4.4	*26	37	30	20	.3	[c]	--	105	33	--	--	--	--	--
	901	34	do	--	--	--	[a]	[b]	*13	6	10	12	--	[c]	--	41	5	--	--	--	--	--
	21-901	16	Jan. 30, 1942	--	--	--	[a]	[b]	*15	6	3	24	.1	[c]	--	49	11	--	--	--	--	--
	902	Spring	do	--	--	--	[a]	[b]	*8.7	12	2	4.5	.1	[c]	--	22	0	--	--	--	--	--
	22-403	260	Aug. 7, 1964	12	.08	0.04	4.0	1.7	125 2.2	274	54	8.8	.3	.0	.77	344	17	93	1.3	4.15	563	7.9
	501	30	Feb. 11, 1942	--	--	--	[a]	3.6	*4.4	18	2	3.0	.1	[c]	--	29	17	--	--	--	--	--
	504	365	Oct. 23, 1964	13	.26	--	2.5	.2	*123	282	30	9.0	.2	.2	--	317	7	97	20	4.48	506	7.9
	505	45	Feb. 11, 1942	--	--	--	14	[b]	*5.8	55	2	4.5	--	[c]	--	55	41	--	--	--	--	--
	601	17	do	--	--	--	[a]	[b]	*5.1	12	2	3.0	.1	[c]	--	18	6	--	--	--	--	--
[e]	704	215	Sept. 16, 1964	17	--	--	28	10	*110	166	164	22	.4	3	--	436	111	--	--	--	691	7.5
	705	215	June 22, 1964	23	.48	--	8.5	4.6	87 5.4	172	48	31	.1	5.8	.25	299	40	80	6.0	2.02	485	6.5
	706	316	Dec. 30, 1960	13	--	--	1.0	.1	*146	235	98	18	.2	.0	--	392	3	99	37	--	651	8.1
	706	316	June 22, 1964	13	.15	--	1.8	.1	150 1.7	240	107	19	.2	3.0	.31	414	5	98	29	3.83	672	7.8
	707	200	do	17	.19	--	10	3.4	163 5.6	162	221	24	.1	9.8	.21	534	39	89	11	1.88	837	6.9
	23-502	315	Oct. 27, 1941	--	--	--	[a]	[b]	*128	256	25	38	.4	[c]	--	320	11	--	--	--	--	--
	502	315	June 17, 1964	25	1.0	--	7.2	2.7	*115	232	32	37	.2	2.2	--	335	29	90	9.3	3.22	538	7.2
	602	133	Feb. 21, 1942	--	--	--	6.8	3.6	*174	360	10	74	.1	[c]	--	446	32	--	--	--	--	--

See footnotes at end of table.

Table 7.--Chemical analyses of water from wells and springs in Harrison County--Continued

Well	Depth of well (ft)	Date of collection	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids	Hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio (SAR)	Residual sodium carbonate (RSC)	Specific conductance (micromhos at 25°C)	pH
LK-35-23-701	--	Oct. 28, 1941	--	--	--	a/	b/	*234	354	4	168	--	c/	--	587	22	--	--	--	--	--
801	430	Feb. 21, 1942	--	--	--	10	b/	*142	299	30	44	0.1	c/	--	375	31	--	--	--	--	--
801	430	July 17, 1964	13	0.16	0.01	7.2	1.9	144 2.0	307	21	47	.0	1.8	0.18	389	26	92	12	4.51	661	8.0
902	105	Oct. 27, 1941	--	--	--	24	20	*91	262	42	52	.2	c/	--	367	142	--	--	--	--	--
24-101	103	Oct. 28, 1941	--	--	--	a/	b/	*121	220	23	50	--	c/	--	305	11	--	--	--	--	--
401	103	Nov. 3, 1941	--	--	--	a/	b/	*108	201	31	34	.3	c/	--	275	11	--	--	--	--	--
701	36	Feb. 12, 1942	--	--	--	a/	4.9	*26	6	17	34	.2	c/	--	91	20	--	--	--	--	--
27-301	16	Jan. 29, 1942	--	--	--	a/	b/	*6.7	6	2	11	.1	c/	--	29	10	--	--	--	--	--
302	424	Oct. 21, 1964	6.8	2.1	--	4.2	1.1	*271	284	1.2	262	.3	.0	--	687	15	98	30	4.35	1,260	8.2
901	274	July 24, 1964	43	6.6	.04	48	3.0	42 3.7	215	41	9.3	.0	.8	.16	297	132	40	1.6	.88	443	7.4
28-101	25	Jan. 30, 1942	--	--	--	a/	b/	*12	12	3	8.0	.2	c/	--	32	0	--	--	--	--	--
102	200	Oct. 22, 1964	30	11	--	12	7.5	*31	105	27	10	.1	.2	--	170	61	53	1.7	.50	255	6.2
402	30	Jan. 28, 1942	--	--	--	a/	b/	*9.0	6	10	4.0	--	c/	--	32	5	--	--	--	--	--
802	242	June 12, 1964	10	.09	--	2.8	.7	*99	176	63	9.7	.1	2.5	--	275	10	96	14	2.69	448	7.8
803	205	Oct. 17, 1941	--	--	--	2.8	1.7	*114	156	105	17	--	0	--	331	14	--	--	--	--	--
803	205	June 12, 1964	11	.21	--	2.5	.9	*110	152	94	16	.1	4.0	--	314	10	96	15	2.29	507	7.6
804	245	do	10	.09	--	1.5	.5	*110	160	89	13	.1	3.8	--	307	6	98	20	2.51	495	7.5
902	250	Oct. 17, 1941	--	--	--	9.6	6.1	*59	98	69	18	.1	c/	--	210	49	--	--	--	--	--
903	272	do	--	--	--	14	7.3	*47	79	69	21	.3	c/	--	197	65	--	--	--	--	--
29-102	240	July 29, 1964	11	.32	.00	1.5	1.1	254 2.1	647	8.0	8.2	2.4	3.2	.61	610	8	98	39	10.4	992	8.1
103	590	do	13	.36	--	1.5	.6	229 1.2	511	36	40	.7	1.2	.57	575	6	99	41	8.26	955	8.2
201	600	do	13	.05	--	.5	.5	207 .9	408	52	47	.5	2.0	.56	525	3	99	52	6.63	875	8.1
301	37	Jan. 30, 1942	--	--	--	a/	b/	*17	6	26	8.0	.1	c/	--	56	7	--	--	--	--	--
401	23	Feb. 17, 1942	--	--	--	a/	b/	*4.4	6	8	5.0	.3	c/	--	24	12	--	--	--	--	--
501	30	Jan. 30, 1942	--	--	--	a/	6.1	*17	18	20	25	.2	c/	--	81	34	--	--	--	--	--
701	25	Jan. 28, 1942	--	--	--	a/	b/	*11	6	3	14	.1	c/	--	37	7	--	--	--	--	--
703	220	July 30, 1964	11	.12	.01	3.0	.9	*196	378	108	7.0	.7	3.2	--	516	11	97	26	5.98	822	8.0
802	30	Jan. 28, 1942	--	--	--	6.0	4.4	*22	0	10	24	--	50	--	116	33	--	--	--	--	--

See footnotes at end of table.

Table 7.--Chemical analyses of water from wells and springs in Harrison County--Continued

Well	Depth of well (ft)	Date of collection	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids	Hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio (SAR)	Residual sodium carbonate (RSC)	Specific conductance (micromhos at 25°C)	pH
LK-35-29-902	444	Oct. 23, 1964	12	0.12	--	1.8	0.4	*246	564	62	7.9	1.1	0.2	--	608	6	99	44	9.14	968	8.3
903	315	Oct. 28, 1960	12	--	--	7.5	3.5	122 3.6	267	63	10	.4	2.5	--	356	33	88	9.2	--	574	7.5
904	410	Aug. 5, 1964	12	.12	0.01	.8	.0	170 1.1	417	23	4.1	.4	.2	0.53	417	2	99	52	6.79	681	8.2
906	248	Nov. 18, 1941	--	d/ 35	--	22	9.0	*11	0	23	64	--	c/	--	129	91	--	--	--	--	--
907	192	do	--	d/ 55	--	23	24	*45	0	50	182	0	c/	--	324	155	--	--	--	--	--
908	201	do	--	d/ 50	--	19	24	*84	0	88	185	--	c/	--	400	145	--	--	--	--	--
909	111	do	--	d/ 55	--	20	20	*46	0	81	208	--	c/	--	377	132	--	--	--	--	--
910	50	do	--	d/ 2.5	--	10	b/	*17	12	4	42	--	c/	--	82	37	--	--	--	--	--
911	128	do	--	d/ 15	--	20	13	*16	85	46	14	.2	c/	--	151	103	--	--	--	--	--
912	125	do	--	d/ 15	--	44	25	*5.3	116	100	16	--	c/	--	247	210	--	--	--	--	--
30-401	610	Nov. 17, 1941	--	--	--	10	5.4	*4.8	6	40	8.0	.2	c/	--	71	48	--	--	--	--	--
402	300	Nov. 12, 1941	--	--	--	a/	6.6	*16	24	42	7.0	.1	c/	--	88	39	--	--	--	--	--
e/ 403	300	Dec. --, 1944	31	2	.08	8	5	*22	18	53	12	f/	f/	--	144	41	--	f/	--	--	5.6
405	300	Nov. 12, 1941	--	--	--	10	5.4	*2.8	0	96	6.5	0	c/	--	121	48	--	--	--	--	--
e/ 405	300	Dec. --, 1944	32	4.1	.07	7	4	*7	0	55	11	f/	f/	--	108	34	--	f/	--	--	4.0
406	240	Nov. 12, 1941	--	--	--	7.6	9.0	*2.5	31	26	6.5	.2	c/	--	67	56	--	--	--	--	--
e/ 406	240	Dec. --, 1944	30	2.3	g/	9	9	*5	24	34	11	.4	f/	--	100	60	--	f/	--	--	6.3
e/ 408	479	July 22, 1940	29	.6	.1	43	9	*84	201	112	32	--	2.2	--	400	145	--	f/	--	--	7.4
408	479	Nov. 12, 1941	--	--	--	6	11	*109	195	103	20	0	c/	--	345	62	--	--	--	--	--
e/ 408	479	Dec. --, 1944	24	1.1	.13	40	9	*79	199	111	21	.44	1.8	--	407	137	--	f/	--	--	7.6
701	323	Nov. 18, 1941	--	--	--	104	9	*23	275	100	12	.3	c/	--	383	296	--	--	--	--	--
702	351	Nov. 13, 1941	--	--	--	15	b/	*100	189	77	16	.2	c/	--	302	40	--	--	--	--	--
e/ 702	351	Dec. --, 1944	14	.04	h/	12	3	*104	201	71	21	.5	f/	--	305	43	--	f/	--	--	7.8
e/ 703	375	July 22, 1940	24	.4	--	32	9	*90	195	94	39	f/	f/	--	370	117	--	f/	--	--	7.2
703	375	Nov. 12, 1941	--	--	--	10	3.9	*89	165	77	15	.2	c/	--	276	42	--	--	--	--	--
e/ 703	375	Dec. --, 1944	24	.14	.08	33	7	*73	189	75	27	.4	f/	--	308	112	--	f/	--	--	7.9
704	473	Nov. 12, 1941	--	--	--	18	b/	*103	177	100	18	.1	c/	--	328	51	--	--	--	--	--
e/ 704	473	Dec. --, 1944	22	.14	.09	27	6	*95	195	100	25	.4	f/	--	380	92	--	f/	--	--	7.9

See footnotes at end of table.

Table 7.--Chemical analyses of water from wells and springs in Harrison County--Continued

Well	Depth of well (ft)	Date of collection	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids	Hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio (SAR)	Residual sodium carbonate (RSC)	Specific conductance (micromhos at 25°C)	pH
LK-35-30-803	24	Feb. 17, 1942	--	--	--	13	36	*36	12	146	69	0.1	c/	--	308	183	--	--	--	--	--
804	364	Oct. 23, 1964	22	1.4	--	21	7.2	*60	152	26	42	.2	1.8	--	255	82	61	2.9	0.85	421	7.1
901	31	Feb. 9, 1942	--	--	--	a/	6.1	*5.1	37	3	4	.1	c/	--	39	29	--	--	--	--	--
31-302	205	Feb. 14, 1942	--	--	--	a/	4.9	*11	49	2	1	.4	c/	--	53	20	--	--	--	--	--
601	17	Feb. 12, 1942	--	--	--	118	56	*108	232	2	401	.3	c/	--	800	525	--	--	--	--	--
701	28	Feb. 9, 1942	--	--	--	a/	b/	*18	12	17	20	--	c/	--	76	22	--	--	--	--	--
702	411	June 22, 1964	50	59	--	44	42	52 5.8	0	106	217	.1	.8	0.03	518	282	27	1.3	.00	931	4.0
703	792	Dec. 30, 1960	15	--	--	16	4.7	83 3.3	221	23	24	.2	3.0	--	281	59	74	4.7	--	464	7.4
703	792	July 10, 1964	17	.23	--	16	4.4	80 3.2	217	24	23	.2	4.8	.18	280	58	74	4.6	2.40	467	7.5
708	27	Feb. 9, 1942	--	--	--	a/	b/	*10	6	2	8.5	--	c/	--	46	12	--	--	--	--	--
709	415	June 22, 1964	14	.04	--	2.0	.2	141 1.5	316	3.2	38	.3	2.5	.34	358	6	97	25	5.06	607	8.0
801	19	Feb. 12, 1942	--	--	--	a/	11	*81	31	20	129	.2	c/	--	259	52	--	--	--	--	--
32-501	18	do	--	--	--	23	6	*14	85	11	9.5	.1	c/	--	104	67	--	--	--	--	--
35-201	304	Nov. 4, 1941	--	--	--	a/	b/	*79	165	46	7.5	.4	c/	--	220	22	--	--	--	--	--
601	450	July 24, 1964	8.1	1.1	0.00	4.5	1.7	686 3.1	564	1.8	760	--	.8	.49	1,740	18	99	70	8.88	3,170	7.7
604	500	do	12	.70	.01	4.5	1.5	447 2.3	664	4.8	305	1.4	4.2	.55	1,110	17	98	47	10.5	1,930	7.9
36-101	35	Jan. 27, 1942	--	--	--	a/	b/	*40	18	60	14	--	c/	--	129	12	--	--	--	--	--
201	32	do	--	--	--	a/	b/	*10	12	2	3.5	--	c/	--	32	3	--	--	--	--	--
202	26	do	--	--	--	6.0	7.1	*86	6	2	88	1.2	120	--	313	44	--	--	--	--	--
301	20	Jan. 28, 1942	--	--	--	a/	b/	*12	12	3	12	.1	c/	--	37	5	--	--	--	--	--
401	27	Nov. 4, 1941	--	--	--	a/	b/	*3.9	6	7	5.0	--	c/	--	22	11	--	--	--	--	--
501	28	Jan. 27, 1942	--	--	--	a/	3.6	*3.5	6	2	5.5	--	c/	--	30	17	--	--	--	--	--
601	220	July 28, 1964	12	.14	.01	3.0	.9	187 1.9	456	29	13	.5	2.5	.65	474	11	97	25	7.25	779	8.0
701	18	Jan. 27, 1942	--	--	--	17	13	*44	18	10	91	--	50	--	234	98	--	--	--	--	--
901	--	Nov. 14, 1941	--	--	--	a/	b/	*291	695	3	44	--	c/	--	684	2	--	--	--	--	--
37-101	465	Jan. 28, 1942	--	--	--	a/	b/	*2.1	6	2	7.5	.1	c/	--	25	17	--	--	--	--	--
401	22	do	--	--	--	a/	b/	*6.9	6	2	3.0	.1	c/	--	20	0	--	--	--	--	--
402	370	Aug. 3, 1964	17	--	--	3.0	1.1	*238	606	.8	20	1.6	.5	--	580	12	98	30	9.69	940	7.7

See footnotes at end of table.

Table 7.--Chemical analyses of water from wells and springs in Harrison County--Continued

Well	Depth of well (ft)	Date of collection	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids	Hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio (SAR)	Residual sodium carbonate (RSC)	Specific conductance (micromhos at 25°C)	pH
LK-35-37-601	6	Feb. 14, 1942	--	--	--	130	83	*143	0	899	101	0.8	c/	--	1,361	666	--	--	--	--	--
701	25	Nov. 4, 1941	--	--	--	a/	6.6	*6.2	24	2	18	--	c/	--	48	34	--	--	--	--	--
801	200	Aug. 3, 1964	12	0.09	--	2.5	1.0	*301	723	.6	46	2.4	0.2	--	722	10	98	41	11.6	1,200	8.1
802	429	do	13	.07	0.00	.8	.5	283 1.1	608	.2	63	1.3	2.2	1.0	685	4	99	62	8.89	1,150	8.5
803	420	do	12	.1	--	.8	.7	*272	629	3.4	52	1.2	.8	--	652	5	99	53	10.2	1,100	8.2
38-101	43	Feb. 17, 1942	--	--	--	23	3.6	*25	122	15	7.0	--	c/	--	134	72	--	--	--	--	--
602	150	Feb. 13, 1942	--	--	--	a/	b/	*115	262	10	28	.1	c/	--	289	17	--	--	--	--	--
603	--	Nov. 4, 1941	--	--	--	a/	b/	*186	415	5	50	.3	c/	--	448	12	--	--	--	--	--
701	105	do	--	--	--	52	39	*35	372	2	41	--	c/	--	352	289	--	--	--	--	--
801	73	Nov. 14, 1941	--	--	--	128	155	*364	756	238	620	.1	c/	--	1,883	956	--	--	--	--	--
802	91	do	--	--	--	31	15	*174	519	12	57	--	c/	--	544	139	--	--	--	--	--
803	--	do	--	--	--	30	b/	*118	153	7	148	.8	c/	--	389	87	--	--	--	--	--
804	--	do	--	--	--	a/	b/	*173	433	4	24	--	c/	--	419	17	--	--	--	--	--
39-201	33	Feb. 13, 1942	--	--	--	a/	b/	4.8	12	4	4.5	.1	c/	--	25	12	--	--	--	--	--
301	190	July 13, 1964	--	.62	--	--	--	--	348	--	40	--	--	--	--	100	--	--	3.70	694	7.4
304	247	Oct. 6, 1964	23	2.2	--	20	8.3	*100	290	6.0	40	.2	.0	--	341	84	72	4.7	3.07	610	6.9
401	35	Feb. 17, 1942	--	--	--	20	18	*140	67	67	127	.2	156	--	561	126	--	--	--	--	--
605	245	Oct. 6, 1964	11	.05	--	1.5	.4	*169	362	28	33	.2	.2	--	421	5	99	33	5.83	641	7.8
801	259	Aug. 11, 1964	57	3.8	--	18	3.9	*15	108	.0	2.7	.2	.0	--	150	61	34	.8	.55	181	6.4
902	280	do	62	6.3	--	11	4.5	*26	102	.2	13	.2	.0	--	167	46	55	1.7	.75	210	6.4
40-101	205	July 10, 1964	11	.04	--	2.0	.7	179 1.1	368	5.8	60	.2	5.0	.45	447	8	98	28	5.87	752	8.0
102	208	Oct. 20, 1964	11	.06	--	4.5	1.7	*197	396	.8	85	.3	.0	--	495	18	96	20	6.13	845	8.0
201	135	July 10, 1964	11	.66	--	13	3.8	304 2.1	396	200	132	.2	.2	.50	862	48	93	19	5.53	1,400	7.9
204	151	Oct. 29, 1941	--	--	--	16	16	*172	262	77	130	--	c/	--	540	105	--	--	--	--	--
204	151	June 18, 1964	14	1.3	--	32	9.7	*178	272	78	143	.1	.0	--	589	120	76	7.1	2.06	1,000	7.4
206	150	do	15	.05	--	30	10	*294	256	136	282	.1	5.6	--	899	116	85	12	1.88	1,530	7.9
207	170	Oct. 31, 1941	--	--	--	13	15	*177	293	77	112	--	--	--	538	94	--	--	--	--	--
401	40	Feb. 13, 1942	--	--	--	a/	b/	*18	12	23	7.5	.1	c/	--	58	6	--	--	--	--	--

See footnotes at end of table.

Table 7.--Chemical analyses of water from wells and springs in Harrison County--Continued

Well	Depth of well (ft)	Date of collection	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids	Hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio (SAR)	Residual sodium carbonate (RSC)	Specific conductance (micromhos at 25°C)	pH
LK-35-40-402	190	Oct. 6, 1964	19	0.64	--	43	12	*130	328	115	35	0.2	1.8	--	517	157	64	4.5	2.24	812	7.1
501	22	Feb. 13, 1942	--	--	--	8.4	b/	*45	92	10	24	.9	c/	--	136	26	--	--	--	--	--
502	158	Oct. 20, 1964	3.5	1.2	--	10	59	*492	622	.2	585	.1	1.0	--	1,460	268	80	13	4.85	2,550	8.8
704	25	Feb. 13, 1942	--	--	--	10	7.3	*84	37	8	141	--	c/	--	268	55	--	--	--	--	--
46-202	147	Nov. 14, 1941	--	--	--	7.6	b/	*119	317	8	12	.3	c/	--	304	26	--	--	--	--	--
47-201	310	Aug. 11, 1964	34	.46	0.02	2.0	.5	103 1.0	246	.0	24	.1	.0	0.11	286	7	96	17	3.89	443	7.8

* Sodium and potassium calculated as sodium (Na).
† Well 35-20-403 Phosphate (PO_4), 0.17.
a/ Less than 5 ppm.
b/ Less than 3 ppm.
c/ Less than 20 ppm.
d/ Iron determination on same date by Atlas Chemical Industries, Inc.
e/ Analyses by Texas State Dept. of Health.
f/ Less than 0.4 ppm.
g/ Less than 0.05 ppm.

ATTACHMENT E
February 2023 Pirkey Landfill Leachate Laboratory Analytical Report

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 230659 **Customer: Pirkey Power Station** **Date Reported: 04/06/2023**

Customer Sample ID: EBAP
Customer Description: TG-32
Lab Number: 230659-003
Preparation:
Date Collected: 03/01/2023 00:23 EST
Date Received: 03/02/2023 10:30 EST

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.59	mg/L	5	0.25	0.05		CRJ	03/16/2023 13:42	EPA 300.1 -1997, Rev. 1.0
Chloride	84.5	mg/L	5	0.10	0.05		CRJ	03/16/2023 13:42	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.56	mg/L	5	0.15	0.05		CRJ	03/16/2023 13:42	EPA 300.1 -1997, Rev. 1.0
Sulfate	2780	mg/L	100	20	3		CRJ	03/16/2023 19:11	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	03/03/2023 11:26	SM 2320B-2011
TDS, Filterable Residue	3900	mg/L	20	1000	400		SDW	03/07/2023 10:50	SM 2540C-2015

Customer Sample ID: Leachate
Customer Description: TG-32
Lab Number: 230659-004
Preparation:
Date Collected: 02/28/2023 10:55 EST
Date Received: 03/02/2023 10:30 EST

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	1.82	mg/L	5	0.25	0.05		CRJ	03/16/2023 14:15	EPA 300.1 -1997, Rev. 1.0
Chloride	41.7	mg/L	5	0.10	0.05		CRJ	03/16/2023 14:15	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.47	mg/L	5	0.15	0.05		CRJ	03/16/2023 14:15	EPA 300.1 -1997, Rev. 1.0
Sulfate	329	mg/L	50	10	2		CRJ	03/16/2023 21:23	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	94	mg/L	1	20	5		MGK	03/03/2023 11:26	SM 2320B-2011
TDS, Filterable Residue	600	mg/L	20	1000	400	J1	SDW	03/03/2023 12:09	SM 2540C-2015

Water Analysis Report

Reissued

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 230701 **Customer: Pirkey Power Station** **Date Reported: 10/28/2023**

Customer Sample ID: Leachate
Lab Number: 230701-004
Date Collected: 02/28/2023 10:55 EST

Customer Description:
Preparation:
Date Received: 03/06/2023 14:20 EST

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	03/08/2023 13:10	EPA 200.8-1994, Rev. 5.4
Arsenic	2.22	µg/L	1	0.10	0.03		GES	03/08/2023 13:10	EPA 200.8-1994, Rev. 5.4
Barium	685	µg/L	1	0.20	0.05		GES	03/08/2023 13:10	EPA 200.8-1994, Rev. 5.4
Beryllium	1.16	µg/L	1	0.050	0.007		GES	03/08/2023 13:10	EPA 200.8-1994, Rev. 5.4
Boron	2.37	mg/L	1	0.050	0.009		GES	03/08/2023 13:10	EPA 200.8-1994, Rev. 5.4
Cadmium	0.148	µg/L	1	0.020	0.004		GES	03/08/2023 13:10	EPA 200.8-1994, Rev. 5.4
Calcium	50.9	mg/L	1	0.05	0.02		GES	03/08/2023 13:10	EPA 200.8-1994, Rev. 5.4
Chromium	0.36	µg/L	1	0.20	0.04		GES	03/08/2023 13:10	EPA 200.8-1994, Rev. 5.4
Cobalt	35.6	µg/L	1	0.020	0.003		GES	03/08/2023 13:10	EPA 200.8-1994, Rev. 5.4
Lead	0.50	µg/L	1	0.20	0.05		GES	03/08/2023 13:10	EPA 200.8-1994, Rev. 5.4
Lithium	0.0352	mg/L	1	0.00020	0.00005		GES	03/08/2023 13:10	EPA 200.8-1994, Rev. 5.4
Magnesium	27.0	mg/L	1	0.10	0.02		GES	03/08/2023 13:10	EPA 200.8-1994, Rev. 5.4
Molybdenum	0.8	µg/L	1	0.5	0.1		GES	03/08/2023 13:10	EPA 200.8-1994, Rev. 5.4
Potassium	3.11	mg/L	1	0.10	0.02		GES	03/08/2023 13:10	EPA 200.8-1994, Rev. 5.4
Selenium	4.16	µg/L	1	0.50	0.09		GES	03/15/2023 19:02	EPA 200.8-1994, Rev. 5.4
Sodium	52.9	mg/L	1	0.20	0.05		GES	03/08/2023 13:10	EPA 200.8-1994, Rev. 5.4
Strontium	1.25	mg/L	1	0.0020	0.0004		GES	03/08/2023 13:10	EPA 200.8-1994, Rev. 5.4
Thallium	0.12	µg/L	1	0.20	0.04	J1	GES	03/08/2023 13:10	EPA 200.8-1994, Rev. 5.4

ATTACHMENT F
Certification by a Qualified Professional Engineer

CERTIFICATION BY A QUALIFIED PROFESSIONAL ENGINEER

I certify that the above described alternative source demonstration is appropriate for evaluating the groundwater monitoring data for the Pirkey Landfill CCR management area and that the requirements of 30 TAC §352.941(c)(2) have been met.



Beth Ann Gross
Printed Name of Licensed Professional Engineer

Beth Ann Gross
Signature

Geosyntec Consultants
2039 Centre Pointe Blvd, Suite 103
Tallahassee, Florida 32308

Texas Registered Engineering Firm
No. F-1182

79864	Texas	December 23, 2025
License Number	Licensing State	Date

APPENDIX 4

Notices for Monitoring Program Transitions

Pirkey Plant

Notice of Assessment Monitoring Program Establishment

Landfill

On January 3, 2018, it was determined that Pirkey Plant's Landfill had statistically significant increases over background for Boron, Sulfate, and Total Dissolved Solids (TDS). An alternative source demonstration was not successful within the 90 day period as allowed for in 257.94(e)(2) prompting the initiation of an assessment monitoring program, which was established on April 3, 2018. Therefore this notice is being placed in the operating record in accordance with the requirement of 257.94(e)(3).

APPENDIX 5

Well Installation/Decommissioning Logs – NA

APPENDIX 6

Groundwater monitoring Field and Laboratory Reports

CCR Groundwater Monitoring Well Inspection Form

Facility: Pilgrim

Sampling Period: Feb 2025

Sampling Contractor: Eagle

Signature:

Well No.	Well Locked	Fastener and Lock Functioning	Well Locked After Sampling	Access to Well Maintained	Well Casing, Protective Cover, Barriers and Pad in Good Shape	Well Properly Labeled	Well Cap Present and Vented*	Comments
B-2				✓		✓	✓	lid will not shut
AD-12	✓	✓	✓	✓	✓	✓	✓	
AD-32	✓	✓	✓	✓	✓	✓	✓	
AD-31	✓	✓	✓	✓	✓	✓	✓	
AD-30	✓	✓	✓	✓	✓	✓	✓	
AD-26	✓	✓	✓	✓	✓	✓	✓	
AD-25	✓	✓	✓	✓	✓	✓	✓	
AD-28	✓	✓	✓	✓	✓	✓	✓	
AD-3	✓	✓	✓	✓	✓	✓	✓	

*Not all wells will be vented, especially flush mounted wells. If that is the case, please note "flush mount well" in the comments.

CCR Groundwater Monitoring Well Inspection Form

Facility: AEP Pinney PP

Sampling Period: February 2025

Sampling Contractor: EAGLE

Signature: KAM

Well No.	Well Locked	Lock Functioning	Well Locked After Sampling	Access to Well Maintained	Well Casing, Housing, and Pad in Good Shape	Well Properly Labeled	Well cap present	Comments
AD-13	✓	✓	✓	✓	✓	✓	✓	
AD-18	✓	✓	✓	✓	✓	✓	✓	
AD-04	✓	✓	✓		✓	✓	✓	NO GOOD ACCESS TO WELL LOCATION STEEP HILL
B-3	✓	✓	✓	✓	✓		✓	NEEDS LABEL
AD-7R	✓	✓	✓	✓	✓		✓	NO LABEL
AD-22	✓	✓	✓	✓	✓	✓	✓	
AD-33	✓	✓	✓	✓	✓	✓	✓	
AD-02	✓	✓	✓	✓	✓	✓	✓	
AD-17	✓	✓	✓	✓	✓	✓	✓	

Instructions: Complete form and submit to AEP Environmental Services with Field Data. Place check mark for items that are satisfactory. Unsatisfactory items should be left blank with a note in the comments section on what needs to be remedied.

Facility Name	AEP Pickaway PP
Sample by	Kenny McDonald

Sample Location ID	AD-02

Depth to water, feet (TOC)	15.31
Measured Total Depth, feet (TOC)	40.36

Depth to water date	02/04/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1006	15.40	220	4.37	722	1.1	2.71	411	18.37		
1011	15.41	220	4.35	725	0.6	2.28	414	18.40		
1016	15.41	220	4.35	729	0.8	2.25	420	18.42		
1021	15.44	220	4.34	731	0.4	2.23	417	18.42		

Total volume purged	
Sample appearance	clear
Sample time	1023
Sample date	02/04/25

Facility Name	Pixley
Sample by	Matt Hamilton

Sample Location ID	AD-3
Depth to water date	2-4-25

Depth to water, feet (TOC)	33.98
Measured Total Depth, feet (TOC)	57.81

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1032	34.22	220	4.55	105	22.3	1.00	413	21.71		
1037	34.31	220	4.57	106	22.7	0.48	400	21.18		
1042	34.39	220	4.58	105	8.2	0.93	394	20.82		
1047	34.49	220	4.57	104	8.4	0.91	390	20.67		

Total volume purged	
Sample appearance	clear
Sample time	1045
Sample date	2-4-25

Facility Name	AEP Pirkey PP
Sample by	Kenny McDonald

Sample Location ID	AD-04

Depth to water, feet (TOC)	10.93
Measured Total Depth, feet (TOC)	47.29

Depth to water date	02/03/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
0941	10.95	190	5.03	84	10.6	4.13	436	18.52		
0946	10.95	190	4.97	87	9.4	2.87	436	18.59		
0951	10.96	190	4.95	91	9.0	2.92	430	18.60		
0956	10.95	190	4.94	94	9.2	2.94	427	18.63		

Total volume purged	
Sample appearance	CLEAR
Sample time	0958
Sample date	02/03/25

Facility Name	AEP Pigeon PP
Sample by	Kenny McDonald

Sample Location ID	AD-7R

Depth to water, feet (TOC)	5.75
Measured Total Depth, feet (TOC)	33.03

Depth to water date	02/03/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1052	5.91	230	5.08	234	1.4	3.21	287	17.46		
1057	5.87	230	5.23	238	0.8	2.26	285	17.50		
1102	5.86	230	5.26	240	0.0	2.22	280	17.54		
1107	5.86	230	5.27	236	0.5	2.21	279	17.56		
Qr										

Total volume purged	
Sample appearance	Clear
Sample time	1109
Sample date	02/03/25

Facility Name	Pixley
Sample by	MH Hamilton

Sample Location ID	AD-12

Depth to water, feet (TOC)	7.22
Measured Total Depth, feet (TOC)	52.00

Depth to water date	2-3-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
912	7.71	300	3.59	44	3.0	1.16	277	19.40		
917	7.89	300	3.22	41	3.3	1.05	347	19.67		
922	7.98	300	3.14	40	3.1	1.03	361	19.77		

Total volume purged	
Sample appearance	clear
Sample time	924
Sample date	2-3-25

Facility Name	AEP Pinch PP
Sample by	Kenny McDonald

Sample Location ID	AD-13

Depth to water, feet (TOC)	10.34
Measured Total Depth, feet (TOC)	40.70

Depth to water date	02/03/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
0756	10.61	180	5.69	386	15.6	4.87	218	18.21		
0801	10.63	180	5.71	379	11.3	3.29	209	18.24		
0806	10.64	180	5.71	377	8.2	3.06	209	18.27		
0811	10.68	180	5.74	377	8.0	3.10	209	18.30		
0816	10.70	180	5.72	375	8.4	3.07	206	18.30		

Total volume purged	
Sample appearance	REDDISH BROWN TINT
Sample time	0818
Sample date	02/03/25

DUPLICATE 0818

Facility Name	AEP PIRKEY PP
Sample by	KENNY McDONALD

Sample Location ID	AD-17

Depth to water, feet (TOC)	19.04
Measured Total Depth, feet (TOC)	33.05

Depth to water date	02/04/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1107	19.13	206	4.12	80	8.3	1.87	422	19.84		
1112	19.13	206	4.16	84	7.9	1.85	427	19.88		
1117	19.15	206	4.19	87	7.6	1.87	431	19.91		

Total volume purged	
Sample appearance	CLEAR
Sample time	1119
Sample date	02/04/25

Facility Name	ACP PINAM PP
Sample by	KIMMY McDONALD

Sample Location ID	AD-18

Depth to water, feet (TOC)	3.82
Measured Total Depth, feet (TOC)	28.42

Depth to water date	02/03/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
0917	4.91	96	4.61	60	13.7	2.61	422	18.91		
0922	5.76	96	4.57	56	14.3	2.48	417	19.03		
			Won't Hold							

Total volume purged	
Sample appearance	CLEAR
Sample time	0804
Sample date	02/04/25

Facility Name	ACP Pinnacle PP
Sample by	Kenny McDonald

Sample Location ID	AD-22

Depth to water, feet (TOC)	6.95
Measured Total Depth, feet (TOC)	32.70

Depth to water date	02/03/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1204	7.02	180	4.20	796	0.8	2.03	342	18.11		
1209	7.02	180	4.21	802	1.1	1.98	346	18.13		
1214	7.04	180	4.22	805	0.7	1.97	348	18.13		

Total volume purged	
Sample appearance	Clear
Sample time	1216
Sample date	02/03/25

Facility Name	Pickett
Sample by	Matt Bonilla

Sample Location ID	AD-25

Depth to water, feet (TOC)	8.57
Measured Total Depth, feet (TOC)	27.38

Depth to water date	2-4-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
851	8.81	125	3.51	769	11.4	1.14	351	20.66		
856	8.89	125	3.58	739	8.2	0.98	364	21.cc		
901	8.91	125	3.61	741	8.3	0.90	276	21.09		
906	9.09	125	3.63	742	8.3	0.87	269	21.12		

Total volume purged	
Sample appearance	clear
Sample time	908
Sample date	2-4-25

Facility Name	Pinkey
Sample by	Hunt / Hamilton

Depth to water, feet (TOC)	16.14
Measured Total Depth, feet (TOC)	42.73

Sample Location ID	AD-26
Depth to water date	2-4-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
802	16.33	300	3.21	2,000	11.4	4.38	554	20.86		
807	16.51	300	3.78	2,100	8.8	1.49	523	21.06		
812	16.65	300	3.90	2,150	8.9	1.21	506	21.22		
817	16.78	300	3.94	2,250	8.8	1.13	498	21.31		

Total volume purged	
Sample appearance	clear
Sample time	819
Sample date	2-4-25

Facility Name	Pixley
Sample by	Matt Hamilton

Sample Location ID	AD-28

Depth to water, feet (TOC)	17.82
Measured Total Depth, feet (TOC)	38.59

Depth to water date	2-4-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
935	18.21	220	3.46	120	5.7	1.16	298	21.02		
940	18.31	220	3.51	113	3.0	1.03	343	20.89		
945	18.33	220	3.75	113	1.7	0.95	351	20.86		

Total volume purged	
Sample appearance	Clear
Sample time	947
Sample date	2-4-25

Facility Name	Pixley
Sample by	Hamilton

Sample Location ID	AD-30

Depth to water, feet (TOC)	17.95
Measured Total Depth, feet (TOC)	42.71

Depth to water date	2-3-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1152	18.06	300	3.48	320	99	0.62	405	23.54		
1157	18.06	300	3.44	323	54.6	0.67	388	23.33		
1202	18.06	300	3.98	323	32.2	0.64	377	23.05		
1207	18.06	300	3.97	322	21.2	0.61	371	22.95		
1212	18.06	300	3.97	321	9.9	0.54	367	22.88		
1217	18.06	300	3.96	320	9.9	0.58	364	22.71		

Total volume purged	
Sample appearance	clear
Sample time	1219
Sample date	2-3-25

Facility Name	Pickaway
Sample by	Matt Hamilton

Sample Location ID	AD-31

Depth to water, feet (TOC)	21.38
Measured Total Depth, feet (TOC)	37.32

Depth to water date	2-3-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1053	21.72	220	3.25	254	47.4	0.79	311	23.26		
1058	21.72	220	3.08	262	24.5	0.74	318	23.64		
1103	21.72	220	3.07	265	22.9	0.70	324	23.96		
1108	21.72	220	3.07	267	18.3	0.65	330	23.67		
1113	21.72	220	3.09	269	18.4	0.62	335	24.07		

Total volume purged	
Sample appearance	clear
Sample time	1115
Sample date	2-3-25

Facility Name	Pixley
Sample by	Matt / Hailey

Depth to water, feet (TOC)	14.44
Measured Total Depth, feet (TOC)	34.61

Sample Location ID	AD-32
Depth to water date	2-3-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
955	14.96	220	4.61	225	71.3	0.93	231	21.42		
1004	15.01	220	4.66	237	61.2	0.91	134	21.81		
1009	15.08	220	4.71	242	64.5	0.89	107	21.96		
1014	15.12	220	4.75	244	68.7	0.84	99	22.11		

Total volume purged	
Sample appearance	slightly turbid
Sample time	1016
Sample date	2-3-25

Facility Name	AEP PIKE PP
Sample by	KENNY McDONALD

Sample Location ID	AP-33

Depth to water, feet (TOC)	10.08
Measured Total Depth, feet (TOC)	32.50

Depth to water date	02/04/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
0912	10.13	224	4.08	198	1.3	3.35	306	17.24		
0917	10.14	224	4.07	200	1.3	3.34	311	17.26		
0922	10.14	224	4.06	204	1.0	3.36	313	17.27		

Total volume purged	
Sample appearance	CLEAR
Sample time	0924
Sample date	02/04/25

Facility Name	Pixley
Sample by	M-N Hamilton

Sample Location ID	B-2

Depth to water, feet (TOC)	15.25
Measured Total Depth, feet (TOC)	51.44

Depth to water date	2-3-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
830	15.65	300	4.67	233	9.2	0.74	327	19.56		
835	15.67	300	3.93	124	3.3	1.00	279	19.68		
840	15.68	300	4.00	121	2.1	0.98	268	19.73		

Total volume purged	
Sample appearance	clear
Sample time	842
Sample date	2-3-25

Duplicate
1333

Facility Name	AEP Pirkey PP
Sample by	Kiwny McDonald

Sample Location ID	B-3

Depth to water, feet (TOC)	10.30
Measured Total Depth, feet (TOC)	37.49

Depth to water date	02/03/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1035	11.21	102	4.97	189	5.7	2.13	371	18.47		
1040	12.36	102	5.01	194	4.9	2.06	352	18.53		
			Well Hold	Water Level						

Total volume purged	
Sample appearance	Clear
Sample time	0845
Sample date	02/04/25

CCR Groundwater Monitoring Well Inspection Form

Facility: AEP Pirkey PP

Sampling Period: APRIL 2025

Sampling Contractor: EAGLE

Signature: KYM

Well No.	Well Locked	Lock Functioning	Well Locked After Sampling	Access to Well Maintained	Well Casing, Housing, and Pad in Good Shape	Well Properly Labeled	Well cap present	Comments
AD-16	✓	✓	✓		✓	✓	✓	TRAIL NEEDS CLEARING
AD-13	✓	✓	✓	✓	✓	✓	✓	
AD-7R	✓	✓	✓	✓	✓	✓	✓	
AD-22	✓	✓	✓	✓	✓	✓	✓	
AD-33	✓	✓	✓	✓	✓	✓	✓	
AD-2	✓	✓	✓	✓	✓	✓	✓	
AD-36	✓	✓	✓	✓	✓	✓	✓	
AD-8	✓	✓	✓	✓	✓	✓	✓	
B-3	✓	✓	✓	✓	✓	✓	✓	
AD-18	✓	✓	✓	✓	✓	✓	✓	
AD-34	✓	✓	✓		✓	✓	✓	FENCE REPAIRS SIDE OF ACCESS OVER LANDFILL
AD-4	✓	✓	✓		✓	✓	✓	STEEP SLOPE ONLY ACCESS

Instructions: Complete form and submit to AEP Environmental Services with Field Data. Place check mark for items that are satisfactory. Unsatisfactory items should be left blank with a note in the comments section on what needs to be remedied.

CCR Groundwater Monitoring Well Inspection Form

Facility: Pirkey

Sampling Period: April 2-25

Sampling Contractor: Eagle

Signature: Matt Tull

Well No.	Well Locked	Fastener and Lock Functioning	Well Locked After Sampling	Access to Well Maintained	Well Casing, Protective Cover, Barriers and Pad in Good Shape	Well Properly Labeled	Well Cap Present and Vented*	Comments
B-2		✓		✓	✓	✓	✓	lid will not close
AD-12	✓	✓	✓	✓	✓	✓	✓	
AD-32	✓	✓	✓	✓	✓	✓	✓	
AD-31	✓	✓	✓	✓	✓	✓	✓	
AD-3c	✓	✓	✓	✓	✓	✓	✓	
AD-17	✓	✓	✓	✓	✓	✓	✓	
AD-28	✓	✓	✓	✓	✓	✓	✓	
AD-3	✓	✓	✓	✓	✓	✓	✓	
AD-27	✓	✓	✓	✓	✓	✓	✓	
AD-26	✓	✓	✓	✓	✓	✓	✓	needs new lock
AD-25	✓	✓	✓	✓	✓	✓	✓	needs new lock
AD-23	✓	✓	✓	✓	✓	✓	✓	

*Not all wells will be vented, especially flush mounted wells. If that is the case, please note "flush mount well" in the comments.

Facility Name	AFP Pinkney PP
Sample by	Kenny McDonald

Sample Location ID	AD-2

Depth to water, feet (TOC)	16.45
Measured Total Depth, feet (TOC)	40.36

Depth to water date	04/22/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
0916	16.51	220	3.93	732	1.1	1.99	424	21.31		
0921	16.52	220	3.95	749	0.8	1.97	424	21.24		
0926	16.52	220	3.96	758	0.6	1.93	422	21.20		
	1#									

Total volume purged	
Sample appearance	Clear
Sample time	0928
Sample date	04/22/25

Facility Name	Pilcoy
Sample by	M-N Hamilton

Depth to water, feet (TOC)	33.91
Measured Total Depth, feet (TOC)	57.46

Sample Location ID	AD-3
Depth to water date	4.22.25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)
1030	33.82	220	4.89	124	10.6	1.05	432	22.53
1035	33.90	220	4.72	123	5	1.04	433	21.58
1040	33.94	220	4.74	123	4	1.00	416	21.41
1045	34.07	220	4.75	123	3	0.97	410	21.34

Total volume purged	
Sample appearance	Clear
Sample time	1047
Sample date	4.22.25

Facility Name	AGP Plant PP
Sample by	Kerry McDonald

Sample Location ID	AO-4

Depth to water, feet (TOC)	14.82
Measured Total Depth, feet (TOC)	47.29

Depth to water date	04/23/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
0945	14.92	180	4.09	88	13.7	2.97	410	22.28		
0950	14.94	180	4.02	106	15.3	2.04	413	22.31		
0955	14.95	180	4.00	107	15.0	1.99	415	22.31		
1000	14.97	180	3.99	111	14.8	1.97	418	22.31		

Total volume purged	
Sample appearance	Clear
Sample time	1002
Sample date	04/23/25

Facility Name	AFD PINNEY PP
Sample by	KENNY McDONALD

Sample Location ID	AO-7R

Depth to water, feet (TOC)	6.83
Measured Total Depth, feet (TOC)	33.03

Depth to water date	04/21/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1046	6.85	218	4.21	231	8.2	2.80	222			
1051	6.85	218	4.20	230	4.6	1.77	225			
1056	6.85	218	4.18	230	4.5	1.73	227			
1101	6.87	218	4.18	226	4.2	1.71	229			

Total volume purged	
Sample appearance	CLEAR
Sample time	1103
Sample date	04/21/25

Facility Name	AEP Pirkey PP
Sample by	Kenny McDonald

Depth to water, feet (TOC)	11.88
Measured Total Depth, feet (TOC)	31.33

Sample Location ID	AP-08
Depth to water date	04/22/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1057	11.91	206	5.94	416	4.7	3.12	334	22.41		
1102	11.91	206	5.63	420	5.3	1.84	318	22.37		
1107	11.91	206	5.61	422	5.7	1.80	311	22.35		
1112	11.93	206	5.60	422	5.9	1.79	306	22.33		

Total volume purged	
Sample appearance	Clear
Sample time	1114
Sample date	04/22/25

Facility Name	Pinkey
Sample by	Mert / Hamilton

Sample Location ID	AD-12

Depth to water, feet (TOC)	12.47
Measured Total Depth, feet (TOC)	52.00

Depth to water date	4.21.21

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
923	12.61	300	3.50	42	6.4	1.32	313	20.75		
928	12.72	300	3.18	39	7.3	1.27	348	21.05		
933	12.80	300	3.12	38	7.4	1.21	364	21.33		
938	12.92	300	3.15	37	7.4	1.19	371	21.31		

Total volume purged	
Sample appearance	clear
Sample time	940
Sample date	4-21.21

Facility Name	AFP Pitney PP
Sample by	Kenny McDonald

Sample Location ID	AD-13

Depth to water, feet (TOC)	10.47
Measured Total Depth, feet (TOC)	40.70

Depth to water date	04/21/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
0942	10.56	184	5.59	415	425	5.31	253	22.93		
0947	10.60	184	5.56	397	315	5.02	124	23.06		
0952	10.63	184	5.55	399	228	4.97	80	23.09		
0957	10.65	184	5.55	399	223	4.96	79	23.10		
1002	10.69	184	5.54	398	220	4.92	77	23.10		

Total volume purged	
Sample appearance	TURBID
Sample time	1004
Sample date	04/21/25

Facility Name	AEP Pinnacle PP
Sample by	Kenny McDonald

Sample Location ID	AD-16

Depth to water, feet (TOC)	15.46
Measured Total Depth, feet (TOC)	38.24

Depth to water date	04/21/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
0852	15.55	180	4.51	304	10.2	0.87	358	21.84		
0857	15.55	180	4.53	297	9.8	0.86	360	21.79		
0902	15.55	180	4.53	291	10.1	0.83	364	21.77		

Total volume purged	
Sample appearance	clear
Sample time	904
Sample date	04/21/25

Facility Name	Pillcox
Sample by	M-tt Hamilton

Depth to water, feet (TOC)	21.13
Measured Total Depth, feet (TOC)	33.05

Sample Location ID	AD-17
Depth to water date	4-22-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
854	21.63	200	4.18	68	17.4	1.17	474	20.83		
859	21.65	200	3.76	66	4.9	1.19	513	20.41		
904	21.66	200	3.74	65	3.3	1.17	514	20.36		
909	21.66	200	3.73	64	2.9	1.16	514	20.37		

Total volume purged	
Sample appearance	clear
Sample time	911
Sample date	4-22-25

Facility Name	AEP Pinnacle PP
Sample by	Kenny McDonald

Sample Location ID	MP-18

Depth to water, feet (TOC)	4.99
Measured Total Depth, feet (TOC)	28.42

Depth to water date	04/22/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1201	6.03	106	4.10	135	1.3	1.58	407	21.83		
1206	6.97	106	4.18	123	2.5	1.47	389	21.96		
				won't hold warm level						

Total volume purged	
Sample appearance	clear
Sample time	0901
Sample date	04/23/25

Facility Name	AEP Pirkey PP
Sample by	Kenny McDonald

Sample Location ID	AO-22

Depth to water, feet (TOC)	8.40
Measured Total Depth, feet (TOC)	32.70

Depth to water date	04/21/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1148	8.82	180	3.85	822	3.7	2.51	364	23.28		
1153	8.83	180	3.92	833	1.6	2.43	357	23.41		
1158	8.86	180	3.92	836	1.3	2.41	354	23.43		
1203	8.87	180	3.94	838	1.2	2.40	352	23.43		

Total volume purged	
Sample appearance	Clear
Sample time	1205
Sample date	04/21/25

Facility Name	Pixley
Sample by	M. Ft Hamilton

Sample Location ID	MW-23

Depth to water, feet (TOC)	29.66
Measured Total Depth, feet (TOC)	38.26

Depth to water date	4-23-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1035	29.89	220	4.18	199	14.4	0.96	306	21.71		
1040	29.91	220	4.25	103	78.9	0.99	315	21.47		
1045	29.92	220	4.24	85	60.2	0.96	322	21.39		
1050	29.93	220	4.25	84	47.2	0.91	330	21.37		
1055	29.93	220	4.26	82	48.5	0.89	334	21.42		

Total volume purged	
Sample appearance	Turbid
Sample time	1057
Sample date	4-23-25

Facility Name	Pillar
Sample by	Matt Hamilton

Depth to water, feet (TOC)	8.64
Measured Total Depth, feet (TOC)	27.38

Sample Location ID	AD-23
Depth to water date	4-23-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
940	8.90	120	4.03	874	47.5	1.05	301	22.01		
945	9.01	120	4.21	739	23.5	1.04	278	21.75		
950	9.08	120	4.25	717	9.9	1.03	265	21.62		
955	9.16	120	4.27	710	9.5	1.04	258	21.56		

Total volume purged	
Sample appearance	Clear
Sample time	957
Sample date	4-23-25

Facility Name	Pixley
Sample by	Matt Hamilton

Sample Location ID	AD-26

Depth to water, feet (TOC)	15.67
Measured Total Depth, feet (TOC)	42.73

Depth to water date	4-23-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
856	16.08	300	3.47	2,060	6.4	1.41	467	21.43		
901	16.28	300	3.54	2,100	3.8	1.20	394	21.36		
906	16.35	300	3.57	2,110	4.7	1.16	390	21.44		

Total volume purged	
Sample appearance	Clear
Sample time	908
Sample date	4-23-25

Facility Name	Pillcy
Sample by	Matt Hamilton

Sample Location ID	AD-27

Depth to water, feet (TOC)	2.24
Measured Total Depth, feet (TOC)	40.07

Depth to water date	4-23-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
826	2.57	300	3.75	223	21.6	1.20	488	21.75		
831	2.64	300	3.53	238	11.3	1.15	498	21.57		
836	2.67	300	3.54	241	8.4	1.05	493	21.54		
841	2.69	300	3.55	243	8.3	1.01	490	21.53		

Total volume purged	
Sample appearance	clear
Sample time	843
Sample date	4-23-25

Facility Name	Pitney
Sample by	Mark Hamilton

Sample Location ID	AD-28

Depth to water, feet (TOC)	19.01
Measured Total Depth, feet (TOC)	38.54

Depth to water date	4.22.25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
933	19.24	220	3.95	110	7.3	1.07	481	21.46		
938	19.41	220	3.80	113	4.9	1.18	459	20.86		
943	19.49	220	3.76	114	4.0	1.15	500	20.81		

Total volume purged	
Sample appearance	Clear
Sample time	945
Sample date	4.22.25

Facility Name	Pixley
Sample by	Matt / Hamilton

Sample Location ID	AD-30

Depth to water, feet (TOC)	19.59
Measured Total Depth, feet (TOC)	27.15

Depth to water date	4-22-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
803	19.74	220	4.55	300	45.2	1.01	450	21.01		
808	19.77	220	4.27	314	75.6	1.14	488	20.66		
813	19.79	220	4.23	316	82.0	1.08	492	20.52		
818	19.80	220	4.21	317	51.9	1.00	491	20.41		
823	19.81	220	4.21	317	22.1	0.85	489	20.41		
828	19.81	220	4.20	318	22.5	0.83	488	20.46		

Total volume purged	
Sample appearance	clear
Sample time	830
Sample date	4-22-25

Facility Name	Pixley
Sample by	Matt Hamilton

Sample Location ID	AD-31

Depth to water, feet (TOC)	21.16
Measured Total Depth, feet (TOC)	37.32

Depth to water date	4.21.25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1103	21.34	220	3.21	253	38.4	1.03	322	24.26		
1108	21.53	220	3.14	251	26.2	0.99	3-1	24.23		
1113	21.55	220	3.12	264	26.2	0.88	295	24.21		
1118	21.56	220	3.11	270	26.3	0.86	295	24.28		

Total volume purged	
Sample appearance	clear
Sample time	1120
Sample date	4-21-25

Facility Name	Pinney
Sample by	Matt Hamilton

Sample Location ID	AD-32

Depth to water, feet (TOC)	15.71
Measured Total Depth, feet (TOC)	34.65

Depth to water date	4-21-21

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1012	16.37	220	4.69	231	42	1.068	269	21.46		
1017	16.51	220	4.81	245	25	0.99	148	21.54		
1022	16.62	220	4.85	251	36	0.85	121	21.78		
1027	16.70	220	4.84	252	38	0.77	114	22.35		

Total volume purged	
Sample appearance	~~Clear~~ Slightly turbid
Sample time	1029
Sample date	4-21-21

Facility Name	AEP Pinnacle PP
Sample by	K Gray/M Deardorff

Sample Location ID	AO-33

Depth to water, feet (TOC)	10.58
Measured Total Depth, feet (TOC)	32.50

Depth to water date	04/22/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
0753	10.63	214	3.73	266	0.0	1.97	446	21.05		
0758	10.64	214	3.70	247	0.0	1.93	459	20.94		
0803	10.64	214	3.69	246	0.0	1.91	467	20.92		
0808	10.63	214	3.69	241	0.0	1.90	478	20.91		

Total volume purged	
Sample appearance	Clear
Sample time	0810
Sample date	04/22/25

DUPLICATE-1 1200

Facility Name	AEP PIRKEY PP
Sample by	Kenny McDonald

Sample Location ID	AD-34

Depth to water, feet (TOC)	TOC
Measured Total Depth, feet (TOC)	26.05

Depth to water date	04/23/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
0754	0.52	118	3.86	1490	1.2	0.97	423	22.03		
0759	0.60	118	3.91	1500	0.8	0.93	428	21.95		
0804	0.63	118	3.92	1520	0.5	0.91	431	21.84		

Total volume purged	
Sample appearance	Clear
Sample time	0806
Sample date	04/23/25

Facility Name	AEP Pilgrim PP
Sample by	Kenny McDonald

Sample Location ID	AD-36

Depth to water, feet (TOC)	5.61
Measured Total Depth, feet (TOC)	17.10

Depth to water date	04/22/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1009	5.69	172	4.47	109	2.8	1.74	364	22.41		
1014	5.69	172	4.48	99	1.9	1.42	378	22.50		
1019	5.72	172	4.48	97	1.6	1.38	381	22.52		
1024	5.73	172	4.48	96	1.7	1.37	384	22.55		

Total volume purged	
Sample appearance	Clear
Sample time	1026
Sample date	04/22/25

Facility Name	Pilkey
Sample by	Matt Hamilton

Sample Location ID	B-2

Depth to water, feet (TOC)	17.94
Measured Total Depth, feet (TOC)	51.44

Depth to water date	4-21-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
822	18.36	300	4.25	163	16.0	0.89	332	14.38		
827	18.48	300	4.02	118	4.8	1.24	316	19.56		
832	18.42	300	4.02	114	4.7	1.20	311	14.64		
837	18.43	300	4.03	112	4.6	1.18	310	19.69		

Total volume purged	
Sample appearance	clear
Sample time	839
Sample date	4-21-25

Duplicate

1222

Facility Name	AFP Pinkney PP
Sample by	Kenny McDonald

Sample Location ID	B-3

Depth to water, feet (TOC)	12.84
Measured Total Depth, feet (TOC)	37.49

Depth to water date	04/22/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1141	13.73	104	5.45	192	8.7	2.41	350	21.38		
1146	14.92	104	5.48	197	4.6	2.36	342	21.29		
			WON'T HOLD WATER LEVEL							

Total volume purged	
Sample appearance	CLEAR
Sample time	1051
Sample date	04/23/25

CCR Groundwater Monitoring Well Inspection Form

Facility: AEP Pigeon PP

Sampling Period: September 2025

Sampling Contractor: Engle

Signature: [signature]

Well No.	Well Locked	Lock Functioning	Well Locked After Sampling	Access to Well Maintained	Well Casing, Housing, and Pad in Good Shape	Well Properly Labeled	Well cap present	Comments
AD-13	✓	✓	✓	✓	✓	✓	✓	
AD-7R	✓	✓	✓	✓	✓	✓	✓	
AD-22	✓	✓	✓	✓	✓	✓	✓	
AD-33	✓	✓	✓	✓	✓	✓	✓	
AD-34	✓	✓	✓	✓	✓	✓	✓	
AD-36	✓	✓	✓	✓	✓	✓	✓	
AD-8	✓	✓	✓	✓	✓	✓	✓	
AD-2	✓	✓	✓	✓	✓	✓	✓	
B-3	✓	✓	✓		✓	✓	✓	NEEDS WEEDEATING
AD-18	✓	✓	✓	✓	✓	✓	✓	
AB-4	✓	✓	✓		✓	✓	✓	NO GOOD ACCESS
AD-16	✓	✓	✓		✓	✓	✓	TRAIL NEEDS MAINTENANCE

Instructions: Complete form and submit to AEP Environmental Services with Field Data. Place check mark for items that are satisfactory. Unsatisfactory items should be left blank with a note in the comments section on what needs to be remedied.

CCR Groundwater Monitoring Well Inspection Form

Facility: Pilkey Sampling Period: Sept 2025

Sampling Contractor: Eagle Signature: [signature]

Well No.	Well Locked	Fastener and Lock Functioning	Well Locked After Sampling	Access to Well Maintained	Well Casing, Protective Cover, Barriers and Pad in Good Shape	Well Properly Labeled	Well Cap Present and Vented*	Comments
B-2					✓	✓	✓	Protective Casing will not close
AD-12	✓	✓	✓	✓	✓	✓	✓	
AD-32	✓	✓	✓	✓	✓	✓	✓	
AD-31	✓	✓	✓	✓	✓	✓	✓	
AD-30	✓	✓	✓	✓	✓	✓	✓	
AD-28	✓	✓	✓	✓	✓	✓	✓	
AD-17	✓	✓	✓	✓	✓	✓	✓	
AD-3	✓	✓	✓	✓	✓	✓	✓	
AD-27	✓	✓	✓	✓	✓	✓	✓	
AD-26	✓	✓	✓	✓	✓	✓	✓	
AD-25	✓	✓	✓	✓	✓	✓	✓	
AD-23	✓	✓	✓	✓	✓	✓	✓	

*Not all wells will be vented, especially flush mounted wells. If that is the case, please note "flush mount well" in the comments.

Facility Name	AEP Pinnacle PP
Sample by	Kenny McDonald

Sample Location ID	AD-2

Depth to water, feet (TOC)	16.52
Measured Total Depth, feet (TOC)	40.36

Depth to water date	09/09/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1014	16.63	220	4.13	720	1.0	1.94	406	21.27		
1019	16.62	220	4.10	724	0.8	1.80	410	21.32		
1024	16.62	220	4.10	728	0.8	1.78	414	21.33		
1029	16.61	220	4.09	728	0.8	1.77	420	21.36		

Total volume purged	
Sample appearance	Clear
Sample time	1031
Sample date	09/09/25

Facility Name	Pixley
Sample by	Matt Hamilton

Sample Location ID	AD-3

Depth to water, feet (TOC)	36.42
Measured Total Depth, feet (TOC)	57.49

Depth to water date	4.6.21

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1104	36.76	220	4.91	129	46.2	1.35	316	25.08		
1109	36.85	220	4.73	131	49.9	0.42	282	22.58		
1114	36.93	220	4.72	131	49.5	0.39	259	22.18		
1119	36.99	220	4.71	132	49.9	0.37	255	22.10		

Total volume purged	
Sample appearance	~~clear~~ slightly turbid
Sample time	1121
Sample date	4.6.21

Facility Name	AEP PIRKEY PP
Sample by	KENNY McDONALD

Sample Location ID	AD-4

Depth to water, feet (TOC)	17.86
Measured Total Depth, feet (TOC)	47.29

Depth to water date	09/10/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
0941	17.90	190	4.82	120	30.1	2.42	397	23.17		
0946	17.91	190	4.84	116	22.4	2.07	408	23.20		
0951	17.91	190	4.85	112	50.6	1.96	411	23.24		
0956	17.91	190	4.85	112	50.2	1.92	413	23.21		
1001	17.92	190	4.86	110	50.8	1.89	416	23.19		

Total volume purged	
Sample appearance	TURBID
Sample time	1003
Sample date	09/10/25

Facility Name	AEP PIMM PP
Sample by	KIMM McDONALD

Sample Location ID	AD-7R

Depth to water, feet (TOC)	8.26
Measured Total Depth, feet (TOC)	33.03

Depth to water date	09/08/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
0919	8.31	230	4.78	236	2.2	1.93	247	22.13		
0924	8.31	230	4.79	241	0.4	1.64	244	22.46		
0929	8.31	230	4.82	245	0.0	1.60	246	22.51		
0934	8.32	230	4.81	247	0.2	1.59	250	22.53		

Total volume purged	
Sample appearance	CLEAR
Sample time	0936
Sample date	09/08/25

Facility Name	AEP Pickaway PP
Sample by	Kenny McDonald

Sample Location ID	AD-8

Depth to water, feet (TOC)	12.71
Measured Total Depth, feet (TOC)	31.33

Depth to water date	09/09/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
0928	12.76	214	5.87	452	4.2	2.13	284	23.07		
0933	12.77	214	5.89	447	3.6	1.64	276	23.11		
0938	12.78	214	5.91	443	3.3	1.60	276	23.15		
0943	12.78	214	5.93	443	3.5	1.59	271	23.17		

Total volume purged	
Sample appearance	Clear
Sample time	0945
Sample date	09/09/25

Facility Name	Pixley
Sample by	Matt/ Hamilton

Sample Location ID	AD-12

Depth to water, feet (TOC)	13.87
Measured Total Depth, feet (TOC)	52.00

Depth to water date	9-8-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
921	14.12	300	3.48	42	19.5	1.74	447	23.37		
926	14.13	300	3.40	42	9.9	1.25	452	23.75		
931	14.13	300	3.44	42	7.2	1.25	448	23.78		
936	14.14	300	3.47	42	7.3	1.28	445	23.99		

Total volume purged	
Sample appearance	Clear
Sample time	938
Sample date	9-8-25

Facility Name	AEP Pickaway PP
Sample by	Kenny McDonald

Sample Location ID -	AD-13

Depth to water, feet (TOC)	12.68
Measured Total Depth, feet (TOC)	40.70

Depth to water date	09/08/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
0815	12.75	180	5.75	434	11.6	4.71	164	22.43		
0820	12.81	180	5.79	424	10.9	4.43	128	22.36		
0825	12.84	180	5.81	426	11.1	4.39	123	22.38		
0830	12.88	180	5.80	421	10.8	4.37	119	22.41		

Total volume purged	
Sample appearance	Clear
Sample time	0832
Sample date	09/08/25

DUPLICATE 1200

Facility Name	AFP Pitman PP
Sample by	Kenny McPintch

Sample Location ID	AD-16

Depth to water, feet (TOC)	18.65
Measured Total Depth, feet (TOC)	38.24

Depth to water date	09/10/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1048	18.11	200	4.73	260	12.4	1.37	350	23.21		
1053	18.10	200	4.73	263	11.8	1.09	352	23.30		
1058	18.10	200	4.76	268	11.6	1.05	356	23.31		
1103	18.11	200	4.74	271	11.6	1.03	361	23.35		

Total volume purged	
Sample appearance	Clear
Sample time	1105
Sample date	09/10/25

Facility Name	D. Ilcox
Sample by	Staff Hamilton

Sample Location ID	AP-17

Depth to water, feet (TOC)	22.54
Measured Total Depth, feet (TOC)	33.05

Depth to water date	9-9-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1003	22.64	220	3.75	108	56.3	1.14	401	22.92		
1008	22.67	220	3.67	109	38.3	0.51	404	23.25		
1013	22.68	220	3.65	127	14.3	0.52	401	23.35		
1018	22.69	220	3.66	110	6.5	0.53	397	23.45		
1023	22.69	220	3.67	108	6.5	0.54	395	23.52		

Total volume purged	
Sample appearance	Clear
Sample time	1025
Sample date	9-9-25

Facility Name	ATP Pinney PP
Sample by	K Kinney/McDonald

Sample Location ID	AD-18

Depth to water, feet (TOC)	7.99
Measured Total Depth, feet (TOC)	28.42

Depth to water date	09/09/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1121	8.37	102	4.20	98	6.4	2.03	357	22.83		
1126	9.24	102	4.18	87	5.1	1.89	364	22.94		
				WONT HOLD WATER LEVEL						

Total volume purged	
Sample appearance	SLIGHTLY TURBID
Sample time	0842
Sample date	09/10/25

Facility Name	AFP Pinney PP
Sample by	Kenny McDonald

Sample Location ID	AD-22

Depth to water, feet (TOC)	10.28
Measured Total Depth, feet (TOC)	32.70

Depth to water date	04/08/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1003	10.36	200	4.31	746	0.8	2.51	341	22.83		
1008	10.44	200	4.33	752	0.2	2.16	344	22.85		
1013	10.57	200	4.31	759	0.0	2.13	346	22.89		
1018	10.63	200	4.30	762	0.0	2.12	347	22.93		

Total volume purged	
Sample appearance	CLEAR
Sample time	1020
Sample date	09/08/25

Facility Name	Pillsley
Sample by	Matt Hamlin

Sample Location ID	MD-23

Depth to water, feet (TOC)	29.36
Measured Total Depth, feet (TOC)	38.26

Depth to water date	9-10-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1046	29.53	220	4.10	140	90	2.72	281	26.82		
1051	29.54	220	4.11	95	145	1.75	294	25.68		
1056	29.60	220	4.10	88	117	1.61	303	25.02		
1101	29.60	220	4.10	87	70.6	1.28	305	25.01		
1106	29.61	220	4.11	89	52.7	1.21	301	25.11		
1111	29.61	220	4.10	90	37.2	1.04	311	25.15		
1116	29.62	220	4.09	91	34.2	1.03	313	25.32		
1121	29.62	220	4.04	91	34.5	0.99	314	25.61		

Total volume purged	
Sample appearance	Clear
Sample time	1123
Sample date	9-10-25

Facility Name	Pixley
Sample by	Matt Manilla

Sample Location ID	AD-25

Depth to water, feet (TOC)	10.31
Measured Total Depth, feet (TOC)	21.38

Depth to water date	9-10-23

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
959	10.64	120	4.32	685	47.8	2.11	278	27.16		
1004	10.72	120	4.52	806	48.3	0.38	222	26.85		
1009	10.80	120	4.56	792	48.4	0.41	211	26.54		
1014	10.84	120	4.60	784	46.8	0.44	208	26.38		

Total volume purged	
Sample appearance	Clear
Sample time	1016
Sample date	9-10-23

Facility Name	Chatt Hills Pitkey
Sample by	Matt Hamilton

Sample Location ID	AD- 26

Depth to water, feet (TOC)	15.65
Measured Total Depth, feet (TOC)	42.73

Depth to water date	9-10-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
854	16.04	300	3.38	1,990	10.4	1.43	425	23.4		
859	16.15	300	3.56	2,020	4.9	0.70	395	22.87		
904	16.19	300	3.53	2,050	3.5	0.46	386	22.97		

Total volume purged	
Sample appearance	Clear
Sample time	906
Sample date	9-10-25

Facility Name	Pilleey
Sample by	Matt Hanlon

Sample Location ID	AD.27

Depth to water, feet (TOC)	21.69
Measured Total Depth, feet (TOC)	46.07

Depth to water date	9-10-11

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
818	21.91	300	3.56	233	36.6	1.52	447	22.71		
823	21.98	300	3.31	244	28.3	0.64	451	22.21		
828	22.02	300	3.24	256	9.9	1.57	449	22.36		
833	22.03	300	3.28	259	9.9	1.54	448	22.39		

Total volume purged	
Sample appearance	Clear
Sample time	825
Sample date	9-10-11

Facility Name	Pixley
Sample by	Matt Hamilton

Sample Location ID	AD-28

Depth to water, feet (TOC)	19.33
Measured Total Depth, feet (TOC)	38.51

Depth to water date	9-9-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
917	19.54	220	3.82	116	12.7	1.90	382	21.31		
922	19.67	220	3.59	113	4.9	1.32	392	20.46		
927	19.71	220	3.55	113	4.9	1.35	392	20.45		

Total volume purged	
Sample appearance	Clear
Sample time	927
Sample date	9-9-25

Facility Name	Pixley
Sample by	Matt Hamilton

Sample Location ID	AD-30

Depth to water, feet (TOC)	20.18
Measured Total Depth, feet (TOC)	27.15

Depth to water date	9-9-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
807	20.47	220	3.48	318	49	2.86	309	19.13		
812	20.46	220	3.53	326	113	0.72	332	20.50		
817	20.48	220	3.59	327	94.2	0.63	332	21.12		
822	20.44	220	3.66	326	51.8	0.57	331	21.63		
827	20.44	220	3.70	328	35.2	0.57	329	21.96		
832	20.49	220	3.76	328	22.3	0.55	326	22.12		
837	20.50	220	3.79	328	19.4	0.54	325	22.30		
842	20.50	220	3.81	328	19.5	0.53	324	22.41		

Total volume purged	
Sample appearance	Clear
Sample time	844
Sample date	9-9-25

Facility Name	Pixley
Sample by	Matt Hamilton

Sample Location ID	AD-31

Depth to water, feet (TOC)	23.42
Measured Total Depth, feet (TOC)	37.32

Depth to water date	9-8-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1109	23.64	220	3.45	254	184	1.08	293	26.12		
1114	23.68	220	3.46	254	97	0.54	298	26.24		
1119	23.70	220	3.46	269	129	0.47	295	25.97		
1124	23.71	220	3.48	270	133	0.46	295	25.71		
1129	23.73	220	3.44	271	135	0.44	293	25.72		

Total volume purged	
Sample appearance	turbid
Sample time	1131
Sample date	9-8-25

Facility Name	Pillow
Sample by	Matt Hamilton

Sample Location ID	AD-32

Depth to water, feet (TOC)	17.03
Measured Total Depth, feet (TOC)	34.65

Depth to water date	9-8-25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1014	17.35	220	5.28	257	226	2.90	305	23.55		
1019	17.51	220	5.26	259	131	0.68	147	23.35		
1024	17.65	220	5.28	261	112	0.54	116	23.73		
1029	17.77	220	5.30	262	113	0.50	102	24.03		
1034	17.86	220	5.32	263	116	0.48	95	24.08		

Total volume purged	
Sample appearance	turbid
Sample time	1036
Sample date	9-8-25

Facility Name	AFP Pigeon PP
Sample by	Kenny McDonald

Sample Location ID	AD-33

Depth to water, feet (TOC)	11.92
Measured Total Depth, feet (TOC)	32.50

Depth to water date	09/08/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1106	11.94	220	4.10	223	0.0	2.61	382	23.02		
1111	11.95	220	4.08	223	0.0	1.92	386	22.97		
1116	11.96	220	4.08	223	0.0	1.90	390	23.00		
1121	11.96	220	4.08	222	0.0	1.90	393	23.06		

Total volume purged	
Sample appearance	Clear
Sample time	1123
Sample date	09/08/25

Facility Name	AEP PIRKEY PP
Sample by	KENNY McDONALD

Sample Location ID	AP-34

Depth to water, feet (TOC)	TOC
Measured Total Depth, feet (TOC)	26.05

Depth to water date	09/09/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
0757	0.41	120	4.02	1510	3.6	2.83	374	22.08		
0802	0.47	120	4.06	1510	3.4	2.51	379	22.11		
0807	0.53	120	4.04	1500	3.4	2.48	382	22.11		
0812	0.56	120	4.04	1490	3.4	2.47	388	22.13		

Total volume purged	
Sample appearance	CLEAR
Sample time	0814
Sample date	09/09/25

Facility Name	AFP Pitney PP
Sample by	Kenny McDonald

Sample Location ID	AD-36

Depth to water, feet (TOC)	5.49
Measured Total Depth, feet (TOC)	17.10

Depth to water date	09/09/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
0840	5.52	200	4.21	94	4.8	1.69	411	22.41		
0845	5.54	200	4.19	90	2.6	0.92	413	22.42		
0850	5.55	200	4.16	88	2.3	0.97	417	22.43		
0855	5.55	200	4.15	87	2.6	0.95	417	22.46		

Total volume purged	
Sample appearance	Clear
Sample time	0857
Sample date	09/09/25

Facility Name	Pilkey
Sample by	M-H Hamilton

Sample Location ID	B-2

Depth to water, feet (TOC)	23.45
Measured Total Depth, feet (TOC)	51.44

Depth to water date	9-8-23

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
815	23.19	300	4.72	97	35.3	2.02	324	20.41		
820	23.89	300	4.05	95	15.3	2.12	375	19.86		
825	23.97	300	3.98	95	6.1	2.14	385	19.81		
830	24.02	300	3.97	94	6.1	2.15	392	19.78		

Total volume purged	
Sample appearance	clear
Sample time	832
Sample date	9-8-23

Duplicate
1214

Facility Name	AEP Pinnypp
Sample by	Kimmy Mitchell

Sample Location ID	B-3

Depth to water, feet (TOC)	15.53
Measured Total Depth, feet (TOC)	37.49

Depth to water date	09/09/25

Purge Stabilization Data

Time	Water Depth (from TOC)	Flow Rate (mL/min)	pH (S.U.)	Spec Cond (µS/cm)	Turbidity (N.T.U)	D.O. (mg/L)	ORP (mV)	Temperature (°C)		
1139	16.38	102	4.97	207	5.2	2.06	332	23.06		
1144	17.14	102	4.99	214	5.8	1.83	340	22.94		
				WON'T Hold	WATER LEVEL					

Total volume purged	
Sample appearance	CLEAR
Sample time	0756
Sample date	09/10/25

Water Analysis Report

Reissued

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-2
Customer Description: TG-32
Lab Number: 251109-001
Preparation:
Date Collected: 04/22/2025 10:28 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.04	µg/L	5	0.50	0.04	U1	GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4
Arsenic	1.5	µg/L	5	0.5	0.2		GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4
Barium	13.5	µg/L	5	1.0	0.3		GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4
Beryllium	0.90	µg/L	5	0.25	0.04		GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4
Boron	3.02	mg/L	5	0.25	0.04		GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4
Cadmium	0.12	µg/L	5	0.10	0.02		GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4
Calcium	4.6	mg/L	5	0.3	0.1		GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4
Chromium	0.5	µg/L	5	1.5	0.4	J1	GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4
Cobalt	34.9	µg/L	1	0.020	0.005		GES	04/30/2025 12:22	EPA 200.8-1994, Rev. 5.4
Copper	<0.5	µg/L	5	2.5	0.5	U1	GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4
Lead	0.7	µg/L	5	1.0	0.3	J1	GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4
Lithium	0.0791	mg/L	5	0.0015	0.0003	M1	GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4
Magnesium	10.2	mg/L	5	0.50	0.05		GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4
Mercury	62	ng/L	1	5	2		RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.5	µg/L	5	2.5	0.5	U1	GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4
Potassium	1.59	mg/L	5	0.50	0.05		GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4
Selenium	6.4	µg/L	5	2.5	0.2		GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4
Sodium	120	mg/L	5	1.0	0.1	M1	GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4
Strontium	0.0636	mg/L	5	0.0100	0.0003		GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4
Thallium	0.1	µg/L	5	1.0	0.1	J1	GES	04/30/2025 13:27	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	2.08	pCi/L	0.30	0.30	O3, L1	ST	05/09/2025 13:07	SW-846 9315-1986, Rev. 0
Carrier Recovery	89.4	%						
Radium-228	1.45	pCi/L	0.13	0.40	L1	TTP	05/08/2025 16:14	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	94.4	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-2
Customer Description: TG-32
Lab Number: 251109-001-01
Preparation: Dissolved
Date Collected: 04/22/2025 10:28 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.04	µg/L	5	0.50	0.04	U1	GES	04/30/2025 13:44	EPA 200.8-1994, Rev. 5.4
Arsenic	1.43	µg/L	1	0.10	0.03		GES	04/30/2025 12:38	EPA 200.8-1994, Rev. 5.4
Barium	13.6	µg/L	5	1.0	0.3		GES	04/30/2025 13:44	EPA 200.8-1994, Rev. 5.4
Beryllium	0.94	µg/L	5	0.25	0.04		GES	04/30/2025 13:44	EPA 200.8-1994, Rev. 5.4
Cadmium	0.150	µg/L	1	0.020	0.004		GES	04/30/2025 12:38	EPA 200.8-1994, Rev. 5.4
Chromium	0.39	µg/L	1	0.30	0.07		GES	04/30/2025 12:38	EPA 200.8-1994, Rev. 5.4
Cobalt	35.1	µg/L	1	0.020	0.005		GES	04/30/2025 12:38	EPA 200.8-1994, Rev. 5.4
Copper	0.5	µg/L	1	0.5	0.1		GES	04/30/2025 12:38	EPA 200.8-1994, Rev. 5.4
Iron	0.194	mg/L	1	0.020	0.003		GES	04/30/2025 12:38	EPA 200.8-1994, Rev. 5.4
Lead	0.7	µg/L	5	1.0	0.3	J1	GES	04/30/2025 13:44	EPA 200.8-1994, Rev. 5.4
Lithium	0.0819	mg/L	5	0.0015	0.0003		GES	04/30/2025 13:44	EPA 200.8-1994, Rev. 5.4
Manganese	0.119	mg/L	1	0.00100	0.00007		GES	04/30/2025 12:38	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 12:38	EPA 200.8-1994, Rev. 5.4
Selenium	6.56	µg/L	1	0.50	0.04		GES	04/30/2025 12:38	EPA 200.8-1994, Rev. 5.4
Thallium	0.2	µg/L	5	1.0	0.1	J1	GES	04/30/2025 13:44	EPA 200.8-1994, Rev. 5.4

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-3
Customer Description: TG-32
Lab Number: 251109-002
Preparation:
Date Collected: 04/22/2025 11:47 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.015	µg/L	1	0.100	0.008	J1	GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Arsenic	0.50	µg/L	1	0.10	0.03		GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Barium	69.3	µg/L	1	0.20	0.05		GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Beryllium	0.175	µg/L	1	0.050	0.007		GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Boron	0.054	mg/L	1	0.050	0.007		GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Cadmium	0.017	µg/L	1	0.020	0.004	J1	GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Calcium	5.12	mg/L	1	0.05	0.02		GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Chromium	0.29	µg/L	1	0.30	0.07	J1	GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Cobalt	4.59	µg/L	1	0.020	0.005		GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Copper	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Lead	0.11	µg/L	1	0.20	0.05	J1	GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Lithium	0.0589	mg/L	1	0.00030	0.00006		GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Magnesium	2.52	mg/L	1	0.100	0.009		GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	0.1	µg/L	1	0.5	0.1	J1	GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Potassium	2.64	mg/L	1	0.10	0.01		GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Selenium	0.07	µg/L	1	0.50	0.04	J1	GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Sodium	10.2	mg/L	1	0.20	0.02		GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Strontium	0.0337	mg/L	1	0.00200	0.00005		GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4
Thallium	0.07	µg/L	1	0.20	0.02	J1	GES	04/30/2025 12:54	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.49	pCi/L	0.25	0.30	O3, L1	ST	05/09/2025 13:07	SW-846 9315-1986, Rev. 0
Carrier Recovery	93.9	%						
Radium-228	0.36	pCi/L	0.13	0.43	L1	TTP	05/08/2025 16:14	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	101	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

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Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-3
Customer Description: TG-32
Lab Number: 251109-002-01
Preparation: Dissolved
Date Collected: 04/22/2025 11:47 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.04	µg/L	5	0.50	0.04	U1	GES	04/30/2025 14:00	EPA 200.8-1994, Rev. 5.4
Arsenic	0.40	µg/L	1	0.10	0.03		GES	04/30/2025 13:00	EPA 200.8-1994, Rev. 5.4
Barium	71.5	µg/L	5	1.0	0.3		GES	04/30/2025 14:00	EPA 200.8-1994, Rev. 5.4
Beryllium	0.19	µg/L	5	0.25	0.04	J1	GES	04/30/2025 14:00	EPA 200.8-1994, Rev. 5.4
Cadmium	0.019	µg/L	1	0.020	0.004	J1	GES	04/30/2025 13:00	EPA 200.8-1994, Rev. 5.4
Chromium	0.32	µg/L	1	0.30	0.07		GES	04/30/2025 13:00	EPA 200.8-1994, Rev. 5.4
Cobalt	4.87	µg/L	1	0.020	0.005		GES	04/30/2025 13:00	EPA 200.8-1994, Rev. 5.4
Copper	0.1	µg/L	1	0.5	0.1	J1	GES	04/30/2025 13:00	EPA 200.8-1994, Rev. 5.4
Iron	3.78	mg/L	1	0.020	0.003		GES	04/30/2025 13:00	EPA 200.8-1994, Rev. 5.4
Lead	<0.3	µg/L	5	1.0	0.3	U1	GES	04/30/2025 14:00	EPA 200.8-1994, Rev. 5.4
Lithium	0.0804	mg/L	5	0.0015	0.0003		GES	04/30/2025 14:00	EPA 200.8-1994, Rev. 5.4
Manganese	0.0634	mg/L	1	0.00100	0.00007		GES	04/30/2025 13:00	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 13:00	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	04/30/2025 13:00	EPA 200.8-1994, Rev. 5.4
Thallium	<0.1	µg/L	5	1.0	0.1	U1	GES	04/30/2025 14:00	EPA 200.8-1994, Rev. 5.4

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Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-4
Customer Description: TG-32
Lab Number: 251109-003
Preparation:
Date Collected: 04/23/2025 11:02 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	04/30/2025 13:05	EPA 200.8-1994, Rev. 5.4
Arsenic	0.35	µg/L	1	0.10	0.03		GES	04/30/2025 13:05	EPA 200.8-1994, Rev. 5.4
Barium	103	µg/L	1	0.20	0.05		GES	04/30/2025 13:05	EPA 200.8-1994, Rev. 5.4
Beryllium	0.50	µg/L	5	0.25	0.04		GES	04/30/2025 14:05	EPA 200.8-1994, Rev. 5.4
Boron	0.018	mg/L	1	0.050	0.007	J1	GES	04/30/2025 13:05	EPA 200.8-1994, Rev. 5.4
Cadmium	0.016	µg/L	1	0.020	0.004	J1	GES	04/30/2025 13:05	EPA 200.8-1994, Rev. 5.4
Calcium	2.37	mg/L	1	0.05	0.02		GES	04/30/2025 13:05	EPA 200.8-1994, Rev. 5.4
Chromium	0.32	µg/L	1	0.30	0.07		GES	04/30/2025 13:05	EPA 200.8-1994, Rev. 5.4
Cobalt	4.86	µg/L	1	0.020	0.005		GES	04/30/2025 13:05	EPA 200.8-1994, Rev. 5.4
Copper	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 13:05	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	04/30/2025 13:05	EPA 200.8-1994, Rev. 5.4
Lithium	0.0373	mg/L	5	0.0015	0.0003		GES	04/30/2025 14:05	EPA 200.8-1994, Rev. 5.4
Magnesium	0.898	mg/L	1	0.100	0.009		GES	04/30/2025 13:05	EPA 200.8-1994, Rev. 5.4
Mercury	4	ng/L	1	5	2	J1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 13:05	EPA 200.8-1994, Rev. 5.4
Potassium	2.21	mg/L	1	0.10	0.01		GES	04/30/2025 13:05	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	04/30/2025 13:05	EPA 200.8-1994, Rev. 5.4
Sodium	7.13	mg/L	1	0.20	0.02		GES	04/30/2025 13:05	EPA 200.8-1994, Rev. 5.4
Strontium	0.0187	mg/L	1	0.00200	0.00005		GES	04/30/2025 13:05	EPA 200.8-1994, Rev. 5.4
Thallium	0.09	µg/L	1	0.20	0.02	J1	GES	04/30/2025 13:05	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.51	pCi/L	0.26	0.39	O3, L1	ST	05/09/2025 13:07	SW-846 9315-1986, Rev. 0
Carrier Recovery	88.1	%						
Radium-228	0.88	pCi/L	0.13	0.40	L1	TTP	05/08/2025 16:14	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	104	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

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Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-4
Customer Description: TG-32
Lab Number: 251109-003-01
Preparation: Dissolved
Date Collected: 04/23/2025 11:02 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	04/30/2025 13:11	EPA 200.8-1994, Rev. 5.4
Arsenic	0.04	µg/L	1	0.10	0.03	J1	GES	04/30/2025 13:11	EPA 200.8-1994, Rev. 5.4
Barium	109	µg/L	1	0.20	0.05		GES	04/30/2025 13:11	EPA 200.8-1994, Rev. 5.4
Beryllium	0.50	µg/L	5	0.25	0.04		GES	04/30/2025 14:11	EPA 200.8-1994, Rev. 5.4
Cadmium	0.017	µg/L	1	0.020	0.004	J1	GES	04/30/2025 13:11	EPA 200.8-1994, Rev. 5.4
Chromium	0.21	µg/L	1	0.30	0.07	J1	GES	04/30/2025 13:11	EPA 200.8-1994, Rev. 5.4
Cobalt	5.24	µg/L	1	0.020	0.005		GES	04/30/2025 13:11	EPA 200.8-1994, Rev. 5.4
Copper	0.2	µg/L	1	0.5	0.1	J1	GES	04/30/2025 13:11	EPA 200.8-1994, Rev. 5.4
Iron	0.118	mg/L	1	0.020	0.003		GES	04/30/2025 13:11	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	04/30/2025 13:11	EPA 200.8-1994, Rev. 5.4
Lithium	0.0369	mg/L	5	0.0015	0.0003		GES	04/30/2025 14:11	EPA 200.8-1994, Rev. 5.4
Manganese	0.0433	mg/L	1	0.00100	0.00007		GES	04/30/2025 13:11	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 13:11	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	04/30/2025 13:11	EPA 200.8-1994, Rev. 5.4
Thallium	0.09	µg/L	1	0.20	0.02	J1	GES	04/30/2025 13:11	EPA 200.8-1994, Rev. 5.4

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Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-7R
Customer Description: TG-32
Lab Number: 251109-004
Preparation:
Date Collected: 04/21/2025 12:03 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Arsenic	0.39	µg/L	1	0.10	0.03		GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Barium	45.7	µg/L	1	0.20	0.05		GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Beryllium	1.53	µg/L	1	0.050	0.007		GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Boron	0.293	mg/L	1	0.050	0.007		GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Cadmium	0.379	µg/L	1	0.020	0.004		GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Calcium	3.05	mg/L	1	0.05	0.02		GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Chromium	0.29	µg/L	1	0.30	0.07	J1	GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Cobalt	18.9	µg/L	1	0.020	0.005		GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Copper	0.2	µg/L	1	0.5	0.1	J1	GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Lead	0.09	µg/L	1	0.20	0.05	J1	GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Lithium	0.0506	mg/L	1	0.00030	0.00006		GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Magnesium	4.85	mg/L	1	0.100	0.009		GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Mercury	5	ng/L	1	5	2		RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Potassium	1.76	mg/L	1	0.10	0.01		GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Selenium	1.39	µg/L	1	0.50	0.04		GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Sodium	22.3	mg/L	1	0.20	0.02		GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Strontium	0.0316	mg/L	1	0.00200	0.00005		GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4
Thallium	0.16	µg/L	1	0.20	0.02	J1	GES	04/30/2025 13:16	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.33	pCi/L	0.23	0.27	O3, L1	ST	05/09/2025 13:07	SW-846 9315-1986, Rev. 0
Carrier Recovery	92.3	%						
Radium-228	0.80	pCi/L	0.14	0.45	L1	TTP	05/08/2025 16:14	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	103	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

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Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-7R
Customer Description: TG-32
Lab Number: 251109-004-01
Preparation: Dissolved
Date Collected: 04/21/2025 12:03 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	04/30/2025 13:22	EPA 200.8-1994, Rev. 5.4
Arsenic	0.31	µg/L	1	0.10	0.03		GES	04/30/2025 13:22	EPA 200.8-1994, Rev. 5.4
Barium	44.6	µg/L	1	0.20	0.05		GES	04/30/2025 13:22	EPA 200.8-1994, Rev. 5.4
Beryllium	1.47	µg/L	1	0.050	0.007		GES	04/30/2025 13:22	EPA 200.8-1994, Rev. 5.4
Cadmium	0.355	µg/L	1	0.020	0.004		GES	04/30/2025 13:22	EPA 200.8-1994, Rev. 5.4
Chromium	0.24	µg/L	1	0.30	0.07	J1	GES	04/30/2025 13:22	EPA 200.8-1994, Rev. 5.4
Cobalt	18.8	µg/L	1	0.020	0.005		GES	04/30/2025 13:22	EPA 200.8-1994, Rev. 5.4
Copper	0.4	µg/L	1	0.5	0.1	J1	GES	04/30/2025 13:22	EPA 200.8-1994, Rev. 5.4
Iron	4.87	mg/L	1	0.020	0.003		GES	04/30/2025 13:22	EPA 200.8-1994, Rev. 5.4
Lead	0.07	µg/L	1	0.20	0.05	J1	GES	04/30/2025 13:22	EPA 200.8-1994, Rev. 5.4
Lithium	0.0492	mg/L	1	0.00030	0.00006		GES	04/30/2025 13:22	EPA 200.8-1994, Rev. 5.4
Manganese	0.0605	mg/L	1	0.00100	0.00007		GES	04/30/2025 13:22	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 13:22	EPA 200.8-1994, Rev. 5.4
Selenium	1.47	µg/L	1	0.50	0.04		GES	04/30/2025 13:22	EPA 200.8-1994, Rev. 5.4
Thallium	0.15	µg/L	1	0.20	0.02	J1	GES	04/30/2025 13:22	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-8
Customer Description: TG-32
Lab Number: 251109-005
Preparation:
Date Collected: 04/22/2025 12:14 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.805	mg/L	1	0.050	0.007		GES	04/30/2025 15:16	EPA 200.8-1994, Rev. 5.4
Calcium	63.3	mg/L	1	0.05	0.02		GES	04/30/2025 15:16	EPA 200.8-1994, Rev. 5.4
Magnesium	5.25	mg/L	1	0.100	0.009		GES	04/30/2025 15:16	EPA 200.8-1994, Rev. 5.4
Potassium	1.04	mg/L	1	0.10	0.01		GES	04/30/2025 15:16	EPA 200.8-1994, Rev. 5.4
Sodium	9.65	mg/L	1	0.20	0.02		GES	04/30/2025 15:16	EPA 200.8-1994, Rev. 5.4
Strontium	0.384	mg/L	1	0.00200	0.00005		GES	04/30/2025 15:16	EPA 200.8-1994, Rev. 5.4

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Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-12
Customer Description: TG-32
Lab Number: 251109-006
Preparation:
Date Collected: 04/21/2025 10:40 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.010	µg/L	1	0.100	0.008	J1	GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Arsenic	0.09	µg/L	1	0.10	0.03	J1	GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Barium	15.0	µg/L	1	0.20	0.05		GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Beryllium	0.108	µg/L	1	0.050	0.007		GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Boron	0.020	mg/L	1	0.050	0.007	J1	GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Cadmium	0.005	µg/L	1	0.020	0.004	J1	GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Calcium	0.17	mg/L	1	0.05	0.02		GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Chromium	0.52	µg/L	1	0.30	0.07		GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Cobalt	0.900	µg/L	1	0.020	0.005		GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Copper	0.2	µg/L	1	0.5	0.1	J1	GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Lead	0.10	µg/L	1	0.20	0.05	J1	GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Lithium	0.00514	mg/L	1	0.00030	0.00006		GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Magnesium	0.273	mg/L	1	0.100	0.009		GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Mercury	2	ng/L	1	5	2	J1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Potassium	0.18	mg/L	1	0.10	0.01		GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Selenium	0.20	µg/L	1	0.50	0.04	J1	GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Sodium	3.29	mg/L	1	0.20	0.02		GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Strontium	0.00157	mg/L	1	0.00200	0.00005	J1	GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	04/30/2025 15:22	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.51	pCi/L	0.14	0.27	O3, L1	ST	05/09/2025 13:07	SW-846 9315-1986, Rev. 0
Carrier Recovery	96.9	%						
Radium-228	0.81	pCi/L	0.16	0.52	L1	TTP	05/08/2025 16:14	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	102	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
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Audinet: 210-4221

Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-12
Customer Description: TG-32
Lab Number: 251109-006-01
Preparation: Dissolved
Date Collected: 04/21/2025 10:40 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.019	µg/L	1	0.100	0.008	J1	GES	04/30/2025 15:27	EPA 200.8-1994, Rev. 5.4
Arsenic	0.06	µg/L	1	0.10	0.03	J1	GES	04/30/2025 15:27	EPA 200.8-1994, Rev. 5.4
Barium	15.4	µg/L	1	0.20	0.05		GES	04/30/2025 15:27	EPA 200.8-1994, Rev. 5.4
Beryllium	0.109	µg/L	1	0.050	0.007		GES	04/30/2025 15:27	EPA 200.8-1994, Rev. 5.4
Cadmium	0.005	µg/L	1	0.020	0.004	J1	GES	04/30/2025 15:27	EPA 200.8-1994, Rev. 5.4
Chromium	0.34	µg/L	1	0.30	0.07		GES	04/30/2025 15:27	EPA 200.8-1994, Rev. 5.4
Cobalt	1.02	µg/L	1	0.020	0.005		GES	04/30/2025 15:27	EPA 200.8-1994, Rev. 5.4
Copper	0.3	µg/L	1	0.5	0.1	J1	GES	04/30/2025 15:27	EPA 200.8-1994, Rev. 5.4
Iron	0.021	mg/L	1	0.020	0.003		GES	04/30/2025 15:27	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	04/30/2025 15:27	EPA 200.8-1994, Rev. 5.4
Lithium	0.00530	mg/L	1	0.00030	0.00006		GES	04/30/2025 15:27	EPA 200.8-1994, Rev. 5.4
Manganese	0.00263	mg/L	1	0.00100	0.00007		GES	04/30/2025 15:27	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 15:27	EPA 200.8-1994, Rev. 5.4
Selenium	0.15	µg/L	1	0.50	0.04	J1	GES	04/30/2025 15:27	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	04/30/2025 15:27	EPA 200.8-1994, Rev. 5.4

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
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Phone: 614-836-4221
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Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-13
Customer Description: TG-32
Lab Number: 251109-007
Preparation:
Date Collected: 04/21/2025 11:04 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Arsenic	2.15	µg/L	1	0.10	0.03		GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Barium	37.5	µg/L	1	0.20	0.05		GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Beryllium	0.327	µg/L	1	0.050	0.007		GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Boron	0.072	mg/L	1	0.050	0.007		GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Calcium	10.2	mg/L	1	0.05	0.02		GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Chromium	0.26	µg/L	1	0.30	0.07	J1	GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Cobalt	49.9	µg/L	1	0.020	0.005		GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Copper	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Lithium	0.129	mg/L	1	0.00030	0.00006		GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Magnesium	14.0	mg/L	1	0.100	0.009		GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Potassium	4.90	mg/L	1	0.10	0.01		GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Sodium	20.2	mg/L	1	0.20	0.02		GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Strontium	0.0740	mg/L	1	0.00200	0.00005		GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	04/30/2025 15:33	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.03	pCi/L	0.21	0.29	O3, L1	ST	05/09/2025 13:07	SW-846 9315-1986, Rev. 0
Carrier Recovery	86.7	%						
Radium-228	0.88	pCi/L	0.15	0.48	L1	TTP	05/08/2025 16:14	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	101	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

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Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-13
Customer Description: TG-32
Lab Number: 251109-007-01
Preparation: Dissolved
Date Collected: 04/21/2025 11:04 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	04/30/2025 15:38	EPA 200.8-1994, Rev. 5.4
Arsenic	0.49	µg/L	1	0.10	0.03		GES	04/30/2025 15:38	EPA 200.8-1994, Rev. 5.4
Barium	37.1	µg/L	1	0.20	0.05		GES	04/30/2025 15:38	EPA 200.8-1994, Rev. 5.4
Beryllium	0.233	µg/L	1	0.050	0.007		GES	04/30/2025 15:38	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	04/30/2025 15:38	EPA 200.8-1994, Rev. 5.4
Chromium	0.25	µg/L	1	0.30	0.07	J1	GES	04/30/2025 15:38	EPA 200.8-1994, Rev. 5.4
Cobalt	50.1	µg/L	1	0.020	0.005		GES	04/30/2025 15:38	EPA 200.8-1994, Rev. 5.4
Copper	0.1	µg/L	1	0.5	0.1	J1	GES	04/30/2025 15:38	EPA 200.8-1994, Rev. 5.4
Iron	28.5	mg/L	1	0.020	0.003		GES	04/30/2025 15:38	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	04/30/2025 15:38	EPA 200.8-1994, Rev. 5.4
Lithium	0.128	mg/L	1	0.00030	0.00006		GES	04/30/2025 15:38	EPA 200.8-1994, Rev. 5.4
Manganese	0.479	mg/L	1	0.00100	0.00007		GES	04/30/2025 15:38	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 15:38	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	04/30/2025 15:38	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	04/30/2025 15:38	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-16
Customer Description: TG-32
Lab Number: 251109-008
Preparation:
Date Collected: 04/21/2025 10:04 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.015	mg/L	1	0.050	0.007	J1	GES	04/30/2025 15:44	EPA 200.8-1994, Rev. 5.4
Calcium	0.88	mg/L	1	0.05	0.02		GES	04/30/2025 15:44	EPA 200.8-1994, Rev. 5.4
Manganese	0.0157	mg/L	1	0.00100	0.00007		GES	04/30/2025 15:44	EPA 200.8-1994, Rev. 5.4
Potassium	1.09	mg/L	1	0.10	0.01		GES	04/30/2025 15:44	EPA 200.8-1994, Rev. 5.4
Sodium	17.6	mg/L	1	0.20	0.02		GES	04/30/2025 15:44	EPA 200.8-1994, Rev. 5.4
Strontium	0.0114	mg/L	1	0.00200	0.00005		GES	04/30/2025 15:44	EPA 200.8-1994, Rev. 5.4

AMERICAN ELECTRIC POWER

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4001 Bixby Road
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Audinet: 210-4221

Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-17
Customer Description: TG-32
Lab Number: 251109-009
Preparation:
Date Collected: 04/22/2025 10:11 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Arsenic	0.07	µg/L	1	0.10	0.03	J1	GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Barium	93.1	µg/L	1	0.20	0.05		GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Beryllium	0.240	µg/L	1	0.050	0.007		GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Boron	0.039	mg/L	1	0.050	0.007	J1	GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Cadmium	0.019	µg/L	1	0.020	0.004	J1	GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Calcium	0.25	mg/L	1	0.05	0.02		GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Chromium	0.33	µg/L	1	0.30	0.07		GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Cobalt	4.60	µg/L	1	0.020	0.005		GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Copper	0.3	µg/L	1	0.5	0.1	J1	GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Lithium	0.00984	mg/L	1	0.00030	0.00006		GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Magnesium	1.45	mg/L	1	0.100	0.009		GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Mercury	97	ng/L	4	20	8		RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Potassium	0.37	mg/L	1	0.10	0.01		GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Selenium	0.06	µg/L	1	0.50	0.04	J1	GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Sodium	6.39	mg/L	1	0.20	0.02		GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Strontium	0.00715	mg/L	1	0.00200	0.00005		GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	04/30/2025 15:49	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.69	pCi/L	0.27	0.41	O3, L1	ST	05/09/2025 13:07	SW-846 9315-1986, Rev. 0
Carrier Recovery	89.2	%						
Radium-228	1.06	pCi/L	0.11	0.34	L1	TTP	05/08/2025 16:14	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	105	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

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Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-17
Customer Description: TG-32
Lab Number: 251109-009-01
Preparation: Dissolved
Date Collected: 04/22/2025 10:11 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	04/30/2025 15:55	EPA 200.8-1994, Rev. 5.4
Arsenic	0.05	µg/L	1	0.10	0.03	J1	GES	04/30/2025 15:55	EPA 200.8-1994, Rev. 5.4
Barium	86.9	µg/L	1	0.20	0.05		GES	04/30/2025 15:55	EPA 200.8-1994, Rev. 5.4
Beryllium	0.240	µg/L	1	0.050	0.007		GES	04/30/2025 15:55	EPA 200.8-1994, Rev. 5.4
Cadmium	0.020	µg/L	1	0.020	0.004		GES	04/30/2025 15:55	EPA 200.8-1994, Rev. 5.4
Chromium	0.29	µg/L	1	0.30	0.07	J1	GES	04/30/2025 15:55	EPA 200.8-1994, Rev. 5.4
Cobalt	4.21	µg/L	1	0.020	0.005		GES	04/30/2025 15:55	EPA 200.8-1994, Rev. 5.4
Copper	0.3	µg/L	1	0.5	0.1	J1	GES	04/30/2025 15:55	EPA 200.8-1994, Rev. 5.4
Iron	0.005	mg/L	1	0.020	0.003	J1	GES	04/30/2025 15:55	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	04/30/2025 15:55	EPA 200.8-1994, Rev. 5.4
Lithium	0.00980	mg/L	1	0.00030	0.00006		GES	04/30/2025 15:55	EPA 200.8-1994, Rev. 5.4
Manganese	0.00360	mg/L	1	0.00100	0.00007		GES	04/30/2025 15:55	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 15:55	EPA 200.8-1994, Rev. 5.4
Selenium	0.06	µg/L	1	0.50	0.04	J1	GES	04/30/2025 15:55	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	04/30/2025 15:55	EPA 200.8-1994, Rev. 5.4

AMERICAN ELECTRIC POWER

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4001 Bixby Road
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Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-18
Customer Description: TG-32
Lab Number: 251109-010
Preparation:
Date Collected: 04/23/2025 10:01 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Arsenic	0.18	µg/L	1	0.10	0.03		GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Barium	76.8	µg/L	1	0.20	0.05		GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Beryllium	0.082	µg/L	1	0.050	0.007		GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Boron	0.011	mg/L	1	0.050	0.007	J1	GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Cadmium	0.011	µg/L	1	0.020	0.004	J1	GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Calcium	0.23	mg/L	1	0.05	0.02		GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Chromium	0.49	µg/L	1	0.30	0.07		GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Cobalt	0.991	µg/L	1	0.020	0.005		GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Copper	0.2	µg/L	1	0.5	0.1	J1	GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Lead	0.09	µg/L	1	0.20	0.05	J1	GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Lithium	0.0152	mg/L	1	0.00030	0.00006		GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Magnesium	0.327	mg/L	1	0.100	0.009		GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Mercury	14	ng/L	1	5	2		RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Potassium	0.82	mg/L	1	0.10	0.01		GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Selenium	0.10	µg/L	1	0.50	0.04	J1	GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Sodium	5.98	mg/L	1	0.20	0.02		GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Strontium	0.00446	mg/L	1	0.00200	0.00005		GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4
Thallium	0.04	µg/L	1	0.20	0.02	J1	GES	04/30/2025 16:00	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.67	pCi/L	0.15	0.20	O3, L1	ST	05/09/2025 13:07	SW-846 9315-1986, Rev. 0
Carrier Recovery	105	%						
Radium-228	0.45	pCi/L	0.14	0.45		TTP	05/12/2025 17:25	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	99.3	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-18
Customer Description: TG-32
Lab Number: 251109-010-01
Preparation: Dissolved
Date Collected: 04/23/2025 10:01 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	04/30/2025 16:05	EPA 200.8-1994, Rev. 5.4
Arsenic	0.06	µg/L	1	0.10	0.03	J1	GES	04/30/2025 16:05	EPA 200.8-1994, Rev. 5.4
Barium	71.3	µg/L	1	0.20	0.05		GES	04/30/2025 16:05	EPA 200.8-1994, Rev. 5.4
Beryllium	0.084	µg/L	1	0.050	0.007		GES	04/30/2025 16:05	EPA 200.8-1994, Rev. 5.4
Cadmium	0.011	µg/L	1	0.020	0.004	J1	GES	04/30/2025 16:05	EPA 200.8-1994, Rev. 5.4
Chromium	0.22	µg/L	1	0.30	0.07	J1	GES	04/30/2025 16:05	EPA 200.8-1994, Rev. 5.4
Cobalt	1.10	µg/L	1	0.020	0.005		GES	04/30/2025 16:05	EPA 200.8-1994, Rev. 5.4
Copper	0.3	µg/L	1	0.5	0.1	J1	GES	04/30/2025 16:05	EPA 200.8-1994, Rev. 5.4
Iron	0.018	mg/L	1	0.020	0.003	J1	GES	04/30/2025 16:05	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	04/30/2025 16:05	EPA 200.8-1994, Rev. 5.4
Lithium	0.0158	mg/L	1	0.00030	0.00006		GES	04/30/2025 16:05	EPA 200.8-1994, Rev. 5.4
Manganese	0.00444	mg/L	1	0.00100	0.00007		GES	04/30/2025 16:05	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 16:05	EPA 200.8-1994, Rev. 5.4
Selenium	0.05	µg/L	1	0.50	0.04	J1	GES	04/30/2025 16:05	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	04/30/2025 16:05	EPA 200.8-1994, Rev. 5.4

AMERICAN ELECTRIC POWER

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Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-22
Customer Description: TG-32
Lab Number: 251109-011
Preparation:
Date Collected: 04/21/2025 13:05 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.04	µg/L	5	0.50	0.04	U1	GES	05/06/2025 22:20	EPA 200.8-1994, Rev. 5.4
Arsenic	2.06	µg/L	1	0.10	0.03		GES	04/30/2025 16:11	EPA 200.8-1994, Rev. 5.4
Barium	14.8	µg/L	5	1.0	0.3		GES	05/06/2025 22:20	EPA 200.8-1994, Rev. 5.4
Beryllium	8.00	µg/L	1	0.050	0.007		GES	04/30/2025 16:11	EPA 200.8-1994, Rev. 5.4
Boron	0.069	mg/L	1	0.050	0.007		GES	04/30/2025 16:11	EPA 200.8-1994, Rev. 5.4
Cadmium	1.50	µg/L	1	0.020	0.004		GES	04/30/2025 16:11	EPA 200.8-1994, Rev. 5.4
Calcium	14.0	mg/L	1	0.05	0.02		GES	04/30/2025 16:11	EPA 200.8-1994, Rev. 5.4
Chromium	0.51	µg/L	1	0.30	0.07		GES	04/30/2025 16:11	EPA 200.8-1994, Rev. 5.4
Cobalt	104	µg/L	1	0.020	0.005		GES	04/30/2025 16:11	EPA 200.8-1994, Rev. 5.4
Copper	0.5	µg/L	1	0.5	0.1		GES	04/30/2025 16:11	EPA 200.8-1994, Rev. 5.4
Lead	0.3	µg/L	5	1.0	0.3	J1	GES	05/06/2025 22:20	EPA 200.8-1994, Rev. 5.4
Lithium	0.135	mg/L	1	0.00030	0.00006		GES	04/30/2025 16:11	EPA 200.8-1994, Rev. 5.4
Magnesium	21.0	mg/L	1	0.100	0.009		GES	04/30/2025 16:11	EPA 200.8-1994, Rev. 5.4
Mercury	1700	ng/L	50	300	100		RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 16:11	EPA 200.8-1994, Rev. 5.4
Potassium	3.89	mg/L	1	0.10	0.01		GES	04/30/2025 16:11	EPA 200.8-1994, Rev. 5.4
Selenium	10.0	µg/L	1	0.50	0.04		GES	04/30/2025 16:11	EPA 200.8-1994, Rev. 5.4
Sodium	98.4	mg/L	1	0.20	0.02		GES	04/30/2025 16:11	EPA 200.8-1994, Rev. 5.4
Strontium	0.127	mg/L	1	0.00200	0.00005		GES	04/30/2025 16:11	EPA 200.8-1994, Rev. 5.4
Thallium	0.2	µg/L	5	1.0	0.1	J1	GES	05/06/2025 22:20	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.75	pCi/L	0.15	0.23		WCG	05/06/2025 13:38	SW-846 9315-1986, Rev. 0
Carrier Recovery	90.8	%						
Radium-228	1.80	pCi/L	0.17	0.50		TTP	05/12/2025 17:25	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	91.8	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

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Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-22
Customer Description: TG-32
Lab Number: 251109-011-01
Preparation: Dissolved
Date Collected: 04/21/2025 13:05 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	04/30/2025 16:16	EPA 200.8-1994, Rev. 5.4
Arsenic	1.96	µg/L	1	0.10	0.03		GES	04/30/2025 16:16	EPA 200.8-1994, Rev. 5.4
Barium	14.6	µg/L	5	1.0	0.3		GES	05/06/2025 22:25	EPA 200.8-1994, Rev. 5.4
Beryllium	7.92	µg/L	1	0.050	0.007		GES	04/30/2025 16:16	EPA 200.8-1994, Rev. 5.4
Cadmium	1.48	µg/L	1	0.020	0.004		GES	04/30/2025 16:16	EPA 200.8-1994, Rev. 5.4
Chromium	0.54	µg/L	1	0.30	0.07		GES	04/30/2025 16:16	EPA 200.8-1994, Rev. 5.4
Cobalt	103	µg/L	1	0.020	0.005		GES	04/30/2025 16:16	EPA 200.8-1994, Rev. 5.4
Copper	0.9	µg/L	1	0.5	0.1		GES	04/30/2025 16:16	EPA 200.8-1994, Rev. 5.4
Iron	5.58	mg/L	1	0.020	0.003		GES	04/30/2025 16:16	EPA 200.8-1994, Rev. 5.4
Lead	0.4	µg/L	5	1.0	0.3	J1	GES	05/06/2025 22:25	EPA 200.8-1994, Rev. 5.4
Lithium	0.138	mg/L	1	0.00030	0.00006		GES	04/30/2025 16:16	EPA 200.8-1994, Rev. 5.4
Manganese	0.353	mg/L	1	0.00100	0.00007		GES	04/30/2025 16:16	EPA 200.8-1994, Rev. 5.4
Mercury	39	ng/L	1	5	2		RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 16:16	EPA 200.8-1994, Rev. 5.4
Selenium	9.95	µg/L	1	0.50	0.04		GES	04/30/2025 16:16	EPA 200.8-1994, Rev. 5.4
Thallium	0.2	µg/L	5	1.0	0.1	J1	GES	05/06/2025 22:25	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-23
Customer Description: TG-32
Lab Number: 251109-012
Preparation:
Date Collected: 04/23/2025 11:57 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.424	mg/L	1	0.050	0.007		GES	04/30/2025 17:55	EPA 200.8-1994, Rev. 5.4
Calcium	0.21	mg/L	1	0.05	0.02		GES	04/30/2025 17:55	EPA 200.8-1994, Rev. 5.4
Magnesium	0.200	mg/L	1	0.100	0.009		GES	04/30/2025 17:55	EPA 200.8-1994, Rev. 5.4
Potassium	2.83	mg/L	1	0.10	0.01		GES	04/30/2025 17:55	EPA 200.8-1994, Rev. 5.4
Sodium	5.00	mg/L	1	0.20	0.02		GES	04/30/2025 17:55	EPA 200.8-1994, Rev. 5.4
Strontium	0.00229	mg/L	1	0.00200	0.00005		GES	04/30/2025 17:55	EPA 200.8-1994, Rev. 5.4

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Water Analysis Report

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Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-27
Customer Description: TG-32
Lab Number: 251109-013
Preparation:
Date Collected: 04/23/2025 10:43 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.083	mg/L	1	0.050	0.007		GES	04/30/2025 18:11	EPA 200.8-1994, Rev. 5.4
Calcium	3.67	mg/L	1	0.05	0.02		GES	04/30/2025 18:11	EPA 200.8-1994, Rev. 5.4
Magnesium	4.98	mg/L	1	0.100	0.009		GES	04/30/2025 18:11	EPA 200.8-1994, Rev. 5.4
Potassium	2.07	mg/L	1	0.10	0.01		GES	04/30/2025 18:11	EPA 200.8-1994, Rev. 5.4
Sodium	11.5	mg/L	1	0.20	0.02		GES	04/30/2025 18:11	EPA 200.8-1994, Rev. 5.4
Strontium	0.0556	mg/L	1	0.00200	0.00005		GES	04/30/2025 18:11	EPA 200.8-1994, Rev. 5.4

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Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-28
Customer Description: TG-32
Lab Number: 251109-014
Preparation:
Date Collected: 04/22/2025 10:45 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.011	µg/L	1	0.100	0.008	J1	GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4
Arsenic	0.13	µg/L	1	0.10	0.03		GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4
Barium	136	µg/L	1	0.20	0.05		GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4
Beryllium	0.615	µg/L	1	0.050	0.007		GES	05/06/2025 22:30	EPA 200.8-1994, Rev. 5.4
Boron	0.350	mg/L	1	0.050	0.007		GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4
Cadmium	0.061	µg/L	1	0.020	0.004		GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4
Calcium	1.65	mg/L	1	0.05	0.02		GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4
Chromium	0.41	µg/L	1	0.30	0.07		GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4
Cobalt	16.1	µg/L	1	0.020	0.005		GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4
Copper	0.4	µg/L	1	0.5	0.1	J1	GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4
Lead	0.11	µg/L	1	0.20	0.05	J1	GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4
Lithium	0.0266	mg/L	1	0.00030	0.00006		GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4
Magnesium	3.62	mg/L	1	0.100	0.009		GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4
Mercury	11	ng/L	1	5	2		RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4
Potassium	0.82	mg/L	1	0.10	0.01		GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4
Selenium	0.29	µg/L	1	0.50	0.04	J1	GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4
Sodium	6.66	mg/L	1	0.20	0.02		GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4
Strontium	0.0238	mg/L	1	0.00200	0.00005		GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4
Thallium	0.05	µg/L	1	0.20	0.02	J1	GES	04/30/2025 18:28	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.58	pCi/L	0.22	0.27		WCG	05/06/2025 13:38	SW-846 9315-1986, Rev. 0
Carrier Recovery	97.7	%						
Radium-228	0.99	pCi/L	0.13	0.39		TTP	05/12/2025 17:25	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	98.8	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

AMERICAN ELECTRIC POWER

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Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-28
Customer Description: TG-32
Lab Number: 251109-014-01
Preparation: Dissolved
Date Collected: 04/22/2025 10:45 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.009	µg/L	1	0.100	0.008	J1	GES	04/30/2025 18:33	EPA 200.8-1994, Rev. 5.4
Arsenic	0.08	µg/L	1	0.10	0.03	J1	GES	04/30/2025 18:33	EPA 200.8-1994, Rev. 5.4
Barium	133	µg/L	1	0.20	0.05		GES	04/30/2025 18:33	EPA 200.8-1994, Rev. 5.4
Beryllium	0.607	µg/L	1	0.050	0.007		GES	05/06/2025 22:36	EPA 200.8-1994, Rev. 5.4
Cadmium	0.061	µg/L	1	0.020	0.004		GES	04/30/2025 18:33	EPA 200.8-1994, Rev. 5.4
Chromium	0.30	µg/L	1	0.30	0.07		GES	04/30/2025 18:33	EPA 200.8-1994, Rev. 5.4
Cobalt	15.6	µg/L	1	0.020	0.005		GES	04/30/2025 18:33	EPA 200.8-1994, Rev. 5.4
Copper	0.4	µg/L	1	0.5	0.1	J1	GES	04/30/2025 18:33	EPA 200.8-1994, Rev. 5.4
Iron	0.012	mg/L	1	0.020	0.003	J1	GES	04/30/2025 18:33	EPA 200.8-1994, Rev. 5.4
Lead	0.09	µg/L	1	0.20	0.05	J1	GES	04/30/2025 18:33	EPA 200.8-1994, Rev. 5.4
Lithium	0.0263	mg/L	1	0.00030	0.00006		GES	04/30/2025 18:33	EPA 200.8-1994, Rev. 5.4
Manganese	0.0595	mg/L	1	0.00100	0.00007		GES	04/30/2025 18:33	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 18:33	EPA 200.8-1994, Rev. 5.4
Selenium	0.18	µg/L	1	0.50	0.04	J1	GES	04/30/2025 18:33	EPA 200.8-1994, Rev. 5.4
Thallium	0.04	µg/L	1	0.20	0.02	J1	GES	04/30/2025 18:33	EPA 200.8-1994, Rev. 5.4

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Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-30
Customer Description: TG-32
Lab Number: 251109-015
Preparation:
Date Collected: 04/22/2025 09:30 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4
Arsenic	0.14	µg/L	1	0.10	0.03		GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4
Barium	43.7	µg/L	1	0.20	0.05		GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4
Beryllium	0.070	µg/L	1	0.050	0.007		GES	05/06/2025 22:41	EPA 200.8-1994, Rev. 5.4
Boron	1.02	mg/L	1	0.050	0.007		GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4
Cadmium	0.005	µg/L	1	0.020	0.004	J1	GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4
Calcium	0.44	mg/L	1	0.05	0.02		GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4
Chromium	0.50	µg/L	1	0.30	0.07		GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4
Cobalt	3.05	µg/L	1	0.020	0.005		GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4
Copper	0.2	µg/L	1	0.5	0.1	J1	GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4
Lithium	0.00856	mg/L	1	0.00030	0.00006		GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4
Magnesium	1.58	mg/L	1	0.100	0.009		GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4
Mercury	16	ng/L	1	5	2		RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4
Potassium	0.70	mg/L	1	0.10	0.01		GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4
Selenium	0.23	µg/L	1	0.50	0.04	J1	GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4
Sodium	54.6	mg/L	1	0.20	0.02		GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4
Strontium	0.00630	mg/L	1	0.00200	0.00005		GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4
Thallium	0.04	µg/L	1	0.20	0.02	J1	GES	04/30/2025 18:39	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.53	pCi/L	0.15	0.28		WCG	05/06/2025 13:38	SW-846 9315-1986, Rev. 0
Carrier Recovery	69.7	%						
Radium-228	0.28	pCi/L	0.10	0.33		TTP	05/12/2025 17:25	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	101	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-30
Customer Description: TG-32
Lab Number: 251109-015-01
Preparation: Dissolved
Date Collected: 04/22/2025 09:30 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	04/30/2025 18:44	EPA 200.8-1994, Rev. 5.4
Arsenic	0.09	µg/L	1	0.10	0.03	J1	GES	04/30/2025 18:44	EPA 200.8-1994, Rev. 5.4
Barium	42.5	µg/L	1	0.20	0.05		GES	04/30/2025 18:44	EPA 200.8-1994, Rev. 5.4
Beryllium	0.067	µg/L	1	0.050	0.007		GES	05/06/2025 22:47	EPA 200.8-1994, Rev. 5.4
Cadmium	0.008	µg/L	1	0.020	0.004	J1	GES	04/30/2025 18:44	EPA 200.8-1994, Rev. 5.4
Chromium	0.38	µg/L	1	0.30	0.07		GES	04/30/2025 18:44	EPA 200.8-1994, Rev. 5.4
Cobalt	3.17	µg/L	1	0.020	0.005		GES	04/30/2025 18:44	EPA 200.8-1994, Rev. 5.4
Copper	0.3	µg/L	1	0.5	0.1	J1	GES	04/30/2025 18:44	EPA 200.8-1994, Rev. 5.4
Iron	0.007	mg/L	1	0.020	0.003	J1	GES	04/30/2025 18:44	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	04/30/2025 18:44	EPA 200.8-1994, Rev. 5.4
Lithium	0.00892	mg/L	1	0.00030	0.00006		GES	04/30/2025 18:44	EPA 200.8-1994, Rev. 5.4
Manganese	0.0127	mg/L	1	0.00100	0.00007		GES	04/30/2025 18:44	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 18:44	EPA 200.8-1994, Rev. 5.4
Selenium	0.24	µg/L	1	0.50	0.04	J1	GES	04/30/2025 18:44	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	04/30/2025 18:44	EPA 200.8-1994, Rev. 5.4

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
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Audinet: 210-4221

Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-31
Customer Description: TG-32
Lab Number: 251109-016
Preparation:
Date Collected: 04/21/2025 12:20 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	04/30/2025 18:49	EPA 200.8-1994, Rev. 5.4
Arsenic	0.26	µg/L	1	0.10	0.03		GES	04/30/2025 18:49	EPA 200.8-1994, Rev. 5.4
Barium	31.0	µg/L	1	0.20	0.05		GES	04/30/2025 18:49	EPA 200.8-1994, Rev. 5.4
Beryllium	0.94	µg/L	5	0.25	0.04		GES	05/06/2025 22:52	EPA 200.8-1994, Rev. 5.4
Boron	0.024	mg/L	1	0.050	0.007	J1	GES	04/30/2025 18:49	EPA 200.8-1994, Rev. 5.4
Cadmium	0.061	µg/L	1	0.020	0.004		GES	04/30/2025 18:49	EPA 200.8-1994, Rev. 5.4
Calcium	2.20	mg/L	1	0.05	0.02		GES	04/30/2025 18:49	EPA 200.8-1994, Rev. 5.4
Chromium	0.39	µg/L	1	0.30	0.07		GES	04/30/2025 18:49	EPA 200.8-1994, Rev. 5.4
Cobalt	8.87	µg/L	1	0.020	0.005		GES	04/30/2025 18:49	EPA 200.8-1994, Rev. 5.4
Copper	0.5	µg/L	1	0.5	0.1		GES	04/30/2025 18:49	EPA 200.8-1994, Rev. 5.4
Lead	0.27	µg/L	1	0.20	0.05		GES	04/30/2025 18:49	EPA 200.8-1994, Rev. 5.4
Lithium	0.0934	mg/L	10	0.0030	0.0006		GES	05/08/2025 14:49	EPA 200.8-1994, Rev. 5.4
Magnesium	3.40	mg/L	1	0.100	0.009		GES	04/30/2025 18:49	EPA 200.8-1994, Rev. 5.4
Mercury	500	ng/L	10	50	20		RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 18:49	EPA 200.8-1994, Rev. 5.4
Potassium	1.54	mg/L	1	0.10	0.01		GES	04/30/2025 18:49	EPA 200.8-1994, Rev. 5.4
Selenium	0.38	µg/L	1	0.50	0.04	J1	GES	04/30/2025 18:49	EPA 200.8-1994, Rev. 5.4
Sodium	29.5	mg/L	1	0.20	0.02		GES	04/30/2025 18:49	EPA 200.8-1994, Rev. 5.4
Strontium	0.0322	mg/L	1	0.00200	0.00005		GES	04/30/2025 18:49	EPA 200.8-1994, Rev. 5.4
Thallium	0.09	µg/L	1	0.20	0.02	J1	GES	04/30/2025 18:49	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.07	pCi/L	0.18	0.20		WCG	05/06/2025 13:38	SW-846 9315-1986, Rev. 0
Carrier Recovery	100	%						
Radium-228	1.60	pCi/L	0.15	0.45		TTP	05/12/2025 17:25	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	102	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
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Audinet: 210-4221

Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-31
Customer Description: TG-32
Lab Number: 251109-016-01
Preparation: Dissolved
Date Collected: 04/21/2025 12:20 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	04/30/2025 18:55	EPA 200.8-1994, Rev. 5.4
Arsenic	0.18	µg/L	1	0.10	0.03		GES	04/30/2025 18:55	EPA 200.8-1994, Rev. 5.4
Barium	30.0	µg/L	1	0.20	0.05		GES	04/30/2025 18:55	EPA 200.8-1994, Rev. 5.4
Beryllium	0.89	µg/L	5	0.25	0.04		GES	05/06/2025 22:58	EPA 200.8-1994, Rev. 5.4
Cadmium	0.055	µg/L	1	0.020	0.004		GES	04/30/2025 18:55	EPA 200.8-1994, Rev. 5.4
Chromium	0.33	µg/L	1	0.30	0.07		GES	04/30/2025 18:55	EPA 200.8-1994, Rev. 5.4
Cobalt	8.90	µg/L	1	0.020	0.005		GES	04/30/2025 18:55	EPA 200.8-1994, Rev. 5.4
Copper	0.5	µg/L	1	0.5	0.1		GES	04/30/2025 18:55	EPA 200.8-1994, Rev. 5.4
Iron	0.106	mg/L	1	0.020	0.003		GES	04/30/2025 18:55	EPA 200.8-1994, Rev. 5.4
Lead	0.31	µg/L	1	0.20	0.05		GES	04/30/2025 18:55	EPA 200.8-1994, Rev. 5.4
Lithium	0.0929	mg/L	10	0.0030	0.0006		GES	05/08/2025 14:54	EPA 200.8-1994, Rev. 5.4
Manganese	0.0222	mg/L	1	0.00100	0.00007		GES	04/30/2025 18:55	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 18:55	EPA 200.8-1994, Rev. 5.4
Selenium	0.32	µg/L	1	0.50	0.04	J1	GES	04/30/2025 18:55	EPA 200.8-1994, Rev. 5.4
Thallium	0.09	µg/L	1	0.20	0.02	J1	GES	04/30/2025 18:55	EPA 200.8-1994, Rev. 5.4

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Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-32
Customer Description: TG-32
Lab Number: 251109-017
Preparation:
Date Collected: 04/21/2025 11:29 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.009	µg/L	1	0.100	0.008	J1	GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4
Arsenic	5.81	µg/L	1	0.10	0.03		GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4
Barium	40.8	µg/L	1	0.20	0.05		GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4
Beryllium	0.08	µg/L	5	0.25	0.04	J1	GES	05/08/2025 15:00	EPA 200.8-1994, Rev. 5.4
Boron	0.097	mg/L	1	0.050	0.007		GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4
Calcium	6.15	mg/L	1	0.05	0.02		GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4
Chromium	0.27	µg/L	1	0.30	0.07	J1	GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4
Cobalt	14.8	µg/L	1	0.020	0.005		GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4
Copper	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4
Lithium	0.0684	mg/L	1	0.00030	0.00006		GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4
Magnesium	6.89	mg/L	1	0.100	0.009		GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4
Mercury	240	ng/L	20	100	40		RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4
Potassium	3.17	mg/L	1	0.10	0.01		GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4
Selenium	0.07	µg/L	1	0.50	0.04	J1	GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4
Sodium	15.6	mg/L	1	0.20	0.02		GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4
Strontium	0.0797	mg/L	1	0.00200	0.00005		GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4
Thallium	0.06	µg/L	1	0.20	0.02	J1	GES	04/30/2025 20:06	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.33	pCi/L	0.11	0.26		WCG	05/06/2025 13:38	SW-846 9315-1986, Rev. 0
Carrier Recovery	94.2	%						
Radium-228	0.61	pCi/L	0.15	0.49		TTP	05/12/2025 17:25	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	77.6	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-32
Customer Description: TG-32
Lab Number: 251109-017-01
Preparation: Dissolved
Date Collected: 04/21/2025 11:29 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	04/30/2025 20:12	EPA 200.8-1994, Rev. 5.4
Arsenic	4.11	µg/L	1	0.10	0.03		GES	04/30/2025 20:12	EPA 200.8-1994, Rev. 5.4
Barium	40.2	µg/L	1	0.20	0.05		GES	04/30/2025 20:12	EPA 200.8-1994, Rev. 5.4
Beryllium	0.07	µg/L	5	0.25	0.04	J1	GES	05/08/2025 15:05	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	04/30/2025 20:12	EPA 200.8-1994, Rev. 5.4
Chromium	0.35	µg/L	1	0.30	0.07		GES	04/30/2025 20:12	EPA 200.8-1994, Rev. 5.4
Cobalt	15.0	µg/L	1	0.020	0.005		GES	04/30/2025 20:12	EPA 200.8-1994, Rev. 5.4
Copper	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 20:12	EPA 200.8-1994, Rev. 5.4
Iron	19.1	mg/L	1	0.020	0.003		GES	04/30/2025 20:12	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	04/30/2025 20:12	EPA 200.8-1994, Rev. 5.4
Lithium	0.0681	mg/L	1	0.00030	0.00006		GES	04/30/2025 20:12	EPA 200.8-1994, Rev. 5.4
Manganese	0.125	mg/L	1	0.00100	0.00007		GES	04/30/2025 20:12	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 20:12	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	04/30/2025 20:12	EPA 200.8-1994, Rev. 5.4
Thallium	0.06	µg/L	1	0.20	0.02	J1	GES	04/30/2025 20:12	EPA 200.8-1994, Rev. 5.4

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Audinet: 210-4221

Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-33
Customer Description: TG-32
Lab Number: 251109-018
Preparation:
Date Collected: 04/22/2025 09:10 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.04	µg/L	5	0.50	0.04	U1	GES	05/06/2025 23:14	EPA 200.8-1994, Rev. 5.4
Arsenic	1.13	µg/L	1	0.10	0.03		GES	04/30/2025 20:17	EPA 200.8-1994, Rev. 5.4
Barium	48.8	µg/L	5	1.0	0.3		GES	05/06/2025 23:14	EPA 200.8-1994, Rev. 5.4
Beryllium	2.04	µg/L	5	0.25	0.04		GES	05/06/2025 23:14	EPA 200.8-1994, Rev. 5.4
Boron	0.211	mg/L	1	0.050	0.007		GES	04/30/2025 20:17	EPA 200.8-1994, Rev. 5.4
Cadmium	0.083	µg/L	1	0.020	0.004		GES	04/30/2025 20:17	EPA 200.8-1994, Rev. 5.4
Calcium	3.04	mg/L	1	0.05	0.02		GES	04/30/2025 20:17	EPA 200.8-1994, Rev. 5.4
Chromium	0.38	µg/L	1	0.30	0.07		GES	04/30/2025 20:17	EPA 200.8-1994, Rev. 5.4
Cobalt	15.8	µg/L	1	0.020	0.005		GES	04/30/2025 20:17	EPA 200.8-1994, Rev. 5.4
Copper	0.9	µg/L	1	0.5	0.1		GES	04/30/2025 20:17	EPA 200.8-1994, Rev. 5.4
Lead	0.3	µg/L	5	1.0	0.3	J1	GES	05/06/2025 23:14	EPA 200.8-1994, Rev. 5.4
Lithium	0.0246	mg/L	1	0.00030	0.00006		GES	04/30/2025 20:17	EPA 200.8-1994, Rev. 5.4
Magnesium	6.33	mg/L	1	0.100	0.009		GES	04/30/2025 20:17	EPA 200.8-1994, Rev. 5.4
Mercury	6300	ng/L	100	500	200		RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 20:17	EPA 200.8-1994, Rev. 5.4
Potassium	0.31	mg/L	1	0.10	0.01		GES	04/30/2025 20:17	EPA 200.8-1994, Rev. 5.4
Selenium	4.93	µg/L	1	0.50	0.04		GES	04/30/2025 20:17	EPA 200.8-1994, Rev. 5.4
Sodium	20.3	mg/L	1	0.20	0.02		GES	04/30/2025 20:17	EPA 200.8-1994, Rev. 5.4
Strontium	0.0477	mg/L	1	0.00200	0.00005		GES	04/30/2025 20:17	EPA 200.8-1994, Rev. 5.4
Thallium	<0.1	µg/L	5	1.0	0.1	U1	GES	05/06/2025 23:14	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.94	pCi/L	0.16	0.19		WCG	05/06/2025 13:38	SW-846 9315-1986, Rev. 0
Carrier Recovery	97.5	%						
Radium-228	1.36	pCi/L	0.13	0.41		TTP	05/12/2025 17:25	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	101	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

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Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-33
Customer Description: TG-32
Lab Number: 251109-018-01
Preparation: Dissolved
Date Collected: 04/22/2025 09:10 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.04	µg/L	5	0.50	0.04	U1	GES	05/06/2025 23:20	EPA 200.8-1994, Rev. 5.4
Arsenic	1.04	µg/L	1	0.10	0.03		GES	04/30/2025 20:22	EPA 200.8-1994, Rev. 5.4
Barium	46.7	µg/L	5	1.0	0.3		GES	05/06/2025 23:20	EPA 200.8-1994, Rev. 5.4
Beryllium	2.05	µg/L	5	0.25	0.04		GES	05/06/2025 23:20	EPA 200.8-1994, Rev. 5.4
Cadmium	0.079	µg/L	1	0.020	0.004		GES	04/30/2025 20:22	EPA 200.8-1994, Rev. 5.4
Chromium	0.34	µg/L	1	0.30	0.07		GES	04/30/2025 20:22	EPA 200.8-1994, Rev. 5.4
Cobalt	15.5	µg/L	1	0.020	0.005		GES	04/30/2025 20:22	EPA 200.8-1994, Rev. 5.4
Copper	2.2	µg/L	1	0.5	0.1		GES	04/30/2025 20:22	EPA 200.8-1994, Rev. 5.4
Iron	0.016	mg/L	1	0.020	0.003	J1	GES	04/30/2025 20:22	EPA 200.8-1994, Rev. 5.4
Lead	0.3	µg/L	5	1.0	0.3	J1	GES	05/06/2025 23:20	EPA 200.8-1994, Rev. 5.4
Lithium	0.0245	mg/L	1	0.00030	0.00006		GES	04/30/2025 20:22	EPA 200.8-1994, Rev. 5.4
Manganese	0.0101	mg/L	1	0.00100	0.00007		GES	04/30/2025 20:22	EPA 200.8-1994, Rev. 5.4
Mercury	1050	ng/L	20	100	40		RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 20:22	EPA 200.8-1994, Rev. 5.4
Selenium	4.64	µg/L	1	0.50	0.04		GES	04/30/2025 20:22	EPA 200.8-1994, Rev. 5.4
Thallium	<0.1	µg/L	5	1.0	0.1	U1	GES	05/06/2025 23:20	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-34
Customer Description: TG-32
Lab Number: 251109-019
Preparation:
Date Collected: 04/23/2025 09:06 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.08	mg/L	10	0.50	0.07	J1	GES	04/30/2025 20:28	EPA 200.8-1994, Rev. 5.4
Calcium	42.2	mg/L	10	0.5	0.2		GES	04/30/2025 20:28	EPA 200.8-1994, Rev. 5.4
Magnesium	40.3	mg/L	10	1.00	0.09		GES	04/30/2025 20:28	EPA 200.8-1994, Rev. 5.4
Potassium	7.5	mg/L	10	1.0	0.1		GES	04/30/2025 20:28	EPA 200.8-1994, Rev. 5.4
Sodium	15.7	mg/L	10	2.0	0.2		GES	04/30/2025 20:28	EPA 200.8-1994, Rev. 5.4
Strontium	0.433	mg/L	10	0.0200	0.0005		GES	04/30/2025 20:28	EPA 200.8-1994, Rev. 5.4

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: AD-36
Customer Description: TG-32
Lab Number: 251109-020
Preparation:
Date Collected: 04/23/2025 09:06 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.079	mg/L	1	0.050	0.007		GES	04/30/2025 20:33	EPA 200.8-1994, Rev. 5.4
Calcium	1.34	mg/L	1	0.05	0.02		GES	04/30/2025 20:33	EPA 200.8-1994, Rev. 5.4
Magnesium	2.72	mg/L	1	0.100	0.009		GES	04/30/2025 20:33	EPA 200.8-1994, Rev. 5.4
Potassium	1.72	mg/L	1	0.10	0.01		GES	04/30/2025 20:33	EPA 200.8-1994, Rev. 5.4
Sodium	8.03	mg/L	1	0.20	0.02		GES	04/30/2025 20:33	EPA 200.8-1994, Rev. 5.4
Strontium	0.0147	mg/L	1	0.00200	0.00005		GES	04/30/2025 20:33	EPA 200.8-1994, Rev. 5.4

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Audinet: 210-4221

Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: Duplicate 1
Customer Description: TG-32
Lab Number: 251109-021
Preparation:
Date Collected: 04/22/2025 13:00 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.04	µg/L	5	0.50	0.04	U1	GES	05/07/2025 00:31	EPA 200.8-1994, Rev. 5.4
Arsenic	1.11	µg/L	1	0.10	0.03		GES	04/30/2025 20:39	EPA 200.8-1994, Rev. 5.4
Barium	47.7	µg/L	5	1.0	0.3		GES	05/07/2025 00:31	EPA 200.8-1994, Rev. 5.4
Beryllium	1.99	µg/L	5	0.25	0.04		GES	05/07/2025 00:31	EPA 200.8-1994, Rev. 5.4
Boron	0.214	mg/L	1	0.050	0.007		GES	04/30/2025 20:39	EPA 200.8-1994, Rev. 5.4
Cadmium	0.080	µg/L	1	0.020	0.004		GES	04/30/2025 20:39	EPA 200.8-1994, Rev. 5.4
Calcium	3.01	mg/L	1	0.05	0.02		GES	04/30/2025 20:39	EPA 200.8-1994, Rev. 5.4
Chromium	0.40	µg/L	1	0.30	0.07		GES	04/30/2025 20:39	EPA 200.8-1994, Rev. 5.4
Cobalt	15.9	µg/L	1	0.020	0.005		GES	04/30/2025 20:39	EPA 200.8-1994, Rev. 5.4
Copper	0.9	µg/L	1	0.5	0.1		GES	04/30/2025 20:39	EPA 200.8-1994, Rev. 5.4
Lead	0.4	µg/L	5	1.0	0.3	J1	GES	05/07/2025 00:31	EPA 200.8-1994, Rev. 5.4
Lithium	0.0244	mg/L	1	0.00030	0.00006		GES	04/30/2025 20:39	EPA 200.8-1994, Rev. 5.4
Magnesium	6.30	mg/L	1	0.100	0.009		GES	04/30/2025 20:39	EPA 200.8-1994, Rev. 5.4
Mercury	6400	ng/L	100	500	200		RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 20:39	EPA 200.8-1994, Rev. 5.4
Potassium	0.31	mg/L	1	0.10	0.01		GES	04/30/2025 20:39	EPA 200.8-1994, Rev. 5.4
Selenium	4.75	µg/L	1	0.50	0.04		GES	04/30/2025 20:39	EPA 200.8-1994, Rev. 5.4
Sodium	20.5	mg/L	1	0.20	0.02		GES	04/30/2025 20:39	EPA 200.8-1994, Rev. 5.4
Strontium	0.0479	mg/L	1	0.00200	0.00005		GES	04/30/2025 20:39	EPA 200.8-1994, Rev. 5.4
Thallium	<0.1	µg/L	5	1.0	0.1	U1	GES	05/07/2025 00:31	EPA 200.8-1994, Rev. 5.4

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Audinet: 210-4221

Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: Duplicate 1
Customer Description: TG-32
Lab Number: 251109-021-01
Preparation: Dissolved
Date Collected: 04/22/2025 13:00 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.04	µg/L	5	0.50	0.04	U1	GES	05/07/2025 00:36	EPA 200.8-1994, Rev. 5.4
Arsenic	1.05	µg/L	1	0.10	0.03		GES	04/30/2025 20:44	EPA 200.8-1994, Rev. 5.4
Barium	49.9	µg/L	5	1.0	0.3		GES	05/07/2025 00:36	EPA 200.8-1994, Rev. 5.4
Beryllium	1.61	µg/L	5	0.25	0.04		GES	05/07/2025 00:36	EPA 200.8-1994, Rev. 5.4
Cadmium	0.078	µg/L	1	0.020	0.004		GES	04/30/2025 20:44	EPA 200.8-1994, Rev. 5.4
Chromium	0.34	µg/L	1	0.30	0.07		GES	04/30/2025 20:44	EPA 200.8-1994, Rev. 5.4
Cobalt	15.3	µg/L	1	0.020	0.005		GES	04/30/2025 20:44	EPA 200.8-1994, Rev. 5.4
Copper	0.9	µg/L	1	0.5	0.1		GES	04/30/2025 20:44	EPA 200.8-1994, Rev. 5.4
Iron	0.016	mg/L	1	0.020	0.003	J1	GES	04/30/2025 20:44	EPA 200.8-1994, Rev. 5.4
Lead	0.4	µg/L	5	1.0	0.3	J1	GES	05/07/2025 00:36	EPA 200.8-1994, Rev. 5.4
Lithium	0.0308	mg/L	1	0.00030	0.00006		GES	04/30/2025 20:44	EPA 200.8-1994, Rev. 5.4
Manganese	0.00994	mg/L	1	0.00100	0.00007		GES	04/30/2025 20:44	EPA 200.8-1994, Rev. 5.4
Mercury	990	ng/L	20	100	40		RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 20:44	EPA 200.8-1994, Rev. 5.4
Potassium	0.30	mg/L	1	0.10	0.01		GES	04/30/2025 20:44	EPA 200.8-1994, Rev. 5.4
Selenium	4.59	µg/L	1	0.50	0.04		GES	04/30/2025 20:44	EPA 200.8-1994, Rev. 5.4
Thallium	0.04	µg/L	1	0.20	0.02	J1	GES	04/30/2025 20:34	EPA 200.8-1994, Rev. 5.4

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Audinet: 210-4221

Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: Equipment Blank
Customer Description: TG-32
Lab Number: 251109-022
Preparation:
Date Collected: 04/22/2025 11:22 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.008	µg/L	1	0.100	0.008	U1	GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4
Arsenic	<0.03	µg/L	1	0.10	0.03	U1	GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4
Barium	0.05	µg/L	1	0.20	0.05	J1	GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4
Beryllium	<0.007	µg/L	1	0.050	0.007	U1	GES	05/07/2025 00:41	EPA 200.8-1994, Rev. 5.4
Boron	<0.007	mg/L	1	0.050	0.007	U1	GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4
Calcium	0.02	mg/L	1	0.05	0.02	J1	GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4
Chromium	0.36	µg/L	1	0.30	0.07		GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4
Cobalt	0.007	µg/L	1	0.020	0.005	J1	GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4
Copper	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4
Lithium	0.00006	mg/L	1	0.00030	0.00006	J1	GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4
Magnesium	<0.009	mg/L	1	0.100	0.009	U1	GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4
Potassium	<0.01	mg/L	1	0.10	0.01	U1	GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4
Sodium	<0.02	mg/L	1	0.20	0.02	U1	GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4
Strontium	<0.00005	mg/L	1	0.00200	0.00005	U1	GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	04/30/2025 20:50	EPA 200.8-1994, Rev. 5.4

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Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Customer Sample ID: Field Blank
Customer Description: TG-32
Lab Number: 251109-023
Preparation:
Date Collected: 04/23/2025 09:19 EDT
Date Received: 04/28/2025 10:49 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.067	µg/L	1	0.100	0.008	J1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4
Arsenic	<0.03	µg/L	1	0.10	0.03	U1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4
Barium	<0.05	µg/L	1	0.20	0.05	U1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4
Beryllium	<0.007	µg/L	1	0.050	0.007	U1	GES	05/07/2025 00:47	EPA 200.8-1994, Rev. 5.4
Boron	<0.007	mg/L	1	0.050	0.007	U1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4
Calcium	0.02	mg/L	1	0.05	0.02	J1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4
Chromium	0.23	µg/L	1	0.30	0.07	J1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4
Cobalt	<0.005	µg/L	1	0.020	0.005	U1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4
Copper	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4
Lithium	<0.00006	mg/L	1	0.00030	0.00006	U1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4
Magnesium	<0.009	mg/L	1	0.100	0.009	U1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	1	5	2	U1	RLP	05/02/2025 00:00	EPA 245.7-2005, Rev. 2.0
Molybdenum	<0.1	µg/L	1	0.5	0.1	U1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4
Potassium	<0.01	mg/L	1	0.10	0.01	U1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4
Sodium	<0.02	mg/L	1	0.20	0.02	U1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4
Strontium	<0.00005	mg/L	1	0.00200	0.00005	U1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	04/30/2025 20:55	EPA 200.8-1994, Rev. 5.4

251109
Job Comments:

Original report issued 5/13/25. Report reissued 6/26/25 with Tl added to 251109-021-01. Report reissued 7/2/25 with Co added to samples originally reported with Cu.

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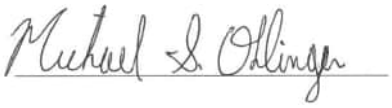
Water Analysis Report

Reissued

Job ID: 251109 **Customer: Pirkey Power Station** **Date Reported: 07/02/2025**

Report Verification

This report and the above data have been confirmed by the following analyst.



Michael Ohlinger, Chemist
Email: msohlinger@aep.com
Phone: 614-836-4184
Audinet: 8-210-4184

THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF THE LABORATORY. ALL TEST RESULTS MEET ALL OF THE REQUIREMENTS OF THE ACCREDITING AUTHORITY, UNLESS OTHERWISE NOTED. ALL TIMES LISTED ARE IN THE EASTERN TIME ZONE.

Data Qualifer Legend

U1 - Not detected at or below method detection limit (MDL).
J1 - Concentration estimated. Analyte was detected between the method detection limit and the reporting limit.
M1 - The associated matrix spike (MS) or matrix spike duplicate (MSD) recovery was outside acceptance limits.
O3 - Insufficient sample was received to perform the duplicate analysis with this sample batch.
L1 - The associated laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) recovery was outside acceptance limits.

Chain of Custody Record

Program: Coal Combustion Residuals (CCR)

Dolan Chemical Laboratory (DCL)
4001 Bixby Road
Groveport, Ohio 43125
Contacts: Michael Ohlinger (614-836-4184)
Dave Conover (614-836-4219)

Project Name: Pirkey PP CCR
Contact Name: Pryce Warren
Contact Phone: 325-310-6668
Sampler(s): Matt Hamilton Kenny McDonald

Analysis Turnaround Time (in Calendar Days)
(•) Routine (28 days for Monitoring Wells)

Site Contact: 18 14 2 1
Date: — 15

For Lab Use Only:
COC/Order #: 251109

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sampler(s) Initials	250 mL bottle, pH<2, HNO_3 — Sb, As, B, Ba, Be, Ca Cd, Cr, Co, K, Li, Mg, Mo, Na, Pb, Se, Sr, Tl	Field-filter 250 mL bottle, then pH<2, HNO_3 — Dissolved Sb, As, Ba, Be, Cd, Cr, Co, Fe, Li, Mn, Mo, Pb, Se, Tl	Three (six every 10th*) 1 L bottles, pH<2, HNO3 — Ra-226, Ra-228	250 mL Glass bottle, HCL**, pH<2 — Mercury	250 mL Glass bottle, HCL**, pH<2 — Dissolved Mercury	250 mL bottle, pH<2, HNO_3 — B, Ca, K, Mg, Na, Sr		Sample Specific Notes
AD-2	4/22/2025	928	G	GW	7		X	X	X	X	X			1
AD-3	4/22/2025	1047	G	GW	7		X	X	X	X	X			2
AD-4	4/23/2025	1002	G	GW	7		X	X	X	X	X			3
AD-7R	4/21/2025	1103	G	GW	7		X	X	X	X	X			4
AD-8	4/22/2025	1114	G	GW	1							X		5
AD-12	4/21/2025	940	G	GW	7		X	X	X	X	X			6
AD-13	4/21/2025	1004	G	GW	7		X	X	X	X	X			7
AD-16	4/21/2025	904	G	GW	1							X		8
AD-17	4/22/2025	911	G	GW	7		X	X	X	X	X			9
AD-18	4/23/2025	901	G	GW	7		X	X	X	X	X			10
AD-22	4/21/2025	1205	G	GW	7		X	X	X	X	X			11
AD-23	4/23/2025	1057	G	GW	1							X		12
Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____; F= filter in field							4	F4	4	2	F2			

* *Six 1L Bottles must be collected for Radium for every 10th sample.*

Special Instructions/QC Requirements & Comments:

TG-32 needed

Relinquished by: [signature]	Company: Eagle	Date/Time: 4-24-25 1300	Received by:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Date/Time: 04/28/25 10:49 AM

Chain of Custody Record

Program: Coal Combustion Residuals (CCR)

Dolan Chemical Laboratory (DCL)
4001 Bixby Road
Groveport, Ohio 43125
Contacts: Michael Ohlinger (614-836-4184)
Dave Conover (614-836-4219)

Project Name: Pirkey PP CCR
Contact Name: Pryce Warren
Contact Phone: 325-310-6668
Sampler(s): Matt Hamilton Kenny McDonald

Analysis Turnaround Time (in Calendar Days)
◉ Routine (28 days for Monitoring Wells)

Site Contact: 8 14 2 –
Date: – 6

For Lab Use Only:
COC/Order #:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sampler(s) Initials	Sb, As, B, Ba, Be, Ca Cd, Cr, Co, K, Li, Mg, Mo, Na, Pb, Se, Sr, Tl (250 mL bottle, pH<2, HNO_3)	Dissolved Sb, As, Ba, Be, Cd, Cr, Co, Fe, Li, Mn, Mo, Pb, Se, Tl (Field-filter 250 mL bottle, then pH<2, HNO_3)	Ra-226, Ra-228 (Three (six every 10th*) 1 L bottles, pH<2, HNO3)	Mercury (250 mL Glass bottle, HCL**, pH<2)	Dissolved Mercury (250 mL Glass bottle, HCL**, pH<2)	B, Ca, K, Mg, Na, Sr (250 mL bottle, pH<2, HNO_3)		Sample Specific Notes:
AD-27	4/23/2025	843	G	GW	1							X		13
AD-28	4/22/2025	945	G	GW	7		X	X	X	X	X			14
AD-30	4/22/2025	830	G	GW	7		X	X	X	X	X			15
AD-31	4/21/2025	1120	G	GW	7		X	X	X	X	X			16
AD-32	4/21/2025	1029	G	GW	7		X	X	X	X	X			17
AD-33	4/22/2025	810	G	GW	10		X	X	X	X	X			18
AD-34	4/23/2025	806	G	GW	1							X		19
AD-36	4/22/2025	1026	G	GW	1							X		20
Duplicate 1	4/22/2025	1200	G	GW	4		X	X		X	X			21
Equipment Blank	4/22/2025	1022	G	GW	2		X			X				22
Field Blank	4/23/2025	819	G	GW	2		X			X				23
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____; F= filter in field							**4**	**F4**	**4**	**2**	**F2**	**4**		

** Six 1L Bottles must be collected for Radium for every 10th sample.*

Special Instructions/QC Requirements & Comments:

TG-32 needed

Relinquished by:	Company:	Date/Time:	Received by:	Date/Time:
[signature]	Eagle	4-24-25 1300		
Relinquished by:	Company:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Date/Time:
			[signature]	04/28/25 10:49 AM

WATER & WASTE SAMPLE RECEIPT FORM

Form SOP-7102 Sample Receipt Form Rev.10, 01/03/25

Package Type	Delivery Type
(Cooler) Box Bag Envelope	UPS FedEX USPS
	Other _____

Plant/Customer Pirkey **Total # of Containers RECEIVED in Job:** 115

Opened By ELH

Date/Time 4/28/25 @11:00am

Were all required temperatures, per BN-water-900, T≤6°C *w/o sample freezing*? Y / N or (N/A)

Initial/Date: BLB 4/28/25 on ice / (no ice)

If No, specify each deviation(s) on back of form. (IR Gun Ser# 240093386, *Expir.* 05/20/2025)

Was container in good condition? (Y) / N Comments _____

Was Chain of Custody received? (Y) / N Comments _____

Requested turnaround: Routine If **RUSH**, who was notified? _____

pH (15 min) Cr^{+6} (pres) (24 hr) NO_2 or NO_3 (48 hr) *ortho*-PO_4 (48 hr) Hg-diss (pres) (48 hr)

Were pH requirements met for required samples, per BN-water-900? (Y) / N or N/A

Initial/Date: BLB 4/28/25

***pH paper*:** mfr Lab Rat Supplies, PN RS-4801, LOT# X000RWDG21, EXPIR DATE 05/31/2026

*** Note changes to pH paper in comments below*

Was Add'l Preservative needed? Y / (N) If Yes: By whom & when: _____ (See Prep Book)

(Dissolved) Is sample filtration requested? Y / (N) Comments _____ (See Prep Book)

Was COC filled out properly? (Y) / N Comments _____

Were samples labeled properly? (Y) / N Comments _____

Were correct containers used? (Y) / N Comments _____

Was the customer contacted? If Yes: Person Contacted: _____

Lab ID# 251109 Initial & Date & Time : _____

Logged by MLC Comments: _____

(Record Test Count on back of form)

Total # of Containers LISTED on COC: 115

WATER & WASTE SAMPLE RECEIPT FORM (CONT)

Form SOP-7102 Sample Receipt Form Rev.10, 01/03/25

REMINDER: Document the pertinent sample integrity information and deviations in sample receipt (as noted above) in the Sample or Job "Comments" field in the LIMS. **Comments below**:
i.e. Mark "LF" if needs Lab filtered, Temperature or Preservative deviation, Preserved upon arrival , etc.

JOB # : 251109 **Initial/ Date:** MDL 04/28/25 **Peer Review Initial/ Date:** MSO 4/28/25

Login Test Count from COC	LIMS Sample ID (or COC Sample Name)	Comments /Nonconformities	Peer Review Test Count from COC
21	251109-001		21
15	251109-001-01		15
21	251109-002		21
15	251109-002-01		15
21	251109-003		21
15	251109-003-01		15
21	251109-004		21
15	251109-004-01		15
6	251109-005		6
21	251109-006		21
15	251109-006-01		15
21	251109-007		21
15	251109-007-01		15
6	251109-008		6
21	251109-009		21
15	251109-009-01		15
21	251109-010		21
15	251109-010-01		15
21	251109-011		21
15	251109-011-01		15
6	251109-012		6
6	251109-013		6
21	251109-014		21
15	251109-014-01		15

WATER & WASTE SAMPLE RECEIPT FORM (CONT)

Form SOP-7102 Sample Receipt Form Rev.10, 01/03/25

REMINDER: Document the pertinent sample integrity information and deviations in sample receipt (as noted above) in the Sample or Job "Comments" field in the LIMS. **Comments below**:
i.e. Mark "LF" if needs Lab filtered, Temperature or Preservative deviation, Preserved upon arrival , etc.

JOB # : 25/109 **Initial/ Date:** MBK 04/28/25 **Peer Review Initial/ Date:** MBD 4/28/25

Login Test Count from COC	LIMS Sample ID (or COC Sample Name)	Comments /Nonconformities	Peer Review Test Count from COC
21	25/109-015		21
15	25/109-015-01		15
21	25/109-016		21
15	25/109-016-01		15
21	25/109-017		21
15	25/109-017-01		15
21	25/109-018		21
15	25/109-018-01		15
6	25/109-019		6
6	25/109-020		6
21	25/109-021		~~21~~ 19
15	25/109-021-01		15
19	25/109-022		19
19	25/109-023		19

Municipal Solid Waste Laboratory Review Checklist

This data package consists of:

- [x] This signature page, and the laboratory review checklist consisting of Table 1, Reportable Data (which includes the reportable data identified on this page), Table 2, Supporting Data, and Table 3, Exception Reports.
- [x] R1 Field chain-of-custody documentation
- [x] R2 Sample identification cross-reference
- [x] R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - (a) Items specified in NELAC Chapter 5 for reporting results, e.g., Section 5.5.10 in 2003 NELAC Standard
  - (b) Dilution factors
  - (c) Preparation methods
  - (d) Cleanup methods
  - (e) If required for the project, tentatively identified compounds (TICs)
- [NA] R4 Surrogate recovery data including:
  - (a) Calculated recovery (%R)
  - (b) The laboratory's surrogate QC limits
- [x] R5 Test reports/summary forms for blank samples
- [x] R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - (a) LCS spiking amounts
  - (b) Calculated %R for each analyte
  - (c) The laboratory's LCS QC limits
- [x] R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - (a) Samples associated with the MS/MSD clearly identified
  - (b) MS/MSD spiking amounts
  - (c) Concentration of each MS/MSD analyte measured in the parent and spiked samples
  - (d) Calculated %Rs and relative percent differences (RPDs)
  - (e) The laboratory's MS/MSD QC limits
- [x] R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - (a) The amount of analyte measured in the duplicate
  - (b) The calculated RPD
  - (c) The laboratory's QC limits for analytical duplicates
- [x] R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix
- [x] R10 Other problems or anomalies
- [x] The Exception Report for every item for which the result is "No" or "NR" (Not Reviewed)

Release Statement: I am responsible for the release of this laboratory data package. This data package as been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [●] This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Tamisha T. Palmer	Tamisha T. Palmer	Chemical Technician, Principal	05/13/2025
Name (printed)	Signature	Official Title	Date

Table 1. Reportable Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey

Reviewer Name: Tamisha Palmer

LRC Date: 05/13/2025

Laboratory Job Number: 251109

Prep Batch Number(s): PB25043002

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
R1	O, I	**Chain-of-custody (COC)**		
	I	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	Yes	
	I	Were all departures from standard conditions described in an exception report?	Yes	
R2	O, I	**Sample and quality control (QC) identification**		
	I	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Yes	
	I	Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Yes	
R3	O, I	**Test reports**		
	I	Were all samples prepared and analyzed within holding times?	Yes	
	I	Other than those results < MQL, were all other raw values bracketed by calibration standards?	NA	
	I	Were calculations checked by a peer or supervisor?	Yes	
	I	Were all analyte identifications checked by a peer or supervisor?	Yes	
	I	Were sample quantitation limits reported for all analytes not detected?	Yes	
	I	Were all results for soil and sediment samples reported on a dry weight basis?	NA	
	I	Was % moisture (or solids) reported for all soil and sediment samples?	NA	
	I	If required for the project, TICs reported?	NA	
R4	O	**Surrogate recovery data**		
	I	Were surrogates added prior to extraction?	NA	
	I	Were surrogate percent recoveries in all samples within the laboratory QC limits?	NA	
R5	O, I	**Test reports/summary forms for blank samples**		
	I	Were appropriate type(s) of blanks analyzed?	Yes	
	I	Were blanks analyzed at the appropriate frequency?	Yes	

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
	I	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Yes	
	I	Were blank concentrations < MQL?	Yes	
R6	O, I	**Laboratory control samples (LCS):**		
	I	Were all COCs included in the LCS?	Yes	
	I	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Yes	
	I	Were LCSs analyzed at the required frequency?	Yes	
	I	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	No	ER1
	I	Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	Yes	
	I	Was the LCSD RPD within QC limits?	Yes	
R7	O, I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**		
	I	Were the project/method specified analytes included in the MS and MSD?	NA	
	I	Were MS/MSD analyzed at the appropriate frequency?	NA	
	I	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	NA	
	I	Were MS/MSD RPDs within laboratory QC limits?	NA	
R8	O, I	**Analytical duplicate data**		
	I	Were appropriate analytical duplicates analyzed for each matrix?	No	ER2
	I	Were analytical duplicates analyzed at the appropriate frequency?	NA	
	I	Were RPDs or relative standard deviations within the laboratory QC limits?	NA	
R9	O, I	**Method quantitation limits (MQLs):**		
	I	Are the MQLs for each method analyte included in the laboratory data package?	Yes	
	I	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Yes	
	I	Are unadjusted MQLs included in the laboratory data package?	Yes	
R10	O, I	**Other problems/anomalies**		
	I	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Yes	
	I	Were all necessary corrective actions performed for the reported data?	Yes	
	I	Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	Yes	

Table 2. Supporting Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey

Reviewer Name: Tamisha Palmer

LRC Date: 05/13/2025

Laboratory Job Number: 251109

Prep Batch Number(s): PB25043002

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S1	O, I	**Initial calibration (ICAL)**		
	I	Were response factors and/or relative response factors for each analyte within QC limits?	NA	
	I	Were percent RSDs or correlation coefficient criteria met?	Yes	
	I	Was the number of standards recommended in the method used for all analytes?	Yes	
	I	Were all points generated between the lowest and highest standard used to calculate the curve?	NA	
	I	Are ICAL data available for all instruments used?	Yes	
	I	Has the initial calibration curve been verified using an appropriate second source standard?	Yes	
S2	O, I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**		
	I	Was the CCV analyzed at the method-required frequency?	NA	
	I	Were percent differences for each analyte within the method-required QC limits?	NA	
	I	Was the ICAL curve verified for each analyte?	NA	
	I	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	NA	
S3	O	**Mass spectral tuning:**		
	I	Was the appropriate compound for the method used for tuning?	NA	
	I	Were ion abundance data within the method-required QC limits?	NA	
S4	O	**Internal standards (IS):**		
	I	Were IS area counts and retention times within the method-required QC limits?	NA	
S5	O, I	**Raw data (NELAC section 1 appendix A glossary, and section 5.)**		
	I	Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	Yes	
	I	Were data associated with manual integrations flagged on the raw data?	NA	

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S6	O	**Dual column confirmation**		
	I	Did dual column confirmation results meet the method-required QC?	NA	
S7	O	**Tentatively identified compounds (TICs):**		
	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?	NA	
S8	I	**Interference Check Sample (ICS) results:**		
	I	Were percent recoveries within method QC limits?	NA	
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**		
	I	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	NA	
S10	O, I	**Method detection limit (MDL) studies**		
	I	Was a MDL study performed for each reported analyte?	Yes	
	I	Is the MDL either adjusted or supported by the analysis of DCSs?	Yes	
S11	O, I	**Proficiency test reports:**		
	I	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	Yes	
S12	O, I	**Standards documentation**		
	I	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Yes	
S13	O, I	**Compound/analyte identification procedures**		
	I	Are the procedures for compound/analyte identification documented?	Yes	
S14	O, I	**Demonstration of analyst competency (DOC)**		
	I	Was DOC conducted consistent with NELAC Chapter 5C?	Yes	
	I	Is documentation of the analyst's competency up-to-date and on file?	Yes	
S15	O, I	**Verification/validation documentation for methods (NELAC Chap 5n 5)**		
	I	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Yes	
S16	O, I	**Laboratory standard operating procedures (SOPs):**		
	I	Are laboratory SOPs current and on file for each method performed?	Yes	

Table 3. Exception Reports.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey

Reviewer Name: Tamisha Palmer

LRC Date: 05/13/2025

Laboratory Job Number: 251109

Prep Batch Number(s): PB25043002

Exception Report No.	Description
ER1	The associated LCS recovery was outside limits: LCSD was acceptable
ER2	There was not a duplicate available for analysis with this batch.

[1] Items identified by the letter "R" must be available as a hard copy or as a .pdf file. Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
[2] O - organic analyses; I - inorganic analyses (including general chemistry constituents, when applicable).
[3] NA - Not applicable; NR - Not reviewed.
[4] Exception Report identification number; an Exception Report should be completed for an item if the result is "No" or "NR."

Municipal Solid Waste Laboratory Review Checklist

This data package consists of:

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- [x] R1 Field chain-of-custody documentation
- [x] R2 Sample identification cross-reference
- [x] R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - (a) Items specified in NELAC Chapter 5 for reporting results, e.g., Section 5.5.10 in 2003 NELAC Standard
  - (b) Dilution factors
  - (c) Preparation methods
  - (d) Cleanup methods
  - (e) If required for the project, tentatively identified compounds (TICs)
- [NA] R4 Surrogate recovery data including:
  - (a) Calculated recovery (%R)
  - (b) The laboratory's surrogate QC limits
- [x] R5 Test reports/summary forms for blank samples
- [x] R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - (a) LCS spiking amounts
  - (b) Calculated %R for each analyte
  - (c) The laboratory's LCS QC limits
- [x] R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - (a) Samples associated with the MS/MSD clearly identified
  - (b) MS/MSD spiking amounts
  - (c) Concentration of each MS/MSD analyte measured in the parent and spiked samples
  - (d) Calculated %Rs and relative percent differences (RPDs)
  - (e) The laboratory's MS/MSD QC limits
- [x] R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - (a) The amount of analyte measured in the duplicate
  - (b) The calculated RPD
  - (c) The laboratory's QC limits for analytical duplicates
- [x] R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix
- [x] R10 Other problems or anomalies
- [x] The Exception Report for every item for which the result is "No" or "NR" (Not Reviewed)

Release Statement: I am responsible for the release of this laboratory data package. This data package as been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: (●) This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Sunita Timsina		Chemist Associate	05/13/2025
Name (printed)	Signature	Official Title	Date

Radium Laboratory Review Checklist

Table 1. Reportable Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Power Station

Reviewer Name: Sunita Timsina

LRC Date: 05/13/2025

Laboratory Job Number: 251109

Prep Batch Number(s): PB25050106, PB25050203

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
R1	O, I	**Chain-of-custody (COC)**		
	I	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	Yes	
	I	Were all departures from standard conditions described in an exception report?	Yes	
R2	O, I	**Sample and quality control (QC) identification**		
	I	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Yes	
	I	Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Yes	
R3	O, I	**Test reports**		
	I	Were all samples prepared and analyzed within holding times?	Yes	
	I	Other than those results < MQL, were all other raw values bracketed by calibration standards?	NA	
	I	Were calculations checked by a peer or supervisor?	Yes	
	I	Were all analyte identifications checked by a peer or supervisor?	Yes	
	I	Were sample quantitation limits reported for all analytes not detected?	Yes	
	I	Were all results for soil and sediment samples reported on a dry weight basis?	NA	
	I	Was % moisture (or solids) reported for all soil and sediment samples?	NA	
	I	If required for the project, TICs reported?	NA	
R4	O	**Surrogate recovery data**		
	I	Were surrogates added prior to extraction?	NA	
	I	Were surrogate percent recoveries in all samples within the laboratory QC limits?	NA	
R5	O, I	**Test reports/summary forms for blank samples**		
	I	Were appropriate type(s) of blanks analyzed?	Yes	
	I	Were blanks analyzed at the appropriate frequency?	Yes	

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
	I	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Yes	
	I	Were blank concentrations < MQL?	Yes	
R6	O, I	**Laboratory control samples (LCS):**		
	I	Were all COCs included in the LCS?	Yes	
	I	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Yes	
	I	Were LCSs analyzed at the required frequency?	Yes	
	I	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	No	ER1
	I	Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	Yes	
	I	Was the LCSD RPD within QC limits?	Yes	
R7	O, I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**		
	I	Were the project/method specified analytes included in the MS and MSD?	Yes	
	I	Were MS/MSD analyzed at the appropriate frequency?	Yes	
	I	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Were MS/MSD RPDs within laboratory QC limits?	No	ER2
R8	O, I	**Analytical duplicate data**		
	I	Were appropriate analytical duplicates analyzed for each matrix?	Yes	
	I	Were analytical duplicates analyzed at the appropriate frequency?	Yes	
	I	Were RPDs or relative standard deviations within the laboratory QC limits?	NA	
R9	O, I	**Method quantitation limits (MQLs):**		
	I	Are the MQLs for each method analyte included in the laboratory data package?	Yes	
	I	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Yes	
	I	Are unadjusted MQLs included in the laboratory data package?	Yes	
R10	O, I	**Other problems/anomalies**		
	I	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Yes	
	I	Were all necessary corrective actions performed for the reported data?	Yes	
	I	Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	Yes	

Table 2. Supporting Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Power Station

Reviewer Name: Sunita Timsina

LRC Date: 05/13/2025

Laboratory Job Number: 251109

Prep Batch Number(s): PB25050106, PB25050203

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S1	O, I	**Initial calibration (ICAL)**		
	I	Were response factors and/or relative response factors for each analyte within QC limits?	NA	
	I	Were percent RSDs or correlation coefficient criteria met?	Yes	
	I	Was the number of standards recommended in the method used for all analytes?	Yes	
	I	Were all points generated between the lowest and highest standard used to calculate the curve?	NA	
	I	Are ICAL data available for all instruments used?	Yes	
	I	Has the initial calibration curve been verified using an appropriate second source standard?	Yes	
S2	O, I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**		
	I	Was the CCV analyzed at the method-required frequency?	NA	
	I	Were percent differences for each analyte within the method-required QC limits?	NA	
	I	Was the ICAL curve verified for each analyte?	NA	
	I	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	NA	
S3	O	**Mass spectral tuning:**		
	I	Was the appropriate compound for the method used for tuning?	NA	
	I	Were ion abundance data within the method-required QC limits?	NA	
S4	O	**Internal standards (IS):**		
	I	Were IS area counts and retention times within the method-required QC limits?	NA	
S5	O, I	**Raw data (NELAC section 1 appendix A glossary, and section 5.)**		
	I	Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	Yes	
	I	Were data associated with manual integrations flagged on the raw data?	NA	

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S6	O	**Dual column confirmation**		
	I	Did dual column confirmation results meet the method-required QC?	NA	
S7	O	**Tentatively identified compounds (TICs):**		
	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?	NA	
S8	I	**Interference Check Sample (ICS) results:**		
	I	Were percent recoveries within method QC limits?	NA	
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**		
	I	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	NA	
S10	O, I	**Method detection limit (MDL) studies**		
	I	Was a MDL study performed for each reported analyte?	Yes	
	I	Is the MDL either adjusted or supported by the analysis of DCSs?	Yes	
S11	O, I	**Proficiency test reports:**		
	I	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	Yes	
S12	O, I	**Standards documentation**		
	I	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Yes	
S13	O, I	**Compound/analyte identification procedures**		
	I	Are the procedures for compound/analyte identification documented?	Yes	
S14	O, I	**Demonstration of analyst competency (DOC)**		
	I	Was DOC conducted consistent with NELAC Chapter 5C?	Yes	
	I	Is documentation of the analyst's competency up-to-date and on file?	Yes	
S15	O, I	**Verification/validation documentation for methods (NELAC Chap 5n 5)**		
	I	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Yes	
S16	O, I	**Laboratory standard operating procedures (SOPs):**		
	I	Are laboratory SOPs current and on file for each method performed?	Yes	

Table 3. Exception Reports.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Power Station

Reviewer Name: Sunita Timsina

LRC Date: 05/13/2025

Laboratory Job Number: 251109

Prep Batch Number(s): PB25050106, PB25050203

Exception Report No.	Description
ER1	PB25050106, The associated laboratory control sample (LCS) or laboratory control
	sample duplicate (LCSD) recovery was outside acceptance limits.
ER2	PB25050106, The precision on the matrix spike duplicate (MSD) was above
	acceptance limits.

[1] Items identified by the letter "R" must be available as a hard copy or as a .pdf file. Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
[2] O - organic analyses; I - inorganic analyses (including general chemistry constituents, when applicable).
[3] NA - Not applicable; NR - Not reviewed.
[4] Exception Report identification number; an Exception Report should be completed for an item if the result is "No" or "NR."

Municipal Solid Waste Laboratory Review Checklist

This data package consists of:

- [x] This signature page, and the laboratory review checklist consisting of Table 1, Reportable Data (which includes the reportable data identified on this page), Table 2, Supporting Data, and Table 3, Exception Reports.
- [x] R1 Field chain-of-custody documentation
- [x] R2 Sample identification cross-reference
- [x] R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - (a) Items specified in NELAC Chapter 5 for reporting results, e.g., Section 5.5.10 in 2003 NELAC Standard
  - (b) Dilution factors
  - (c) Preparation methods
  - (d) Cleanup methods
  - (e) If required for the project, tentatively identified compounds (TICs)
- [x] R4 Surrogate recovery data including:
  - (a) Calculated recovery (%R)
  - (b) The laboratory's surrogate QC limits
- [x] R5 Test reports/summary forms for blank samples
- [x] R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - (a) LCS spiking amounts
  - (b) Calculated %R for each analyte
  - (c) The laboratory's LCS QC limits
- [x] R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - (a) Samples associated with the MS/MSD clearly identified
  - (b) MS/MSD spiking amounts
  - (c) Concentration of each MS/MSD analyte measured in the parent and spiked samples
  - (d) Calculated %Rs and relative percent differences (RPDs)
  - (e) The laboratory's MS/MSD QC limits
- [x] R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - (a) The amount of analyte measured in the duplicate
  - (b) The calculated RPD
  - (c) The laboratory's QC limits for analytical duplicates
- [x] R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix
- [x] R10 Other problems or anomalies
- [x] The Exception Report for every item for which the result is "No" or "NR" (Not Reviewed)

Release Statement: I am responsible for the release of this laboratory data package. This data package as been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: (●) This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Kelsey Huff		Chemist	05/09/2025
Name (printed)	Signature	Official Title	Date

Mercury Laboratory Review Checklist

Table 1. Reportable Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey

Reviewer Name: Kelsey Huff

LRC Date: 05/09/2025

Laboratory Job Number: 251109

Prep Batch Number(s): PB25050101, PB25050102, PB25050104

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
R1	O, I	**Chain-of-custody (COC)**		
	I	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	Yes	
	I	Were all departures from standard conditions described in an exception report?	Yes	
R2	O, I	**Sample and quality control (QC) identification**		
	I	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Yes	
	I	Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Yes	
R3	O, I	**Test reports**		
	I	Were all samples prepared and analyzed within holding times?	Yes	
	I	Other than those results < MQL, were all other raw values bracketed by calibration standards?	Yes	
	I	Were calculations checked by a peer or supervisor?	Yes	
	I	Were all analyte identifications checked by a peer or supervisor?	Yes	
	I	Were sample quantitation limits reported for all analytes not detected?	Yes	
	I	Were all results for soil and sediment samples reported on a dry weight basis?	NA	
	I	Was % moisture (or solids) reported for all soil and sediment samples?	NA	
	I	If required for the project, TICs reported?	NA	
R4	O	**Surrogate recovery data**		
	I	Were surrogates added prior to extraction?	NA	
	I	Were surrogate percent recoveries in all samples within the laboratory QC limits?	NA	
R5	O, I	**Test reports/summary forms for blank samples**		
	I	Were appropriate type(s) of blanks analyzed?	Yes	
	I	Were blanks analyzed at the appropriate frequency?	Yes	

Mercury Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
	I	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Yes	
	I	Were blank concentrations < MQL?	Yes	
R6	O, I	**Laboratory control samples (LCS):**		
	I	Were all COCs included in the LCS?	Yes	
	I	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Yes	
	I	Were LCSs analyzed at the required frequency?	Yes	
	I	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	Yes	
	I	Was the LCSD RPD within QC limits?	Yes	
R7	O, I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**		
	I	Were the project/method specified analytes included in the MS and MSD?	Yes	
	I	Were MS/MSD analyzed at the appropriate frequency?	Yes	
	I	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Were MS/MSD RPDs within laboratory QC limits?	Yes	
R8	O, I	**Analytical duplicate data**		
	I	Were appropriate analytical duplicates analyzed for each matrix?	NA	
	I	Were analytical duplicates analyzed at the appropriate frequency?	NA	
	I	Were RPDs or relative standard deviations within the laboratory QC limits?	NA	
R9	O, I	**Method quantitation limits (MQLs):**		
	I	Are the MQLs for each method analyte included in the laboratory data package?	Yes	
	I	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Yes	
	I	Are unadjusted MQLs included in the laboratory data package?	Yes	
R10	O, I	**Other problems/anomalies**		
	I	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Yes	
	I	Were all necessary corrective actions performed for the reported data?	Yes	
	I	Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	Yes	

Mercury Laboratory Review Checklist

Table 2. Supporting Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey

Reviewer Name: Kelsey Huff

LRC Date: 05/09/2025

Laboratory Job Number: 251109

Prep Batch Number(s): PB25050101, PB25050102, PB25050104

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S1	O, I	**Initial calibration (ICAL)**		
	I	Were response factors and/or relative response factors for each analyte within QC limits?	NA	
	I	Were percent RSDs or correlation coefficient criteria met?	Yes	
	I	Was the number of standards recommended in the method used for all analytes?	Yes	
	I	Were all points generated between the lowest and highest standard used to calculate the curve?	Yes	
	I	Are ICAL data available for all instruments used?	Yes	
	I	Has the initial calibration curve been verified using an appropriate second source standard?	Yes	
S2	O, I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**		
	I	Was the CCV analyzed at the method-required frequency?	Yes	
	I	Were percent differences for each analyte within the method-required QC limits?	Yes	
	I	Was the ICAL curve verified for each analyte?	Yes	
	I	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	No	ER1
S3	O	**Mass spectral tuning:**		
	I	Was the appropriate compound for the method used for tuning?	NA	
	I	Were ion abundance data within the method-required QC limits?	NA	
S4	O	**Internal standards (IS):**		
	I	Were IS area counts and retention times within the method-required QC limits?	NA	
S5	O, I	**Raw data (NELAC section 1 appendix A glossary, and section 5.)**		
	I	Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	Yes	
	I	Were data associated with manual integrations flagged on the raw data?	NA	

Mercury Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S6	O	**Dual column confirmation**		
	I	Did dual column confirmation results meet the method-required QC?	NA	
S7	O	**Tentatively identified compounds (TICs):**		
	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?	NA	
S8	I	**Interference Check Sample (ICS) results:**		
	I	Were percent recoveries within method QC limits?	NA	
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**		
	I	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	NA	
S10	O, I	**Method detection limit (MDL) studies**		
	I	Was a MDL study performed for each reported analyte?	Yes	
	I	Is the MDL either adjusted or supported by the analysis of DCSs?	Yes	
S11	O, I	**Proficiency test reports:**		
	I	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	Yes	
S12	O, I	**Standards documentation**		
	I	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Yes	
S13	O, I	**Compound/analyte identification procedures**		
	I	Are the procedures for compound/analyte identification documented?	Yes	
S14	O, I	**Demonstration of analyst competency (DOC)**		
	I	Was DOC conducted consistent with NELAC Chapter 5C?	Yes	
	I	Is documentation of the analyst's competency up-to-date and on file?	Yes	
S15	O, I	**Verification/validation documentation for methods (NELAC Chap 5n 5)**		
	I	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Yes	
S16	O, I	**Laboratory standard operating procedures (SOPs):**		
	I	Are laboratory SOPs current and on file for each method performed?	Yes	

Table 3. Exception Reports.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey

Reviewer Name: Kelsey Huff

LRC Date: 05/09/2025

Laboratory Job Number: 251109

Prep Batch Number(s): PB25050101, PB25050102, PB25050104

Exception Report No.	Description
ER1	CCB acceptance criteria is CCB<MQL.

[1] Items identified by the letter "R" must be available as a hard copy or as a .pdf file. Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
[2] O - organic analyses; I - inorganic analyses (including general chemistry constituents, when applicable).
[3] NA - Not applicable; NR - Not reviewed.
[4] Exception Report identification number; an Exception Report should be completed for an item if the result is "No" or "NR."

Municipal Solid Waste Laboratory Review Checklist

This data package consists of:

- [x] This signature page, and the laboratory review checklist consisting of Table 1, Reportable Data (which includes the reportable data identified on this page), Table 2, Supporting Data, and Table 3, Exception Reports.
- [x] R1 Field chain-of-custody documentation
- [x] R2 Sample identification cross-reference
- [x] R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - (a) Items specified in NELAC Chapter 5 for reporting results, e.g., Section 5.5.10 in 2003 NELAC Standard
  - (b) Dilution factors
  - (c) Preparation methods
  - (d) Cleanup methods
  - (e) If required for the project, tentatively identified compounds (TICs)
- [x] R4 Surrogate recovery data including:
  - (a) Calculated recovery (%R)
  - (b) The laboratory's surrogate QC limits
- [x] R5 Test reports/summary forms for blank samples
- [x] R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - (a) LCS spiking amounts
  - (b) Calculated %R for each analyte
  - (c) The laboratory's LCS QC limits
- [x] R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - (a) Samples associated with the MS/MSD clearly identified
  - (b) MS/MSD spiking amounts
  - (c) Concentration of each MS/MSD analyte measured in the parent and spiked samples
  - (d) Calculated %Rs and relative percent differences (RPDs)
  - (e) The laboratory's MS/MSD QC limits
- [x] R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - (a) The amount of analyte measured in the duplicate
  - (b) The calculated RPD
  - (c) The laboratory's QC limits for analytical duplicates
- [x] R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix
- [x] R10 Other problems or anomalies
- [x] The Exception Report for every item for which the result is "No" or "NR" (Not Reviewed)

Release Statement: I am responsible for the release of this laboratory data package. This data package as been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: (●) This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Elizabeth Hoitink	Elizabeth L Hoitink Digitally signed by Elizabeth L Hoitink Date: 2025.07.01 10:04:30 -04'00'	Chemist	7-1-2025
Name (printed)	Signature	Official Title	Date

ICP-MS Laboratory Review Checklist

Table 1. Reportable Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey CCR

Reviewer Name: Elizabeth Hoitink

LRC Date: 07-1-2025

Laboratory Job Number: 251109

Prep Batch Number(s): PB25042901, PB25042905, QC250515, QC2505057, QC2505072

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
R1	O, I	**Chain-of-custody (COC)**		
	I	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	Yes	
	I	Were all departures from standard conditions described in an exception report?	Yes	
R2	O, I	**Sample and quality control (QC) identification**		
	I	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Yes	
	I	Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Yes	
R3	O, I	**Test reports**		
	I	Were all samples prepared and analyzed within holding times?	Yes	
	I	Other than those results < MQL, were all other raw values bracketed by calibration standards?	No	ER1
	I	Were calculations checked by a peer or supervisor?	Yes	
	I	Were all analyte identifications checked by a peer or supervisor?	Yes	
	I	Were sample quantitation limits reported for all analytes not detected?	Yes	
	I	Were all results for soil and sediment samples reported on a dry weight basis?	NA	
	I	Was % moisture (or solids) reported for all soil and sediment samples?	NA	
	I	If required for the project, TICs reported?	NA	
R4	O	**Surrogate recovery data**		
	I	Were surrogates added prior to extraction?	NA	
	I	Were surrogate percent recoveries in all samples within the laboratory QC limits?	NA	
R5	O, I	**Test reports/summary forms for blank samples**		
	I	Were appropriate type(s) of blanks analyzed?	Yes	
	I	Were blanks analyzed at the appropriate frequency?	Yes	

ICP-MS Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
	I	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Yes	
	I	Were blank concentrations < MQL?	Yes	
R6	O, I	**Laboratory control samples (LCS):**		
	I	Were all COCs included in the LCS?	Yes	
	I	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Yes	
	I	Were LCSs analyzed at the required frequency?	Yes	
	I	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	Yes	
	I	Was the LCSD RPD within QC limits?	Yes	
R7	O, I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**		
	I	Were the project/method specified analytes included in the MS and MSD?	Yes	
	I	Were MS/MSD analyzed at the appropriate frequency?	Yes	
	I	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	No	ER3
	I	Were MS/MSD RPDs within laboratory QC limits?	Yes	
R8	O, I	**Analytical duplicate data**		
	I	Were appropriate analytical duplicates analyzed for each matrix?	Yes	
	I	Were analytical duplicates analyzed at the appropriate frequency?	Yes	
	I	Were RPDs or relative standard deviations within the laboratory QC limits?	Yes	
R9	O, I	**Method quantitation limits (MQLs):**		
	I	Are the MQLs for each method analyte included in the laboratory data package?	Yes	
	I	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Yes	
	I	Are unadjusted MQLs included in the laboratory data package?	Yes	
R10	O, I	**Other problems/anomalies**		
	I	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Yes	
	I	Were all necessary corrective actions performed for the reported data?	Yes	
	I	Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	Yes	

Table 2. Supporting Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey CCR

Reviewer Name: Elizabeth Hoitink

LRC Date: 07-1-2025

Laboratory Job Number: 251109

Prep Batch Number(s): PB25042901, PB25042905, QC250515, QC2505057, QC2505072

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S1	O, I	**Initial calibration (ICAL)**		
	I	Were response factors and/or relative response factors for each analyte within QC limits?	NA	
	I	Were percent RSDs or correlation coefficient criteria met?	Yes	
	I	Was the number of standards recommended in the method used for all analytes?	Yes	
	I	Were all points generated between the lowest and highest standard used to calculate the curve?	Yes	
	I	Are ICAL data available for all instruments used?	Yes	
	I	Has the initial calibration curve been verified using an appropriate second source standard?	Yes	
S2	O, I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**		
	I	Was the CCV analyzed at the method-required frequency?	Yes	
	I	Were percent differences for each analyte within the method-required QC limits?	Yes	
	I	Was the ICAL curve verified for each analyte?	Yes	
	I	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	No	ER2
S3	O	**Mass spectral tuning:**		
	I	Was the appropriate compound for the method used for tuning?	Yes	
	I	Were ion abundance data within the method-required QC limits?	Yes	
S4	O	**Internal standards (IS):**		
	I	Were IS area counts and retention times within the method-required QC limits?	Yes	
S5	O, I	**Raw data (NELAC section 1 appendix A glossary, and section 5.)**		
	I	Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	Yes	
	I	Were data associated with manual integrations flagged on the raw data?	NA	

ICP-MS Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S6	O	**Dual column confirmation**		
	I	Did dual column confirmation results meet the method-required QC?	NA	
S7	O	**Tentatively identified compounds (TICs):**		
	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?	NA	
S8	I	**Interference Check Sample (ICS) results:**		
	I	Were percent recoveries within method QC limits?	NA	
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**		
	I	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	NA	
S10	O, I	**Method detection limit (MDL) studies**		
	I	Was a MDL study performed for each reported analyte?	Yes	
	I	Is the MDL either adjusted or supported by the analysis of DCSs?	Yes	
S11	O, I	**Proficiency test reports:**		
	I	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	Yes	
S12	O, I	**Standards documentation**		
	I	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Yes	
S13	O, I	**Compound/analyte identification procedures**		
	I	Are the procedures for compound/analyte identification documented?	Yes	
S14	O, I	**Demonstration of analyst competency (DOC)**		
	I	Was DOC conducted consistent with NELAC Chapter 5C?	Yes	
	I	Is documentation of the analyst's competency up-to-date and on file?	Yes	
S15	O, I	**Verification/validation documentation for methods (NELAC Chap 5n 5)**		
	I	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Yes	
S16	O, I	**Laboratory standard operating procedures (SOPs):**		
	I	Are laboratory SOPs current and on file for each method performed?	Yes	

Table 3. Exception Reports.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey CCR

Reviewer Name: Elizabeth Hoitink

LRC Date: 07-1-2025

Laboratory Job Number: 251109

Prep Batch Number(s): PB25042901, PB25042905, QC250515, QC2505057, QC2505072

Exception Report No.	Description
ER1	Linear Dynamic Range (LDR) study used to determine upper limit of analyte calibration.
ER2	CCB acceptance criteria is CCB<2.2*MDL.
ER3	Matrix spike failed for Li and Na for sample 251109-001.

[1] Items identified by the letter "R" must be available as a hard copy or as a .pdf file. Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
[2] O - organic analyses; I - inorganic analyses (including general chemistry constituents, when applicable).
[3] NA - Not applicable; NR - Not reviewed.
[4] Exception Report identification number; an Exception Report should be completed for an item if the result is "No" or "NR."

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 251095 **Customer: Pirkey Power Station** **Date Reported: 05/08/2025**

Customer Sample ID: AD-2 Customer Description:
Lab Number: 251095-001 Preparation:
Date Collected: 04/22/2025 10:28 EDT Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.47	mg/L	2	0.10	0.02		CRJ	04/30/2025 15:05	EPA 300.1 -1997, Rev. 1.0
Chloride	26.8	mg/L	2	0.06	0.02		CRJ	04/30/2025 15:05	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.37	mg/L	2	0.06	0.02		CRJ	04/30/2025 15:05	EPA 300.1 -1997, Rev. 1.0
Sulfate	298	mg/L	10	3.0	0.6		CRJ	04/30/2025 15:47	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	570	mg/L	1	50	20		BLB	04/25/2025 12:36	SM 2540C-2015

Customer Sample ID: AD-3 Customer Description:
Lab Number: 251095-002 Preparation:
Date Collected: 04/22/2025 11:47 EDT Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.07	mg/L	2	0.10	0.02	J1	CRJ	04/30/2025 14:45	EPA 300.1 -1997, Rev. 1.0
Chloride	6.30	mg/L	2	0.06	0.02		CRJ	04/30/2025 14:45	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.09	mg/L	2	0.06	0.02		CRJ	04/30/2025 14:45	EPA 300.1 -1997, Rev. 1.0
Sulfate	29.6	mg/L	2	0.6	0.1		CRJ	04/30/2025 14:45	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	12	mg/L	1	20	5	J1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	130	mg/L	1	50	20		BLB	04/28/2025 08:09	SM 2540C-2015

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Job ID: 251095 **Customer: Pirkey Power Station** **Date Reported: 05/08/2025**

Customer Sample ID: AD-4
Customer Description:
Lab Number: 251095-003
Preparation:
Date Collected: 04/23/2025 11:02 EDT
Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.23	mg/L	2	0.10	0.02		CRJ	04/30/2025 16:22	EPA 300.1 -1997, Rev. 1.0
Chloride	4.12	mg/L	2	0.06	0.02		CRJ	04/30/2025 16:22	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.05	mg/L	2	0.06	0.02	J1	CRJ	04/30/2025 16:22	EPA 300.1 -1997, Rev. 1.0
Sulfate	20.5	mg/L	2	0.6	0.1		CRJ	04/30/2025 16:22	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	110	mg/L	1	50	20		BLB	04/28/2025 08:15	SM 2540C-2015

Customer Sample ID: AD-7R
Customer Description:
Lab Number: 251095-004
Preparation:
Date Collected: 04/21/2025 12:03 EDT
Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	1.32	mg/L	2	0.10	0.02		CRJ	04/30/2025 17:45	EPA 300.1 -1997, Rev. 1.0
Chloride	24.2	mg/L	2	0.06	0.02		CRJ	04/30/2025 17:45	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.17	mg/L	2	0.06	0.02		CRJ	04/30/2025 17:45	EPA 300.1 -1997, Rev. 1.0
Sulfate	49.5	mg/L	2	0.6	0.1		CRJ	04/30/2025 17:45	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	190	mg/L	1	50	20		BLB	04/25/2025 12:41	SM 2540C-2015

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Job ID: 251095 **Customer: Pirkey Power Station** **Date Reported: 05/08/2025**

Customer Sample ID: AD-8
Customer Description:
Lab Number: 251095-005
Preparation:
Date Collected: 04/22/2025 12:14 EDT
Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.85	mg/L	2	0.10	0.02		CRJ	04/30/2025 16:42	EPA 300.1 -1997, Rev. 1.0
Chloride	7.58	mg/L	2	0.06	0.02		CRJ	04/30/2025 16:42	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.36	mg/L	2	0.06	0.02		CRJ	04/30/2025 16:42	EPA 300.1 -1997, Rev. 1.0
Sulfate	136	mg/L	10	3.0	0.6		CRJ	04/30/2025 17:24	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	71	mg/L	1	20	5		MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	270	mg/L	1	50	20		BLB	04/28/2025 08:15	SM 2540C-2015

Customer Sample ID: AD-12
Customer Description:
Lab Number: 251095-006
Preparation:
Date Collected: 04/21/2025 10:40 EDT
Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.11	mg/L	2	0.10	0.02		CRJ	04/30/2025 18:05	EPA 300.1 -1997, Rev. 1.0
Chloride	4.58	mg/L	2	0.06	0.02		CRJ	04/30/2025 18:05	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.08	mg/L	2	0.06	0.02		CRJ	04/30/2025 18:05	EPA 300.1 -1997, Rev. 1.0
Sulfate	2.7	mg/L	2	0.6	0.1		CRJ	04/30/2025 18:05	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	70	mg/L	1	50	20		BLB	04/25/2025 12:41	SM 2540C-2015

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Job ID: 251095 **Customer: Pirkey Power Station** **Date Reported: 05/08/2025**

Customer Sample ID: AD-13 Customer Description:
Lab Number: 251095-007 Preparation:
Date Collected: 04/21/2025 11:04 EDT Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.30	mg/L	2	0.10	0.02		CRJ	04/30/2025 18:26	EPA 300.1 -1997, Rev. 1.0
Chloride	42.1	mg/L	10	0.3	0.1		CRJ	05/01/2025 10:16	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.31	mg/L	2	0.06	0.02		CRJ	04/30/2025 18:26	EPA 300.1 -1997, Rev. 1.0
Sulfate	78.8	mg/L	2	0.6	0.1		CRJ	04/30/2025 18:26	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	240	mg/L	1	50	20		BLB	04/25/2025 12:47	SM 2540C-2015

Customer Sample ID: AD-16 Customer Description:
Lab Number: 251095-008 Preparation:
Date Collected: 04/21/2025 10:04 EDT Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.21	mg/L	2	0.10	0.02		CRJ	04/30/2025 19:08	EPA 300.1 -1997, Rev. 1.0
Chloride	29.2	mg/L	2	0.06	0.02		CRJ	04/30/2025 19:08	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.12	mg/L	2	0.06	0.02		CRJ	04/30/2025 19:08	EPA 300.1 -1997, Rev. 1.0
Sulfate	10.2	mg/L	2	0.6	0.1		CRJ	04/30/2025 19:08	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	120	mg/L	1	50	20		BLB	04/25/2025 12:47	SM 2540C-2015

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Job ID: 251095 **Customer: Pirkey Power Station** **Date Reported: 05/08/2025**

Customer Sample ID: AD-17
Customer Description:
Lab Number: 251095-009
Preparation:
Date Collected: 04/22/2025 10:11 EDT
Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.15	mg/L	2	0.10	0.02		CRJ	04/30/2025 22:35	EPA 300.1 -1997, Rev. 1.0
Chloride	12.3	mg/L	2	0.06	0.02		CRJ	04/30/2025 22:35	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.17	mg/L	2	0.06	0.02		CRJ	04/30/2025 22:35	EPA 300.1 -1997, Rev. 1.0
Sulfate	1.8	mg/L	2	0.6	0.1		CRJ	04/30/2025 22:35	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	30	mg/L	1	50	20	J1	BLB	04/28/2025 08:20	SM 2540C-2015

Customer Sample ID: AD-18
Customer Description:
Lab Number: 251095-010
Preparation:
Date Collected: 04/23/2025 10:01 EDT
Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.04	mg/L	2	0.10	0.02	J1	CRJ	04/30/2025 22:56	EPA 300.1 -1997, Rev. 1.0
Chloride	4.98	mg/L	2	0.06	0.02		CRJ	04/30/2025 22:56	EPA 300.1 -1997, Rev. 1.0
Fluoride	<0.02	mg/L	2	0.06	0.02	U1	CRJ	04/30/2025 22:56	EPA 300.1 -1997, Rev. 1.0
Sulfate	7.5	mg/L	2	0.6	0.1		CRJ	04/30/2025 22:56	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	100	mg/L	1	50	20		BLB	04/28/2025 08:20	SM 2540C-2015

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Job ID: 251095 **Customer: Pirkey Power Station** **Date Reported: 05/08/2025**

Customer Sample ID: AD-22 Customer Description:
Lab Number: 251095-011 Preparation:
Date Collected: 04/21/2025 13:05 EDT Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.53	mg/L	2	0.10	0.02		CRJ	04/30/2025 21:54	EPA 300.1 -1997, Rev. 1.0
Chloride	82.6	mg/L	25	0.8	0.3		CRJ	04/30/2025 21:33	EPA 300.1 -1997, Rev. 1.0
Fluoride	1.07	mg/L	2	0.06	0.02		CRJ	04/30/2025 21:54	EPA 300.1 -1997, Rev. 1.0
Sulfate	294	mg/L	25	8	2		CRJ	04/30/2025 21:33	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	610	mg/L	1	50	20		BLB	04/25/2025 12:53	SM 2540C-2015

Customer Sample ID: AD-23 Customer Description:
Lab Number: 251095-012 Preparation:
Date Collected: 04/23/2025 11:57 EDT Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.37	mg/L	2	0.10	0.02		CRJ	04/30/2025 23:17	EPA 300.1 -1997, Rev. 1.0
Chloride	10.4	mg/L	2	0.06	0.02		CRJ	04/30/2025 23:17	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.05	mg/L	2	0.06	0.02	J1	CRJ	04/30/2025 23:17	EPA 300.1 -1997, Rev. 1.0
Sulfate	4.7	mg/L	2	0.6	0.1		CRJ	04/30/2025 23:17	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	40	mg/L	1	50	20	J1	BLB	04/28/2025 08:26	SM 2540C-2015

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Job ID: 251095 **Customer: Pirkey Power Station** **Date Reported: 05/08/2025**

Customer Sample ID: AD-27
Customer Description:
Lab Number: 251095-013
Preparation:
Date Collected: 04/23/2025 09:43 EDT
Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.38	mg/L	2	0.10	0.02		CRJ	04/30/2025 23:38	EPA 300.1 -1997, Rev. 1.0
Chloride	12.5	mg/L	2	0.06	0.02		CRJ	04/30/2025 23:38	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.22	mg/L	2	0.06	0.02		CRJ	04/30/2025 23:38	EPA 300.1 -1997, Rev. 1.0
Sulfate	49.8	mg/L	2	0.6	0.1		CRJ	04/30/2025 23:38	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	130	mg/L	1	50	20		BLB	04/28/2025 08:26	SM 2540C-2015

Customer Sample ID: AD-28
Customer Description:
Lab Number: 251095-014
Preparation:
Date Collected: 04/22/2025 10:45 EDT
Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.13	mg/L	2	0.10	0.02		CRJ	05/01/2025 00:19	EPA 300.1 -1997, Rev. 1.0
Chloride	4.99	mg/L	2	0.06	0.02		CRJ	05/01/2025 00:19	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.76	mg/L	2	0.06	0.02		CRJ	05/01/2025 00:19	EPA 300.1 -1997, Rev. 1.0
Sulfate	25.4	mg/L	2	0.6	0.1		CRJ	05/01/2025 00:19	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	100	mg/L	1	50	20		BLB	04/25/2025 12:53	SM 2540C-2015

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Job ID: 251095 **Customer: Pirkey Power Station** **Date Reported: 05/08/2025**

Customer Sample ID: AD-30 Customer Description:
Lab Number: 251095-015 Preparation:
Date Collected: 04/22/2025 09:30 EDT Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.13	mg/L	2	0.10	0.02		CRJ	05/01/2025 01:01	EPA 300.1 -1997, Rev. 1.0
Chloride	11.5	mg/L	2	0.06	0.02		CRJ	05/01/2025 01:01	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.04	mg/L	2	0.06	0.02	J1	CRJ	05/01/2025 01:01	EPA 300.1 -1997, Rev. 1.0
Sulfate	99.0	mg/L	10	3.0	0.6		CRJ	05/01/2025 00:40	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	220	mg/L	1	50	20	S7	BLB	04/25/2025 13:00	SM 2540C-2015

Customer Sample ID: AD-31 Customer Description:
Lab Number: 251095-016 Preparation:
Date Collected: 04/21/2025 12:20 EDT Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.22	mg/L	2	0.10	0.02		CRJ	05/01/2025 01:42	EPA 300.1 -1997, Rev. 1.0
Chloride	13.1	mg/L	2	0.06	0.02		CRJ	05/01/2025 01:42	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.12	mg/L	2	0.06	0.02		CRJ	05/01/2025 01:42	EPA 300.1 -1997, Rev. 1.0
Sulfate	75.3	mg/L	10	3.0	0.6		CRJ	05/01/2025 15:06	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	230	mg/L	1	50	20		BLB	04/25/2025 13:00	SM 2540C-2015

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Job ID: 251095 **Customer: Pirkey Power Station** **Date Reported: 05/08/2025**

Customer Sample ID: AD-32 Customer Description:
Lab Number: 251095-017 Preparation:
Date Collected: 04/21/2025 11:29 EDT Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.32	mg/L	2	0.10	0.02		CRJ	05/01/2025 05:10	EPA 300.1 -1997, Rev. 1.0
Chloride	10.3	mg/L	2	0.06	0.02		CRJ	05/01/2025 05:10	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.39	mg/L	2	0.06	0.02		CRJ	05/01/2025 05:10	EPA 300.1 -1997, Rev. 1.0
Sulfate	55.2	mg/L	2	0.6	0.1		CRJ	05/01/2025 05:10	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	8	mg/L	1	20	5	J1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	180	mg/L	1	50	20		BLB	04/25/2025 13:06	SM 2540C-2015

Customer Sample ID: AD-33 Customer Description:
Lab Number: 251095-018 Preparation:
Date Collected: 04/22/2025 09:10 EDT Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	1.04	mg/L	2	0.10	0.02		CRJ	05/01/2025 05:31	EPA 300.1 -1997, Rev. 1.0
Chloride	12.7	mg/L	2	0.06	0.02		CRJ	05/01/2025 05:31	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.50	mg/L	2	0.06	0.02		CRJ	05/01/2025 05:31	EPA 300.1 -1997, Rev. 1.0
Sulfate	68.5	mg/L	2	0.6	0.1		CRJ	05/01/2025 05:31	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	190	mg/L	1	50	20		BLB	04/25/2025 13:06	SM 2540C-2015

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Job ID: 251095 **Customer: Pirkey Power Station** **Date Reported: 05/08/2025**

Customer Sample ID: AD-34 Customer Description:
Lab Number: 251095-019 Preparation:
Date Collected: 04/23/2025 09:06 EDT Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.17	mg/L	5	0.25	0.05	J1	CRJ	05/01/2025 06:33	EPA 300.1 -1997, Rev. 1.0
Chloride	7.65	mg/L	5	0.15	0.05		CRJ	05/01/2025 06:33	EPA 300.1 -1997, Rev. 1.0
Fluoride	1.39	mg/L	5	0.15	0.05		CRJ	05/01/2025 06:33	EPA 300.1 -1997, Rev. 1.0
Sulfate	1110	mg/L	50	15	3		CRJ	05/01/2025 06:12	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	1600	mg/L	1	50	20	S7	BLB	04/28/2025 08:32	SM 2540C-2015

Customer Sample ID: AD-36 Customer Description:
Lab Number: 251095-020 Preparation:
Date Collected: 04/23/2025 11:26 EDT Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.84	mg/L	2	0.10	0.02		CRJ	05/01/2025 08:17	EPA 300.1 -1997, Rev. 1.0
Chloride	17.0	mg/L	2	0.06	0.02		CRJ	05/01/2025 08:17	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.11	mg/L	2	0.06	0.02		CRJ	05/01/2025 08:17	EPA 300.1 -1997, Rev. 1.0
Sulfate	6.2	mg/L	2	0.6	0.1		CRJ	05/01/2025 08:17	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	<20	mg/L	1	50	20	S12, U1	BLB	04/28/2025 08:32	SM 2540C-2015

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 251095 **Customer: Pirkey Power Station** **Date Reported: 05/08/2025**

Customer Sample ID: Duplicate
Lab Number: 251095-021
Date Collected: 04/22/2025 01:00 EDT

Customer Description:
Preparation:
Date Received: 04/25/2025 09:45 EDT

Ion Chromatography

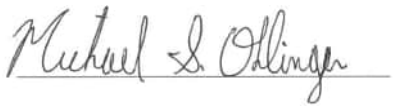
Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	1.05	mg/L	2	0.10	0.02		CRJ	05/01/2025 07:35	EPA 300.1 -1997, Rev. 1.0
Chloride	12.7	mg/L	2	0.06	0.02		CRJ	05/01/2025 07:35	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.50	mg/L	2	0.06	0.02		CRJ	05/01/2025 07:35	EPA 300.1 -1997, Rev. 1.0
Sulfate	68.9	mg/L	2	0.6	0.1		CRJ	05/01/2025 07:35	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	04/25/2025 14:25	SM 2320B-2011
TDS, Filterable Residue	200	mg/L	1	50	20		BLB	04/25/2025 13:11	SM 2540C-2015

Report Verification

This report and the above data have been confirmed by the following analyst.



Michael Ohlinger, Chemist
Email: msohlinger@aep.com
Phone: 614-836-4184
Audinet: 8-210-4184

THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF THE LABORATORY. ALL TEST RESULTS MEET ALL OF THE REQUIREMENTS OF THE ACCREDITING AUTHORITY, UNLESS OTHERWISE NOTED. ALL TIMES LISTED ARE IN THE EASTERN TIME ZONE.

Data Qualifer Legend

U1 - Not detected at or below method detection limit (MDL).
J1 - Concentration estimated. Analyte was detected between the method detection limit and the reporting limit.
S7 - Sample did not achieve constant weight.
S12 - Residue weight is below the method criteria but was already analyzed with 100 mL.

Chain of Custody Record

Program: Coal Combustion Residuals (CCR)

Dolan Chemical Laboratory (DCL)
4001 Bixby Road
Groveport, Ohio 43125
Contacts: Michael Ohlinger (614-836-4184)
Dave Conover (614-836-4219)

Project Name: Pirkey PP Semi-Annual CCR
Contact Name: Pryce Warren
Contact Phone: 325-310-6668
Sampler(s): Matt Hamilton Kenny McDonald

Analysis Turnaround Time (in Calendar Days)
Routine (28 days for Monitoring Wells)

Site Contact:

Date:

For Lab Use Only:
COC/Order #: 251095

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sampler(s) Initials	250 mL bottle, pH<2, HNO3 — Mercury	Field-filter 250 mL bottle, then pH<2, HNO3 — Dissolved Mercury	1 L bottle, Cool, 0-6C — F, Cl, SO4, Br, TDS, Alkalinity	Three (six every 10th*) 1 L bottles, pH<2, HNO3 — Ra-226, Ra-228				Sample Specific Notes:
AD-2	4/22/2025	928	G	GW	1				X					
AD-3	4/22/2025	1047	G	GW	1				X					
AD-4	4/23/2025	1002	G	GW	1				X					
AD-7R	4/21/2025	1103	G	GW	1				X					
AD-8	4/22/2025	1114	G	GW	1				X					
AD-12	4/21/2025	940	G	GW	1				X					
AD-13	4/21/2025	1004	G	GW	1				X					
AD-16	4/21/2025	904	G	GW	1				X					
AD-17	4/22/2025	911	G	GW	1				X					
AD-18	4/23/2025	901	G	GW	1				X					
AD-22	4/21/2025	1205	G	GW	1				X					
AD-23	4/23/2025	1057	G	GW	1				X					
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____; F= filter in field							4	F4	1	4				

** Six 1L Bottles must be collected for Radium for every 10th sample.*

Special Instructions/QC Requirements & Comments:

TG-32 needed

Relinquished by:	Company:	Date/Time:	Received by:	Date/Time:
Matt Hamilton	Eagle	4-24-25 1300		
Relinquished by:	Company:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Date/Time:
			Michael Ohlinger	4/25/25 9:45

Chain of Custody Record

Program: Coal Combustion Residuals (CCR)

Dolan Chemical Laboratory (DCL)
4001 Bixby Road
Groveport, Ohio 43125
Contacts: Michael Ohlinger (614-836-4184)
Dave Conover (614-836-4219)

Project Name: Pirkey PP CCR
Contact Name: Pryce Warren
Contact Phone: 325-310-6668
Sampler(s): Matt Hamilton Kenny McDonald

Analysis Turnaround Time (in Calendar Days)
◉ Routine (28 days for Monitoring Wells)

Site Contact: | Date: | For Lab Use Only: COC/Order #:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sampler(s) Initials	Mercury (250 mL bottle, pH<2, HNO3)	Dissolved Mercury (Field-filter 250 mL bottle, then pH<2, HNO3)	F, Cl, SO4, Br, TDS, Alkalinity (1 L bottle, Cool, 0-6C)	Ra-226, Ra-228 (Three (six every 10th*) 1 L bottles, pH<2, HNO3)				Sample Specific Notes
AD-27	4/23/2025	843	G	GW	1				X					
AD-28	4/22/2025	945	G	GW	1				X					
AD-30	4/22/2025	830	G	GW	1				X					
AD-31	4/21/2025	1120	G	GW	1				X					
AD-32	4/21/2025	1029	G	GW	1				X					
AD-33	4/22/2025	810	G	GW	1				X					
AD-34	4/23/2025	806	G	GW	1				X					
AD-36	4/22/2025	1026	G	GW	1				X					
Duplicate 1	4/22/2025	1200	G	GW	1				X					
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____; F= filter in field							4	F4	1	4				

** Six 1L Bottles must be collected for Radium for every 10th sample.*

Special Instructions/QC Requirements & Comments:

TG-32 needed

Relinquished by:	Company:	Date/Time:	Received by:	Date/Time
[signature]	Eng'r	4-24-25 1300		
Relinquished by:	Company:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Date/Time: 4/25/25 9:45.

Form COC-04, AEP Chain of Custody (COC) Record for Coal Combustion Residual (CCR) Sampling - Shreveport, Rev. 1, 1/10/17

WATER & WASTE SAMPLE RECEIPT FORM

Form SOP-7102 Sample Receipt Form Rev. 10, 01/03/25

Package Type	Delivery Type
(Cooler) Box Bag Envelope	UPS (FedEX) USPS
	Other _____

Plant/Customer Pirkey **Total # of Containers RECEIVED in Job:** 21

Opened By WCh

Date/Time 4/25/25 0945

Were all required temperatures, per BN-water-900, T≤6°C *w/o sample freezing*? (Y) / N or N/A

Initial/Date: mbc 04/25/25 (on ice) / no ice

If No, specify each deviation(s) on back of form. (IR Gun Ser# 240093386, *Expir.* 05/20/2025)

Was container in good condition? (Y) / N Comments _____

Was Chain of Custody received? (Y) / N Comments _____

Requested turnaround: Routine If **RUSH**, who was notified? _____

pH (15 min) Cr^{+6} (pres) (24 hr) NO_2 or NO_3 (48 hr) *ortho*-PO_4 (48 hr) Hg-diss (pres) (48 hr)

Were pH requirements met for required samples, per BN-water-900? (Y) / N or N/A

Initial/Date: ELH 4-25-25 (#1-17) MBC 04/25/25 (18-20)

pH paper: mfr Lab Rat Supplies, PN RS-4801 LOT# X000RWDG21 EXPIR DATE 05/31/2026

***** Note changes to pH paper in comments below***

Was Add'l Preservative needed? Y / (N) If Yes: By whom & when: _____ (See Prep Book)

(Dissolved) Is sample filtration requested? Y / (N) Comments _____ (See Prep Book)

Was COC filled out properly? (Y) / N Comments _____

Were samples labeled properly? (Y) / N Comments _____

Were correct containers used? (Y) / N Comments _____

Was the customer contacted? If Yes: Person Contacted: _____

Lab ID# 251095 Initial & Date & Time : _____

Logged by MSD Comments: _____

(Record Test Count on back of form)

Total # of Containers LISTED on COC: 21

WATER & WASTE SAMPLE RECEIPT FORM (CONT)

Form SOP-7102 Sample Receipt Form Rev.10, 01/03/25

REMINDER: Document the pertinent sample integrity information and deviations in sample receipt (as noted above) in the Sample or Job "Comments" field in the LIMS. **Comments below**:

i.e. Mark "LF" if needs Lab filtered, Temperature or Preservative deviation, Preserved upon arrival , etc.

JOB # : 251095 **Initial/ Date:** MSO 4/25/25 **Peer Review Initial/ Date:** CLH 4/28/25

Login Test Count from COC	LIMS Sample ID (or COC Sample Name)	Comments /Nonconformities	Peer Review Test Count from COC
6	251095-001		6
6	" -002		
6	" -003		
6	" -004		
6	" -005		
6	" -006		
6	" -007		
6	" -008		
6	" -009		
6	" -010		
6	" -011		
6	" -012		
6	" -013		
6	" -014		
6	" -015		
6	" -016		
6	" -017		
6	" -018		
6	" -019		
6	" -020		
6	" -021		

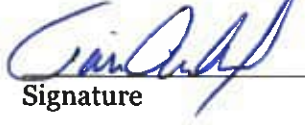
Municipal Solid Waste Laboratory Review Checklist

This data package consists of:

- [x] This signature page, and the laboratory review checklist consisting of Table 1, Reportable Data (which includes the reportable data identified on this page), Table 2, Supporting Data, and Table 3, Exception Reports.
- [x] R1 Field chain-of-custody documentation
- [x] R2 Sample identification cross-reference
- [x] R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - (a) Items specified in NELAC Chapter 5 for reporting results, e.g., Section 5.5.10 in 2003 NELAC Standard
  - (b) Dilution factors
  - (c) Preparation methods
  - (d) Cleanup methods
  - (e) If required for the project, tentatively identified compounds (TICs)
- [x] R4 Surrogate recovery data including:
  - (a) Calculated recovery (%R)
  - (b) The laboratory's surrogate QC limits
- [x] R5 Test reports/summary forms for blank samples
- [x] R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - (a) LCS spiking amounts
  - (b) Calculated %R for each analyte
  - (c) The laboratory's LCS QC limits
- [x] R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - (a) Samples associated with the MS/MSD clearly identified
  - (b) MS/MSD spiking amounts
  - (c) Concentration of each MS/MSD analyte measured in the parent and spiked samples
  - (d) Calculated %Rs and relative percent differences (RPDs)
  - (e) The laboratory's MS/MSD QC limits
- [x] R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - (a) The amount of analyte measured in the duplicate
  - (b) The calculated RPD
  - (c) The laboratory's QC limits for analytical duplicates
- [x] R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix
- [x] R10 Other problems or anomalies
- [x] The Exception Report for every item for which the result is "No" or "NR" (Not Reviewed)

Release Statement: I am responsible for the release of this laboratory data package. This data package as been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: (●) This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Tim Arnold		Principle Chemist	5/2/2025
Name (printed)	Signature	Official Title	Date

Ion Chromatography Laboratory Review Checklist

Table 1. Reportable Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Semi-annual CCR

Reviewer Name: Tim Arnold

LRC Date: 5/2/2025

Laboratory Job Number: 251095

Prep Batch Number(s): QC2505020

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
R1	O, I	**Chain-of-custody (COC)**		
	I	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	Yes	
	I	Were all departures from standard conditions described in an exception report?	Yes	
R2	O, I	**Sample and quality control (QC) identification**		
	I	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Yes	
	I	Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Yes	
R3	O, I	**Test reports**		
	I	Were all samples prepared and analyzed within holding times?	Yes	
	I	Other than those results < MQL, were all other raw values bracketed by calibration standards?	Yes	
	I	Were calculations checked by a peer or supervisor?	Yes	
	I	Were all analyte identifications checked by a peer or supervisor?	Yes	
	I	Were sample quantitation limits reported for all analytes not detected?	Yes	
	I	Were all results for soil and sediment samples reported on a dry weight basis?	NA	
	I	Was % moisture (or solids) reported for all soil and sediment samples?	NA	
	I	If required for the project, TICs reported?	NA	
R4	O	**Surrogate recovery data**		
	I	Were surrogates added prior to extraction?	Yes	
	I	Were surrogate percent recoveries in all samples within the laboratory QC limits?	Yes	
R5	O, I	**Test reports/summary forms for blank samples**		
	I	Were appropriate type(s) of blanks analyzed?	Yes	
	I	Were blanks analyzed at the appropriate frequency?	Yes	

Ion Chromatography Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
	I	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Yes	
	I	Were blank concentrations < MQL?	Yes	
R6	O, I	**Laboratory control samples (LCS):**		
	I	Were all COCs included in the LCS?	Yes	
	I	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Yes	
	I	Were LCSs analyzed at the required frequency?	Yes	
	I	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	Yes	
	I	Was the LCSD RPD within QC limits?	Yes	
R7	O, I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**		
	I	Were the project/method specified analytes included in the MS and MSD?	Yes	
	I	Were MS/MSD analyzed at the appropriate frequency?	Yes	
	I	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Were MS/MSD RPDs within laboratory QC limits?	Yes	
R8	O, I	**Analytical duplicate data**		
	I	Were appropriate analytical duplicates analyzed for each matrix?	Yes	
	I	Were analytical duplicates analyzed at the appropriate frequency?	Yes	
	I	Were RPDs or relative standard deviations within the laboratory QC limits?	Yes	
R9	O, I	**Method quantitation limits (MQLs):**		
	I	Are the MQLs for each method analyte included in the laboratory data package?	Yes	
	I	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Yes	
	I	Are unadjusted MQLs included in the laboratory data package?	Yes	
R10	O, I	**Other problems/anomalies**		
	I	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Yes	
	I	Were all necessary corrective actions performed for the reported data?	Yes	
	I	Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	Yes	

Ion Chromatography Laboratory Review Checklist

Table 2. Supporting Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Semi-annual CCR

Reviewer Name: Tim Arnold

LRC Date: 5/2/2025

Laboratory Job Number: 251095

Prep Batch Number(s): QC2505020

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S1	O, I	**Initial calibration (ICAL)**		
	I	Were response factors and/or relative response factors for each analyte within QC limits?	NA	
	I	Were percent RSDs or correlation coefficient criteria met?	Yes	
	I	Was the number of standards recommended in the method used for all analytes?	Yes	
	I	Were all points generated between the lowest and highest standard used to calculate the curve?	Yes	
	I	Are ICAL data available for all instruments used?	Yes	
	I	Has the initial calibration curve been verified using an appropriate second source standard?	Yes	
S2	O, I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**		
	I	Was the CCV analyzed at the method-required frequency?	Yes	
	I	Were percent differences for each analyte within the method-required QC limits?	Yes	
	I	Was the ICAL curve verified for each analyte?	Yes	
	I	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	No	ER1
S3	O	**Mass spectral tuning:**		
	I	Was the appropriate compound for the method used for tuning?	NA	
	I	Were ion abundance data within the method-required QC limits?	NA	
S4	O	**Internal standards (IS):**		
	I	Were IS area counts and retention times within the method-required QC limits?	NA	
S5	O, I	**Raw data (NELAC section 1 appendix A glossary, and section 5.)**		
	I	Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	Yes	
	I	Were data associated with manual integrations flagged on the raw data?	NA	

Ion Chromatography Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S6	O	**Dual column confirmation**		
	I	Did dual column confirmation results meet the method-required QC?	NA	
S7	O	**Tentatively identified compounds (TICs):**		
	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?	NA	
S8	I	**Interference Check Sample (ICS) results:**		
	I	Were percent recoveries within method QC limits?	NA	
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**		
	I	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	NA	
S10	O, I	**Method detection limit (MDL) studies**		
	I	Was a MDL study performed for each reported analyte?	Yes	
	I	Is the MDL either adjusted or supported by the analysis of DCSs?	Yes	
S11	O, I	**Proficiency test reports:**		
	I	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	Yes	
S12	O, I	**Standards documentation**		
	I	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Yes	
S13	O, I	**Compound/analyte identification procedures**		
	I	Are the procedures for compound/analyte identification documented?	Yes	
S14	O, I	**Demonstration of analyst competency (DOC)**		
	I	Was DOC conducted consistent with NELAC Chapter 5C?	Yes	
	I	Is documentation of the analyst's competency up-to-date and on file?	Yes	
S15	O, I	**Verification/validation documentation for methods (NELAC Chap 5n 5)**		
	I	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Yes	
S16	O, I	**Laboratory standard operating procedures (SOPs):**		
	I	Are laboratory SOPs current and on file for each method performed?	Yes	

Table 3. Exception Reports.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Semi-annual CCR

Reviewer Name: Tim Arnold

LRC Date: 5/2/2025

Laboratory Job Number: 251095

Prep Batch Number(s): QC2505020

Exception Report No.	Description
ER1	CCB acceptance criteria is CCB<MQL.

[1] Items identified by the letter "R" must be available as a hard copy or as a .pdf file. Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
[2] O - organic analyses; I - inorganic analyses (including general chemistry constituents, when applicable).
[3] NA - Not applicable; NR - Not reviewed.
[4] Exception Report identification number; an Exception Report should be completed for an item if the result is "No" or "NR."

Municipal Solid Waste Laboratory Review Checklist

This data package consists of:

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- [x] R1 Field chain-of-custody documentation
- [x] R2 Sample identification cross-reference
- [x] R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - (a) Items specified in NELAC Chapter 5 for reporting results, e.g., Section 5.5.10 in 2003 NELAC Standard
  - (b) Dilution factors
  - (c) Preparation methods
  - (d) Cleanup methods
  - (e) If required for the project, tentatively identified compounds (TICs)
- [NA] R4 Surrogate recovery data including:
  - (a) Calculated recovery (%R)
  - (b) The laboratory's surrogate QC limits
- [x] R5 Test reports/summary forms for blank samples
- [x] R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - (a) LCS spiking amounts
  - (b) Calculated %R for each analyte
  - (c) The laboratory's LCS QC limits
- [x] R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - (a) Samples associated with the MS/MSD clearly identified
  - (b) MS/MSD spiking amounts
  - (c) Concentration of each MS/MSD analyte measured in the parent and spiked samples
  - (d) Calculated %Rs and relative percent differences (RPDs)
  - (e) The laboratory's MS/MSD QC limits
- [x] R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - (a) The amount of analyte measured in the duplicate
  - (b) The calculated RPD
  - (c) The laboratory's QC limits for analytical duplicates
- [x] R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix
- [x] R10 Other problems or anomalies
- [x] The Exception Report for every item for which the result is "No" or "NR" (Not Reviewed)

Release Statement: I am responsible for the release of this laboratory data package. This data package as been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: (●) This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Sandra Williams	Sandra D. Williams	Chemist	05/05/2025
Name (printed)	Signature	Official Title	Date

TDS Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
	I	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Yes	
	I	Were blank concentrations < MQL?	Yes	
R6	O, I	**Laboratory control samples (LCS):**		
	I	Were all COCs included in the LCS?	Yes	
	I	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Yes	
	I	Were LCSs analyzed at the required frequency?	Yes	
	I	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	Yes	
	I	Was the LCSD RPD within QC limits?	Yes	
R7	O, I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**		
	I	Were the project/method specified analytes included in the MS and MSD?	NA	
	I	Were MS/MSD analyzed at the appropriate frequency?	NA	
	I	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	NA	
	I	Were MS/MSD RPDs within laboratory QC limits?	NA	
R8	O, I	**Analytical duplicate data**		
	I	Were appropriate analytical duplicates analyzed for each matrix?	Yes	
	I	Were analytical duplicates analyzed at the appropriate frequency?	Yes	
	I	Were RPDs or relative standard deviations within the laboratory QC limits?	Yes	
R9	O, I	**Method quantitation limits (MQLs):**		
	I	Are the MQLs for each method analyte included in the laboratory data package?	Yes	
	I	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Yes	
	I	Are unadjusted MQLs included in the laboratory data package?	Yes	
R10	O, I	**Other problems/anomalies**		
	I	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Yes	
	I	Were all necessary corrective actions performed for the reported data?	Yes	
	I	Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	Yes	

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S6	O	**Dual column confirmation**		
	I	Did dual column confirmation results meet the method-required QC?	NA	
S7	O	**Tentatively identified compounds (TICs):**		
	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?	NA	
S8	I	**Interference Check Sample (ICS) results:**		
	I	Were percent recoveries within method QC limits?	NA	
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**		
	I	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	NA	
S10	O, I	**Method detection limit (MDL) studies**		
	I	Was a MDL study performed for each reported analyte?	Yes	
	I	Is the MDL either adjusted or supported by the analysis of DCSs?	Yes	
S11	O, I	**Proficiency test reports:**		
	I	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	Yes	
S12	O, I	**Standards documentation**		
	I	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Yes	
S13	O, I	**Compound/analyte identification procedures**		
	I	Are the procedures for compound/analyte identification documented?	Yes	
S14	O, I	**Demonstration of analyst competency (DOC)**		
	I	Was DOC conducted consistent with NELAC Chapter 5C?	Yes	
	I	Is documentation of the analyst's competency up-to-date and on file?	Yes	
S15	O, I	**Verification/validation documentation for methods (NELAC Chap 5n 5)**		
	I	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Yes	
S16	O, I	**Laboratory standard operating procedures (SOPs):**		
	I	Are laboratory SOPs current and on file for each method performed?	Yes	

Municipal Solid Waste Laboratory Review Checklist

This data package consists of:

- [x] This signature page, and the laboratory review checklist consisting of Table 1, Reportable Data (which includes the reportable data identified on this page), Table 2, Supporting Data, and Table 3, Exception Reports.
- [x] R1 Field chain-of-custody documentation
- [x] R2 Sample identification cross-reference
- [x] R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - (a) Items specified in NELAC Chapter 5 for reporting results, e.g., Section 5.5.10 in 2003 NELAC Standard
  - (b) Dilution factors
  - (c) Preparation methods
  - (d) Cleanup methods
  - (e) If required for the project, tentatively identified compounds (TICs)
- [NA] R4 Surrogate recovery data including:
  - (a) Calculated recovery (%R)
  - (b) The laboratory's surrogate QC limits
- [x] R5 Test reports/summary forms for blank samples
- [x] R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - (a) LCS spiking amounts
  - (b) Calculated %R for each analyte
  - (c) The laboratory's LCS QC limits
- [x] R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - (a) Samples associated with the MS/MSD clearly identified
  - (b) MS/MSD spiking amounts
  - (c) Concentration of each MS/MSD analyte measured in the parent and spiked samples
  - (d) Calculated %Rs and relative percent differences (RPDs)
  - (e) The laboratory's MS/MSD QC limits
- [x] R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - (a) The amount of analyte measured in the duplicate
  - (b) The calculated RPD
  - (c) The laboratory's QC limits for analytical duplicates
- [x] R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix
- [x] R10 Other problems or anomalies
- [x] The Exception Report for every item for which the result is "No" or "NR" (Not Reviewed)

Release Statement: I am responsible for the release of this laboratory data package. This data package as been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: (●) This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Michael Ohlinger	Michael Ohlinger	Senior Chemist	05/02/2025
Name (printed)	Signature	Official Title	Date

Alkalinity Laboratory Review Checklist

Table 1. Reportable Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Plant

Reviewer Name: Michael Ohlinger

LRC Date: 05/02/2025

Laboratory Job Number: 251095

Prep Batch Number(s): QC2504171

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
R1	O, I	**Chain-of-custody (COC)**		
	I	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	Yes	
	I	Were all departures from standard conditions described in an exception report?	Yes	
R2	O, I	**Sample and quality control (QC) identification**		
	I	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Yes	
	I	Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Yes	
R3	O, I	**Test reports**		
	I	Were all samples prepared and analyzed within holding times?	Yes	
	I	Other than those results < MQL, were all other raw values bracketed by calibration standards?	NA	
	I	Were calculations checked by a peer or supervisor?	Yes	
	I	Were all analyte identifications checked by a peer or supervisor?	Yes	
	I	Were sample quantitation limits reported for all analytes not detected?	Yes	
	I	Were all results for soil and sediment samples reported on a dry weight basis?	NA	
	I	Was % moisture (or solids) reported for all soil and sediment samples?	NA	
	I	If required for the project, TICs reported?	NA	
R4	O	**Surrogate recovery data**		
	I	Were surrogates added prior to extraction?	NA	
	I	Were surrogate percent recoveries in all samples within the laboratory QC limits?	NA	
R5	O, I	**Test reports/summary forms for blank samples**		
	I	Were appropriate type(s) of blanks analyzed?	Yes	
	I	Were blanks analyzed at the appropriate frequency?	Yes	

Alkalinity Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
	I	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Yes	
	I	Were blank concentrations < MQL?	Yes	
R6	O, I	**Laboratory control samples (LCS):**		
	I	Were all COCs included in the LCS?	Yes	
	I	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Yes	
	I	Were LCSs analyzed at the required frequency?	Yes	
	I	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	Yes	
	I	Was the LCSD RPD within QC limits?	Yes	
R7	O, I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**		
	I	Were the project/method specified analytes included in the MS and MSD?	NA	
	I	Were MS/MSD analyzed at the appropriate frequency?	NA	
	I	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	NA	
	I	Were MS/MSD RPDs within laboratory QC limits?	NA	
R8	O, I	**Analytical duplicate data**		
	I	Were appropriate analytical duplicates analyzed for each matrix?	Yes	
	I	Were analytical duplicates analyzed at the appropriate frequency?	Yes	
	I	Were RPDs or relative standard deviations within the laboratory QC limits?	Yes	
R9	O, I	**Method quantitation limits (MQLs):**		
	I	Are the MQLs for each method analyte included in the laboratory data package?	Yes	
	I	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Yes	
	I	Are unadjusted MQLs included in the laboratory data package?	Yes	
R10	O, I	**Other problems/anomalies**		
	I	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Yes	
	I	Were all necessary corrective actions performed for the reported data?	Yes	
	I	Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	Yes	

Alkalinity Laboratory Review Checklist

Table 2. Supporting Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Plant

Reviewer Name: Michael Ohlinger

LRC Date: 05/02/2025

Laboratory Job Number: 251095

Prep Batch Number(s): QC2504171

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S1	O, I	**Initial calibration (ICAL)**		
	I	Were response factors and/or relative response factors for each analyte within QC limits?	NA	
	I	Were percent RSDs or correlation coefficient criteria met?	NA	
	I	Was the number of standards recommended in the method used for all analytes?	NA	
	I	Were all points generated between the lowest and highest standard used to calculate the curve?	Yes	
	I	Are ICAL data available for all instruments used?	NA	
	I	Has the initial calibration curve been verified using an appropriate second source standard?	NA	
S2	O, I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**		
	I	Was the CCV analyzed at the method-required frequency?	Yes	
	I	Were percent differences for each analyte within the method-required QC limits?	Yes	
	I	Was the ICAL curve verified for each analyte?	Yes	
	I	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	No	ER1
S3	O	**Mass spectral tuning:**		
	I	Was the appropriate compound for the method used for tuning?	NA	
	I	Were ion abundance data within the method-required QC limits?	NA	
S4	O	**Internal standards (IS):**		
	I	Were IS area counts and retention times within the method-required QC limits?	NA	
S5	O, I	**Raw data (NELAC section 1 appendix A glossary, and section 5.)**		
	I	Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	Yes	
	I	Were data associated with manual integrations flagged on the raw data?	NA	

Alkalinity Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S6	O	**Dual column confirmation**		
	I	Did dual column confirmation results meet the method-required QC?	NA	
S7	O	**Tentatively identified compounds (TICs):**		
	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?	NA	
S8	I	**Interference Check Sample (ICS) results:**		
	I	Were percent recoveries within method QC limits?	NA	
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**		
	I	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	NA	
S10	O, I	**Method detection limit (MDL) studies**		
	I	Was a MDL study performed for each reported analyte?	Yes	
	I	Is the MDL either adjusted or supported by the analysis of DCSs?	Yes	
S11	O, I	**Proficiency test reports:**		
	I	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	Yes	
S12	O, I	**Standards documentation**		
	I	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Yes	
S13	O, I	**Compound/analyte identification procedures**		
	I	Are the procedures for compound/analyte identification documented?	Yes	
S14	O, I	**Demonstration of analyst competency (DOC)**		
	I	Was DOC conducted consistent with NELAC Chapter 5C?	Yes	
	I	Is documentation of the analyst's competency up-to-date and on file?	Yes	
S15	O, I	**Verification/validation documentation for methods (NELAC Chap 5n 5)**		
	I	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Yes	
S16	O, I	**Laboratory standard operating procedures (SOPs):**		
	I	Are laboratory SOPs current and on file for each method performed?	Yes	

Alkalinity Laboratory Review Checklist

Table 3. Exception Reports.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Plant

Reviewer Name: Michael Ohlinger

LRC Date: 05/02/2025

Laboratory Job Number: 251095

Prep Batch Number(s): QC2504171

Exception Report No.	Description
ER1	CCB acceptance criteria is CCB<0.5*MQL.

[1] Items identified by the letter "R" must be available as a hard copy or as a .pdf file. Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

[2] O - organic analyses; I - inorganic analyses (including general chemistry constituents, when applicable).

[3] NA - Not applicable; NR - Not reviewed.

[4] Exception Report identification number; an Exception Report should be completed for an item if the result is "No" or "NR."

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-2
Lab Number: 252402-001
Date Collected: 09/09/2025 11:31 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.1	µg/L	5	0.5	0.1	U1	GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Arsenic	1.7	µg/L	5	0.5	0.2		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Barium	14.2	µg/L	5	1.0	0.3		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Beryllium	0.9	µg/L	5	0.3	0.1		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Boron	2.82	mg/L	5	0.25	0.03		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Cadmium	0.13	µg/L	5	0.10	0.02		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Calcium	4.1	mg/L	5	0.5	0.1		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Chromium	0.5	µg/L	5	1.5	0.4	J1	GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Cobalt	31.3	µg/L	5	0.15	0.05		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Lead	0.8	µg/L	5	1.0	0.3	J1	GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Lithium	0.0828	mg/L	5	0.0015	0.0004		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Magnesium	8.36	mg/L	5	0.50	0.05		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Mercury	55	ng/L	20	10	4		JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	<0.3	µg/L	5	2.5	0.3	U1	GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Potassium	1.6	mg/L	5	0.5	0.1		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Selenium	6.7	µg/L	5	2.5	0.2		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Sodium	111	mg/L	5	1.0	0.1		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Strontium	0.0561	mg/L	5	0.0100	0.0003		GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4
Thallium	0.1	µg/L	5	1.0	0.1	J1	GES	09/22/2025 14:17	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.96	pCi/L	0.35	0.58		TTP	09/19/2025 09:46	SW-846 9315-1986, Rev. 0
Carrier Recovery	83.8	%						
Radium-228	1.19	pCi/L	0.19	0.58	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	79.7	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-2 Dissolved
Customer Description:
Lab Number: 252402-001-01
Preparation: Dissolved
Date Collected: 09/09/2025 11:31 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.1	µg/L	5	0.5	0.1	U1	GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Arsenic	1.9	µg/L	5	0.5	0.2		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Barium	13.9	µg/L	5	1.0	0.3		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Beryllium	0.9	µg/L	5	0.3	0.1		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Cadmium	0.13	µg/L	5	0.10	0.02		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Chromium	0.8	µg/L	5	1.5	0.4	J1	GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Cobalt	32.3	µg/L	5	0.15	0.05		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Iron	0.81	mg/L	5	0.10	0.02		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Lead	0.8	µg/L	5	1.0	0.3	J1	GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Lithium	0.0820	mg/L	5	0.0015	0.0004		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Manganese	0.118	mg/L	5	0.0050	0.0005		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Mercury	6	ng/L	10	5	2		JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	<0.3	µg/L	5	2.5	0.3	U1	GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Selenium	7.5	µg/L	5	2.5	0.2		GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4
Thallium	0.1	µg/L	5	1.0	0.1	J1	GES	09/22/2025 14:22	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-3
Lab Number: 252402-002
Date Collected: 09/09/2025 12:21 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Arsenic	0.84	µg/L	1	0.10	0.03		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Barium	63.4	µg/L	1	0.20	0.05		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Beryllium	0.19	µg/L	1	0.05	0.02		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Boron	0.045	mg/L	1	0.050	0.006	J1	GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Cadmium	0.014	µg/L	1	0.020	0.004	J1	GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Calcium	4.48	mg/L	1	0.10	0.02		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Chromium	0.61	µg/L	1	0.30	0.07		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Cobalt	4.68	µg/L	1	0.03	0.01		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Lead	0.38	µg/L	1	0.20	0.05		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Lithium	0.0564	mg/L	1	0.00030	0.00007		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Magnesium	2.53	mg/L	1	0.10	0.01		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Mercury	5	ng/L	10	5	2		JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	0.07	µg/L	1	0.50	0.05	J1	GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Potassium	2.58	mg/L	1	0.10	0.02		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Selenium	0.06	µg/L	1	0.50	0.04	J1	GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Sodium	9.75	mg/L	1	0.20	0.02		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Strontium	0.0300	mg/L	1	0.00200	0.00006		GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4
Thallium	0.04	µg/L	1	0.20	0.02	J1	GES	09/22/2025 14:27	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	2.24	pCi/L	0.36	0.33		TTP	09/19/2025 09:46	SW-846 9315-1986, Rev. 0
Carrier Recovery	83.0	%						
Radium-228	1.30	pCi/L	0.15	0.43	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	88.7	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-3 Dissolved
Customer Description:
Lab Number: 252402-002-01
Preparation: Dissolved
Date Collected: 09/09/2025 12:21 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Arsenic	0.25	µg/L	1	0.10	0.03		GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Barium	64.1	µg/L	1	0.20	0.05		GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Beryllium	0.17	µg/L	1	0.05	0.02		GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Cadmium	0.014	µg/L	1	0.020	0.004	J1	GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Chromium	0.40	µg/L	1	0.30	0.07		GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Cobalt	4.76	µg/L	1	0.03	0.01		GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Iron	3.49	mg/L	1	0.020	0.003		GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Lithium	0.0584	mg/L	1	0.00030	0.00007		GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Manganese	0.0633	mg/L	1	0.0010	0.0001		GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Mercury	3	ng/L	10	5	2	J1	JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Selenium	0.05	µg/L	1	0.50	0.04	J1	GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4
Thallium	0.04	µg/L	1	0.20	0.02	J1	GES	09/22/2025 14:33	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-4
Lab Number: 252402-003
Date Collected: 09/10/2025 11:03 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Arsenic	1.95	µg/L	1	0.10	0.03		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Barium	114	µg/L	1	0.20	0.05		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Beryllium	0.25	µg/L	1	0.05	0.02		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Boron	0.013	mg/L	1	0.050	0.006	J1	GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Cadmium	0.020	µg/L	1	0.020	0.004		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Calcium	2.21	mg/L	1	0.10	0.02		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Chromium	0.55	µg/L	1	0.30	0.07		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Cobalt	3.26	µg/L	1	0.03	0.01		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Lead	0.30	µg/L	1	0.20	0.05		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Lithium	0.0236	mg/L	1	0.00030	0.00007		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Magnesium	0.59	mg/L	1	0.10	0.01		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Mercury	9	ng/L	10	5	2		JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Potassium	2.08	mg/L	1	0.10	0.02		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Selenium	0.09	µg/L	1	0.50	0.04	J1	GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Sodium	6.25	mg/L	1	0.20	0.02		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Strontium	0.0176	mg/L	1	0.00200	0.00006		GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4
Thallium	0.09	µg/L	1	0.20	0.02	J1	GES	09/22/2025 14:38	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.47	pCi/L	0.14	0.29		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	59.5	%						
Radium-228	1.28	pCi/L	0.16	0.50	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	83.9	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-4 Dissolved
Customer Description:
Lab Number: 252402-003-01
Preparation: Dissolved
Date Collected: 09/10/2025 11:03 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Arsenic	0.16	µg/L	1	0.10	0.03		GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Barium	113	µg/L	1	0.20	0.05		GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Beryllium	0.21	µg/L	1	0.05	0.02		GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Cadmium	0.019	µg/L	1	0.020	0.004	J1	GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Chromium	0.45	µg/L	1	0.30	0.07		GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Cobalt	3.40	µg/L	1	0.03	0.01		GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Iron	3.08	mg/L	1	0.020	0.003		GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Lead	0.05	µg/L	1	0.20	0.05	J1	GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Lithium	0.0229	mg/L	1	0.00030	0.00007		GES	09/24/2025 10:06	EPA 200.8-1994, Rev. 5.4
Manganese	0.0308	mg/L	1	0.0010	0.0001		GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	10	5	2	U1	JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Selenium	0.05	µg/L	1	0.50	0.04	J1	GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4
Thallium	0.09	µg/L	1	0.20	0.02	J1	GES	09/22/2025 15:49	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-7R
Lab Number: 252402-004
Date Collected: 09/08/2025 10:36 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Arsenic	0.99	µg/L	1	0.10	0.03		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Barium	60.1	µg/L	1	0.20	0.05		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Beryllium	1.35	µg/L	1	0.05	0.02		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Boron	0.566	mg/L	1	0.050	0.006		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Cadmium	0.336	µg/L	1	0.020	0.004		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Calcium	2.46	mg/L	1	0.10	0.02		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Chromium	0.27	µg/L	1	0.30	0.07	J1	GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Cobalt	15.2	µg/L	1	0.03	0.01		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Lead	0.22	µg/L	1	0.20	0.05		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Lithium	0.0358	mg/L	1	0.00030	0.00007		GES	09/24/2025 10:12	EPA 200.8-1994, Rev. 5.4
Magnesium	4.54	mg/L	1	0.10	0.01		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Mercury	101	ng/L	20	10	4		JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Potassium	1.45	mg/L	1	0.10	0.02		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Selenium	4.10	µg/L	1	0.50	0.04		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Sodium	20.2	mg/L	1	0.20	0.02		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Strontium	0.0301	mg/L	1	0.00200	0.00006		GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4
Thallium	0.13	µg/L	1	0.20	0.02	J1	GES	09/22/2025 15:55	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	2.64	pCi/L	0.27	0.24		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	91.8	%						
Radium-228	2.15	pCi/L	0.15	0.40	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	89.4	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-7R Dissolved
Customer Description:
Lab Number: 252402-004-01
Preparation: Dissolved
Date Collected: 09/08/2025 10:36 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Arsenic	1.02	µg/L	1	0.10	0.03		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Barium	60.2	µg/L	1	0.20	0.05		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Beryllium	1.29	µg/L	1	0.05	0.02		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Cadmium	0.346	µg/L	1	0.020	0.004		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Chromium	0.27	µg/L	1	0.30	0.07	J1	GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Cobalt	15.5	µg/L	1	0.03	0.01		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Iron	1.25	mg/L	1	0.020	0.003		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Lead	0.23	µg/L	1	0.20	0.05		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Lithium	0.0362	mg/L	1	0.00030	0.00007		GES	09/24/2025 10:17	EPA 200.8-1994, Rev. 5.4
Manganese	0.0389	mg/L	1	0.0010	0.0001		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Mercury	18	ng/L	10	5	2		JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Selenium	4.18	µg/L	1	0.50	0.04		GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4
Thallium	0.12	µg/L	1	0.20	0.02	J1	GES	09/22/2025 16:00	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-8
Customer Description:
Lab Number: 252402-005
Preparation:
Date Collected: 09/09/2025 10:45 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	1.06	mg/L	1	0.050	0.006		GES	09/22/2025 16:06	EPA 200.8-1994, Rev. 5.4
Calcium	66.0	mg/L	1	0.10	0.02		GES	09/22/2025 16:06	EPA 200.8-1994, Rev. 5.4
Magnesium	4.72	mg/L	1	0.10	0.01		GES	09/22/2025 16:06	EPA 200.8-1994, Rev. 5.4
Potassium	1.71	mg/L	1	0.10	0.02		GES	09/22/2025 16:06	EPA 200.8-1994, Rev. 5.4
Sodium	8.08	mg/L	1	0.20	0.02		GES	09/22/2025 16:06	EPA 200.8-1994, Rev. 5.4
Strontium	0.398	mg/L	1	0.00200	0.00006		GES	09/22/2025 16:06	EPA 200.8-1994, Rev. 5.4

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-12
Lab Number: 252402-006
Date Collected: 09/08/2025 10:38 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Arsenic	0.09	µg/L	1	0.10	0.03	J1	GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Barium	17.2	µg/L	1	0.20	0.05		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Beryllium	0.12	µg/L	1	0.05	0.02		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Boron	0.081	mg/L	1	0.050	0.006		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Cadmium	0.006	µg/L	1	0.020	0.004	J1	GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Calcium	0.18	mg/L	1	0.10	0.02		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Chromium	0.81	µg/L	1	0.30	0.07		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Cobalt	0.95	µg/L	1	0.03	0.01		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Lead	0.10	µg/L	1	0.20	0.05	J1	GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Lithium	0.00589	mg/L	1	0.00030	0.00007		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Magnesium	0.30	mg/L	1	0.10	0.01		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Mercury	5	ng/L	10	5	2		JLD	10/03/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Potassium	0.16	mg/L	1	0.10	0.02		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Selenium	0.20	µg/L	1	0.50	0.04	J1	GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Sodium	3.41	mg/L	1	0.20	0.02		GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Strontium	0.00169	mg/L	1	0.00200	0.00006	J1	GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4
Thallium	0.02	µg/L	1	0.20	0.02	J1	GES	09/18/2025 10:49	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.13	pCi/L	0.16	0.15		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	112	%						
Radium-228	0.77	pCi/L	0.15	0.48	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	80.2	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-12 Dissolved
Customer Description:
Lab Number: 252402-006-01
Preparation: Dissolved
Date Collected: 09/08/2025 10:38 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Arsenic	0.05	µg/L	1	0.10	0.03	J1	GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Barium	17.2	µg/L	1	0.20	0.05		GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Beryllium	0.12	µg/L	1	0.05	0.02		GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Cadmium	0.006	µg/L	1	0.020	0.004	J1	GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Chromium	0.40	µg/L	1	0.30	0.07		GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Cobalt	1.10	µg/L	1	0.03	0.01		GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Iron	0.016	mg/L	1	0.020	0.003	J1	GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Lead	0.06	µg/L	1	0.20	0.05	J1	GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Lithium	0.00583	mg/L	1	0.00030	0.00007		GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Manganese	0.0027	mg/L	1	0.0010	0.0001		GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Mercury	3	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Selenium	0.20	µg/L	1	0.50	0.04	J1	GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	09/18/2025 10:54	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-13
Lab Number: 252402-007
Date Collected: 09/08/2025 09:32 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Arsenic	1.85	µg/L	1	0.10	0.03		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Barium	36.8	µg/L	1	0.20	0.05		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Beryllium	0.14	µg/L	1	0.05	0.02		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Boron	0.058	mg/L	1	0.050	0.006		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Calcium	6.11	mg/L	1	0.10	0.02		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Chromium	0.27	µg/L	1	0.30	0.07	J1	GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Cobalt	34.8	µg/L	1	0.03	0.01		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Lithium	0.140	mg/L	20	0.006	0.001		GES	09/22/2025 10:51	EPA 200.8-1994, Rev. 5.4
Magnesium	8.69	mg/L	1	0.10	0.01		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Mercury	3	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Potassium	4.33	mg/L	1	0.10	0.02		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Sodium	13.6	mg/L	1	0.20	0.02		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Strontium	0.0320	mg/L	1	0.00200	0.00006		GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	09/18/2025 10:59	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.60	pCi/L	0.21	0.19		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	93.1	%						
Radium-228	1.40	pCi/L	0.17	0.50	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	86.6	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-13 Dissolved
Lab Number: 252402-007-01
Date Collected: 09/08/2025 09:32 EDT

Customer Description:
Preparation: Dissolved
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Arsenic	1.53	µg/L	1	0.10	0.03		GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Barium	36.1	µg/L	1	0.20	0.05		GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Beryllium	0.13	µg/L	1	0.05	0.02		GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Chromium	0.25	µg/L	1	0.30	0.07	J1	GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Cobalt	34.4	µg/L	1	0.03	0.01		GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Iron	28.3	mg/L	1	0.020	0.003		GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Lithium	0.140	mg/L	20	0.006	0.001		GES	09/22/2025 10:57	EPA 200.8-1994, Rev. 5.4
Manganese	0.279	mg/L	1	0.0010	0.0001		GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Mercury	2	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	09/18/2025 11:05	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-16
Lab Number: 252402-008
Date Collected: 09/10/2025 12:05 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.019	mg/L	1	0.050	0.006	J1	GES	09/18/2025 11:10	EPA 200.8-1994, Rev. 5.4
Calcium	1.02	mg/L	1	0.10	0.02		GES	09/18/2025 11:10	EPA 200.8-1994, Rev. 5.4
Magnesium	1.98	mg/L	1	0.10	0.01		GES	09/18/2025 11:10	EPA 200.8-1994, Rev. 5.4
Potassium	1.18	mg/L	1	0.10	0.02		GES	09/18/2025 11:10	EPA 200.8-1994, Rev. 5.4
Sodium	16.6	mg/L	1	0.20	0.02		GES	09/18/2025 11:10	EPA 200.8-1994, Rev. 5.4
Strontium	0.0127	mg/L	1	0.00200	0.00006		GES	09/18/2025 11:10	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-17
Lab Number: 252402-009
Date Collected: 09/09/2025 11:25 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.02	µg/L	1	0.10	0.02	J1	GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Arsenic	0.12	µg/L	1	0.10	0.03		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Barium	128	µg/L	1	0.20	0.05		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Beryllium	0.37	µg/L	1	0.05	0.02		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Boron	0.040	mg/L	1	0.050	0.006	J1	GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Cadmium	0.032	µg/L	1	0.020	0.004		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Calcium	0.35	mg/L	1	0.10	0.02		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Chromium	0.45	µg/L	1	0.30	0.07		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Cobalt	5.68	µg/L	1	0.03	0.01		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Lead	0.06	µg/L	1	0.20	0.05	J1	GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Lithium	0.0167	mg/L	1	0.00030	0.00007		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Magnesium	1.98	mg/L	1	0.10	0.01		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Mercury	123	ng/L	10	5	2		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Potassium	0.49	mg/L	1	0.10	0.02		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Selenium	0.35	µg/L	1	0.50	0.04	J1	GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Sodium	7.33	mg/L	1	0.20	0.02		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Strontium	0.00784	mg/L	1	0.00200	0.00006		GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4
Thallium	0.02	µg/L	1	0.20	0.02	J1	GES	09/18/2025 11:16	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.80	pCi/L	0.22	0.23		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	92.5	%						
Radium-228	1.79	pCi/L	0.16	0.44	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	94.6	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-17 Dissolved
Customer Description:
Lab Number: 252402-009-01
Preparation: Dissolved
Date Collected: 09/09/2025 11:25 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Arsenic	0.10	µg/L	1	0.10	0.03		GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Barium	136	µg/L	1	0.20	0.05		GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Beryllium	0.38	µg/L	1	0.05	0.02		GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Cadmium	0.034	µg/L	1	0.020	0.004		GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Chromium	0.36	µg/L	1	0.30	0.07		GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Cobalt	6.05	µg/L	1	0.03	0.01		GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Iron	0.014	mg/L	1	0.020	0.003	J1	GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Lead	0.06	µg/L	1	0.20	0.05	J1	GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Lithium	0.0170	mg/L	1	0.00030	0.00007		GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Manganese	0.0144	mg/L	1	0.0010	0.0001		GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Mercury	2	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Selenium	0.34	µg/L	1	0.50	0.04	J1	GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4
Thallium	0.02	µg/L	1	0.20	0.02	J1	GES	09/18/2025 11:21	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-18
Lab Number: 252402-010
Date Collected: 09/10/2025 09:42 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.04	µg/L	1	0.10	0.02	J1	GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Arsenic	2.87	µg/L	1	0.10	0.03		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Barium	87.7	µg/L	1	0.20	0.05		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Beryllium	0.11	µg/L	1	0.05	0.02		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Boron	0.015	mg/L	1	0.050	0.006	J1	GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Cadmium	0.012	µg/L	1	0.020	0.004	J1	GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Calcium	0.23	mg/L	1	0.10	0.02		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Chromium	3.43	µg/L	1	0.30	0.07		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Cobalt	1.04	µg/L	1	0.03	0.01		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Lead	1.47	µg/L	1	0.20	0.05		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Lithium	0.0151	mg/L	1	0.00030	0.00007		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Magnesium	0.41	mg/L	1	0.10	0.01		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Mercury	32	ng/L	10	5	2		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	0.12	µg/L	1	0.50	0.05	J1	GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Potassium	0.83	mg/L	1	0.10	0.02		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Selenium	0.87	µg/L	1	0.50	0.04		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Sodium	4.96	mg/L	1	0.20	0.02		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Strontium	0.00645	mg/L	1	0.00200	0.00006		GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4
Thallium	0.06	µg/L	1	0.20	0.02	J1	GES	09/18/2025 11:27	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.06	pCi/L	0.13	0.11	R2	TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	137	%						
Radium-228	1.24	pCi/L	0.17	0.53	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	90.2	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-18 Dissolved
Customer Description: PK_AD18
Lab Number: 252402-010-01
Preparation: Dissolved
Date Collected: 09/10/2025 09:42 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Arsenic	0.05	µg/L	1	0.10	0.03	J1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Barium	76.9	µg/L	1	0.20	0.05		GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Beryllium	0.07	µg/L	1	0.05	0.02		GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Cadmium	0.010	µg/L	1	0.020	0.004	J1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Chromium	0.24	µg/L	1	0.30	0.07	J1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Cobalt	0.89	µg/L	1	0.03	0.01		GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Iron	0.010	mg/L	1	0.020	0.003	J1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Lithium	0.0159	mg/L	1	0.00030	0.00007		GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Manganese	0.0029	mg/L	1	0.0010	0.0001		GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Mercury	3	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Selenium	0.07	µg/L	1	0.50	0.04	J1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	09/18/2025 11:32	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-22
Lab Number: 252402-011
Date Collected: 09/08/2025 11:20 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Arsenic	0.80	µg/L	1	0.10	0.03		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Barium	17.3	µg/L	1	0.20	0.05		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Beryllium	1.81	µg/L	1	0.05	0.02		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Boron	0.023	mg/L	1	0.050	0.006	J1	GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Cadmium	0.465	µg/L	1	0.020	0.004		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Calcium	9.16	mg/L	1	0.10	0.02		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Chromium	0.54	µg/L	1	0.30	0.07		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Cobalt	54.0	µg/L	1	0.03	0.01		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Lead	0.08	µg/L	1	0.20	0.05	J1	GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Lithium	0.101	mg/L	20	0.006	0.001		GES	09/22/2025 11:16	EPA 200.8-1994, Rev. 5.4
Magnesium	13.1	mg/L	1	0.10	0.01		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Mercury	100	ng/L	100	50	20		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Potassium	2.99	mg/L	1	0.10	0.02		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Selenium	2.61	µg/L	1	0.50	0.04		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Sodium	84.4	mg/L	1	0.20	0.02		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Strontium	0.0761	mg/L	1	0.00200	0.00006		GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4
Thallium	0.13	µg/L	1	0.20	0.02	J1	GES	09/18/2025 12:43	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.04	pCi/L	0.16	0.17		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	93.2	%						
Radium-228	1.56	pCi/L	0.20	0.62	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	86.2	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-22 Dissolved
Lab Number: 252402-011-01
Date Collected: 09/08/2025 11:20 EDT

Customer Description:
Preparation: Dissolved
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Arsenic	0.82	µg/L	1	0.10	0.03		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Barium	17.7	µg/L	1	0.20	0.05		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Beryllium	1.69	µg/L	1	0.05	0.02		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Cadmium	0.450	µg/L	1	0.020	0.004		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Chromium	0.53	µg/L	1	0.30	0.07		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Cobalt	58.7	µg/L	1	0.03	0.01		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Iron	26.6	mg/L	1	0.020	0.003		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Lead	0.08	µg/L	1	0.20	0.05	J1	GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Lithium	0.109	mg/L	20	0.006	0.001		GES	09/22/2025 11:22	EPA 200.8-1994, Rev. 5.4
Manganese	0.290	mg/L	1	0.0010	0.0001		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Mercury	23	ng/L	10	5	2		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Selenium	2.51	µg/L	1	0.50	0.04		GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4
Thallium	0.13	µg/L	1	0.20	0.02	J1	GES	09/18/2025 12:49	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-23
Lab Number: 252402-012
Date Collected: 09/10/2025 12:23 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.525	mg/L	1	0.050	0.006		GES	09/18/2025 12:54	EPA 200.8-1994, Rev. 5.4
Calcium	0.19	mg/L	1	0.10	0.02		GES	09/18/2025 12:54	EPA 200.8-1994, Rev. 5.4
Magnesium	0.17	mg/L	1	0.10	0.01		GES	09/18/2025 12:54	EPA 200.8-1994, Rev. 5.4
Potassium	2.96	mg/L	1	0.10	0.02		GES	09/18/2025 12:54	EPA 200.8-1994, Rev. 5.4
Sodium	5.90	mg/L	1	0.20	0.02		GES	09/18/2025 12:54	EPA 200.8-1994, Rev. 5.4
Strontium	0.00190	mg/L	1	0.00200	0.00006	J1	GES	09/18/2025 12:54	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
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Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-27
Customer Description:
Lab Number: 252402-013
Preparation:
Date Collected: 09/10/2025 09:25 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.137	mg/L	1	0.050	0.006		GES	09/18/2025 13:00	EPA 200.8-1994, Rev. 5.4
Calcium	3.96	mg/L	1	0.10	0.02		GES	09/18/2025 13:00	EPA 200.8-1994, Rev. 5.4
Magnesium	5.09	mg/L	1	0.10	0.01		GES	09/18/2025 13:00	EPA 200.8-1994, Rev. 5.4
Potassium	2.06	mg/L	1	0.10	0.02		GES	09/18/2025 13:00	EPA 200.8-1994, Rev. 5.4
Sodium	11.9	mg/L	1	0.20	0.02		GES	09/18/2025 13:00	EPA 200.8-1994, Rev. 5.4
Strontium	0.0598	mg/L	1	0.00200	0.00006		GES	09/18/2025 13:00	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-28
Lab Number: 252402-014
Date Collected: 09/09/2025 10:29 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.14	µg/L	1	0.10	0.02		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Arsenic	0.23	µg/L	1	0.10	0.03		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Barium	125	µg/L	1	0.20	0.05		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Beryllium	0.53	µg/L	1	0.05	0.02		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Boron	0.327	mg/L	1	0.050	0.006		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Cadmium	0.051	µg/L	1	0.020	0.004		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Calcium	1.54	mg/L	1	0.10	0.02		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Chromium	0.62	µg/L	1	0.30	0.07		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Cobalt	13.7	µg/L	1	0.03	0.01		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Lead	0.20	µg/L	1	0.20	0.05		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Lithium	0.0289	mg/L	1	0.00030	0.00007		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Magnesium	3.06	mg/L	1	0.10	0.01		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Mercury	21	ng/L	10	5	2		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Potassium	0.82	mg/L	1	0.10	0.02		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Selenium	0.25	µg/L	1	0.50	0.04	J1	GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Sodium	5.93	mg/L	1	0.20	0.02		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Strontium	0.0213	mg/L	1	0.00200	0.00006		GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	09/18/2025 13:05	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	1.26	pCi/L	0.18	0.17		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	94.7	%						
Radium-228	1.94	pCi/L	0.19	0.56	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	86.9	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
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Water Analysis Report

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-28 Dissolved
Customer Description: PK_AD28
Lab Number: 252402-014-01
Preparation: Dissolved
Date Collected: 09/09/2025 10:29 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.02	µg/L	1	0.10	0.02	J1	GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Arsenic	0.08	µg/L	1	0.10	0.03	J1	GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Barium	125	µg/L	1	0.20	0.05		GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Beryllium	0.54	µg/L	1	0.05	0.02		GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Cadmium	0.057	µg/L	1	0.020	0.004		GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Chromium	0.38	µg/L	1	0.30	0.07		GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Cobalt	13.9	µg/L	1	0.03	0.01		GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Iron	0.045	mg/L	1	0.020	0.003		GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Lead	0.12	µg/L	1	0.20	0.05	J1	GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Lithium	0.0290	mg/L	1	0.00030	0.00007		GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Manganese	0.0545	mg/L	1	0.0010	0.0001		GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Mercury	8	ng/L	10	5	2		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Selenium	0.20	µg/L	1	0.50	0.04	J1	GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	09/18/2025 13:11	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-30
Lab Number: 252402-015
Date Collected: 09/09/2025 09:44 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Arsenic	0.13	µg/L	1	0.10	0.03		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Barium	51.8	µg/L	1	0.20	0.05		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Beryllium	0.07	µg/L	1	0.05	0.02		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Boron	1.18	mg/L	1	0.050	0.006		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Cadmium	0.006	µg/L	1	0.020	0.004	J1	GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Calcium	0.50	mg/L	1	0.10	0.02		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Chromium	0.52	µg/L	1	0.30	0.07		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Cobalt	3.15	µg/L	1	0.03	0.01		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Lithium	0.0117	mg/L	1	0.00030	0.00007		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Magnesium	1.62	mg/L	1	0.10	0.01		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Mercury	16	ng/L	20	10	4		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Potassium	0.76	mg/L	1	0.10	0.02		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Selenium	0.26	µg/L	1	0.50	0.04	J1	GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Sodium	51.0	mg/L	1	0.20	0.02	M1	GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Strontium	0.00695	mg/L	1	0.00200	0.00006		GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4
Thallium	0.03	µg/L	1	0.20	0.02	J1	GES	09/18/2025 13:16	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	17.30	pCi/L	0.88	0.30		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	75.0	%						
Radium-228	1.04	pCi/L	0.14	0.41	B1	ST	09/30/2025 14:16	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	90.9	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
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Water Analysis Report

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-30 Dissolved
Customer Description: PK_AD30
Lab Number: 252402-015-01
Preparation: Dissolved
Date Collected: 09/09/2025 09:44 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Arsenic	0.09	µg/L	1	0.10	0.03	J1	GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Barium	45.0	µg/L	1	0.20	0.05		GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Beryllium	0.07	µg/L	1	0.05	0.02		GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Cadmium	0.006	µg/L	1	0.020	0.004	J1	GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Chromium	0.55	µg/L	1	0.30	0.07		GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Cobalt	3.02	µg/L	1	0.03	0.01		GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Iron	0.087	mg/L	1	0.020	0.003		GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Lithium	0.0115	mg/L	1	0.00030	0.00007		GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Manganese	0.0140	mg/L	1	0.0010	0.0001		GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Mercury	3	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Selenium	0.24	µg/L	1	0.50	0.04	J1	GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4
Thallium	0.07	µg/L	1	0.20	0.02	J1	GES	09/18/2025 13:32	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
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Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-31
Lab Number: 252402-016
Date Collected: 09/08/2025 12:31 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.10	µg/L	1	0.10	0.02		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Arsenic	1.26	µg/L	1	0.10	0.03		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Barium	36.5	µg/L	1	0.20	0.05		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Beryllium	0.75	µg/L	1	0.05	0.02	M1	GES	09/29/2025 14:01	EPA 200.8-1994, Rev. 5.4
Boron	0.023	mg/L	1	0.050	0.006	J1	GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Cadmium	0.054	µg/L	1	0.020	0.004		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Calcium	2.09	mg/L	1	0.10	0.02		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Chromium	2.24	µg/L	1	0.30	0.07		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Cobalt	8.06	µg/L	1	0.03	0.01		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Lead	1.07	µg/L	1	0.20	0.05		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Lithium	0.0894	mg/L	10	0.0030	0.0007		GES	09/22/2025 22:17	EPA 200.8-1994, Rev. 5.4
Magnesium	3.03	mg/L	1	0.10	0.01		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Mercury	610	ng/L	100	50	20		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	0.06	µg/L	1	0.50	0.05	J1	GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Potassium	1.62	mg/L	1	0.10	0.02		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Selenium	0.85	µg/L	1	0.50	0.04		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Sodium	26.4	mg/L	1	0.20	0.02	M1	GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Strontium	0.0311	mg/L	1	0.00200	0.00006		GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4
Thallium	0.10	µg/L	1	0.20	0.02	J1	GES	09/22/2025 17:55	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	2.91	pCi/L	0.26	0.11		TTP	09/24/2025 16:19	SW-846 9315-1986, Rev. 0
Carrier Recovery	111	%						
Radium-228	1.71	pCi/L	0.17	0.51	L1, P2	TTP	09/29/2025 16:28	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	86.8	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-31 Dissolved
Customer Description: PK_AD31
Lab Number: 252402-016-01
Preparation: Dissolved
Date Collected: 09/08/2025 12:31 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.02	µg/L	1	0.10	0.02	J1	GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Arsenic	0.19	µg/L	1	0.10	0.03		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Barium	28.3	µg/L	1	0.20	0.05		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Beryllium	0.74	µg/L	1	0.05	0.02	M1	GES	09/29/2025 15:12	EPA 200.8-1994, Rev. 5.4
Cadmium	0.054	µg/L	1	0.020	0.004		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Chromium	0.41	µg/L	1	0.30	0.07		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Cobalt	7.98	µg/L	1	0.03	0.01		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Iron	0.151	mg/L	1	0.020	0.003		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Lead	0.30	µg/L	1	0.20	0.05		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Lithium	0.0882	mg/L	10	0.0030	0.0007		GES	09/22/2025 22:34	EPA 200.8-1994, Rev. 5.4
Manganese	0.0215	mg/L	1	0.0010	0.0001		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Mercury	3	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	0.06	µg/L	1	0.50	0.05	J1	GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Selenium	0.50	µg/L	1	0.50	0.04		GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4
Thallium	0.12	µg/L	1	0.20	0.02	J1	GES	09/22/2025 18:12	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-32
Lab Number: 252402-017
Date Collected: 09/08/2025 11:36 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.11	µg/L	1	0.10	0.02		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Arsenic	9.77	µg/L	1	0.10	0.03		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Barium	46.0	µg/L	1	0.20	0.05		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Beryllium	0.07	µg/L	1	0.05	0.02		GES	09/29/2025 15:28	EPA 200.8-1994, Rev. 5.4
Boron	0.081	mg/L	1	0.050	0.006		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Calcium	6.03	mg/L	1	0.10	0.02		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Chromium	0.39	µg/L	1	0.30	0.07		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Cobalt	14.4	µg/L	1	0.03	0.01		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Lead	0.08	µg/L	1	0.20	0.05	J1	GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Lithium	0.0629	mg/L	1	0.00030	0.00007		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Magnesium	6.50	mg/L	1	0.10	0.01		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Mercury	2480	ng/L	100	50	20		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	0.09	µg/L	1	0.50	0.05	J1	GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Potassium	3.13	mg/L	1	0.10	0.02		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Selenium	0.17	µg/L	1	0.50	0.04	J1	GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Sodium	14.7	mg/L	1	0.20	0.02		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Strontium	0.0720	mg/L	1	0.00200	0.00006		GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4
Thallium	0.08	µg/L	1	0.20	0.02	J1	GES	09/22/2025 18:28	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.42	pCi/L	0.10	0.17		ST	10/10/2025 11:15	SW-846 9315-1986, Rev. 0
Carrier Recovery	81.8	%						
Radium-228	1.02	pCi/L	0.16	0.51	L1, P2	TTP	09/29/2025 16:28	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	90.0	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-32 Dissolved
Customer Description: PK_AD32
Lab Number: 252402-017-01
Preparation: Dissolved
Date Collected: 09/08/2025 11:36 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Arsenic	3.99	µg/L	1	0.10	0.03		GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Barium	44.4	µg/L	1	0.20	0.05		GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Beryllium	0.04	µg/L	1	0.05	0.02	J1	GES	09/29/2025 15:33	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Chromium	0.60	µg/L	1	0.30	0.07		GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Cobalt	14.7	µg/L	1	0.03	0.01		GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Iron	19.0	mg/L	1	0.020	0.003		GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Lithium	0.0646	mg/L	1	0.00030	0.00007		GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Manganese	0.131	mg/L	1	0.0010	0.0001		GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Mercury	4	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Selenium	0.05	µg/L	1	0.50	0.04	J1	GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4
Thallium	0.05	µg/L	1	0.20	0.02	J1	GES	09/22/2025 18:33	EPA 200.8-1994, Rev. 5.4

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-33
Lab Number: 252402-018
Date Collected: 09/08/2025 12:23 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Arsenic	0.93	µg/L	1	0.10	0.03		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Barium	40.9	µg/L	1	0.20	0.05		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Beryllium	1.23	µg/L	1	0.05	0.02		GES	09/29/2025 15:39	EPA 200.8-1994, Rev. 5.4
Boron	0.135	mg/L	1	0.050	0.006		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Cadmium	0.052	µg/L	1	0.020	0.004		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Calcium	1.69	mg/L	1	0.10	0.02		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Chromium	0.28	µg/L	1	0.30	0.07	J1	GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Cobalt	10.0	µg/L	1	0.03	0.01		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Lead	0.31	µg/L	1	0.20	0.05		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Lithium	0.0212	mg/L	1	0.00030	0.00007		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Magnesium	3.86	mg/L	1	0.10	0.01		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Mercury	6000	ng/L	1000	500	200		JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Potassium	0.28	mg/L	1	0.10	0.02		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Selenium	3.79	µg/L	1	0.50	0.04		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Sodium	16.1	mg/L	1	0.20	0.02		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Strontium	0.0297	mg/L	1	0.00200	0.00006		GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4
Thallium	0.05	µg/L	1	0.20	0.02	J1	GES	09/22/2025 18:39	EPA 200.8-1994, Rev. 5.4

Radiochemistry

Parameter	Result	Units	UNC*(+/-)	MDA*	Data Qualifiers	Analyst	Analysis Date	Method
Radium-226	0.42	pCi/L	0.10	0.19		ST	10/10/2025 11:15	SW-846 9315-1986, Rev. 0
Carrier Recovery	93.6	%						
Radium-228	1.37	pCi/L	0.15	0.44	L1, P2	TTP	09/29/2025 16:28	SW-846 9320-2014, Rev. 1.0
Carrier Recovery	88.5	%						

* The Required Detection Limit (RDL) is equivalent to the RL and for Radium-226 and Radium-228, the RDL is calculated to be 1.0 pCi/L. The Minimal Detectable Activity (MDA) listed with these results is sample specific and empirical. The combined standard uncertainty (UNC) is a counting uncertainty representing "one-sigma" which has the same units of measurement as the result.

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-33 Dissolved
Customer Description: PK_AD33
Lab Number: 252402-018-01
Preparation: Dissolved
Date Collected: 09/08/2025 12:23 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Arsenic	0.93	µg/L	1	0.10	0.03		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Barium	41.0	µg/L	1	0.20	0.05		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Beryllium	1.22	µg/L	1	0.05	0.02		GES	09/29/2025 15:44	EPA 200.8-1994, Rev. 5.4
Cadmium	0.055	µg/L	1	0.020	0.004		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Chromium	0.39	µg/L	1	0.30	0.07		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Cobalt	10.4	µg/L	1	0.03	0.01		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Iron	0.012	mg/L	1	0.020	0.003	J1	GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Lead	0.32	µg/L	1	0.20	0.05		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Lithium	0.0212	mg/L	1	0.00030	0.00007		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Magnesium	3.98	mg/L	1	0.10	0.01		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Manganese	0.0063	mg/L	1	0.0010	0.0001		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Mercury	210	ng/L	50	30	10		JLD	10/07/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Selenium	4.00	µg/L	1	0.50	0.04		GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4
Thallium	0.04	µg/L	1	0.20	0.02	J1	GES	09/22/2025 18:44	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: AD-34
Customer Description:
Lab Number: 252402-019
Preparation:
Date Collected: 09/09/2025 09:14 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.063	mg/L	1	0.050	0.006		GES	09/22/2025 18:50	EPA 200.8-1994, Rev. 5.4
Calcium	39.2	mg/L	1	0.10	0.02		GES	09/22/2025 18:50	EPA 200.8-1994, Rev. 5.4
Magnesium	34.2	mg/L	1	0.10	0.01		GES	09/22/2025 18:50	EPA 200.8-1994, Rev. 5.4
Potassium	7.19	mg/L	1	0.10	0.02		GES	09/22/2025 18:50	EPA 200.8-1994, Rev. 5.4
Sodium	14.6	mg/L	1	0.20	0.02		GES	09/22/2025 18:50	EPA 200.8-1994, Rev. 5.4
Strontium	0.407	mg/L	1	0.00200	0.00006		GES	09/22/2025 18:50	EPA 200.8-1994, Rev. 5.4

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: AD-36
Lab Number: 252402-020
Date Collected: 09/09/2025 09:57 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Boron	0.099	mg/L	1	0.050	0.006		GES	09/22/2025 18:55	EPA 200.8-1994, Rev. 5.4
Calcium	1.43	mg/L	1	0.10	0.02		GES	09/22/2025 18:55	EPA 200.8-1994, Rev. 5.4
Magnesium	2.80	mg/L	1	0.10	0.01		GES	09/22/2025 18:55	EPA 200.8-1994, Rev. 5.4
Potassium	1.93	mg/L	1	0.10	0.02		GES	09/22/2025 18:55	EPA 200.8-1994, Rev. 5.4
Sodium	7.26	mg/L	1	0.20	0.02		GES	09/22/2025 18:55	EPA 200.8-1994, Rev. 5.4
Strontium	0.0147	mg/L	1	0.00200	0.00006		GES	09/22/2025 18:55	EPA 200.8-1994, Rev. 5.4

Customer Sample ID: Duplicate
Lab Number: 252402-021
Date Collected: 09/08/2025 13:00 EDT

Customer Description:
Preparation:
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Arsenic	1.85	µg/L	1	0.10	0.03		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Barium	35.4	µg/L	1	0.20	0.05		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Beryllium	0.15	µg/L	1	0.05	0.02		GES	09/29/2025 15:50	EPA 200.8-1994, Rev. 5.4
Boron	0.048	mg/L	1	0.050	0.006	J1	GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Calcium	5.68	mg/L	1	0.10	0.02		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Chromium	0.30	µg/L	1	0.30	0.07		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Cobalt	33.7	µg/L	1	0.03	0.01		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Lithium	0.101	mg/L	1	0.00030	0.00007		GES	09/24/2025 10:23	EPA 200.8-1994, Rev. 5.4
Magnesium	8.29	mg/L	1	0.10	0.01		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Mercury	3	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Potassium	4.16	mg/L	1	0.10	0.02		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Sodium	13.5	mg/L	1	0.20	0.02		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Strontium	0.0307	mg/L	1	0.00200	0.00006		GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	09/22/2025 20:06	EPA 200.8-1994, Rev. 5.4

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: Duplicate Dissolved
Customer Description: PK_DUP
Lab Number: 252402-021-01
Preparation: Dissolved
Date Collected: 09/08/2025 13:00 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	<0.02	µg/L	1	0.10	0.02	U1	GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Arsenic	1.55	µg/L	1	0.10	0.03		GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Barium	35.1	µg/L	1	0.20	0.05		GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Beryllium	0.13	µg/L	1	0.05	0.02		GES	09/29/2025 15:55	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Chromium	0.32	µg/L	1	0.30	0.07		GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Cobalt	34.2	µg/L	1	0.03	0.01		GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Iron	28.3	mg/L	1	0.020	0.003		GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Lithium	0.101	mg/L	1	0.00030	0.00007		GES	09/24/2025 10:28	EPA 200.8-1994, Rev. 5.4
Manganese	0.276	mg/L	1	0.0010	0.0001		GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Mercury	3	ng/L	10	5	2	J1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	09/22/2025 20:12	EPA 200.8-1994, Rev. 5.4

Dolan Chemical Laboratory
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Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: Equipment Blank
Customer Description:
Lab Number: 252402-022
Preparation:
Date Collected: 09/09/2025 10:20 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.03	µg/L	1	0.10	0.02	J1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Arsenic	<0.03	µg/L	1	0.10	0.03	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Barium	<0.05	µg/L	1	0.20	0.05	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Beryllium	<0.02	µg/L	1	0.05	0.02	U1	GES	09/29/2025 16:01	EPA 200.8-1994, Rev. 5.4
Boron	<0.006	mg/L	1	0.050	0.006	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Calcium	<0.02	mg/L	1	0.10	0.02	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Chromium	0.39	µg/L	1	0.30	0.07		GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Cobalt	0.01	µg/L	1	0.03	0.01	J1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Lithium	<0.00007	mg/L	1	0.00030	0.00007	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Magnesium	<0.01	mg/L	1	0.10	0.01	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	10	5	2	U1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Potassium	<0.02	mg/L	1	0.10	0.02	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Sodium	<0.02	mg/L	1	0.20	0.02	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Strontium	<0.00006	mg/L	1	0.00200	0.00006	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	09/22/2025 20:17	EPA 200.8-1994, Rev. 5.4

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Customer Sample ID: Field Blank
Customer Description:
Lab Number: 252402-023
Preparation:
Date Collected: 09/09/2025 10:21 EDT
Date Received: 09/15/2025 12:40 EDT

Metals

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Antimony	0.05	µg/L	1	0.10	0.02	J1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Arsenic	<0.03	µg/L	1	0.10	0.03	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Barium	<0.05	µg/L	1	0.20	0.05	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Beryllium	<0.02	µg/L	1	0.05	0.02	U1	GES	09/29/2025 16:06	EPA 200.8-1994, Rev. 5.4
Boron	<0.006	mg/L	1	0.050	0.006	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Cadmium	<0.004	µg/L	1	0.020	0.004	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Calcium	0.03	mg/L	1	0.10	0.02	J1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Chromium	0.25	µg/L	1	0.30	0.07	J1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Cobalt	<0.01	µg/L	1	0.03	0.01	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Lead	<0.05	µg/L	1	0.20	0.05	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Lithium	<0.00007	mg/L	1	0.00030	0.00007	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Magnesium	<0.01	mg/L	1	0.10	0.01	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Mercury	<2	ng/L	10	5	2	U1	JLD	10/06/2025 00:00	EPA 1631E-2002
Molybdenum	<0.05	µg/L	1	0.50	0.05	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Potassium	<0.02	mg/L	1	0.10	0.02	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Selenium	<0.04	µg/L	1	0.50	0.04	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Sodium	<0.02	mg/L	1	0.20	0.02	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Strontium	<0.00006	mg/L	1	0.00200	0.00006	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4
Thallium	<0.02	µg/L	1	0.20	0.02	U1	GES	09/22/2025 20:23	EPA 200.8-1994, Rev. 5.4

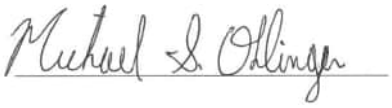
Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252402 **Customer: Pirkey Power Station** **Date Reported: 10/15/2025**

Report Verification

This report and the above data have been confirmed by the following analyst.



Michael Ohlinger, Chemist
Email: msohlinger@aep.com
Phone: 614-836-4184
Audinet: 8-210-4184

THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF THE LABORATORY. ALL TEST RESULTS MEET ALL OF THE REQUIREMENTS OF THE ACCREDITING AUTHORITY, UNLESS OTHERWISE NOTED. ALL TIMES LISTED ARE IN THE EASTERN TIME ZONE.

Data Qualifer Legend

U1 - Not detected at or below method detection limit (MDL).
J1 - Concentration estimated. Analyte was detected between the method detection limit and the reporting limit.
B1 - Analyte detected in method blank (MB) at or above the method criteria.
R2 - Carrier recovery was outside acceptance limits.
M1 - The associated matrix spike (MS) or matrix spike duplicate (MSD) recovery was outside acceptance limits.
L1 - The associated laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) recovery was outside acceptance limits.
P2 - The precision on the laboratory control sample duplicate (LCSD) was above acceptance limits.

Chain of Custody Record

Program: Coal Combustion Residuals (CCR)

Dolan Chemical Laboratory (DCL)
4001 Bixby Road
Groveport, Ohio 43125
Contacts: Michael Ohlinger (614-836-4184)
Dave Conover (614-836-4219)

Project Name: Pirkey PP CCR
Contact Name: Pryce Warren
Contact Phone: 325-310-6668
Sampler(s): Matt Hamilton Kenny McDonald

Analysis Turnaround Time (in Calendar Days)
◉ Routine (28 days for Monitoring Wells)

Site Contact:

Date:

For Lab Use Only:
COC/Order #: 252402 1/2

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sampler(s) Initials	250 mL bottle, pH<2, HNO_3 Sb, As, B, Ba, Be, Ca Cd, Cr, Co, K, Li, Mg, Mo, Na, Pb, Se, Sr, Tl	Field-filter 250 mL bottle, then pH<2, HNO_3 Dissolved Sb, As, Ba, Be, Cd, Cr, Co, Fe, Li, Mn, Mo, Pb, Se, Tl	Three (six every 10th*) 1 L bottles, pH<2, HNO3 Ra-226, Ra-228	250 mL Glass bottle, HCL**, pH<2 Mercury	250 mL Glass bottle, HCL**, pH<2 Dissolved Mercury	250 mL bottle, pH<2, HNO_3 B, Ca, K, Mg, Na, Sr		Sample Specific Notes
1	AD-2	9/9/2025	1031	G	GW	7		X	X	X	X	X			
2	AD-3	9/9/2025	1121	G	GW	7		X	X	X	X	X			
3	AD-4	9/10/2025	1003	G	GW	7		X	X	X	X	X			
4	AD-7R	9/8/2025	936	G	GW	7		X	X	X	X	X			
5	AD-8	9/9/2025	945	G	GW	1							X		
6	AD-12	9/8/2025	938	G	GW	7		X	X	X	X	X			
7	AD-13	9/8/2025	932	G	GW	10		X	X	X	X	X			
8	AD-16	9/10/2025	1105	G	GW	1							X		
9	AD-17	9/9/2025	1025	G	GW	7		X	X	X	X	X			
10	AD-18	9/10/2025	842	G	GW	7		X	X	X	X	X			
11	AD-22	9/8/2025	1020	G	GW	7		X	X	X	X	X			
12	AD-23	9/10/2025	1123	G	GW	1							X		
	Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____; F= filter in field							4	F4	4	2	F2	4		

* *Six 1L Bottles must be collected for Radium for every 10th sample.*

Special Instructions/QC Requirements & Comments:

TG-32 needed

Relinquished by: Matt Hamilton	Company: Eagle	Date/Time: 9-11-25 1400	Received by:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Aeung Award	Date/Time: 9-15-25 1240

Chain of Custody Record

Program: Coal Combustion Residuals (CCR)

Dolan Chemical Laboratory (DCL)
4001 Bixby Road
Groveport, Ohio 43125
Contacts: Michael Ohlinger (614-836-4184)
Dave Conover (614-836-4219)

Project Name: Pirkey PP CCR
Contact Name: Pryce Warren
Contact Phone: 325-310-6668
Sampler(s): Matt Hamilton Kenny McDonald

Analysis Turnaround Time (in Calendar Days)
◉ Routine (28 days for Monitoring Wells)

Site Contact: | Date:

For Lab Use Only:
COC/Order #: 252402 2/2

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sampler(s) Initials	250 mL bottle, pH<2, HNO_3 Sb, As, B, Ba, Be, Ca Cd, Cr, Co, K, Li, Mg, Mo, Na, Pb, Se, Sr, Tl	Field-filter 250 mL bottle, then pH<2, HNO_3 Dissolved Sb, As, Ba, Be, Cd, Cr, Co, Fe, Li, Mn, Mo, Pb, Se, Tl	Three (six every 10th*) 1 L bottles, pH<2, HNO3 Ra-226, Ra-228	250 mL Glass bottle, HCL**, pH<2 Mercury	250 mL Glass bottle, HCL**, pH<2 Dissolved Mercury	250 mL bottle, pH<2, HNO_3 B, Ca, K, Mg, Na, Sr		Sample Specific Notes
AD-27	9/10/2025	825	G	GW	1							X		
AD-28	9/9/2025	929	G	GW	7		X	X	X	X	X			
AD-30	9/9/2025	844	G	GW	7		X	X	X	X	X			
AD-31	9/8/2025	1131	G	GW	7		X	X	X	X	X			
AD-32	9/8/2025	1036	G	GW	7		X	X	X	X	X			
AD-33	9/8/2025	1123	G	GW	7		X	X	X	X	X			
AD-34	9/9/2025	814	G	GW	1							X		
AD-36	9/9/2025	857	G	GW	1							X		
Duplicate	9/8/2025	832	G	GW	4		X	X		X	X			
Equipment Blank	9/9/2025	920	G	GW	2		X			X				
Field Blank	9/9/2025	921	G	GW	2		X			X				
Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____; F= filter in field							4	F4	4	2	F2	4		

* *Six 1L Bottles must be collected for Radium for every 10th sample.*

Special Instructions/QC Requirements & Comments:

TG-32 needed

Relinquished by:	Company:	Date/Time:	Received by:	Date/Time:
[signature]	Eagle	9-11-25 1400		
Relinquished by:	Company:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Date/Time: 9.15.25 1240

WATER & WASTE SAMPLE RECEIPT FORM

Form SOP-7102 Sample Receipt Form Rev.10, 01/03/25

Package Type	Delivery Type
(Cooler) Box Bag Envelope	UPS (FedEX) USPS
	Other _____

Plant/Customer Pinney **Total # of Containers RECEIVED in Job:** 115

Opened By KSH/AMR

Date/Time 09/15/25 1246

Were all required temperatures, per BN-water-900, T≤6°C *w/o sample freezing*? Y / N or (N/A)

Initial/Date: NA on ice / (no ice)

If No, specify each deviation(s) on back of form. (IR Gun Ser# 240093386, *Expir.* 01/31/2026)

Was container in good condition? (Y) / N Comments _____

Was Chain of Custody received? (Y) / N Comments _____

Requested turnaround: Routine If **RUSH**, who was notified? _____

pH (15 min) Cr^{+6} (pres) (24 hr) NO_2 or NO_3 (48 hr) *ortho*-PO_4 (48 hr) Hg-diss (pres) (48 hr)

Were pH requirements met for required samples, per BN-water-900? (Y) / N or N/A

Initial/Date: AMR 9.15.25

***pH paper*:** mfr LabRat ,PN LRS-4801 ,LOT# X000RWDG21 ,EXPIR DATE 09/30/2026

*** Note changes to pH paper in comments below***

Was Add'l Preservative needed? Y / (N) If Yes: By whom & when: NA (See Prep Book)

(Dissolved) Is sample filtration requested? Y / (N) Comments NA (See Prep Book)

Was COC filled out properly? (Y) / N Comments _____

Were samples labeled properly? Y / (N) Comments *AD-13, AD-16, Duplicate time diff on label vs. COC

Were correct containers used? (Y) / N Comments _____

Was the customer contacted? If Yes: Person Contacted: Pryce Warren AMR 9.15.25

Lab ID# 252402 Initial & Date & Time : AMR 9.15.25 1454

Logged by AMR Comments: Per email AD-13 and duplicate bottle times used and AD-16 COC time used.

(Record Test Count on back of form)

Total # of Containers LISTED on COC: 115

WATER & WASTE SAMPLE RECEIPT FORM (CONT)

Form SOP-7102 Sample Receipt Form Rev 10, 01/03/25

REMINDER: Document the pertinent sample integrity information and deviations in sample receipt (as noted above) in the Sample or Job "Comments" field in the LIMS. **Comments below:**

i.e. Mark "LE" if needs Lab filtered, Temperature or Preservative deviation, Preserved upon arrival , etc.

JOB # : ~~252401~~ 252402 AMR 9/16/25 **Initial/ Date:** AMR 9.15.25 **Peer Review Initial/ Date:** EGM 9/16/25

Login Test Count from COC	LIMS Sample ID (or COC Sample Name)	Comments /Nonconformities	Peer Review Test Count from COC
21	~~252402~~ ~~252401~~ AMR 9.16.25 -001		21
15	-001-01		15
21	-002		21
15	-002-01		15
21	-003		21
15	-003-01		15
21	-004		21
15	-004-01		15
6	-005		6
21	-006		21
15	-006-01		15
21	-007		21
15	-007-01		15
6	-008		6
21	-009		21
15	-009-01		15
21	-010		21
15	-010-01		15
21	-011		21
15	-011-01		15
6	-012		6
6	-013		6
21	-014		21
15	-014-01		15

WATER & WASTE SAMPLE RECEIPT FORM (CONT)

Form SOP-7102 Sample Receipt Form Rev.10, 01/03/25

REMINDER: Document the pertinent sample integrity information and deviations in sample receipt (as noted above) in the Sample or Job "Comments" field in the LIMS. **Comments below**:

i.e. Mark "LF" if needs Lab filtered, Temperature or Preservative deviation, Preserved upon arrival , etc.

JOB # : ~~252401~~ 252402 **Initial/ Date:** AMP 9.15.25 **Peer Review Initial/ Date:** EGM 9/16/25

AMP 9.16.25

Login Test Count from COC	LIMS Sample ID (or COC Sample Name)	Comments /Nonconformities	Peer Review Test Count from COC
	252402 AMP 9.16.25		
21	~~252401~~ -015		21
15	-015-01		15
21	-016		21
15	-016-01		15
21	-017		21
15	-017-01		15
21	-018		21
15	-018-01		15
6	-019		6
6	-020		6
19	-021		19
15	-021-01		15
19	-022		19
19	-023		19

Municipal Solid Waste Laboratory Review Checklist

This data package consists of:

- [x] This signature page, and the laboratory review checklist consisting of Table 1, Reportable Data (which includes the reportable data identified on this page), Table 2, Supporting Data, and Table 3, Exception Reports.
- [x] R1 Field chain-of-custody documentation
- [x] R2 Sample identification cross-reference
- [x] R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - (a) Items specified in NELAC Chapter 5 for reporting results, e.g., Section 5.5.10 in 2003 NELAC Standard
  - (b) Dilution factors
  - (c) Preparation methods
  - (d) Cleanup methods
  - (e) If required for the project, tentatively identified compounds (TICs)
- [NA] R4 Surrogate recovery data including:
  - (a) Calculated recovery (%R)
  - (b) The laboratory's surrogate QC limits
- [x] R5 Test reports/summary forms for blank samples
- [x] R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - (a) LCS spiking amounts
  - (b) Calculated %R for each analyte
  - (c) The laboratory's LCS QC limits
- [x] R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - (a) Samples associated with the MS/MSD clearly identified
  - (b) MS/MSD spiking amounts
  - (c) Concentration of each MS/MSD analyte measured in the parent and spiked samples
  - (d) Calculated %Rs and relative percent differences (RPDs)
  - (e) The laboratory's MS/MSD QC limits
- [x] R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - (a) The amount of analyte measured in the duplicate
  - (b) The calculated RPD
  - (c) The laboratory's QC limits for analytical duplicates
- [x] R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix
- [x] R10 Other problems or anomalies
- [x] The Exception Report for every item for which the result is "No" or "NR" (Not Reviewed)

Release Statement: I am responsible for the release of this laboratory data package. This data package as been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: (●) This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Tamisha T. Palmer	Tamisha T. Palmer	Chemical Technican, Principal	10/14/2025
Name (printed)	Signature	Official Title	Date

Radium Laboratory Review Checklist

Table 1. Reportable Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Power Plant

Reviewer Name: Tamisha Palmer

LRC Date: 10/14/2025

Laboratory Job Number: 252402

Prep Batch Number(s): PB25092402

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
R1	O, I	**Chain-of-custody (COC)**		
	I	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	Yes	
	I	Were all departures from standard conditions described in an exception report?	Yes	
R2	O, I	**Sample and quality control (QC) identification**		
	I	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Yes	
	I	Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Yes	
R3	O, I	**Test reports**		
	I	Were all samples prepared and analyzed within holding times?	Yes	
	I	Other than those results < MQL, were all other raw values bracketed by calibration standards?	NA	
	I	Were calculations checked by a peer or supervisor?	Yes	
	I	Were all analyte identifications checked by a peer or supervisor?	Yes	
	I	Were sample quantitation limits reported for all analytes not detected?	Yes	
	I	Were all results for soil and sediment samples reported on a dry weight basis?	NA	
	I	Was % moisture (or solids) reported for all soil and sediment samples?	NA	
	I	If required for the project, TICs reported?	NA	
R4	O	**Surrogate recovery data**		
	I	Were surrogates added prior to extraction?	NA	
	I	Were surrogate percent recoveries in all samples within the laboratory QC limits?	NA	
R5	O, I	**Test reports/summary forms for blank samples**		
	I	Were appropriate type(s) of blanks analyzed?	Yes	
	I	Were blanks analyzed at the appropriate frequency?	Yes	

Radium Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
	I	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Yes	
	I	Were blank concentrations < MQL?	Yes	
R6	O, I	**Laboratory control samples (LCS):**		
	I	Were all COCs included in the LCS?	Yes	
	I	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Yes	
	I	Were LCSs analyzed at the required frequency?	Yes	
	I	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	Yes	
	I	Was the LCSD RPD within QC limits?	Yes	
R7	O, I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**		
	I	Were the project/method specified analytes included in the MS and MSD?	NA	
	I	Were MS/MSD analyzed at the appropriate frequency?	NA	
	I	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	NA	
	I	Were MS/MSD RPDs within laboratory QC limits?	NA	
R8	O, I	**Analytical duplicate data**		
	I	Were appropriate analytical duplicates analyzed for each matrix?	Yes	
	I	Were analytical duplicates analyzed at the appropriate frequency?	Yes	
	I	Were RPDs or relative standard deviations within the laboratory QC limits?	No	ER1
R9	O, I	**Method quantitation limits (MQLs):**		
	I	Are the MQLs for each method analyte included in the laboratory data package?	Yes	
	I	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Yes	
	I	Are unadjusted MQLs included in the laboratory data package?	Yes	
R10	O, I	**Other problems/anomalies**		
	I	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Yes	
	I	Were all necessary corrective actions performed for the reported data?	Yes	
	I	Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	Yes	

Table 2. Supporting Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Power Plant

Reviewer Name: Tamisha Palmer

LRC Date: 10/14/2025

Laboratory Job Number: 252402

Prep Batch Number(s): PB25092402

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S1	O, I	**Initial calibration (ICAL)**		
	I	Were response factors and/or relative response factors for each analyte within QC limits?	NA	
	I	Were percent RSDs or correlation coefficient criteria met?	Yes	
	I	Was the number of standards recommended in the method used for all analytes?	Yes	
	I	Were all points generated between the lowest and highest standard used to calculate the curve?	NA	
	I	Are ICAL data available for all instruments used?	Yes	
	I	Has the initial calibration curve been verified using an appropriate second source standard?	Yes	
S2	O, I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**		
	I	Was the CCV analyzed at the method-required frequency?	NA	
	I	Were percent differences for each analyte within the method-required QC limits?	NA	
	I	Was the ICAL curve verified for each analyte?	NA	
	I	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	NA	
S3	O	**Mass spectral tuning:**		
	I	Was the appropriate compound for the method used for tuning?	NA	
	I	Were ion abundance data within the method-required QC limits?	NA	
S4	O	**Internal standards (IS):**		
	I	Were IS area counts and retention times within the method-required QC limits?	NA	
S5	O, I	**Raw data (NELAC section 1 appendix A glossary, and section 5.)**		
	I	Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	Yes	
	I	Were data associated with manual integrations flagged on the raw data?	NA	

Radium Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S6	O	**Dual column confirmation**		
	I	Did dual column confirmation results meet the method-required QC?	NA	
S7	O	**Tentatively identified compounds (TICs):**		
	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?	NA	
S8	I	**Interference Check Sample (ICS) results:**		
	I	Were percent recoveries within method QC limits?	NA	
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**		
	I	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	NA	
S10	O, I	**Method detection limit (MDL) studies**		
	I	Was a MDL study performed for each reported analyte?	Yes	
	I	Is the MDL either adjusted or supported by the analysis of DCSs?	Yes	
S11	O, I	**Proficiency test reports:**		
	I	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	Yes	
S12	O, I	**Standards documentation**		
	I	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Yes	
S13	O, I	**Compound/analyte identification procedures**		
	I	Are the procedures for compound/analyte identification documented?	Yes	
S14	O, I	**Demonstration of analyst competency (DOC)**		
	I	Was DOC conducted consistent with NELAC Chapter 5C?	Yes	
	I	Is documentation of the analyst's competency up-to-date and on file?	Yes	
S15	O, I	**Verification/validation documentation for methods (NELAC Chap 5n 5)**		
	I	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Yes	
S16	O, I	**Laboratory standard operating procedures (SOPs):**		
	I	Are laboratory SOPs current and on file for each method performed?	Yes	

Table 3. Exception Reports.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Power Plant

Reviewer Name: Tamisha Palmer

LRC Date: 10/14/2025

Laboratory Job Number: 252402

Prep Batch Number(s): PB25092402

Exception Report No.	Description
ER1	The RPD was outside criteria. The sample and the Duplicate both were below the detection limit.

[1] Items identified by the letter "R" must be available as a hard copy or as a .pdf file. Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
[2] O - organic analyses; I - inorganic analyses (including general chemistry constituents, when applicable).
[3] NA - Not applicable; NR - Not reviewed.
[4] Exception Report identification number; an Exception Report should be completed for an item if the result is "No" or "NR."

Municipal Solid Waste Laboratory Review Checklist

This data package consists of:

- [x] This signature page, and the laboratory review checklist consisting of Table 1, Reportable Data (which includes the reportable data identified on this page), Table 2, Supporting Data, and Table 3, Exception Reports.
- [x] R1 Field chain-of-custody documentation
- [x] R2 Sample identification cross-reference
- [x] R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - (a) Items specified in NELAC Chapter 5 for reporting results, e.g., Section 5.5.10 in 2003 NELAC Standard
  - (b) Dilution factors
  - (c) Preparation methods
  - (d) Cleanup methods
  - (e) If required for the project, tentatively identified compounds (TICs)
- [NA] R4 Surrogate recovery data including:
  - (a) Calculated recovery (%R)
  - (b) The laboratory's surrogate QC limits
- [x] R5 Test reports/summary forms for blank samples
- [x] R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - (a) LCS spiking amounts
  - (b) Calculated %R for each analyte
  - (c) The laboratory's LCS QC limits
- [x] R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - (a) Samples associated with the MS/MSD clearly identified
  - (b) MS/MSD spiking amounts
  - (c) Concentration of each MS/MSD analyte measured in the parent and spiked samples
  - (d) Calculated %Rs and relative percent differences (RPDs)
  - (e) The laboratory's MS/MSD QC limits
- [x] R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - (a) The amount of analyte measured in the duplicate
  - (b) The calculated RPD
  - (c) The laboratory's QC limits for analytical duplicates
- [x] R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix
- [x] R10 Other problems or anomalies
- [x] The Exception Report for every item for which the result is "No" or "NR" (Not Reviewed)

Release Statement: I am responsible for the release of this laboratory data package. This data package as been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: (●) This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Tamisha Palmer	Tami L. Palmer	Chemical Technician Principal	10/14/2025
Name (printed)	Signature	Official Title	Date

Radium Laboratory Review Checklist

Table 1. Reportable Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Power Plant

Reviewer Name: Tamisha Palmer

LRC Date: 10/14/2025

Laboratory Job Number: 252401, 252402

Prep Batch Number(s): PB25091701

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
R1	O, I	**Chain-of-custody (COC)**		
	I	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	Yes	
	I	Were all departures from standard conditions described in an exception report?	Yes	
R2	O, I	**Sample and quality control (QC) identification**		
	I	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Yes	
	I	Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Yes	
R3	O, I	**Test reports**		
	I	Were all samples prepared and analyzed within holding times?	Yes	
	I	Other than those results < MQL, were all other raw values bracketed by calibration standards?	NA	
	I	Were calculations checked by a peer or supervisor?	Yes	
	I	Were all analyte identifications checked by a peer or supervisor?	Yes	
	I	Were sample quantitation limits reported for all analytes not detected?	Yes	
	I	Were all results for soil and sediment samples reported on a dry weight basis?	NA	
	I	Was % moisture (or solids) reported for all soil and sediment samples?	NA	
	I	If required for the project, TICs reported?	NA	
R4	O	**Surrogate recovery data**		
	I	Were surrogates added prior to extraction?	NA	
	I	Were surrogate percent recoveries in all samples within the laboratory QC limits?	NA	
R5	O, I	**Test reports/summary forms for blank samples**		
	I	Were appropriate type(s) of blanks analyzed?	Yes	
	I	Were blanks analyzed at the appropriate frequency?	Yes	

Radium Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
	I	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Yes	
	I	Were blank concentrations < MQL?	Yes	
R6	O, I	**Laboratory control samples (LCS):**		
	I	Were all COCs included in the LCS?	Yes	
	I	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Yes	
	I	Were LCSs analyzed at the required frequency?	Yes	
	I	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	Yes	
	I	Was the LCSD RPD within QC limits?	Yes	
R7	O, I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**		
	I	Were the project/method specified analytes included in the MS and MSD?	Yes	
	I	Were MS/MSD analyzed at the appropriate frequency?	Yes	
	I	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Were MS/MSD RPDs within laboratory QC limits?	No	ER1
R8	O, I	**Analytical duplicate data**		
	I	Were appropriate analytical duplicates analyzed for each matrix?	NA	
	I	Were analytical duplicates analyzed at the appropriate frequency?	NA	
	I	Were RPDs or relative standard deviations within the laboratory QC limits?	NA	
R9	O, I	**Method quantitation limits (MQLs):**		
	I	Are the MQLs for each method analyte included in the laboratory data package?	Yes	
	I	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Yes	
	I	Are unadjusted MQLs included in the laboratory data package?	Yes	
R10	O, I	**Other problems/anomalies**		
	I	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Yes	
	I	Were all necessary corrective actions performed for the reported data?	Yes	
	I	Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	Yes	

Table 2. Supporting Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Power Plant

Reviewer Name: Tamisha Palmer

LRC Date: 10/14/2025

Laboratory Job Number: 252401, 252402

Prep Batch Number(s): PB25091701

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S1	O, I	**Initial calibration (ICAL)**		
	I	Were response factors and/or relative response factors for each analyte within QC limits?	NA	
	I	Were percent RSDs or correlation coefficient criteria met?	Yes	
	I	Was the number of standards recommended in the method used for all analytes?	Yes	
	I	Were all points generated between the lowest and highest standard used to calculate the curve?	NA	
	I	Are ICAL data available for all instruments used?	Yes	
	I	Has the initial calibration curve been verified using an appropriate second source standard?	Yes	
S2	O, I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**		
	I	Was the CCV analyzed at the method-required frequency?	NA	
	I	Were percent differences for each analyte within the method-required QC limits?	NA	
	I	Was the ICAL curve verified for each analyte?	NA	
	I	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	NA	
S3	O	**Mass spectral tuning:**		
	I	Was the appropriate compound for the method used for tuning?	NA	
	I	Were ion abundance data within the method-required QC limits?	NA	
S4	O	**Internal standards (IS):**		
	I	Were IS area counts and retention times within the method-required QC limits?	NA	
S5	O, I	**Raw data (NELAC section 1 appendix A glossary, and section 5.)**		
	I	Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	Yes	
	I	Were data associated with manual integrations flagged on the raw data?	NA	

Radium Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S6	O	**Dual column confirmation**		
	I	Did dual column confirmation results meet the method-required QC?	NA	
S7	O	**Tentatively identified compounds (TICs):**		
	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?	NA	
S8	I	**Interference Check Sample (ICS) results:**		
	I	Were percent recoveries within method QC limits?	NA	
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**		
	I	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	NA	
S10	O, I	**Method detection limit (MDL) studies**		
	I	Was a MDL study performed for each reported analyte?	Yes	
	I	Is the MDL either adjusted or supported by the analysis of DCSs?	Yes	
S11	O, I	**Proficiency test reports:**		
	I	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	Yes	
S12	O, I	**Standards documentation**		
	I	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Yes	
S13	O, I	**Compound/analyte identification procedures**		
	I	Are the procedures for compound/analyte identification documented?	Yes	
S14	O, I	**Demonstration of analyst competency (DOC)**		
	I	Was DOC conducted consistent with NELAC Chapter 5C?	Yes	
	I	Is documentation of the analyst's competency up-to-date and on file?	Yes	
S15	O, I	**Verification/validation documentation for methods (NELAC Chap 5n 5)**		
	I	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Yes	
S16	O, I	**Laboratory standard operating procedures (SOPs):**		
	I	Are laboratory SOPs current and on file for each method performed?	Yes	

Table 3. Exception Reports.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Power Plant

Reviewer Name: Tamisha Palmer

LRC Date: 10/14/2025

Laboratory Job Number: 252401, 252402

Prep Batch Number(s): PB25091701

Exception Report No.	Description
ER1	RPD for MS/MSD was outside of the criteria of 25%

[1] Items identified by the letter "R" must be available as a hard copy or as a .pdf file. Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
[2] O - organic analyses; I - inorganic analyses (including general chemistry constituents, when applicable).
[3] NA - Not applicable; NR - Not reviewed.
[4] Exception Report identification number; an Exception Report should be completed for an item if the result is "No" or "NR."

Municipal Solid Waste Laboratory Review Checklist

This data package consists of:

- [x] This signature page, and the laboratory review checklist consisting of Table 1, Reportable Data (which includes the reportable data identified on this page), Table 2, Supporting Data, and Table 3, Exception Reports.
- [x] R1 Field chain-of-custody documentation
- [x] R2 Sample identification cross-reference
- [x] R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - (a) Items specified in NELAC Chapter 5 for reporting results, e.g., Section 5.5.10 in 2003 NELAC Standard
  - (b) Dilution factors
  - (c) Preparation methods
  - (d) Cleanup methods
  - (e) If required for the project, tentatively identified compounds (TICs)
- [x] R4 Surrogate recovery data including:
  - (a) Calculated recovery (%R)
  - (b) The laboratory's surrogate QC limits
- [x] R5 Test reports/summary forms for blank samples
- [x] R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - (a) LCS spiking amounts
  - (b) Calculated %R for each analyte
  - (c) The laboratory's LCS QC limits
- [x] R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - (a) Samples associated with the MS/MSD clearly identified
  - (b) MS/MSD spiking amounts
  - (c) Concentration of each MS/MSD analyte measured in the parent and spiked samples
  - (d) Calculated %Rs and relative percent differences (RPDs)
  - (e) The laboratory's MS/MSD QC limits
- [x] R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - (a) The amount of analyte measured in the duplicate
  - (b) The calculated RPD
  - (c) The laboratory's QC limits for analytical duplicates
- [x] R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix
- [x] R10 Other problems or anomalies
- [x] The Exception Report for every item for which the result is "No" or "NR" (Not Reviewed)

Release Statement: I am responsible for the release of this laboratory data package. This data package as been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: (●) This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Kelsey Huff		Chemist	10/09/2025
Name (printed)	Signature	Official Title	Date

Mercury Laboratory Review Checklist

Table 1. Reportable Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey

Reviewer Name: Kelsey Huff

LRC Date: 10/09/2025

Laboratory Job Number: 252402

Prep Batch Number(s): PB25100305, PB25100306, PB25100307, PB25100606

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
R1	O, I	**Chain-of-custody (COC)**		
	I	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	Yes	
	I	Were all departures from standard conditions described in an exception report?	Yes	
R2	O, I	**Sample and quality control (QC) identification**		
	I	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Yes	
	I	Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Yes	
R3	O, I	**Test reports**		
	I	Were all samples prepared and analyzed within holding times?	Yes	
	I	Other than those results < MQL, were all other raw values bracketed by calibration standards?	Yes	
	I	Were calculations checked by a peer or supervisor?	Yes	
	I	Were all analyte identifications checked by a peer or supervisor?	Yes	
	I	Were sample quantitation limits reported for all analytes not detected?	Yes	
	I	Were all results for soil and sediment samples reported on a dry weight basis?	NA	
	I	Was % moisture (or solids) reported for all soil and sediment samples?	NA	
	I	If required for the project, TICs reported?	NA	
R4	O	**Surrogate recovery data**		
	I	Were surrogates added prior to extraction?	NA	
	I	Were surrogate percent recoveries in all samples within the laboratory QC limits?	NA	
R5	O, I	**Test reports/summary forms for blank samples**		
	I	Were appropriate type(s) of blanks analyzed?	Yes	
	I	Were blanks analyzed at the appropriate frequency?	Yes	

Mercury Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
	I	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Yes	
	I	Were blank concentrations < MQL?	Yes	
R6	O, I	**Laboratory control samples (LCS):**		
	I	Were all COCs included in the LCS?	Yes	
	I	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Yes	
	I	Were LCSs analyzed at the required frequency?	Yes	
	I	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	Yes	
	I	Was the LCSD RPD within QC limits?	Yes	
R7	O, I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**		
	I	Were the project/method specified analytes included in the MS and MSD?	Yes	
	I	Were MS/MSD analyzed at the appropriate frequency?	Yes	
	I	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Were MS/MSD RPDs within laboratory QC limits?	Yes	
R8	O, I	**Analytical duplicate data**		
	I	Were appropriate analytical duplicates analyzed for each matrix?	NA	
	I	Were analytical duplicates analyzed at the appropriate frequency?	NA	
	I	Were RPDs or relative standard deviations within the laboratory QC limits?	NA	
R9	O, I	**Method quantitation limits (MQLs):**		
	I	Are the MQLs for each method analyte included in the laboratory data package?	Yes	
	I	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Yes	
	I	Are unadjusted MQLs included in the laboratory data package?	Yes	
R10	O, I	**Other problems/anomalies**		
	I	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Yes	
	I	Were all necessary corrective actions performed for the reported data?	Yes	
	I	Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	Yes	

Mercury Laboratory Review Checklist

Table 2. Supporting Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey

Reviewer Name: Kelsey Huff

LRC Date: 10/09/2025

Laboratory Job Number: 252402

Prep Batch Number(s): PB25100305, PB25100306, PB25100307, PB25100606

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S1	O, I	**Initial calibration (ICAL)**		
	I	Were response factors and/or relative response factors for each analyte within QC limits?	NA	
	I	Were percent RSDs or correlation coefficient criteria met?	Yes	
	I	Was the number of standards recommended in the method used for all analytes?	Yes	
	I	Were all points generated between the lowest and highest standard used to calculate the curve?	Yes	
	I	Are ICAL data available for all instruments used?	Yes	
	I	Has the initial calibration curve been verified using an appropriate second source standard?	Yes	
S2	O, I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**		
	I	Was the CCV analyzed at the method-required frequency?	Yes	
	I	Were percent differences for each analyte within the method-required QC limits?	Yes	
	I	Was the ICAL curve verified for each analyte?	Yes	
	I	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	No	ER1
S3	O	**Mass spectral tuning:**		
	I	Was the appropriate compound for the method used for tuning?	NA	
	I	Were ion abundance data within the method-required QC limits?	NA	
S4	O	**Internal standards (IS):**		
	I	Were IS area counts and retention times within the method-required QC limits?	NA	
S5	O, I	**Raw data (NELAC section 1 appendix A glossary, and section 5.)**		
	I	Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	Yes	
	I	Were data associated with manual integrations flagged on the raw data?	NA	

Mercury Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S6	O	**Dual column confirmation**		
	I	Did dual column confirmation results meet the method-required QC?	NA	
S7	O	**Tentatively identified compounds (TICs):**		
	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?	NA	
S8	I	**Interference Check Sample (ICS) results:**		
	I	Were percent recoveries within method QC limits?	NA	
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**		
	I	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	NA	
S10	O, I	**Method detection limit (MDL) studies**		
	I	Was a MDL study performed for each reported analyte?	Yes	
	I	Is the MDL either adjusted or supported by the analysis of DCSs?	Yes	
S11	O, I	**Proficiency test reports:**		
	I	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	Yes	
S12	O, I	**Standards documentation**		
	I	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Yes	
S13	O, I	**Compound/analyte identification procedures**		
	I	Are the procedures for compound/analyte identification documented?	Yes	
S14	O, I	**Demonstration of analyst competency (DOC)**		
	I	Was DOC conducted consistent with NELAC Chapter 5C?	Yes	
	I	Is documentation of the analyst's competency up-to-date and on file?	Yes	
S15	O, I	**Verification/validation documentation for methods (NELAC Chap 5n 5)**		
	I	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Yes	
S16	O, I	**Laboratory standard operating procedures (SOPs):**		
	I	Are laboratory SOPs current and on file for each method performed?	Yes	

Table 3. Exception Reports.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey

Reviewer Name: Kelsey Huff

LRC Date: 10/09/2025

Laboratory Job Number: 252402

Prep Batch Number(s): PB25100305, PB25100306, PB25100307, PB25100606

Exception Report No.	Description
ER1	CCB acceptance criteria is CCB<MQL.

[1] Items identified by the letter "R" must be available as a hard copy or as a .pdf file. Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

[2] O - organic analyses; I - inorganic analyses (including general chemistry constituents, when applicable).

[3] NA - Not applicable; NR - Not reviewed.

[4] Exception Report identification number; an Exception Report should be completed for an item if the result is "No" or "NR."

Municipal Solid Waste Laboratory Review Checklist

This data package consists of:

- [x] This signature page, and the laboratory review checklist consisting of Table 1, Reportable Data (which includes the reportable data identified on this page), Table 2, Supporting Data, and Table 3, Exception Reports.
- [x] R1 Field chain-of-custody documentation
- [x] R2 Sample identification cross-reference
- [x] R3 Test reports (analytical data sheets) for each environmental sample that includes:
  (a) Items specified in NELAC Chapter 5 for reporting results, e.g., Section 5.5.10 in 2003 NELAC Standard
  (b) Dilution factors
  (c) Preparation methods
  (d) Cleanup methods
  (e) If required for the project, tentatively identified compounds (TICs)
- [NA] R4 Surrogate recovery data including:
  (a) Calculated recovery (%R)
  (b) The laboratory's surrogate QC limits
- [x] R5 Test reports/summary forms for blank samples
- [x] R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  (a) LCS spiking amounts
  (b) Calculated %R for each analyte
  (c) The laboratory's LCS QC limits
- [x] R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  (a) Samples associated with the MS/MSD clearly identified
  (b) MS/MSD spiking amounts
  (c) Concentration of each MS/MSD analyte measured in the parent and spiked samples
  (d) Calculated %Rs and relative percent differences (RPDs)
  (e) The laboratory's MS/MSD QC limits
- [x] R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  (a) The amount of analyte measured in the duplicate
  (b) The calculated RPD
  (c) The laboratory's QC limits for analytical duplicates
- [x] R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix
- [x] R10 Other problems or anomalies
- [x] The Exception Report for every item for which the result is "No" or "NR" (Not Reviewed)

Release Statement: I am responsible for the release of this laboratory data package. This data package as been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: (●) This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Elizabeth Hoitink	Elizabeth L Hoitink Digitally signed by Elizabeth L Hoitink Date 2025.10.02 12:53:38 -04'00'	Chemist	10-02-2025
Name (printed)	Signature	Official Title	Date

ICP-MS Laboratory Review Checklist

Table 1. Reportable Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey CCR

Reviewer Name: Elizabeth Hoitink

LRC Date: 10-02-2025

Laboratory Job Number: 252402

Prep Batch Number(s): PB25091702, PB25091704, PB25091801, QC2509106, QC2509157, QC2509160, QC2509171

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
R1	O, I	**Chain-of-custody (COC)**		
	I	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	Yes	
	I	Were all departures from standard conditions described in an exception report?	Yes	
R2	O, I	**Sample and quality control (QC) identification**		
	I	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Yes	
	I	Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Yes	
R3	O, I	**Test reports**		
	I	Were all samples prepared and analyzed within holding times?	Yes	
	I	Other than those results < MQL, were all other raw values bracketed by calibration standards?	No	ER1
	I	Were calculations checked by a peer or supervisor?	Yes	
	I	Were all analyte identifications checked by a peer or supervisor?	Yes	
	I	Were sample quantitation limits reported for all analytes not detected?	Yes	
	I	Were all results for soil and sediment samples reported on a dry weight basis?	NA	
	I	Was % moisture (or solids) reported for all soil and sediment samples?	NA	
	I	If required for the project, TICs reported?	NA	
R4	O	**Surrogate recovery data**		
	I	Were surrogates added prior to extraction?	NA	
	I	Were surrogate percent recoveries in all samples within the laboratory QC limits?	NA	
R5	O, I	**Test reports/summary forms for blank samples**		
	I	Were appropriate type(s) of blanks analyzed?	Yes	
	I	Were blanks analyzed at the appropriate frequency?	Yes	

ICP-MS Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
	I	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Yes	
	I	Were blank concentrations < MQL?	Yes	
R6	O, I	**Laboratory control samples (LCS):**		
	I	Were all COCs included in the LCS?	Yes	
	I	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Yes	
	I	Were LCSs analyzed at the required frequency?	Yes	
	I	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	Yes	
	I	Was the LCSD RPD within QC limits?	Yes	
R7	O, I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**		
	I	Were the project/method specified analytes included in the MS and MSD?	Yes	
	I	Were MS/MSD analyzed at the appropriate frequency?	Yes	
	I	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	No	ER3
	I	Were MS/MSD RPDs within laboratory QC limits?	Yes	
R8	O, I	**Analytical duplicate data**		
	I	Were appropriate analytical duplicates analyzed for each matrix?	Yes	
	I	Were analytical duplicates analyzed at the appropriate frequency?	Yes	
	I	Were RPDs or relative standard deviations within the laboratory QC limits?	Yes	
R9	O, I	**Method quantitation limits (MQLs):**		
	I	Are the MQLs for each method analyte included in the laboratory data package?	Yes	
	I	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Yes	
	I	Are unadjusted MQLs included in the laboratory data package?	Yes	
R10	O, I	**Other problems/anomalies**		
	I	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Yes	
	I	Were all necessary corrective actions performed for the reported data?	Yes	
	I	Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	Yes	

ICP-MS Laboratory Review Checklist

Table 2. Supporting Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey CCR

Reviewer Name: Elizabeth Hoitink

LRC Date: 10-02-2025

Laboratory Job Number: 252402

Prep Batch Number(s): PB25091702, PB25091704, PB25091801, QC2509106, QC2509157, QC2509160, QC2509171

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S1	O, I	**Initial calibration (ICAL)**		
	I	Were response factors and/or relative response factors for each analyte within QC limits?	NA	
	I	Were percent RSDs or correlation coefficient criteria met?	Yes	
	I	Was the number of standards recommended in the method used for all analytes?	Yes	
	I	Were all points generated between the lowest and highest standard used to calculate the curve?	Yes	
	I	Are ICAL data available for all instruments used?	Yes	
	I	Has the initial calibration curve been verified using an appropriate second source standard?	Yes	
S2	O, I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**		
	I	Was the CCV analyzed at the method-required frequency?	Yes	
	I	Were percent differences for each analyte within the method-required QC limits?	Yes	
	I	Was the ICAL curve verified for each analyte?	Yes	
	I	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	No	ER2
S3	O	**Mass spectral tuning:**		
	I	Was the appropriate compound for the method used for tuning?	Yes	
	I	Were ion abundance data within the method-required QC limits?	Yes	
S4	O	**Internal standards (IS):**		
	I	Were IS area counts and retention times within the method-required QC limits?	Yes	
S5	O, I	**Raw data (NELAC section 1 appendix A glossary, and section 5.)**		
	I	Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	Yes	
	I	Were data associated with manual integrations flagged on the raw data?	NA	

ICP-MS Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S6	O	**Dual column confirmation**		
	I	Did dual column confirmation results meet the method-required QC?	NA	
S7	O	**Tentatively identified compounds (TICs):**		
	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?	NA	
S8	I	**Interference Check Sample (ICS) results:**		
	I	Were percent recoveries within method QC limits?	NA	
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**		
	I	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	NA	
S10	O, I	**Method detection limit (MDL) studies**		
	I	Was a MDL study performed for each reported analyte?	Yes	
	I	Is the MDL either adjusted or supported by the analysis of DCSs?	Yes	
S11	O, I	**Proficiency test reports:**		
	I	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	Yes	
S12	O, I	**Standards documentation**		
	I	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Yes	
S13	O, I	**Compound/analyte identification procedures**		
	I	Are the procedures for compound/analyte identification documented?	Yes	
S14	O, I	**Demonstration of analyst competency (DOC)**		
	I	Was DOC conducted consistent with NELAC Chapter 5C?	Yes	
	I	Is documentation of the analyst's competency up-to-date and on file?	Yes	
S15	O, I	**Verification/validation documentation for methods (NELAC Chap 5n 5)**		
	I	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Yes	
S16	O, I	**Laboratory standard operating procedures (SOPs):**		
	I	Are laboratory SOPs current and on file for each method performed?	Yes	

Table 3. Exception Reports.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey CCR

Reviewer Name: Elizabeth Hoitink

LRC Date: 10-02-2025

Laboratory Job Number: 252402

Prep Batch Number(s): PB25091702, PB25091704, PB25091801, QC2509106, QC2509157, QC2509160, QC2509171

Exception Report No.	Description
ER1	Linear Dynamic Range (LDR) study used to determine upper limit of analyte calibration.
ER2	CCB acceptance criteria is CCB<2.2*MDL.
ER3	252402-015 matrix spike failed Na. 252402-016 matrix spike failed Be, Na. 252402-016-01 matrix spike failed Be.

[1] Items identified by the letter "R" must be available as a hard copy or as a .pdf file. Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
[2] O - organic analyses; I - inorganic analyses (including general chemistry constituents, when applicable).
[3] NA - Not applicable; NR - Not reviewed.
[4] Exception Report identification number; an Exception Report should be completed for an item if the result is "No" or "NR."

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252381 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-31
Lab Number: 252381-001
Date Collected: 09/08/2025 12:31 EDT
Customer Description:
Preparation:
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.22	mg/L	2	0.10	0.02		JCF	09/19/2025 18:43	EPA 300.1 -1997, Rev. 1.0
Chloride	14.0	mg/L	2	0.06	0.02		JCF	09/19/2025 18:43	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.10	mg/L	2	0.06	0.02		JCF	09/19/2025 18:43	EPA 300.1 -1997, Rev. 1.0
Sulfate	69.5	mg/L	2	0.60	0.04		JCF	09/19/2025 18:43	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	260	mg/L	1	50	20		BLB	09/15/2025 07:06	SM 2540C-2020

Customer Sample ID: AD-30
Lab Number: 252381-002
Date Collected: 09/09/2025 09:44 EDT
Customer Description:
Preparation:
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.23	mg/L	2	0.10	0.02		JCF	09/19/2025 19:06	EPA 300.1 -1997, Rev. 1.0
Chloride	16.8	mg/L	2	0.06	0.02		JCF	09/19/2025 19:06	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.04	mg/L	2	0.06	0.02	J1	JCF	09/19/2025 19:06	EPA 300.1 -1997, Rev. 1.0
Sulfate	91.1	mg/L	2	0.60	0.04		JCF	09/19/2025 19:06	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	J8, U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	210	mg/L	1	50	20		BLB	09/15/2025 07:06	SM 2540C-2020

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252381 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-28
Lab Number: 252381-003
Date Collected: 09/09/2025 10:29 EDT
Customer Description:
Preparation:
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.09	mg/L	2	0.10	0.02	J1	JCF	09/19/2025 19:29	EPA 300.1 -1997, Rev. 1.0
Chloride	4.79	mg/L	2	0.06	0.02		JCF	09/19/2025 19:29	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.62	mg/L	2	0.06	0.02		JCF	09/19/2025 19:29	EPA 300.1 -1997, Rev. 1.0
Sulfate	22.7	mg/L	2	0.60	0.04		JCF	09/19/2025 19:29	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	100	mg/L	1	50	20		BLB	09/15/2025 07:06	SM 2540C-2020

Customer Sample ID: AD-27
Lab Number: 252381-004
Date Collected: 09/10/2025 09:25 EDT
Customer Description:
Preparation:
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.36	mg/L	2	0.10	0.02		JCF	09/19/2025 19:51	EPA 300.1 -1997, Rev. 1.0
Chloride	14.0	mg/L	2	0.06	0.02		JCF	09/19/2025 19:51	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.24	mg/L	2	0.06	0.02		JCF	09/19/2025 19:51	EPA 300.1 -1997, Rev. 1.0
Sulfate	60.5	mg/L	2	0.60	0.04		JCF	09/19/2025 19:51	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	210	mg/L	1	50	20		BLB	09/15/2025 06:39	SM 2540C-2020

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252381 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-32
Customer Description:
Lab Number: 252381-005
Preparation:
Date Collected: 09/08/2025 11:36 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.29	mg/L	2	0.10	0.02		JCF	09/19/2025 20:37	EPA 300.1 -1997, Rev. 1.0
Chloride	10.1	mg/L	2	0.06	0.02		JCF	09/19/2025 20:37	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.34	mg/L	2	0.06	0.02		JCF	09/19/2025 20:37	EPA 300.1 -1997, Rev. 1.0
Sulfate	53.0	mg/L	2	0.60	0.04		JCF	09/19/2025 20:37	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	7	mg/L	1	20	5	J8, J1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	170	mg/L	1	50	20		BLB	09/15/2025 06:39	SM 2540C-2020

Customer Sample ID: AD-33
Customer Description:
Lab Number: 252381-006
Preparation:
Date Collected: 09/08/2025 12:23 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.72	mg/L	2	0.10	0.02		JCF	09/19/2025 21:00	EPA 300.1 -1997, Rev. 1.0
Chloride	11.3	mg/L	2	0.06	0.02		JCF	09/19/2025 21:00	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.31	mg/L	2	0.06	0.02		JCF	09/19/2025 21:00	EPA 300.1 -1997, Rev. 1.0
Sulfate	49.1	mg/L	2	0.60	0.04		JCF	09/19/2025 21:00	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	170	mg/L	1	50	20		BLB	09/15/2025 06:45	SM 2540C-2020

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Job ID: 252381 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-34
Lab Number: 252381-007
Date Collected: 09/09/2025 09:14 EDT
Customer Description:
Preparation:
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.16	mg/L	5	0.25	0.05	J1	JCF	09/19/2025 22:53	EPA 300.1 -1997, Rev. 1.0
Chloride	7.54	mg/L	5	0.15	0.05		JCF	09/19/2025 22:53	EPA 300.1 -1997, Rev. 1.0
Fluoride	1.17	mg/L	5	0.15	0.05		JCF	09/19/2025 22:53	EPA 300.1 -1997, Rev. 1.0
Sulfate	955	mg/L	50	15	1		JCF	09/19/2025 22:31	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	1670	mg/L	1	50	20		BLB	09/15/2025 07:06	SM 2540C-2020

Customer Sample ID: AD-36
Lab Number: 252381-008
Date Collected: 09/08/2025 09:57 EDT
Customer Description:
Preparation:
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.92	mg/L	2	0.10	0.02		JCF	09/19/2025 21:22	EPA 300.1 -1997, Rev. 1.0
Chloride	18.8	mg/L	2	0.06	0.02		JCF	09/19/2025 21:22	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.12	mg/L	2	0.06	0.02		JCF	09/19/2025 21:22	EPA 300.1 -1997, Rev. 1.0
Sulfate	4.99	mg/L	2	0.60	0.04		JCF	09/19/2025 21:22	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	J8, U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	60	mg/L	1	50	20		BLB	09/15/2025 06:45	SM 2540C-2020

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252381 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: Duplicate
Lab Number: 252381-009
Date Collected: 09/09/2025 13:00 EDT

Customer Description:
Preparation:
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

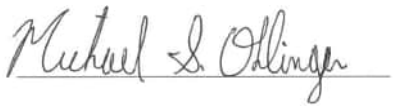
Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.28	mg/L	2	0.10	0.02		JCF	09/19/2025 21:45	EPA 300.1 -1997, Rev. 1.0
Chloride	24.8	mg/L	2	0.06	0.02		JCF	09/19/2025 21:45	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.37	mg/L	2	0.06	0.02		JCF	09/19/2025 21:45	EPA 300.1 -1997, Rev. 1.0
Sulfate	41.5	mg/L	2	0.60	0.04		JCF	09/19/2025 21:45	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	51	mg/L	1	20	5		MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	220	mg/L	1	50	20		BLB	09/15/2025 07:12	SM 2540C-2020

Report Verification

This report and the above data have been confirmed by the following analyst.



Michael Ohlinger, Chemist
Email: msohlinger@aep.com
Phone: 614-836-4184
Audinet: 8-210-4184

THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF THE LABORATORY. ALL TEST RESULTS MEET ALL OF THE REQUIREMENTS OF THE ACCREDITING AUTHORITY, UNLESS OTHERWISE NOTED. ALL TIMES LISTED ARE IN THE EASTERN TIME ZONE.

Data Qualifer Legend

U1 - Not detected at or below method detection limit (MDL).
J1 - Concentration estimated. Analyte was detected between the method detection limit and the reporting limit.
J8 - Concentration estimated. Per the method, this Low Alkalinity sample (< 20 mg/L) was titrated to a fixed pH 4.4.

Chain of Custody Record

Program: Coal Combustion Residuals (CCR)

Dolan Chemical Laboratory (DCL)
4001 Bixby Road
Groveport, Ohio 43125
Contacts: Michael Ohlinger (614-836-4184)
Dave Conover (614-836-4219)

Project Name: Pirkey PP CCR
Contact Name: Pryce Warren
Contact Phone: 325-310-6668
Sampler(s): Matt Hamilton Kenny McDonald

Analysis Turnaround Time (in Calendar Days)
◉ Routine (28 days for Monitoring Wells)

Site Contact: | Date:

For Lab Use Only:
COC/Order #: 252381

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sampler(s) initials	Mercury (250 mL bottle, pH<2, HNO3)	Dissolved Mercury (Field-filter 250 mL bottle, then pH<2, HNO3)	F, Cl, SO4, Br, TDS, Alkalinity (1 L bottle, Cool, 0-6C)	Ra-226, Ra-228 (Three (six every 10th*) 1 L bottles, pH<2, HNO3)				Sample Specific Notes:
AD-27	9/10/2025	825	G	GW	1				X					
AD-28	9/9/2025	929	G	GW	1				X					
AD-30	9/9/2025	844	G	GW	1				X					
AD-31	9/8/2025	1131	G	GW	1				X					
AD-32	9/8/2025	1036	G	GW	1				X					
AD-33	9/8/2025	1123	G	GW	1				X					
AD-34	9/9/2025	814	G	GW	1				X					
AD-36	9/9/2025	857	G	GW	1				X					
Duplicate	9/8/2025	832	G	GW	1				X					Collection time 1200
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____; F= filter in field							4	F4	1	4				

** Six 1L Bottles must be collected for Radium for every 10th sample.*

Special Instructions/QC Requirements & Comments:

TG-32 needed

Relinquished by: Matt Hamilton	Company: Eagle	Date/Time: 9-11-25 1400	Received by:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Date/Time: 9/12/25 0940

WATER & WASTE SAMPLE RECEIPT FORM

Form SOP-7102 Sample Receipt Form Rev 10, 01/03/25

Package Type

(Cooler) Box Bag Envelope

Delivery Type

UPS (FedEX) USPS

Other _____

Plant/Customer Pirkey **Total # of Containers RECEIVED in Job:** 9

Opened By EGM

Date/Time 9/12/25 0940

Were all required temperatures, per BN-water-900, T≤6°C *w/o sample freezing*? (Y) / N or N/A

Initial/Date: EGM 9/12/25 or (ice) / no ice

If No, specify each deviation(s) on back of form. (IR Gun Ser# 240093386, *Expir.* 01/31/2026)

Was container in good condition? (Y) / N Comments NA

Was Chain of Custody received? (Y) / N Comments NA

Requested turnaround: Routine If **RUSH**, who was notified? NA

pH (15 min) Cr^{+6} (pres) (24 hr) NO_2 or NO_3 (48 hr) *ortho*-PO_4 (48 hr) Hg-diss (pres) (48 hr)

Were pH requirements met for required samples, per BN-water-900? (Y) N or N/A

Initial/Date: EGM 9/12/25

***pH paper:* mfr LabRat ,PN LRS-4801 ,LOT# X000RWDG21 ,EXPIR DATE 09/30/2026

*** Note changes to pH paper in comments below***

Was Add'l Preservative needed? Y / (N) If Yes: By whom & when: NA (See Prep Book)

(Dissolved) Is sample filtration requested? Y / (N) Comments NA (See Prep Book)

Was COC filled out properly? Y / (N) Comments The Duplicate sample was listed w/ the incorrect time on the COC.

Were samples labeled properly? (Y) / N Comments

Were correct containers used? (Y) / N Comments /NA

Was the customer contacted? If Yes: Person Contacted: Pryce Warren

Lab ID# 252381 Initial & Date & Time : EGM 9/12/25 1004

Logged by EGM Comments: Duplicate bottle was labeled w/ a different time than COC.

(Record Test Count on back of form)

Total # of Containers LISTED on COC: 9

WATER & WASTE SAMPLE RECEIPT FORM (CONT)

Form SOP-7102 Sample Receipt Form Rev 10, 01/03/25

REMINDER: Document the pertinent sample integrity information and deviations in sample receipt (as noted above) in the Sample or Job "Comments" field in the LIMS. **Comments below**:
i.e. Mark "LF" if needs Lab filtered, Temperature or Preservative deviation, Preserved upon arrival , etc.

JOB # : 252381 **Initial/ Date:** EGW 9/12/25 **Peer Review Initial/ Date:** AMR 9.12.25

Login Test Count from COC	LIMS Sample ID (or COC Sample Name)	Comments /Nonconformities	Peer Review Test Count from COC
9	252381 -001		9
	-002		
	-003		
	-004		
	-005		
	-006		
	-007		
	-008		
	-009	Incorrect time	

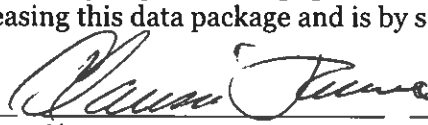
Municipal Solid Waste Laboratory Review Checklist

This data package consists of:

- [x] This signature page, and the laboratory review checklist consisting of Table 1, Reportable Data (which includes the reportable data identified on this page), Table 2, Supporting Data, and Table 3, Exception Reports.
- [x] R1 Field chain-of-custody documentation
- [x] R2 Sample identification cross-reference
- [x] R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - (a) Items specified in NELAC Chapter 5 for reporting results, e.g., Section 5.5.10 in 2003 NELAC Standard
  - (b) Dilution factors
  - (c) Preparation methods
  - (d) Cleanup methods
  - (e) If required for the project, tentatively identified compounds (TICs)
- [x] R4 Surrogate recovery data including:
  - (a) Calculated recovery (%R)
  - (b) The laboratory's surrogate QC limits
- [x] R5 Test reports/summary forms for blank samples
- [x] R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - (a) LCS spiking amounts
  - (b) Calculated %R for each analyte
  - (c) The laboratory's LCS QC limits
- [x] R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - (a) Samples associated with the MS/MSD clearly identified
  - (b) MS/MSD spiking amounts
  - (c) Concentration of each MS/MSD analyte measured in the parent and spiked samples
  - (d) Calculated %Rs and relative percent differences (RPDs)
  - (e) The laboratory's MS/MSD QC limits
- [x] R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - (a) The amount of analyte measured in the duplicate
  - (b) The calculated RPD
  - (c) The laboratory's QC limits for analytical duplicates
- [x] R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix
- [x] R10 Other problems or anomalies
- [x] The Exception Report for every item for which the result is "No" or "NR" (Not Reviewed)

Release Statement: I am responsible for the release of this laboratory data package. This data package as been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: (●) This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Clarissa Jameson		Chemical Lab Tech Principle	10/3/2025
Name (printed)	Signature	Official Title	Date

Ion Chromatography Laboratory Review Checklist

Table 1. Reportable Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey PP CCR

Reviewer Name: Clarissa Jameson

LRC Date: 10/3/2025

Laboratory Job Number: 252381

Prep Batch Number(s): QC2509119

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
R1	O, I	**Chain-of-custody (COC)**		
	I	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	Yes	
	I	Were all departures from standard conditions described in an exception report?	Yes	
R2	O, I	**Sample and quality control (QC) identification**		
	I	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Yes	
	I	Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Yes	
R3	O, I	**Test reports**		
	I	Were all samples prepared and analyzed within holding times?	Yes	
	I	Other than those results < MQL, were all other raw values bracketed by calibration standards?	Yes	
	I	Were calculations checked by a peer or supervisor?	Yes	
	I	Were all analyte identifications checked by a peer or supervisor?	Yes	
	I	Were sample quantitation limits reported for all analytes not detected?	Yes	
	I	Were all results for soil and sediment samples reported on a dry weight basis?	NA	
	I	Was % moisture (or solids) reported for all soil and sediment samples?	NA	
	I	If required for the project, TICs reported?	NA	
R4	O	**Surrogate recovery data**		
	I	Were surrogates added prior to extraction?	Yes	
	I	Were surrogate percent recoveries in all samples within the laboratory QC limits?	Yes	
R5	O, I	**Test reports/summary forms for blank samples**		
	I	Were appropriate type(s) of blanks analyzed?	Yes	
	I	Were blanks analyzed at the appropriate frequency?	Yes	

Ion Chromatography Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
	I	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Yes	
	I	Were blank concentrations < MQL?	Yes	
R6	O, I	**Laboratory control samples (LCS):**		
	I	Were all COCs included in the LCS?	Yes	
	I	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Yes	
	I	Were LCSs analyzed at the required frequency?	Yes	
	I	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	Yes	
	I	Was the LCSD RPD within QC limits?	Yes	
R7	O, I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**		
	I	Were the project/method specified analytes included in the MS and MSD?	Yes	
	I	Were MS/MSD analyzed at the appropriate frequency?	Yes	
	I	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Were MS/MSD RPDs within laboratory QC limits?	Yes	
R8	O, I	**Analytical duplicate data**		
	I	Were appropriate analytical duplicates analyzed for each matrix?	Yes	
	I	Were analytical duplicates analyzed at the appropriate frequency?	Yes	
	I	Were RPDs or relative standard deviations within the laboratory QC limits?	Yes	
R9	O, I	**Method quantitation limits (MQLs):**		
	I	Are the MQLs for each method analyte included in the laboratory data package?	Yes	
	I	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Yes	
	I	Are unadjusted MQLs included in the laboratory data package?	Yes	
R10	O, I	**Other problems/anomalies**		
	I	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Yes	
	I	Were all necessary corrective actions performed for the reported data?	Yes	
	I	Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	Yes	

Table 2. Supporting Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey PP CCR

Reviewer Name: Clarissa Jameson

LRC Date: 10/3/2025

Laboratory Job Number: 252381

Prep Batch Number(s): QC2509119

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S1	O, I	**Initial calibration (ICAL)**		
	I	Were response factors and/or relative response factors for each analyte within QC limits?	NA	
	I	Were percent RSDs or correlation coefficient criteria met?	Yes	
	I	Was the number of standards recommended in the method used for all analytes?	Yes	
	I	Were all points generated between the lowest and highest standard used to calculate the curve?	Yes	
	I	Are ICAL data available for all instruments used?	Yes	
	I	Has the initial calibration curve been verified using an appropriate second source standard?	Yes	
S2	O, I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**		
	I	Was the CCV analyzed at the method-required frequency?	Yes	
	I	Were percent differences for each analyte within the method-required QC limits?	Yes	
	I	Was the ICAL curve verified for each analyte?	Yes	
	I	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	No	ER1
S3	O	**Mass spectral tuning:**		
	I	Was the appropriate compound for the method used for tuning?	NA	
	I	Were ion abundance data within the method-required QC limits?	NA	
S4	O	**Internal standards (IS):**		
	I	Were IS area counts and retention times within the method-required QC limits?	NA	
S5	O, I	**Raw data (NELAC section 1 appendix A glossary, and section 5.)**		
	I	Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	Yes	
	I	Were data associated with manual integrations flagged on the raw data?	NA	

Ion Chromatography Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S6	O	**Dual column confirmation**		
	I	Did dual column confirmation results meet the method-required QC?	NA	
S7	O	**Tentatively identified compounds (TICs):**		
	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?	NA	
S8	I	**Interference Check Sample (ICS) results:**		
	I	Were percent recoveries within method QC limits?	NA	
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**		
	I	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	NA	
S10	O, I	**Method detection limit (MDL) studies**		
	I	Was a MDL study performed for each reported analyte?	Yes	
	I	Is the MDL either adjusted or supported by the analysis of DCSs?	Yes	
S11	O, I	**Proficiency test reports:**		
	I	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	Yes	
S12	O, I	**Standards documentation**		
	I	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Yes	
S13	O, I	**Compound/analyte identification procedures**		
	I	Are the procedures for compound/analyte identification documented?	Yes	
S14	O, I	**Demonstration of analyst competency (DOC)**		
	I	Was DOC conducted consistent with NELAC Chapter 5C?	Yes	
	I	Is documentation of the analyst's competency up-to-date and on file?	Yes	
S15	O, I	**Verification/validation documentation for methods (NELAC Chap 5n 5)**		
	I	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Yes	
S16	O, I	**Laboratory standard operating procedures (SOPs):**		
	I	Are laboratory SOPs current and on file for each method performed?	Yes	

Table 3. Exception Reports.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey PP CCR

Reviewer Name: Clarissa Jameson

LRC Date: 10/3/2025

Laboratory Job Number: 252381

Prep Batch Number(s): QC2509119

Exception Report No.	Description
ER1	CCB acceptance criteria is CCB<MQL.

[1] Items identified by the letter "R" must be available as a hard copy or as a .pdf file. Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

[2] O - organic analyses; I - inorganic analyses (including general chemistry constituents, when applicable).

[3] NA - Not applicable; NR - Not reviewed.

[4] Exception Report identification number; an Exception Report should be completed for an item if the result is "No" or "NR."

Municipal Solid Waste Laboratory Review Checklist

This data package consists of:

- [x] This signature page, and the laboratory review checklist consisting of Table 1, Reportable Data (which includes the reportable data identified on this page), Table 2, Supporting Data, and Table 3, Exception Reports.
- [x] R1 Field chain-of-custody documentation
- [x] R2 Sample identification cross-reference
- [x] R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - (a) Items specified in NELAC Chapter 5 for reporting results, e.g., Section 5.5.10 in 2003 NELAC Standard
  - (b) Dilution factors
  - (c) Preparation methods
  - (d) Cleanup methods
  - (e) If required for the project, tentatively identified compounds (TICs)
- [NA] R4 Surrogate recovery data including:
  - (a) Calculated recovery (%R)
  - (b) The laboratory's surrogate QC limits
- [x] R5 Test reports/summary forms for blank samples
- [x] R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - (a) LCS spiking amounts
  - (b) Calculated %R for each analyte
  - (c) The laboratory's LCS QC limits
- [x] R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - (a) Samples associated with the MS/MSD clearly identified
  - (b) MS/MSD spiking amounts
  - (c) Concentration of each MS/MSD analyte measured in the parent and spiked samples
  - (d) Calculated %Rs and relative percent differences (RPDs)
  - (e) The laboratory's MS/MSD QC limits
- [x] R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - (a) The amount of analyte measured in the duplicate
  - (b) The calculated RPD
  - (c) The laboratory's QC limits for analytical duplicates
- [x] R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix
- [x] R10 Other problems or anomalies
- [x] The Exception Report for every item for which the result is "No" or "NR" (Not Reviewed)

Release Statement: I am responsible for the release of this laboratory data package. This data package as been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: (●) This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Sandra Williams	Sandra D. Williams	Chemist	09/22/2025
Name (printed)	Signature	Official Title	Date

TDS Laboratory Review Checklist

Table 1. Reportable Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Power Station

Reviewer Name: Sandra Williams

LRC Date: 09/22/2025

Laboratory Job Number: 252381

Prep Batch Number(s): QC2509103

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
R1	O, I	**Chain-of-custody (COC)**		
	I	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	Yes	
	I	Were all departures from standard conditions described in an exception report?	NA	
R2	O, I	**Sample and quality control (QC) identification**		
	I	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Yes	
	I	Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Yes	
R3	O, I	**Test reports**		
	I	Were all samples prepared and analyzed within holding times?	Yes	
	I	Other than those results < MQL, were all other raw values bracketed by calibration standards?	NA	
	I	Were calculations checked by a peer or supervisor?	Yes	
	I	Were all analyte identifications checked by a peer or supervisor?	Yes	
	I	Were sample quantitation limits reported for all analytes not detected?	Yes	
	I	Were all results for soil and sediment samples reported on a dry weight basis?	NA	
	I	Was % moisture (or solids) reported for all soil and sediment samples?	NA	
	I	If required for the project, TICs reported?	NA	
R4	O	**Surrogate recovery data**		
	I	Were surrogates added prior to extraction?	NA	
	I	Were surrogate percent recoveries in all samples within the laboratory QC limits?	NA	
R5	O, I	**Test reports/summary forms for blank samples**		
	I	Were appropriate type(s) of blanks analyzed?	Yes	
	I	Were blanks analyzed at the appropriate frequency?	Yes	

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
	I	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Yes	
	I	Were blank concentrations < MQL?	Yes	
R6	O, I	**Laboratory control samples (LCS):**		
	I	Were all COCs included in the LCS?	Yes	
	I	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Yes	
	I	Were LCSs analyzed at the required frequency?	Yes	
	I	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	Yes	
	I	Was the LCSD RPD within QC limits?	Yes	
R7	O, I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**		
	I	Were the project/method specified analytes included in the MS and MSD?	NA	
	I	Were MS/MSD analyzed at the appropriate frequency?	NA	
	I	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	NA	
	I	Were MS/MSD RPDs within laboratory QC limits?	NA	
R8	O, I	**Analytical duplicate data**		
	I	Were appropriate analytical duplicates analyzed for each matrix?	Yes	
	I	Were analytical duplicates analyzed at the appropriate frequency?	Yes	
	I	Were RPDs or relative standard deviations within the laboratory QC limits?	Yes	
R9	O, I	**Method quantitation limits (MQLs):**		
	I	Are the MQLs for each method analyte included in the laboratory data package?	Yes	
	I	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Yes	
	I	Are unadjusted MQLs included in the laboratory data package?	Yes	
R10	O, I	**Other problems/anomalies**		
	I	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Yes	
	I	Were all necessary corrective actions performed for the reported data?	Yes	
	I	Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	Yes	

Table 2. Supporting Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Power Station

Reviewer Name: Sandra Williams

LRC Date: 09/22/2025

Laboratory Job Number: 252381

Prep Batch Number(s): QC2509103

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S1	O, I	**Initial calibration (ICAL)**		
	I	Were response factors and/or relative response factors for each analyte within QC limits?	NA	
	I	Were percent RSDs or correlation coefficient criteria met?	NA	
	I	Was the number of standards recommended in the method used for all analytes?	NA	
	I	Were all points generated between the lowest and highest standard used to calculate the curve?	NA	
	I	Are ICAL data available for all instruments used?	NA	
	I	Has the initial calibration curve been verified using an appropriate second source standard?	NA	
S2	O, I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**		
	I	Was the CCV analyzed at the method-required frequency?	NA	
	I	Were percent differences for each analyte within the method-required QC limits?	NA	
	I	Was the ICAL curve verified for each analyte?	NA	
	I	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	NA	
S3	O	**Mass spectral tuning:**		
	I	Was the appropriate compound for the method used for tuning?	NA	
	I	Were ion abundance data within the method-required QC limits?	NA	
S4	O	**Internal standards (IS):**		
	I	Were IS area counts and retention times within the method-required QC limits?	NA	
S5	O, I	**Raw data (NELAC section 1 appendix A glossary, and section 5.)**		
	I	Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	Yes	
	I	Were data associated with manual integrations flagged on the raw data?	NA	

TDS Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S6	O	**Dual column confirmation**		
	I	Did dual column confirmation results meet the method-required QC?	NA	
S7	O	**Tentatively identified compounds (TICs):**		
	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?	NA	
S8	I	**Interference Check Sample (ICS) results:**		
	I	Were percent recoveries within method QC limits?	NA	
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**		
	I	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	NA	
S10	O, I	**Method detection limit (MDL) studies**		
	I	Was a MDL study performed for each reported analyte?	Yes	
	I	Is the MDL either adjusted or supported by the analysis of DCSs?	Yes	
S11	O, I	**Proficiency test reports:**		
	I	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	Yes	
S12	O, I	**Standards documentation**		
	I	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Yes	
S13	O, I	**Compound/analyte identification procedures**		
	I	Are the procedures for compound/analyte identification documented?	Yes	
S14	O, I	**Demonstration of analyst competency (DOC)**		
	I	Was DOC conducted consistent with NELAC Chapter 5C?	Yes	
	I	Is documentation of the analyst's competency up-to-date and on file?	Yes	
S15	O, I	**Verification/validation documentation for methods (NELAC Chap 5n 5)**		
	I	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Yes	
S16	O, I	**Laboratory standard operating procedures (SOPs):**		
	I	Are laboratory SOPs current and on file for each method performed?	Yes	

Table 3. Exception Reports.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Power Station

Reviewer Name: Sandra Williams

LRC Date: 09/22/2025

Laboratory Job Number: 252381

Prep Batch Number(s): QC2509103

Exception Report No.	Description

[1] Items identified by the letter "R" must be available as a hard copy or as a .pdf file. Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

[2] O - organic analyses; I - inorganic analyses (including general chemistry constituents, when applicable).

[3] NA - Not applicable; NR - Not reviewed.

[4] Exception Report identification number; an Exception Report should be completed for an item if the result is "No" or "NR."

Municipal Solid Waste Laboratory Review Checklist

This data package consists of:

- [x] This signature page, and the laboratory review checklist consisting of Table 1, Reportable Data (which includes the reportable data identified on this page), Table 2, Supporting Data, and Table 3, Exception Reports.
- [x] R1 Field chain-of-custody documentation
- [x] R2 Sample identification cross-reference
- [x] R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - (a) Items specified in NELAC Chapter 5 for reporting results, e.g., Section 5.5.10 in 2003 NELAC Standard
  - (b) Dilution factors
  - (c) Preparation methods
  - (d) Cleanup methods
  - (e) If required for the project, tentatively identified compounds (TICs)
- [NA] R4 Surrogate recovery data including:
  - (a) Calculated recovery (%R)
  - (b) The laboratory's surrogate QC limits
- [x] R5 Test reports/summary forms for blank samples
- [x] R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - (a) LCS spiking amounts
  - (b) Calculated %R for each analyte
  - (c) The laboratory's LCS QC limits
- [x] R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - (a) Samples associated with the MS/MSD clearly identified
  - (b) MS/MSD spiking amounts
  - (c) Concentration of each MS/MSD analyte measured in the parent and spiked samples
  - (d) Calculated %Rs and relative percent differences (RPDs)
  - (e) The laboratory's MS/MSD QC limits
- [x] R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - (a) The amount of analyte measured in the duplicate
  - (b) The calculated RPD
  - (c) The laboratory's QC limits for analytical duplicates
- [x] R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix
- [x] R10 Other problems or anomalies
- [x] The Exception Report for every item for which the result is "No" or "NR" (Not Reviewed)

Release Statement: I am responsible for the release of this laboratory data package. This data package as been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: (●) This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Michael Ohlinger	Michael Ohlinger	Chemist	09/17/25
Name (printed)	Signature	Official Title	Date

Alkalinity Laboratory Review Checklist

Table 1. Reportable Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Plant

Reviewer Name: Michael Ohlinger

LRC Date: 09/17/25

Laboratory Job Number: 252380, 252381, 252382

Prep Batch Number(s): QC2509094

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
R1	O, I	**Chain-of-custody (COC)**		
	I	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	Yes	
	I	Were all departures from standard conditions described in an exception report?	Yes	
R2	O, I	**Sample and quality control (QC) identification**		
	I	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Yes	
	I	Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Yes	
R3	O, I	**Test reports**		
	I	Were all samples prepared and analyzed within holding times?	Yes	
	I	Other than those results < MQL, were all other raw values bracketed by calibration standards?	NA	
	I	Were calculations checked by a peer or supervisor?	Yes	
	I	Were all analyte identifications checked by a peer or supervisor?	Yes	
	I	Were sample quantitation limits reported for all analytes not detected?	Yes	
	I	Were all results for soil and sediment samples reported on a dry weight basis?	NA	
	I	Was % moisture (or solids) reported for all soil and sediment samples?	NA	
	I	If required for the project, TICs reported?	NA	
R4	O	**Surrogate recovery data**		
	I	Were surrogates added prior to extraction?	NA	
	I	Were surrogate percent recoveries in all samples within the laboratory QC limits?	NA	
R5	O, I	**Test reports/summary forms for blank samples**		
	I	Were appropriate type(s) of blanks analyzed?	Yes	
	I	Were blanks analyzed at the appropriate frequency?	Yes	

Alkalinity Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
	I	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Yes	
	I	Were blank concentrations < MQL?	Yes	
R6	O, I	**Laboratory control samples (LCS):**		
	I	Were all COCs included in the LCS?	Yes	
	I	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Yes	
	I	Were LCSs analyzed at the required frequency?	Yes	
	I	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	Yes	
	I	Was the LCSD RPD within QC limits?	Yes	
R7	O, I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**		
	I	Were the project/method specified analytes included in the MS and MSD?	NA	
	I	Were MS/MSD analyzed at the appropriate frequency?	NA	
	I	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	NA	
	I	Were MS/MSD RPDs within laboratory QC limits?	NA	
R8	O, I	**Analytical duplicate data**		
	I	Were appropriate analytical duplicates analyzed for each matrix?	Yes	
	I	Were analytical duplicates analyzed at the appropriate frequency?	Yes	
	I	Were RPDs or relative standard deviations within the laboratory QC limits?	Yes	
R9	O, I	**Method quantitation limits (MQLs):**		
	I	Are the MQLs for each method analyte included in the laboratory data package?	Yes	
	I	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Yes	
	I	Are unadjusted MQLs included in the laboratory data package?	Yes	
R10	O, I	**Other problems/anomalies**		
	I	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Yes	
	I	Were all necessary corrective actions performed for the reported data?	Yes	
	I	Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	Yes	

Alkalinity Laboratory Review Checklist

Table 2. Supporting Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Plant

Reviewer Name: Michael Ohlinger

LRC Date: 09/17/25

Laboratory Job Number: 252380, 252381, 252382

Prep Batch Number(s): QC2509094

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S1	O, I	**Initial calibration (ICAL)**		
	I	Were response factors and/or relative response factors for each analyte within QC limits?	NA	
	I	Were percent RSDs or correlation coefficient criteria met?	NA	
	I	Was the number of standards recommended in the method used for all analytes?	NA	
	I	Were all points generated between the lowest and highest standard used to calculate the curve?	Yes	
	I	Are ICAL data available for all instruments used?	NA	
	I	Has the initial calibration curve been verified using an appropriate second source standard?	NA	
S2	O, I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**		
	I	Was the CCV analyzed at the method-required frequency?	Yes	
	I	Were percent differences for each analyte within the method-required QC limits?	Yes	
	I	Was the ICAL curve verified for each analyte?	Yes	
	I	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	No	ER1
S3	O	**Mass spectral tuning:**		
	I	Was the appropriate compound for the method used for tuning?	NA	
	I	Were ion abundance data within the method-required QC limits?	NA	
S4	O	**Internal standards (IS):**		
	I	Were IS area counts and retention times within the method-required QC limits?	NA	
S5	O, I	**Raw data (NELAC section 1 appendix A glossary, and section 5.)**		
	I	Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	Yes	
	I	Were data associated with manual integrations flagged on the raw data?	NA	

Alkalinity Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S6	O	**Dual column confirmation**		
	I	Did dual column confirmation results meet the method-required QC?	NA	
S7	O	**Tentatively identified compounds (TICs):**		
	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?	NA	
S8	I	**Interference Check Sample (ICS) results:**		
	I	Were percent recoveries within method QC limits?	NA	
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**		
	I	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	NA	
S10	O, I	**Method detection limit (MDL) studies**		
	I	Was a MDL study performed for each reported analyte?	Yes	
	I	Is the MDL either adjusted or supported by the analysis of DCSs?	Yes	
S11	O, I	**Proficiency test reports:**		
	I	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	Yes	
S12	O, I	**Standards documentation**		
	I	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Yes	
S13	O, I	**Compound/analyte identification procedures**		
	I	Are the procedures for compound/analyte identification documented?	Yes	
S14	O, I	**Demonstration of analyst competency (DOC)**		
	I	Was DOC conducted consistent with NELAC Chapter 5C?	Yes	
	I	Is documentation of the analyst's competency up-to-date and on file?	Yes	
S15	O, I	**Verification/validation documentation for methods (NELAC Chap 5n 5)**		
	I	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Yes	
S16	O, I	**Laboratory standard operating procedures (SOPs):**		
	I	Are laboratory SOPs current and on file for each method performed?	Yes	

Table 3. Exception Reports.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Plant

Reviewer Name: Michael Ohlinger

LRC Date: 09/17/25

Laboratory Job Number: 252380, 252381, 252382

Prep Batch Number(s): QC2509094

Exception Report No.	Description
ER1	CCB acceptance criteria is CCB<0.5*MQL.

[1] Items identified by the letter "R" must be available as a hard copy or as a .pdf file. Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

[2] O - organic analyses; I - inorganic analyses (including general chemistry constituents, when applicable).

[3] NA - Not applicable; NR - Not reviewed.

[4] Exception Report identification number; an Exception Report should be completed for an item if the result is "No" or "NR."

Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252382 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-12
Customer Description:
Lab Number: 252382-001
Preparation:
Date Collected: 09/08/2025 10:38 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.25	mg/L	2	0.10	0.02		CRJ	09/30/2025 16:57	EPA 300.1 -1997, Rev. 1.0
Chloride	4.61	mg/L	2	0.06	0.02		CRJ	09/30/2025 16:57	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.07	mg/L	2	0.06	0.02		CRJ	09/30/2025 16:57	EPA 300.1 -1997, Rev. 1.0
Sulfate	3.11	mg/L	2	0.60	0.04		CRJ	09/30/2025 16:57	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	J8, U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	70	mg/L	1	50	20		BLB	09/15/2025 07:12	SM 2540C-2020

Customer Sample ID: AD-8
Customer Description:
Lab Number: 252382-002
Preparation:
Date Collected: 09/09/2025 10:45 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.74	mg/L	2	0.10	0.02		CRJ	09/30/2025 17:43	EPA 300.1 -1997, Rev. 1.0
Chloride	5.85	mg/L	2	0.06	0.02		CRJ	09/30/2025 17:43	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.36	mg/L	2	0.06	0.02		CRJ	09/30/2025 17:43	EPA 300.1 -1997, Rev. 1.0
Sulfate	103	mg/L	10	3.0	0.2		CRJ	09/30/2025 17:20	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	90	mg/L	1	20	5		MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	280	mg/L	1	50	20		BLB	09/15/2025 07:12	SM 2540C-2020

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Job ID: 252382 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-7R
Lab Number: 252382-003
Date Collected: 09/08/2025 10:36 EDT
Customer Description:
Preparation:
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	1.36	mg/L	2	0.10	0.02		CRJ	09/30/2025 18:28	EPA 300.1 -1997, Rev. 1.0
Chloride	27.5	mg/L	2	0.06	0.02		CRJ	09/30/2025 18:28	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.14	mg/L	2	0.06	0.02		CRJ	09/30/2025 18:28	EPA 300.1 -1997, Rev. 1.0
Sulfate	34.1	mg/L	2	0.60	0.04		CRJ	09/30/2025 18:28	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	180	mg/L	1	50	20		BLB	09/15/2025 07:56	SM 2540C-2020

Customer Sample ID: AD-4
Lab Number: 252382-004
Date Collected: 09/10/2025 11:03 EDT
Customer Description:
Preparation:
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.21	mg/L	2	0.10	0.02		CRJ	09/30/2025 20:00	EPA 300.1 -1997, Rev. 1.0
Chloride	3.91	mg/L	2	0.06	0.02		CRJ	09/30/2025 20:00	EPA 300.1 -1997, Rev. 1.0
Fluoride	<0.02	mg/L	2	0.06	0.02	U1	CRJ	09/30/2025 20:00	EPA 300.1 -1997, Rev. 1.0
Sulfate	19.0	mg/L	2	0.60	0.04		CRJ	09/30/2025 20:00	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	J8, U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	150	mg/L	1	50	20		BLB	09/15/2025 06:45	SM 2540C-2020

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Job ID: 252382 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-3
Customer Description:
Lab Number: 252382-005
Preparation:
Date Collected: 09/09/2025 12:21 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.08	mg/L	2	0.10	0.02	J1	CRJ	09/30/2025 19:14	EPA 300.1 -1997, Rev. 1.0
Chloride	6.41	mg/L	2	0.06	0.02		CRJ	09/30/2025 19:14	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.07	mg/L	2	0.06	0.02		CRJ	09/30/2025 19:14	EPA 300.1 -1997, Rev. 1.0
Sulfate	31.5	mg/L	2	0.60	0.04		CRJ	09/30/2025 19:14	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	J8, U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	150	mg/L	1	50	20		BLB	09/15/2025 07:56	SM 2540C-2020

Customer Sample ID: AD-2
Customer Description:
Lab Number: 252382-006
Preparation:
Date Collected: 09/09/2025 11:31 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.42	mg/L	2	0.10	0.02		CRJ	09/30/2025 20:23	EPA 300.1 -1997, Rev. 1.0
Chloride	25.4	mg/L	2	0.06	0.02		CRJ	09/30/2025 20:23	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.26	mg/L	2	0.06	0.02		CRJ	09/30/2025 20:23	EPA 300.1 -1997, Rev. 1.0
Sulfate	271	mg/L	10	3.0	0.2		CRJ	10/01/2025 09:14	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	520	mg/L	1	50	20		BLB	09/15/2025 06:45	SM 2540C-2020

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252382 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-13
Customer Description:
Lab Number: 252382-007
Preparation:
Date Collected: 09/08/2025 09:32 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.26	mg/L	2	0.10	0.02		CRJ	09/30/2025 23:04	EPA 300.1 -1997, Rev. 1.0
Chloride	26.1	mg/L	2	0.06	0.02		CRJ	09/30/2025 23:04	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.39	mg/L	2	0.06	0.02		CRJ	09/30/2025 23:04	EPA 300.1 -1997, Rev. 1.0
Sulfate	44.5	mg/L	2	0.60	0.04		CRJ	09/30/2025 23:04	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	49	mg/L	1	20	5		MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	210	mg/L	1	50	20		BLB	09/15/2025 06:52	SM 2540C-2020

Customer Sample ID: AD-16
Customer Description:
Lab Number: 252382-008
Preparation:
Date Collected: 09/10/2025 12:05 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.22	mg/L	2	0.10	0.02		CRJ	09/30/2025 23:27	EPA 300.1 -1997, Rev. 1.0
Chloride	30.5	mg/L	2	0.06	0.02		CRJ	09/30/2025 23:27	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.08	mg/L	2	0.06	0.02		CRJ	09/30/2025 23:27	EPA 300.1 -1997, Rev. 1.0
Sulfate	8.80	mg/L	2	0.60	0.04		CRJ	09/30/2025 23:27	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	110	mg/L	1	50	20		BLB	09/15/2025 07:56	SM 2540C-2020

AMERICAN ELECTRIC POWER

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Water Analysis Report

Job ID: 252382 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-17
Customer Description:
Lab Number: 252382-009
Preparation:
Date Collected: 09/09/2025 11:25 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.22	mg/L	2	0.10	0.02		CRJ	09/30/2025 23:49	EPA 300.1 -1997, Rev. 1.0
Chloride	20.0	mg/L	2	0.06	0.02		CRJ	09/30/2025 23:49	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.18	mg/L	2	0.06	0.02		CRJ	09/30/2025 23:49	EPA 300.1 -1997, Rev. 1.0
Sulfate	2.84	mg/L	2	0.60	0.04		CRJ	09/30/2025 23:49	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	60	mg/L	1	50	20		BLB	09/15/2025 07:56	SM 2540C-2020

Customer Sample ID: AD-18
Customer Description:
Lab Number: 252382-010
Preparation:
Date Collected: 09/10/2025 09:42 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.06	mg/L	2	0.10	0.02	J1	CRJ	10/01/2025 00:12	EPA 300.1 -1997, Rev. 1.0
Chloride	5.92	mg/L	2	0.06	0.02		CRJ	10/01/2025 00:12	EPA 300.1 -1997, Rev. 1.0
Fluoride	<0.02	mg/L	2	0.06	0.02	U1	CRJ	10/01/2025 00:12	EPA 300.1 -1997, Rev. 1.0
Sulfate	7.57	mg/L	2	0.60	0.04		CRJ	10/01/2025 00:12	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	150	mg/L	1	50	20		BLB	09/15/2025 08:03	SM 2540C-2020

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252382 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Customer Sample ID: AD-22
Customer Description:
Lab Number: 252382-011
Preparation:
Date Collected: 09/08/2025 11:20 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.65	mg/L	2	0.10	0.02		CRJ	10/01/2025 01:21	EPA 300.1 -1997, Rev. 1.0
Chloride	84.9	mg/L	25	0.8	0.3		CRJ	10/01/2025 00:58	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.21	mg/L	2	0.06	0.02		CRJ	10/01/2025 01:21	EPA 300.1 -1997, Rev. 1.0
Sulfate	221	mg/L	25	7.5	0.5		CRJ	10/01/2025 00:58	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	J8, U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	530	mg/L	1	50	20		BLB	09/15/2025 06:52	SM 2540C-2020

Customer Sample ID: AD-23
Customer Description:
Lab Number: 252382-012
Preparation:
Date Collected: 09/10/2025 12:23 EDT
Date Received: 09/12/2025 09:40 EDT

Ion Chromatography

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Bromide	0.34	mg/L	2	0.10	0.02		CRJ	10/01/2025 02:07	EPA 300.1 -1997, Rev. 1.0
Chloride	11.1	mg/L	2	0.06	0.02		CRJ	10/01/2025 02:07	EPA 300.1 -1997, Rev. 1.0
Fluoride	0.04	mg/L	2	0.06	0.02	J1	CRJ	10/01/2025 02:07	EPA 300.1 -1997, Rev. 1.0
Sulfate	7.44	mg/L	2	0.60	0.04		CRJ	10/01/2025 02:07	EPA 300.1 -1997, Rev. 1.0

Wet Chemistry

Parameter	Result	Units	Dilution	RL	MDL	Data Qualifiers	Analyst	Analysis Date	Method
Alkalinity, as CaCO3	<5	mg/L	1	20	5	U1	MGK	09/16/2025 14:39	SM 2320B-2021
TDS, Filterable Residue	60	mg/L	1	50	20		BLB	09/15/2025 08:03	SM 2540C-2020

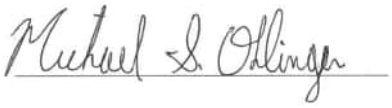
Water Analysis Report

Dolan Chemical Laboratory
4001 Bixby Road
Groveport, OH 43125
Phone: 614-836-4221
Audinet: 210-4221

Job ID: 252382 **Customer: Pirkey Power Station** **Date Reported: 10/14/2025**

Report Verification

This report and the above data have been confirmed by the following analyst.



Michael Ohlinger, Chemist
Email: msohlinger@aep.com
Phone: 614-836-4184
Audinet: 8-210-4184

THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF THE LABORATORY. ALL TEST RESULTS MEET ALL OF THE REQUIREMENTS OF THE ACCREDITING AUTHORITY, UNLESS OTHERWISE NOTED. ALL TIMES LISTED ARE IN THE EASTERN TIME ZONE.

Data Qualifer Legend

J8 - Concentration estimated. Per the method, this Low Alkalinity sample (< 20 mg/L) was titrated to a fixed pH 4.4.

U1 - Not detected at or below method detection limit (MDL).

J1 - Concentration estimated. Analyte was detected between the method detection limit and the reporting limit.

Chain of Custody Record

Program: Coal Combustion Residuals (CCR)

Dolan Chemical Laboratory (DCL)
4001 Bixby Road
Groveport, Ohio 43125
Contacts: Michael Ohlinger (614-836-4184)
Dave Conover (614-836-4219)

Project Name: Pirkey PP Semi-Annual CCR
Contact Name: Pryce Warren
Contact Phone: 325-310-6668
Sampler(s): Matt Hamilton Kenny McDonald

Analysis Turnaround Time (In Calendar Days)
◉ Routine (28 days for Monitoring Wells)

Site Contact: | Date:

For Lab Use Only:
COC/Order #: 252382

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sampler(s) Initials	Mercury (250 mL bottle, pH<2, HNO3)	Dissolved Mercury (Field-filter 250 mL bottle, then pH<2, HNO3)	F, Cl, SO4, Br, TDS, Alkalinity (1 L bottle, Cool, 0-6C)	Ra-226, Ra-228 (Three (six every 10th*) 1 L bottles, pH<2, HNO3)				Sample Specific Notes:
AD-2	9/9/2025	1031	G	GW	1				X					
AD-3	9/9/2025	1121	G	GW	1				X					
AD-4	9/10/2025	1003	G	GW	1				X					
AD-7R	9/8/2025	936	G	GW	1				X					
AD-8	9/9/2025	945	G	GW	1				X					
AD-12	9/8/2025	938	G	GW	1				X					
AD-13	9/8/2025	932	G	GW	1				X					collection time 0832
AD-16	9/10/2025	1105	G	GW	1				X					
AD-17	9/9/2025	1025	G	GW	1				X					
AD-18	9/10/2025	842	G	GW	1				X					
AD-22	9/8/2025	1020	G	GW	1				X					
AD-23	9/10/2025	1123	G	GW	1				X					
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____; F= filter in field							4	F4	1	4				

** Six 1L Bottles must be collected for Radium for every 10th sample.*

Special Instructions/QC Requirements & Comments:

TG-32 needed

Relinquished by: Matt Hamilton	Company: Eagle	Date/Time: 9-11-25 1400	Received by	Date/Time
Relinquished by:	Company:	Date/Time:	Received by	Date/Time
Relinquished by	Company:	Date/Time:	Received in Laboratory by:	Date/Time: 9/12/25 0940

WATER & WASTE SAMPLE RECEIPT FORM

Form SOP-7102 Sample Receipt Form Rev.10, 01/03/25

Package Type

(Cooler) Box Bag Envelope

Delivery Type

UPS (FedEX) USPS

Other _____

Plant/Customer Pirkey **Total # of Containers RECEIVED in Job:** 12

Opened By EGM

Date/Time 9/12/25 0940

Were all required temperatures, per BN-water-900, T≤6°C *w/o sample freezing*? (Y) N or N/A

Initial/Date: EGM 9/12/25 (on ice) / no ice

If No, specify each deviation(s) on back of form. (IR Gun Ser# 240093386, *Expir.* 01/31/2026)

Was container in good condition? (Y) / N Comments NA

Was Chain of Custody received? (Y) / N Comments NA

Requested turnaround: Routine If **RUSH**, who was notified? NA

pH (15 min) Cr^{+6} (pres) (24 hr) NO_2 or NO_3 (48 hr) *ortho*-PO_4 (48 hr) Hg-diss (pres) (48 hr)

Were pH requirements met for required samples, per BN-water-900? (Y) N or N/A

Initial/Date: EGM 9/12/25

***pH paper:* mfr LabRat ,PN LRS-4801 ,LOT# X000RWDG21 ,EXPIR DATE 09/30/2026

*** Note changes to pH paper in comments below***

Was Add'l Preservative needed? Y / (N) If Yes: By whom & when: NA (See Prep Book)

(Dissolved) Is sample filtration requested? Y / (N) Comments NA (See Prep Book)

Was COC filled out properly? Y / (N) Comments The listed time for AD-13 was incorrect on the CoC.

Were samples labeled properly? (Y) / N Comments

Were correct containers used? (Y) / N Comments

Was the customer contacted? If Yes: Person Contacted: Pryce Warren

Lab ID# 252382 Initial & Date & Time : EGM 9/12/25 1004

Logged by EGM Comments: AD-13 had a different collection time on bottle than CoC.

(Record Test Count on back of form)

Total # of Containers LISTED on COC: 12

WATER & WASTE SAMPLE RECEIPT FORM (CONT)

Form SOP-7102 Sample Receipt Form Rev.10, 01/03/25

REMINDER: Document the pertinent sample integrity information and deviations in sample receipt (as noted above) in the Sample or Job "Comments" field in the LIMS. **Comments below**:
i.e. Mark "LF" if needs Lab filtered, Temperature or Preservative deviation, Preserved upon arrival , etc.

JOB # : 252382 **Initial/ Date:** EGM 9/12/25 **Peer Review Initial/ Date:** AMR 9.12.25

Login Test Count from COC	LIMS Sample ID (or COC Sample Name) EGM 9/12/25	Comments /Nonconformities	Peer Review Test Count from COC
12	252382-001		12
	-002		
	-003		
	-004	NA	
	-005		
	-006		
	-007	Incorrect time on CoC	
	-008		
	-009		
	-010	NA	
	-011		
	-012		

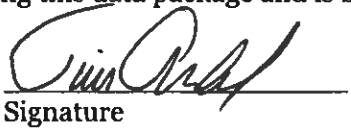
Municipal Solid Waste Laboratory Review Checklist

This data package consists of:

- [x] This signature page, and the laboratory review checklist consisting of Table 1, Reportable Data (which includes the reportable data identified on this page), Table 2, Supporting Data, and Table 3, Exception Reports.
- [x] R1 Field chain-of-custody documentation
- [x] R2 Sample identification cross-reference
- [x] R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - (a) Items specified in NELAC Chapter 5 for reporting results, e.g., Section 5.5.10 in 2003 NELAC Standard
  - (b) Dilution factors
  - (c) Preparation methods
  - (d) Cleanup methods
  - (e) If required for the project, tentatively identified compounds (TICs)
- [x] R4 Surrogate recovery data including:
  - (a) Calculated recovery (%R)
  - (b) The laboratory's surrogate QC limits
- [x] R5 Test reports/summary forms for blank samples
- [x] R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - (a) LCS spiking amounts
  - (b) Calculated %R for each analyte
  - (c) The laboratory's LCS QC limits
- [x] R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - (a) Samples associated with the MS/MSD clearly identified
  - (b) MS/MSD spiking amounts
  - (c) Concentration of each MS/MSD analyte measured in the parent and spiked samples
  - (d) Calculated %Rs and relative percent differences (RPDs)
  - (e) The laboratory's MS/MSD QC limits
- [x] R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - (a) The amount of analyte measured in the duplicate
  - (b) The calculated RPD
  - (c) The laboratory's QC limits for analytical duplicates
- [x] R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix
- [x] R10 Other problems or anomalies
- [x] The Exception Report for every item for which the result is "No" or "NR" (Not Reviewed)

Release Statement: I am responsible for the release of this laboratory data package. This data package as been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: (●) This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Tim Arnold		Chemist Principal	10/2/25
Name (printed)	Signature	Official Title	Date

Ion Chromatography Laboratory Review Checklist

Table 1. Reportable Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey PP Semi-Annual CCR

Reviewer Name: Tim Arnold

LRC Date: 10/2/25

Laboratory Job Number: 252382

Prep Batch Number(s): QC2510008

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
R1	O, I	**Chain-of-custody (COC)**		
	I	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	Yes	
	I	Were all departures from standard conditions described in an exception report?	Yes	
R2	O, I	**Sample and quality control (QC) identification**		
	I	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Yes	
	I	Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Yes	
R3	O, I	**Test reports**		
	I	Were all samples prepared and analyzed within holding times?	Yes	
	I	Other than those results < MQL, were all other raw values bracketed by calibration standards?	Yes	
	I	Were calculations checked by a peer or supervisor?	Yes	
	I	Were all analyte identifications checked by a peer or supervisor?	Yes	
	I	Were sample quantitation limits reported for all analytes not detected?	Yes	
	I	Were all results for soil and sediment samples reported on a dry weight basis?	NA	
	I	Was % moisture (or solids) reported for all soil and sediment samples?	NA	
	I	If required for the project, TICs reported?	NA	
R4	O	**Surrogate recovery data**		
	I	Were surrogates added prior to extraction?	Yes	
	I	Were surrogate percent recoveries in all samples within the laboratory QC limits?	Yes	
R5	O, I	**Test reports/summary forms for blank samples**		
	I	Were appropriate type(s) of blanks analyzed?	Yes	
	I	Were blanks analyzed at the appropriate frequency?	Yes	

Ion Chromatography Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
	I	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Yes	
	I	Were blank concentrations < MQL?	Yes	
R6	O, I	**Laboratory control samples (LCS):**		
	I	Were all COCs included in the LCS?	Yes	
	I	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Yes	
	I	Were LCSs analyzed at the required frequency?	Yes	
	I	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	Yes	
	I	Was the LCSD RPD within QC limits?	Yes	
R7	O, I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**		
	I	Were the project/method specified analytes included in the MS and MSD?	Yes	
	I	Were MS/MSD analyzed at the appropriate frequency?	Yes	
	I	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Were MS/MSD RPDs within laboratory QC limits?	Yes	
R8	O, I	**Analytical duplicate data**		
	I	Were appropriate analytical duplicates analyzed for each matrix?	Yes	
	I	Were analytical duplicates analyzed at the appropriate frequency?	Yes	
	I	Were RPDs or relative standard deviations within the laboratory QC limits?	Yes	
R9	O, I	**Method quantitation limits (MQLs):**		
	I	Are the MQLs for each method analyte included in the laboratory data package?	Yes	
	I	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Yes	
	I	Are unadjusted MQLs included in the laboratory data package?	Yes	
R10	O, I	**Other problems/anomalies**		
	I	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Yes	
	I	Were all necessary corrective actions performed for the reported data?	Yes	
	I	Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	Yes	

Table 2. Supporting Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey PP Semi-Annual CCR

Reviewer Name: Tim Arnold

LRC Date: 10/2/25

Laboratory Job Number: 252382

Prep Batch Number(s): QC2510008

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S1	O, I	**Initial calibration (ICAL)**		
	I	Were response factors and/or relative response factors for each analyte within QC limits?	NA	
	I	Were percent RSDs or correlation coefficient criteria met?	Yes	
	I	Was the number of standards recommended in the method used for all analytes?	Yes	
	I	Were all points generated between the lowest and highest standard used to calculate the curve?	Yes	
	I	Are ICAL data available for all instruments used?	Yes	
	I	Has the initial calibration curve been verified using an appropriate second source standard?	Yes	
S2	O, I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**		
	I	Was the CCV analyzed at the method-required frequency?	Yes	
	I	Were percent differences for each analyte within the method-required QC limits?	Yes	
	I	Was the ICAL curve verified for each analyte?	Yes	
	I	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	No	ER1
S3	O	**Mass spectral tuning:**		
	I	Was the appropriate compound for the method used for tuning?	NA	
	I	Were ion abundance data within the method-required QC limits?	NA	
S4	O	**Internal standards (IS):**		
	I	Were IS area counts and retention times within the method-required QC limits?	NA	
S5	O, I	**Raw data (NELAC section 1 appendix A glossary, and section 5.)**		
	I	Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	Yes	
	I	Were data associated with manual integrations flagged on the raw data?	NA	

Ion Chromatography Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S6	O	**Dual column confirmation**		
	I	Did dual column confirmation results meet the method-required QC?	NA	
S7	O	**Tentatively identified compounds (TICs):**		
	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?	NA	
S8	I	**Interference Check Sample (ICS) results:**		
	I	Were percent recoveries within method QC limits?	NA	
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**		
	I	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	NA	
S10	O, I	**Method detection limit (MDL) studies**		
	I	Was a MDL study performed for each reported analyte?	Yes	
	I	Is the MDL either adjusted or supported by the analysis of DCSs?	Yes	
S11	O, I	**Proficiency test reports:**		
	I	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	Yes	
S12	O, I	**Standards documentation**		
	I	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Yes	
S13	O, I	**Compound/analyte identification procedures**		
	I	Are the procedures for compound/analyte identification documented?	Yes	
S14	O, I	**Demonstration of analyst competency (DOC)**		
	I	Was DOC conducted consistent with NELAC Chapter 5C?	Yes	
	I	Is documentation of the analyst's competency up-to-date and on file?	Yes	
S15	O, I	**Verification/validation documentation for methods (NELAC Chap 5n 5)**		
	I	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Yes	
S16	O, I	**Laboratory standard operating procedures (SOPs):**		
	I	Are laboratory SOPs current and on file for each method performed?	Yes	

Table 3. Exception Reports.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey PP Semi-Annual CCR

Reviewer Name: Tim Arnold

LRC Date: 10/2/25

Laboratory Job Number: 252382

Prep Batch Number(s): QC2510008

Exception Report No.	Description
ER1	CCB acceptance criteria is CCB<MQL.

[1] Items identified by the letter "R" must be available as a hard copy or as a .pdf file. Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

[2] O - organic analyses; I - inorganic analyses (including general chemistry constituents, when applicable).

[3] NA - Not applicable; NR - Not reviewed.

[4] Exception Report identification number; an Exception Report should be completed for an item if the result is "No" or "NR."

Municipal Solid Waste Laboratory Review Checklist

This data package consists of:

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- [x] R1 Field chain-of-custody documentation
- [x] R2 Sample identification cross-reference
- [x] R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - (a) Items specified in NELAC Chapter 5 for reporting results, e.g., Section 5.5.10 in 2003 NELAC Standard
  - (b) Dilution factors
  - (c) Preparation methods
  - (d) Cleanup methods
  - (e) If required for the project, tentatively identified compounds (TICs)
- [NA] R4 Surrogate recovery data including:
  - (a) Calculated recovery (%R)
  - (b) The laboratory's surrogate QC limits
- [x] R5 Test reports/summary forms for blank samples
- [x] R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - (a) LCS spiking amounts
  - (b) Calculated %R for each analyte
  - (c) The laboratory's LCS QC limits
- [x] R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - (a) Samples associated with the MS/MSD clearly identified
  - (b) MS/MSD spiking amounts
  - (c) Concentration of each MS/MSD analyte measured in the parent and spiked samples
  - (d) Calculated %Rs and relative percent differences (RPDs)
  - (e) The laboratory's MS/MSD QC limits
- [x] R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - (a) The amount of analyte measured in the duplicate
  - (b) The calculated RPD
  - (c) The laboratory's QC limits for analytical duplicates
- [x] R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix
- [x] R10 Other problems or anomalies
- [x] The Exception Report for every item for which the result is "No" or "NR" (Not Reviewed)

Release Statement: I am responsible for the release of this laboratory data package. This data package as been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: (●) This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Sandra Williams	Sandra D. Williams	Chemist	09/22/2025
Name (printed)	Signature	Official Title	Date

TDS Laboratory Review Checklist

Table 1. Reportable Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Power Station

Reviewer Name: Sandra Williams

LRC Date: 09/22/2025

Laboratory Job Number: 252382

Prep Batch Number(s): QC2509103

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
R1	O, I	**Chain-of-custody (COC)**		
	I	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	Yes	
	I	Were all departures from standard conditions described in an exception report?	NA	
R2	O, I	**Sample and quality control (QC) identification**		
	I	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Yes	
	I	Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Yes	
R3	O, I	**Test reports**		
	I	Were all samples prepared and analyzed within holding times?	Yes	
	I	Other than those results < MQL, were all other raw values bracketed by calibration standards?	NA	
	I	Were calculations checked by a peer or supervisor?	Yes	
	I	Were all analyte identifications checked by a peer or supervisor?	Yes	
	I	Were sample quantitation limits reported for all analytes not detected?	Yes	
	I	Were all results for soil and sediment samples reported on a dry weight basis?	NA	
	I	Was % moisture (or solids) reported for all soil and sediment samples?	NA	
	I	If required for the project, TICs reported?	NA	
R4	O	**Surrogate recovery data**		
	I	Were surrogates added prior to extraction?	NA	
	I	Were surrogate percent recoveries in all samples within the laboratory QC limits?	NA	
R5	O, I	**Test reports/summary forms for blank samples**		
	I	Were appropriate type(s) of blanks analyzed?	Yes	
	I	Were blanks analyzed at the appropriate frequency?	Yes	

TDS Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
	I	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Yes	
	I	Were blank concentrations < MQL?	Yes	
R6	O, I	**Laboratory control samples (LCS):**		
	I	Were all COCs included in the LCS?	Yes	
	I	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Yes	
	I	Were LCSs analyzed at the required frequency?	Yes	
	I	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	Yes	
	I	Was the LCSD RPD within QC limits?	Yes	
R7	O, I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**		
	I	Were the project/method specified analytes included in the MS and MSD?	NA	
	I	Were MS/MSD analyzed at the appropriate frequency?	NA	
	I	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	NA	
	I	Were MS/MSD RPDs within laboratory QC limits?	NA	
R8	O, I	**Analytical duplicate data**		
	I	Were appropriate analytical duplicates analyzed for each matrix?	Yes	
	I	Were analytical duplicates analyzed at the appropriate frequency?	Yes	
	I	Were RPDs or relative standard deviations within the laboratory QC limits?	Yes	
R9	O, I	**Method quantitation limits (MQLs):**		
	I	Are the MQLs for each method analyte included in the laboratory data package?	Yes	
	I	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Yes	
	I	Are unadjusted MQLs included in the laboratory data package?	Yes	
R10	O, I	**Other problems/anomalies**		
	I	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Yes	
	I	Were all necessary corrective actions performed for the reported data?	Yes	
	I	Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	Yes	

Table 2. Supporting Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Power Station

Reviewer Name: Sandra Williams

LRC Date: 09/22/2025

Laboratory Job Number: 252382

Prep Batch Number(s): QC2509103

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S1	O, I	**Initial calibration (ICAL)**		
	I	Were response factors and/or relative response factors for each analyte within QC limits?	NA	
	I	Were percent RSDs or correlation coefficient criteria met?	NA	
	I	Was the number of standards recommended in the method used for all analytes?	NA	
	I	Were all points generated between the lowest and highest standard used to calculate the curve?	NA	
	I	Are ICAL data available for all instruments used?	NA	
	I	Has the initial calibration curve been verified using an appropriate second source standard?	NA	
S2	O, I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**		
	I	Was the CCV analyzed at the method-required frequency?	NA	
	I	Were percent differences for each analyte within the method-required QC limits?	NA	
	I	Was the ICAL curve verified for each analyte?	NA	
	I	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	NA	
S3	O	**Mass spectral tuning:**		
	I	Was the appropriate compound for the method used for tuning?	NA	
	I	Were ion abundance data within the method-required QC limits?	NA	
S4	O	**Internal standards (IS):**		
	I	Were IS area counts and retention times within the method-required QC limits?	NA	
S5	O, I	**Raw data (NELAC section 1 appendix A glossary, and section 5.)**		
	I	Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	Yes	
	I	Were data associated with manual integrations flagged on the raw data?	NA	

TDS Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S6	O	**Dual column confirmation**		
	I	Did dual column confirmation results meet the method-required QC?	NA	
S7	O	**Tentatively identified compounds (TICs):**		
	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?	NA	
S8	I	**Interference Check Sample (ICS) results:**		
	I	Were percent recoveries within method QC limits?	NA	
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**		
	I	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	NA	
S10	O, I	**Method detection limit (MDL) studies**		
	I	Was a MDL study performed for each reported analyte?	Yes	
	I	Is the MDL either adjusted or supported by the analysis of DCSs?	Yes	
S11	O, I	**Proficiency test reports:**		
	I	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	Yes	
S12	O, I	**Standards documentation**		
	I	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Yes	
S13	O, I	**Compound/analyte identification procedures**		
	I	Are the procedures for compound/analyte identification documented?	Yes	
S14	O, I	**Demonstration of analyst competency (DOC)**		
	I	Was DOC conducted consistent with NELAC Chapter 5C?	Yes	
	I	Is documentation of the analyst's competency up-to-date and on file?	Yes	
S15	O, I	**Verification/validation documentation for methods (NELAC Chap 5n 5)**		
	I	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Yes	
S16	O, I	**Laboratory standard operating procedures (SOPs):**		
	I	Are laboratory SOPs current and on file for each method performed?	Yes	

Table 3. Exception Reports.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Power Station

Reviewer Name: Sandra Williams

LRC Date: 09/22/2025

Laboratory Job Number: 252382

Prep Batch Number(s): QC2509103

Exception Report No.	Description

[1] Items identified by the letter "R" must be available as a hard copy or as a .pdf file. Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

[2] O - organic analyses; I - inorganic analyses (including general chemistry constituents, when applicable).

[3] NA - Not applicable; NR - Not reviewed.

[4] Exception Report identification number; an Exception Report should be completed for an item if the result is "No" or "NR."

Municipal Solid Waste Laboratory Review Checklist

This data package consists of:

- [x] This signature page, and the laboratory review checklist consisting of Table 1, Reportable Data (which includes the reportable data identified on this page), Table 2, Supporting Data, and Table 3, Exception Reports.
- [x] R1 Field chain-of-custody documentation
- [x] R2 Sample identification cross-reference
- [x] R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - (a) Items specified in NELAC Chapter 5 for reporting results, e.g., Section 5.5.10 in 2003 NELAC Standard
  - (b) Dilution factors
  - (c) Preparation methods
  - (d) Cleanup methods
  - (e) If required for the project, tentatively identified compounds (TICs)
- [NA] R4 Surrogate recovery data including:
  - (a) Calculated recovery (%R)
  - (b) The laboratory's surrogate QC limits
- [x] R5 Test reports/summary forms for blank samples
- [x] R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - (a) LCS spiking amounts
  - (b) Calculated %R for each analyte
  - (c) The laboratory's LCS QC limits
- [x] R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - (a) Samples associated with the MS/MSD clearly identified
  - (b) MS/MSD spiking amounts
  - (c) Concentration of each MS/MSD analyte measured in the parent and spiked samples
  - (d) Calculated %Rs and relative percent differences (RPDs)
  - (e) The laboratory's MS/MSD QC limits
- [x] R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - (a) The amount of analyte measured in the duplicate
  - (b) The calculated RPD
  - (c) The laboratory's QC limits for analytical duplicates
- [x] R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix
- [x] R10 Other problems or anomalies
- [x] The Exception Report for every item for which the result is "No" or "NR" (Not Reviewed)

Release Statement: I am responsible for the release of this laboratory data package. This data package as been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: (●) This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Michael Ohlinger	Michael Ohlinger	Chemist	09/17/25
Name (printed)	Signature	Official Title	Date

Alkalinity Laboratory Review Checklist

Table 1. Reportable Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Plant

Reviewer Name: Michael Ohlinger

LRC Date: 09/17/25

Laboratory Job Number: 252380, 252381, 252382

Prep Batch Number(s): QC2509094

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
R1	O, I	**Chain-of-custody (COC)**		
	I	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	Yes	
	I	Were all departures from standard conditions described in an exception report?	Yes	
R2	O, I	**Sample and quality control (QC) identification**		
	I	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Yes	
	I	Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Yes	
R3	O, I	**Test reports**		
	I	Were all samples prepared and analyzed within holding times?	Yes	
	I	Other than those results < MQL, were all other raw values bracketed by calibration standards?	NA	
	I	Were calculations checked by a peer or supervisor?	Yes	
	I	Were all analyte identifications checked by a peer or supervisor?	Yes	
	I	Were sample quantitation limits reported for all analytes not detected?	Yes	
	I	Were all results for soil and sediment samples reported on a dry weight basis?	NA	
	I	Was % moisture (or solids) reported for all soil and sediment samples?	NA	
	I	If required for the project, TICs reported?	NA	
R4	O	**Surrogate recovery data**		
	I	Were surrogates added prior to extraction?	NA	
	I	Were surrogate percent recoveries in all samples within the laboratory QC limits?	NA	
R5	O, I	**Test reports/summary forms for blank samples**		
	I	Were appropriate type(s) of blanks analyzed?	Yes	
	I	Were blanks analyzed at the appropriate frequency?	Yes	

Alkalinity Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
	I	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Yes	
	I	Were blank concentrations < MQL?	Yes	
R6	O, I	**Laboratory control samples (LCS):**		
	I	Were all COCs included in the LCS?	Yes	
	I	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Yes	
	I	Were LCSs analyzed at the required frequency?	Yes	
	I	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	Yes	
	I	Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	Yes	
	I	Was the LCSD RPD within QC limits?	Yes	
R7	O, I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**		
	I	Were the project/method specified analytes included in the MS and MSD?	NA	
	I	Were MS/MSD analyzed at the appropriate frequency?	NA	
	I	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	NA	
	I	Were MS/MSD RPDs within laboratory QC limits?	NA	
R8	O, I	**Analytical duplicate data**		
	I	Were appropriate analytical duplicates analyzed for each matrix?	Yes	
	I	Were analytical duplicates analyzed at the appropriate frequency?	Yes	
	I	Were RPDs or relative standard deviations within the laboratory QC limits?	Yes	
R9	O, I	**Method quantitation limits (MQLs):**		
	I	Are the MQLs for each method analyte included in the laboratory data package?	Yes	
	I	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Yes	
	I	Are unadjusted MQLs included in the laboratory data package?	Yes	
R10	O, I	**Other problems/anomalies**		
	I	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Yes	
	I	Were all necessary corrective actions performed for the reported data?	Yes	
	I	Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	Yes	

Alkalinity Laboratory Review Checklist

Table 2. Supporting Data.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Plant

Reviewer Name: Michael Ohlinger

LRC Date: 09/17/25

Laboratory Job Number: 252380, 252381, 252382

Prep Batch Number(s): QC2509094

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S1	O, I	**Initial calibration (ICAL)**		
	I	Were response factors and/or relative response factors for each analyte within QC limits?	NA	
	I	Were percent RSDs or correlation coefficient criteria met?	NA	
	I	Was the number of standards recommended in the method used for all analytes?	NA	
	I	Were all points generated between the lowest and highest standard used to calculate the curve?	Yes	
	I	Are ICAL data available for all instruments used?	NA	
	I	Has the initial calibration curve been verified using an appropriate second source standard?	NA	
S2	O, I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):**		
	I	Was the CCV analyzed at the method-required frequency?	Yes	
	I	Were percent differences for each analyte within the method-required QC limits?	Yes	
	I	Was the ICAL curve verified for each analyte?	Yes	
	I	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	No	ER1
S3	O	**Mass spectral tuning:**		
	I	Was the appropriate compound for the method used for tuning?	NA	
	I	Were ion abundance data within the method-required QC limits?	NA	
S4	O	**Internal standards (IS):**		
	I	Were IS area counts and retention times within the method-required QC limits?	NA	
S5	O, I	**Raw data (NELAC section 1 appendix A glossary, and section 5.)**		
	I	Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	Yes	
	I	Were data associated with manual integrations flagged on the raw data?	NA	

Alkalinity Laboratory Review Checklist

Item[1]	Analytes[2]	Description	Result (Yes, No, NA, NR)[3]	Exception Report No.[4]
S6	O	**Dual column confirmation**		
	I	Did dual column confirmation results meet the method-required QC?	NA	
S7	O	**Tentatively identified compounds (TICs):**		
	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?	NA	
S8	I	**Interference Check Sample (ICS) results:**		
	I	Were percent recoveries within method QC limits?	NA	
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**		
	I	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	NA	
S10	O, I	**Method detection limit (MDL) studies**		
	I	Was a MDL study performed for each reported analyte?	Yes	
	I	Is the MDL either adjusted or supported by the analysis of DCSs?	Yes	
S11	O, I	**Proficiency test reports:**		
	I	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	Yes	
S12	O, I	**Standards documentation**		
	I	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Yes	
S13	O, I	**Compound/analyte identification procedures**		
	I	Are the procedures for compound/analyte identification documented?	Yes	
S14	O, I	**Demonstration of analyst competency (DOC)**		
	I	Was DOC conducted consistent with NELAC Chapter 5C?	Yes	
	I	Is documentation of the analyst's competency up-to-date and on file?	Yes	
S15	O, I	**Verification/validation documentation for methods (NELAC Chap 5n 5)**		
	I	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Yes	
S16	O, I	**Laboratory standard operating procedures (SOPs):**		
	I	Are laboratory SOPs current and on file for each method performed?	Yes	

Table 3. Exception Reports.

Laboratory Name: American Electric Power Dolan Chemical Laboratory

Project Name: Pirkey Plant

Reviewer Name: Michael Ohlinger

LRC Date: 09/17/25

Laboratory Job Number: 252380, 252381, 252382

Prep Batch Number(s): QC2509094

Exception Report No.	Description
ER1	CCB acceptance criteria is CCB<0.5*MQL.

[1] Items identified by the letter "R" must be available as a hard copy or as a .pdf file. Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

[2] O - organic analyses; I - inorganic analyses (including general chemistry constituents, when applicable).

[3] NA - Not applicable; NR - Not reviewed.

[4] Exception Report identification number; an Exception Report should be completed for an item if the result is "No" or "NR."