HALEY ALDRICH

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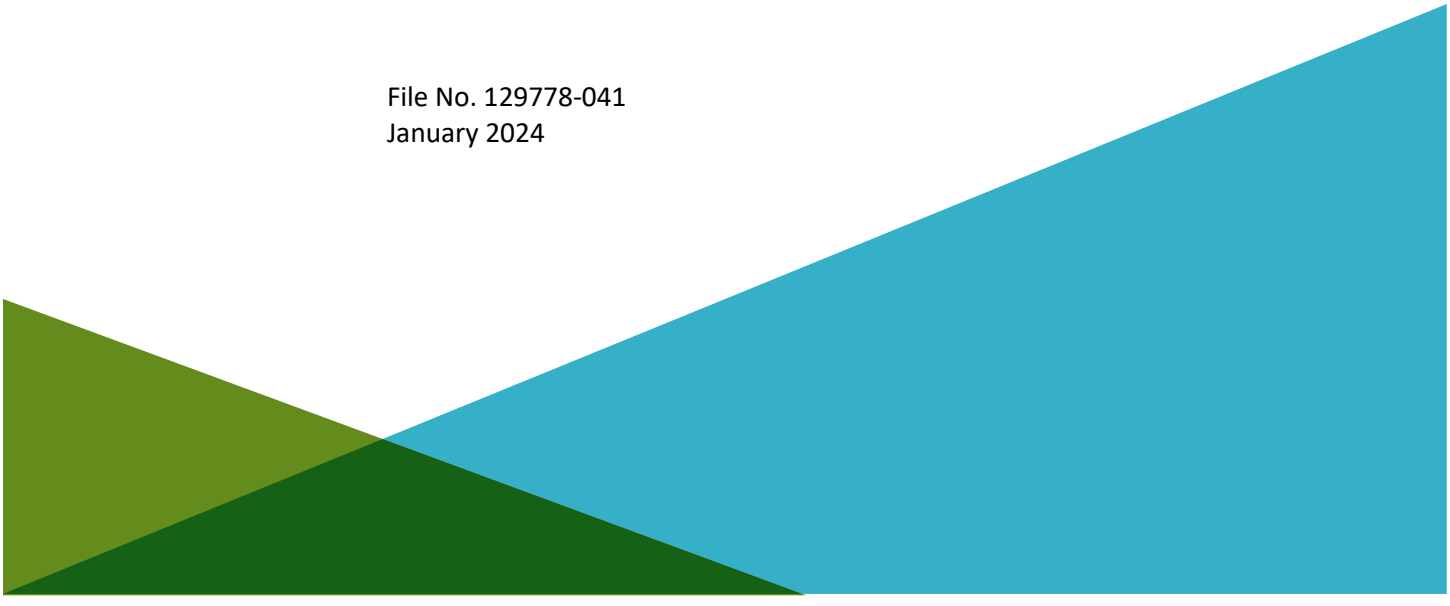
2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
BOTTOM ASH SETTLING AREA/BOTTOM ASH LANDFILL
JEFFREY ENERGY CENTER
ST. MARYS, KANSAS

by
Haley & Aldrich, Inc.
Cleveland, Ohio

for
Evergy Kansas Central, Inc.
Topeka, Kansas

File No. 129778-041
January 2024



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This Annual Groundwater Monitoring and Corrective Action Report documents the groundwater monitoring program for the Jeffrey Energy Center (JEC) Bottom Ash Settling Area/Bottom Ash Landfill (BASA/BAL) consistent with applicable sections of 257.90 through 257.98, and describes activities conducted in the prior calendar year (2022) and documents compliance with the U.S. Environmental Protection Agency Coal Combustion Residual Rule. I certify that the 2023 Annual Groundwater Monitoring and Corrective Action Report for the JEC BASA/BAL is, to the best of my knowledge, accurate and complete.

Signed: _____
Professional Geologist

Print Name:	Mark Nicholls
Kansas License No.:	Professional Geologist No. 881
Title:	Principal Consultant
Company:	Haley & Aldrich, Inc.

1. Introduction

This 2023 Annual Groundwater Monitoring and Corrective Action Report (Annual Report) addresses the Bottom Ash Settling Area/Bottom Ash Landfill (BASA/BAL) at the Jeffrey Energy Center (JEC), operated by Evergy Kansas Central, Inc. (Evergy). This Annual Report was developed in accordance with the U.S. Environmental Protection Agency Coal Combustion Residual (CCR) Rule (Rule) effective October 19, 2015, including subsequent revisions, specifically Title 40 Code of Federal Regulations (40 CFR), subsection 257.90(e). The Annual Report documents the groundwater monitoring system for the BASA/BAL consistent with applicable sections of 257.90 through 257.98, and describes activities conducted in the prior calendar year (2023) and documents compliance with the Rule. The specific requirements for the Annual Report listed in § 257.90(e) of the Rule are provided in Sections 1 and 2 of this Annual Report and are in bold italic font, followed by a narrative describing how each Rule requirement has been met.

1.1 40 CFR § 257.90(e)(6) SUMMARY

A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit. At a minimum, the summary must specify all of the following:

1.1.1 40 CFR § 257.90(e)(6)(i) – Initial Monitoring Program

At the start of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in § 257.94 or the assessment monitoring program in § 257.95;

At the start of the current annual reporting period (January 1, 2023), the BASA/BAL was operating under a detection monitoring program in compliance with 40 CFR § 257.94.

1.1.2 40 CFR § 257.90(e)(6)(ii) – Final Monitoring Program

At the end of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in § 257.94 or the assessment monitoring program in § 257.95;

At the end of the current annual reporting period (December 31, 2023), the BASA/BAL was operating under a detection monitoring program in compliance with 40 CFR § 257.94.

1.1.3 40 CFR § 257.90(e)(6)(iii) – Statistically Significant Increases

If it was determined that there was a statistically significant increase over background for one or more constituents listed in Appendix III to this part pursuant to § 257.94(e):

1.1.3.1 40 CFR § 257.90(e)(6)(iii)(a) – Statistically Significant Increase Constituents

Identify those constituents listed in Appendix III to this part and the names of the monitoring wells associated with such an increase; and

No statistically significant increases (SSI) over background were identified during the previous calendar year (2023). The statistical evaluation reports for semi-annual assessment monitoring sampling events from September 2022 and March 2023 were completed in February 2023 and July 2023, respectively, and are included in Attachment 1.

1.1.3.2 40 CFR § 257.90(e)(6)(iii)(b) – Initiation of Assessment Monitoring

Provide the date when the assessment monitoring program was initiated for the CCR unit.

No SSIs over background were identified during the previous calendar year (2023); therefore, an assessment monitoring program was not initiated for the BASA/BAL in 2023.

1.1.4 40 CFR § 257.90(e)(6)(iv) – Statistically Significant Levels

If it was determined that there was a statistically significant level above the groundwater protection standard for one or more constituents listed in Appendix IV to this part pursuant to § 257.95(g) include all of the following:

1.1.4.1 40 CFR § 257.90(e)(6)(iv)(A) – Statistically Significant Level Constituents

Identify those constituents listed in Appendix IV to this part and the names of the monitoring wells associated with such an increase;

The BASA/BAL remains in detection monitoring, and no Appendix IV constituents were collected or analyzed in 2023. Therefore, no statistically significant levels above the groundwater protection standard were identified for the BASA/BAL.

1.1.4.2 40 CFR § 257.90(e)(6)(iv)(B) – Initiation of the Assessment of Corrective Measures

Provide the date when the assessment of corrective measures was initiated for the CCR unit;

No assessment of corrective measures was required to be initiated in 2023 for this unit. The BASA/BAL remained in detection monitoring during 2023.

1.1.4.3 40 CFR § 257.90(e)(6)(iv)(C) – Assessment of Corrective Measures Public Meeting

Provide the date when the public meeting was held for the assessment of corrective measures for the CCR unit; and

An assessment of corrective measures was not required for the BASA/BAL in 2023; therefore, a public meeting was not held.

1.1.4.4 40 CFR § 257.90(e)(6)(iv)(D) – Completion of the Assessment of Corrective Measures

Provide the date when the assessment of corrective measures was completed for the CCR unit.

No assessment of corrective measures was required to be initiated in 2023 for this unit. The BASA/BAL remained in detection monitoring during 2023.

1.1.5 40 CFR § 257.90(e)(6)(v) – Selection of Remedy

Whether a remedy was selected pursuant to § 257.97 during the current annual reporting period, and if so, the date of remedy selection; and

The BASA/BAL remains in detection monitoring, and no remedy was required to be selected.

1.1.6 40 CFR § 257.90(e)(6)(vi) – Remedial Activities

Whether remedial activities were initiated or are ongoing pursuant to § 257.98 during the current annual reporting period.

No remedial activities were required in 2023.

2. 40 CFR § 257.90 Applicability

2.1 40 CFR § 257.90(a)

All CCR landfills, CCR surface impoundments, and lateral expansions of CCR units are subject to the groundwater monitoring and corrective action requirements under §§ 257.90 through 257.99, except as provided in paragraph (g) [Suspension of groundwater monitoring requirements] of this section.

Evergy has installed and certified a groundwater monitoring system at the JEC BASA/BAL. The BASA/BAL is a multi-unit system subject to the groundwater monitoring and corrective action requirements described under 40 CFR §§ 257.90 through 257.98. This document addresses the requirement for the Owner/Operator to prepare an Annual Report per § 257.90(e).

2.2 40 CFR § 257.90(e) – SUMMARY

Annual groundwater monitoring and corrective action report. For existing CCR landfills and existing CCR surface impoundments, no later than January 31, 2018, and annually thereafter, the owner or operator must prepare an annual groundwater monitoring and corrective action report. For new CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units, the owner or operator must prepare the initial annual groundwater monitoring and corrective action report no later than January 31 of the year following the calendar year a groundwater monitoring system has been established for such CCR unit as required by this subpart, and annually thereafter. For the preceding calendar year, the annual report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. For purposes of this section, the owner or operator has prepared the annual report when the report is placed in the facility's operating record as required by § 257.105(h)(1).

This Annual Report describes monitoring completed and actions taken for the groundwater monitoring system at the JEC BASA/BAL as required by the Rule. Groundwater sampling and analysis was conducted in accordance with requirements described in § 257.93, and the status of the groundwater monitoring program described in § 257.94 is provided in this report. This Annual Report documents the applicable groundwater-related activities completed in the calendar year 2023.

2.2.1 Status of the Groundwater Monitoring Program

The BASA/BAL remained in the detection monitoring program during 2023.

2.2.2 Key Actions Completed

The 2022 Annual Groundwater Monitoring and Corrective Action Report was completed in January 2023. Statistical evaluation was completed in February 2023 on analytical data from the September 2022 semi-annual detection monitoring sampling event. Semi-annual detection monitoring events were completed in March and September of 2023. Statistical evaluation was completed in July 2023 on analytical data from the March 2023 semi-annual detection monitoring sampling event. Statistical

evaluation of the results from the September 2023 semi-annual detection monitoring sampling event are due to be completed in January 2024 and will be reported in the next annual report.

2.2.3 Problems Encountered

One problem encountered during groundwater monitoring activities in 2023 consisted of a laboratory analytical error that required the laboratory to reanalyze select analytical results. The total dissolved solids concentration was reanalyzed for monitoring wells BAA-3 and BAA-6 following the March 2023 semi-annual detection monitoring sampling event. The analytical results were revised accordingly. This was the only issue that needed to be addressed at the BASA/BAL in 2023.

2.2.4 Actions to Resolve Problems

The resolution to problems encountered in 2023 included additional laboratory analyses, as described above. The analytical results were revised accordingly. No other problems were encountered at the BASA/BAL in 2023; therefore, no additional actions to resolve problems were required.

2.2.5 Project Key Activities for Upcoming Year

Key activities planned for 2024 include completion of the 2023 Annual Groundwater Monitoring and Corrective Action Report, statistical evaluation of semi-annual detection monitoring analytical data collected in September 2023, and semi-annual detection monitoring and subsequent statistical evaluations.

2.3 40 CFR § 257.90(e) – INFORMATION

At a minimum, the annual groundwater monitoring and corrective action report must contain the following information, to the extent available:

2.3.1 40 CFR § 257.90(e)(1)

A map, aerial image, or diagram showing the CCR unit and all background (or upgradient) and downgradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR unit;

As required by § 257.90(e)(1), a map showing the locations of the CCR unit and associated upgradient and downgradient monitoring wells for the BASA/BAL is included in this report as Figure 1.

2.3.2 40 CFR § 257.90(e)(2) – Monitoring System Changes

Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken;

No monitoring wells were installed or decommissioned in 2023.

2.3.3 40 CFR § 257.90(e)(3) – Summary of Sampling Events

In addition to all the monitoring data obtained under § 257.90 through § 257.98, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs;

In accordance with § 257.94(b), two independent detection monitoring samples from each background and downgradient monitoring well were collected during 2023. A summary including the sample names, dates of sample collection, field parameters, and monitoring data obtained for the groundwater monitoring program for the BASA/BAL is presented in Table I of this report, with corresponding laboratory analytical reports provided in Attachment 2. Groundwater potentiometric elevation contour maps, along with calculated groundwater flow rates and directions, associated with each groundwater monitoring sampling event in 2023 are shown on Figures 2 and 3.

2.3.4 40 CFR § 257.90(e)(4) – Monitoring Transition Narrative

A narrative discussion of any transition between monitoring programs (e.g., the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase over background levels); and

There was no transition between monitoring programs in 2023. Only detection monitoring was conducted in 2023.

2.3.5 40 CFR § 257.90(e)(5) – Other Requirements

Other information required to be included in the annual report as specified in § 257.90 through § 257.98.

This Annual Report documents activities conducted to comply with § 257.90 through § 257.94 of the Rule. It is understood that there are supplemental references in § 257.90 through § 257.98 that must be placed in the Annual Report. The following requirements include relevant and required information in the Annual Report for the activities completed in calendar year 2023.

2.3.5.1 40 CFR § 257.94(d)(3) – Demonstration for Alternative Detection Monitoring Frequency

The owner or operator must obtain a certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority stating that the demonstration for an alternative groundwater sampling and analysis frequency meets the requirements of this section. The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified professional engineer or the approval from the Participating State Director or approval from EPA where EPA is the permitting authority in the annual groundwater monitoring and corrective action report required by § 257.90(e).

An alternative groundwater detection monitoring sampling and analysis frequency has not been established for this CCR unit; therefore, no demonstration or certification is applicable.

2.3.5.2 40 CFR § 257.94(e)(2) – Detection Monitoring Alternate Source Demonstration

The owner or operator may demonstrate that a source other than the CCR unit caused the statistically significant increase over background levels for a constituent or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. The owner or operator must complete the written demonstration within 90 days of detecting a statistically significant increase over background levels to include obtaining a certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority verifying the accuracy of the information in the report. If a successful demonstration is completed within the 90-day period, the owner or operator of the CCR unit may continue with a detection monitoring program under this section. If a successful demonstration is not completed within the 90-day period, the owner or operator of the CCR unit must initiate an assessment monitoring program as required under § 257.95. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by § 257.90(e), in addition to the certification by a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority.

No alternate source demonstration or certification was required in 2023; therefore, no demonstration or certification is applicable.

2.3.5.3 40 CFR § 257.95(c)(3) – Demonstration for Alternative Assessment Monitoring Frequency

The owner or operator must obtain a certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority stating that the demonstration for an alternative groundwater sampling and analysis frequency meets the requirements of this section. The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified professional engineer or the approval from the Participating State Director or approval from EPA where EPA is the permitting authority in the annual groundwater monitoring and corrective action report required by § 257.90(e).

The BASA/BAL remains in detection monitoring and an alternative groundwater assessment monitoring sampling and analysis frequency has not been established for this CCR unit; therefore, no demonstration or certification is applicable.

2.3.5.4 40 CFR § 257.95(d)(3) – Assessment Monitoring Concentrations and Groundwater Protection Standards

Include the recorded concentrations required by paragraph (d)(1) of this section, identify the background concentrations established under § 257.94(b), and identify the groundwater protection standards established under paragraph (d)(2) of this section in the annual groundwater monitoring and corrective action report required by § 257.90(e).

The BASA/BAL remains in detection monitoring, and no assessment monitoring samples were collected or analyzed in 2023. Consequently, Evergy is not required to establish groundwater protection standards for this CCR unit, and this criterion is not applicable.

2.3.5.5 40 CFR § 257.95(g)(3)(ii) – Assessment Monitoring Alternate Source Demonstration

Demonstrate that a source other than the CCR unit caused the contamination, or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Any such demonstration must be supported by a report that includes the factual or evidentiary basis for any conclusions and must be certified to be accurate by a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority. If a successful demonstration is made, the owner or operator must continue monitoring in accordance with the assessment monitoring program pursuant to this section and may return to detection monitoring if the constituents in appendices III and IV to this part are at or below background as specified in paragraph (e) of this section. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by § 257.90(e), in addition to the certification by a qualified professional engineer or the approval from the Participating State Director or approval from EPA where EPA is the permitting authority.

No assessment monitoring alternate source demonstration or certification was required in 2023. The BASA/BAL remained in detection monitoring during 2023.

2.3.5.6 40 CFR § 257.96(a) – Demonstration for Additional Time for Assessment of Corrective Measures

Within 90 days of finding that any constituent listed in Appendix IV to this part has been detected at a statistically significant level exceeding the groundwater protection standard defined under § 257.95(h), or immediately upon detection of a release from a CCR unit, the owner or operator must initiate an assessment of corrective measures to prevent further releases, to remediate any releases and to restore affected area to original conditions. The assessment of corrective measures must be completed within 90 days, unless the owner or operator demonstrates the need for additional time to complete the assessment of corrective measures due to site-specific conditions or circumstances. The owner or operator must obtain a certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority attesting that the demonstration is accurate. The 90-day deadline to complete the assessment of corrective measures may be extended for no longer than 60 days. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by § 257.90(e), in addition to the certification by a qualified professional engineer or the approval from the Participating State Director or approval from EPA where EPA is the permitting authority.

No assessment of corrective measures was required to be initiated in 2023; therefore, no demonstration or certification is applicable for this unit.

TABLE

TABLE I

SUMMARY OF ANALYTICAL RESULTS - 2023 DETECTION MONITORING

EVERGY KANSAS CENTRAL, INC.

JEFFREY ENERGY CENTER, BOTTOM ASH SETTLING AREA / BOTTOM ASH LANDFILL

ST. MARYS, KANSAS

Location	Upgradient		Downgradient							
	MW-BAA-6		MW-BAA-2		MW-BAA-3				MW-BAA-7	
Measure Point (TOC)	1301.81		1226.56		1222.00				1213.15	
Sample Name	MW BAA-6-031423	BAA-6-090623	MW BAA-2-031423	BAA-2-090623	MW BAA-3-031423	DUP JEC BAA-031423	BAA-3-090623	BAA-DUP-090623	MW BAA-7-031423	BAA-7-090623
Sample Date	3/14/2023	9/6/2023	3/14/2023	9/6/2023	3/14/2023	3/14/2023	9/6/2023	9/6/2023	3/14/2023	9/6/2023
Final Lab Report Date	3/28/2023	9/21/2023	3/28/2023	9/21/2023	3/28/2023	3/28/2023	9/21/2023	9/21/2023	3/28/2023	9/21/2023
Final Lab Report Revision Date	4/25/2023	N/A	4/25/2023	N/A	4/25/2023	4/25/2023	N/A	N/A	4/25/2023	N/A
Lab Data Reviewed and Accepted	6/8/2023	12/13/2023	6/8/2023	12/13/2023	6/8/2023	6/8/2023	12/13/2023	12/13/2023	6/8/2023	12/13/2023
Depth to Water (ft btoc)	79.33	83.00	19.25	22.28	13.90	-	17.88	17.88	21.33	25.6
Temperature (Deg C)	13.10	19.19	13.23	15.95	12.19	-	18.24	-	13.17	17.30
Conductivity (µS/cm)	4,110	3,820	1,430	1,190	3,330	-	2,850	-	2,260	2,020
Turbidity (NTU)	0.0	0.0	32.5	0.0	0.0	-	0.0	-	19.6	0.0
pH, Field (su)	7.09	7.04	7.44	7.24	7.1	-	7.07	-	7.25	7.23
Dissolved Oxygen, Field (mg/L)	0.00	1.94	2.36	0.00	0.00	-	0.00	-	0.00	0.00
ORP, Field (mV)	13	-61	63	-29	-24	-	-65	-	18	-13
Boron, Total (mg/L)	**4.5**	**4.5**	**1.1**	**0.80**	**2.4**	**2.4**	**2.3**	**2.3**	**0.72**	**0.61**
Calcium, Total (mg/L)	**575**	**531**	**186**	**187**	**552**	**557**	**514**	**523**	**276**	**251**
Chloride (mg/L)	**326**	**270**	**134**	**98.8**	**111**	**112**	**116**	**78.4**	**153**	**156**
Fluoride (mg/L)	< 0.20	< 0.20	< 0.20	**0.36**	**0.24**	**0.25**	**0.33**	**0.25**	**0.27**	**0.34**
Sulfate (mg/L)	**2,060**	**2,140**	**635**	**424**	**2,060**	**2,080**	**2,110**	**789**	**943**	**850**
pH (su)	**6.8**	**7.0**	**7.0**	**7.2**	**7.0**	**6.8**	**7.1**	**7.1**	**6.9**	**7.2**
TDS (mg/L)	**3,710**	**3,920**	**1,260**	**996**	**3,100**	**3,170**	**3,520**	**3,250**	**1,930**	**1,760**

Notes:

Bold value: *Detection above laboratory reporting limit.*

µS/cm = micro Siemens per centimeter

Deg C = degrees Celsius

ft btoc = feet below top of casing

mg/L = milligrams per liter

mV = millivolt

NTU = Nephelometric Turbidity Unit

ORP = oxidation reduction potential

su = standard unit

TDS = total dissolved solids

TOC = top of casing

FIGURES

LEGEND

- MONITORING WELL
- PIEZOMETER OBSERVATION ONLY
- BOTTOM ASH SETTLING AREA /BOTTOM ASH LANDFILL BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: ESRI, 20 OCTOBER 2022

N

0 300 600

SCALE IN FEET

HALEY ALDRICH

EVERGY KANSAS CENTRAL, INC.
JEFFREY ENERGY CENTER
ST. MARYS, KANSAS

BOTTOM ASH SETTLING AREA/ BOTTOM ASH LANDFILL MONITORING WELL LOCATION MAP

evergy

JANUARY 2024

FIGURE 1

GIS: \\haleyaldrich.com\share\phx_common\Projects\Westar\GIS\Jeffrey Energy CenterMaps\2024 011129778 054 0001 BASA MONITORING WELL LOCATION MAP.mxd - khensen - 1/11/2024 8:41:16 AM

LEGEND

- MONITORING WELL
- PIEZOMETER OBSERVATION ONLY
- ESTIMATED GROUNDWATER POTENTIOMETRIC OBSERVATION ELEVATION CONTOUR, IN FEET
- GROUNDWATER FLOW DIRECTION AND APPROXIMATE GROUNDWATER FLOW RATE (FEET/YEAR)
- BOTTOM ASH SETTLING AREA / BOTTOM ASH LANDFILL

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. GROUNDWATER POTENTIOMETRIC ELEVATIONS WERE MEASURED 14 MARCH 2023.

3. GROUNDWATER ELEVATION IN **BOLD BLUE TEXT** AND IN FEET ABOVE MEAN SEA LEVEL (AMSL).

4. THE GROUNDWATER FLOW RATE WAS APPROXIMATED USING THE HYDRAULIC GRADIENT CALCULATED FROM GROUNDWATER POTENTIOMETRIC ELEVATIONS MEASURED 14 MARCH 2023 AND THE CONDUCTIVITY VALUES AND EFFECTIVE POROSITY VALUES OBTAINED FROM SLUG TESTS COMPLETED APRIL 2016.

5. AERIAL IMAGERY SOURCE: ESRI, 20 OCTOBER 2022

N

0 300 600
SCALE IN FEET

HALEY ALDRICH

EVERGY KANSAS CENTRAL, INC.
JEFFREY ENERGY CENTER
ST. MARY'S, KANSAS

BOTTOM ASH SETTLING AREA / BOTTOM ASH LANDFILL GROUNDWATER POTENTIOMETRIC ELEVATION CONTOUR MAP MARCH 14, 2023

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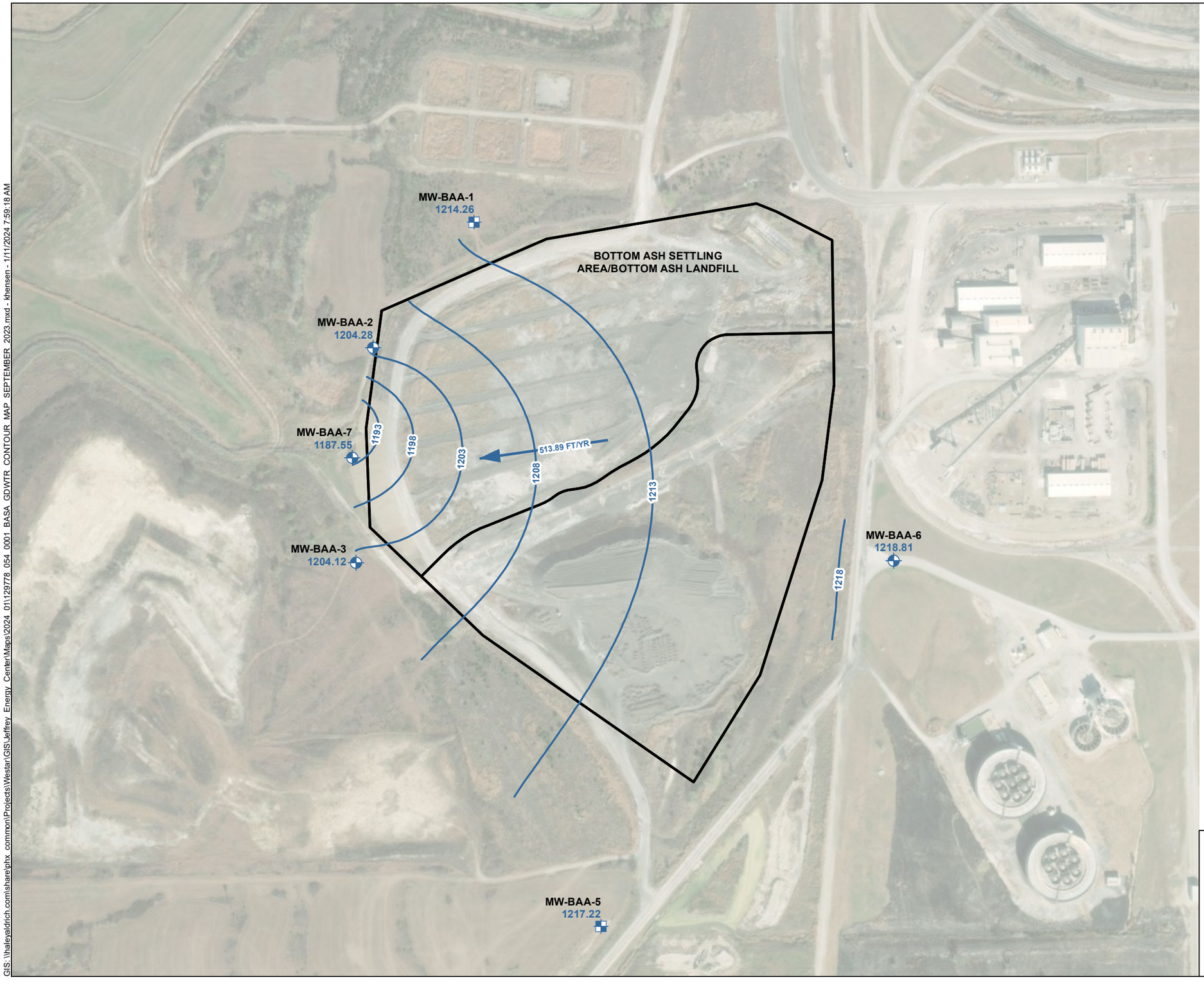
JANUARY 2024

FIGURE 2



LEGEND

- MONITORING WELL
- PIEZOMETER OBSERVATION ONLY
- ESTIMATED GROUNDWATER POTENTIOMETRIC OBSERVATION ELEVATION CONTOUR, IN FEET
- GROUNDWATER FLOW DIRECTION AND APPROXIMATE GROUNDWATER FLOW RATE (FEET/YEAR)
- BOTTOM ASH SETTLING AREA /BOTTOM ASH LANDFILL BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. GROUNDWATER POTENTIOMETRIC ELEVATIONS WERE MEASURED 6 SEPTEMBER 2023.

3. THE GROUNDWATER FLOW RATE WAS APPROXIMATED USING THE HYDRAULIC GRADIENT CALCULATED FROM GROUNDWATER POTENTIOMETRIC ELEVATIONS MEASURED 6 SEPTEMBER 2023 AND THE CONDUCTIVITY VALUES AND EFFECTIVE POROSITY VALUES OBTAINED FROM SLUG TESTS COMPLETED APRIL 2016.

4. GROUNDWATER ELEVATION IN **BOLD BLUE TEXT** AND IN FEET ABOVE MEAN SEA LEVEL (AMSL).

5. AERIAL IMAGERY SOURCE: ESRI, 20 OCTOBER 2022

N

0 300 600
SCALE IN FEET

HALEY ALDRICH

EVERGY KANSAS CENTRAL, INC.
JEFFREY ENERGY CENTER
ST. MARYS, KANSAS

BOTTOM ASH SETTLING AREA/ BOTTOM ASH LANDFILL GROUNDWATER POTENTIOMETRIC ELEVATION CONTOUR MAP SEPTEMBER 6, 2023

evergy

JANUARY 2024

FIGURE 3

GIS: \\haleyaldrich.com\share\phx_common\Projects\Westar\GIS\Jeffrey Energy Center\Maps\2024 011129778 054 0001 BASA GDWTR CONTOUR MAP SEPTEMBER 2023.mxd - khensen - 1/11/2024 7:59:18 AM

ATTACHMENT 1
Statistical Analyses

ATTACHMENT 1-1
September 2022 Semi-Annual Groundwater Assessment Monitoring Data Statistical Evaluation

HALEY & ALDRICH, INC.
6500 Rockside Road
Suite 200
Cleveland, OH 44131
216.739.0555

TECHNICAL MEMORANDUM

January 31, 2024
File No. 129778-050

TO: Evergy Kansas Central, Inc.
Jared Morrison – Director, Water and Waste Programs

FROM: Haley & Aldrich, Inc.
Steven F. Putrich, P.E., Principal Consultant – Engineering Principal
Mark Nicholls, P.G., Senior Associate – Senior Hydrogeologist

SUBJECT: September 2022 Semi-Annual Groundwater Detection Monitoring Data
Statistical Evaluation
Completed February 1, 2023
Jeffrey Energy Center
Bottom Ash Settling Area/Bottom Ash Landfill

Pursuant to Title 40 Code of Federal Regulations (40 CFR) §§ 257.93 and 257.94 (Rule), this memorandum summarizes the statistical evaluation of the analytical results for the **September 2022** semi-annual detection monitoring groundwater sampling event for the Jeffrey Energy Center (JEC) Bottom Ash Settling Area/Bottom Ash Landfill (BASA/BAL). This semi-annual detection monitoring groundwater sampling event was completed on **September 8, 2022,** with laboratory results received and validated on **November 4, 2022**.

The statistical evaluation discussed in this memorandum was conducted to determine if Appendix III groundwater monitoring constituents have been detected in downgradient wells at concentrations that represent a statistically significant increase (SSI) above background or upgradient wells consistent with the requirements in 40 CFR § 257.94.

Statistical Evaluation of Appendix III Constituents

The Rule provides four specific options for statistical evaluation of groundwater quality data collected at a coal combustion residual (CCR) unit (40 CFR § 257.93(f)(1-4)). The two statistical methods used for these evaluations, prediction limits (PL) and Parametric Analysis of Variance, were certified by Haley & Aldrich, Inc. on April 17, 2019. The PL method, as determined applicable for this sampling event, was used to evaluate potential SSIs above background. Background levels for each constituent listed in Appendix III (boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids) were computed as upper prediction limits (UPL), considering one future observation, and a minimum 95 percent confidence coefficient. The most recent groundwater sampling event from each compliance well was compared to the corresponding background PL to determine if a SSI existed.

STATISTICAL EVALUATION

An interwell evaluation using the PL method was used to complete the statistical evaluation of the referenced dataset. Interwell evaluation compares the most recent values from downgradient compliance wells against a background dataset composed of upgradient well data (MW-BAA-6). A PL procedure is one in which a concentration limit for each constituent is established from the distribution of the background data, with a specified confidence level (e.g., 95 percent). The upper endpoint of a concentration limit is called the UPL. Depending on the background data distribution, parametric or non-parametric PL procedures are used to evaluate groundwater monitoring data using this method. Parametric PLs utilize normally distributed data or normalized data via a transformation of the sample background data used to construct the limit. If the data are non-normal and a transformation is not indicated, non-parametric procedures (order statistics or bootstrap methods) are used to calculate the PL. If all the background data are non-detect, a maximum reporting limit may serve as an appropriate UPL.

The statistical evaluation was conducted using the background dataset for all Appendix III constituents. The UPLs were calculated from the background well dataset using Chemstat software after testing for outlier sample results that would warrant removal from the dataset based on likely error in sampling or measurement. Both visual and statistical outlier tests for the background data were performed using Chemstat and U.S. Environmental Protection Agency's ProUCL 5.1 software, and a visual inspection of the data was performed using box plots and distribution plots for the downgradient sample data. No sample data were identified as outliers that warranted removal from the dataset.

BACKGROUND DISTRIBUTIONS

The groundwater analytical results for each sampling event from the background sample location MW-BAA-6 were combined to calculate the UPL for each Appendix III constituent. The variability and distribution of the pooled dataset were evaluated to determine the method for UPL calculation. Per the document, *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance*, March 2009, background concentrations were updated based on statistical evaluation of analytical results collected through **September 2021**.

RESULTS OF APPENDIX III DOWNGRADIENT STATISTICAL COMPARISONS

Sample concentrations from the downgradient wells for each of the Appendix III constituents from the **September 2022** semi-annual detection monitoring sampling event were compared to their respective background UPLs (Table I). A sample concentration greater than the background UPL is considered to represent a SSI. The results of the groundwater detection monitoring statistical evaluation are provided in Table I. **Based on this statistical evaluation of groundwater sampling data collected in September 2022, no SSIs above background PLs occurred at the JEC BASA/BAL.**

Attachments:
Table I – Summary of Semi-Annual Detection Groundwater Monitoring Statistical Evaluation

TABLE

TABLE I
SUMMARY OF SEMI-ANNUAL DETECTION GROUNDWATER MONITORING STATISTICAL EVALUATION
SEPTEMBER 2022
JEFFREY ENERGY CENTER BOTTOM ASH SETTLING AREA/BOTTOM ASH LANDFILL
ST. MARYS, KANSAS

												Interwell Analysis	
Location Id	**Frequency of Detection**	**Percent Non-Detects**	**Range of Non-Detect**	**Maximum Detect**	**Variance**	**Standard Deviation**	**Coefficient of Variance**	**Outlier Presence**	**Outlier Removed**	**Trend**	**Distribution Well**	**September 2022 Concentration (mg/L)**	**Background Limits[1] (UPL) mg/L**	**SSI**
CCR Appendix-III: Boron, Total (mg/L)														
MW-BAA-6 (upgradient)	18/18	0%	-	5.92	1.742	1.32	0.3305	No	No	Stable		5.8	9.08	
MW-BAA-2	18/18	0%	-	1.4	0.03291	0.1814	0.167	No	No	Stable	Normal	1.1		No
MW-BAA-3	18/18	0%	-	2.5	0.01032	0.1016	0.04472	Yes	No	Stable	Non-parametric	2.1		No
MW-BAA-7	18/18	0%	-	1.3	0.09597	0.3098	0.3439	No	No	Decrease	Non-parametric	0.70		No
CCR Appendix-III: Calcium, Total (mg/L)														
MW-BAA-6 (upgradient)	18/18	0%	-	557	3107	55.74	0.1111	Yes	No	Increase		477	557	
MW-BAA-2	18/18	0%	-	224	496.6	22.28	0.1255	No	No	Stable	Normal	170		No
MW-BAA-3	19/19	0%	-	559	693.7	26.34	0.05097	No	No	Stable	Normal	493		No
MW-BAA-7	18/18	0%	-	267	419	20.47	0.08905	No	No	Stable	Normal	259		No
CCR Appendix-III: Chloride (mg/L)														
MW-BAA-6 (upgradient)	18/18	0%	-	314	1925	43.87	0.1772	No	No	Increase		306	422	
MW-BAA-2	18/18	0%	-	220	1617	40.21	0.3087	No	No	Stable	Normal	131		No
MW-BAA-3	18/18	0%	-	189	150.6	12.27	0.07743	No	No	Stable	Normal	138		No
MW-BAA-7	18/18	0%	-	211	804.8	28.37	0.1549	No	No	Stable	Non-parametric	137		No
CCR Appendix-III: Fluoride (mg/L)														
MW-BAA-6 (upgradient)	15/18	17%	0.2-0.2	0.88	0.05035	0.2244	0.413	No	No	Stable		<0.20	1.398	
MW-BAA-2	18/18	0%	-	0.63	0.007471	0.08643	0.1729	Yes	No	Stable	Normal	0.25		No
MW-BAA-3	16/18	11%	0.2-0.2	1	0.06521	0.2554	0.3274	No	No	Decrease	Non-parametric	<0.20		No
MW-BAA-7	17/18	6%	0.2-0.2	0.9	0.02494	0.1579	0.2242	Yes	No	Decrease	Normal	<0.20		No
CCR Appendix-III: pH (lab) (SU)														
MW-BAA-6 (upgradient)	18/18	0%	-	7.5	0.03124	0.1768	0.02497	No	No	Stable		7.5	7.71	
MW-BAA-2	18/18	0%	-	8.5	0.08889	0.2981	0.04017	Yes	No	Stable	Non-parametric	7.1		No
MW-BAA-3	18/18	0%	-	7.6	0.03281	0.1811	0.02547	Yes	No	Decrease	Normal	7.0		No
MW-BAA-7	18/18	0%	-	7.6	0.02379	0.1542	0.02097	No	No	Stable	Normal	7.6		No
CCR Appendix-III: Sulfate (mg/L)														
MW-BAA-6 (upgradient)	18/18	0%	-	2190	119800	346.1	0.1926	No	No	Stable		2090	2190	
MW-BAA-2	18/18	0%	-	983	30160	173.7	0.2687	No	No	Stable	Normal	652		No
MW-BAA-3	18/18	0%	-	2290	14740	121.4	0.0605	No	No	Stable	Normal	1780		No
MW-BAA-7	18/18	0%	-	986	2794	52.86	0.05843	No	No	Stable	Non-parametric	986		No
CCR Appendix-III: Total Dissolved Solids (TDS) (mg/L)														
MW-BAA-6 (upgradient)	18/18	0%	-	4530	229600	479.2	0.1454	Yes	No	Stable		4530	3670	
MW-BAA-2	18/18	0%	-	1790	44560	211.1	0.1659	No	No	Stable	Normal	1170		No
MW-BAA-3	18/18	0%	-	3780	60190	245.3	0.07411	No	No	Stable	Normal	3610		No
MW-BAA-7	18/18	0%	-	1990	8297	91.09	0.05045	Yes	No	Stable	Normal	1970		No

Notes:

[1] Based on background data collected from 08/25/2016 through 09/14/2021.
CCR = coal combustion residual
mg/L = milligrams per liter
SSI = statistically significant increase
SU = standard unit
UPL = upper prediction limit

ATTACHMENT 1-2
March 2023 Semi-Annual Groundwater Assessment Monitoring Data Statistical Evaluation

HALEY & ALDRICH, INC.
6500 Rockside Road
Suite 200
Cleveland, OH 44131
216.739.0555

TECHNICAL MEMORANDUM

January 31, 2024
File No. 129778-050

TO: Evergy Kansas Central, Inc.
Jared Morrison – Director, Water and Waste Programs

FROM: Haley & Aldrich, Inc.
Steven F. Putrich, P.E., Principal Consultant – Engineering Principal
Mark Nicholls, P.G., Senior Associate – Senior Hydrogeologist

SUBJECT: March 2023 Semi-Annual Groundwater Detection Monitoring Data
Statistical Evaluation
Completed July 21, 2023
Jeffrey Energy Center
Bottom Ash Settling Area/Bottom Ash Landfill

Pursuant to Title 40 Code of Federal Regulations (40 CFR) §§ 257.93 and 257.94 (Rule), this memorandum summarizes the statistical evaluation of the analytical results for the **March 2023** semi-annual detection monitoring groundwater sampling event for the Jeffrey Energy Center (JEC) Bottom Ash Settling Area/Bottom Ash Landfill (BASA/BAL). This semi-annual detection monitoring groundwater sampling event was completed on **March 14, 2023,** with laboratory results received and validated on **June 8, 2023**.

The statistical evaluation discussed in this memorandum was conducted to determine if Appendix III groundwater monitoring constituents have been detected in downgradient wells at concentrations that represent a statistically significant increase (SSI) above background or upgradient wells consistent with the requirements in 40 CFR § 257.94.

Statistical Evaluation of Appendix III Constituents

The Rule provides four specific options for statistical evaluation of groundwater quality data collected at a coal combustion residual (CCR) unit (40 CFR § 257.93(f)(1-4)). The two statistical methods used for these evaluations, prediction limits (PL) and Parametric Analysis of Variance, were certified by Haley & Aldrich, Inc. on April 17, 2019. The PL method, as determined applicable for this sampling event, was used to evaluate potential SSIs above background. Background levels for each constituent listed in Appendix III (boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids) were computed as upper prediction limits (UPL), considering one future observation, and a minimum 95 percent confidence coefficient. The most recent groundwater sampling event from each compliance well was compared to the corresponding background PL to determine if a SSI existed.

STATISTICAL EVALUATION

An interwell evaluation using the PL method was used to complete the statistical evaluation of the referenced dataset. Interwell evaluation compares the most recent values from downgradient compliance wells against a background dataset composed of upgradient well data (MW-BAA-6). A PL procedure is one in which a concentration limit for each constituent is established from the distribution of the background data, with a specified confidence level (e.g., 95 percent). The upper endpoint of a concentration limit is called the UPL. Depending on the background data distribution, parametric or non-parametric PL procedures are used to evaluate groundwater monitoring data using this method. Parametric PLs utilize normally distributed data or normalized data via a transformation of the sample background data used to construct the limit. If the data are non-normal and a transformation is not indicated, non-parametric procedures (order statistics or bootstrap methods) are used to calculate the PL. If all the background data are non-detect, a maximum reporting limit may serve as an appropriate UPL.

The statistical evaluation was conducted using the background dataset for all Appendix III constituents. The UPLs were calculated from the background well dataset using Chemstat software after testing for outlier sample results that would warrant removal from the dataset based on likely error in sampling or measurement. Both visual and statistical outlier tests for the background data were performed using Chemstat and U.S. Environmental Protection Agency's ProUCL 5.1 software, and a visual inspection of the data was performed using box plots and distribution plots for the downgradient sample data. No sample data were identified as outliers that warranted removal from the dataset.

BACKGROUND DISTRIBUTIONS

The groundwater analytical results for each sampling event from the background sample location MW-BAA-6 were combined to calculate the UPL for each Appendix III constituent. The variability and distribution of the pooled dataset were evaluated to determine the method for UPL calculation. Per the document, *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance*, March 2009, background concentrations were updated based on statistical evaluation of analytical results collected through **September 2021**.

RESULTS OF APPENDIX III DOWNGRADIENT STATISTICAL COMPARISONS

Sample concentrations from the downgradient wells for each of the Appendix III constituents from the **March 2023** semi-annual detection monitoring sampling event were compared to their respective background UPLs (Table I). A sample concentration greater than the background UPL is considered to represent a SSI. The results of the groundwater detection monitoring statistical evaluation are provided in Table I. **Based on this statistical evaluation of groundwater sampling data collected in March 2023, no SSIs above background PLs occurred at the JEC BASA/BAL.**

Attachments:
Table I – Summary of Semi-Annual Detection Groundwater Monitoring Statistical Evaluation

TABLE

TABLE I
SUMMARY OF SEMI-ANNUAL DETECTION GROUNDWATER MONITORING STATISTICAL EVALUATION
MARCH 2023 SAMPLING EVENT
JEFFREY ENERGY CENTER BOTTOM ASH SETTLING AREA/BOTTOM ASH LANDFILL
ST. MARYS, KANSAS

													Interwell Analysis	
Location Id	**Frequency of Detection**	**Percent Non-Detects**	**Range of Non-Detect**	**Maximum Detect**	**Variance**	**Standard Deviation**	**Coefficient of Variance**	**Outlier Presence**	**Outlier Removed**	**Trend**	**Distribution Well**	**March 2023 Concentration (mg/L)**	**Background Limits[1] (UPL) mg/L**	**SSI**
CCR Appendix-III: Boron, Total (mg/L)														
MW-BAA-6	19/19	0%	-	5.92	1.658	1.288	0.3204	No	No	Stable	Normal	4.5	9.08	
MW-BAA-2	19/19	0%	-	1.4	0.03109	0.1763	0.1622	No	No	Stable	Normal	1.1		No
MW-BAA-3	19/19	0%	-	2.5	0.01062	0.103	0.04524	Yes	No	Stable	Non-parametric	2.4		No
MW-BAA-7	19/19	0%	-	1.3	0.09235	0.3039	0.341	No	No	Decrease	Non-parametric	0.72		No
CCR Appendix-III: Calcium, Total (mg/L)														
MW-BAA-6	19/19	0%	-	575	3217	56.71	0.1122	Yes	No	Increase	Non-parametric	575	557	
MW-BAA-2	19/19	0%	-	224	472.7	21.74	0.1221	No	No	Stable	Normal	186		No
MW-BAA-3	20/20	0%	-	559	719.5	26.82	0.05174	No	No	Stable	Normal	552		No
MW-BAA-7	19/19	0%	-	276	507.7	22.53	0.09699	No	No	Stable	Normal	276		No
CCR Appendix-III: Chloride (mg/L)														
MW-BAA-6	19/19	0%	-	326	2142	46.28	0.1839	No	No	Increase	Normal	326	422	
MW-BAA-2	19/19	0%	-	220	1528	39.09	0.2996	No	No	Stable	Normal	134		No
MW-BAA-3	19/19	0%	-	189	261	16.16	0.1036	No	No	Stable	Normal	111		No
MW-BAA-7	19/19	0%	-	211	807.9	28.42	0.1566	No	No	Stable	Non-parametric	153		No
CCR Appendix-III: Fluoride (mg/L)														
MW-BAA-6	15/19	21%	0.2-0.2	0.88	0.05376	0.2319	0.4414	No	No	Stable	Normal	< 0.20	1.398	
MW-BAA-2	18/19	5%	0.2-0.2	0.63	0.01179	0.1086	0.2243	Yes	No	Stable	Normal	< 0.20		No
MW-BAA-3	17/19	11%	0.2-0.2	1	0.07694	0.2774	0.3691	No	No	Decrease	Non-parametric	0.24		No
MW-BAA-7	18/19	5%	0.2-0.2	0.9	0.03349	0.183	0.2685	Yes	No	Decrease	Normal	0.27		No
CCR Appendix-III: pH (lab) (SU)														
MW-BAA-6	19/19	0%	-	7.5	0.03357	0.1832	0.02594	No	No	Stable	Normal	6.8	7.71	
MW-BAA-2	19/19	0%	-	8.5	0.09333	0.3055	0.04128	Yes	No	Stable	Non-parametric	7.0		No
MW-BAA-3	19/19	0%	-	7.6	0.03164	0.1779	0.02503	Yes	No	Decrease	Normal	7.0		No
MW-BAA-7	19/19	0%	-	7.6	0.03339	0.1827	0.02492	No	No	Stable	Normal	6.9		No
CCR Appendix-III: Sulfate (mg/L)														
MW-BAA-6	19/19	0%	-	2190	116800	341.7	0.1887	No	No	Stable	Non-parametric	2060	2190	
MW-BAA-2	19/19	0%	-	983	28490	168.8	0.2614	No	No	Stable	Normal	635		No
MW-BAA-3	19/19	0%	-	2290	14070	118.6	0.05903	No	No	Stable	Normal	2060		No
MW-BAA-7	19/19	0%	-	986	2716	52.12	0.05748	No	No	Stable	Non-parametric	943		No
CCR Appendix-III: Total Dissolved Solids (TDS) (mg/L)														
MW-BAA-6	19/19	0%	-	4530	275400	524.7	0.1566	Yes	No	Stable	Non-parametric	3710	3670	
MW-BAA-2	19/19	0%	-	1790	42090	205.2	0.1613	No	No	Stable	Normal	1260		No
MW-BAA-3	19/19	0%	-	3780	67010	258.9	0.07765	No	No	Stable	Normal	3100		No
MW-BAA-7	19/19	0%	-	1990	8651	93.01	0.05133	Yes	No	Stable	Normal	1930		No

Notes:

[1] Based on background data collected from 08/25/2016 through 09/14/2021.
CCR = coal combustion residual
mg/L = milligrams per liter
SSI = statistically significant increase
SU = standard unit
UPL = upper prediction limit

ATTACHMENT 2
Laboratory Analytical Reports

ATTACHMENT 2-1
March 2023 Semi-Annual Sampling Event Laboratory Analytical Report

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

April 25, 2023

Jake Humphrey
Evergy, Inc.
818 S Kansas Avenue
Topeka, KS 66612

RE: Project: JEC BASA/BAL
Pace Project No.: 60423983

Dear Jake Humphrey:

Enclosed are the analytical results for sample(s) received by the laboratory on March 15, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Kansas City

REVISED 4/25/23

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Spiller

Alice Spiller
alice.spiller@pacelabs.com
(913)599-5665
PM Lab Management

Enclosures

cc: Shelly Gomez, Evergy
Laura Hines, Evergy, Inc.
Shannon Hughes, Evergy
Adam Irvin, Evergy
Samantha Kaney, Haley & Aldrich
Adriana Sosa, Haley & Aldrich, Inc.
Andrew Watson, Haley & Aldrich

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: JEC BASA/BAL
Pace Project No.: 60423983

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 22-031-0
Illinois Certification #: 2000302021-3
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212023-1
Oklahoma Certification #: 2022-057
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-21-15
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: JEC BASA/BAL
Pace Project No.: 60423983

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60423983001	**MW BAA-2-031423**	Water	03/14/23 10:50	03/15/23 12:00
60423983002	**MW BAA-3-031423**	Water	03/14/23 12:30	03/15/23 12:00
60423983003	**MW BAA-6-031423**	Water	03/14/23 11:55	03/15/23 12:00
60423983004	**MW BAA-7-031423**	Water	03/14/23 11:15	03/15/23 12:00
60423983005	**DUP JEC BAA-031423**	Water	03/14/23 12:30	03/15/23 12:00

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: JEC BASA/BAL
Pace Project No.: 60423983

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60423983001	**MW BAA-2-031423**	EPA 200.7	ALH	2	PASI-K
		SM 2540C	MLD	1	PASI-K
		SM 4500-H+B	CRN2	1	PASI-K
		EPA 300.0	CRN2	3	PASI-K
60423983002	**MW BAA-3-031423**	EPA 200.7	ALH	2	PASI-K
		SM 2540C	MLD	1	PASI-K
		SM 4500-H+B	CRN2	1	PASI-K
		EPA 300.0	CRN2	3	PASI-K
60423983003	**MW BAA-6-031423**	EPA 200.7	ALH	2	PASI-K
		SM 2540C	MLD	1	PASI-K
		SM 4500-H+B	CRN2	1	PASI-K
		EPA 300.0	CRN2	3	PASI-K
60423983004	**MW BAA-7-031423**	EPA 200.7	ALH	2	PASI-K
		SM 2540C	MLD	1	PASI-K
		SM 4500-H+B	CRN2	1	PASI-K
		EPA 300.0	CRN2	3	PASI-K
60423983005	**DUP JEC BAA-031423**	EPA 200.7	ALH	2	PASI-K
		SM 2540C	MLD	1	PASI-K
		SM 4500-H+B	CRN2	1	PASI-K
		EPA 300.0	CRN2	3	PASI-K

PASI-K = Pace Analytical Services - Kansas City

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: JEC BASA/BAL
Pace Project No.: 60423983

Date: April 25, 2023

Amended report to reflect reanalysis data of TDS for sample BAA-3 and BAA-6 per client request.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: JEC BASA/BAL
Pace Project No.: 60423983

Method: **EPA 200.7**
Description: 200.7 Metals, Total
Client: Evergy Kansas Central, Inc.
Date: April 25, 2023

General Information:
5 samples were analyzed for EPA 200.7 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 200.7 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: JEC BASA/BAL
Pace Project No.: 60423983

Method: **SM 2540C**
Description: 2540C Total Dissolved Solids
Client: Evergy Kansas Central, Inc.
Date: April 25, 2023

General Information:
5 samples were analyzed for SM 2540C by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- MW BAA-3-031423 (Lab ID: 60423983002)
- MW BAA-6-031423 (Lab ID: 60423983003)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: JEC BASA/BAL
Pace Project No.: 60423983

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Evergy Kansas Central, Inc.
Date: April 25, 2023

General Information:
5 samples were analyzed for SM 4500-H+B by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated outside of the 15 minute EPA required holding time.
- DUP JEC BAA-031423 (Lab ID: 60423983005)
- MW BAA-2-031423 (Lab ID: 60423983001)
- MW BAA-3-031423 (Lab ID: 60423983002)
- MW BAA-6-031423 (Lab ID: 60423983003)
- MW BAA-7-031423 (Lab ID: 60423983004)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: JEC BASA/BAL
Pace Project No.: 60423983

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Evergy Kansas Central, Inc.
Date: April 25, 2023

General Information:
5 samples were analyzed for EPA 300.0 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: JEC BASA/BAL
Pace Project No.: 60423983

Sample: MW BAA-2-031423 **Lab ID: 60423983001** Collected: 03/14/23 10:50 Received: 03/15/23 12:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City							
Boron, Total Recoverable	**1.1**	mg/L	0.10	1	03/16/23 12:12	03/27/23 16:32	7440-42-8	
Calcium, Total Recoverable	**186**	mg/L	0.20	1	03/16/23 12:12	03/27/23 16:32	7440-70-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	**1260**	mg/L	13.3	1		03/16/23 09:40		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B Pace Analytical Services - Kansas City							
pH at 25 Degrees C	**7.0**	Std. Units	0.10	1		03/16/23 10:38		H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	**134**	mg/L	10.0	10		03/21/23 21:39	16887-00-6	
Fluoride	**<0.20**	mg/L	0.20	1		03/21/23 21:26	16984-48-8	
Sulfate	**635**	mg/L	100	100		03/23/23 22:17	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: JEC BASA/BAL
Pace Project No.: 60423983

Sample: MW BAA-3-031423 **Lab ID: 60423983002** Collected: 03/14/23 12:30 Received: 03/15/23 12:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City							
Boron, Total Recoverable	**2.4**	mg/L	0.10	1	03/16/23 12:12	03/27/23 16:38	7440-42-8	
Calcium, Total Recoverable	**552**	mg/L	0.20	1	03/16/23 12:12	03/27/23 16:38	7440-70-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	**3750**	mg/L	66.7	1		03/16/23 09:40		
Total Dissolved Solids	**3100**	mg/L	66.7	1		04/13/23 08:47		H1
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B Pace Analytical Services - Kansas City							
pH at 25 Degrees C	**7.0**	Std. Units	0.10	1		03/16/23 10:38		H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	**111**	mg/L	10.0	10		03/21/23 22:06	16887-00-6	
Fluoride	**0.24**	mg/L	0.20	1		03/21/23 21:53	16984-48-8	
Sulfate	**2060**	mg/L	200	200		03/23/23 22:31	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: JEC BASA/BAL
Pace Project No.: 60423983

Sample: MW BAA-6-031423 **Lab ID: 60423983003** Collected: 03/14/23 11:55 Received: 03/15/23 12:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City							
Boron, Total Recoverable	**4.5**	mg/L	0.10	1	03/16/23 12:12	03/27/23 16:40	7440-42-8	
Calcium, Total Recoverable	**575**	mg/L	0.20	1	03/16/23 12:12	03/27/23 16:40	7440-70-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	**4350**	mg/L	66.7	1		03/16/23 09:40		
Total Dissolved Solids	**3710**	mg/L	100	1		04/13/23 08:47		H1
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B Pace Analytical Services - Kansas City							
pH at 25 Degrees C	**6.8**	Std. Units	0.10	1		03/16/23 10:38		H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	**326**	mg/L	50.0	50		03/23/23 22:44	16887-00-6	
Fluoride	**<0.20**	mg/L	0.20	1		03/21/23 22:20	16984-48-8	
Sulfate	**2060**	mg/L	500	500		03/23/23 22:57	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: JEC BASA/BAL
Pace Project No.: 60423983

Sample: MW BAA-7-031423 **Lab ID: 60423983004** Collected: 03/14/23 11:15 Received: 03/15/23 12:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City							
Boron, Total Recoverable	**0.72**	mg/L	0.10	1	03/16/23 12:12	03/27/23 16:42	7440-42-8	
Calcium, Total Recoverable	**276**	mg/L	0.20	1	03/16/23 12:12	03/27/23 16:42	7440-70-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	**1930**	mg/L	20.0	1		03/16/23 09:41		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B Pace Analytical Services - Kansas City							
pH at 25 Degrees C	**6.9**	Std. Units	0.10	1		03/16/23 10:38		H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	**153**	mg/L	10.0	10		03/21/23 23:00	16887-00-6	
Fluoride	**0.27**	mg/L	0.20	1		03/21/23 22:46	16984-48-8	
Sulfate	**943**	mg/L	100	100		03/23/23 23:38	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: JEC BASA/BAL
Pace Project No.: 60423983

Sample: DUP JEC BAA-031423 **Lab ID: 60423983005** Collected: 03/14/23 12:30 Received: 03/15/23 12:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City							
Boron, Total Recoverable	**2.4**	mg/L	0.10	1	03/16/23 12:12	03/27/23 16:45	7440-42-8	
Calcium, Total Recoverable	**557**	mg/L	0.20	1	03/16/23 12:12	03/27/23 16:45	7440-70-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	**3170**	mg/L	66.7	1		03/16/23 09:41		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B Pace Analytical Services - Kansas City							
pH at 25 Degrees C	**6.8**	Std. Units	0.10	1		03/16/23 10:38		H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	**112**	mg/L	10.0	10		03/21/23 23:53	16887-00-6	
Fluoride	**0.25**	mg/L	0.20	1		03/21/23 23:13	16984-48-8	
Sulfate	**2080**	mg/L	200	200		03/23/23 23:51	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: JEC BASA/BAL
Pace Project No.: 60423983

QC Batch: 836957
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60423983001, 60423983002, 60423983003, 60423983004, 60423983005

METHOD BLANK: 3319303 Matrix: Water
Associated Lab Samples: 60423983001, 60423983002, 60423983003, 60423983004, 60423983005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Boron	mg/L	<0.10	0.10	03/27/23 16:27	
Calcium	mg/L	<0.20	0.20	03/27/23 16:27	

LABORATORY CONTROL SAMPLE: 3319304

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.98	98	85-115	
Calcium	mg/L	10	10.5	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3319305 3319306

Parameter	Units	60423983001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	1.1	1	1	2.1	2.1	101	102	70-130	0	20	
Calcium	mg/L	186	10	10	198	198	120	117	70-130	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: JEC BASA/BAL
Pace Project No.: 60423983

QC Batch: 836930
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60423983001, 60423983002, 60423983003

METHOD BLANK: 3319188 Matrix: Water
Associated Lab Samples: 60423983001, 60423983002, 60423983003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	03/16/23 09:38	

LABORATORY CONTROL SAMPLE: 3319189

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	1000	100	80-120	

SAMPLE DUPLICATE: 3319190

Parameter	Units	60423873001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	533	558	5	10	

SAMPLE DUPLICATE: 3319191

Parameter	Units	60423977003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1530	1460	5	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: JEC BASA/BAL
Pace Project No.: 60423983

QC Batch: 836932
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60423983004, 60423983005

METHOD BLANK: 3319193 Matrix: Water
Associated Lab Samples: 60423983004, 60423983005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	03/16/23 09:40	

LABORATORY CONTROL SAMPLE: 3319194

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	1010	101	80-120	

SAMPLE DUPLICATE: 3319195

Parameter	Units	60423955001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	780	755	3	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: JEC BASA/BAL
Pace Project No.: 60423983

QC Batch: 841433
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60423983002, 60423983003

METHOD BLANK: 3335046 Matrix: Water
Associated Lab Samples: 60423983002, 60423983003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	04/13/23 08:47	

LABORATORY CONTROL SAMPLE: 3335047

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	967	97	80-120	

SAMPLE DUPLICATE: 3335048

Parameter	Units	60423983002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	3100	3060	1	10	H1

SAMPLE DUPLICATE: 3335049

Parameter	Units	60425855003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	776	771	1	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: JEC BASA/BAL
Pace Project No.: 60423983

QC Batch: 836964
QC Batch Method: SM 4500-H+B
Analysis Method: SM 4500-H+B
Analysis Description: 4500H+B pH
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60423983001, 60423983002, 60423983003, 60423983004, 60423983005

SAMPLE DUPLICATE: 3319334

Parameter	Units	60423985001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	6.7	6.7	1	5	H6

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: JEC BASA/BAL
Pace Project No.: 60423983

QC Batch: 837612
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60423983001, 60423983002, 60423983003, 60423983004, 60423983005

METHOD BLANK: 3321412 Matrix: Water
Associated Lab Samples: 60423983001, 60423983002, 60423983003, 60423983004, 60423983005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<1.0	1.0	03/21/23 13:47	
Fluoride	mg/L	<0.20	0.20	03/21/23 13:47	
Sulfate	mg/L	<1.0	1.0	03/21/23 13:47	

METHOD BLANK: 3324417 Matrix: Water
Associated Lab Samples: 60423983001, 60423983002, 60423983003, 60423983004, 60423983005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<1.0	1.0	03/23/23 17:24	
Fluoride	mg/L	<0.20	0.20	03/23/23 17:24	
Sulfate	mg/L	<1.0	1.0	03/23/23 17:24	

LABORATORY CONTROL SAMPLE: 3321413

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	98	90-110	
Fluoride	mg/L	2.5	2.7	107	90-110	
Sulfate	mg/L	5	5.3	106	90-110	

LABORATORY CONTROL SAMPLE: 3324418

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.2	103	90-110	
Fluoride	mg/L	2.5	2.7	107	90-110	
Sulfate	mg/L	5	5.3	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3321414 3321415

Parameter	Units	60423918008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	6.4			999	990				1	15	
Fluoride	mg/L	ND	500	500	522	521	104	104	80-120	0	15	
Sulfate	mg/L	480	1000	1000	1470	1460	99	98	80-120	1	15	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: JEC BASA/BAL
Pace Project No.: 60423983

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

H1	Analysis conducted outside the EPA method holding time.
H6	Analysis initiated outside of the 15 minute EPA required holding time.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: JEC BASA/BAL
Pace Project No.: 60423983

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60423983001	**MW BAA-2-031423**	EPA 200.7	836957	EPA 200.7	837019
60423983002	**MW BAA-3-031423**	EPA 200.7	836957	EPA 200.7	837019
60423983003	**MW BAA-6-031423**	EPA 200.7	836957	EPA 200.7	837019
60423983004	**MW BAA-7-031423**	EPA 200.7	836957	EPA 200.7	837019
60423983005	**DUP JEC BAA-031423**	EPA 200.7	836957	EPA 200.7	837019
60423983001	**MW BAA-2-031423**	SM 2540C	836930		
60423983002	**MW BAA-3-031423**	SM 2540C	836930		
60423983002	**MW BAA-3-031423**	SM 2540C	841433		
60423983003	**MW BAA-6-031423**	SM 2540C	836930		
60423983003	**MW BAA-6-031423**	SM 2540C	841433		
60423983004	**MW BAA-7-031423**	SM 2540C	836932		
60423983005	**DUP JEC BAA-031423**	SM 2540C	836932		
60423983001	**MW BAA-2-031423**	SM 4500-H+B	836964		
60423983002	**MW BAA-3-031423**	SM 4500-H+B	836964		
60423983003	**MW BAA-6-031423**	SM 4500-H+B	836964		
60423983004	**MW BAA-7-031423**	SM 4500-H+B	836964		
60423983005	**DUP JEC BAA-031423**	SM 4500-H+B	836964		
60423983001	**MW BAA-2-031423**	EPA 300.0	837612		
60423983002	**MW BAA-3-031423**	EPA 300.0	837612		
60423983003	**MW BAA-6-031423**	EPA 300.0	837612		
60423983004	**MW BAA-7-031423**	EPA 300.0	837612		
60423983005	**DUP JEC BAA-031423**	EPA 300.0	837612		

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_S	WO#: 60423983
	Revision: 2	Effective Date: 01/

Client Name: Evergy Kansas Central, Inc.

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☑ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☑ No ☐

Custody Seal on Cooler/Box Present: Yes ☐ No ☑ Seals intact: Yes ☐ No ☐

Packing Material: Bubble Wrap ☑ Bubble Bags ☐ Foam ☐ None ☐ Other ☑ ZPLC

Thermometer Used: T296 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 5.1 **Corr. Factor** -0.1 **Corrected** 5.0

Date and initials of person examining contents: DA 3/15/23

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#: 6718	☑Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☐No ☑N/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Evergy Kansas Central, Inc.	Report To:	Jake Humphrey	Attention:	ACCOUNTS PAYABLE
Address:	400 E Van Buren St	Copy To:	Laura Hines, Samantha Kaney, Melissa Michels	Company Name:	EVERGY KANSAS CENTRAL
Suite 545 Phoenix, AZ 85004				Address:	SAME AS A
Email:	skaney@haleyaldrich.com	Purchase Order #:		Pace Quote:	
Phone:	507-251-2232 Fax:	Project Name:	JEC BASA/BAL	Pace Project Manager:	alice.spiller@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	9657, line 5

Regulatory Agency	
State / Location	KS

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	200.7 Metals B,Ca	300.0 Anions Cl,F,S	Total Dissolved Solids (TDS)	pH	Residual Chlorine (Y/N)	60423983
	Requested Analysis Filtered (Y/N)																	Y	N	N	N	N		
1	MW BAA-2-031423	WT	G	NA	NA	3/14/23 #######	10:50		4	3		1							X	X	X	X		
2	MW BAA-3-031423	WT	G	NA	NA	3/14/23 #######	12:30		4	3		1							X	X	X	X		
3	MW BAA-6-031423	WT	G	NA	NA	3/14/23 #######	11:55		4	3		1							X	X	X	X		
4	MW BAA-7-031423	WT	G	NA	NA	3/14/23 #######	11:15		4	3		1							X	X	X	X		
5	Dup JEC BAA-031423	WT	G	NA	NA	3/14/23 #######	12:30		4	3		1							X	X	X	X		
6																									
7																									
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Matt VanderPutten / SCS	3/14/2023	1000		3/15	1200	5.0	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Matt VanderPutten

SIGNATURE of SAMPLER: Matt VanderPutten **DATE Signed:** 3/14/2023

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Client: Evergy Kansas Central, Inc. Profile # 9657, line 5

Site: JEC BASA/BAL Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	WT																		1		2		1									
2	↓																		↓		↓		↓									
3																																
4																																
5	↓																															
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass				Plastic		Misc.	
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar	BP1C	1L NAOH plastic	I	Wipe/Swab
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar	BP1N	1L HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar	BP1S	1L H2SO4 plastic	ZPLC	Ziploc Bag
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide	BP1U	1L unpreserved plastic	AF	Air Filter
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass	BP1Z	1L NaOH, Zn Acetate	C	Air Cassettes
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass	BP2C	500mL NAOH plastic	R	Terracore Kit
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass	BP2N	500mL HNO3 plastic	U	Summa Can
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass	BP2S	500mL H2SO4 plastic		
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass	BP2U	500mL unpreserved plastic		
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass	BP2Z	500mL NaOH, Zn Acetate	Matrix	
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass	BP3C	250mL NaOH plastic		
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass	BP3F	250mL HNO3 plastic - field filtered	WT	Water
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass	BP3N	250mL HNO3 plastic	SL	Solid
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass	BP3U	250mL unpreserved plastic	NAL	Non-aqueous Liquid
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass	BP3S	250mL H2SO4 plastic	OL	OIL
		AG5U	100mL unpres amber glass	BP3Z	250mL NaOH, Zn Acetate	WP	Wipe
				BP4U	125mL unpreserved plastic	DW	Drinking Water
				BP4N	125mL HNO3 plastic		
				BP4S	125mL H2SO4 plastic		
				WPDU	16oz unpresserved plstic		

Work Order Number: 60423983

ATTACHMENT 2-2
September 2023 Annual Assessment
Sampling Event Laboratory Analytical Report

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

September 21, 2023

Jake Humphrey
Evergy, Inc.
818 S Kansas Avenue
Topeka, KS 66612

RE: Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

Dear Jake Humphrey:

Enclosed are the analytical results for sample(s) received by the laboratory on September 07, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Kansas City

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Spiller

Alice Spiller
alice.spiller@pacelabs.com
(913)599-5665
PM Lab Management

Enclosures

cc: Shelly Gomez, Evergy
Laura Hines, Evergy, Inc.
Shannon Hughes, Evergy
Adam Irvin, Evergy
Samantha Kaney, Haley & Aldrich
Melanie Satanek, Haley Aldrich
Adriana Sosa, Haley & Aldrich, Inc.
Andrew Watson, Haley & Aldrich

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 88-00679
Illinois Certification #: 2000302023-5
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212023-1
Oklahoma Certification #: 2022-057
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-22-16
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Services, LLC
9608 Loiret Blvd.
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SAMPLE SUMMARY

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60437050001	**BAA-2-090623**	Water	09/06/23 09:55	09/07/23 16:30
60437050002	**BAA-3-090623**	Water	09/06/23 11:40	09/07/23 16:30
60437050003	**BAA-6-090623**	Water	09/06/23 11:00	09/07/23 16:30
60437050004	**BAA-7-090623**	Water	09/06/23 10:20	09/07/23 16:30
60437050005	**BAA-DUP-090623**	Water	09/06/23 11:40	09/07/23 16:30

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Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60437050001	**BAA-2-090623**	EPA 200.7	JXD	2	PASI-K
		SM 2540C	BDH1	1	PASI-K
		SM 4500-H+B	RKA	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
60437050002	**BAA-3-090623**	EPA 200.7	JXD	2	PASI-K
		SM 2540C	BDH1	1	PASI-K
		SM 4500-H+B	RKA	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
60437050003	**BAA-6-090623**	EPA 200.7	JXD	2	PASI-K
		SM 2540C	BDH1	1	PASI-K
		SM 4500-H+B	RKA	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
60437050004	**BAA-7-090623**	EPA 200.7	JXD	2	PASI-K
		SM 2540C	BDH1	1	PASI-K
		SM 4500-H+B	RKA	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
60437050005	**BAA-DUP-090623**	EPA 200.7	JXD	2	PASI-K
		SM 2540C	BDH1	1	PASI-K
		SM 4500-H+B	RKA	1	PASI-K
		EPA 300.0	MLD	3	PASI-K

PASI-K = Pace Analytical Services - Kansas City

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

Method: **EPA 200.7**
Description: 200.7 Metals, Total
Client: Evergy Kansas Central, Inc.
Date: September 21, 2023

General Information:
5 samples were analyzed for EPA 200.7 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 200.7 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 864377

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60436996002,60437054001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3422656)
  - Boron
  - Calcium
- MS (Lab ID: 3422658)
  - Calcium
- MSD (Lab ID: 3422657)
  - Boron
  - Calcium

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

Method: **SM 2540C**
Description: 2540C Total Dissolved Solids
Client: Evergy Kansas Central, Inc.
Date: September 21, 2023

General Information:
5 samples were analyzed for SM 2540C by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Evergy Kansas Central, Inc.
Date: September 21, 2023

General Information:
5 samples were analyzed for SM 4500-H+B by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated outside of the 15 minute EPA required holding time.
- BAA-2-090623 (Lab ID: 60437050001)
- BAA-3-090623 (Lab ID: 60437050002)
- BAA-6-090623 (Lab ID: 60437050003)
- BAA-7-090623 (Lab ID: 60437050004)
- BAA-DUP-090623 (Lab ID: 60437050005)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
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Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Evergy Kansas Central, Inc.
Date: September 21, 2023

General Information:
5 samples were analyzed for EPA 300.0 by Pace Analytical Services Kansas City. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 865020

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60436338001,60437550003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3425425)
  - Chloride
  - Sulfate
- MS (Lab ID: 3425427)
  - Chloride
  - Fluoride
  - Sulfate
- MSD (Lab ID: 3425426)
  - Fluoride
  - Sulfate

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

Sample: BAA-2-090623 **Lab ID: 60437050001** Collected: 09/06/23 09:55 Received: 09/07/23 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City							
Boron, Total Recoverable	**0.80**	mg/L	0.10	1	09/13/23 16:19	09/15/23 10:51	7440-42-8	
Calcium, Total Recoverable	**187**	mg/L	0.20	1	09/13/23 16:19	09/15/23 10:51	7440-70-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	**996**	mg/L	13.3	1		09/12/23 08:59		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B Pace Analytical Services - Kansas City							
pH at 25 Degrees C	**7.2**	Std. Units	0.10	1		09/09/23 13:17		H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	**98.8**	mg/L	50.0	50		09/20/23 17:04	16887-00-6	
Fluoride	**0.36**	mg/L	0.20	1		09/19/23 17:08	16984-48-8	
Sulfate	**424**	mg/L	50.0	50		09/20/23 17:04	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

Sample: BAA-3-090623 **Lab ID: 60437050002** Collected: 09/06/23 11:40 Received: 09/07/23 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City							
Boron, Total Recoverable	**2.3**	mg/L	0.10	1	09/13/23 16:19	09/15/23 10:59	7440-42-8	
Calcium, Total Recoverable	**514**	mg/L	0.20	1	09/13/23 16:19	09/15/23 10:59	7440-70-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	**3520**	mg/L	66.7	1		09/12/23 09:00		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B Pace Analytical Services - Kansas City							
pH at 25 Degrees C	**7.1**	Std. Units	0.10	1		09/09/23 13:28		H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	**116**	mg/L	20.0	20		09/19/23 17:48	16887-00-6	
Fluoride	**0.33**	mg/L	0.20	1		09/19/23 17:35	16984-48-8	
Sulfate	**2110**	mg/L	400	400		09/20/23 17:34	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

Sample: BAA-6-090623 **Lab ID: 60437050003** Collected: 09/06/23 11:00 Received: 09/07/23 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City							
Boron, Total Recoverable	**4.5**	mg/L	0.10	1	09/13/23 16:19	09/15/23 11:01	7440-42-8	
Calcium, Total Recoverable	**531**	mg/L	0.20	1	09/13/23 16:19	09/15/23 11:01	7440-70-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	**3920**	mg/L	100	1		09/12/23 09:01		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B Pace Analytical Services - Kansas City							
pH at 25 Degrees C	**7.0**	Std. Units	0.10	1		09/09/23 13:27		H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	**270**	mg/L	20.0	20		09/19/23 18:15	16887-00-6	
Fluoride	**<0.20**	mg/L	0.20	1		09/19/23 18:02	16984-48-8	
Sulfate	**2140**	mg/L	400	400		09/20/23 17:47	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

Sample: BAA-7-090623 **Lab ID: 60437050004** Collected: 09/06/23 10:20 Received: 09/07/23 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City							
Boron, Total Recoverable	**0.61**	mg/L	0.10	1	09/13/23 16:19	09/15/23 11:03	7440-42-8	
Calcium, Total Recoverable	**251**	mg/L	0.20	1	09/13/23 16:19	09/15/23 11:03	7440-70-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	**1760**	mg/L	20.0	1		09/12/23 09:01		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B Pace Analytical Services - Kansas City							
pH at 25 Degrees C	**7.2**	Std. Units	0.10	1		09/09/23 13:21		H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	**156**	mg/L	20.0	20		09/19/23 18:42	16887-00-6	
Fluoride	**0.34**	mg/L	0.20	1		09/19/23 18:29	16984-48-8	
Sulfate	**850**	mg/L	100	100		09/20/23 17:59	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

Sample: BAA-DUP-090623 **Lab ID: 60437050005** Collected: 09/06/23 11:40 Received: 09/07/23 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City							
Boron, Total Recoverable	**2.3**	mg/L	0.10	1	09/13/23 16:19	09/15/23 11:05	7440-42-8	
Calcium, Total Recoverable	**523**	mg/L	0.20	1	09/13/23 16:19	09/15/23 11:05	7440-70-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	**3250**	mg/L	40.0	1		09/12/23 09:01		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B Pace Analytical Services - Kansas City							
pH at 25 Degrees C	**7.1**	Std. Units	0.10	1		09/09/23 13:32		H6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	**78.4**	mg/L	20.0	20		09/19/23 19:09	16887-00-6	
Fluoride	**0.25**	mg/L	0.20	1		09/19/23 18:55	16984-48-8	
Sulfate	**789**	mg/L	400	400		09/20/23 18:12	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

QC Batch: 864377
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60437050001, 60437050002, 60437050003, 60437050004, 60437050005

METHOD BLANK: 3422654 Matrix: Water
Associated Lab Samples: 60437050001, 60437050002, 60437050003, 60437050004, 60437050005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Boron	mg/L	<0.10	0.10	09/15/23 10:34	
Calcium	mg/L	<0.20	0.20	09/15/23 10:34	

LABORATORY CONTROL SAMPLE: 3422655

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	1.0	100	85-115	
Calcium	mg/L	10	10.6	106	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3422656 3422657

Parameter	Units	60436996002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	530 ug/L	1	1	1.5	1.5	102	101	70-130	1	20	M1
Calcium	mg/L	86800 ug/L	10	10	97.5	96.9	107	101	70-130	1	20	M1

MATRIX SPIKE SAMPLE: 3422658

Parameter	Units	60437054001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	0.39	1	1.4	103	70-130	
Calcium	mg/L	291	10	301	103	70-130	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

QC Batch: 864073
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60437050001, 60437050002, 60437050003, 60437050004, 60437050005

METHOD BLANK: 3421464 Matrix: Water
Associated Lab Samples: 60437050001, 60437050002, 60437050003, 60437050004, 60437050005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	09/12/23 08:59	

LABORATORY CONTROL SAMPLE: 3421465

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	1010	101	80-120	

SAMPLE DUPLICATE: 3421466

Parameter	Units	60436977001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	5230	4810	8	10	

SAMPLE DUPLICATE: 3421467

Parameter	Units	60437054004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	638	659	3	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

QC Batch: 863862
QC Batch Method: SM 4500-H+B
Analysis Method: SM 4500-H+B
Analysis Description: 4500H+B pH
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60437050001, 60437050002, 60437050003, 60437050004, 60437050005

SAMPLE DUPLICATE: 3420733

Parameter	Units	60437058001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	6.7	6.8	0	5	H6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

QUALITY CONTROL DATA

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

QC Batch: 865020
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60437050001, 60437050002, 60437050003, 60437050004, 60437050005

METHOD BLANK: 3425423 Matrix: Water
Associated Lab Samples: 60437050001, 60437050002, 60437050003, 60437050004, 60437050005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<1.0	1.0	09/19/23 09:06	
Fluoride	mg/L	<0.20	0.20	09/19/23 09:06	
Sulfate	mg/L	<1.0	1.0	09/19/23 09:06	

METHOD BLANK: 3427904 Matrix: Water
Associated Lab Samples: 60437050001, 60437050002, 60437050003, 60437050004, 60437050005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<1.0	1.0	09/20/23 19:15	
Fluoride	mg/L	<0.20	0.20	09/20/23 19:15	
Sulfate	mg/L	<1.0	1.0	09/20/23 19:15	

METHOD BLANK: 3427932 Matrix: Water
Associated Lab Samples: 60437050001, 60437050002, 60437050003, 60437050004, 60437050005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<1.0	1.0	09/21/23 09:49	
Fluoride	mg/L	<0.20	0.20	09/21/23 09:49	
Sulfate	mg/L	<1.0	1.0	09/21/23 09:49	

LABORATORY CONTROL SAMPLE: 3425424

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	96	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	5	4.9	98	90-110	

LABORATORY CONTROL SAMPLE: 3427905

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	98	90-110	
Fluoride	mg/L	2.5	2.6	104	90-110	
Sulfate	mg/L	5	5.1	103	90-110	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

LABORATORY CONTROL SAMPLE: 3427933

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	94	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	5	4.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3425425 3425426

Parameter	Units	60436338001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	9.4	5	5	15.4	14.0	121	91	80-120	10	15	M1
Fluoride	mg/L	ND	2.5	2.5	2.1	1.9	85	74	80-120	14	15	M1
Sulfate	mg/L	233	100	100	312	306	79	73	80-120	2	15	M1

MATRIX SPIKE SAMPLE: 3425427

Parameter	Units	60437550003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	74.6	100	74.8	0	80-120	M1
Fluoride	mg/L	ND	50	<4.0	0	80-120	M1
Sulfate	mg/L	27.0	100	26.1	-1	80-120	M1

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REPORT OF LABORATORY ANALYSIS

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

H6	Analysis initiated outside of the 15 minute EPA required holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: JEC BASA/BAL CCR
Pace Project No.: 60437050

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60437050001	**BAA-2-090623**	EPA 200.7	864377	EPA 200.7	864421
60437050002	**BAA-3-090623**	EPA 200.7	864377	EPA 200.7	864421
60437050003	**BAA-6-090623**	EPA 200.7	864377	EPA 200.7	864421
60437050004	**BAA-7-090623**	EPA 200.7	864377	EPA 200.7	864421
60437050005	**BAA-DUP-090623**	EPA 200.7	864377	EPA 200.7	864421
60437050001	**BAA-2-090623**	SM 2540C	864073		
60437050002	**BAA-3-090623**	SM 2540C	864073		
60437050003	**BAA-6-090623**	SM 2540C	864073		
60437050004	**BAA-7-090623**	SM 2540C	864073		
60437050005	**BAA-DUP-090623**	SM 2540C	864073		
60437050001	**BAA-2-090623**	SM 4500-H+B	863862		
60437050002	**BAA-3-090623**	SM 4500-H+B	863862		
60437050003	**BAA-6-090623**	SM 4500-H+B	863862		
60437050004	**BAA-7-090623**	SM 4500-H+B	863862		
60437050005	**BAA-DUP-090623**	SM 4500-H+B	863862		
60437050001	**BAA-2-090623**	EPA 300.0	865020		
60437050002	**BAA-3-090623**	EPA 300.0	865020		
60437050003	**BAA-6-090623**	EPA 300.0	865020		
60437050004	**BAA-7-090623**	EPA 300.0	865020		
60437050005	**BAA-DUP-090623**	EPA 300.0	865020		

WO# : 60437050

60437050

Pace	DC#_Title: ENV-FRM-LENE-0009_Sample Co		
	Revision: 2	Effective Date: 01/12/2022	Issued By: Lenexa

Client Name: Evergy Kansas Central

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☑ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None ☑ Other ☐

Thermometer Used: T295 **Type of Ice:** Wet Blue None

Cooler Temperature (°C): **As-read** 2.3 **Corr. Factor** -0.3 **Corrected** 2.0

Date and initials of person examining contents: AF 9/8

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) **LOT#:** 6204001	☑Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added. Added 2ML Nitric to "BHA6" BP3N. pH 6 to pH1
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☐No ☑N/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	EVERGY KANSAS CENTRAL, INC.	Report To:	Samantha Kaney	Attention:	Accounts Payable
Address:	Jeffrey Energy Center (JEC)	Copy To:	Jake Humphrey, Laura Hines	Company Name:	EVERGY KANSAS CENTRAL, INC
	818 Kansas Ave, Topeka, KS 66612			Address:	SEE SECTION A
Email To:	skaney@haleyaldrich.com	Purchase Order No.:		Pace Quote Reference:	
Phone:	507-251-2232 Fax:	Project Name:	JEC BASA/BAL CCR	Pace Project Manager:	Alice Spiller 913-563-1403
Requested Due Date/TAT:		Project Number:		Pace Profile #:	9657, line 5

REGULATORY AGENCY

☐ NPDES ☑ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: KS

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COLLECTED: COMPOSITE START TIME	COLLECTED: COMPOSITE END/GRAB DATE	COLLECTED: COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	200.7 Total Metals*	4500 H+B pH	300: Cl, F, SO4	2540C TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N	N	N	N	N		60437090
1	BAA-2-090623	WT	G	-	-	09/06/23	9:55	-	4	3		1							X	X	X	X		
2	BAA-3-090623	WT	G	-	-	09/06/23	11:40	-	4	3		1							X	X	X	X		
3	BAA-6-090623	WT	G	-	-	09/06/23	11:00	-	4	3		1							X	X	X	X		
4	BAA-7-090623	WT	G	-	-	09/06/23	10:20	-	4	3		1							X	X	X	X		
5	BAA-DUP-090623	WT	G	-	-	09/06/23	11:40	-	4	3		1							X	X	X	X		
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
200.7 Total Metals*: B, Ca	Jason R. Franks / SCS	9/7/23	16:00	JA Pace	9/7/23	1630	2.0	C	Y	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jason R. Franks

SIGNATURE of SAMPLER: Jason R. Franks **DATE Signed (MM/DD/YY):** 9/7/23

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Client: Evergy / Kansas Central

Profile # 9657-5

Site: JEC BHSH/BHL LCR

Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	WT																		1		2		1									
2																			1		2		1									
3																			1		2		1									
4																			1		2		1									
5																			1		2		1									
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass				Plastic		Misc.	
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar	BP1C	1L NAOH plastic	I	Wipe/Swab
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar	BP1N	1L HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar	BP1S	1L H2SO4 plastic	ZPLC	Ziploc Bag
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide	BP1U	1L unpreserved plastic	AF	Air Filter
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass	BP1Z	1L NaOH, Zn Acetate	C	Air Cassettes
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass	BP2C	500mL NAOH plastic	R	Terracore Kit
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass	BP2N	500mL HNO3 plastic	U	Summa Can
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass	BP2S	500mL H2SO4 plastic		
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass	BP2U	500mL unpreserved plastic		
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass	BP2Z	500mL NaOH, Zn Acetate	Matrix	
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass	BP3C	250mL NaOH plastic		
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass	BP3F	250mL HNO3 plastic - field filtered	WT	Water
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass	BP3N	250mL HNO3 plastic	SL	Solid
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass	BP3U	250mL unpreserved plastic	NAL	Non-aqueous Liquid
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass	BP3S	250mL H2SO4 plastic	OL	OIL
		AG5U	100mL unpres amber glass	BP3Z	250mL NaOH, Zn Acetate	WP	Wipe
				BP4U	125mL unpreserved plastic	DW	Drinking Water
				BP4N	125mL HNO3 plastic		
				BP4S	125mL H2SO4 plastic		
				WPDU	16oz unpresserved plstic		

Work Order Number: 60137050