2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

FLY ASH IMPOUNDMENT
SIBLEY GENERATING STATION
SIBLEY, MISSOURI

Presented to:
Evergy Missouri West, Inc.

SCS ENGINEERS

27224507.00 | January 31, 2025

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Overland Park, Kansas 66210
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CERTIFICATIONS

I, John R. Rockhold, being a qualified groundwater scientist and Registered Geologist in the State of Missouri, do hereby certify that the 2024 Annual Groundwater Monitoring and Corrective Action Report for the Fly Ash Impoundment at the Sibley Generating Station was prepared by me or under my direct supervision and fulfills the requirements of 40 CFR § 257.90(e).



John R. Rockhold, R.G.
SCS Engineers

I, Daniel Aaron Wiens, being a qualified licensed Professional Engineer in the State of Missouri, do hereby certify that the 2024 Annual Groundwater Monitoring and Corrective Action Report for the Fly Ash Impoundment at the Sibley Generating Station was prepared by me or under my direct supervision and fulfills the requirements of 40 CFR § 257.90(e).



Daniel Aaron Wiens, P.E.
SCS Engineers

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Revision Number	Revision Date	Revision Sections	Summary of Revisions
0	January 31, 2025	NA	Original

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1 INTRODUCTION

This 2024 Annual Groundwater Monitoring and Corrective Action Report was prepared to support compliance with the groundwater monitoring requirements of the "Coal Combustion Residuals (CCR) Final Rule" (Rule) published by the United States Environmental Protection Agency (USEPA) in the *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule*, dated April 17, 2015 (USEPA, 2015), and subsequent revisions/amendments. Specifically, this report was prepared for Evergy Missouri West, Inc. (Evergy) to fulfill the requirements of 40 CFR § 257.90 (e). The applicable sections of the Rule are provided below in *italics*, followed by applicable information relative to the 2024 Annual Groundwater Monitoring and Corrective Action Report for the Fly Ash Impoundment at the Sibley Generating Station.

1.1 § 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 § 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, 2024), the CCR Impoundment was operating under an assessment monitoring program in compliance with § 257.95 for all constituents except for molybdenum. An assessment of corrective measures (ACM) was conducted in accordance with § 257.96 for molybdenum, which continues to be monitored under an assessment monitoring program in accordance with § 257.96(b).

1.1.2 § 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, 2024), the CCR Impoundment was operating under an assessment monitoring program in compliance with § 257.95 for all constituents except for molybdenum. An assessment of corrective measures (ACM) was conducted in accordance with § 257.96 for molybdenum, which continues to be monitored under an assessment monitoring program in accordance with § 257.96(b).

1.1.3 § 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):

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

Detection monitoring statistics were not performed because the CCR Impoundment was in assessment monitoring during 2024.

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

Notification of a statistically significant level (SSL) and notification of establishing an Assessment Monitoring Program was provided on March 28, 2022 to meet the requirements of § 257.95.

1.1.4 § 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:

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

Monitoring Well	Constituent
MW-806R	Molybdenum

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

An assessment of corrective measures (ACM) was initiated on April 18, 2022, for molybdenum.

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

A public meeting for the ACM was held on November 19, 2024.

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

The ACM was completed on September 15, 2022.

1.1.5 § 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;

A remedy was not selected for molybdenum during the 2024 reporting period.

1.1.6 § 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 initiated during the 2024 reporting period.

2 § 257.90(E) ANNUAL REPORT REQUIREMENTS

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 CCR management units, the owner or operator must prepare the initial annual groundwater monitoring and corrective action report no later than January 31, 2029, 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). At a minimum, the annual groundwater monitoring and corrective action report must contain the following information, to the extent available:

2.1 § 257.90(e)(1) SITE MAP

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;

A site map with an aerial image showing the Fly Ash Impoundment and all background (or upgradient) and downgradient monitoring wells with identification numbers for the Fly Ash Impoundment groundwater monitoring program is provided as **Figure 1** in **Appendix A.** Additionally, monitoring wells installed to assist with the nature and extent investigation at the Fly Ash Impoundment are also presented in **Figure 1** in **Appendix A.**

2.2 § 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 new monitoring wells were installed, and no monitoring wells were decommissioned as part of the CCR groundwater monitoring program for the Fly Ash Impoundment in 2024.

2.3 § 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;

Assessment monitoring was conducted during the reporting period (2024). The annual assessment monitoring groundwater samples were collected in February 2024 and analyzed for all Appendix IV assessment monitoring constituents. Samples collected in May and November 2024 were collected and analyzed for Appendix III constituents and the Appendix IV assessment monitoring constituents detected during the annual assessment monitoring event performed in February 2024. Results of the sampling events are provided in **Appendix B, Table 1** (Appendix III

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and Appendix IV Assessment Monitoring Results), and **Table 2** (Groundwater Monitoring Field Measurements). The dates of sample collection and the monitoring program requiring the sample are also provided in these tables.

Additional nature and extent corrective measures samples were collected in February, June, November, and December 2024. Results of the sampling events are provided in **Appendix B, Table 3** (Nature and Extent Corrective Measures Monitoring Results), and **Table 4** (Nature and Extent Corrective Measures Monitoring Field Measurements). The dates of sample collection are also provided in these tables.

2.4 § 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);

The Fly Ash Impoundment remained in Assessment Monitoring through 2024 for all constituents except for molybdenum. An Assessment of Corrective Measures (ACM) was conducted in accordance with 40 CFR 257.96 for molybdenum, which continues to be monitored under an assessment monitoring program in accordance with 40 CFR 257.96(b).

2.5 § 257.90(e)(5) OTHER REQUIREMENTS

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

A summary of potentially required information and the corresponding section of the Rule is provided in the following sections.

2.5.1 § 257.90(e) Program Status

Status of Groundwater Monitoring and Corrective Action Program.

The groundwater monitoring and corrective action program is in Assessment Monitoring. Nature and extent sampling and additional data are being collected to assist with the selection of a remedy.

Summary of Key Actions Completed.

a. Completion of the 2023 Annual Groundwater Monitoring and Corrective Action Report,

b. Completion of the annual assessment monitoring sampling and analysis event,

c. Completion of the statistical evaluation of the Fall 2023 semiannual assessment monitoring sampling and analysis event per the certified statistical method,

d. Completion of March 2024 Semi-Annual Remedy Selection Progress Report,

e. Completion of the Spring 2024 semiannual assessment monitoring sampling and analysis event,

f. Sampling of nature and extent monitoring wells as part of the ACM Selection of Remedy in

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February, May, June, July, September, November, and December 2024,

g. Installation of two pumping test wells, performance of pumping test, and nature and extent well sampling,

h. Completion of September 2024 Semi-Annual Remedy Selection Progress Report,

i. Geoprobe soil and groundwater sampling of temporary piezometers as part of ACM Selection of Remedy

j. Completion of the statistical evaluation of the Spring 2024 semiannual and annual assessment monitoring sampling and analysis events per the certified statistical method,

k. Conducted the ACM public meeting in November 2024 to discuss the results of the ACM,

l. Initiation of the Fall 2024 semiannual assessment monitoring sampling and analysis event, and

m. Collection of soil samples as part of the ACM Selection of Remedy process.

Description of Any Problems Encountered.

No noteworthy problems were encountered.

Discussion of Actions to Resolve the Problems.

Not applicable because no noteworthy problems were encountered.

Projection of Key Activities for the Upcoming Year (2025).

- Completion of verification sampling and data analysis (if applicable)
- Statistical evaluation of Fall 2024 assessment monitoring sampling and analysis event
- Completion of the 2025 annual assessment monitoring sampling and analysis event
- Semiannual Spring and Fall 2024 groundwater sampling and analysis events
- Completion of the March and September 2025 semiannual remedy selection progress report
- Completion of the statistical evaluation of the Spring 2025 assessment monitoring sampling and analysis event
- Continuation of the nature and extent investigation and evaluation for the selection of remedy
- Data collection and evaluation for the selection of remedy
- Selection of remedy

2.5.2 § 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).

Not applicable because an alternative monitoring frequency for detection monitoring and certification was not pursued.

2.5.3 § 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.

The Fly Ash Impoundment is in Assessment Monitoring; therefore, a detection monitoring alternative source demonstration (ASD) or certification is not applicable.

2.5.4 § 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 the 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 Assessment Monitoring sampling and analysis frequency has not been established; therefore, a demonstration or certification is not applicable.

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2.5.5 § 257.95(d)(3) Assessment Monitoring Concentrations and Groundwater Protection Standards

Include the recorded concentrations required by § 257.95(d)(1) [parameters in Appendix III to this part and for those constituents in Appendix IV to this part that are detected in response to paragraph § 257.95(b)], *identify the background concentrations established under § 257.94(b), and identify the groundwater protection standards established under § 257.95(d)(2) in the annual groundwater monitoring and corrective action report required by § 257.90(e).*

Appendix III and detected Appendix IV constituents for assessment monitoring are provided in **Table 1** in **Appendix B**. The established groundwater protection standards (GWPSs) as applicable are provided in **Appendix B, Table 5**.

The GWPSs for Appendix IV constituents were set equal to the highest value of the maximum contaminant level (MCL), concentrations specified by § 257.95(h)(2), or background concentrations. The background concentrations for each of the Appendix IV constituents were determined following the prediction limit statistical procedures as specified in the "Statistical Method Certification by A Qualified Professional Engineer" dated October 12, 2017. The resulting GWPS for Appendix IV constituents are provided in **Table 5** in **Appendix B** along with the Appendix IV constituent background samples collected over nine sampling events between December 2015 and October 2017.

2.5.6 § 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.

Not applicable because an Assessment Monitoring ASD was not completed.

2.5.7 § 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 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 additional time was needed in 2024 for the ACM. On July 15, 2022, Evergy demonstrated the need for additional time beyond the regulatory timeline period of 90 days to complete the ACM. The Demonstration and Certification of Need for 60-Day Extension was provided in the 2022 Annual Groundwater Monitoring and Corrective Action Report.

2.6 § 257.90(e)(6) OVERVIEW 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.

§ 257.90(e)(6) is addressed in Section 1.1 of this report.

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3 SUPPLEMENTAL INFORMATION AND DATA

In addition to the requirements listed in 40 CFR 257.90(e), supplemental information has been included in this section in recognition of comments received by Evergy from the USEPA on January 11, 2022. The USEPA indicated in their comments that the GWMCA Report contain the following:

- Results of laboratory analysis of groundwater or other environmental media samples for 40 CFR 257 Appendix III and Appendix IV constituents or other constituents, such as those supporting characterization of site conditions that may ultimately affect a remedy.
- Required statistical analysis performed on laboratory analysis results; and
- Calculated groundwater flow rate and direction.

This information is not specifically referred to in § 257.90(e) for inclusion in the GWMCA Reports; however, it is routinely collected, determined, and maintained in Evergy's files and is being provided with in this GWMCA report. This supplemental information and data are provided as specified below:

- Laboratory Analytical Reports (**Appendix C**):

  Includes laboratory data packages with supporting information such as case narrative, sample and method summary, analytical results, quality control, and chain-of-custody documentation. The laboratory data packages for the following sampling events are provided:

  - February 2024 – Annual assessment monitoring event
  - February 2024 – Nature and extent sampling event for ACM selection of remedy
  - May 2024 – Spring 2024 semiannual assessment monitoring event
  - June 2024 – Nature and extent sampling event for ACM selection of remedy
  - July 2024 – Nature and extent sampling event during pumping test for ACM selection of remedy
  - September 2024 – Nature and extent sampling event for ACM selection of remedy
  - November 2024 – Fall 2024 semiannual assessment monitoring event
  - November 2024 – Nature and extent sampling event for ACM selection of remedy
  - December 2024 – Resampling of two nature and extent wells for ACM selection of remedy
  - December 2024 – Soil sampling event for ACM selection of remedy

- Statistical Analyses **(Appendix D)**:

  Includes summary of statistical results, prediction limit plots, prediction limit background data, detection sample results, first and second verification re-sample results (when applicable), extra sample results for pH (collected as part of the approved sampling procedures), input parameters, and a Prediction Limit summary table. Statistical analyses completed in 2024 included the following:

  - Fall 2023 semiannual assessment monitoring statistical analyses.
  - Spring 2024 semiannual and annual assessment monitoring statistical analyses.

- Groundwater Potentiometric Surface Maps (**Appendix A**):

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Includes groundwater potentiometric surface maps with the measured groundwater elevations at each well and the generalized groundwater flow direction and the calculated groundwater flow rate. Maps for the following sampling events are provided:

- **Figure 2** – February 2024 annual assessment monitoring sampling event.
- **Figure 3** – Spring 2024 semiannual assessment monitoring sampling event.
- **Figure 4** – Fall 2024 semiannual assessment monitoring sampling event.

4 GENERAL COMMENTS

This report has been prepared and reviewed under the direction of a qualified groundwater scientist and qualified professional engineer. The information contained in this report is a reflection of the conditions encountered at the Sibley Generating Station at the time of fieldwork. This report includes a review of and compilation of the required information and does not reflect any variations of the subsurface, which may occur between sampling locations. Actual subsurface conditions may vary and the extent of such variations may not become evident without further investigation.

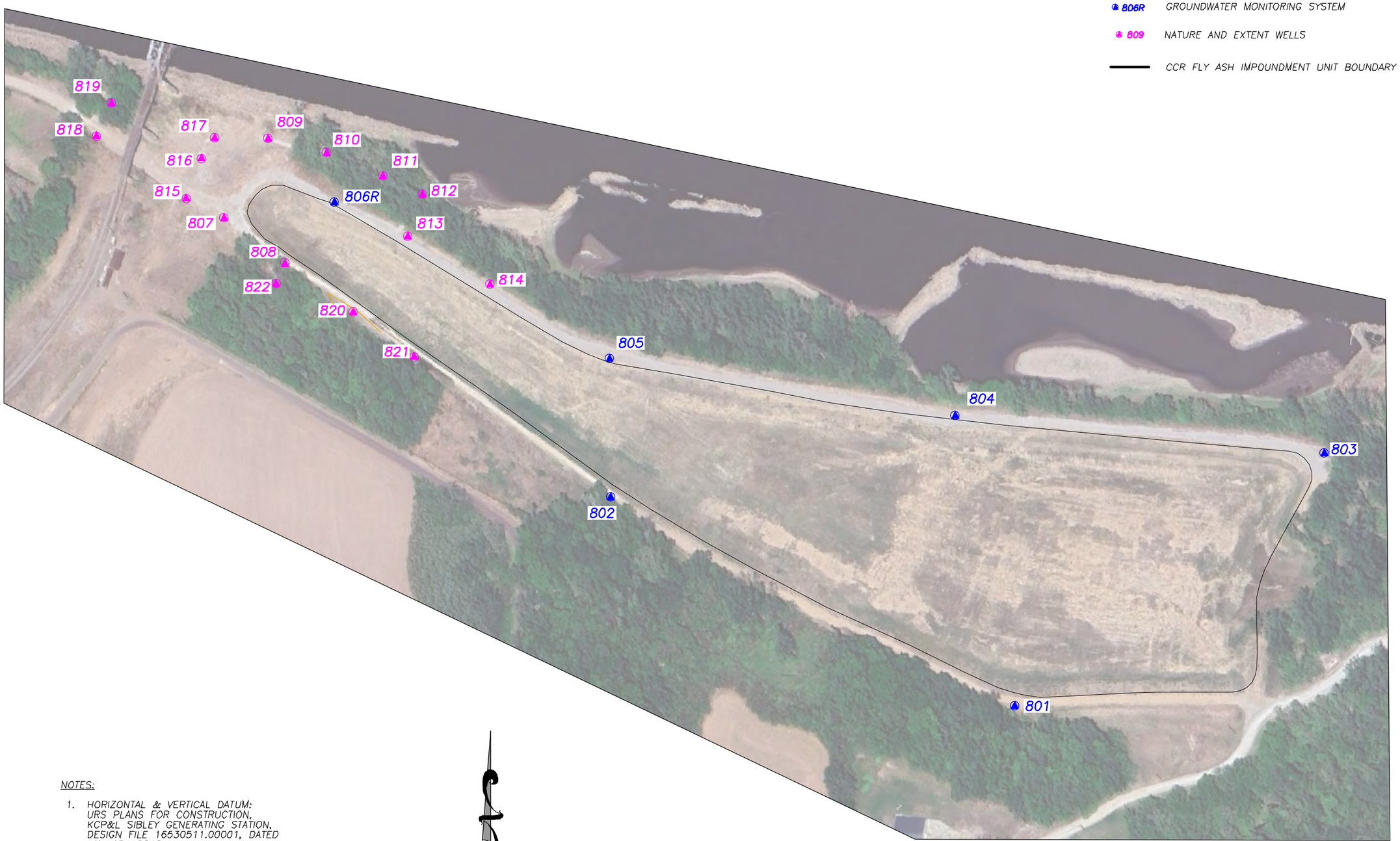
Conclusions drawn by others from the result of this work should recognize the limitations of the methods used. Please note that SCS Engineers does not warrant the work of regulatory agencies or other third parties supplying information used in the assimilation of this report. This report is prepared in accordance with generally accepted environmental engineering and geological practices, within the constraints of the client's directives. It is intended for the exclusive use of Evergy Missouri West, Inc. for specific application to the Sibley Generating Station Fly Ash Impoundment. No warranties, express or implied, are intended or made.

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APPENDIX A

FIGURES

Figure 1: Site Map
Figure 2: Potentiometric Surface Map (February 2024)
Figure 3: Potentiometric Surface Map (May 2024)
Figure 4: Potentiometric Surface Map (November 2024)



NOTES:

1. HORIZONTAL & VERTICAL DATUM: URS PLANS FOR CONSTRUCTION, KCP&L SIBLEY GENERATING STATION, DESIGN FILE 16530511.00001, DATED JANUARY 2010
2. GOOGLE EARTH IMAGE DATED MAY 2023.
3. BOUNDARY AND MONITORING WELL LOCATIONS SHOWN ARE APPROXIMATE.

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SHEET TITLE
FLY ASH IMPOUNDMENT MONITORING SYSTEM

PROJECT TITLE
2024 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

CLIENT
EVERGY MISSOURI WEST, INC.
SIBLEY GENERATING STATION
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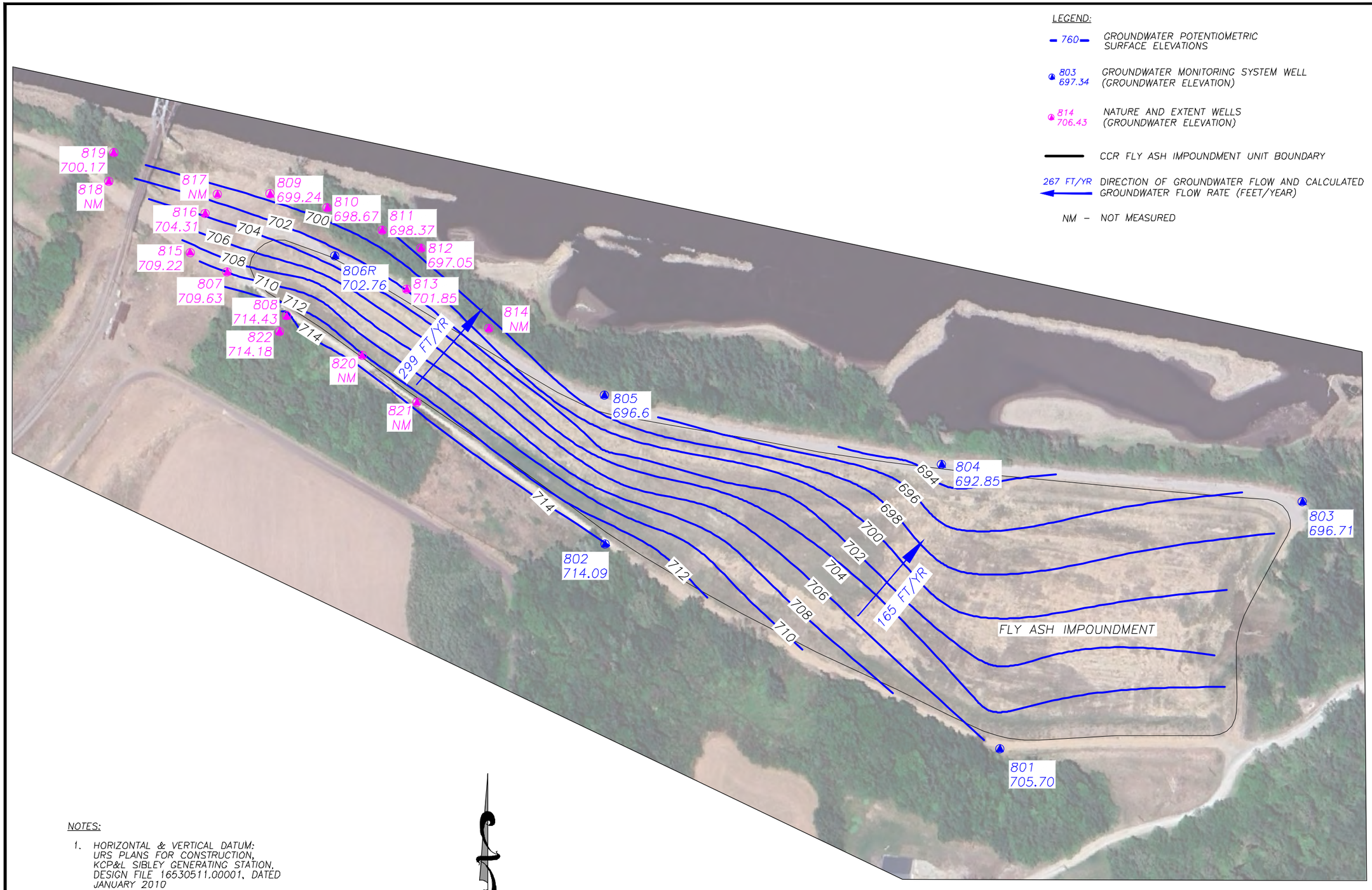
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DWN. BY: LAS
CHK. BY: JRF
D/A RVW BY: JRF
PROJ. MGR: JRF

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FIG 1 SIBLEY FAI SITE MAP MONITORING SYSTEM CCR.DWG

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FIGURE NO.
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LEGEND:

- 760 — GROUNDWATER POTENTIOMETRIC SURFACE ELEVATIONS
- 803 697.34 — GROUNDWATER MONITORING SYSTEM WELL (GROUNDWATER ELEVATION)
- 814 706.43 — NATURE AND EXTENT WELLS (GROUNDWATER ELEVATION)
- CCR FLY ASH IMPOUNDMENT UNIT BOUNDARY
- 267 FT/YR — DIRECTION OF GROUNDWATER FLOW AND CALCULATED GROUNDWATER FLOW RATE (FEET/YEAR)
- NM – NOT MEASURED

NOTES:

1. HORIZONTAL & VERTICAL DATUM: URS PLANS FOR CONSTRUCTION, KCP&L SIBLEY GENERATING STATION, DESIGN FILE 16530511.00001, DATED JANUARY 2010
2. GOOGLE EARTH IMAGE DATED MAY 2023.
3. BOUNDARY AND MONITORING WELL LOCATIONS SHOWN ARE APPROXIMATE.
4. WATER LEVEL MEASUREMENTS COMPLETED ON FEBRUARY 12, 2024.

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SHEET TITLE
POTENTIOMETRIC SURFACE MAP (FEBRUARY 2024) FLY ASH IMPOUNDMENT

PROJECT TITLE
2024 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

CLIENT
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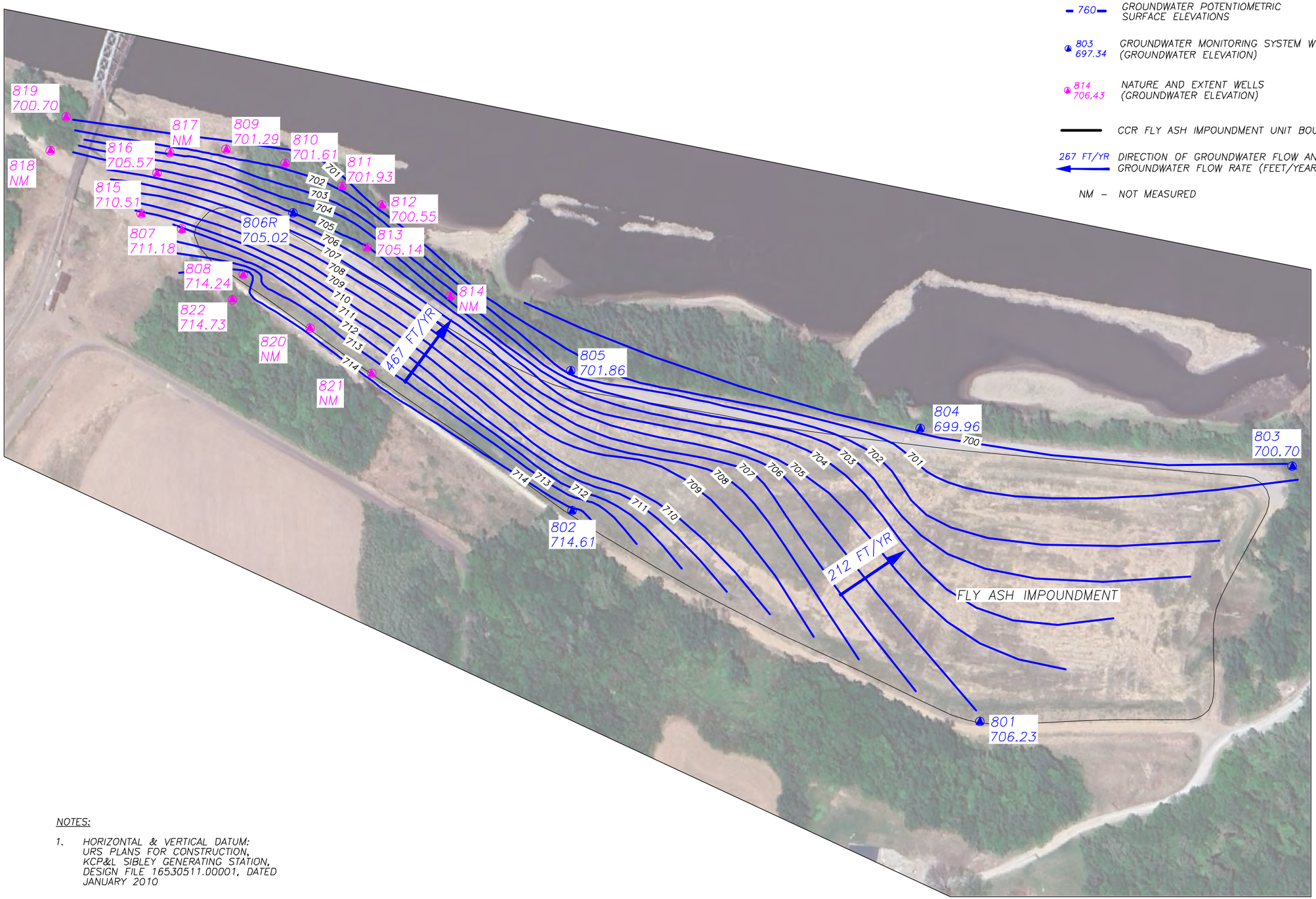
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DSN. BY: ALR | CHK BY: JRF | PROJ. MGR: JRF

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DATE: 1/20/25

FIGURE NO. **2**

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LEGEND:

- 760 — GROUNDWATER POTENTIOMETRIC SURFACE ELEVATIONS
- 803 697.34 — GROUNDWATER MONITORING SYSTEM WELL (GROUNDWATER ELEVATION)
- 814 706.43 — NATURE AND EXTENT WELLS (GROUNDWATER ELEVATION)
- CCR FLY ASH IMPOUNDMENT UNIT BOUNDARY
- 267 FT/YR — DIRECTION OF GROUNDWATER FLOW AND CALCULATED GROUNDWATER FLOW RATE (FEET/YEAR)
- NM – NOT MEASURED

NOTES:

1. HORIZONTAL & VERTICAL DATUM: URS PLANS FOR CONSTRUCTION, KCP&L SIBLEY GENERATING STATION, DESIGN FILE 165305111.00001, DATED JANUARY 2010
2. GOOGLE EARTH IMAGE DATED MAY 2023.
3. BOUNDARY AND MONITORING WELL LOCATIONS SHOWN ARE APPROXIMATE.
4. WATER LEVEL MEASUREMENTS COMPLETED ON MAY 23, JUNE 3–4, 2024.

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SHEET TITLE
POTENTIOMETRIC SURFACE MAP
(MAY 2024)
FLY ASH IMPOUNDMENT

PROJECT TITLE
2024 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

CLIENT
EVERGY MISSOURI WEST, INC.
SIBLEY GENERATING STATION
SIBLEY, MISSOURI

SCS ENGINEERS
8575 W. 110th St, Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

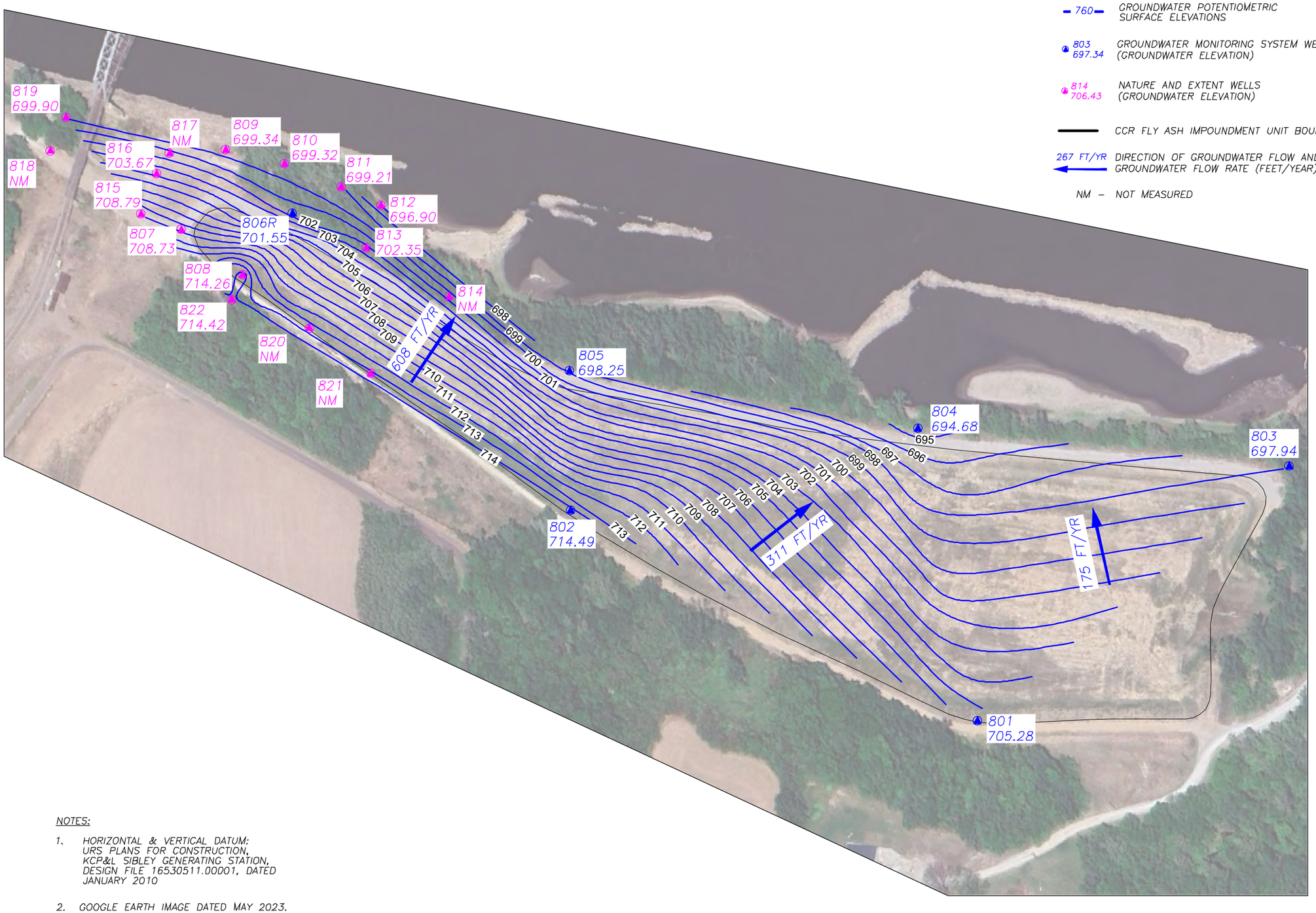
PROJ. NO. 27213169.20
DSN. BY: ALR
DWN. BY: LAS
CHK. BY: JRF
D/A RVW BY: JRF
PROJ. MGR: JRF

CADD FILE:
FIG 2 - SIBLEY FAI MAY 2024 GW CCR.DWG

DATE:
7/30/2024

FIGURE NO.
3

N:\KCPL - EVERGY\Projects\Groundwater\DWG\Sibley\2024\FAI\FIG 2 - Sibley FAI May 2024 GW CCR.dwg Jan 17, 2025 - 1:47pm Layout Name: 2 By: lschocke



LEGEND:

- 760 — GROUNDWATER POTENTIOMETRIC SURFACE ELEVATIONS
- 803 697.34 — GROUNDWATER MONITORING SYSTEM WELL (GROUNDWATER ELEVATION)
- 814 706.43 — NATURE AND EXTENT WELLS (GROUNDWATER ELEVATION)
- CCR FLY ASH IMPOUNDMENT UNIT BOUNDARY
- 267 FT/YR — DIRECTION OF GROUNDWATER FLOW AND CALCULATED GROUNDWATER FLOW RATE (FEET/YEAR)
- NM – NOT MEASURED

NOTES:

1. HORIZONTAL & VERTICAL DATUM: URS PLANS FOR CONSTRUCTION, KCP&L SIBLEY GENERATING STATION, DESIGN FILE 165305511.00001, DATED JANUARY 2010
2. GOOGLE EARTH IMAGE DATED MAY 2023.
3. BOUNDARY AND MONITORING WELL LOCATIONS SHOWN ARE APPROXIMATE.
4. WATER LEVEL MEASUREMENTS COMPLETED ON NOVEMBER 15, 2024.

200 0 200 400
SCALE FEET

REV.	DATE
-	-

SHEET TITLE
POTENTIOMETRIC SURFACE MAP
(NOVEMBER 2024)
FLY ASH IMPOUNDMENT

PROJECT TITLE
2024 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

CLIENT
EVERGY MISSOURI WEST, INC.
SIBLEY GENERATING STATION
SIBLEY, MISSOURI

SCS ENGINEERS
8575 W. 110th St. Ste. 100
Overland Park, Kansas 66210
PH. (913) 681-0030 FAX. (913) 681-0012

PROJ. NO. 27213169.20
DWN. BY: LAS
CHK. BY: JRF
D/A RVW BY: JRF
PROJ. MGR: JRF
DSN. BY: ALR

CADD FILE:
FIG 2 - SIBLEY FAI NOVEMBER 2024 GW CCR.DWG

DATE:
1/8/2024

FIGURE NO.
4

N:\KCPL - EVERGY\Projects\Groundwater\DWG\Sibley\2024\FAI\FIG 2 - Sibley FAI November 2024 GW CCR.dwg Jan 20, 2025 - 7:08am Layout Name: 2 By: lschocke

APPENDIX B

TABLES

Table 1 - Appendix III and IV Assessment Monitoring Results
Table 2 - Assessment Monitoring Field Measurements
Table 3 - Nature and Extent Corrective Measures Monitoring Results
Table 4 - Nature and Extent Corrective Measures Monitoring Field Measurements
Table 5 - Appendix IV Background Data and Groundwater Protection Standards

Table 1
Fly Ash Impoundment
Appendix III and Appendix IV Assessment Monitoring Results
Evergy Sibley Generating Station

		Appendix III Constituents							Appendix IV Constituents														
Well Number	Sample Date	Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	pH (S.U.)	Sulfate (mg/L)	Dissolved Solids (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Fluoride (mg/L)	Lead (mg/L)	Lithium (mg/L)	Mercury (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Thallium (mg/L)	Radium Combined (pCi/L)
MW-801	2/12/2024	---	---	---	0.206	6.87	---	---	<0.00400	<0.00200	0.111	<0.00200	<0.00100	<0.0100	<0.00200	0.206	<0.00200	<0.0150	<0.000200	<0.00500	0.00274	<0.00200	1.22
MW-801	5/23/2024	0.202 (B)	112	68.8	0.292	7.40	38.2	472	---	<0.00200	0.102	---	<0.00100	<0.0100	<0.00200	0.292	<0.00200	<0.0150	<0.000200	<0.00500	0.00266	---	0.159
MW-801	11/21/2024	<0.200	97.4	72.9	0.170	6.84	36.1	422	---	<0.00200	0.0977	---	<0.00100	<0.0100	<0.00200	0.170	<0.00200	<0.0150	<0.000200	<0.00500	0.00299	---	0.000
MW-802	2/12/2024	---	---	---	0.168	6.21	---	---	<0.00400	<0.00200	0.214	<0.00200	<0.00100	<0.0100	<0.00200	0.168	<0.00200	<0.0150	<0.000200	<0.00500	0.00634	<0.00200	1.24
MW-802	5/28/2024	<0.200	114	43.1	0.189	7.28	66.9	482	---	<0.00200	0.259	---	<0.00100	<0.0100	<0.00200	0.189	<0.00200	<0.0150	<0.000200	<0.00500	0.00667	---	0.328
MW-802	11/21/2024	<0.200	32.7	20.4	0.157	6.33	28.9	207	---	<0.00200	0.106	---	<0.00100	<0.0100	<0.00200	0.157	<0.00200	<0.0150	<0.000200	<0.00500	0.00231	---	0.0753 (JU)
MW-803	2/12/2024	---	---	---	0.178	7.14	---	---	<0.00400	0.00256	0.119	<0.00200	<0.00100	<0.0100	<0.00200	0.178	<0.00200	<0.0150	<0.000200	<0.00500	<0.00200	<0.00200	1.55
MW-803	5/23/2024	2.90	115	23.6	0.190	7.32	91.2	493	---	0.00234	1.04	---	<0.00100	<0.0100	<0.00200	0.190	<0.00200	0.0301 (B)	<0.000200	<0.00500	<0.00200	---	0.151
MW-803	11/21/2024	2.93	119	26.6	0.228	7.09	99.9	487	---	0.00297	0.127	---	<0.00100	<0.0100	<0.00200	0.228	<0.00200	0.0184	<0.000200	<0.00500	<0.00200	---	0.357 (J)
MW-804	2/12/2024	---	---	---	0.158	6.98	---	---	<0.00400	0.00269	0.417	<0.00200	<0.00100	<0.0100	<0.00200	0.158	<0.00200	0.0202	<0.000200	<0.00500	<0.00200	<0.00200	1.14
MW-804	5/23/2024	6.10	152	19.1	0.335	7.20	<5.00	592	---	0.00245	0.483	---	<0.00100	<0.0100	<0.00200	0.335	0.00276	0.0193 (B)	<0.000200	<0.00500	<0.00200	---	1.20
MW-804	11/21/2024	4.83	134	17.5	0.211	6.91	<5.00	563	---	0.00215	0.402	---	<0.00100	<0.0100	<0.00200	0.211	0.00232	0.0210	<0.000200	<0.00500	<0.00200	---	1.08
MW-805	2/12/2024	---	---	---	<0.150	7.33	---	---	<0.00400	<0.00200	0.129	<0.00200	<0.00100	<0.0100	<0.00200	<0.150	<0.00200	<0.0150	<0.000200	<0.00500	<0.00200	<0.00200	1.68
MW-805	5/23/2024	<0.200	94.6	8.15	0.328	7.70	46.1	344	---	<0.00200	0.138	---	<0.00100	<0.0100	<0.00200	0.328	<0.00200	<0.0150	<0.000200	<0.00500	<0.00200	---	0.200
MW-805	11/21/2024	<0.200	96.6	7.34	0.178	7.27	46.3	331	---	<0.00200	0.138	---	<0.00100	<0.0100	<0.00200	0.178	<0.00200	<0.0150	<0.000200	<0.00500	<0.00200	---	0.656
MW-806R	2/12/2024	---	---	---	<0.150	7.03	---	---	<0.00400	0.00251	0.0753	<0.00200	<0.00100	<0.0100	<0.00200	<0.150	<0.00200	0.0163	<0.000200	1.35	<0.00200	<0.00200	0.475
MW-806R	9/27/2024	3.07	174	31.6	1.760	7.54	263	735	---	0.00384	0.0772	---	<0.00100	<0.0100	<0.00200	1.760	<0.00200	0.0158 (B)	<0.000200	1.28	<0.00200	---	0.537
MW-806R	7/10/2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.35	---	---	---
MW-806R	9/27/2024	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.59	---	---	---
MW-806R	11/21/2024	3.03	167	27.4	0.158	6.99	272	715	---	0.00386	0.0552	---	<0.00100	<0.0100	<0.00200	0.158	<0.00200	0.0187	<0.000200	1.38	<0.00200	---	2.75

* Verification Sample obtained per certified statistical method and Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance, March 2009.

**Extra Sample for Quality Control Validation or per Standard Sampling Procedure

mg/L - miligrams per liter

pCi/L - picocuries per liter

S.U. - Standard Units

--- Not Sampled

(B) - Based on the Stage II data quality review the sample result is potentially biased high due to analyte detection in the associated sample blank.

(M) - Method Detection Limit (MDL)

(J) - Reported concentration is below the laboratory reported detection limit (RDL), however is above the MDL and is estimated.

(U) - Reported concentration is below detectable limits, which indicates the analyte was not detected.

(H) - Based on the Stage II data quality review the sample result is potentially biased low due to analyte analysis outside of methold hold time.

Table 2
Fly Ash Impoundment
Assessment Monitoring Field Measurements
Evergy Sibley Generating Station

Well Number	Sample Date	pH (S.U.)	Specific Conductivity (µS)	Temperature (^{o}C)	Turbidity (NTU)	ORP (mV)	DO (mg/L)	Water Level (ft btoc)	Groundwater Elevation (ft NGVD)
MW-801	2/12/2024	6.87	787	12.14	11.3	107	1.20	22.39	705.70
MW-801	5/23/2024	7.40	1140	14.45	0.0	193	2.14	21.86	706.23
MW-801	11/21/2024	6.84	678	12.70	6.35	97.3	6.19	22.81	705.28
MW-802	2/12/2024	6.21	667	12.24	31.4	274	3.44	16.60	714.09
MW-802	5/28/2024	7.28	1130	14.68	3.3	132	0.00	16.08	714.61
MW-802	11/21/2024	6.33	282.4	12.90	14.8	114.6	8.66	16.20	714.49
MW-803	2/12/2024	7.14	801	14.20	2.9	-131	2.98	27.43	696.71
MW-803	5/23/2024	7.32	1110	17.55	0.4	-86	0.00	23.44	700.70
MW-803	11/21/2024	7.09	720	14.90	6.97	-152.8	0.50	26.20	697.94
MW-804	2/12/2024	6.98	989	14.81	8.1	-134	3.13	31.49	692.85
MW-804	5/23/2024	7.20	1510	18.98	11.0	-167	4.69	24.38	699.96
MW-804	11/21/2024	6.91	916	15.50	15.8	-175.7	0.46	29.66	694.68
MW-805	2/12/2024	7.33	559	14.97	2.1	-87	0.00	26.65	696.60
MW-805	5/23/2024	7.70	781	19.08	0.0	-159	3.13	21.39	701.86
MW-805	11/21/2024	7.27	500	15.10	10.35	-148.6	0.55	25.00	698.25
MW-806R	2/12/2024	7.03	1010	14.69	6.2	-85	0.01	24.61	702.76
MW-806R	5/23/2024	7.84	1470	17.44	4.3	-112	0.40	22.35	705.02
MW-806R	7/10/2024	7.24	904	23.12	63.2	5	5.23	24.85	702.52
MW-806R	9/27/2024	7.54	1190	18.01	44.2	-66	0.18	24.09	703.28
MW-806R	11/21/2024	6.99	921	15.10	15.63	-120.8	1.16	25.82	701.55

* Verification Sample obtained per certified statistical method and Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance, March 2009.

**Extra Sample for Quality Control Validation or per Standard Sampling Procedure

S.U. - Standard Units

µS - microsiemens

^{o}C - Degrees Celsius

ft btoc - Feet Below Top of Casing

ft NGVD - National Geodetic Vertical Datum (NAVD 88)

NTU - Nephelometric Turbidity Unit

Table 3
Fly Ash Impoundment
Nature and Extend Corrective Measures Monitoring Results
Evergy Sibley Generating Station

Well Number	Sample Date	Appendix III Constituents							Appendix IV Constituents													
		Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	pH (S.U.)	Sulfate (mg/L)	Dissolved Solids (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Fluoride (mg/L)	Lead (mg/L)	Lithium (mg/L)	Mercury (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Thallium (mg/L)	Radium Combined (pCi/L)
MW-807	2/13/2024	---	---	---	---	7.18	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-807	6/3/2024	---	---	---	---	7.28	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-807	11/21/2024	---	---	---	---	7.62	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-808	2/15/2024	---	---	---	---	7.13	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-808	6/4/2024	---	---	---	---	7.10	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-808	11/22/2024	---	---	---	---	7.26	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-809	2/13/2024	---	---	---	---	6.99	---	---	---	---	---	---	---	---	---	---	---	---	---	0.442	---	---	---
MW-809	6/3/2024	---	---	---	---	6.99	---	---	---	---	---	---	---	---	---	---	---	---	---	0.389	---	---	---
MW-809	11/22/2024	---	---	---	---	7.47	---	---	---	---	---	---	---	---	---	---	---	---	---	*NA	---	---	---
MW-809	12/10/2024	---	---	---	---	7.65	---	---	---	---	---	---	---	---	---	---	---	---	---	0.462	---	---	---
MW-810	2/13/2024	---	---	---	---	7.17	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0690	---	---	---
MW-810	6/3/2024	---	---	---	---	7.12	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0589	---	---	---
MW-810	11/21/2024	---	---	---	---	7.51	---	---	---	---	---	---	---	---	---	---	---	---	---	*NA	---	---	---
MW-810	12/10/2024	---	---	---	---	7.66	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0441	---	---	---
MW-811	2/13/2024	---	---	---	---	7.16	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0233	---	---	---
MW-811	6/3/2024	---	---	---	---	6.98	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0166	---	---	---
MW-811	11/22/2024	---	---	---	---	7.55	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0198	---	---	---
MW-812	2/13/2024	---	---	---	---	6.91	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-812	6/3/2024	---	---	---	---	6.80	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-812	11/22/2024	---	---	---	---	7.35	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-813	2/13/2024	---	---	---	---	7.15	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-813	6/3/2024	---	---	---	---	7.05	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-813	11/22/2024	---	---	---	---	7.17	---	---	---	---	---	---	---	---	---	---	---	---	---	0.00865	---	---	---
MW-815	2/15/2024	---	---	---	---	6.88	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-815	6/4/2024	---	---	---	---	7.19	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-815	11/22/2024	---	---	---	---	7.70	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-816	2/15/2024	---	---	---	---	6.86	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-816	6/4/2024	---	---	---	---	7.13	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-816	11/22/2024	---	---	---	---	7.27	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-819	2/15/2024	---	---	---	---	6.59	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-819	6/3/2024	---	---	---	---	6.75	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-819	11/22/2024	---	---	---	---	6.83	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-822	2/13/2024	---	---	---	---	7.30	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-822	6/4/2024	---	---	---	---	7.13	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---
MW-822	11/22/2024	---	---	---	---	7.39	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.00500	---	---	---

* Verification Sample obtained per certified statistical method and Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance, March 2009.
**Extra Sample for Quality Control Validation or per Standard Sampling Procedure
mg/L - miligrams per liter
pCi/L - picocuries per liter
S.U. - Standard Units
*NA - Laboratory reporting error; reported sample concentration not accepted.
--- Not Sampled

Table 4
Fly Ash Impoundment
Nature and Extend Corrective Measures Monitoring Field Measurements
Evergy Sibley Generating Station

Well Number	Sample Date	pH (S.U.)	Specific Conductivity (µS)	Temperature (°C)	Turbidity (NTU)	ORP (mV)	DO (mg/L)	Water Level (ft btoc)	Groundwater Elevation (ft NGVD)
MW-807	2/13/2024	7.18	612	12.01	262	-98	0.00	20.51	709.63
MW-807	6/3/2024	7.28	586	20.35	538	-57	0.89	18.96	711.18
MW-807	11/21/2024	7.62	499.2	10.70	12.11	-1.4	4.09	21.41	708.73
MW-808	2/15/2024	7.13	762	9.68	39.9	51	4.34	15.13	714.43
MW-808	6/4/2024	7.10	755	19.37	79.8	58	2.66	15.32	714.24
MW-808	11/22/2024	7.26	669	12.10	93.00	-9.0	0.88	15.30	714.26
MW-809	2/13/2024	6.99	860	12.16	197	-94	0.00	16.71	699.24
MW-809	6/3/2024	6.99	826	20.92	1000	-135	0.00	14.66	701.29
MW-809	11/22/2024	7.47	925	13.56	95.90	-112.0	0.00	16.61	699.34
MW-809	12/10/2024	7.65	7.69	16.10	39.2	-102	0.00	16.56	699.39
MW-810	2/13/2024	7.17	798	13.16	14.4	-134	0.00	17.12	698.67
MW-810	6/3/2024	7.12	802	20.55	142.0	-12	2.22	14.18	701.61
MW-810	11/21/2024	7.51	930	9.05	40.00	-13.0	0.00	16.47	699.32
MW-810	12/10/2024	7.66	743	16.20	-23.5	-2	0.00	16.45	699.34
MW-811	2/13/2024	7.16	861	15.05	119	-135	0.00	17.18	698.37
MW-811	6/3/2024	6.98	844	19.55	523	-51	0.53	13.62	701.93
MW-811	11/22/2024	7.55	974	10.20	184.00	-124.0	2.03	16.34	699.21
MW-812	2/13/2024	6.91	1710	16.46	205	-149	0.00	17.82	697.05
MW-812	6/3/2024	6.80	1590	20.89	1000	-155	0.00	14.32	700.55
MW-812	11/22/2024	7.35	1930	9.73	402.0	-144.0	0.00	17.97	696.90
MW-813	2/13/2024	7.15	760	17.92	754	-122	0.00	20.82	701.85
MW-813	6/3/2024	7.05	794	19.75	1000	-174	0.00	17.53	705.14
MW-813	11/22/2024	7.17	692	13.20	17.26	-116.9	3.96	20.32	702.35
MW-815	2/15/2024	6.88	510	12.50	8.8	37	1.29	19.58	709.22
MW-815	6/4/2024	7.19	557	19.98	113.0	32	0.51	18.29	710.51
MW-815	11/22/2024	7.70	496.1	12.90	12.59	-45.5	7.88	20.01	708.79
MW-816	2/15/2024	6.86	620	11.98	391	-111	0.00	12.04	704.31
MW-816	6/4/2024	7.13	606	21.99	741	-165	0.00	10.78	705.57
MW-816	11/22/2024	7.27	537	14.50	15.62	-131.2	3.93	12.68	703.67
MW-819	2/15/2024	6.59	1010	11.34	>1000	137	2.12	16.93	700.17
MW-819	6/3/2024	6.75	1210	18.51	386	45	0.65	16.40	700.70
MW-819	11/22/2024	6.83	942	13.90	8.06	-29.1	4.81	17.20	699.90
MW-822	2/13/2024	7.30	510	13.71	30.1	26	1.18	12.65	714.18
MW-822	6/4/2024	7.13	550	20.83	93.8	29	0.19	12.10	714.73
MW-822	11/22/2024	7.39	516	11.90	18.70	-6.0	0.43	12.41	714.42

* Verification Sample obtained per certified statistical method and Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance, March 2009.
**Extra Sample for Quality Control Validation or per Standard Sampling Procedure
S.U. - Standard Units
µS - microsiemens
°C - Degrees Celsius
ft btoc - Feet Below Top of Casing
ft NGVD - National Geodetic Vertical Datum (NAVD 88)
NTU - Nephelometric Turbidity Unit

Table 5
Fly Ash Impoundment
Appendix IV Background Data and Groundwater Protection Standards
Evergy Sibley Generating Station

Well Number	Sample Date	Appendix IV Constituents														
		Antimony (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Fluoride (mg/L)	Lead (mg/L)	Lithium (mg/L)	Mercury (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Thallium (mg/L)	Radium Combined (pCi/L)
MCL GWPS		**0.006**	**0.010**	**2**	**0.004**	**0.005**	**0.1**	**NA**	**4.0**	**0.015***	**NA**	**0.002**	**NA**	**0.05**	**0.002**	**5**
40 CFR 257.95(h) GWPS		**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**0.006**	**NA**	**NA**	**0.040**	**NA**	**0.100**	**NA**	**NA**	**NA**
MW-801	12/16/2015	<0.002	<0.002	0.146	<0.002	<0.001	<0.01	<0.01	0.182	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	0.848
MW-801	2/17/2016	<0.002	<0.002	0.112	<0.002	<0.001	<0.01	<0.01	0.165	<0.002	0.0182	<0.0002	<0.005	<0.002	<0.002	0.028
MW-801	5/26/2016	<0.002	<0.002	0.110	<0.002	<0.001	<0.01	<0.01	0.149	<0.002	0.0274	<0.0002	<0.005	<0.002	<0.002	1.658
MW-801	8/23/2016	<0.002	<0.002	0.103	<0.002	<0.001	<0.01	<0.01	0.159	<0.002	0.0154	<0.0002	<0.005	0.00224	<0.002	0.146
MW-801	11/10/2016	<0.002	<0.002	0.114	<0.002	<0.001	<0.01	<0.01	0.182	<0.002	0.0153	<0.0002	<0.005	0.00218	<0.002	0.251
MW-801	2/9/2017	<0.002	<0.002	0.110	<0.002	<0.001	<0.01	<0.01	0.117	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	0.170
MW-801	5/3/2017	<0.002	<0.002	0.124	<0.002	<0.001	<0.01	<0.01	0.150	<0.002	0.0159	<0.0002	<0.005	<0.002	<0.002	0.582
MW-801	8/1/2017	<0.002	<0.002	0.111	<0.002	<0.001	<0.01	<0.01	0.174	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	0.681
MW-801	10/4/2017	<0.002	<0.002	0.127	<0.002	<0.001	<0.01	<0.01	0.104	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	1.22
MW-801 PL/BG		**0.002**	**0.002**	**0.146**	**0.002**	**0.001**	**0.01**	**0.01**	**0.2137**	**0.002**	**0.03301**	**0.0002**	**0.005**	**0.00224**	**0.002**	**3.569**
MW-801 GWPS		**0.006**	**0.010**	**2**	**0.004**	**0.005**	**0.1**	**0.006**	**4.0**	**0.015**	**0.040**	**0.002**	**0.100**	**0.05**	**0.002**	**5**
MW-801	2/12/2024	<0.00400	<0.00200	0.111	<0.00200	<0.00100	<0.0100	<0.00200	0.206	<0.00200	<0.0150	<0.000200	<0.00500	0.00274	<0.00200	1.22
MW-801	5/23/2024	---	<0.00200	0.102	---	<0.00100	<0.0100	<0.00200	0.292	<0.00200	<0.0150	<0.000200	<0.00500	0.00266	---	0.159
MW-801	11/21/2024	---	<0.00200	0.0977	---	<0.00100	<0.0100	<0.00200	0.17	<0.00200	<0.0150	<0.000200	<0.00500	0.00299	---	0.000
MW-802	12/16/2015	<0.002	0.00304	0.232	<0.002	<0.001	<0.01	<0.01	0.268	0.0026	<0.015	<0.0002	<0.005	<0.002	<0.002	2.334
MW-802	2/17/2016	<0.002	0.00223	0.170	<0.002	<0.001	<0.01	<0.01	0.233	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	1.075
MW-802	5/26/2016	<0.002	0.00200	0.123	<0.002	<0.001	<0.01	<0.01	0.222	<0.002	0.0168	<0.0002	<0.005	<0.002	<0.002	4.222
MW-802	8/23/2016	<0.002	0.00257	0.172	<0.002	<0.001	<0.01	<0.01	0.202	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	0.287
MW-802	11/10/2016	<0.002	0.00262	0.133	<0.002	<0.001	<0.01	<0.01	0.183	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	0.144
MW-802	2/9/2017	<0.002	0.00200	0.198	<0.002	<0.001	<0.01	<0.01	0.113	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	2.23
MW-802	5/3/2017	<0.002	0.00823	0.304	<0.002	<0.001	<0.01	<0.01	0.173	0.0042	<0.015	<0.0002	<0.005	<0.002	<0.002	1.48
MW-802	8/1/2017	<0.002	0.00206	0.162	<0.002	<0.001	<0.01	<0.01	0.174	<0.002	<0.015	<0.0002	<0.005	0.00237	<0.002	0.650
MW-802	10/4/2017	<0.002	<0.002	0.154	<0.002	<0.001	<0.01	<0.01	<0.1	<0.002	<0.015	<0.0002	<0.005	0.00266	<0.002	0.066
MW-802 PL/BG		**0.002**	**0.007646**	**0.3056**	**0.002**	**0.001**	**0.01**	**0.01**	**0.3234**	**0.0042**	**0.0168**	**0.0002**	**0.005**	**0.00266**	**0.002**	**3.569**
MW-802 GWPS		**0.006**	**0.010**	**2**	**0.004**	**0.005**	**0.1**	**0.006**	**4.0**	**0.015**	**0.040**	**0.002**	**0.100**	**0.05**	**0.002**	**5**
MW-802	2/12/2024	<0.00400	<0.00200	0.214	<0.00200	<0.00100	<0.0100	<0.00200	0.168	<0.00200	<0.0150	<0.000200	<0.00500	0.00634	<0.00200	1.24
MW-802	5/28/2024	---	<0.00200	0.259	---	<0.00100	<0.0100	<0.00200	0.189	<0.00200	<0.0150	<0.000200	<0.00500	0.00667	---	0.328
MW-802	11/21/2024	---	<0.00200	0.106	---	<0.00100	<0.0100	<0.00200	0.157	<0.00200	<0.0150	<0.000200	<0.00500	0.00231	---	0.0753 (JU)
MW-803	12/15/2015	<0.002	0.00493	0.150	<0.002	<0.001	<0.01	<0.01	0.276	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	1.11
MW-803	2/17/2016	<0.002	0.00401	0.141	<0.002	<0.001	<0.01	<0.01	0.245	<0.002	0.0197	<0.0002	<0.005	<0.002	<0.002	0.389
MW-803	5/26/2016	<0.002	0.00365	0.131	<0.002	<0.001	<0.01	<0.01	0.290	<0.002	0.0246	<0.0002	<0.005	<0.002	<0.002	0.441
MW-803	8/23/2016	<0.002	0.00296	0.129	<0.002	<0.001	<0.01	<0.01	0.295	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	0.741
MW-803	11/10/2016	<0.002	0.00336	0.137	<0.002	<0.001	<0.01	<0.01	0.290	0.00385	<0.015	<0.0002	<0.005	<0.002	<0.002	0.817
MW-803	2/9/2017	<0.002	0.00282	0.126	<0.002	<0.001	<0.01	<0.01	0.262	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	0.717
MW-803	5/3/2017	<0.002	0.00292	0.129	<0.002	<0.001	<0.01	<0.01	0.254	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	0.000
MW-803	8/1/2017	<0.002	0.00257	0.125	<0.002	<0.001	<0.01	<0.01	0.281	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	1.73
MW-803	10/4/2017	<0.002	0.00270	0.131	<0.002	<0.001	<0.01	<0.01	0.230	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	0.826
MW-803 PL/BG		**0.002**	**0.004999**	**0.1509**	**0.002**	**0.001**	**0.01**	**0.01**	**0.319**	**0.00385**	**0.0246**	**0.0002**	**0.005**	**0.002**	**0.002**	**3.569**
MW-803 GWPS		**0.006**	**0.010**	**2**	**0.004**	**0.005**	**0.1**	**0.006**	**4.0**	**0.015**	**0.040**	**0.002**	**0.100**	**0.05**	**0.002**	**5**
MW-803	2/12/2024	<0.00400	0.00256	0.119	<0.00200	<0.00100	<0.0100	<0.00200	0.178	<0.00200	<0.0150	<0.000200	<0.00500	<0.00200	<0.00200	1.55
MW-803	5/23/2024	---	0.00234	1.04	---	<0.00100	<0.0100	<0.00200	0.190	<0.00200	0.0301 (B)	<0.000200	<0.00500	<0.00200	---	0.151
MW-803	11/21/2024	---	0.00297	0.127	---	<0.00100	<0.0100	<0.00200	0.228	<0.00200	0.0184	<0.000200	<0.00500	<0.00200	---	0.357 (J)
MW-804	12/15/2015	<0.002	0.0108	0.531	<0.002	<0.001	<0.01	<0.01	0.219	0.00865	0.0218	<0.0002	<0.005	<0.002	<0.002	1.257
MW-804	2/17/2016	<0.002	0.00719	0.370	<0.002	<0.001	<0.01	<0.01	0.183	<0.002	0.0257	<0.0002	<0.005	<0.002	<0.002	1.308
MW-804	5/26/2016	<0.002	0.00607	0.398	<0.002	<0.001	<0.01	<0.01	0.164	0.00402	0.0379	<0.0002	<0.005	<0.002	<0.002	4.27
MW-804	8/23/2016	<0.002	0.00403	0.329	<0.002	<0.001	<0.01	<0.01	0.168	<0.002	0.0234	<0.0002	<0.005	<0.002	<0.002	1.545
MW-804	11/10/2016	<0.002	0.00644	0.390	<0.002	<0.001	<0.01	<0.01	0.148	<0.002	0.0195	<0.0002	<0.005	<0.002	<0.002	1.00
MW-804	2/9/2017	<0.002	0.00640	0.342	<0.002	<0.001	<0.01	<0.01	0.119	<0.002	0.0204	<0.0002	<0.005	<0.002	<0.002	0.749
MW-804	5/3/2017	<0.002	0.00700	0.411	<0.002	<0.001	<0.01	<0.01	0.182	0.00230	0.0210	<0.0002	<0.005	<0.002	<0.002	0.822
MW-804	8/1/2017	<0.002	0.00418	0.365	<0.002	<0.001	<0.01	<0.01	0.206	<0.002	0.0232	<0.0002	<0.005	<0.002	<0.002	1.28
MW-804	10/4/2017	<0.002	0.00545	0.406	<0.002	<0.001	<0.01	<0.01	0.118	<0.002	0.0220	<0.0002	<0.005	<0.002	<0.002	0.511
MW-804 PL/BG		**0.002**	**0.01078**	**0.5223**	**0.002**	**0.001**	**0.01**	**0.01**	**0.2441**	**0.00865**	**0.03616**	**0.0002**	**0.005**	**0.002**	**0.002**	**3.569**
MW-804 GWPS		**0.006**	**0.01078**	**2**	**0.004**	**0.005**	**0.1**	**0.006**	**4.0**	**0.015**	**0.040**	**0.002**	**0.100**	**0.05**	**0.002**	**5**
MW-804	2/12/2024	<0.00400	0.00269	0.417	<0.00200	<0.00100	<0.0100	<0.00200	0.158	<0.00200	0.0202	<0.000200	<0.00500	<0.00200	<0.00200	1.14
MW-804	5/23/2024	---	0.00245	0.483	---	<0.00100	<0.0100	<0.00200	0.335	0.00276	0.0193 (B)	<0.000200	<0.00500	<0.00200	---	1.20
MW-804	11/21/2024	---	0.00215	0.402	---	<0.00100	<0.0100	<0.00200	0.211	0.00232	0.021	<0.000200	<0.00500	<0.00200	---	1.08

Table 5
Fly Ash Impoundment
Appendix IV Background Data and Groundwater Protection Standards
Evergy Sibley Generating Station

Well Number	Sample Date	Appendix IV Constituents														
		Antimony (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Fluoride (mg/L)	Lead (mg/L)	Lithium (mg/L)	Mercury (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Thallium (mg/L)	Radium Combined (pCi/L)
MCL GWPS		**0.006**	**0.010**	**2**	**0.004**	**0.005**	**0.1**	**NA**	**4.0**	**0.015***	**NA**	**0.002**	**NA**	**0.05**	**0.002**	**5**
40 CFR 257.95(h) GWPS		**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**0.006**	**NA**	**NA**	**0.040**	**NA**	**0.100**	**NA**	**NA**	**NA**
MW-805	12/15/2015	<0.002	<0.002	0.180	<0.002	<0.001	<0.01	<0.01	0.148	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	1.843
MW-805	2/17/2016	<0.002	<0.002	0.172	<0.002	<0.001	<0.01	<0.01	0.155	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	0.940
MW-805	5/26/2016	<0.002	<0.002	0.181	<0.002	<0.001	<0.01	<0.01	0.191	<0.002	0.0153	<0.0002	<0.005	<0.002	<0.002	0.785
MW-805	8/23/2016	<0.002	<0.002	0.174	<0.002	<0.001	<0.01	<0.01	0.172	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	1.705
MW-805	11/10/2016	<0.002	<0.002	0.171	<0.002	<0.001	<0.01	<0.01	0.170	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	0.668
MW-805	2/9/2017	<0.002	<0.002	0.163	<0.002	<0.001	<0.01	<0.01	0.178	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	0.338
MW-805	5/3/2017	<0.002	<0.002	0.170	<0.002	<0.001	<0.01	<0.01	0.161	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	1.20
MW-805	8/1/2017	<0.002	<0.002	0.163	<0.002	<0.001	<0.01	<0.01	0.194	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	0.387
MW-805	10/4/2017	<0.002	<0.002	0.168	<0.002	<0.001	<0.01	<0.01	0.121	<0.002	<0.015	<0.0002	<0.005	<0.002	<0.002	0.605
MW-805 PL/BG		**0.002**	**0.002**	**0.1854**	**0.002**	**0.001**	**0.01**	**0.01**	**0.2152**	**0.002**	**0.0153**	**0.0002**	**0.005**	**0.002**	**0.002**	**3.569**
MW-805 GWPS		**0.006**	**0.010**	**2**	**0.004**	**0.005**	**0.1**	**0.006**	**4.0**	**0.015**	**0.040**	**0.002**	**0.100**	**0.05**	**0.002**	**5**
MW-805	2/12/2024	<0.00400	<0.00200	0.129	<0.00200	<0.00100	<0.0100	<0.00200	<0.150	<0.00200	<0.0150	<0.000200	<0.00500	<0.00200	<0.00200	1.68
MW-805	5/23/2024	---	<0.00200	0.138	---	<0.00100	<0.0100	<0.00200	0.328	<0.00200	<0.0150	<0.000200	<0.00500	<0.00200	---	0.200
MW-805	11/21/2024	---	<0.00200	0.138	---	<0.00100	<0.0100	<0.00200	0.178	<0.00200	<0.0150	<0.000200	<0.00500	<0.00200	---	0.656
MW-806R	6/2/2016	<0.002	0.00256	0.125	<0.002	<0.001	<0.01	<0.01	0.252	<0.002	0.0301	<0.0002	1.24	<0.002	<0.002	0.695
MW-806R	7/19/2016	<0.002	0.00269	0.104	<0.002	<0.001	<0.01	<0.01	0.242	<0.002	0.0170	<0.0002	1.11	<0.002	<0.002	0.034
MW-806R	8/23/2016	<0.002	0.00342	0.102	<0.002	<0.001	<0.01	<0.01	0.253	<0.002	0.0181	<0.0002	1.18	<0.002	<0.002	0.109
MW-806R	11/11/2016	<0.002	0.00388	0.0966	<0.002	<0.001	<0.01	<0.01	0.197	<0.002	0.0154	<0.0002	1.18	<0.002	<0.002	0.228
MW-806R	2/9/2017	<0.002	0.00357	0.0919	<0.002	<0.001	<0.01	<0.01	0.205	<0.002	0.0180	<0.0002	1.09	<0.002	<0.002	0.731
MW-806R	3/22/2017	<0.002	0.00634	0.103	<0.002	<0.001	<0.01	<0.01	0.224	<0.002	0.0184	<0.0002	1.24	<0.002	<0.002	0.668
MW-806R	5/3/2017	<0.002	0.00295	0.0747	<0.002	<0.001	<0.01	<0.01	0.195	<0.002	0.0163	<0.0002	1.19	<0.002	<0.002	0.131
MW-806R	8/1/2017	<0.002	0.00685	0.0930	<0.002	<0.001	<0.01	<0.01	0.223	<0.002	0.0175	<0.0002	1.33	<0.002	<0.002	0.494
MW-806R	10/4/2017	<0.002	0.00555	0.0901	<0.002	<0.001	<0.01	<0.01	0.129	<0.002	0.0182	<0.0002	1.33	<0.002	<0.002	2.35
MW-806R PL/BG		**0.002**	**0.00776**	**0.1276**	**0.002**	**0.001**	**0.01**	**0.01**	**0.2979**	**0.002**	**0.0301**	**0.0002**	**1.395**	**0.002**	**0.002**	**3.569**
MW-806R GWPS		**0.006**	**0.010**	**2**	**0.004**	**0.005**	**0.1**	**0.006**	**4.0**	**0.015**	**0.040**	**0.002**	**1.395**	**0.05**	**0.002**	**5**
MW-806R	2/12/2024	<0.00400	0.00251	0.0753	<0.00200	<0.00100	<0.0100	<0.00200	<0.150	<0.00200	0.0163	<0.000200	1.35	<0.00200	<0.00200	0.475
MW-806R	9/27/2024	---	0.00384	0.0772	---	<0.00100	<0.0100	<0.00200	1.76	<0.00200	0.0158 (B)	<0.000200	1.28	<0.00200	---	0.537
MW-806R	11/21/2024	---	0.00386	0.0552	---	<0.00100	<0.0100	<0.00200	0.158	<0.00200	0.0187	<0.000200	1.38	<0.00200	---	2.75

NA - Not Applicable
PL/BG - Prediction Limit/Background
MCL GWPS - Maximum Contaminant Level Groundwater Protection Standard
GWPS - Groundwater Protection Standard
mg/L - miligrams per liter
pCi/L - picocuries per liter
S.U. - Standard Units
--- Not Sampled
(B) - Based on the Stage II data quality review the sample result is potentially biased high due to analyte detection in the associated sample blank.
(M) - Method Detection Limit (MDL)
(J) - Reported concentration is below the laboratory reported detection limit (RDL), however is above the MDL and is estimated.
(H) - Based on the Stage II data quality review the sample result is potentially biased low due to analyte analysis outside of methold hold time.

APPENDIX C

LABORATORY ANALYTICAL REPORTS

- February 2024 – Annual assessment monitoring event
- February 2024 – Nature and extent sampling event for ACM selection of remedy
- May 2024 – Spring 2024 semiannual assessment monitoring event
- June 2024 – Nature and extent sampling event for ACM selection of remedy
- July 2024 – Nature and extent sampling event during pumping test for ACM selection of remedy
- September 2024 – Nature and extent sampling event for ACM selection of remedy
- November 2024 – Fall 2024 semiannual assessment monitoring event
- November 2024 – Nature and extent sampling event for ACM selection of remedy
- December 2024 – Resampling of two nature and extent wells for ACM selection of remedy
- December 2024 – Soil sampling event for ACM selection of remedy

ANALYTICAL REPORT

February 27, 2024

SCS Engineers - KS

Sample Delivery Group:	L1705245
Samples Received:	02/13/2024
Project Number:	27222162.23 - 3
Description:	Evergy Sibley Gen Station FAI CM

Report To: Jason Franks
8575 W. 110th Street
Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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MW-801 L1705245-01 GW

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 15:40 | Received date/time: 02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2227225	1	02/20/24 10:05	02/20/24 10:05	DJS	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2227623	1	02/16/24 11:33	02/16/24 19:49	ARD	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2226045	1	02/15/24 11:09	02/15/24 11:09	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2227752	1	02/16/24 12:19	02/16/24 12:19	ARV	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG2226851	1	02/15/24 12:34	02/15/24 12:34	ARV	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2226353	1	02/14/24 20:00	02/14/24 22:15	ASH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226032	1	02/14/24 19:05	02/14/24 19:05	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2225896	1	02/15/24 03:08	02/15/24 03:08	ASH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2226376	1	02/19/24 12:13	02/20/24 10:14	DJS	Mt. Juliet, TN

MW-802 L1705245-02 GW

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 11:20 | Received date/time: 02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2227225	1	02/20/24 10:35	02/20/24 10:35	DJS	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2226380	1	02/14/24 15:13	02/15/24 12:48	CAT	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2226045	1	02/15/24 11:39	02/15/24 11:39	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2227752	1	02/16/24 12:21	02/16/24 12:21	ARV	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG2226851	1	02/15/24 12:34	02/15/24 12:34	ARV	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2226353	1	02/14/24 20:00	02/14/24 22:28	ASH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226032	1	02/14/24 19:19	02/14/24 19:19	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2225896	1	02/15/24 03:28	02/15/24 03:28	ASH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2226376	1	02/19/24 12:13	02/20/24 10:16	DJS	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2227225	1	02/19/24 04:12	02/20/24 10:35	DJS	Mt. Juliet, TN

MW-803 L1705245-03 GW

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 12:10 | Received date/time: 02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2227225	1	02/20/24 10:36	02/20/24 10:36	DJS	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2226380	1	02/14/24 15:13	02/15/24 12:48	CAT	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2226045	1	02/15/24 11:42	02/15/24 11:42	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2227752	5	02/16/24 12:21	02/16/24 12:21	ARV	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG2226851	1	02/15/24 12:34	02/15/24 12:34	ARV	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2226353	1	02/14/24 20:00	02/14/24 22:44	ASH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226032	1	02/14/24 19:33	02/14/24 19:33	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2225896	1	02/15/24 03:48	02/15/24 03:48	ASH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2226376	1	02/19/24 12:13	02/20/24 10:19	DJS	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2227225	1	02/19/24 04:12	02/20/24 10:36	DJS	Mt. Juliet, TN

MW-804 L1705245-04 GW

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 13:10 | Received date/time: 02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2227225	1	02/20/24 09:50	02/20/24 09:50	DJS	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2226380	1	02/14/24 15:13	02/15/24 12:48	CAT	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2226045	1	02/15/24 11:49	02/15/24 11:49	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2227752	10	02/16/24 12:21	02/16/24 12:21	ARV	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG2226851	1	02/15/24 12:35	02/15/24 12:35	ARV	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2226353	1	02/14/24 20:00	02/14/24 23:00	ASH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226032	1	02/14/24 20:00	02/14/24 20:00	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2225896	1	02/15/24 04:06	02/15/24 04:06	ASH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2226376	1	02/19/24 12:13	02/20/24 10:22	DJS	Mt. Juliet, TN

MW-804 L1705245-04 GW

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 13:10 | Received date/time: 02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2227225	1	02/19/24 04:12	02/20/24 09:50	DJS	Mt. Juliet, TN

MW-805 L1705245-05 GW

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 14:00 | Received date/time: 02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2227225	1	02/20/24 09:52	02/20/24 09:52	DJS	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2226380	1	02/14/24 15:13	02/15/24 12:48	CAT	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2226403	1	02/19/24 11:16	02/19/24 11:16	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2227752	1	02/16/24 12:22	02/16/24 12:22	ARV	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG2226851	1	02/15/24 12:35	02/15/24 12:35	ARV	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2226353	1	02/14/24 20:00	02/14/24 23:13	ASH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226032	1	02/14/24 20:13	02/14/24 20:13	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2225896	1	02/15/24 04:28	02/15/24 04:28	ASH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2226376	1	02/19/24 12:13	02/20/24 10:30	DJS	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2227225	1	02/19/24 04:12	02/20/24 09:52	DJS	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2227225	1	02/19/24 04:12	02/20/24 15:30	ZSA	Mt. Juliet, TN

MW-806R L1705245-06 GW

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 14:45 | Received date/time: 02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2227225	1	02/20/24 09:54	02/20/24 09:54	DJS	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2226380	1	02/14/24 15:13	02/15/24 12:48	CAT	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2226403	1	02/19/24 11:21	02/19/24 11:21	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2227752	10	02/16/24 12:22	02/16/24 12:22	ARV	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG2226851	1	02/15/24 12:35	02/15/24 12:35	ARV	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2226353	1	02/14/24 20:00	02/14/24 23:27	ASH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226032	1	02/15/24 01:00	02/15/24 01:00	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226032	5	02/15/24 01:13	02/15/24 01:13	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2225896	1	02/15/24 04:49	02/15/24 04:49	ASH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2226376	1	02/19/24 12:13	02/20/24 10:33	DJS	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2227225	1	02/19/24 04:12	02/20/24 09:54	DJS	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferric Iron	59.3		50.0	1	02/20/2024 10:05	WG2227225

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Hardness (calculated) as CaCO3	362000		2500	1	02/20/2024 10:05	WG2227225

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	454000		10000	1	02/16/2024 19:49	WG2227623

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity,Bicarbonate	250000		20000	1	02/15/2024 11:09	WG2226045
Alkalinity,Carbonate	ND		20000	1	02/15/2024 11:09	WG2226045

Sample Narrative:

L1705245-01 WG2226045: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferrous Iron	ND	T8	50.0	1	02/16/2024 12:19	WG2227752

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfide	ND		50.0	1	02/15/2024 12:34	WG2226851

Wet Chemistry by Method 5310 B-2014

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
DOC	1440	B	1000	1	02/14/2024 22:15	WG2226353

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	75200		1000	1	02/14/2024 19:05	WG2226032
Fluoride	246		150	1	02/14/2024 19:05	WG2226032
Sulfate	38100		5000	1	02/14/2024 19:05	WG2226032

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	ND		1000	1	02/15/2024 03:08	WG2225896

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium,Dissolved	111000		1000	1	02/20/2024 10:14	WG2226376
Iron,Dissolved	ND		100	1	02/20/2024 10:14	WG2226376
Magnesium,Dissolved	21400		1000	1	02/20/2024 10:14	WG2226376
Manganese,Dissolved	ND		10.0	1	02/20/2024 10:14	WG2226376
Molybdenum,Dissolved	ND		5.00	1	02/20/2024 10:14	WG2226376
Potassium,Dissolved	ND		2000	1	02/20/2024 10:14	WG2226376
Sodium,Dissolved	22800		3000	1	02/20/2024 10:14	WG2226376

Calculated Results

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Ferric Iron	276		50.0	1	02/20/2024 10:35	WG2227225

Calculated Results

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Hardness (calculated) as CaCO3	299000		2500	1	02/20/2024 10:35	WG2227225

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	361000		10000	1	02/15/2024 12:48	WG2226380

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	129000		20000	1	02/15/2024 11:39	WG2226045
Alkalinity,Carbonate	ND		20000	1	02/15/2024 11:39	WG2226045

Sample Narrative:

L1705245-02 WG2226045: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Ferrous Iron	ND	T8	50.0	1	02/16/2024 12:21	WG2227752

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfide	ND		50.0	1	02/15/2024 12:34	WG2226851

Wet Chemistry by Method 5310 B-2014

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
DOC	1740	B	1000	1	02/14/2024 22:28	WG2226353

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	54700		1000	1	02/14/2024 19:19	WG2226032
Fluoride	210		150	1	02/14/2024 19:19	WG2226032
Sulfate	78600		5000	1	02/14/2024 19:19	WG2226032

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1560		1000	1	02/15/2024 03:28	WG2225896

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	79600		1000	1	02/20/2024 10:35	WG2227225
Calcium,Dissolved	80000		1000	1	02/20/2024 10:16	WG2226376
Iron	276		100	1	02/20/2024 10:35	WG2227225
Iron,Dissolved	ND		100	1	02/20/2024 10:16	WG2226376
Magnesium	24300		1000	1	02/20/2024 10:35	WG2227225
Magnesium,Dissolved	24600		1000	1	02/20/2024 10:16	WG2226376
Manganese	91.1		10.0	1	02/20/2024 10:35	WG2227225
Manganese,Dissolved	ND		10.0	1	02/20/2024 10:16	WG2226376
Molybdenum,Dissolved	ND		5.00	1	02/20/2024 10:16	WG2226376
Potassium	ND		2000	1	02/20/2024 10:35	WG2227225
Potassium,Dissolved	ND		2000	1	02/20/2024 10:16	WG2226376
Sodium	15500		3000	1	02/20/2024 10:35	WG2227225
Sodium,Dissolved	14500		3000	1	02/20/2024 10:16	WG2226376

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferric Iron	ND		100	1	02/20/2024 10:36	WG2227225

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Hardness (calculated) as CaCO3	389000		2500	1	02/20/2024 10:36	WG2227225

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	452000		10000	1	02/15/2024 12:48	WG2226380

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity,Bicarbonate	293000		20000	1	02/15/2024 11:42	WG2226045
Alkalinity,Carbonate	ND		20000	1	02/15/2024 11:42	WG2226045

Sample Narrative:

L1705245-03 WG2226045: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferrous Iron	4790	T8	250	5	02/16/2024 12:21	WG2227752

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfide	ND		50.0	1	02/15/2024 12:34	WG2226851

Wet Chemistry by Method 5310 B-2014

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
DOC	5030		1000	1	02/14/2024 22:44	WG2226353

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	21900		1000	1	02/14/2024 19:33	WG2226032
Fluoride	272		150	1	02/14/2024 19:33	WG2226032
Sulfate	92800		5000	1	02/14/2024 19:33	WG2226032

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	ND		1000	1	02/15/2024 03:48	WG2225896

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	118000		1000	1	02/20/2024 10:36	WG2227225
Calcium,Dissolved	119000		1000	1	02/20/2024 10:19	WG2226376
Iron	4460		100	1	02/20/2024 10:36	WG2227225
Iron,Dissolved	ND		100	1	02/20/2024 10:19	WG2226376
Magnesium	23200		1000	1	02/20/2024 10:36	WG2227225
Magnesium,Dissolved	23800		1000	1	02/20/2024 10:19	WG2226376
Manganese	247		10.0	1	02/20/2024 10:36	WG2227225
Manganese,Dissolved	243		10.0	1	02/20/2024 10:19	WG2226376
Molybdenum,Dissolved	ND		5.00	1	02/20/2024 10:19	WG2226376
Potassium	2330		2000	1	02/20/2024 10:36	WG2227225
Potassium,Dissolved	2360		2000	1	02/20/2024 10:19	WG2226376
Sodium	22400		3000	1	02/20/2024 10:36	WG2227225
Sodium,Dissolved	21700		3000	1	02/20/2024 10:19	WG2226376

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferric Iron	ND		100	1	02/20/2024 09:50	WG2227225

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Hardness (calculated) as CaCO3	516000		2500	1	02/20/2024 09:50	WG2227225

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	532000		13300	1	02/15/2024 12:48	WG2226380

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity,Bicarbonate	554000		20000	1	02/15/2024 11:49	WG2226045
Alkalinity,Carbonate	ND		20000	1	02/15/2024 11:49	WG2226045

Sample Narrative:

L1705245-04 WG2226045: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferrous Iron	11800	T8	500	10	02/16/2024 12:21	WG2227752

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfide	ND		50.0	1	02/15/2024 12:35	WG2226851

Wet Chemistry by Method 5310 B-2014

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
DOC	4620		1000	1	02/14/2024 23:00	WG2226353

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	17600		1000	1	02/14/2024 20:00	WG2226032
Fluoride	241		150	1	02/14/2024 20:00	WG2226032
Sulfate	ND		5000	1	02/14/2024 20:00	WG2226032

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	2820		1000	1	02/15/2024 04:06	WG2225896

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	147000		1000	1	02/20/2024 09:50	WG2227225
Calcium,Dissolved	143000		1000	1	02/20/2024 10:22	WG2226376
Iron	10800		100	1	02/20/2024 09:50	WG2227225
Iron,Dissolved	ND		100	1	02/20/2024 10:22	WG2226376
Magnesium	36200		1000	1	02/20/2024 09:50	WG2227225
Magnesium,Dissolved	36100		1000	1	02/20/2024 10:22	WG2226376
Manganese	786		10.0	1	02/20/2024 09:50	WG2227225
Manganese,Dissolved	740		10.0	1	02/20/2024 10:22	WG2226376
Molybdenum,Dissolved	ND		5.00	1	02/20/2024 10:22	WG2226376
Potassium	6090		2000	1	02/20/2024 09:50	WG2227225
Potassium,Dissolved	5810		2000	1	02/20/2024 10:22	WG2226376
Sodium	27100		3000	1	02/20/2024 09:50	WG2227225
Sodium,Dissolved	25400		3000	1	02/20/2024 10:22	WG2226376

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferric Iron	ND		50.0	1	02/20/2024 09:52	WG2227225

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Hardness (calculated) as CaCO3	297000		2500	1	02/20/2024 09:52	WG2227225

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	304000		10000	1	02/15/2024 12:48	WG2226380

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity,Bicarbonate	243000		20000	1	02/19/2024 11:16	WG2226403
Alkalinity,Carbonate	ND		20000	1	02/19/2024 11:16	WG2226403

Sample Narrative:

L1705245-05 WG2226403: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferrous Iron	267	T8	50.0	1	02/16/2024 12:22	WG2227752

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfide	ND		50.0	1	02/15/2024 12:35	WG2226851

Wet Chemistry by Method 5310 B-2014

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
DOC	1070	B	1000	1	02/14/2024 23:13	WG2226353

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	6940		1000	1	02/14/2024 20:13	WG2226032
Fluoride	196		150	1	02/14/2024 20:13	WG2226032
Sulfate	45100		5000	1	02/14/2024 20:13	WG2226032

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	1440		1000	1	02/15/2024 04:28	WG2225896

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	96500		1000	1	02/20/2024 09:52	WG2227225
Calcium,Dissolved	96700		1000	1	02/20/2024 10:30	WG2226376
Iron	227		100	1	02/20/2024 09:52	WG2227225
Iron,Dissolved	ND		100	1	02/20/2024 10:30	WG2226376
Magnesium	13700		1000	1	02/20/2024 09:52	WG2227225
Magnesium,Dissolved	14100		1000	1	02/20/2024 10:30	WG2226376
Manganese	63.2		10.0	1	02/20/2024 09:52	WG2227225
Manganese,Dissolved	65.3		10.0	1	02/20/2024 10:30	WG2226376
Molybdenum,Dissolved	ND		5.00	1	02/20/2024 10:30	WG2226376
Potassium	ND		2000	1	02/20/2024 09:52	WG2227225
Potassium,Dissolved	ND		2000	1	02/20/2024 10:30	WG2226376
Sodium	15500		3000	1	02/20/2024 15:30	WG2227225
Sodium,Dissolved	8600		3000	1	02/20/2024 10:30	WG2226376

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferric Iron	ND		100	1	02/20/2024 09:54	WG2227225

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Hardness (calculated) as CaCO3	543000		2500	1	02/20/2024 09:54	WG2227225

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	676000		13300	1	02/15/2024 12:48	WG2226380

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity,Bicarbonate	235000		20000	1	02/19/2024 11:21	WG2226403
Alkalinity,Carbonate	ND		20000	1	02/19/2024 11:21	WG2226403

Sample Narrative:

L1705245-06 WG2226403: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferrous Iron	6650	T8	500	10	02/16/2024 12:22	WG2227752

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfide	ND		50.0	1	02/15/2024 12:35	WG2226851

Wet Chemistry by Method 5310 B-2014

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
DOC	1810	B	1000	1	02/14/2024 23:27	WG2226353

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	30100		1000	1	02/15/2024 01:00	WG2226032
Fluoride	209		150	1	02/15/2024 01:00	WG2226032
Sulfate	285000		25000	5	02/15/2024 01:13	WG2226032

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	4080		1000	1	02/15/2024 04:49	WG2225896

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	178000		1000	1	02/20/2024 09:54	WG2227225
Calcium,Dissolved	175000		1000	1	02/20/2024 10:33	WG2226376
Iron	6390		100	1	02/20/2024 09:54	WG2227225
Iron,Dissolved	ND		100	1	02/20/2024 10:33	WG2226376
Magnesium	23700		1000	1	02/20/2024 09:54	WG2227225
Magnesium,Dissolved	23900		1000	1	02/20/2024 10:33	WG2226376
Manganese	2230		10.0	1	02/20/2024 09:54	WG2227225
Manganese,Dissolved	2270		10.0	1	02/20/2024 10:33	WG2226376
Molybdenum,Dissolved	1410		5.00	1	02/20/2024 10:33	WG2226376
Potassium	3730		2000	1	02/20/2024 09:54	WG2227225
Potassium,Dissolved	3510		2000	1	02/20/2024 10:33	WG2226376
Sodium	23700		3000	1	02/20/2024 09:54	WG2227225
Sodium,Dissolved	22700		3000	1	02/20/2024 10:33	WG2226376

Method Blank (MB)

(MB) R4035053-1 02/15/24 12:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Dissolved Solids	U		10000	10000

L1705179-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705179-01 02/15/24 12:48 • (DUP) R4035053-3 02/15/24 12:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Dissolved Solids	268000	275000	1	2.58		10

L1705223-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705223-01 02/15/24 12:48 • (DUP) R4035053-4 02/15/24 12:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Dissolved Solids	388000	399000	1	2.80		10

Laboratory Control Sample (LCS)

(LCS) R4035053-2 02/15/24 12:48

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Dissolved Solids	8800000	8490000	96.5	85.0-115	

Method Blank (MB)

(MB) R4035395-1 02/16/24 19:49

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Dissolved Solids	U		10000	10000

L1705766-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1705766-07 02/16/24 19:49 • (DUP) R4035395-3 02/19/24 10:50

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	456000	437000	1	4.26		10

L1705766-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1705766-08 02/16/24 19:49 • (DUP) R4035395-4 02/19/24 10:50

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	532000	535000	1	0.562		10

Laboratory Control Sample (LCS)

(LCS) R4035395-2 02/16/24 19:49

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	8720000	99.1	85.0-115	

Method Blank (MB)

(MB) R4034233-2 02/15/24 09:15

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity,Bicarbonate	U		8450	20000
Alkalinity,Carbonate	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1705435-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705435-01 02/15/24 11:29 • (DUP) R4034233-3 02/15/24 11:35

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	ND	ND	1	0.000		20
Alkalinity,Carbonate	ND	ND	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1705005-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1705005-15 02/15/24 09:28 • (DUP) R4034233-4 02/15/24 13:21

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	235000	220000	1	6.72		20
Alkalinity,Carbonate	ND	ND	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

QUALITY CONTROL SUMMARY

L1705245-05,06

Method Blank (MB)

(MB) R4035422-2 02/19/24 10:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity,Bicarbonate	U		8450	20000
Alkalinity,Carbonate	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1705329-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1705329-02 02/19/24 10:24 • (DUP) R4035422-3 02/19/24 10:27

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	ND	ND	1	0.000		20
Alkalinity,Carbonate	ND	ND	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1705473-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705473-01 02/19/24 12:17 • (DUP) R4035422-4 02/19/24 12:21

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	ND	ND	1	0.643		20
Alkalinity,Carbonate	ND	ND	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Method Blank (MB)

(MB) R4034660-1 02/16/24 12:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ferrous Iron	U		15.0	50.0

L1705245-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705245-01 02/16/24 12:19 • (DUP) R4034660-3 02/16/24 12:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Ferrous Iron	ND	ND	1	0.000		20

L1705450-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1705450-04 02/16/24 12:28 • (DUP) R4034660-4 02/16/24 12:28

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Ferrous Iron	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4034660-2 02/16/24 12:18

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Ferrous Iron	1000	991	99.1	85.0-115	

L1706083-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706083-04 02/16/24 12:32 • (MS) R4034660-5 02/16/24 12:32 • (MSD) R4034660-6 02/16/24 12:33

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Ferrous Iron	1000	76.0	1170	1140	110	106	1	80.0-120			2.86	20

Method Blank (MB)

(MB) R4034149-1 02/15/24 12:33

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Sulfide	U		6.50	50.0

L1705245-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705245-01 02/15/24 12:34 • (DUP) R4034149-3 02/15/24 12:34

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Sulfide	ND	ND	1	0.000		20

L1705329-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705329-01 02/15/24 12:35 • (DUP) R4034149-4 02/15/24 12:37

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Sulfide	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4034149-2 02/15/24 12:34

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Sulfide	500	548	110	85.0-115	

L1705484-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705484-06 02/15/24 12:39 • (MS) R4034149-5 02/15/24 12:40 • (MSD) R4034149-6 02/15/24 12:40

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Sulfide	500	ND	522	536	104	107	1	80.0-120			2.65	20

QUALITY CONTROL SUMMARY

L1705245-01,02,03,04,05,06

Method Blank (MB)

(MB) R4033973-2 02/14/24 20:44

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
DOC	323	J	106	1000

L1705484-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1705484-02 02/15/24 02:04 • (DUP) R4033973-5 02/15/24 02:19

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
DOC	5700	5920	1	3.75		20

L1705484-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1705484-05 02/15/24 03:05 • (DUP) R4033973-6 02/15/24 03:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
DOC	5600	5260	1	6.33		20

Laboratory Control Sample (LCS)

(LCS) R4033973-1 02/14/24 20:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
DOC	25000	23600	94.2	85.0-115	

L1705484-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705484-01 02/14/24 23:44 • (MS) R4033973-3 02/15/24 00:10 • (MSD) R4033973-4 02/15/24 00:35

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
DOC	25000	8010	31000	31300	91.9	93.3	1	80.0-120			1.16	20

L1705484-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705484-06 02/15/24 03:34 • (MS) R4033973-7 02/15/24 03:59 • (MSD) R4033973-8 02/15/24 04:23

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
DOC	25000	1640	24500	24400	91.5	91.1	1	80.0-120			0.409	20

Method Blank (MB)

(MB) R4035442-1 02/14/24 11:29

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Fluoride	U		64.0	150
Sulfate	U		594	5000

L1705223-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1705223-02 02/14/24 17:44 • (DUP) R4035442-3 02/14/24 17:58

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	176000	176000	1	0.0116		15
Fluoride	ND	ND	1	5.94		15
Sulfate	66600	66600	1	0.0842		15

L1705261-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705261-01 02/14/24 17:03 • (DUP) R4035442-5 02/15/24 01:27

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	34900	34300	1	1.51		15
Fluoride	292	270	1	8.11		15
Sulfate	21200	21200	1	0.0777		15

Laboratory Control Sample (LCS)

(LCS) R4035442-2 02/14/24 11:43

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40300	101	80.0-120	
Fluoride	8000	8920	112	80.0-120	
Sulfate	40000	41500	104	80.0-120	

Sample Narrative:

LCS: LCS for Fluoride DOD/DW is out of range, but in range for regular samples. No DOD/DW Fluoride in WG

L1705223-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1705223-02 02/14/24 17:44 • (MS) R4035442-4 02/14/24 18:38

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	176000	181000	12.2	1	80.0-120	V
Fluoride	8000	ND	8880	110	1	80.0-120	
Sulfate	40000	66600	94200	69.0	1	80.0-120	J6

Sample Narrative:

MS: Cl/SO4 spike failed due to sample matrix

L1705261-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705261-01 02/14/24 17:03 • (MS) R4035442-6 02/15/24 01:40 • (MSD) R4035442-7 02/15/24 01:54

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	34900	68300	68400	83.5	83.9	1	80.0-120			0.215	15
Fluoride	8000	292	9280	9220	112	112	1	80.0-120			0.674	15
Sulfate	40000	21200	59000	59200	94.5	94.8	1	80.0-120			0.234	15

Method Blank (MB)

(MB) R4034207-2 02/14/24 11:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	U		102	1000

L1705166-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705166-01 02/15/24 09:49 • (DUP) R4034207-6 02/15/24 10:06

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	ND	ND	1	0.000		20

L1705186-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1705186-04 02/14/24 19:17 • (DUP) R4034207-5 02/14/24 19:48

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	39000	39900	1	2.13		20

Laboratory Control Sample (LCS)

(LCS) R4034207-1 02/14/24 11:24

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	24400	97.5	85.0-115	

L1705186-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705186-05 02/15/24 10:35 • (MS) R4034207-7 02/15/24 11:03 • (MSD) R4034207-8 02/15/24 11:31

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	70100	124000	122000	215	209	2	85.0-115	E J5	E J5	1.30	20

L1705179-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705179-01 02/14/24 15:46 • (MS) R4034207-3 02/14/24 16:12 • (MSD) R4034207-4 02/14/24 16:38

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	8760	34800	34100	104	102	1	85.0-115			2.03	20

Method Blank (MB)

(MB) R4035979-6 02/20/24 10:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Calcium	U		79.3	1000
Iron	U		18.0	100
Magnesium	U		85.3	1000
Manganese	U		0.934	10.0
Potassium	U		261	2000
Sodium	U		504	3000

Laboratory Control Sample (LCS)

(LCS) R4035979-7 02/20/24 10:43

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium	10000	9920	99.2	80.0-120	
Iron	10000	9770	97.7	80.0-120	
Magnesium	10000	10400	104	80.0-120	
Manganese	1000	1030	103	80.0-120	
Potassium	10000	9940	99.4	80.0-120	
Sodium	10000	10200	102	80.0-120	

L1705245-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705245-01 02/20/24 10:05 • (MS) R4035979-4 02/20/24 10:08 • (MSD) R4035979-5 02/20/24 10:10

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Calcium	10000	110000	118000	118000	79.9	83.7	1	75.0-125			0.321	20
Iron	10000	ND	9680	9790	96.2	97.3	1	75.0-125			1.11	20
Magnesium	10000	21300	31000	31000	96.7	97.3	1	75.0-125			0.173	20
Manganese	1000	10.3	1010	1020	100	101	1	75.0-125			0.959	20
Potassium	10000	ND	11100	11300	98.5	100	1	75.0-125			1.39	20
Sodium	10000	23800	32900	33000	90.7	91.3	1	75.0-125			0.185	20

Method Blank (MB)

(MB) R4035949-1 02/20/24 09:57

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Calcium,Dissolved	U		79.3	1000
Iron,Dissolved	U		18.0	100
Magnesium,Dissolved	U		85.3	1000
Manganese,Dissolved	U		0.934	10.0
Molybdenum,Dissolved	U		1.16	5.00
Potassium,Dissolved	U		261	2000
Sodium,Dissolved	U		504	3000

Laboratory Control Sample (LCS)

(LCS) R4035949-2 02/20/24 10:00

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium,Dissolved	10000	9900	99.0	80.0-120	
Iron,Dissolved	10000	9820	98.2	80.0-120	
Magnesium,Dissolved	10000	10400	104	80.0-120	
Manganese,Dissolved	1000	1030	103	80.0-120	
Molybdenum,Dissolved	1000	983	98.3	80.0-120	
Potassium,Dissolved	10000	9880	98.8	80.0-120	
Sodium,Dissolved	10000	9590	95.9	80.0-120	

L1705404-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705404-01 02/20/24 10:03 • (MS) R4035949-4 02/20/24 10:08 • (MSD) R4035949-5 02/20/24 10:11

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Calcium,Dissolved	10000	30700	40200	39900	95.1	92.4	1	75.0-125			0.687	20
Iron,Dissolved	10000	ND	9710	9600	97.1	96.0	1	75.0-125			1.08	20
Magnesium,Dissolved	10000	12600	22500	22200	98.6	96.2	1	75.0-125			1.11	20
Manganese,Dissolved	1000	ND	1020	1020	102	102	1	75.0-125			0.205	20
Molybdenum,Dissolved	1000	59.5	1020	1020	96.5	96.5	1	75.0-125			0.00381	20
Potassium,Dissolved	10000	3240	12900	12800	96.1	95.8	1	75.0-125			0.292	20
Sodium,Dissolved	10000	459000	464000	460000	49.7	15.6	1	75.0-125	V	V	0.738	20

Method Blank (MB)

(MB) R4035979-6 02/20/24 10:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Calcium	U		79.3	1000
Iron	U		18.0	100
Magnesium	U		85.3	1000
Manganese	U		0.934	10.0
Potassium	U		261	2000
Sodium	U		504	3000

Laboratory Control Sample (LCS)

(LCS) R4035979-7 02/20/24 10:43

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium	10000	9920	99.2	80.0-120	
Iron	10000	9770	97.7	80.0-120	
Magnesium	10000	10400	104	80.0-120	
Manganese	1000	1030	103	80.0-120	
Potassium	10000	9940	99.4	80.0-120	
Sodium	10000	10200	102	80.0-120	

L1705245-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705245-01 02/20/24 10:05 • (MS) R4035979-4 02/20/24 10:08 • (MSD) R4035979-5 02/20/24 10:10

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Calcium	10000	110000	118000	118000	79.9	83.7	1	75.0-125			0.321	20
Iron	10000	ND	9680	9790	96.2	97.3	1	75.0-125			1.11	20
Magnesium	10000	21300	31000	31000	96.7	97.3	1	75.0-125			0.173	20
Manganese	1000	10.3	1010	1020	100	101	1	75.0-125			0.959	20
Potassium	10000	ND	11100	11300	98.5	100	1	75.0-125			1.39	20
Sodium	10000	23800	32900	33000	90.7	91.3	1	75.0-125			0.185	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
SCS Engineers - KS
8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Pres Chk

Report to: **Jason Franks**

Email To: **jfranks@scsengineers.com;jrockhold@scsengine**

Project Description: **Evergy Sibley Gen Station FAI CM**

City/State Collected: **Sibly MO**

Please Circle: PT MT (CT) ET

Phone: **913-681-0030**

Client Project # **27222162.23 - 3**

Lab Project # **AQUAOPKS-SIBLEY**

Collected by (print): **Matt Vander Patten**

Site/Facility ID #

P.O. #

Collected by (signature):

Quote #

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed: 5+d

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALKBI, ALKCA 125mlHDPE-NoPres	Chloride, F, SO4 125mlHDPE-NoPres	DOC (Field Filtered) 250mlAmb-HCl	Dissolved Metals 250mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Sufide 250mlAmb-S-NaOH+ZnAc	TDS 1L-HDPE NoPres	TOC 250mlAmb-HCl	Total Metals 250mlHDPE-HNO3	Remarks	Sample # (lab only)
MW-801	Grab	GW	NA	2/12/24	1540	9	X	X	X	X	X	X	X	X	X		-01
MW-802		GW			1120	9	X	X	X	X	X	X	X	X	X		-02
MW-803		GW			1210	9	X	X	X	X	X	X	X	X	X		-03
MW-804		GW			1310	9	X	X	X	X	X	X	X	X	X		-04
MW-805		GW			1400	9	X	X	X	X	X	X	X	X	X		-05
MW-806R		GW			1445	9	X	X	X	X	X	X	X	X	X		-06
~~MW-807~~		GW				9	X	X	X	X	X	X	X	X	X		
~~MW-808~~		GW				9	X	X	X	X	X	X	X	X	X		
~~MW-809~~		GW				9	X	X	X	X	X	X	X	X	X		
~~MW-810~~		GW				9	X	X	X	X	X	X	X	X	X		

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
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

L1705245

G059

Acctnum: **AQUAOPKS**
Template: **T236081**
Prelogin: **P1054298**
PM: **206 - Jeff Carr**
PB:
Shipped Via: **FedEX Ground**

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: Exclude MW-801 thru MW-806R for total molybdenum.

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 5300 4294 5780

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR
Matt Vander Patten	2/12/24	1800		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: DFAB °C Bottles Received: 1.5+0=1.5 54
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Ei Debnath 17	Date: 2-13-24 Time: 900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

ANALYTICAL REPORT

March 14, 2024

SCS Engineers - KS

Sample Delivery Group:	L1705249
Samples Received:	02/13/2024
Project Number:	27213169.23 - B
Description:	Evergy Sibley Gen Station GW 2023-24

Report To:

Jason Franks
8575 W. 110th Street
Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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MW-801 L1705249-01 Non-Potable Water

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 15:40 | Received date/time: 02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2235353	1	02/29/24 10:48	03/12/24 19:28	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2229469	1	02/21/24 11:40	03/12/24 19:28	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2229469	1	02/21/24 11:40	02/22/24 17:07	ZRG	Mt. Juliet, TN

MW-802 L1705249-02 Non-Potable Water

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 11:20 | Received date/time: 02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2235353	1	02/29/24 10:48	03/12/24 19:28	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2229469	1	02/21/24 11:40	03/12/24 19:28	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2229469	1	02/21/24 11:40	02/22/24 17:07	ZRG	Mt. Juliet, TN

MW-803 L1705249-03 Non-Potable Water

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 12:10 | Received date/time: 02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2235353	1	02/29/24 10:48	03/12/24 19:28	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2229469	1	02/21/24 11:40	03/12/24 19:28	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2229469	1	02/21/24 11:40	02/22/24 17:07	ZRG	Mt. Juliet, TN

MW-804 L1705249-04 Non-Potable Water

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 13:10 | Received date/time: 02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2235353	1	02/29/24 10:48	03/12/24 19:28	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2229469	1	02/21/24 11:40	03/12/24 19:28	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2229469	1	02/21/24 11:40	02/22/24 17:07	ZRG	Mt. Juliet, TN

MW-805 L1705249-05 Non-Potable Water

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 14:00 | Received date/time: 02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2235353	1	02/29/24 10:48	03/12/24 19:28	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2229469	1	02/21/24 11:40	03/12/24 19:28	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2229469	1	02/21/24 11:40	02/22/24 17:07	ZRG	Mt. Juliet, TN

MW-806R L1705249-06 Non-Potable Water

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 14:45 | Received date/time: 02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2235353	1	02/29/24 10:48	03/12/24 19:28	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2229469	1	02/21/24 11:40	03/12/24 19:28	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2229469	1	02/21/24 11:40	02/22/24 17:07	ZRG	Mt. Juliet, TN

DUPLICATE L1705249-07 Non-Potable Water

Collected by: Matt Vander Putten
Collected date/time: 02/12/24 12:10
Received date/time: 02/13/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2235353	1	02/29/24 10:48	03/12/24 19:28	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2229469	1	02/21/24 11:40	03/12/24 19:28	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2229469	1	02/21/24 11:40	02/22/24 17:07	ZRG	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	1.06		0.282	0.888	0.495	0.258	03/12/2024 19:28	WG2235353
(T) Barium	*113*					*30.0-143*	*03/12/2024 19:28*	WG2235353
(T) Yttrium	*98.4*					*30.0-136*	*03/12/2024 19:28*	WG2235353

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.22		0.319	0.518	03/12/2024 19:28	WG2229469

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.160		0.149	0.0729	0.154	0.127	02/22/2024 17:07	WG2229469
(T) Barium-133	*96.7*					*30.0-143*	*02/22/2024 17:07*	WG2229469

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	1.05		0.292	0.905	0.515	0.268	03/12/2024 19:28	WG2235353
(T) Barium	*102*					*30.0-143*	*03/12/2024 19:28*	WG2235353
(T) Yttrium	*114*					*30.0-136*	*03/12/2024 19:28*	WG2235353

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.24		0.334	0.537	03/12/2024 19:28	WG2229469

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.192		0.162	0.0815	0.153	0.126	02/22/2024 17:07	WG2229469
(T) Barium-133	*99.8*					*30.0-143*	*02/22/2024 17:07*	WG2229469

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	1.31		0.366	1.08	0.645	0.337	03/12/2024 19:28	WG2235353
(T) Barium	*112*					*30.0-143*	*03/12/2024 19:28*	WG2235353
(T) Yttrium	*105*					*30.0-136*	*03/12/2024 19:28*	WG2235353

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.55		0.413	0.667	03/12/2024 19:28	WG2229469

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.247		0.191	0.0879	0.168	0.138	02/22/2024 17:07	WG2229469
(T) Barium-133	*90.8*					*30.0-143*	*02/22/2024 17:07*	WG2229469

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.729		0.262	1.04	0.468	0.244	03/12/2024 19:28	WG2235353
(T) Barium	*137*					*30.0-143*	*03/12/2024 19:28*	WG2235353
(T) Yttrium	*98.3*					*30.0-136*	*03/12/2024 19:28*	WG2235353

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.14		0.354	0.495	03/12/2024 19:28	WG2229469

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.410		0.238	0.117	0.160	0.132	02/22/2024 17:07	WG2229469
(T) Barium-133	*96.2*					*30.0-143*	*02/22/2024 17:07*	WG2229469

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	1.27		0.230	0.729	0.389	0.205	03/12/2024 19:28	WG2235353
(T) Barium	*137*					*30.0-143*	*03/12/2024 19:28*	WG2235353
(T) Yttrium	*114*					*30.0-136*	*03/12/2024 19:28*	WG2235353

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.68		0.335	0.422	03/12/2024 19:28	WG2229469

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.418		0.243	0.121	0.164	0.135	02/22/2024 17:07	WG2229469
(T) Barium-133	*97.1*					*30.0-143*	*02/22/2024 17:07*	WG2229469

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.342	J	0.198	1.31	0.360	0.190	03/12/2024 19:28	WG2235353
(T) Barium	*118*					*30.0-143*	*03/12/2024 19:28*	WG2235353
(T) Yttrium	*114*					*30.0-136*	*03/12/2024 19:28*	WG2235353

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.475		0.242	0.394	03/12/2024 19:28	WG2229469

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.132	J	0.140	0.0701	0.161	0.133	02/22/2024 17:07	WG2229469
(T) Barium-133	*103*					*30.0-143*	*02/22/2024 17:07*	WG2229469

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.650		0.277	1.11	0.497	0.259	03/12/2024 19:28	WG2235353
(T) Barium	*130*					*30.0-143*	*03/12/2024 19:28*	WG2235353
(T) Yttrium	*117*					*30.0-136*	*03/12/2024 19:28*	WG2235353

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.846		0.332	0.531	03/12/2024 19:28	WG2229469

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.196		0.183	0.0846	0.188	0.156	02/22/2024 17:07	WG2229469
(T) Barium-133	*91.9*					*30.0-143*	*02/22/2024 17:07*	WG2229469

Method Blank (MB)

(MB) R4045290-1 03/12/24 19:28

Analyte	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
	pCi/l		+ / -	pCi/l	pCi/l
Radium-228	0.653		0.155	0.268	0.141
(T) Barium	*107*		*107*		
(T) Yttrium	*120*		*120*		

L1705328-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1705328-02 03/12/24 19:28 • (DUP) R4045290-5 03/12/24 19:28

Analyte	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
Radium-228	0.968	0.342	0.609	0.319	0.502	0.388	0.709	0.370	63.5	0.902	J	20	3
(T) Barium	*112*				*110*	*110*							
(T) Yttrium	*97.8*				*96.4*	*96.4*							

Laboratory Control Sample (LCS)

(LCS) R4045290-2 03/12/24 19:28

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-228	5.00	5.47	109	80.0-120	
(T) Barium			*113*		
(T) Yttrium			*102*		

L1705249-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705249-03 03/12/24 19:28 • (MS) R4045290-3 03/12/24 19:28 • (MSD) R4045290-4 03/12/24 19:28

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-228	16.7	1.31	18.3	16.2	102	89.1	1	70.0-130			12.1		20
(T) Barium		*112*			*105*	*107*							
(T) Yttrium		*105*			*97.0*	*96.6*							

Method Blank (MB)

(MB) R4041068-1 02/22/24 17:07

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.0311	J	0.0390	0.0512	0.0423
(T) Barium-133	*87.9*		*87.9*		

L1705230-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705230-01 02/22/24 17:07 • (DUP) R4041068-5 02/22/24 17:07

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.244	0.188	0.165	0.136	0.394	0.240	0.168	0.139	47.3	0.495		20	3
(T) Barium-133	*93.2*				*93.2*	*93.2*							

Laboratory Control Sample (LCS)

(LCS) R4041068-2 02/22/24 17:07

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	4.93	98.6	80.0-120	
(T) Barium-133			*91.7*		

L1705249-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705249-03 02/22/24 17:07 • (MS) R4041068-3 02/22/24 17:07 • (MSD) R4041068-4 02/22/24 17:07

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.247	20.0	22.3	98.6	110	1	75.0-125			10.9		20
(T) Barium-133		*90.8*			*96.2*	*90.1*							

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Pres Chk

Report to:
Jason Franks

Email To:
jfranks@scsengineers.com;jrockhold@scsengine

Project Description:
Evergy Sibley Gen Station GW 2023-24

City/State Collected: Sibly MO

Please Circle: PT MT CT ET

Phone: **913-681-0030**

Client Project #
27213169.23 - B

Lab Project #
AQUAOPKS-SIBLEY

Collected by (print):
Matt VanderPutten

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed
Std

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	RA-226, RA-228 1L-HDPE-Add HNO3
MW-801	Grab	NPW	NA	2/12/24	1340	~~2~~ 1	X
MW-802		NPW			1120	2	X
MW-803		NPW			1210	2	X
MW-804		NPW			1310	2	X
MW-805		NPW			1400	~~2~~ 1	X
MW-806R		NPW			1445	~~2~~ 1	X
DUPLICATE		NPW			1210	2	X
MS / MSD		NPW			1210	2	X
~~MSD~~		~~NPW~~				~~2~~	~~X~~

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
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

SDG # L1705249
D042

Acctnum: **AQUAOPKS**
Template: **T198905**
Prelogin: **P1054289**
PM: **206 - Jeff Carr**
PB:

Shipped Via: **FedEX Ground**

Remarks	Sample # (lab only)
	-01
	-02
~~-03~~ HKR 2/14/24	-03
	-04
	-05
	-06
	-07
	-08

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: RA 226/228 - Report separately and combined.

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Matt VanderPutten	2/12/24	1800		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp 0.8+0.6 °C 11.4+0=11.4 Bottles Received: 10
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) M. Grant	Date: 2/13/24 Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

February 27, 2024

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

SCS Engineers - KS

Sample Delivery Group:	L1705484
Samples Received:	02/14/2024
Project Number:	27222162.23 - 3
Description:	Evergy Sibley Gen Station FAI CM

Report To: Jason Franks
8575 W. 110th Street
Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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MW-809 L1705484-01 GW

Collected by: Matt Vander Putten | Collected date/time: 02/13/24 09:55 | Received date/time: 02/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2230928	1	02/22/24 12:25	02/22/24 12:25	JTM	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2226631	1	02/14/24 23:58	02/15/24 08:52	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2226406	1	02/19/24 14:38	02/19/24 14:38	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2227752	10	02/16/24 12:29	02/16/24 12:29	ARV	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG2226851	1	02/15/24 12:38	02/15/24 12:38	ARV	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2226353	1	02/14/24 20:00	02/14/24 23:44	ASH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226841	1	02/16/24 20:35	02/16/24 20:35	HMM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2226819	1	02/15/24 14:12	02/15/24 14:12	DMA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2226648	1	02/15/24 13:52	02/16/24 21:11	JTM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2230928	1	02/22/24 06:59	02/22/24 12:25	JTM	Mt. Juliet, TN

MW-810 L1705484-02 GW

Collected by: Matt Vander Putten | Collected date/time: 02/13/24 11:00 | Received date/time: 02/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2230928	1	02/22/24 12:34	02/22/24 12:34	JTM	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2226631	1	02/14/24 23:58	02/15/24 08:52	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2226406	1	02/19/24 14:43	02/19/24 14:43	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2227755	10	02/16/24 12:05	02/16/24 12:05	ARV	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG2226851	1	02/15/24 12:38	02/15/24 12:38	ARV	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2226353	1	02/14/24 20:00	02/15/24 02:04	ASH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226841	1	02/16/24 20:48	02/16/24 20:48	HMM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2227179	1	02/15/24 19:27	02/15/24 19:27	CNH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2226648	1	02/15/24 13:52	02/16/24 21:13	JTM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2230928	1	02/22/24 06:59	02/22/24 12:34	JTM	Mt. Juliet, TN

MW-811 L1705484-03 GW

Collected by: Matt Vander Putten | Collected date/time: 02/13/24 12:15 | Received date/time: 02/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2230928	1	02/22/24 12:37	02/22/24 12:37	JTM	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2226631	1	02/14/24 23:58	02/15/24 08:52	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2226406	1	02/19/24 15:15	02/19/24 15:15	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2227752	10	02/16/24 12:29	02/16/24 12:29	ARV	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG2226851	1	02/15/24 12:38	02/15/24 12:38	ARV	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2226353	1	02/14/24 20:00	02/15/24 02:33	ASH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226841	1	02/16/24 21:01	02/16/24 21:01	HMM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2227631	5	02/20/24 02:34	02/20/24 02:34	DLH	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2227179	1	02/15/24 19:46	02/15/24 19:46	CNH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2226648	1	02/15/24 13:52	02/16/24 21:14	JTM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2230928	1	02/22/24 06:59	02/22/24 12:37	JTM	Mt. Juliet, TN

MW-812 L1705484-04 GW

Collected by: Matt Vander Putten | Collected date/time: 02/13/24 13:35 | Received date/time: 02/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2230928	1	02/22/24 12:40	02/22/24 12:40	JTM	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2226631	1	02/14/24 23:58	02/15/24 08:52	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2226406	1	02/19/24 15:19	02/19/24 15:19	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2227752	25	02/16/24 12:30	02/16/24 12:30	ARV	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG2226851	1	02/15/24 12:38	02/15/24 12:38	ARV	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2226353	1	02/14/24 20:00	02/15/24 02:50	ASH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226843	1	02/20/24 16:00	02/20/24 16:00	GEB	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

MW-812 L1705484-04 GW

Collected by: Matt Vander Putten | Collected date/time: 02/13/24 13:35 | Received date/time: 02/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2226843	10	02/20/24 16:13	02/20/24 16:13	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2227179	1	02/15/24 20:07	02/15/24 20:07	CNH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2226648	1	02/15/24 13:52	02/16/24 21:16	JTM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2230928	1	02/22/24 06:59	02/22/24 12:40	JTM	Mt. Juliet, TN

MW-813 L1705484-05 GW

Collected by: Matt Vander Putten | Collected date/time: 02/13/24 15:00 | Received date/time: 02/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2230928	1	02/22/24 12:43	02/22/24 12:43	JTM	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2226631	1	02/14/24 23:58	02/15/24 08:52	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2226406	1	02/19/24 15:23	02/19/24 15:23	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2227755	10	02/16/24 12:06	02/16/24 12:06	ARV	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG2226851	1	02/15/24 12:38	02/15/24 12:38	ARV	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2226353	1	02/14/24 20:00	02/15/24 03:05	ASH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226843	1	02/20/24 18:44	02/20/24 18:44	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2227179	1	02/15/24 20:26	02/15/24 20:26	CNH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2226648	1	02/15/24 13:52	02/16/24 21:18	JTM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2230928	1	02/22/24 06:59	02/22/24 12:43	JTM	Mt. Juliet, TN

MW-822 L1705484-06 GW

Collected by: Matt Vander Putten | Collected date/time: 02/13/24 16:15 | Received date/time: 02/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2230928	1	02/22/24 12:46	02/22/24 12:46	JTM	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2226631	1	02/14/24 23:58	02/15/24 08:52	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2226406	1	02/19/24 15:02	02/19/24 15:02	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2227752	1	02/16/24 12:30	02/16/24 12:30	ARV	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG2226851	1	02/15/24 12:39	02/15/24 12:39	ARV	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2226353	1	02/14/24 20:00	02/15/24 03:34	ASH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226843	1	02/20/24 18:58	02/20/24 18:58	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2226819	1	02/15/24 18:08	02/15/24 18:08	DMA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2226648	1	02/15/24 13:52	02/16/24 21:19	JTM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2230928	1	02/22/24 06:59	02/22/24 12:46	JTM	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferric Iron	1460		100	1	02/22/2024 12:25	WG2230928

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Hardness (calculated) as CaCO3	434000		2500	1	02/22/2024 12:25	WG2230928

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	498000		10000	1	02/15/2024 08:52	WG2226631

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity,Bicarbonate	366000		20000	1	02/19/2024 14:38	WG2226406
Alkalinity,Carbonate	ND		20000	1	02/19/2024 14:38	WG2226406

Sample Narrative:

L1705484-01 WG2226406: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferrous Iron	7840	T8	500	10	02/16/2024 12:29	WG2227752

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfide	ND		50.0	1	02/15/2024 12:38	WG2226851

Wet Chemistry by Method 5310 B-2014

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
DOC	8010		1000	1	02/14/2024 23:44	WG2226353

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	28100		1000	1	02/16/2024 20:35	WG2226841
Fluoride	599		150	1	02/16/2024 20:35	WG2226841
Sulfate	56800		5000	1	02/16/2024 20:35	WG2226841

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	4570		1000	1	02/15/2024 14:12	WG2226819

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	144000		1000	1	02/22/2024 12:25	WG2230928
Calcium,Dissolved	142000		1000	1	02/16/2024 21:11	WG2226648
Iron	9310		100	1	02/22/2024 12:25	WG2230928
Iron,Dissolved	ND		100	1	02/16/2024 21:11	WG2226648
Magnesium	18400		1000	1	02/22/2024 12:25	WG2230928
Magnesium,Dissolved	19400		1000	1	02/16/2024 21:11	WG2226648
Manganese	4470		10.0	1	02/22/2024 12:25	WG2230928
Manganese,Dissolved	4660		10.0	1	02/16/2024 21:11	WG2226648
Molybdenum	442		5.00	1	02/22/2024 12:25	WG2230928
Molybdenum,Dissolved	459		5.00	1	02/16/2024 21:11	WG2226648
Potassium	4470		2000	1	02/22/2024 12:25	WG2230928
Potassium,Dissolved	4330		2000	1	02/16/2024 21:11	WG2226648
Sodium	25700		3000	1	02/22/2024 12:25	WG2230928
Sodium,Dissolved	24400		3000	1	02/16/2024 21:11	WG2226648

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferric Iron	ND		100	1	02/22/2024 12:34	WG2230928

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Hardness (calculated) as CaCO3	416000		2500	1	02/22/2024 12:34	WG2230928

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	498000		10000	1	02/15/2024 08:52	WG2226631

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity,Bicarbonate	296000		20000	1	02/19/2024 14:43	WG2226406
Alkalinity,Carbonate	ND		20000	1	02/19/2024 14:43	WG2226406

Sample Narrative:

L1705484-02 WG2226406: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferrous Iron	10500	T8	500	10	02/16/2024 12:05	WG2227755

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfide	ND		50.0	1	02/15/2024 12:38	WG2226851

Wet Chemistry by Method 5310 B-2014

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
DOC	5700		1000	1	02/15/2024 02:04	WG2226353

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	18000		1000	1	02/16/2024 20:48	WG2226841
Fluoride	ND		150	1	02/16/2024 20:48	WG2226841
Sulfate	120000		5000	1	02/16/2024 20:48	WG2226841

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	1100		1000	1	02/15/2024 19:27	WG2227179

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	136000		1000	1	02/22/2024 12:34	WG2230928
Calcium,Dissolved	130000		1000	1	02/16/2024 21:13	WG2226648
Iron	8960		100	1	02/22/2024 12:34	WG2230928
Iron,Dissolved	ND		100	1	02/16/2024 21:13	WG2226648
Magnesium	18800		1000	1	02/22/2024 12:34	WG2230928
Magnesium,Dissolved	19400		1000	1	02/16/2024 21:13	WG2226648
Manganese	575		10.0	1	02/22/2024 12:34	WG2230928
Manganese,Dissolved	542		10.0	1	02/16/2024 21:13	WG2226648
Molybdenum	69.0		5.00	1	02/22/2024 12:34	WG2230928
Molybdenum,Dissolved	64.5		5.00	1	02/16/2024 21:13	WG2226648
Potassium	2870		2000	1	02/22/2024 12:34	WG2230928
Potassium,Dissolved	2700		2000	1	02/16/2024 21:13	WG2226648
Sodium	25300		3000	1	02/22/2024 12:34	WG2230928
Sodium,Dissolved	22400		3000	1	02/16/2024 21:13	WG2226648

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferric Iron	ND		100	1	02/22/2024 12:37	WG2230928

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Hardness (calculated) as CaCO3	470000		2500	1	02/22/2024 12:37	WG2230928

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	562000		10000	1	02/15/2024 08:52	WG2226631

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity,Bicarbonate	240000		20000	1	02/19/2024 15:15	WG2226406
Alkalinity,Carbonate	ND		20000	1	02/19/2024 15:15	WG2226406

Sample Narrative:

L1705484-03 WG2226406: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferrous Iron	9260	T8	500	10	02/16/2024 12:29	WG2227752

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfide	ND		50.0	1	02/15/2024 12:38	WG2226851

Wet Chemistry by Method 5310 B-2014

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
DOC	2170	B	1000	1	02/15/2024 02:33	WG2226353

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	25500		1000	1	02/16/2024 21:01	WG2226841
Fluoride	ND		150	1	02/16/2024 21:01	WG2226841
Sulfate	205000		25000	5	02/20/2024 02:34	WG2227631

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	ND		1000	1	02/15/2024 19:46	WG2227179

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	156000		1000	1	02/22/2024 12:37	WG2230928
Calcium,Dissolved	156000		1000	1	02/16/2024 21:14	WG2226648
Iron	9070		100	1	02/22/2024 12:37	WG2230928
Iron,Dissolved	ND		100	1	02/16/2024 21:14	WG2226648
Magnesium	19300		1000	1	02/22/2024 12:37	WG2230928
Magnesium,Dissolved	20900		1000	1	02/16/2024 21:14	WG2226648
Manganese	1250		10.0	1	02/22/2024 12:37	WG2230928
Manganese,Dissolved	1260		10.0	1	02/16/2024 21:14	WG2226648
Molybdenum	23.3		5.00	1	02/22/2024 12:37	WG2230928
Molybdenum,Dissolved	30.3		5.00	1	02/16/2024 21:14	WG2226648
Potassium	2960		2000	1	02/22/2024 12:37	WG2230928
Potassium,Dissolved	2990		2000	1	02/16/2024 21:14	WG2226648
Sodium	12100		3000	1	02/22/2024 12:37	WG2230928
Sodium,Dissolved	11900		3000	1	02/16/2024 21:14	WG2226648

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferric Iron	ND		100	1	02/22/2024 12:40	WG2230928

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Hardness (calculated) as CaCO3	981000		2500	1	02/22/2024 12:40	WG2230928

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	1280000		20000	1	02/15/2024 08:52	WG2226631

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity,Bicarbonate	391000		20000	1	02/19/2024 15:19	WG2226406
Alkalinity,Carbonate	ND		20000	1	02/19/2024 15:19	WG2226406

Sample Narrative:

L1705484-04 WG2226406: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferrous Iron	45100	T8	1250	25	02/16/2024 12:30	WG2227752

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfide	ND		50.0	1	02/15/2024 12:38	WG2226851

Wet Chemistry by Method 5310 B-2014

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
DOC	6240		1000	1	02/15/2024 02:50	WG2226353

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	29800		1000	1	02/20/2024 16:00	WG2226843
Fluoride	233		150	1	02/20/2024 16:00	WG2226843
Sulfate	497000		50000	10	02/20/2024 16:13	WG2226843

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	4530		1000	1	02/15/2024 20:07	WG2227179

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	280000		1000	1	02/22/2024 12:40	WG2230928
Calcium,Dissolved	273000		1000	1	02/16/2024 21:16	WG2226648
Iron	44300		100	1	02/22/2024 12:40	WG2230928
Iron,Dissolved	1870		100	1	02/16/2024 21:16	WG2226648
Magnesium	68400		1000	1	02/22/2024 12:40	WG2230928
Magnesium,Dissolved	73500		1000	1	02/16/2024 21:16	WG2226648
Manganese	3150		10.0	1	02/22/2024 12:40	WG2230928
Manganese,Dissolved	3040		10.0	1	02/16/2024 21:16	WG2226648
Molybdenum	ND		5.00	1	02/22/2024 12:40	WG2230928
Molybdenum,Dissolved	ND		5.00	1	02/16/2024 21:16	WG2226648
Potassium	8620		2000	1	02/22/2024 12:40	WG2230928
Potassium,Dissolved	8110		2000	1	02/16/2024 21:16	WG2226648
Sodium	50600		3000	1	02/22/2024 12:40	WG2230928
Sodium,Dissolved	48900		3000	1	02/16/2024 21:16	WG2226648

Calculated Results

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Ferric Iron	1470		100	1	02/22/2024 12:43	WG2230928

Calculated Results

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Hardness (calculated) as CaCO3	431000		2500	1	02/22/2024 12:43	WG2230928

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	476000		10000	1	02/15/2024 08:52	WG2226631

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	290000		20000	1	02/19/2024 15:23	WG2226406
Alkalinity,Carbonate	ND		20000	1	02/19/2024 15:23	WG2226406

Sample Narrative:

L1705484-05 WG2226406: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Ferrous Iron	13400	T8	500	10	02/16/2024 12:06	WG2227755

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfide	ND		50.0	1	02/15/2024 12:38	WG2226851

Wet Chemistry by Method 5310 B-2014

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
DOC	5600		1000	1	02/15/2024 03:05	WG2226353

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	36100		1000	1	02/20/2024 18:44	WG2226843
Fluoride	ND		150	1	02/20/2024 18:44	WG2226843
Sulfate	91600		5000	1	02/20/2024 18:44	WG2226843

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1080		1000	1	02/15/2024 20:26	WG2227179

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	144000		1000	1	02/22/2024 12:43	WG2230928
Calcium,Dissolved	129000		1000	1	02/16/2024 21:18	WG2226648
Iron	14900		100	1	02/22/2024 12:43	WG2230928
Iron,Dissolved	ND		100	1	02/16/2024 21:18	WG2226648
Magnesium	17300		1000	1	02/22/2024 12:43	WG2230928
Magnesium,Dissolved	15400		1000	1	02/16/2024 21:18	WG2226648
Manganese	472		10.0	1	02/22/2024 12:43	WG2230928
Manganese,Dissolved	200		10.0	1	02/16/2024 21:18	WG2226648
Molybdenum	ND		5.00	1	02/22/2024 12:43	WG2230928
Molybdenum,Dissolved	10.7		5.00	1	02/16/2024 21:18	WG2226648
Potassium	3040		2000	1	02/22/2024 12:43	WG2230928
Potassium,Dissolved	2640		2000	1	02/16/2024 21:18	WG2226648
Sodium	28500		3000	1	02/22/2024 12:43	WG2230928
Sodium,Dissolved	27500		3000	1	02/16/2024 21:18	WG2226648

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferric Iron	1380		50.0	1	02/22/2024 12:46	WG2230928

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Hardness (calculated) as CaCO3	305000		2500	1	02/22/2024 12:46	WG2230928

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	341000		10000	1	02/15/2024 08:52	WG2226631

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity,Bicarbonate	217000		20000	1	02/19/2024 15:02	WG2226406
Alkalinity,Carbonate	ND		20000	1	02/19/2024 15:02	WG2226406

Sample Narrative:

L1705484-06 WG2226406: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferrous Iron	467	T8	50.0	1	02/16/2024 12:30	WG2227752

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfide	ND		50.0	1	02/15/2024 12:39	WG2226851

Wet Chemistry by Method 5310 B-2014

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
DOC	1640	B	1000	1	02/15/2024 03:34	WG2226353

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	18100		1000	1	02/20/2024 18:58	WG2226843
Fluoride	246		150	1	02/20/2024 18:58	WG2226843
Sulfate	61100		5000	1	02/20/2024 18:58	WG2226843

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	1130	B P1	1000	1	02/15/2024 18:08	WG2226819

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	104000		1000	1	02/22/2024 12:46	WG2230928
Calcium,Dissolved	100000		1000	1	02/16/2024 21:19	WG2226648
Iron	1840		100	1	02/22/2024 12:46	WG2230928
Iron,Dissolved	ND		100	1	02/16/2024 21:19	WG2226648
Magnesium	11000		1000	1	02/22/2024 12:46	WG2230928
Magnesium,Dissolved	10900		1000	1	02/16/2024 21:19	WG2226648
Manganese	247		10.0	1	02/22/2024 12:46	WG2230928
Manganese,Dissolved	37.4		10.0	1	02/16/2024 21:19	WG2226648
Molybdenum	ND		5.00	1	02/22/2024 12:46	WG2230928
Molybdenum,Dissolved	5.06		5.00	1	02/16/2024 21:19	WG2226648
Potassium	ND		2000	1	02/22/2024 12:46	WG2230928
Potassium,Dissolved	ND		2000	1	02/16/2024 21:19	WG2226648
Sodium	8880		3000	1	02/22/2024 12:46	WG2230928
Sodium,Dissolved	8660		3000	1	02/16/2024 21:19	WG2226648

Method Blank (MB)

(MB) R4035610-1 02/15/24 08:52

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Dissolved Solids	U		10000	10000

L1705484-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1705484-05 02/15/24 08:52 • (DUP) R4035610-3 02/15/24 08:52

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	476000	486000	1	2.08		10

L1705484-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1705484-06 02/15/24 08:52 • (DUP) R4035610-4 02/15/24 08:52

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	341000	358000	1	4.86		10

Laboratory Control Sample (LCS)

(LCS) R4035610-2 02/15/24 08:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	8480000	96.4	85.0-115	

Method Blank (MB)

(MB) R4035524-2 02/19/24 12:29

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity,Bicarbonate	U		8450	20000
Alkalinity,Carbonate	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1705370-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1705370-04 02/19/24 12:38 • (DUP) R4035524-4 02/19/24 12:41

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	538000	538000	1	0.103		20
Alkalinity,Carbonate	ND	ND	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1705484-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1705484-06 02/19/24 15:02 • (DUP) R4035524-6 02/19/24 15:08

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	217000	216000	1	0.258		20
Alkalinity,Carbonate	ND	ND	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Method Blank (MB)

(MB) R4034660-1 02/16/24 12:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ferrous Iron	U		15.0	50.0

L1705245-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705245-01 02/16/24 12:19 • (DUP) R4034660-3 02/16/24 12:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ferrous Iron	ND	ND	1	0.000		20

L1705450-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1705450-04 02/16/24 12:28 • (DUP) R4034660-4 02/16/24 12:28

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ferrous Iron	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4034660-2 02/16/24 12:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ferrous Iron	1000	991	99.1	85.0-115	

L1706083-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706083-04 02/16/24 12:32 • (MS) R4034660-5 02/16/24 12:32 • (MSD) R4034660-6 02/16/24 12:33

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ferrous Iron	1000	76.0	1170	1140	110	106	1	80.0-120			2.86	20

Method Blank (MB)

(MB) R4034651-1 02/16/24 12:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ferrous Iron	U		15.0	50.0

L1705484-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1705484-02 02/16/24 12:05 • (DUP) R4034651-3 02/16/24 12:05

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ferrous Iron	10500	10300	10	1.93		20

Laboratory Control Sample (LCS)

(LCS) R4034651-2 02/16/24 12:04

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ferrous Iron	1000	987	98.7	85.0-115	

L1705484-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705484-05 02/16/24 12:06 • (MS) R4034651-4 02/16/24 12:06 • (MSD) R4034651-5 02/16/24 12:06

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ferrous Iron	10000	13400	22500	22600	90.7	92.1	10	80.0-120			0.635	20

Method Blank (MB)

(MB) R4034149-1 02/15/24 12:33

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Sulfide	U		6.50	50.0

L1705245-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705245-01 02/15/24 12:34 • (DUP) R4034149-3 02/15/24 12:34

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Sulfide	ND	ND	1	0.000		20

L1705329-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705329-01 02/15/24 12:35 • (DUP) R4034149-4 02/15/24 12:37

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Sulfide	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4034149-2 02/15/24 12:34

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Sulfide	500	548	110	85.0-115	

L1705484-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705484-06 02/15/24 12:39 • (MS) R4034149-5 02/15/24 12:40 • (MSD) R4034149-6 02/15/24 12:40

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Sulfide	500	ND	522	536	104	107	1	80.0-120			2.65	20

QUALITY CONTROL SUMMARY

L1705484-01,02,03,04,05,06

Method Blank (MB)

(MB) R4033973-2 02/14/24 20:44

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
DOC	323	J	106	1000

L1705484-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1705484-02 02/15/24 02:04 • (DUP) R4033973-5 02/15/24 02:19

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
DOC	5700	5920	1	3.75		20

L1705484-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1705484-05 02/15/24 03:05 • (DUP) R4033973-6 02/15/24 03:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
DOC	5600	5260	1	6.33		20

Laboratory Control Sample (LCS)

(LCS) R4033973-1 02/14/24 20:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
DOC	25000	23600	94.2	85.0-115	

L1705484-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705484-01 02/14/24 23:44 • (MS) R4033973-3 02/15/24 00:10 • (MSD) R4033973-4 02/15/24 00:35

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
DOC	25000	8010	31000	31300	91.9	93.3	1	80.0-120			1.16	20

L1705484-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705484-06 02/15/24 03:34 • (MS) R4033973-7 02/15/24 03:59 • (MSD) R4033973-8 02/15/24 04:23

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
DOC	25000	1640	24500	24400	91.5	91.1	1	80.0-120			0.409	20

Method Blank (MB)

(MB) R4035104-1 02/16/24 19:18

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	596	J	379	1000
Fluoride	U		64.0	150
Sulfate	U		594	5000

L1705473-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705473-01 02/16/24 19:44 • (DUP) R4035104-3 02/16/24 19:56

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	80200	78700	1	1.79		15
Fluoride	155	ND	1	15.9	P1	15
Sulfate	24500	24100	1	1.64		15

L1705613-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705613-01 02/17/24 04:03 • (DUP) R4035104-6 02/17/24 04:16

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	77100	76500	1	0.886		15
Fluoride	ND	ND	1	200	P1	15
Sulfate	24900	27000	1	8.06		15

Laboratory Control Sample (LCS)

(LCS) R4035104-2 02/16/24 19:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39400	98.6	80.0-120	
Fluoride	8000	7920	98.9	80.0-120	
Sulfate	40000	39000	97.4	80.0-120	

L1705473-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705473-01 02/16/24 19:44 • (MS) R4035104-4 02/16/24 20:09 • (MSD) R4035104-5 02/16/24 20:22

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	80200	105000	104000	61.1	59.0	1	80.0-120	J6	J6	0.810	15
Fluoride	8000	155	8220	8200	101	101	1	80.0-120			0.156	15
Sulfate	40000	24500	61600	60900	92.6	90.9	1	80.0-120			1.09	15

Sample Narrative:

MS: Cl spike failed due to sample matrix

MSD: Cl spike failed due to sample matrix

L1705613-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1705613-01 02/17/24 04:03 • (MS) R4035104-7 02/17/24 04:29

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	77100	101000	60.1	1	80.0-120	J6
Fluoride	8000	ND	7810	97.6	1	80.0-120	
Sulfate	40000	24900	60400	88.6	1	80.0-120	

Sample Narrative:

MS: Cl spike failed due to sample matrix

Method Blank (MB)

(MB) R4036418-1 02/20/24 12:32

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Fluoride	U		64.0	150
Sulfate	U		594	5000

L1705491-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705491-01 02/20/24 16:27 • (DUP) R4036418-3 02/20/24 16:55

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1580000	1570000	10	0.597		15
Fluoride	5120	4960	10	3.02		15
Sulfate	215000	215000	10	0.265		15

L1705642-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705642-01 02/20/24 19:12 • (DUP) R4036418-7 02/20/24 19:25

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	29400	29300	1	0.315		15
Fluoride	334	337	1	0.835		15
Sulfate	11700	11700	1	0.0299		15

Laboratory Control Sample (LCS)

(LCS) R4036418-2 02/20/24 12:46

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	37800	94.6	80.0-120	
Fluoride	8000	8250	103	80.0-120	
Sulfate	40000	36900	92.3	80.0-120	

L1705491-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705491-01 02/20/24 16:27 • (MS) R4036418-5 02/20/24 17:22 • (MSD) R4036418-6 02/20/24 17:36

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	1580000	1430000	1430000	0.000	0.000	10	80.0-120	V	V	0.0292	15
Fluoride	8000	5120	8420	9060	41.3	49.3	10	80.0-120	J6	J6	7.31	15
Sulfate	40000	215000	219000	218000	9.38	7.64	10	80.0-120	V	V	0.320	15

Sample Narrative:

MS: Spike failure due to matrix interference

MSD: Spike failure due to matrix interference

L1705642-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1705642-01 02/20/24 19:12 • (MS) R4036418-8 02/20/24 19:39

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	29400	63700	85.9	1	80.0-120	
Fluoride	8000	334	8590	103	1	80.0-120	
Sulfate	40000	11700	49200	93.8	1	80.0-120	

QUALITY CONTROL SUMMARY

L1705484-03

Method Blank (MB)

(MB) R4035769-1 02/20/24 01:56

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Sulfate	U		594	5000

L1706204-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1706204-01 02/20/24 03:11 • (DUP) R4035769-3 02/20/24 03:24

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	24100	24200	1	0.239		15

L1706762-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1706762-05 02/20/24 05:17 • (DUP) R4035769-5 02/20/24 05:30

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	ND	ND	1	0.000		15

Laboratory Control Sample (LCS)

(LCS) R4035769-2 02/20/24 02:08

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfate	40000	35800	89.5	80.0-120	

L1706204-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1706204-01 02/20/24 03:11 • (MS) R4035769-4 02/20/24 03:37

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Sulfate	40000	24100	59300	87.9	1	80.0-120	

L1706762-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706762-05 02/20/24 05:17 • (MS) R4035769-6 02/20/24 05:43 • (MSD) R4035769-7 02/20/24 05:55

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	40000	ND	39600	39200	98.9	98.0	1	80.0-120			0.924	15

Method Blank (MB)

(MB) R4034378-2 02/15/24 11:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	277	J	102	1000

L1705471-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705471-01 02/15/24 12:50 • (DUP) R4034378-3 02/15/24 13:03

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	1950	1960	1	0.768		20

L1705484-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1705484-06 02/15/24 18:08 • (DUP) R4034378-4 02/15/24 18:32

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	1130	ND	1	55.7	P1	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4034378-1 02/15/24 11:15 • (LCSD) R4034378-5 02/15/24 19:04

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	23000	22800	91.9	91.3	85.0-115			0.655	20

L1705515-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705515-05 02/15/24 20:28 • (MS) R4034378-6 02/15/24 20:52 • (MSD) R4034378-7 02/15/24 21:16

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	ND	24200	24500	94.7	95.8	1	85.0-115			1.11	20

Method Blank (MB)

(MB) R4034531-2 02/15/24 16:29

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	U		102	1000

L1705901-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705901-01 02/15/24 21:06 • (DUP) R4034531-3 02/15/24 22:07

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	4410	4340	1	1.76		20

L1705929-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1705929-06 02/16/24 02:19 • (DUP) R4034531-6 02/16/24 02:37

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	1750	1060	1	48.7	P1	20

Laboratory Control Sample (LCS)

(LCS) R4034531-1 02/15/24 16:13

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	23800	95.3	85.0-115	

L1705901-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705901-09 02/16/24 00:17 • (MS) R4034531-4 02/16/24 00:40 • (MSD) R4034531-5 02/16/24 01:41

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	ND	25000	25000	97.8	97.8	1	85.0-115			0.000	20

L1705929-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705929-11 02/16/24 02:55 • (MS) R4034531-7 02/16/24 03:18 • (MSD) R4034531-8 02/16/24 03:40

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	ND	25000	25100	97.4	97.8	1	85.0-115			0.400	20

Method Blank (MB)

(MB) R4034917-1 02/16/24 20:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Calcium,Dissolved	U		79.3	1000
Iron,Dissolved	U		18.0	100
Magnesium,Dissolved	U		85.3	1000
Manganese,Dissolved	U		0.934	10.0
Molybdenum,Dissolved	U		1.16	5.00
Potassium,Dissolved	U		261	2000
Sodium,Dissolved	U		504	3000

Laboratory Control Sample (LCS)

(LCS) R4034917-2 02/16/24 20:49

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium,Dissolved	10000	9880	98.8	80.0-120	
Iron,Dissolved	10000	9790	97.9	80.0-120	
Magnesium,Dissolved	10000	9850	98.5	80.0-120	
Manganese,Dissolved	1000	1010	101	80.0-120	
Molybdenum,Dissolved	1000	969	96.9	80.0-120	
Potassium,Dissolved	10000	9560	95.6	80.0-120	
Sodium,Dissolved	10000	9800	98.0	80.0-120	

L1704988-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1704988-02 02/16/24 20:51 • (MS) R4034917-4 02/16/24 20:54 • (MSD) R4034917-5 02/16/24 20:56

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Calcium,Dissolved	10000	53500	67000	66800	135	133	1	75.0-125	V	V	0.306	20
Iron,Dissolved	10000	ND	9630	9710	95.8	96.6	1	75.0-125			0.811	20
Magnesium,Dissolved	10000	30400	39500	39600	91.3	91.9	1	75.0-125			0.156	20
Manganese,Dissolved	1000	290	1260	1270	97.3	97.6	1	75.0-125			0.219	20
Molybdenum,Dissolved	1000	17.7	985	991	96.7	97.4	1	75.0-125			0.642	20
Potassium,Dissolved	10000	4180	13800	14000	96.6	98.0	1	75.0-125			0.988	20
Sodium,Dissolved	10000	1170000	1160000	1160000	0.000	0.000	1	75.0-125	E V	E V	0.00816	20

Method Blank (MB)

(MB) R4037046-7 02/22/24 12:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Calcium	U		79.3	1000
Iron	U		18.0	100
Magnesium	U		85.3	1000
Manganese	U		0.934	10.0
Molybdenum	U		1.16	5.00
Potassium	U		261	2000
Sodium	U		504	3000

L1694492-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1694492-08 02/22/24 11:42 • (DUP) R4037046-6 02/22/24 11:44

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Calcium	129000	111000	9	15.0		20
Iron	ND	ND	9	0.000		20
Magnesium	1750	ND	9	1.11		20
Manganese	10.0	ND	9	7.24		20
Molybdenum		ND	9	0.000		20
Potassium	ND	ND	9	0.000		20
Sodium	5850	ND	9	7.30		20

Laboratory Control Sample (LCS)

(LCS) R4037046-8 02/22/24 12:57

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium	10000	10200	102	80.0-120	
Iron	10000	9920	99.2	80.0-120	
Magnesium	10000	9230	92.3	80.0-120	
Manganese	1000	997	99.7	80.0-120	
Molybdenum	1000	1000	100	80.0-120	
Potassium	10000	9740	97.4	80.0-120	
Sodium	10000	10300	103	80.0-120	

L1705620-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705620-09 02/22/24 13:00 • (MS) R4037046-10 02/22/24 13:06 • (MSD) R4037046-11 02/22/24 13:08

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Calcium	10000	ND	10600	10400	104	102	1	75.0-125			1.56	20
Iron	10000	ND	10100	9990	101	99.9	1	75.0-125			0.913	20
Magnesium	10000	ND	9480	9270	94.8	92.7	1	75.0-125			2.30	20
Manganese	1000	ND	1000	1000	100	100	1	75.0-125			0.349	20
Molybdenum	1000	ND	1010	1000	101	100	1	75.0-125			0.334	20
Potassium	10000	ND	9930	9860	99.3	98.6	1	75.0-125			0.753	20
Sodium	10000	ND	10800	10800	108	108	1	75.0-125			0.0688	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Pres Chk

Report to:
Jason Franks

Email To:
jfranks@scsengineers.com;jrockhold@scsengine

Project Description:
Evergy Sibley Gen Station FAI CM

City/State Collected: **Sibley MO**

Please Circle: PT MT (CT) ET

Phone: **913-681-0030**

Client Project #
27222162.23 - 3

Lab Project #
AQUAOPKS-SIBLEY

Collected by (print):
Matt Vander Patten

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: **Std**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALKBI, ALKCA 125mlHDPE-NoPres	Chloride, F, SO4 125mlHDPE-NoPres	DOC (Field Filtered) 250mlAmb-HCl	Dissolved Metals 250mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Sufide 250mlAmb-S-NaOH+ZnAc	TDS 1L-HDPE NoPres	TOC 250mlAmb-HCl	Total Metals 250mlHDPE-HNO3 (22)	Remarks	Sample # (lab only)
~~MW-801~~ MW-809	Grab	GW	NA	2/13/24	955	9	X	X	X	X	X	X	X	X	X		-01
~~MW-802~~ MW-810		GW			1100	9	X	X	X	X	X	X	X	X	X		-02
~~MW-803~~ MW-811		GW			1215	9	X	X	X	X	X	X	X	X	X		-03
~~MW-804~~ MW-812		GW			1335	9	X	X	X	X	X	X	X	X	X		-04
~~MW-805~~ MW-813		GW			1500	9	X	X	X	X	X	X	X	X	X		-05
~~MW-806R~~ MW-822		GW			1615	9	X	X	X	X	X	X	X	X	X		-06
~~MW-807~~		~~GW~~				~~9~~	X	X	X	X	X	X	X	X	X		
~~MW-808~~		~~GW~~				~~9~~	X	X	X	X	X	X	X	X	X		
~~MW-809~~		~~GW~~				~~9~~	X	X	X	X	X	X	X	X	X		
~~MW-810~~		~~GW~~				~~9~~	X	X	X	X	X	X	X	X	X		

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ____

Remarks: Exclude MW-801 thru MW-806R for total molybdenum.

pH ____ Temp ____
Flow ____ Other ____

Samples returned via:
__ UPS X FedEx __ Courier ____

Tracking #

Relinquished by : (Signature) — Date: 8/13/24 — Time: 1830
Received by: (Signature)

Relinquished by : (Signature) — Date: — Time:
Received by: (Signature)

Relinquished by : (Signature) — Date: — Time:
Received for lab by: (Signature) (23) — Date: 2-14-24 — Time: 0900

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C Bottles Received: 54

Hold: — Condition: NCF / OK

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

PH-10BDH5021 TRC-215262
CR6-20221V Date/Time

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
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

SDG # L1705484
C193

Acctnum: **AQUAOPKS**
Template: **T236081**
Prelogin: **P1054298**
PM: **206 - Jeff Carr**
PB:

Shipped Via: **FedEX Ground**

LN054484

Tracking Numbers	Temperature
582967019463	DPA85.8to=5.8
530042945779	DPA85.4to=5.4
530042943805	DPA84.1to=4.1

Name

Date

ANALYTICAL REPORT

February 21, 2024

SCS Engineers - KS

Sample Delivery Group:	L1705698
Samples Received:	02/14/2024
Project Number:	27213169.23 - B
Description:	Evergy - Sibley Gen Station GW 2023-24

Report To:

Jason Franks
8575 W. 110th Street
Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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MW-801 L1705698-01 GW

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 15:40 | Received date/time: 02/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2226839	1	02/17/24 13:59	02/17/24 13:59	ASM	Mt. Juliet, TN
Mercury by Method 7470A	WG2226829	1	02/18/24 18:19	02/19/24 12:53	NDL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2228762	1	02/19/24 07:58	02/19/24 21:32	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2228773	1	02/20/24 09:02	02/20/24 18:24	LD	Mt. Juliet, TN

MW-802 L1705698-02 GW

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 11:20 | Received date/time: 02/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2226839	1	02/17/24 14:11	02/17/24 14:11	ASM	Mt. Juliet, TN
Mercury by Method 7470A	WG2226829	1	02/18/24 18:19	02/19/24 12:55	NDL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2228762	1	02/19/24 07:58	02/19/24 21:34	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2228773	1	02/20/24 09:02	02/20/24 18:27	LD	Mt. Juliet, TN

MW-803 L1705698-03 GW

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 12:10 | Received date/time: 02/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2226839	1	02/17/24 14:50	02/17/24 14:50	ASM	Mt. Juliet, TN
Mercury by Method 7470A	WG2226829	1	02/18/24 18:19	02/19/24 12:02	NDL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2228762	1	02/19/24 07:58	02/19/24 21:13	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2228773	1	02/20/24 09:02	02/20/24 17:40	LD	Mt. Juliet, TN

MW-804 L1705698-04 GW

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 13:10 | Received date/time: 02/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2226839	1	02/17/24 15:41	02/17/24 15:41	ASM	Mt. Juliet, TN
Mercury by Method 7470A	WG2229324	1	02/19/24 20:54	02/21/24 11:36	NDL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2228762	1	02/19/24 07:58	02/19/24 21:35	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2228773	1	02/20/24 09:02	02/20/24 18:30	LD	Mt. Juliet, TN

MW-805 L1705698-05 GW

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 14:00 | Received date/time: 02/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2226839	1	02/17/24 15:54	02/17/24 15:54	ASM	Mt. Juliet, TN
Mercury by Method 7470A	WG2226830	1	02/15/24 14:22	02/16/24 17:36	SDG	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2228762	1	02/19/24 07:58	02/19/24 21:37	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2228773	1	02/20/24 09:02	02/20/24 18:33	LD	Mt. Juliet, TN

MW-806R L1705698-06 GW

Collected by: Matt Vander Putten | Collected date/time: 02/12/24 14:45 | Received date/time: 02/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2226839	1	02/17/24 16:07	02/17/24 16:07	ASM	Mt. Juliet, TN
Mercury by Method 7470A	WG2226830	1	02/15/24 14:22	02/16/24 17:38	SDG	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2228762	1	02/19/24 07:58	02/19/24 21:39	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2228773	1	02/20/24 09:02	02/20/24 18:36	LD	Mt. Juliet, TN

DUPLICATE L1705698-07 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	02/12/24 12:10	02/14/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2226839	1	02/17/24 16:19	02/17/24 16:19	ASM	Mt. Juliet, TN
Mercury by Method 7470A	WG2226830	1	02/15/24 14:22	02/16/24 17:40	SDG	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2228762	1	02/19/24 07:58	02/19/24 21:40	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2228773	1	02/20/24 09:02	02/20/24 18:40	LD	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Fluoride	206		150	1	02/17/2024 13:59	WG2226839

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	02/19/2024 12:53	WG2226829

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	111		5.00	1	02/19/2024 21:32	WG2228762
Chromium	ND		10.0	1	02/19/2024 21:32	WG2228762
Lithium	ND		15.0	1	02/19/2024 21:32	WG2228762
Molybdenum	ND		5.00	1	02/19/2024 21:32	WG2228762

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Antimony	ND		4.00	1	02/20/2024 18:24	WG2228773
Arsenic	ND		2.00	1	02/20/2024 18:24	WG2228773
Beryllium	ND		2.00	1	02/20/2024 18:24	WG2228773
Cadmium	ND		1.00	1	02/20/2024 18:24	WG2228773
Cobalt	ND		2.00	1	02/20/2024 18:24	WG2228773
Lead	ND		2.00	1	02/20/2024 18:24	WG2228773
Selenium	2.74		2.00	1	02/20/2024 18:24	WG2228773
Thallium	ND		2.00	1	02/20/2024 18:24	WG2228773

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Fluoride	168		150	1	02/17/2024 14:11	WG2226839

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	02/19/2024 12:55	WG2226829

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	214		5.00	1	02/19/2024 21:34	WG2228762
Chromium	ND		10.0	1	02/19/2024 21:34	WG2228762
Lithium	ND		15.0	1	02/19/2024 21:34	WG2228762
Molybdenum	ND		5.00	1	02/19/2024 21:34	WG2228762

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Antimony	ND		4.00	1	02/20/2024 18:27	WG2228773
Arsenic	ND		2.00	1	02/20/2024 18:27	WG2228773
Beryllium	ND		2.00	1	02/20/2024 18:27	WG2228773
Cadmium	ND		1.00	1	02/20/2024 18:27	WG2228773
Cobalt	ND		2.00	1	02/20/2024 18:27	WG2228773
Lead	ND		2.00	1	02/20/2024 18:27	WG2228773
Selenium	6.34		2.00	1	02/20/2024 18:27	WG2228773
Thallium	ND		2.00	1	02/20/2024 18:27	WG2228773

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Fluoride	178		150	1	02/17/2024 14:50	WG2226839

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	02/19/2024 12:02	WG2226829

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	119		5.00	1	02/19/2024 21:13	WG2228762
Chromium	ND		10.0	1	02/19/2024 21:13	WG2228762
Lithium	ND		15.0	1	02/19/2024 21:13	WG2228762
Molybdenum	ND		5.00	1	02/19/2024 21:13	WG2228762

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Antimony	ND		4.00	1	02/20/2024 17:40	WG2228773
Arsenic	2.56		2.00	1	02/20/2024 17:40	WG2228773
Beryllium	ND		2.00	1	02/20/2024 17:40	WG2228773
Cadmium	ND		1.00	1	02/20/2024 17:40	WG2228773
Cobalt	ND		2.00	1	02/20/2024 17:40	WG2228773
Lead	ND		2.00	1	02/20/2024 17:40	WG2228773
Selenium	ND		2.00	1	02/20/2024 17:40	WG2228773
Thallium	ND		2.00	1	02/20/2024 17:40	WG2228773

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Fluoride	158		150	1	02/17/2024 15:41	WG2226839

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	02/21/2024 11:36	WG2229324

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	417		5.00	1	02/19/2024 21:35	WG2228762
Chromium	ND		10.0	1	02/19/2024 21:35	WG2228762
Lithium	20.2		15.0	1	02/19/2024 21:35	WG2228762
Molybdenum	ND		5.00	1	02/19/2024 21:35	WG2228762

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Antimony	ND		4.00	1	02/20/2024 18:30	WG2228773
Arsenic	2.69		2.00	1	02/20/2024 18:30	WG2228773
Beryllium	ND		2.00	1	02/20/2024 18:30	WG2228773
Cadmium	ND		1.00	1	02/20/2024 18:30	WG2228773
Cobalt	ND		2.00	1	02/20/2024 18:30	WG2228773
Lead	ND		2.00	1	02/20/2024 18:30	WG2228773
Selenium	ND		2.00	1	02/20/2024 18:30	WG2228773
Thallium	ND		2.00	1	02/20/2024 18:30	WG2228773

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Fluoride	ND		150	1	02/17/2024 15:54	WG2226839

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	02/16/2024 17:36	WG2226830

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	129		5.00	1	02/19/2024 21:37	WG2228762
Chromium	ND		10.0	1	02/19/2024 21:37	WG2228762
Lithium	ND		15.0	1	02/19/2024 21:37	WG2228762
Molybdenum	ND		5.00	1	02/19/2024 21:37	WG2228762

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Antimony	ND		4.00	1	02/20/2024 18:33	WG2228773
Arsenic	ND		2.00	1	02/20/2024 18:33	WG2228773
Beryllium	ND		2.00	1	02/20/2024 18:33	WG2228773
Cadmium	ND		1.00	1	02/20/2024 18:33	WG2228773
Cobalt	ND		2.00	1	02/20/2024 18:33	WG2228773
Lead	ND		2.00	1	02/20/2024 18:33	WG2228773
Selenium	ND		2.00	1	02/20/2024 18:33	WG2228773
Thallium	ND		2.00	1	02/20/2024 18:33	WG2228773

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Fluoride	ND		150	1	02/17/2024 16:07	WG2226839

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	02/16/2024 17:38	WG2226830

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	75.3		5.00	1	02/19/2024 21:39	WG2228762
Chromium	ND		10.0	1	02/19/2024 21:39	WG2228762
Lithium	16.3		15.0	1	02/19/2024 21:39	WG2228762
Molybdenum	1350		5.00	1	02/19/2024 21:39	WG2228762

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Antimony	ND		4.00	1	02/20/2024 18:36	WG2228773
Arsenic	2.51		2.00	1	02/20/2024 18:36	WG2228773
Beryllium	ND		2.00	1	02/20/2024 18:36	WG2228773
Cadmium	ND		1.00	1	02/20/2024 18:36	WG2228773
Cobalt	ND		2.00	1	02/20/2024 18:36	WG2228773
Lead	ND		2.00	1	02/20/2024 18:36	WG2228773
Selenium	ND		2.00	1	02/20/2024 18:36	WG2228773
Thallium	ND		2.00	1	02/20/2024 18:36	WG2228773

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Fluoride	186		150	1	02/17/2024 16:19	WG2226839

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	02/16/2024 17:40	WG2226830

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	109		5.00	1	02/19/2024 21:40	WG2228762
Chromium	ND		10.0	1	02/19/2024 21:40	WG2228762
Lithium	ND		15.0	1	02/19/2024 21:40	WG2228762
Molybdenum	ND		5.00	1	02/19/2024 21:40	WG2228762

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Antimony	ND		4.00	1	02/20/2024 18:40	WG2228773
Arsenic	2.63		2.00	1	02/20/2024 18:40	WG2228773
Beryllium	ND		2.00	1	02/20/2024 18:40	WG2228773
Cadmium	ND		1.00	1	02/20/2024 18:40	WG2228773
Cobalt	ND		2.00	1	02/20/2024 18:40	WG2228773
Lead	ND		2.00	1	02/20/2024 18:40	WG2228773
Selenium	ND		2.00	1	02/20/2024 18:40	WG2228773
Thallium	ND		2.00	1	02/20/2024 18:40	WG2228773

Method Blank (MB)

(MB) R4036437-1 02/17/24 09:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Fluoride	U		64.0	150

L1705698-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1705698-03 02/17/24 14:50 • (DUP) R4036437-3 02/17/24 15:03

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	178	167	1	6.25		15

L1705740-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1705740-08 02/17/24 18:28 • (DUP) R4036437-6 02/17/24 18:40

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	ND	ND	1	0.000		15

Laboratory Control Sample (LCS)

(LCS) R4036437-2 02/17/24 09:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluoride	8000	7940	99.2	80.0-120	

L1705698-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705698-03 02/17/24 14:50 • (MS) R4036437-4 02/17/24 15:15 • (MSD) R4036437-5 02/17/24 15:28

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Fluoride	8000	178	8710	8530	107	104	1	80.0-120			1.99	15

L1705740-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L1705740-08 02/17/24 18:28 • (MS) R4036437-7 02/17/24 18:53

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Fluoride	8000	ND	7870	98.4	1	80.0-120	

QUALITY CONTROL SUMMARY

L1705698-01,02,03

Method Blank (MB)

(MB) R4035341-1 02/19/24 11:52

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Mercury	U		0.100	0.200

Laboratory Control Sample (LCS)

(LCS) R4035341-2 02/19/24 11:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	3.00	2.94	98.0	80.0-120	

L1705698-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705698-03 02/19/24 12:02 • (MS) R4035341-3 02/19/24 12:04 • (MSD) R4035341-4 02/19/24 12:07

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	3.00	ND	2.91	2.94	96.9	98.0	1	75.0-125			1.18	20

QUALITY CONTROL SUMMARY

L1705698-05,06,07

Method Blank (MB)

(MB) R4034873-1 02/16/24 17:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Mercury	U		0.100	0.200

Laboratory Control Sample (LCS)

(LCS) R4034873-2 02/16/24 17:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	3.00	3.05	102	80.0-120	

L1704462-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1704462-10 02/16/24 17:08 • (MS) R4034873-3 02/16/24 17:10 • (MSD) R4034873-4 02/16/24 17:13

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	3.00	ND	3.14	3.13	105	104	1	75.0-125			0.541	20

Method Blank (MB)

(MB) R4036459-1 02/21/24 11:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Mercury	U		0.100	0.200

Laboratory Control Sample (LCS)

(LCS) R4036459-2 02/21/24 11:19

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Mercury	3.00	3.53	118	80.0-120	

L1707088-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1707088-02 02/21/24 11:21 • (MS) R4036459-3 02/21/24 11:24 • (MSD) R4036459-4 02/21/24 11:26

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Mercury	3.00	ND	3.59	3.53	120	118	1	75.0-125			1.79	20

Method Blank (MB)

(MB) R4035656-1 02/19/24 21:09

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Barium	U		0.736	5.00
Chromium	U		1.40	10.0
Lithium	U		4.85	15.0
Molybdenum	U		1.16	5.00

Laboratory Control Sample (LCS)

(LCS) R4035656-2 02/19/24 21:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium	1000	1020	102	80.0-120	
Chromium	1000	1020	102	80.0-120	
Lithium	1000	998	99.8	80.0-120	
Molybdenum	1000	1000	100	80.0-120	

L1705698-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705698-03 02/19/24 21:13 • (MS) R4035656-4 02/19/24 21:16 • (MSD) R4035656-5 02/19/24 21:17

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Barium	1000	119	1090	1110	96.7	99.4	1	75.0-125			2.49	20
Chromium	1000	ND	974	1000	97.4	100	1	75.0-125			2.75	20
Lithium	1000	ND	981	1000	96.6	99.0	1	75.0-125			2.43	20
Molybdenum	1000	ND	980	978	98.0	97.8	1	75.0-125			0.234	20

Method Blank (MB)

(MB) R4036139-1 02/20/24 17:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Antimony	U		1.03	4.00
Arsenic	U		0.180	2.00
Beryllium	U		0.190	2.00
Cadmium	U		0.150	1.00
Cobalt	U		0.0596	2.00
Lead	U		0.849	2.00
Selenium	U		0.300	2.00
Thallium	U		0.121	2.00

Laboratory Control Sample (LCS)

(LCS) R4036139-2 02/20/24 17:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	50.0	47.4	94.9	80.0-120	
Arsenic	50.0	47.6	95.2	80.0-120	
Beryllium	50.0	46.7	93.3	80.0-120	
Cadmium	50.0	49.6	99.2	80.0-120	
Cobalt	50.0	48.1	96.1	80.0-120	
Lead	50.0	44.4	88.9	80.0-120	
Selenium	50.0	48.4	96.9	80.0-120	
Thallium	50.0	48.5	97.1	80.0-120	

L1705698-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705698-03 02/20/24 17:40 • (MS) R4036139-4 02/20/24 17:46 • (MSD) R4036139-5 02/20/24 17:50

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	50.0	ND	49.2	49.6	98.5	99.2	1	75.0-125			0.785	20
Arsenic	50.0	2.56	52.2	51.0	99.3	97.0	1	75.0-125			2.26	20
Beryllium	50.0	ND	45.0	46.1	90.1	92.2	1	75.0-125			2.29	20
Cadmium	50.0	ND	49.6	50.8	99.2	102	1	75.0-125			2.51	20
Cobalt	50.0	ND	49.5	48.1	98.9	96.2	1	75.0-125			2.78	20
Lead	50.0	ND	45.7	45.6	91.5	91.3	1	75.0-125			0.201	20
Selenium	50.0	ND	48.9	48.2	97.8	96.4	1	75.0-125			1.38	20
Thallium	50.0	ND	49.9	49.3	99.8	98.6	1	75.0-125			1.24	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Pres Chk

Report to:
Jason Franks

Email To:
jfranks@scsengineers.com;jrockhold@scsengine

Project Description:
Evergy - Sibley Gen Station GW 2023-24

City/State Collected: Sibly MO

Please Circle: PT MT CT ET

Phone: **913-681-0030**

Client Project #
27213169.23 - B

Lab Project #
AQUAOPKS-SIBLEY

Collected by (print):
Matt VanderPutten

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed
Std

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	FLUORIDE 125mlHDPE-NoPres	Metals 250mlHDPE-HNO3	Remarks	Sample # (lab only)
MW-801	Grab	GW	NA	2/12/24	1540	2	X	X		-01
MW-802		GW			1120	2	X	X		-02
MW-803		GW			1210	2	X	X		-03
MW-804		GW			1310	2	X	X		-04
MW-805		GW			1400	2	X	X		-05
MW-806R		GW			1445	2	X	X		-06
DUPLICATE		GW			1210	2	X	X		-07
MS/MSD		GW			1210	2	X	X		-08
~~MSD~~		~~GW~~				~~2~~	~~X~~	~~X~~		

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
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

SDG # 1705698
H232

Acctnum: **AQUAOPKS**
Template: **T208637**
Prelogin: **P1054295**
PM: **206 - Jeff Carr**
PB:

Shipped Via: **FedEX Ground**

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes (No) HCL / MeoH TBR
Matt VanderPutten	2/12/24	1800		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: DPAF °C 2.2+0=2.2 Bottles Received: 16
				If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) (14)	Date: 2/13/24 Time: 900

PH-10BDH5021 TRC-2352362
CR6-20221V

Condition: NCF / OK

ANALYTICAL REPORT

February 28, 2024

SCS Engineers - KS

Sample Delivery Group:	L1706501
Samples Received:	02/16/2024
Project Number:	27222162.23 - 3
Description:	Evergy Sibley Gen Station FAI CM

Report To: Jason Franks
8575 W. 110th Street
Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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MW-807 L1706501-01 GW

Collected by: Matt Vander Putten | Collected date/time: 02/15/24 13:10 | Received date/time: 02/16/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2228768	1	02/21/24 23:18	02/21/24 23:18	DJS	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2228642	1	02/17/24 23:45	02/18/24 22:35	DLS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2230175	1	02/22/24 10:32	02/22/24 10:32	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2229145	1	02/19/24 15:09	02/19/24 15:09	SJA	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG2228482	1	02/17/24 13:46	02/17/24 13:46	ARV	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2228414	1	02/17/24 12:36	02/17/24 12:54	SJF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2228343	1	02/20/24 22:24	02/20/24 22:24	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2228826	1	02/19/24 11:00	02/19/24 11:00	DMA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2227923	1	02/20/24 09:15	02/21/24 10:55	JTM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2228768	1	02/21/24 10:05	02/21/24 23:18	DJS	Mt. Juliet, TN

MW-808 L1706501-02 GW

Collected by: Matt Vander Putten | Collected date/time: 02/15/24 11:55 | Received date/time: 02/16/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2228768	1	02/21/24 23:21	02/21/24 23:21	DJS	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2228642	1	02/17/24 23:45	02/18/24 22:35	DLS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2230175	1	02/22/24 10:36	02/22/24 10:36	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2229145	1	02/19/24 15:10	02/19/24 15:10	SJA	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG2228482	1	02/17/24 13:46	02/17/24 13:46	ARV	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2228414	1	02/17/24 12:36	02/17/24 13:23	SJF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2228343	1	02/20/24 23:19	02/20/24 23:19	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2228826	1	02/19/24 11:18	02/19/24 11:18	DMA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2227923	1	02/20/24 09:15	02/21/24 11:06	JTM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2228768	1	02/21/24 10:05	02/21/24 23:21	DJS	Mt. Juliet, TN

MW-815 L1706501-03 GW

Collected by: Matt Vander Putten | Collected date/time: 02/15/24 14:05 | Received date/time: 02/16/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2228768	1	02/21/24 23:23	02/21/24 23:23	DJS	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2228642	1	02/17/24 23:45	02/18/24 22:35	DLS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2230175	1	02/22/24 10:41	02/22/24 10:41	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2229145	1	02/19/24 15:10	02/19/24 15:10	SJA	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG2228482	1	02/17/24 13:46	02/17/24 13:46	ARV	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2229250	1	02/19/24 10:00	02/19/24 12:26	DMA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2228343	1	02/20/24 23:33	02/20/24 23:33	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2228826	1	02/19/24 12:58	02/19/24 12:58	DMA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2227923	1	02/20/24 09:15	02/21/24 11:08	JTM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2228768	1	02/21/24 10:05	02/21/24 23:23	DJS	Mt. Juliet, TN

MW-816 L1706501-04 GW

Collected by: Matt Vander Putten | Collected date/time: 02/15/24 10:45 | Received date/time: 02/16/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2228768	1	02/21/24 23:26	02/21/24 23:26	DJS	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2228642	1	02/17/24 23:45	02/18/24 22:35	DLS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2230175	1	02/22/24 10:46	02/22/24 10:46	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2229145	10	02/19/24 15:11	02/19/24 15:11	SJA	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG2228482	1	02/17/24 13:46	02/17/24 13:46	ARV	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2229250	1	02/19/24 10:00	02/19/24 13:05	DMA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2228343	1	02/21/24 00:14	02/21/24 00:14	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2228826	1	02/19/24 13:17	02/19/24 13:17	DMA	Mt. Juliet, TN

MW-816 L1706501-04 GW

Collected by: Matt Vander Putten
Collected date/time: 02/15/24 10:45
Received date/time: 02/16/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2227923	1	02/20/24 09:15	02/21/24 11:11	JTM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2228768	1	02/21/24 10:05	02/21/24 23:26	DJS	Mt. Juliet, TN

MW-819 L1706501-05 GW

Collected by: Matt Vander Putten
Collected date/time: 02/15/24 09:35
Received date/time: 02/16/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2228768	1	02/21/24 23:29	02/21/24 23:29	DJS	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2228642	1	02/17/24 23:45	02/18/24 22:35	DLS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2230717	1	02/21/24 12:17	02/21/24 12:17	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2229145	1	02/19/24 15:12	02/19/24 15:12	SJA	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG2228482	1	02/17/24 13:46	02/17/24 13:46	ARV	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2229250	1	02/19/24 10:00	02/19/24 13:24	DMA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2228343	1	02/21/24 00:28	02/21/24 00:28	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2228826	1	02/19/24 20:24	02/19/24 20:24	DMA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2227923	1	02/20/24 09:15	02/21/24 11:14	JTM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2228768	1	02/21/24 10:05	02/21/24 23:29	DJS	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferric Iron	836		50.0	1	02/21/2024 23:18	WG2228768

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Hardness (calculated) as CaCO3	315000		2500	1	02/21/2024 23:18	WG2228768

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	337000		10000	1	02/18/2024 22:35	WG2228642

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity,Bicarbonate	270000		20000	1	02/22/2024 10:32	WG2230175
Alkalinity,Carbonate	ND		20000	1	02/22/2024 10:32	WG2230175

Sample Narrative:

L1706501-01 WG2230175: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferrous Iron	736	T8	50.0	1	02/19/2024 15:09	WG2229145

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfide	ND		50.0	1	02/17/2024 13:46	WG2228482

Wet Chemistry by Method 5310 B-2014

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
DOC	1630	B	1000	1	02/17/2024 12:54	WG2228414

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	11500		1000	1	02/20/2024 22:24	WG2228343
Fluoride	198		150	1	02/20/2024 22:24	WG2228343
Sulfate	33300		5000	1	02/20/2024 22:24	WG2228343

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	ND		1000	1	02/19/2024 11:00	WG2228826

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	99600		1000	1	02/21/2024 23:18	WG2228768
Calcium,Dissolved	99700		1000	1	02/21/2024 10:55	WG2227923
Iron	1570		100	1	02/21/2024 23:18	WG2228768
Iron,Dissolved	ND		100	1	02/21/2024 10:55	WG2227923
Magnesium	16100		1000	1	02/21/2024 23:18	WG2228768
Magnesium,Dissolved	17000	O1	1000	1	02/21/2024 10:55	WG2227923
Manganese	738		10.0	1	02/21/2024 23:18	WG2228768
Manganese,Dissolved	715	O1	10.0	1	02/21/2024 10:55	WG2227923
Molybdenum	ND		5.00	1	02/21/2024 23:18	WG2228768
Molybdenum,Dissolved	5.97		5.00	1	02/21/2024 10:55	WG2227923
Potassium	ND		2000	1	02/21/2024 23:18	WG2228768
Potassium,Dissolved	ND		2000	1	02/21/2024 10:55	WG2227923
Sodium	9580		3000	1	02/21/2024 23:18	WG2228768
Sodium,Dissolved	10200		3000	1	02/21/2024 10:55	WG2227923

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferric Iron	395		50.0	1	02/21/2024 23:21	WG2228768

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Hardness (calculated) as CaCO3	383000		2500	1	02/21/2024 23:21	WG2228768

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	466000		10000	1	02/18/2024 22:35	WG2228642

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity,Bicarbonate	267000		20000	1	02/22/2024 10:36	WG2230175
Alkalinity,Carbonate	ND		20000	1	02/22/2024 10:36	WG2230175

Sample Narrative:

L1706501-02 WG2230175: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferrous Iron	87.0	T8	50.0	1	02/19/2024 15:10	WG2229145

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfide	ND		50.0	1	02/17/2024 13:46	WG2228482

Wet Chemistry by Method 5310 B-2014

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
DOC	4590		1000	1	02/17/2024 13:23	WG2228414

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	37600		1000	1	02/20/2024 23:19	WG2228343
Fluoride	190		150	1	02/20/2024 23:19	WG2228343
Sulfate	80100		5000	1	02/20/2024 23:19	WG2228343

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	ND		1000	1	02/19/2024 11:18	WG2228826

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	129000		1000	1	02/21/2024 23:21	WG2228768
Calcium,Dissolved	134000		1000	1	02/21/2024 11:06	WG2227923
Iron	482		100	1	02/21/2024 23:21	WG2228768
Iron,Dissolved	ND		100	1	02/21/2024 11:06	WG2227923
Magnesium	14800		1000	1	02/21/2024 23:21	WG2228768
Magnesium,Dissolved	16000		1000	1	02/21/2024 11:06	WG2227923
Manganese	520		10.0	1	02/21/2024 23:21	WG2228768
Manganese,Dissolved	411		10.0	1	02/21/2024 11:06	WG2227923
Molybdenum	ND		5.00	1	02/21/2024 23:21	WG2228768
Molybdenum,Dissolved	ND		5.00	1	02/21/2024 11:06	WG2227923
Potassium	ND		2000	1	02/21/2024 23:21	WG2228768
Potassium,Dissolved	ND		2000	1	02/21/2024 11:06	WG2227923
Sodium	11900		3000	1	02/21/2024 23:21	WG2228768
Sodium,Dissolved	12800		3000	1	02/21/2024 11:06	WG2227923

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferric Iron	116		50.0	1	02/21/2024 23:23	WG2228768

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Hardness (calculated) as CaCO3	249000		2500	1	02/21/2024 23:23	WG2228768

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	311000		10000	1	02/18/2024 22:35	WG2228642

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity,Bicarbonate	193000		20000	1	02/22/2024 10:41	WG2230175
Alkalinity,Carbonate	ND		20000	1	02/22/2024 10:41	WG2230175

Sample Narrative:

L1706501-03 WG2230175: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferrous Iron	58.0	T8	50.0	1	02/19/2024 15:10	WG2229145

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfide	ND		50.0	1	02/17/2024 13:46	WG2228482

Wet Chemistry by Method 5310 B-2014

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
DOC	5320		1000	1	02/19/2024 12:26	WG2229250

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	10400		1000	1	02/20/2024 23:33	WG2228343
Fluoride	217		150	1	02/20/2024 23:33	WG2228343
Sulfate	47300		5000	1	02/20/2024 23:33	WG2228343

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	ND		1000	1	02/19/2024 12:58	WG2228826

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	78100		1000	1	02/21/2024 23:23	WG2228768
Calcium,Dissolved	82700		1000	1	02/21/2024 11:08	WG2227923
Iron	174		100	1	02/21/2024 23:23	WG2228768
Iron,Dissolved	ND		100	1	02/21/2024 11:08	WG2227923
Magnesium	13100		1000	1	02/21/2024 23:23	WG2228768
Magnesium,Dissolved	14000		1000	1	02/21/2024 11:08	WG2227923
Manganese	11.7		10.0	1	02/21/2024 23:23	WG2228768
Manganese,Dissolved	ND		10.0	1	02/21/2024 11:08	WG2227923
Molybdenum	ND		5.00	1	02/21/2024 23:23	WG2228768
Molybdenum,Dissolved	ND		5.00	1	02/21/2024 11:08	WG2227923
Potassium	ND		2000	1	02/21/2024 23:23	WG2228768
Potassium,Dissolved	ND		2000	1	02/21/2024 11:08	WG2227923
Sodium	8100		3000	1	02/21/2024 23:23	WG2228768
Sodium,Dissolved	8560		3000	1	02/21/2024 11:08	WG2227923

Calculated Results

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Ferric Iron	10200		100	1	02/21/2024 23:26	WG2228768

Calculated Results

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Hardness (calculated) as CaCO3	292000		2500	1	02/21/2024 23:26	WG2228768

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	336000		10000	1	02/18/2024 22:35	WG2228642

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	249000		20000	1	02/22/2024 10:46	WG2230175
Alkalinity,Carbonate	ND		20000	1	02/22/2024 10:46	WG2230175

Sample Narrative:

L1706501-04 WG2230175: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Ferrous Iron	6950	T8	500	10	02/19/2024 15:11	WG2229145

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Sulfide	ND		50.0	1	02/17/2024 13:46	WG2228482

Wet Chemistry by Method 5310 B-2014

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
DOC	2660		1000	1	02/19/2024 13:05	WG2229250

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	13500		1000	1	02/21/2024 00:14	WG2228343
Fluoride	347		150	1	02/21/2024 00:14	WG2228343
Sulfate	34500		5000	1	02/21/2024 00:14	WG2228343

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2460		1000	1	02/19/2024 13:17	WG2228826

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	89800		1000	1	02/21/2024 23:26	WG2228768
Calcium,Dissolved	91900		1000	1	02/21/2024 11:11	WG2227923
Iron	17200		100	1	02/21/2024 23:26	WG2228768
Iron,Dissolved	ND		100	1	02/21/2024 11:11	WG2227923
Magnesium	16500		1000	1	02/21/2024 23:26	WG2228768
Magnesium,Dissolved	17500		1000	1	02/21/2024 11:11	WG2227923
Manganese	2980		10.0	1	02/21/2024 23:26	WG2228768
Manganese,Dissolved	2920		10.0	1	02/21/2024 11:11	WG2227923
Molybdenum	ND		5.00	1	02/21/2024 23:26	WG2228768
Molybdenum,Dissolved	5.05		5.00	1	02/21/2024 11:11	WG2227923
Potassium	2390		2000	1	02/21/2024 23:26	WG2228768
Potassium,Dissolved	2250		2000	1	02/21/2024 11:11	WG2227923
Sodium	9810		3000	1	02/21/2024 23:26	WG2228768
Sodium,Dissolved	10600		3000	1	02/21/2024 11:11	WG2227923

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferric Iron	7690		50.0	1	02/21/2024 23:29	WG2228768

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Hardness (calculated) as CaCO3	733000		2500	1	02/21/2024 23:29	WG2228768

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	644000		10000	1	02/18/2024 22:35	WG2228642

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity,Bicarbonate	633000		20000	1	02/21/2024 12:17	WG2230717
Alkalinity,Carbonate	ND		20000	1	02/21/2024 12:17	WG2230717

Sample Narrative:

L1706501-05 WG2230717: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ferrous Iron	71.0	T8	50.0	1	02/19/2024 15:12	WG2229145

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Sulfide	ND		50.0	1	02/17/2024 13:46	WG2228482

Wet Chemistry by Method 5310 B-2014

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
DOC	ND		1000	1	02/19/2024 13:24	WG2229250

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	45200		1000	1	02/21/2024 00:28	WG2228343
Fluoride	163		150	1	02/21/2024 00:28	WG2228343
Sulfate	91700		5000	1	02/21/2024 00:28	WG2228343

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	ND		1000	1	02/19/2024 20:24	WG2228826

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	234000		1000	1	02/21/2024 23:29	WG2228768
Calcium,Dissolved	172000		1000	1	02/21/2024 11:14	WG2227923
Iron	7760		100	1	02/21/2024 23:29	WG2228768
Iron,Dissolved	ND		100	1	02/21/2024 11:14	WG2227923
Magnesium	35800		1000	1	02/21/2024 23:29	WG2228768
Magnesium,Dissolved	32000		1000	1	02/21/2024 11:14	WG2227923
Manganese	4280		10.0	1	02/21/2024 23:29	WG2228768
Manganese,Dissolved	ND		10.0	1	02/21/2024 11:14	WG2227923
Molybdenum	ND		5.00	1	02/21/2024 23:29	WG2228768
Molybdenum,Dissolved	ND		5.00	1	02/21/2024 11:14	WG2227923
Potassium	ND		2000	1	02/21/2024 23:29	WG2228768
Potassium,Dissolved	2090		2000	1	02/21/2024 11:14	WG2227923
Sodium	10100		3000	1	02/21/2024 23:29	WG2228768
Sodium,Dissolved	10800		3000	1	02/21/2024 11:14	WG2227923

Method Blank (MB)

(MB) R4036399-1 02/18/24 22:35

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Dissolved Solids	U		10000	10000

L1706528-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1706528-04 02/18/24 22:35 • (DUP) R4036399-3 02/18/24 22:35

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	333000	350000	1	4.98		10

L1706528-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1706528-05 02/18/24 22:35 • (DUP) R4036399-4 02/18/24 22:35

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	183000	179000	1	2.21		10

Laboratory Control Sample (LCS)

(LCS) R4036399-2 02/18/24 22:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	8560000	97.3	85.0-115	

Method Blank (MB)

(MB) R4037157-1 02/22/24 08:51

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity,Bicarbonate	U		8450	20000
Alkalinity,Carbonate	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1705934-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705934-01 02/22/24 10:14 • (DUP) R4037157-4 02/22/24 10:18

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	70200	70700	1	0.713		20
Alkalinity,Carbonate	ND	ND	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1705934-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1705934-02 02/22/24 12:28 • (DUP) R4037157-6 02/22/24 12:32

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	81400	81200	1	0.162		20
Alkalinity,Carbonate	ND	ND	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Method Blank (MB)

(MB) R4036562-2 02/21/24 11:32

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity,Bicarbonate	U		8450	20000
Alkalinity,Carbonate	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1705934-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1705934-05 02/21/24 11:47 • (DUP) R4036562-3 02/21/24 11:52

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	82300	83600	1	1.54		20
Alkalinity,Carbonate	ND	ND	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1705934-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1705934-07 02/21/24 14:06 • (DUP) R4036562-4 02/21/24 14:10

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	72500	73500	1	1.35		20
Alkalinity,Carbonate	ND	ND	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Method Blank (MB)

(MB) R4035468-1 02/19/24 15:09

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ferrous Iron	U		15.0	50.0

L1706501-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1706501-01 02/19/24 15:09 • (DUP) R4035468-3 02/19/24 15:10

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ferrous Iron	736	712	1	3.31		20

L1706552-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1706552-03 02/19/24 15:18 • (DUP) R4035468-6 02/19/24 15:19

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ferrous Iron	305	306	1	0.327		20

Laboratory Control Sample (LCS)

(LCS) R4035468-2 02/19/24 15:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ferrous Iron	1000	978	97.8	85.0-115	

L1706533-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706533-05 02/19/24 15:16 • (MS) R4035468-4 02/19/24 15:16 • (MSD) R4035468-5 02/19/24 15:16

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ferrous Iron	1000	1090	2130	2150	104	106	1	80.0-120			0.982	20

Method Blank (MB)

(MB) R4034992-1 02/17/24 13:44

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Sulfide	U		6.50	50.0

L1706650-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1706650-01 02/17/24 13:47 • (DUP) R4034992-3 02/17/24 13:48

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfide	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4034992-2 02/17/24 13:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfide	500	514	103	85.0-115	

L1706667-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706667-01 02/17/24 13:49 • (MS) R4034992-4 02/17/24 13:49 • (MSD) R4034992-5 02/17/24 13:49

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfide	500	ND	477	488	95.4	97.6	1	80.0-120			2.28	20

QUALITY CONTROL SUMMARY

L1706501-01,02

Method Blank (MB)

(MB) R4035027-2 02/17/24 10:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
DOC	211	J	106	1000

L1706501-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1706501-01 02/17/24 12:54 • (DUP) R4035027-3 02/17/24 13:08

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
DOC	1630	1750	1	7.46		20

Laboratory Control Sample (LCS)

(LCS) R4035027-1 02/17/24 10:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
DOC	25000	23400	93.4	85.0-115	

L1706501-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706501-02 02/17/24 13:23 • (MS) R4035027-4 02/17/24 13:45 • (MSD) R4035027-5 02/17/24 14:06

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
DOC	25000	4590	27700	28100	92.5	93.9	1	80.0-120			1.18	20

Method Blank (MB)

(MB) R4035565-2 02/19/24 11:22

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
DOC	U		106	1000

L1706501-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1706501-03 02/19/24 12:26 • (DUP) R4035565-3 02/19/24 12:45

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
DOC	5320	6160	1	14.5		20

Laboratory Control Sample (LCS)

(LCS) R4035565-1 02/19/24 11:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
DOC	25000	25900	103	85.0-115	

L1706501-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706501-05 02/19/24 13:24 • (MS) R4035565-4 02/19/24 13:47 • (MSD) R4035565-5 02/19/24 14:11

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
DOC	25000	ND	27600	28100	107	109	1	80.0-120			1.90	20

Method Blank (MB)

(MB) R4036419-1 02/20/24 21:29

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Fluoride	U		64.0	150
Sulfate	U		594	5000

L1706501-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1706501-01 02/20/24 22:24 • (DUP) R4036419-3 02/20/24 22:38

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	11500	11400	1	0.433		15
Fluoride	198	195	1	1.47		15
Sulfate	33300	33400	1	0.328		15

L1706561-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1706561-02 02/21/24 01:23 • (DUP) R4036419-6 02/21/24 01:36

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	6800	6740	1	0.857		15
Fluoride	220	214	1	2.49		15
Sulfate	278000	276000	1	0.637	E	15

Laboratory Control Sample (LCS)

(LCS) R4036419-2 02/20/24 21:43

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39000	97.5	80.0-120	
Fluoride	8000	8460	106	80.0-120	
Sulfate	40000	38100	95.4	80.0-120	

L1706501-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706501-01 02/20/24 22:24 • (MS) R4036419-4 02/20/24 22:52 • (MSD) R4036419-5 02/20/24 23:05

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	11500	49500	49400	95.1	94.9	1	80.0-120			0.160	15
Fluoride	8000	198	8900	8890	109	109	1	80.0-120			0.102	15
Sulfate	40000	33300	67400	67300	85.4	85.1	1	80.0-120			0.160	15

L1706561-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1706561-02 02/21/24 01:23 • (MS) R4036419-7 02/21/24 01:50

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	6800	44800	95.0	1	80.0-120	
Fluoride	8000	220	8630	105	1	80.0-120	
Sulfate	40000	278000	261000	0.000	1	80.0-120	E V

Method Blank (MB)

(MB) R4035603-2 02/19/24 01:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	U		102	1000

L1706494-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1706494-04 02/19/24 09:29 • (DUP) R4035603-3 02/19/24 09:46

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	ND	ND	1	12.6		20

L1706501-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1706501-05 02/19/24 20:24 • (DUP) R4035603-8 02/19/24 20:42

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	ND	ND	1	4.71		20

Laboratory Control Sample (LCS)

(LCS) R4035603-1 02/19/24 01:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	24600	98.3	85.0-115	

L1706501-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706501-02 02/19/24 11:18 • (MS) R4035603-4 02/19/24 11:39 • (MSD) R4035603-5 02/19/24 12:01

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	ND	26100	26400	102	103	1	85.0-115			1.14	20

L1706528-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706528-02 02/19/24 14:49 • (MS) R4035603-6 02/19/24 15:10 • (MSD) R4035603-7 02/19/24 15:31

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	2260	26800	26900	98.2	98.4	1	85.0-115			0.186	20

Method Blank (MB)

(MB) R4036488-1 02/21/24 10:49

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Calcium,Dissolved	U		79.3	1000
Iron,Dissolved	U		18.0	100
Magnesium,Dissolved	U		85.3	1000
Manganese,Dissolved	U		0.934	10.0
Molybdenum,Dissolved	U		1.16	5.00
Potassium,Dissolved	U		261	2000
Sodium,Dissolved	U		504	3000

Laboratory Control Sample (LCS)

(LCS) R4036488-2 02/21/24 10:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium,Dissolved	10000	10300	103	80.0-120	
Iron,Dissolved	10000	10200	102	80.0-120	
Magnesium,Dissolved	10000	10800	108	80.0-120	
Manganese,Dissolved	1000	1080	108	80.0-120	
Molybdenum,Dissolved	1000	997	99.7	80.0-120	
Potassium,Dissolved	10000	10200	102	80.0-120	
Sodium,Dissolved	10000	10100	101	80.0-120	

L1706501-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706501-01 02/21/24 10:55 • (MS) R4036488-4 02/21/24 11:00 • (MSD) R4036488-5 02/21/24 11:03

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Calcium,Dissolved	10000	99700	108000	108000	84.6	77.8	1	75.0-125			0.635	20
Iron,Dissolved	10000	ND	9720	9810	97.0	97.9	1	75.0-125			0.962	20
Magnesium,Dissolved	10000	17000	26400	26400	94.3	94.5	1	75.0-125			0.0673	20
Manganese,Dissolved	1000	715	1730	1730	102	101	1	75.0-125			0.226	20
Molybdenum,Dissolved	1000	5.97	973	981	96.7	97.5	1	75.0-125			0.830	20
Potassium,Dissolved	10000	ND	11400	11500	98.0	98.6	1	75.0-125			0.589	20
Sodium,Dissolved	10000	10200	19700	19700	95.7	95.6	1	75.0-125			0.0354	20

Method Blank (MB)

(MB) R4036763-1 02/21/24 22:10

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Calcium	U		79.3	1000
Iron	U		18.0	100
Magnesium	U		85.3	1000
Manganese	U		0.934	10.0
Molybdenum	U		1.16	5.00
Potassium	U		261	2000
Sodium	U		504	3000

Laboratory Control Sample (LCS)

(LCS) R4036763-2 02/21/24 22:13

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium	10000	9820	98.2	80.0-120	
Iron	10000	9680	96.8	80.0-120	
Magnesium	10000	10100	101	80.0-120	
Manganese	1000	999	99.9	80.0-120	
Molybdenum	1000	979	97.9	80.0-120	
Potassium	10000	9720	97.2	80.0-120	
Sodium	10000	9570	95.7	80.0-120	

L1706500-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706500-04 02/21/24 22:16 • (MS) R4036763-4 02/21/24 22:21 • (MSD) R4036763-5 02/21/24 22:24

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Calcium	10000	33000	43700	43800	108	108	1	75.0-125			0.145	20
Iron	10000	75300	88100	89200	129	139	1	75.0-125	V	V	1.18	20
Magnesium	10000	31000	41800	41800	108	109	1	75.0-125			0.182	20
Manganese	1000	1960	3070	3050	111	108	1	75.0-125			0.714	20
Molybdenum	1000	ND	1000	970	100	97.0	1	75.0-125			3.03	20
Potassium	10000	ND	12000	11800	100	98.7	1	75.0-125			1.29	20
Sodium	10000	32300	43100	43200	108	109	1	75.0-125			0.307	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

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Report to: **Jason Franks**

Email To: **jfranks@scsengineers.com;jrockhold@scsengine**

Project Description: **Evergy Sibley Gen Station FAI CM**

City/State Collected: **Sibley MO**

Please Circle: PT MT CT ET

Phone: **913-681-0030**

Client Project # **27222162.23 - 3**

Lab Project # **AQUAOPKS-SIBLEY**

Collected by (print): **Matt VanderPutten**

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y ____

Rush? (Lab MUST Be Notified)
____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day

Quote #

Date Results Needed: **Std**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALKBI, ALKCA 125mlHDPE-NoPres	Chloride, F, SO4 125mlHDPE-NoPres	DOC (Field Filtered) 250mlAmb-HCl	Dissolved Metals 250mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Sufide 250mlAmb-S-NaOH+ZnAc	TDS 1L-HDPE NoPres	TOC 250mlAmb-HCl	Total Metals 250mlHDPE-HNO3	Remarks	Sample # (lab only)
~~MW-804~~ MW-807		GW			1310	9	X	X	X	X	X	X	X	X	X		01
~~MW-812~~ MW-808		GW			1155	9	X	X	X	X	X	X	X	X	X		02
~~MW-813~~ MW-815		GW			1405	9	X	X	X	X	X	X	X	X	X		03
~~MW-817~~ MW-816		GW			1045	9	X	X	X	X	X	X	X	X	X		04
~~MW-816~~ MW-819		GW			935	9	X	X	X	X	X	X	X	X	X		05
~~MW-815~~		~~GW~~				~~9~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		
~~MW-802~~		~~GW~~				~~9~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: Exclude MW-801 thru MW-806R for total molybdenum.

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking #

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
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

SDG # L1706501

A192

Acctnum: **AQUAOPKS**
Template: **T236081**
Prelogin: **P1054298**
PM: **206 - Jeff Carr**
PB:

Shipped Via: **FedEx Ground**

Sample Receipt Checklist

COC Seal Present/Intact:	NP	__Y __N
COC Signed/Accurate:		__Y __N
Bottles arrive intact:		__Y __N
Correct bottles used:		__Y __N
Sufficient volume sent:		__Y __N
If Applicable		
VOA Zero Headspace:		__Y __N
Preservation Correct/Checked:		__Y __N
RAD Screen <0.5 mR/hr:		__Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	2/15/24	1700	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C Bottles Received: 45

Date: 2/16/24 Time: 9:00

If ... PH-10BDH6021 TRC-235/36 ... te/Time
CR6-20221V

Hold:

Condition: NCF / OK

Tracking Numbers	Temperature
5300 4294 5930	1.5±0=1.5 DP 18
7155 0303 0913	1.9±0=1.9 DP 18
5300 4294 5790	2.4±0=2.4 DP 18

Name

Date

ANALYTICAL REPORT

June 21, 2024

SCS Engineers - KS

Sample Delivery Group:	L1741036
Samples Received:	05/29/2024
Project Number:	27224507.00 - C
Description:	Evergy Sibley Gen Station GW 2023-24

Report To: Jason Franks
8575 W. 110th Street
Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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MW-801 L1741036-01 Non-Potable Water

Collected by: Jason R. Francis | Collected date/time: 05/23/24 12:55 | Received date/time: 05/29/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2299243	1	06/06/24 13:18	06/18/24 18:36	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2300766	1	06/10/24 09:46	06/18/24 18:36	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2300766	1	06/10/24 09:46	06/11/24 17:04	ZRG	Mt. Juliet, TN

MW-802 L1741036-02 Non-Potable Water

Collected by: Jason R. Francis | Collected date/time: 05/28/24 12:25 | Received date/time: 05/29/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2299243	1	06/06/24 13:18	06/18/24 18:36	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2300766	1	06/10/24 09:46	06/18/24 18:36	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2300766	1	06/10/24 09:46	06/11/24 17:04	ZRG	Mt. Juliet, TN

MW-803 L1741036-03 Non-Potable Water

Collected by: Jason R. Francis | Collected date/time: 05/23/24 14:00 | Received date/time: 05/29/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2299243	1	06/06/24 13:18	06/18/24 18:36	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2300766	1	06/10/24 09:46	06/18/24 18:36	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2300766	1	06/10/24 09:46	06/11/24 17:04	ZRG	Mt. Juliet, TN

MW-804 L1741036-04 Non-Potable Water

Collected by: Jason R. Francis | Collected date/time: 05/23/24 14:40 | Received date/time: 05/29/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2299243	1	06/06/24 13:18	06/18/24 18:36	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2300766	1	06/10/24 09:46	06/18/24 18:36	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2300766	1	06/10/24 09:46	06/11/24 17:04	ZRG	Mt. Juliet, TN

MW-805 L1741036-05 Non-Potable Water

Collected by: Jason R. Francis | Collected date/time: 05/23/24 15:30 | Received date/time: 05/29/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2299243	1	06/06/24 13:18	06/18/24 18:36	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2300766	1	06/10/24 09:46	06/18/24 18:36	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2300766	1	06/10/24 09:46	06/11/24 17:04	ZRG	Mt. Juliet, TN

MW-806R L1741036-06 Non-Potable Water

Collected by: Jason R. Francis | Collected date/time: 05/23/24 16:20 | Received date/time: 05/29/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2299243	1	06/06/24 13:18	06/18/24 18:36	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2300766	1	06/10/24 09:46	06/18/24 18:36	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2300766	1	06/10/24 09:46	06/11/24 17:04	ZRG	Mt. Juliet, TN

DUPLICATE L1741036-07 Non-Potable Water

Collected by: Jason R. Francis
Collected date/time: 05/23/24 16:20
Received date/time: 05/29/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2299243	1	06/06/24 13:18	06/18/24 18:36	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2300766	1	06/10/24 09:46	06/18/24 18:36	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2300766	1	06/10/24 09:46	06/11/24 17:04	ZRG	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.0912	U	0.322	0.437	0.624	0.325	06/18/2024 18:36	WG2299243
(T) Barium	*103*					*30.0-143*	*06/18/2024 18:36*	WG2299243
(T) Yttrium	*77.0*					*30.0-136*	*06/18/2024 18:36*	WG2299243

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.159	U	0.382	0.724	06/18/2024 18:36	WG2300766

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.0682	U	0.205	0.0655	0.368	0.257	06/11/2024 17:04	WG2300766
(T) Barium-133	*73.7*					*30.0-143*	*06/11/2024 17:04*	WG2300766

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.328	J	0.266	0.367	0.507	0.265	06/18/2024 18:36	WG2299243
(T) Barium	*117*					*30.0-143*	*06/18/2024 18:36*	WG2299243
(T) Yttrium	*94.7*					*30.0-136*	*06/18/2024 18:36*	WG2299243

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.328	J	0.307	0.600	06/18/2024 18:36	WG2300766

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	-0.00767	U	0.154	0.0504	0.320	0.218	06/11/2024 17:04	WG2300766
(T) Barium-133	*84.1*					*30.0-143*	*06/11/2024 17:04*	WG2300766

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.331	U	0.243	0.342	0.485	0.253	06/18/2024 18:36	WG2299243
(T) Barium	*110*					*30.0-143*	*06/18/2024 18:36*	WG2299243
(T) Yttrium	*107*					*30.0-136*	*06/18/2024 18:36*	WG2299243

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.151	U	0.298	0.533	06/18/2024 18:36	WG2300766

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.151	J	0.172	0.0635	0.221	0.174	06/11/2024 17:04	WG2300766
(T) Barium-133	*74.9*					*30.0-143*	*06/11/2024 17:04*	WG2300766

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.469	J	0.249	0.350	0.470	0.246	06/18/2024 18:36	WG2299243
(T) Barium	*98.0*					*30.0-143*	*06/18/2024 18:36*	WG2299243
(T) Yttrium	*96.2*					*30.0-136*	*06/18/2024 18:36*	WG2299243

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.20		0.425	0.523	06/18/2024 18:36	WG2300766

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.729		0.344	0.158	0.230	0.174	06/11/2024 17:04	WG2300766
(T) Barium-133	*89.5*					*30.0-143*	*06/11/2024 17:04*	WG2300766

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.124	U	0.187	0.287	0.364	0.193	06/18/2024 18:36	WG2299243
(T) Barium	*109*					*30.0-143*	*06/18/2024 18:36*	WG2299243
(T) Yttrium	*98.3*					*30.0-136*	*06/18/2024 18:36*	WG2299243

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.200	J	0.214	0.381	06/18/2024 18:36	WG2300766

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.0754	J	0.104	0.0411	0.113	0.113	06/11/2024 17:04	WG2300766
(T) Barium-133	*76.9*					*30.0-143*	*06/11/2024 17:04*	WG2300766

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.373	J	0.275	0.378	0.524	0.273	06/18/2024 18:36	WG2299243
(T) Barium	*98.9*					*30.0-143*	*06/18/2024 18:36*	WG2299243
(T) Yttrium	*94.5*					*30.0-136*	*06/18/2024 18:36*	WG2299243

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.537	J	0.356	0.620	06/18/2024 18:36	WG2300766

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.164	J	0.226	0.0759	0.331	0.234	06/11/2024 17:04	WG2300766
(T) Barium-133	*72.3*					*30.0-143*	*06/11/2024 17:04*	WG2300766

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.0113	U	0.227	0.331	0.445	0.234	06/18/2024 18:36	WG2299243
(T) Barium	*91.0*					*30.0-143*	*06/18/2024 18:36*	WG2299243
(T) Yttrium	*103*					*30.0-136*	*06/18/2024 18:36*	WG2299243

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.0113	U	0.309	0.629	06/18/2024 18:36	WG2300766

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	-0.0564	U	0.210	0.0551	0.444	0.293	06/11/2024 17:04	WG2300766
(T) Barium-133	*72.1*					*30.0-143*	*06/11/2024 17:04*	WG2300766

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R4084580-1 06/18/24 18:36

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	-0.218	U	0.183	0.363	0.190
(T) Barium	*99.7*		*99.7*		
(T) Yttrium	*91.7*		*91.7*		

L1741426-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1741426-09 06/18/24 18:36 • (DUP) R4084580-5 06/18/24 18:36

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.979	0.215	0.384	0.204	0.0240	0.579	1.13	0.588	190	1.55	U	20	3
(T) Barium	*111*				*119*	*119*							
(T) Yttrium	*90.7*				*97.5*	*97.5*							

Laboratory Control Sample (LCS)

(LCS) R4084580-2 06/18/24 18:36

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.48	89.7	80.0-120	
(T) Barium			*101*		
(T) Yttrium			*106*		

L1741036-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1741036-06 06/18/24 18:36 • (MS) R4084580-3 06/18/24 18:36 • (MSD) R4084580-4 06/18/24 18:36

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	0.373	16.9	14.6	98.7	85.2	1	70.0-130			14.3		20
(T) Barium		*98.9*			*103*	*115*							
(T) Yttrium		*94.5*			*94.2*	*99.2*							

Method Blank (MB)

(MB) R4081869-1 06/11/24 17:04

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	-0.00725	U	0.0508	0.106	0.0714
(T) Barium-133	*71.9*		*71.9*		

L1740628-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1740628-01 06/11/24 17:04 • (DUP) R4081869-5 06/11/24 17:04

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	2.69	0.647	0.231	0.175	2.54	0.639	0.218	0.171	5.43	0.156		20	3
(T) Barium-133	*82.1*				*72.9*	*72.9*							

Laboratory Control Sample (LCS)

(LCS) R4081869-2 06/11/24 17:04

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.47	109	75.0-125	
(T) Barium-133			*83.1*		

L1741036-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1741036-06 06/11/24 17:04 • (MS) R4081869-3 06/11/24 17:04 • (MSD) R4081869-4 06/11/24 17:04

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.164	18.6	18.3	92.3	90.5	1	75.0-125			1.90		20
(T) Barium-133		*72.3*			*62.8*	*73.2*							

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
SCS Engineers - KS
8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Pres Chk

Report to: Jason Franks

Email To: jfranks@scsengineers.com;jrockhold@scsengine

Project Description: Evergy Sibley Gen Station GW 2023-24

City/State Collected: Sibley MO

Please Circle: PT MT CT ET

Phone: 913-681-0030

Client Project # 27224507.00 - C

Lab Project # AQUAOPKS-SIBLEY

Collected by (print): JASON R FRANKS

Site/Facility ID #

P.O. #

Collected by (signature):

Quote #

Immediately Packed on Ice N ___ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Analysis / Container / Preservative

RA-226, RA-228 1L-HDPE-Add HNO3

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	RA-226, RA-228 1L-HDPE-Add HNO3	Remarks	Sample # (lab only)
MW-801	GRAB	NPW	—	5/23/24	1255	2	X		-01
MW-802		NPW	—	5/28/24	1225	2	X		-02
MW-803		NPW	—	5/23/24	1400	2	X		-03
MW-804		NPW	—		1440	2	X		-04
MW-805		NPW	—		1530	2	X		-05
MW-806R		NPW	—		1020	2	X		-06
DUPLICATE		NPW	—		1020	2	X		-07
806R MS / MSD		NPW	—		1020	2	X		-06
		NPW				2	X		

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
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

SDG # L1241036
E134

Acctnum: AQUAOPKS
Template: T198905
Prelogin: P1074458
PM: 206 - Jeff Carr
PB: 5/8/24 CAM
Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: RA 226/228 - Report separately and combined.

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 16	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5/29/24 Time: 900	Hold: Condition: NCF / OK

Relinquished by : (Signature) 5/28/24 1400

L7410360

Tracking Numbers	Temperature
9114520249484	17.4+0.1=17.5
9114520249505	19.5+0.1=19.6

Name

5/29/24

Date

ANALYTICAL REPORT

June 25, 2024

SCS Engineers - KS

Sample Delivery Group:	L1741162
Samples Received:	05/29/2024
Project Number:	27224507.00 - C
Description:	Evergy Sibley Gen Station GW 2023-24

Report To: Jason Franks
8575 W. 110th Street
Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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MW-801 L1741162-01 GW

Collected by: Jason R Franks | Collected date/time: 05/23/24 12:55 | Received date/time: 05/29/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2295583	1	05/30/24 13:32	05/30/24 17:31	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2306764	1	06/19/24 15:54	06/19/24 15:54	JDG	Mt. Juliet, TN
Mercury by Method 7470A	WG2295692	1	06/01/24 11:39	06/02/24 18:53	AKB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2297652	1	06/04/24 18:59	06/05/24 08:53	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2300935	1	06/10/24 04:33	06/24/24 21:32	LD	Mt. Juliet, TN

MW-802 L1741162-02 GW

Collected by: Jason R Franks | Collected date/time: 05/28/24 12:25 | Received date/time: 05/29/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2295583	1	05/30/24 13:32	05/30/24 17:31	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2306764	1	06/19/24 16:07	06/19/24 16:07	JDG	Mt. Juliet, TN
Mercury by Method 7470A	WG2295692	1	06/01/24 11:39	06/02/24 18:56	AKB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2297652	1	06/04/24 18:59	06/05/24 08:56	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2300935	1	06/10/24 04:33	06/24/24 21:35	LD	Mt. Juliet, TN

MW-803 L1741162-03 GW

Collected by: Jason R Franks | Collected date/time: 05/23/24 14:00 | Received date/time: 05/29/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2295583	1	05/30/24 13:32	05/30/24 17:31	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2306764	1	06/19/24 16:21	06/19/24 16:21	JDG	Mt. Juliet, TN
Mercury by Method 7470A	WG2295692	1	06/01/24 11:39	06/02/24 18:58	AKB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2297652	1	06/04/24 18:59	06/05/24 09:00	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2300935	1	06/10/24 04:33	06/24/24 21:38	LD	Mt. Juliet, TN

MW-804 L1741162-04 GW

Collected by: Jason R Franks | Collected date/time: 05/23/24 14:40 | Received date/time: 05/29/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2295583	1	05/30/24 13:32	05/30/24 17:31	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2306764	1	06/19/24 16:48	06/19/24 16:48	JDG	Mt. Juliet, TN
Mercury by Method 7470A	WG2295692	1	06/01/24 11:39	06/02/24 19:06	AKB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2297652	1	06/04/24 18:59	06/05/24 09:10	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2300940	1	06/08/24 09:27	06/16/24 17:05	LD	Mt. Juliet, TN

MW-805 L1741162-05 GW

Collected by: Jason R Franks | Collected date/time: 05/23/24 15:30 | Received date/time: 05/29/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2295583	1	05/30/24 13:32	05/30/24 17:31	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2306764	1	06/19/24 17:01	06/19/24 17:01	JDG	Mt. Juliet, TN
Mercury by Method 7470A	WG2295692	1	06/01/24 11:39	06/02/24 19:08	AKB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2297652	1	06/04/24 18:59	06/05/24 09:13	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2300940	1	06/08/24 09:27	06/16/24 17:08	LD	Mt. Juliet, TN

MW-806R L1741162-06 GW

Collected by: Jason R Franks | Collected date/time: 05/23/24 16:20 | Received date/time: 05/29/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2295583	1	05/30/24 13:32	05/30/24 17:31	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2306764	10	06/19/24 19:09	06/19/24 19:09	JDG	Mt. Juliet, TN
Mercury by Method 7470A	WG2295692	1	06/01/24 11:39	06/02/24 18:35	AKB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2297652	1	06/04/24 18:59	06/05/24 08:37	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2300940	1	06/08/24 09:27	06/16/24 16:26	LD	Mt. Juliet, TN

DUPLICATE L1741162-07 GW

Collected by: Jason R Franks | Collected date/time: 05/23/24 16:20 | Received date/time: 05/29/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2295583	1	05/30/24 13:32	05/30/24 17:31	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2306764	1	06/19/24 19:23	06/19/24 19:23	JDG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2306764	10	06/19/24 19:36	06/19/24 19:36	JDG	Mt. Juliet, TN
Mercury by Method 7470A	WG2295692	1	06/01/24 11:39	06/02/24 19:11	AKB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2297652	1	06/04/24 18:59	06/05/24 09:16	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2300940	1	06/08/24 09:27	06/16/24 17:12	LD	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	472000		10000	1	05/30/2024 17:31	WG2295583

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	68800		1000	1	06/19/2024 15:54	WG2306764
Fluoride	292		150	1	06/19/2024 15:54	WG2306764
Sulfate	38200		5000	1	06/19/2024 15:54	WG2306764

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	06/02/2024 18:53	WG2295692

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	102		5.00	1	06/05/2024 08:53	WG2297652
Boron	202	B	200	1	06/05/2024 08:53	WG2297652
Calcium	112000		1000	1	06/05/2024 08:53	WG2297652
Chromium	ND		10.0	1	06/05/2024 08:53	WG2297652
Lithium	ND		15.0	1	06/05/2024 08:53	WG2297652
Molybdenum	ND		5.00	1	06/05/2024 08:53	WG2297652

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic	ND		2.00	1	06/24/2024 21:32	WG2300935
Cadmium	ND		1.00	1	06/24/2024 21:32	WG2300935
Cobalt	ND		2.00	1	06/24/2024 21:32	WG2300935
Lead	ND		2.00	1	06/24/2024 21:32	WG2300935
Selenium	2.66		2.00	1	06/24/2024 21:32	WG2300935

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	482000		10000	1	05/30/2024 17:31	WG2295583

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	43100		1000	1	06/19/2024 16:07	WG2306764
Fluoride	189		150	1	06/19/2024 16:07	WG2306764
Sulfate	66900		5000	1	06/19/2024 16:07	WG2306764

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	06/02/2024 18:56	WG2295692

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	259		5.00	1	06/05/2024 08:56	WG2297652
Boron	ND		200	1	06/05/2024 08:56	WG2297652
Calcium	114000		1000	1	06/05/2024 08:56	WG2297652
Chromium	ND		10.0	1	06/05/2024 08:56	WG2297652
Lithium	ND		15.0	1	06/05/2024 08:56	WG2297652
Molybdenum	ND		5.00	1	06/05/2024 08:56	WG2297652

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic	ND		2.00	1	06/24/2024 21:35	WG2300935
Cadmium	ND		1.00	1	06/24/2024 21:35	WG2300935
Cobalt	ND		2.00	1	06/24/2024 21:35	WG2300935
Lead	ND		2.00	1	06/24/2024 21:35	WG2300935
Selenium	6.67		2.00	1	06/24/2024 21:35	WG2300935

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	493000		10000	1	05/30/2024 17:31	WG2295583

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	23600		1000	1	06/19/2024 16:21	WG2306764
Fluoride	190		150	1	06/19/2024 16:21	WG2306764
Sulfate	91200		5000	1	06/19/2024 16:21	WG2306764

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	06/02/2024 18:58	WG2295692

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	1040		5.00	1	06/05/2024 09:00	WG2297652
Boron	2900		200	1	06/05/2024 09:00	WG2297652
Calcium	115000		1000	1	06/05/2024 09:00	WG2297652
Chromium	ND		10.0	1	06/05/2024 09:00	WG2297652
Lithium	30.1	B	15.0	1	06/05/2024 09:00	WG2297652
Molybdenum	ND		5.00	1	06/05/2024 09:00	WG2297652

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic	2.34		2.00	1	06/24/2024 21:38	WG2300935
Cadmium	ND		1.00	1	06/24/2024 21:38	WG2300935
Cobalt	ND		2.00	1	06/24/2024 21:38	WG2300935
Lead	ND		2.00	1	06/24/2024 21:38	WG2300935
Selenium	ND		2.00	1	06/24/2024 21:38	WG2300935

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	592000		13300	1	05/30/2024 17:31	WG2295583

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	19100		1000	1	06/19/2024 16:48	WG2306764
Fluoride	335		150	1	06/19/2024 16:48	WG2306764
Sulfate	ND		5000	1	06/19/2024 16:48	WG2306764

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	06/02/2024 19:06	WG2295692

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	483		5.00	1	06/05/2024 09:10	WG2297652
Boron	6100		200	1	06/05/2024 09:10	WG2297652
Calcium	152000		1000	1	06/05/2024 09:10	WG2297652
Chromium	ND		10.0	1	06/05/2024 09:10	WG2297652
Lithium	19.3	B	15.0	1	06/05/2024 09:10	WG2297652
Molybdenum	ND		5.00	1	06/05/2024 09:10	WG2297652

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic	2.45		2.00	1	06/16/2024 17:05	WG2300940
Cadmium	ND		1.00	1	06/16/2024 17:05	WG2300940
Cobalt	ND		2.00	1	06/16/2024 17:05	WG2300940
Lead	2.76		2.00	1	06/16/2024 17:05	WG2300940
Selenium	ND		2.00	1	06/16/2024 17:05	WG2300940

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	344000		10000	1	05/30/2024 17:31	WG2295583

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	8150		1000	1	06/19/2024 17:01	WG2306764
Fluoride	328		150	1	06/19/2024 17:01	WG2306764
Sulfate	46100		5000	1	06/19/2024 17:01	WG2306764

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	06/02/2024 19:08	WG2295692

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	138		5.00	1	06/05/2024 09:13	WG2297652
Boron	ND		200	1	06/05/2024 09:13	WG2297652
Calcium	94600		1000	1	06/05/2024 09:13	WG2297652
Chromium	ND		10.0	1	06/05/2024 09:13	WG2297652
Lithium	ND		15.0	1	06/05/2024 09:13	WG2297652
Molybdenum	ND		5.00	1	06/05/2024 09:13	WG2297652

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic	ND		2.00	1	06/16/2024 17:08	WG2300940
Cadmium	ND		1.00	1	06/16/2024 17:08	WG2300940
Cobalt	ND		2.00	1	06/16/2024 17:08	WG2300940
Lead	ND		2.00	1	06/16/2024 17:08	WG2300940
Selenium	ND		2.00	1	06/16/2024 17:08	WG2300940

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	735000		13300	1	05/30/2024 17:31	WG2295583

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	31600		10000	10	06/19/2024 19:09	WG2306764
Fluoride	1760		1500	10	06/19/2024 19:09	WG2306764
Sulfate	263000		50000	10	06/19/2024 19:09	WG2306764

Sample Narrative:

L1741162-06 WG2306764: Dilution due to matrix interference

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	06/02/2024 18:35	WG2295692

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	77.2		5.00	1	06/05/2024 08:37	WG2297652
Boron	3070	O1	200	1	06/05/2024 08:37	WG2297652
Calcium	174000	V	1000	1	06/05/2024 08:37	WG2297652
Chromium	ND		10.0	1	06/05/2024 08:37	WG2297652
Lithium	15.8	B	15.0	1	06/05/2024 08:37	WG2297652
Molybdenum	1280		5.00	1	06/05/2024 08:37	WG2297652

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic	3.84		2.00	1	06/16/2024 16:26	WG2300940
Cadmium	ND		1.00	1	06/16/2024 16:26	WG2300940
Cobalt	ND		2.00	1	06/16/2024 16:26	WG2300940
Lead	ND		2.00	1	06/16/2024 16:26	WG2300940
Selenium	ND		2.00	1	06/16/2024 16:26	WG2300940

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	729000		13300	1	05/30/2024 17:31	WG2295583

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	31200		1000	1	06/19/2024 19:23	WG2306764
Fluoride	376		150	1	06/19/2024 19:23	WG2306764
Sulfate	261000		50000	10	06/19/2024 19:36	WG2306764

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	06/02/2024 19:11	WG2295692

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	130		5.00	1	06/05/2024 09:16	WG2297652
Boron	3070		200	1	06/05/2024 09:16	WG2297652
Calcium	175000		1000	1	06/05/2024 09:16	WG2297652
Chromium	ND		10.0	1	06/05/2024 09:16	WG2297652
Lithium	17.5	B	15.0	1	06/05/2024 09:16	WG2297652
Molybdenum	1300		5.00	1	06/05/2024 09:16	WG2297652

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic	4.47		2.00	1	06/16/2024 17:12	WG2300940
Cadmium	ND		1.00	1	06/16/2024 17:12	WG2300940
Cobalt	ND		2.00	1	06/16/2024 17:12	WG2300940
Lead	ND		2.00	1	06/16/2024 17:12	WG2300940
Selenium	ND		2.00	1	06/16/2024 17:12	WG2300940

Method Blank (MB)

(MB) R4077028-1 05/30/24 17:31

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Dissolved Solids	U		10000	10000

L1741162-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1741162-01 05/30/24 17:31 • (DUP) R4077028-3 05/30/24 17:31

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	472000	491000	1	3.95		10

L1741162-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1741162-02 05/30/24 17:31 • (DUP) R4077028-4 05/30/24 17:31

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	482000	505000	1	4.66		10

Laboratory Control Sample (LCS)

(LCS) R4077028-2 05/30/24 17:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	8640000	98.2	85.0-115	

Method Blank (MB)

(MB) R4084491-1 06/19/24 09:11

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		379	1000
Fluoride	U		64.0	150
Sulfate	U		594	5000

L1741117-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1741117-01 06/19/24 11:52 • (DUP) R4084491-3 06/19/24 12:06

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	40900	42700	1	4.17		15
Fluoride	ND	454	1	200	P1	15
Sulfate	14800	15400	1	3.69		15

L1741162-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1741162-06 06/19/24 18:02 • (DUP) R4084491-5 06/19/24 18:15

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	30300	29400	1	3.28		15
Fluoride	184	201	1	8.61		15
Sulfate	271000	260000	1	4.25	E	15

L1741162-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1741162-06 06/19/24 19:09 • (DUP) R4084491-6 06/19/24 18:29

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	31600	31500	10	0.153		15
Sulfate	263000	281000	10	6.45		15

Sample Narrative:

OS: Dilution due to matrix interference

Laboratory Control Sample (LCS)

(LCS) R4084491-2 06/19/24 09:24

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	37600	94.1	80.0-120	
Fluoride	8000	7860	98.2	80.0-120	
Sulfate	40000	38100	95.3	80.0-120	

L1741117-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1741117-01 06/19/24 11:52 • (MS) R4084491-4 06/19/24 12:19

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	40900	69700	72.0	1	80.0-120	J6
Fluoride	8000	ND	7750	96.9	1	80.0-120	
Sulfate	40000	14800	51400	91.3	1	80.0-120	

L1741162-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1741162-06 06/19/24 18:02 • (MS) R4084491-7 06/19/24 18:42 • (MSD) R4084491-8 06/19/24 18:56

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	30300	60900	63800	76.4	83.6	1	80.0-120	J6		4.62	15
Fluoride	8000	184	7870	8210	96.0	100	1	80.0-120			4.23	15

QUALITY CONTROL SUMMARY

L1741162-01,02,03,04,05,06,07

Method Blank (MB)

(MB) R4076332-1 06/02/24 18:25

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Mercury	U		0.100	0.200

Laboratory Control Sample (LCS)

(LCS) R4076332-2 06/02/24 18:28

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	3.00	3.23	108	80.0-120	

L1741162-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1741162-06 06/02/24 18:35 • (MS) R4076332-4 06/02/24 18:40 • (MSD) R4076332-5 06/02/24 18:43

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	3.00	ND	3.20	3.16	107	105	1	75.0-125			1.39	20

Method Blank (MB)

(MB) R4077650-1 06/05/24 08:30

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Barium	U		0.736	5.00
Boron	37.1	J	20.0	200
Calcium	U		79.3	1000
Chromium	U		1.40	10.0
Lithium	9.72	J	4.85	15.0
Molybdenum	U		1.16	5.00

Laboratory Control Sample (LCS)

(LCS) R4077650-2 06/05/24 08:33

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium	1000	1040	104	80.0-120	
Boron	1000	1050	105	80.0-120	
Calcium	10000	10800	108	80.0-120	
Chromium	1000	1020	102	80.0-120	
Lithium	1000	947	94.7	80.0-120	
Molybdenum	1000	997	99.7	80.0-120	

L1741162-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1741162-06 06/05/24 08:37 • (MS) R4077650-4 06/05/24 08:43 • (MSD) R4077650-5 06/05/24 08:46

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Barium	1000	77.2	1080	1080	100	100	1	75.0-125			0.150	20
Boron	1000	3070	4040	3990	96.6	91.8	1	75.0-125			1.19	20
Calcium	10000	174000	184000	179000	99.0	53.4	1	75.0-125		V	2.51	20
Chromium	1000	ND	996	978	99.6	97.8	1	75.0-125			1.78	20
Lithium	1000	15.8	1020	989	100	97.3	1	75.0-125			2.64	20
Molybdenum	1000	1280	2270	2240	98.2	95.9	1	75.0-125			1.02	20

Method Blank (MB)

(MB) R4085889-1 06/24/24 20:01

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Arsenic	U		0.180	2.00
Cadmium	U		0.150	1.00
Cobalt	U		0.0596	2.00
Lead	U		0.849	2.00
Selenium	U		0.300	2.00

Laboratory Control Sample (LCS)

(LCS) R4085889-2 06/24/24 20:04

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	50.0	51.6	103	80.0-120	
Cadmium	50.0	53.4	107	80.0-120	
Cobalt	50.0	52.4	105	80.0-120	
Lead	50.0	50.7	101	80.0-120	
Selenium	50.0	49.8	99.6	80.0-120	

L1741040-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1741040-01 06/24/24 20:07 • (MS) R4085889-4 06/24/24 20:14 • (MSD) R4085889-5 06/24/24 20:17

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	50.0	ND	55.3	53.3	108	104	1	75.0-125			3.74	20
Cadmium	50.0	ND	54.6	55.0	109	110	1	75.0-125			0.859	20
Cobalt	50.0	ND	53.4	50.8	106	101	1	75.0-125			5.17	20
Lead	50.0	ND	52.4	52.9	105	106	1	75.0-125			0.980	20
Selenium	50.0	ND	53.9	51.9	108	104	1	75.0-125			3.71	20

Method Blank (MB)

(MB) R4082384-1 06/16/24 16:19

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Arsenic	U		0.180	2.00
Cadmium	U		0.150	1.00
Cobalt	U		0.0596	2.00
Lead	U		0.849	2.00
Selenium	U		0.300	2.00

Laboratory Control Sample (LCS)

(LCS) R4082384-2 06/16/24 16:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	50.0	47.8	95.5	80.0-120	
Cadmium	50.0	48.5	97.1	80.0-120	
Cobalt	50.0	49.2	98.3	80.0-120	
Lead	50.0	48.9	97.8	80.0-120	
Selenium	50.0	47.5	94.9	80.0-120	

L1741162-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1741162-06 06/16/24 16:26 • (MS) R4082384-4 06/16/24 16:33 • (MSD) R4082384-5 06/16/24 16:36

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	50.0	3.84	50.5	50.6	93.4	93.4	1	75.0-125			0.0182	20
Cadmium	50.0	ND	47.8	48.8	95.1	97.1	1	75.0-125			2.07	20
Cobalt	50.0	ND	46.0	46.4	91.7	92.4	1	75.0-125			0.796	20
Lead	50.0	ND	47.0	45.6	94.0	91.2	1	75.0-125			3.01	20
Selenium	50.0	ND	46.1	47.2	90.7	92.9	1	75.0-125			2.35	20

L1741317-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1741317-03 06/16/24 16:39 • (MS) R4082384-6 06/16/24 16:42 • (MSD) R4082384-7 06/16/24 16:46

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	50.0	ND	49.4	50.3	95.0	96.8	1	75.0-125			1.80	20
Cadmium	50.0	ND	48.7	50.0	97.3	99.9	1	75.0-125			2.66	20
Cobalt	50.0	ND	46.7	48.3	93.3	96.5	1	75.0-125			3.33	20
Lead	50.0	ND	45.7	47.3	91.4	94.5	1	75.0-125			3.36	20
Selenium	50.0	ND	47.7	48.2	95.5	96.4	1	75.0-125			0.995	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
SCS Engineers - KS
8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Pres Chk

Report to: Jason Franks

Email To: jfranks@scsengineers.com;jrockhold@scsengine

Project Description: Evergy Sibley Gen Station GW 2023-24

City/State Collected: SIBLEY, MO

Please Circle: PT MT CT ET

Phone: 913-681-0030

Client Project # 27224507.00 - C

Lab Project # AQUAOPKS-SIBLEY

Collected by (print): JASON K. FRANKY

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

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MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
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

SDG # 741162

H019

Acctnum: AQUAOPKS
Template: T198904
Prelogin: P1074487
PM: 206 - Jeff Carr
PB: 5/8/24 CAM
Shipped Via: FedEx Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Chloride, F, SO4 125mlHDPE-NoPres	Metals 250mlHDPE-HNO3	TDS 1L-HDPE NoPres								Remarks	Sample # (lab only)
MW-801	GRAB	GW	—	5/23/24	1255	3	X	X	X									-01
MW-802		GW	—	5/23/24	1225	3	X	X	X									-02
MW-803		GW	—	5/23/24	1400	3	X	X	X									-03
MW-804		GW	—		1440	3	X	X	X									-04
MW-805		GW	—		1530	3	X	X	X									-05
MW-806R		GW	—		1620	3	X	X	X									-06
806 MS/MSD		GW	—		1620	3	X	X	X									-06
DUPLICATE		GW	—		1620	3	X	X	X									-07

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: 6010 - Ba,B,Ca,Cr,Li,Mo
6020 - As,Cd,Co,Pb,Se
7470 - Hg

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 7411 4520 2473

Sample Receipt Checklist
COC Seal Present/Intact: __NP ✓Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: ✓Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	Hold:
	5/28/24	1400			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 5.0/6 °C Bottles Received: 4.3+0.1=4.4 24	PH-10BDH5021 TB: CR6-20221V in: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5-29-24 Time: 9:00	Condition: NCF / OK
			Chanler Stevenson		

ANALYTICAL REPORT

June 18, 2024

SCS Engineers - KS

Sample Delivery Group:	L1744036
Samples Received:	06/06/2024
Project Number:	27222162.23 - 1
Description:	Evergy Sibley Gen Station FAI ACM 2024

Report To: Jason Franks
8575 W. 110th Street
Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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MW-807 L1744036-01 GW

Collected by: Matt Vander Putten | Collected date/time: 06/03/24 15:00 | Received date/time: 06/06/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2305372	1	06/17/24 19:11	06/18/24 11:12	DJS	Mt. Juliet, TN

MW-808 L1744036-02 GW

Collected by: Matt Vander Putten | Collected date/time: 06/04/24 13:10 | Received date/time: 06/06/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2305372	1	06/17/24 19:11	06/18/24 11:13	DJS	Mt. Juliet, TN

MW-809 L1744036-03 GW

Collected by: Matt Vander Putten | Collected date/time: 06/03/24 11:05 | Received date/time: 06/06/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2305372	1	06/17/24 19:11	06/18/24 10:46	DJS	Mt. Juliet, TN

MW-810 L1744036-04 GW

Collected by: Matt Vander Putten | Collected date/time: 06/03/24 12:05 | Received date/time: 06/06/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2305372	1	06/17/24 19:11	06/18/24 11:15	DJS	Mt. Juliet, TN

MW-811 L1744036-05 GW

Collected by: Matt Vander Putten | Collected date/time: 06/03/24 13:05 | Received date/time: 06/06/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2305372	1	06/17/24 19:11	06/18/24 11:17	DJS	Mt. Juliet, TN

MW-812 L1744036-06 GW

Collected by: Matt Vander Putten | Collected date/time: 06/03/24 13:55 | Received date/time: 06/06/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2305372	1	06/17/24 19:11	06/18/24 11:18	DJS	Mt. Juliet, TN

MW-813 L1744036-07 GW

Collected by: Matt Vander Putten | Collected date/time: 06/03/24 09:45 | Received date/time: 06/06/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2305372	1	06/17/24 19:11	06/18/24 11:20	DJS	Mt. Juliet, TN

MW-815 L1744036-08 GW

Collected by: Matt Vander Putten | Collected date/time: 06/04/24 10:35 | Received date/time: 06/06/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2305372	1	06/17/24 19:11	06/18/24 11:22	DJS	Mt. Juliet, TN

MW-816 L1744036-09 GW

Collected by: Matt Vander Putten
Collected date/time: 06/04/24 11:35
Received date/time: 06/06/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2305372	1	06/17/24 19:11	06/18/24 11:23	DJS	Mt. Juliet, TN

MW-819 L1744036-10 GW

Collected by: Matt Vander Putten
Collected date/time: 06/03/24 15:45
Received date/time: 06/06/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2305372	1	06/17/24 19:11	06/18/24 11:25	DJS	Mt. Juliet, TN

MW-822 L1744036-11 GW

Collected by: Matt Vander Putten
Collected date/time: 06/04/24 14:05
Received date/time: 06/06/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2305372	1	06/17/24 19:11	06/18/24 10:31	DJS	Mt. Juliet, TN

DUPLICATE L1744036-12 GW

Collected by: Matt Vander Putten
Collected date/time: 06/03/24 11:05
Received date/time: 06/06/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2305372	1	06/17/24 19:11	06/18/24 10:33	DJS	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	ND		5.00	1	06/18/2024 11:12	WG2305372

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	ND		5.00	1	06/18/2024 11:13	WG2305372

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	389		5.00	1	06/18/2024 10:46	WG2305372

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	58.9		5.00	1	06/18/2024 11:15	WG2305372

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	16.6		5.00	1	06/18/2024 11:17	WG2305372

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	ND		5.00	1	06/18/2024 11:18	WG2305372

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	ND		5.00	1	06/18/2024 11:20	WG2305372

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	ND		5.00	1	06/18/2024 11:22	WG2305372

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	ND		5.00	1	06/18/2024 11:23	WG2305372

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	ND		5.00	1	06/18/2024 11:25	WG2305372

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	ND		5.00	1	06/18/2024 10:31	WG2305372

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	378		5.00	1	06/18/2024 10:33	WG2305372

Method Blank (MB)

(MB) R4083258-1 06/18/24 10:43

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Molybdenum	U		1.16	5.00

Laboratory Control Sample (LCS)

(LCS) R4083258-2 06/18/24 10:45

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Molybdenum	1000	1010	101	80.0-120	

L1744036-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1744036-03 06/18/24 10:46 • (MS) R4083258-4 06/18/24 10:50 • (MSD) R4083258-5 06/18/24 10:51

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Molybdenum	1000	389	1400	1380	101	99.6	1	75.0-125			1.12	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Pres Chk

Report to:
Jason Franks

Email To:
jfranks@scsengineers.com;jrockhold@scsengine

Project Description:
Evergy Sibley Gen Station FAI ACM 2024

City/State Collected: **Sibley MO**

Please Circle: PT MT CT ET

Phone: **913-681-0030**

Client Project #
27222162.23 - 1

Lab Project #
AQUAOPKS-SIBLEY

Collected by (print):
Matt VanderPutten

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: **Std**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Mo - 6010 250mlHDPE-HNO3									Remarks	Sample # (lab only)
MW-807	Grab	GW	NA	6/3/24	1500	1	X										-01
MW-808		GW		6/4/24	1310	1	X										-02
MW-809		GW		6/3/24	1105	1	X										-03
MW-810		GW		6/3/24	1205	1	X										-04
MW-811		GW		6/3/24	1305	1	X										-05
MW-812		GW		6/3/24	1355	1	X										-06
MW-813		GW		6/3/24	945	1	X										-07
MW-815		GW		6/4/24	1035	1	X										-08
MW-816		GW		6/4/24	1135	1	X										-09
MW-819		GW		6/3/24	1545	1	X										-10

Chain of Custody Page 1 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
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

SDG # L1744036
F013

Acctnum: **AQUAOPKS**
Template: **T208643**
Prelogin: **P1074554**
PM: **206 - Jeff Carr**
PB: **5-8-2024 Gm**
Shipped Via: **FedEx Ground**

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 7411 4520 2429

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: X Y __N
Preservation Correct/Checked: X Y __N
RAD Screen <0.5 mR/hr: X Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	6/5/24	1015		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.3 +0.3 = 2.6 °C Bottles Received: 13
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 6/6/24 Time: 0900

If pr... PH-10BDH4321 TRC-3223A228 .../Time

Hold: Condition: NCF / OK

Company Name/Address:
SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Pres Chk

Report to:
Jason Franks

Email To:
jfranks@scsengineers.com;jrockhold@scsengine

Project Description:
Evergy Sibley Gen Station FAI ACM 2024

City/State Collected: Sibley MO

Please Circle: PT MT (CT) ET

Phone: **913-681-0030**

Client Project #
27222162.23 - 3

Lab Project #
AQUAOPKS-SIBLEY

Collected by (print):
Matt Vander Putten

Site/Facility ID #

P.O. #

Collected by (signature):
Immediately
Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: Std

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Mo - 6010 250mlHDPE-HNO3
MW-822	Grab	GW	NA	6/4/24	1405	1	X
809 MS/MSD	Grab	GW	NA	6/3/24	1105	1	X
DUPLICATE	Grab	GW	NA	6/3/24	1105	1	X

Chain of Custody Page 2 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
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

SDG # L1744036

Table #

Acctnum: **AQUAOPKS**
Template: **T208643**
Prelogin: **P1074554**
PM: **206 - Jeff Carr**
PB: 5-8-2024 GM

Shipped Via: **FedEX Ground**

Remarks	Sample # (lab only)
	- 11
	- 12 13 03
	- 13 12
	NC 6/6

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 7411 4520 2424

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
Matt Vander Putten	6/5/24	1015			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.3 ED/C 0.3 °C	Bottles Received: 13
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 6/6/24	Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

ANALYTICAL REPORT

July 22, 2024

SCS Engineers - KS

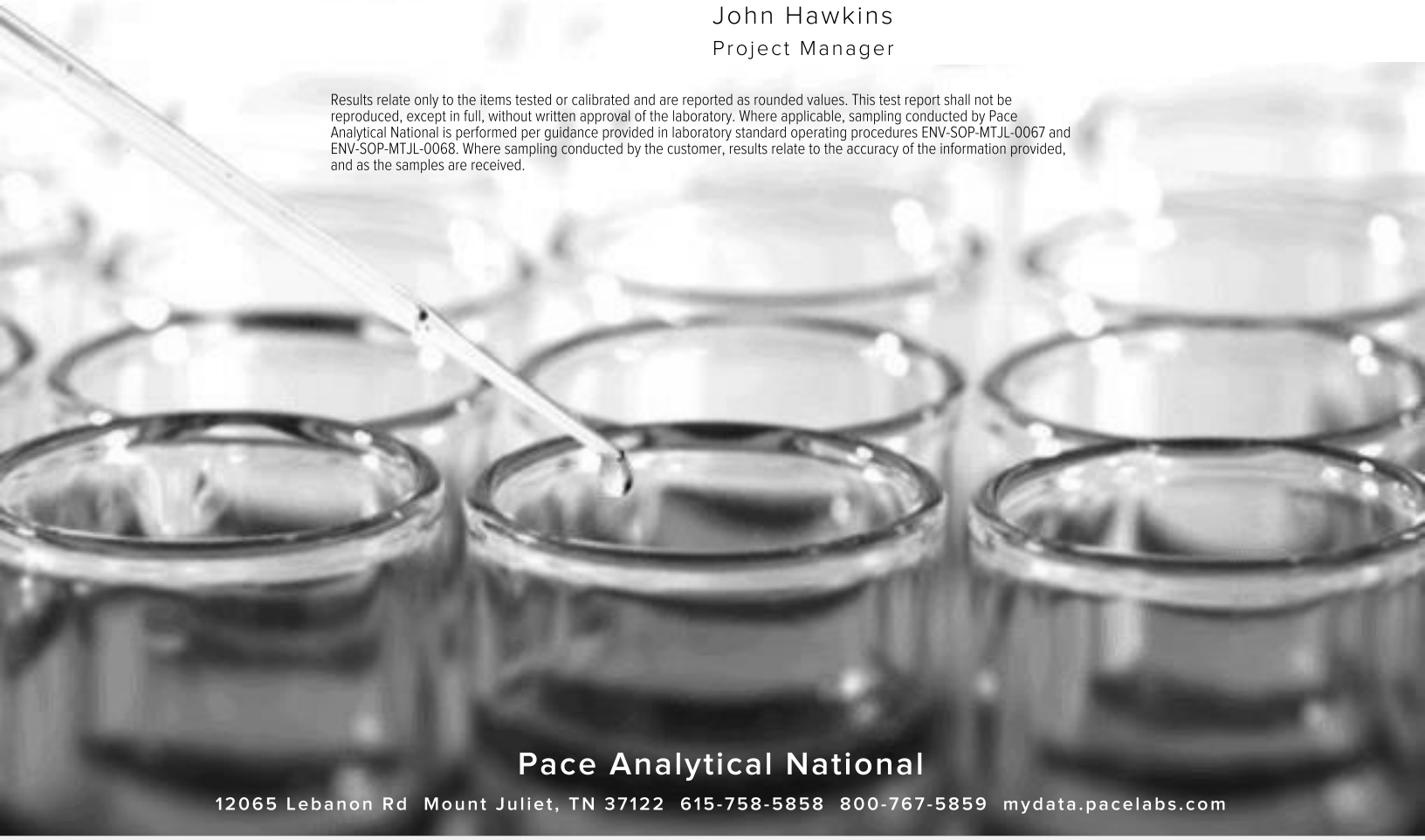
Sample Delivery Group:	L1755757
Samples Received:	07/11/2024
Project Number:	27222162.23
Description:	Evergy - Sibley Pump Test

Report To: Jason Franks
8575 W. 110th Street
Overland Park, KS 66210

Entire Report Reviewed By:

John Hawkins
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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MW-806R L1755757-01 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	07/10/24 17:15	07/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2326398	1	07/20/24 20:23	07/20/24 20:23	DLH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2326398	5	07/20/24 20:39	07/20/24 20:39	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2323831	1	07/19/24 00:43	07/19/24 10:09	JTM	Mt. Juliet, TN

TW-W1 L1755757-02 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	07/09/24 10:45	07/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2326398	1	07/20/24 20:55	07/20/24 20:55	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2323831	1	07/19/24 00:43	07/19/24 10:19	JTM	Mt. Juliet, TN

TW-W2 L1755757-03 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	07/09/24 11:45	07/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2326398	1	07/20/24 21:27	07/20/24 21:27	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2323831	1	07/19/24 00:43	07/19/24 10:20	JTM	Mt. Juliet, TN

TW-W3 L1755757-04 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	07/09/24 12:45	07/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2326398	1	07/20/24 21:58	07/20/24 21:58	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2323831	1	07/19/24 00:43	07/19/24 10:25	JTM	Mt. Juliet, TN

TW-W4 L1755757-05 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	07/09/24 13:45	07/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2326398	1	07/20/24 23:02	07/20/24 23:02	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2323831	1	07/19/24 00:43	07/19/24 10:27	JTM	Mt. Juliet, TN

TW-W5 L1755757-06 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	07/09/24 14:45	07/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2326398	1	07/20/24 23:34	07/20/24 23:34	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2323831	1	07/19/24 00:43	07/19/24 10:29	JTM	Mt. Juliet, TN

TW-W6 L1755757-07 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	07/09/24 15:45	07/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2326398	1	07/21/24 00:06	07/21/24 00:06	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2323831	1	07/19/24 00:43	07/19/24 10:30	JTM	Mt. Juliet, TN

TW-W7 L1755757-08 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	07/09/24 16:45	07/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2326398	1	07/21/24 00:38	07/21/24 00:38	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2323831	1	07/19/24 00:43	07/19/24 10:32	JTM	Mt. Juliet, TN

TW-W8 L1755757-09 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	07/09/24 17:45	07/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2326398	1	07/21/24 01:09	07/21/24 01:09	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2323831	1	07/19/24 00:43	07/19/24 10:34	JTM	Mt. Juliet, TN

TW-E1 L1755757-10 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	07/10/24 08:45	07/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2326398	1	07/21/24 02:13	07/21/24 02:13	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2323831	1	07/19/24 00:43	07/19/24 10:35	JTM	Mt. Juliet, TN

TW-E2 L1755757-11 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	07/10/24 09:45	07/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2326398	1	07/21/24 02:45	07/21/24 02:45	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2323831	1	07/19/24 00:43	07/19/24 10:37	JTM	Mt. Juliet, TN

TW-E3 L1755757-12 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	07/10/24 10:45	07/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2326398	1	07/21/24 03:17	07/21/24 03:17	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2323831	1	07/19/24 00:43	07/19/24 10:39	JTM	Mt. Juliet, TN

TW-E4 L1755757-13 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	07/10/24 11:45	07/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2326398	1	07/21/24 03:48	07/21/24 03:48	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2323831	1	07/19/24 00:43	07/19/24 10:40	JTM	Mt. Juliet, TN

TW-E5 L1755757-14 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	07/10/24 12:45	07/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2326398	1	07/21/24 04:20	07/21/24 04:20	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2323831	1	07/19/24 00:43	07/19/24 10:46	JTM	Mt. Juliet, TN

TW-E6 L1755757-15 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	07/10/24 13:45	07/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2326398	1	07/21/24 05:24	07/21/24 05:24	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2323831	1	07/19/24 00:43	07/19/24 10:47	JTM	Mt. Juliet, TN

TW-E7 L1755757-16 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	07/10/24 14:45	07/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2326398	1	07/21/24 05:56	07/21/24 05:56	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2323831	1	07/19/24 00:43	07/19/24 10:49	JTM	Mt. Juliet, TN

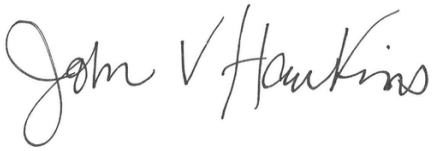
TW-E8 L1755757-17 GW

Collected by	Collected date/time	Received date/time
Matt Vander Putten	07/10/24 15:45	07/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2326398	1	07/21/24 06:27	07/21/24 06:27	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2323831	1	07/19/24 00:43	07/19/24 10:51	JTM	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



John Hawkins
Project Manager

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	30100		1000	1	07/20/2024 20:23	WG2326398
Sulfate	283000		25000	5	07/20/2024 20:39	WG2326398

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	169000	O1 V	1000	1	07/19/2024 10:09	WG2323831
Iron	3120		100	1	07/19/2024 10:09	WG2323831
Magnesium	21900		1000	1	07/19/2024 10:09	WG2323831
Manganese	451		10.0	1	07/19/2024 10:09	WG2323831
Molybdenum	1350		5.00	1	07/19/2024 10:09	WG2323831

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14800		1000	1	07/20/2024 20:55	WG2326398
Sulfate	89600		5000	1	07/20/2024 20:55	WG2326398

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	106000		1000	1	07/19/2024 10:19	WG2323831
Iron	3720		100	1	07/19/2024 10:19	WG2323831
Magnesium	17700		1000	1	07/19/2024 10:19	WG2323831
Manganese	849		10.0	1	07/19/2024 10:19	WG2323831
Molybdenum	38.6		5.00	1	07/19/2024 10:19	WG2323831

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15300		1000	1	07/20/2024 21:27	WG2326398
Sulfate	88000		5000	1	07/20/2024 21:27	WG2326398

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	105000		1000	1	07/19/2024 10:20	WG2323831
Iron	3690		100	1	07/19/2024 10:20	WG2323831
Magnesium	17500		1000	1	07/19/2024 10:20	WG2323831
Manganese	812		10.0	1	07/19/2024 10:20	WG2323831
Molybdenum	32.8		5.00	1	07/19/2024 10:20	WG2323831

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15000		1000	1	07/20/2024 21:58	WG2326398
Sulfate	88100		5000	1	07/20/2024 21:58	WG2326398

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	106000		1000	1	07/19/2024 10:25	WG2323831
Iron	3760		100	1	07/19/2024 10:25	WG2323831
Magnesium	17400		1000	1	07/19/2024 10:25	WG2323831
Manganese	725		10.0	1	07/19/2024 10:25	WG2323831
Molybdenum	31.7		5.00	1	07/19/2024 10:25	WG2323831

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14600		1000	1	07/20/2024 23:02	WG2326398
Sulfate	88200		5000	1	07/20/2024 23:02	WG2326398

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	107000		1000	1	07/19/2024 10:27	WG2323831
Iron	3830		100	1	07/19/2024 10:27	WG2323831
Magnesium	17300		1000	1	07/19/2024 10:27	WG2323831
Manganese	644		10.0	1	07/19/2024 10:27	WG2323831
Molybdenum	32.0		5.00	1	07/19/2024 10:27	WG2323831

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14800		1000	1	07/20/2024 23:34	WG2326398
Sulfate	87600		5000	1	07/20/2024 23:34	WG2326398

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	107000		1000	1	07/19/2024 10:29	WG2323831
Iron	3760		100	1	07/19/2024 10:29	WG2323831
Magnesium	17100		1000	1	07/19/2024 10:29	WG2323831
Manganese	598		10.0	1	07/19/2024 10:29	WG2323831
Molybdenum	34.7		5.00	1	07/19/2024 10:29	WG2323831

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15300		1000	1	07/21/2024 00:06	WG2326398
Sulfate	87700		5000	1	07/21/2024 00:06	WG2326398

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	107000		1000	1	07/19/2024 10:30	WG2323831
Iron	3750		100	1	07/19/2024 10:30	WG2323831
Magnesium	17100		1000	1	07/19/2024 10:30	WG2323831
Manganese	573		10.0	1	07/19/2024 10:30	WG2323831
Molybdenum	39.4		5.00	1	07/19/2024 10:30	WG2323831

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15100		1000	1	07/21/2024 00:38	WG2326398
Sulfate	87300		5000	1	07/21/2024 00:38	WG2326398

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	107000		1000	1	07/19/2024 10:32	WG2323831
Iron	3830		100	1	07/19/2024 10:32	WG2323831
Magnesium	16900		1000	1	07/19/2024 10:32	WG2323831
Manganese	536		10.0	1	07/19/2024 10:32	WG2323831
Molybdenum	41.0		5.00	1	07/19/2024 10:32	WG2323831

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	14900		1000	1	07/21/2024 01:09	WG2326398
Sulfate	87800		5000	1	07/21/2024 01:09	WG2326398

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	107000		1000	1	07/19/2024 10:34	WG2323831
Iron	3860		100	1	07/19/2024 10:34	WG2323831
Magnesium	17100		1000	1	07/19/2024 10:34	WG2323831
Manganese	517		10.0	1	07/19/2024 10:34	WG2323831
Molybdenum	44.2		5.00	1	07/19/2024 10:34	WG2323831

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	19800		1000	1	07/21/2024 02:13	WG2326398
Sulfate	163000		5000	1	07/21/2024 02:13	WG2326398

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	143000		1000	1	07/19/2024 10:35	WG2323831
Iron	1980		100	1	07/19/2024 10:35	WG2323831
Magnesium	18300		1000	1	07/19/2024 10:35	WG2323831
Manganese	338		10.0	1	07/19/2024 10:35	WG2323831
Molybdenum	ND		5.00	1	07/19/2024 10:35	WG2323831

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	19600		1000	1	07/21/2024 02:45	WG2326398
Sulfate	160000		5000	1	07/21/2024 02:45	WG2326398

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	141000		1000	1	07/19/2024 10:37	WG2323831
Iron	1590		100	1	07/19/2024 10:37	WG2323831
Magnesium	18100		1000	1	07/19/2024 10:37	WG2323831
Manganese	298		10.0	1	07/19/2024 10:37	WG2323831
Molybdenum	6.96		5.00	1	07/19/2024 10:37	WG2323831

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	19800		1000	1	07/21/2024 03:17	WG2326398
Sulfate	158000		5000	1	07/21/2024 03:17	WG2326398

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	140000		1000	1	07/19/2024 10:39	WG2323831
Iron	1660		100	1	07/19/2024 10:39	WG2323831
Magnesium	18100		1000	1	07/19/2024 10:39	WG2323831
Manganese	309		10.0	1	07/19/2024 10:39	WG2323831
Molybdenum	9.61		5.00	1	07/19/2024 10:39	WG2323831

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	20200		1000	1	07/21/2024 03:48	WG2326398
Sulfate	159000		5000	1	07/21/2024 03:48	WG2326398

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	141000		1000	1	07/19/2024 10:40	WG2323831
Iron	1870		100	1	07/19/2024 10:40	WG2323831
Magnesium	18200		1000	1	07/19/2024 10:40	WG2323831
Manganese	335		10.0	1	07/19/2024 10:40	WG2323831
Molybdenum	20.9		5.00	1	07/19/2024 10:40	WG2323831

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	20000		1000	1	07/21/2024 04:20	WG2326398
Sulfate	161000		5000	1	07/21/2024 04:20	WG2326398

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	142000		1000	1	07/19/2024 10:46	WG2323831
Iron	2050		100	1	07/19/2024 10:46	WG2323831
Magnesium	18400		1000	1	07/19/2024 10:46	WG2323831
Manganese	363		10.0	1	07/19/2024 10:46	WG2323831
Molybdenum	50.3		5.00	1	07/19/2024 10:46	WG2323831

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	20700		1000	1	07/21/2024 05:24	WG2326398
Sulfate	164000		5000	1	07/21/2024 05:24	WG2326398

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	143000		1000	1	07/19/2024 10:47	WG2323831
Iron	2270		100	1	07/19/2024 10:47	WG2323831
Magnesium	18500		1000	1	07/19/2024 10:47	WG2323831
Manganese	391		10.0	1	07/19/2024 10:47	WG2323831
Molybdenum	96.5		5.00	1	07/19/2024 10:47	WG2323831

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	21000		1000	1	07/21/2024 05:56	WG2326398
Sulfate	168000		5000	1	07/21/2024 05:56	WG2326398

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	142000		1000	1	07/19/2024 10:49	WG2323831
Iron	2650		100	1	07/19/2024 10:49	WG2323831
Magnesium	18400		1000	1	07/19/2024 10:49	WG2323831
Manganese	458		10.0	1	07/19/2024 10:49	WG2323831
Molybdenum	153		5.00	1	07/19/2024 10:49	WG2323831

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	21400		1000	1	07/21/2024 06:27	WG2326398
Sulfate	170000		5000	1	07/21/2024 06:27	WG2326398

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	144000		1000	1	07/19/2024 10:51	WG2323831
Iron	3060		100	1	07/19/2024 10:51	WG2323831
Magnesium	18600		1000	1	07/19/2024 10:51	WG2323831
Manganese	503		10.0	1	07/19/2024 10:51	WG2323831
Molybdenum	199		5.00	1	07/19/2024 10:51	WG2323831

Method Blank (MB)

(MB) R4096755-1 07/20/24 16:47

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		379	1000
Sulfate	U		594	5000

L1755162-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1755162-01 07/20/24 18:16 • (DUP) R4096755-3 07/20/24 18:32

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	7700	7470	1	3.07		15
Sulfate	ND	ND	1	4.04		15

L1755198-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1755198-01 07/20/24 19:19 • (DUP) R4096755-6 07/20/24 19:35

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	17000	17400	1	2.49		15
Sulfate	ND	ND	1	0.572		15

Laboratory Control Sample (LCS)

(LCS) R4096755-2 07/20/24 17:03

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	39200	98.0	80.0-120	
Sulfate	40000	39900	99.7	80.0-120	

L1755162-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1755162-01 07/20/24 18:16 • (MS) R4096755-4 07/20/24 18:47 • (MSD) R4096755-5 07/20/24 19:03

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	40000	7700	45200	45800	93.7	95.2	1	80.0-120			1.30	15
Sulfate	40000	ND	42400	44300	98.3	103	1	80.0-120			4.38	15

L1755198-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1755198-01 07/20/24 19:19 • (MS) R4096755-7 07/20/24 19:51

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	17000	53300	90.8	1	80.0-120	
Sulfate	40000	ND	42400	97.5	1	80.0-120	

Method Blank (MB)

(MB) R4096046-1 07/19/24 10:05

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Calcium	U		79.3	1000
Iron	U		18.0	100
Magnesium	U		85.3	1000
Manganese	U		0.934	10.0
Molybdenum	U		1.16	5.00

Laboratory Control Sample (LCS)

(LCS) R4096046-2 07/19/24 10:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium	10000	9840	98.4	80.0-120	
Iron	10000	9940	99.4	80.0-120	
Magnesium	10000	9850	98.5	80.0-120	
Manganese	1000	992	99.2	80.0-120	
Molybdenum	1000	994	99.4	80.0-120	

L1755757-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1755757-01 07/19/24 10:09 • (MS) R4096046-4 07/19/24 10:12 • (MSD) R4096046-5 07/19/24 10:14

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Calcium	10000	169000	176000	176000	66.1	64.7	1	75.0-125	V	V	0.0801	20
Iron	10000	3120	12900	12900	97.8	98.1	1	75.0-125			0.208	20
Magnesium	10000	21900	31500	31500	95.5	95.5	1	75.0-125			0.00709	20
Manganese	1000	451	1420	1430	96.6	98.0	1	75.0-125			1.00	20
Molybdenum	1000	1350	2340	2340	99.1	98.7	1	75.0-125			0.197	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Pres Chk

Report to:
Jason Franks

Email To:
jfranks@scsengineers.com;jrockhold@scsengine

Project Description:
Evergy - Sibley Pump Test

City/State Collected: **Sibley MO**

Please Circle: PT MT CT ET

Phone: **913-681-0030**

Client Project #
27222162.23

Lab Project #
AQUAOPKS-SIBLEY

Collected by (print):
Matt VanderPutten

Site/Facility ID #

P.O. #

Collected by (signature):

Quote #

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed: **Std**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Ca,Mo,Mg,Mn,Fe-6010 250mlHDPE-HNO3	Chloride, SO4 125mlHDPE-NoPres	Remarks	Sample # (lab only)
MW-806R	Grab	GW	NA	7/10/24	1715	2	X	X		-01
TW-W1		GW		7/9/24	1045	2	X	X		-02
TW-W2		GW			1145	2	X	X		-03
TW-W3		GW			1245	2	X	X		-04
TW-W4		GW			1345	2	X	X		-05
TW-W5		GW			1445	2	X	X		-06
TW-W6		GW			1545	2	X	X		-07
TW-W7		GW			1645	2	X	X		-08
TW-W8		GW			1745	2	X	X		-09
TW-E1		GW		7/10/24	845	2	X	X		-10

Chain of Custody Page ___ of ___

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MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
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

SDG # L1755757

D030

Acctnum: **AQUAOPKS**
Template: **T255934**
Prelogin: **P1087109**
PM: **206 - Jeff Carr**
PB: **JC 7-2-24**
Shipped Via: **FedEX Ground**

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 7315 3208 7617

Sample Receipt Checklist
COC Seal Present/Intact: __NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Matt VanderPutten	7/10/24	1940		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: ED48 °C Bottles Received: 1.4 10.3 = 1.7 34
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 7/11/24 Time: 0900

If pre PH-10BDH5021 TRC-3223A228 /Time

Hold:

Condition: NCF / OK

Company Name/Address:
SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Pres Chk

Report to:
Jason Franks

Email To:
jfranks@scsengineers.com;jrockhold@scsengine

Project Description:
Evergy - Sibley Pump Test

City/State Collected: Sibley MO

Please Circle: PT MT (CT) ET

Phone: **913-681-0030**

Client Project #
27222162.23

Lab Project #
AQUAOPKS-SIBLEY

Collected by (print):
Matt VanderPutten

Site/Facility ID #

P.O. #

Collected by (signature):
Matt VanderPutten

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: Std

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Ca,Mo,Mg,Mn,Fe-6010 250mlHDPE-HNO3	Chloride, SO4 125mlHDPE-NoPres									Remarks	Sample # (lab only)
TW-E2	Grab	GW	NA	7/10/24	945	2	X	X										- 11
TW-E3		GW			1045	2	X	X										- 12
TW-E4		GW			1145	2	X	X										- 13
TW-E5		GW			1245	2	X	X										- 14
TW-E6		GW			1343	2	X	X										- 15
TW-E7		GW			1445	2	X	X										- 16
TW-E8		GW			1345	2	X	X										- 17

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
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

SDG # L1555757

Table #

Acctnum: **AQUAOPKS**
Template: **T255934**
Prelogin: **P1087109**
PM: **206 - Jeff Carr**
PB: JC 7-2-24

Shipped Via: **FedEx Ground**

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 7315 3208 7617

Sample Receipt Checklist
COC Seal Present/Intact: __NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Matt VanderPutten	7/10/24	1940	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			Chase

Trip Blank Received: Yes / (No)
HCL / MeoH
TBR

Temp: EDA8 °C Bottles Received: 1.4 +0.3=1.7 34

Date: 7/11/24 Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

ANALYTICAL REPORT

August 09, 2024

SCS Engineers - KS

Sample Delivery Group:	L1762703
Samples Received:	08/01/2024
Project Number:	27222162.23-5
Description:	Evergy Sibley GW

Report To: Jason Franks
8575 W. 110th Street
Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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Sc: Sample Chain of Custody 15

TW-E L1762703-01 GW

Collected by: Matt Vander Putten | Collected date/time: 07/31/24 12:25 | Received date/time: 08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2336572	1	08/07/24 14:58	08/08/24 16:33	ZSA	Mt. Juliet, TN

TP-1 L1762703-02 GW

Collected by: Matt Vander Putten | Collected date/time: 07/31/24 12:45 | Received date/time: 08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2336572	1	08/07/24 14:58	08/08/24 16:53	ZSA	Mt. Juliet, TN

TP-2 L1762703-03 GW

Collected by: Matt Vander Putten | Collected date/time: 07/31/24 13:00 | Received date/time: 08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2338338	1	08/08/24 09:00	08/08/24 17:44	ZSA	Mt. Juliet, TN

TP-3 L1762703-04 GW

Collected by: Matt Vander Putten | Collected date/time: 07/31/24 13:10 | Received date/time: 08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2338338	1	08/08/24 09:00	08/08/24 17:59	ZSA	Mt. Juliet, TN

TP-4 L1762703-05 GW

Collected by: Matt Vander Putten | Collected date/time: 07/31/24 13:20 | Received date/time: 08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2336572	1	08/07/24 14:58	08/08/24 16:54	ZSA	Mt. Juliet, TN

TP-5 L1762703-06 GW

Collected by: Matt Vander Putten | Collected date/time: 07/31/24 13:30 | Received date/time: 08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2338338	1	08/08/24 09:00	08/08/24 18:03	ZSA	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Molybdenum	6.89		5.00	1	08/08/2024 16:33	WG2336572

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Molybdenum	109		5.00	1	08/08/2024 16:53	WG2336572

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	494		5.00	1	08/08/2024 17:44	WG2338338

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Molybdenum	1900		5.00	1	08/08/2024 17:59	WG2338338

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	2270		5.00	1	08/08/2024 16:54	WG2336572

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	5320		5.00	1	08/08/2024 18:03	WG2338338

Method Blank (MB)

(MB) R4104590-1 08/08/24 16:29

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Molybdenum	U		1.16	5.00

Laboratory Control Sample (LCS)

(LCS) R4104590-2 08/08/24 16:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Molybdenum	1000	990	99.0	80.0-120	

L1762703-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762703-01 08/08/24 16:33 • (MS) R4104590-4 08/08/24 16:36 • (MSD) R4104590-5 08/08/24 16:38

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Molybdenum	1000	6.89	1020	1020	101	102	1	75.0-125			0.782	20

Method Blank (MB)

(MB) R4104585-1 08/08/24 17:38

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Molybdenum	U		1.16	5.00

Laboratory Control Sample (LCS)

(LCS) R4104585-2 08/08/24 17:41

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Molybdenum	1000	993	99.3	80.0-120	

L1762703-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762703-03 08/08/24 17:44 • (MS) R4104585-4 08/08/24 17:50 • (MSD) R4104585-5 08/08/24 17:53

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Molybdenum	1000	494	1480	1520	98.7	102	1	75.0-125			2.41	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

SCS Engineers
8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th St
Overland Park, KS 66210

Pres Chk

Report to: **Jason Franks**

Email To: **jfranks@scsengineers.com;**

Project Description: **Evergy Sibley GW**

City/State Collected: **Sibley MO**

Please Circle: PT MT CT ET

Phone: **913-681-0030**
Fax:

Client Project # **27222162.23 - 5**

Lab Project # **AQUAOPKS-SIBLEY**

Collected by (print): **Matt VanderPutten**

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: **Standard**

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # 176270B
B137

Acctnum: **AQUAOPKS**
Template: **T229665**
Prelogin:
PM: **206-Jeff Carr**
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Mo - 6010 250mlHDPE-HN03	Remarks	Sample # (lab only)
TW-E	Grab	GW	NA	7/31/24	1225	1	X		-01
TP-1	Grab	GW	NA	7/31/24	1245	1	X		-02
TP-2	Grab	GW	NA	7/31/24	1300	1	X		-03
TP-3	Grab	GW	NA	7/31/24	1310	1	X		-04
TP-4	Grab	GW	NA	7/31/24	1320	1	X		-05
TP-5	Grab	GW	NA	7/31/24	1330	1	X		-06

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 6053 3012 5496

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	7/31/24	1600		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: ERA 9°C 1.04+.3=1.7 Bottles Received: 6
				If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/1/24 Time: 0900
			alexa mitchell	Hold: Condition: NCF / OK

ANALYTICAL REPORT

October 16, 2024

SCS Engineers - KS

Sample Delivery Group:	L1783200
Samples Received:	09/28/2024
Project Number:	27222162.23-5
Description:	Evergy Sibley GW

Report To: Jason Franks
8575 W. 110th Street
Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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TW-E L1783200-01 GW

Collected by: Matt Vander Putten | Collected date/time: 09/27/24 13:50 | Received date/time: 09/28/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2374960	1	10/11/24 12:12	10/11/24 18:57	MAP	Mt. Juliet, TN

TP-1 L1783200-02 GW

Collected by: Matt Vander Putten | Collected date/time: 09/27/24 14:15 | Received date/time: 09/28/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2382403	1	10/16/24 13:08	10/16/24 16:45	MAP	Mt. Juliet, TN

TP-2 L1783200-03 GW

Collected by: Matt Vander Putten | Collected date/time: 09/27/24 14:30 | Received date/time: 09/28/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2374960	1	10/11/24 12:12	10/11/24 19:09	MAP	Mt. Juliet, TN

TP-3 L1783200-04 GW

Collected by: Matt Vander Putten | Collected date/time: 09/27/24 14:40 | Received date/time: 09/28/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2374960	1	10/11/24 12:12	10/11/24 19:14	MAP	Mt. Juliet, TN

TP-4 L1783200-05 GW

Collected by: Matt Vander Putten | Collected date/time: 09/27/24 14:45 | Received date/time: 09/28/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2374960	1	10/11/24 12:12	10/11/24 19:16	MAP	Mt. Juliet, TN

TP-5 L1783200-06 GW

Collected by: Matt Vander Putten | Collected date/time: 09/27/24 14:55 | Received date/time: 09/28/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2382403	1	10/16/24 13:08	10/16/24 16:24	MAP	Mt. Juliet, TN

MW-806R L1783200-07 GW

Collected by: Matt Vander Putten | Collected date/time: 09/27/24 14:00 | Received date/time: 09/28/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2374960	1	10/11/24 12:12	10/11/24 19:17	MAP	Mt. Juliet, TN

TW-W L1783200-08 GW

Collected by: Matt Vander Putten | Collected date/time: 09/27/24 13:25 | Received date/time: 09/28/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2374960	1	10/11/24 12:12	10/11/24 19:19	MAP	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	5.29		5.00	1	10/11/2024 18:57	WG2374960

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	14.3		5.00	1	10/16/2024 16:45	WG2382403

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Molybdenum	2710		5.00	1	10/11/2024 19:09	WG2374960

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	1630		5.00	1	10/11/2024 19:14	WG2374960

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	3970		5.00	1	10/11/2024 19:16	WG2374960

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	1110		5.00	1	10/16/2024 16:24	WG2382403

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	1590		5.00	1	10/11/2024 19:17	WG2374960

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Molybdenum	40.6		5.00	1	10/11/2024 19:19	WG2374960

Method Blank (MB)

(MB) R4131745-1 10/11/24 18:53

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Molybdenum	U		1.16	5.00

Laboratory Control Sample (LCS)

(LCS) R4131745-2 10/11/24 18:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Molybdenum	1000	986	98.6	80.0-120	

L1783200-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1783200-01 10/11/24 18:57 • (MS) R4131745-4 10/11/24 19:00 • (MSD) R4131745-5 10/11/24 19:02

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Molybdenum	1000	5.29	994	1000	98.9	99.7	1	75.0-125			0.840	20

Method Blank (MB)

(MB) R4133614-1 10/16/24 16:29

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Molybdenum	U		1.16	5.00

Laboratory Control Sample (LCS)

(LCS) R4133614-2 10/16/24 16:31

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Molybdenum	1000	993	99.3	80.0-120	

L1782679-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1782679-04 10/16/24 16:33 • (MS) R4133614-4 10/16/24 16:36 • (MSD) R4133614-5 10/16/24 16:38

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Molybdenum	1000	16.4	1010	993	99.2	97.6	1	75.0-125			1.55	20

GLOSSARY OF TERMS

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The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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MDL	Method Detection Limit.
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Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

SCS Engineers
8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th St
Overland Park, KS 66210

Report to: **Jason Franks**

Email To: **jfranks@scsengineers.com;**

Project Description: **Evergy Sibley GW**

City/State Collected: **Sibley MO**

Please Circle: PT MT (CT) ET

Phone: **913-681-0030**
Fax:

Client Project # **27222162.23 - 5**

Lab Project # **AQUAOPKS-SIBLEY**

Collected by (print): **Matt VanderPutten**

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: **Standard**

Pres Chk: V2

Analysis / Container / Preservative: Mo - 6010 250mlHDPE-HN03

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Mo - 6010 250mlHDPE-HN03	Remarks	Sample # (lab only)
TW-E	Grab	GW	NA	09/27/24	1350	1	X		-01
TP-1	Grab	GW	NA	09/27/24	1415	1	X		-02
TP-2	Grab	GW	NA	09/27/24	1430	1	X		-03
TP-3	Grab	GW	NA	09/27/24	1440	1	X		-04
TP-4	Grab	GW	NA	09/27/24	1445	1	X		-05
TP-5	Grab	GW	NA	09/27/24	1455	1	X		-06
MW-806R	Grab	GW	NA	09/27/24	1400	1	X		-07
TW-W	Grab	GW	NA	09/27/24	1325	1	X		-08

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1783200
D067

Acctnum: **AQUAOPKS**
Template: **T229665**
Prelogin:
PM: **206-Jeff Carr**
PB:
Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 4702 9190 6708

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	9/27/24	1700	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 7.4 °C Bottles Received:
0.4+0.3=0.7

If p... e/Time

PH – 10BDH0941
TRC – 3327A333

Date: 9/28/24 Time: 0900

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

December 04, 2024

SCS Engineers - KS

Sample Delivery Group:	L1803346
Samples Received:	11/23/2024
Project Number:	27222162.23 - 3
Description:	Evergy Sibley Gen Station FAI ACM 2024

Report To: Jason Franks
8575 W. 110th Street
Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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MW-807 L1803346-01 GW

Collected by: B. O'Rourke | Collected date/time: 11/22/24 12:05 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2411298	1	12/03/24 23:09	12/04/24 09:30	DJS	Mt. Juliet, TN

MW-808 L1803346-02 GW

Collected by: B. O'Rourke | Collected date/time: 11/22/24 11:20 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2411298	1	12/03/24 23:09	12/04/24 09:38	DJS	Mt. Juliet, TN

MW-809 L1803346-03 GW

Collected by: B. O'Rourke | Collected date/time: 11/22/24 12:15 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2411298	1	12/03/24 23:09	12/04/24 09:41	DJS	Mt. Juliet, TN

MW-810 L1803346-04 GW

Collected by: B. O'Rourke | Collected date/time: 11/22/24 11:30 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2411298	1	12/03/24 23:09	12/04/24 09:44	DJS	Mt. Juliet, TN

MW-811 L1803346-05 GW

Collected by: B. O'Rourke | Collected date/time: 11/22/24 10:55 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2411298	1	12/03/24 23:09	12/04/24 09:46	DJS	Mt. Juliet, TN

MW-812 L1803346-06 GW

Collected by: B. O'Rourke | Collected date/time: 11/22/24 10:10 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2411298	1	12/03/24 23:09	12/04/24 09:12	DJS	Mt. Juliet, TN

MW-813 L1803346-07 GW

Collected by: B. O'Rourke | Collected date/time: 11/22/24 10:15 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2411298	1	12/03/24 23:09	12/04/24 09:49	DJS	Mt. Juliet, TN

MW-815 L1803346-08 GW

Collected by: B. O'Rourke | Collected date/time: 11/22/24 10:45 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2411298	1	12/03/24 23:09	12/04/24 09:52	DJS	Mt. Juliet, TN

MW-816 L1803346-09 GW

Collected by: B. O'Rourke | Collected date/time: 11/22/24 11:15 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2411298	1	12/03/24 23:09	12/04/24 09:54	DJS	Mt. Juliet, TN

MW-819 L1803346-10 GW

Collected by: B. O'Rourke | Collected date/time: 11/22/24 11:40 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2411298	1	12/03/24 23:09	12/04/24 09:57	DJS	Mt. Juliet, TN

MW-822 L1803346-11 GW

Collected by: B. O'Rourke | Collected date/time: 11/22/24 12:15 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2411298	1	12/03/24 23:09	12/04/24 10:00	DJS	Mt. Juliet, TN

DUPLICATE L1803346-12 GW

Collected by: B. O'Rourke | Collected date/time: 11/22/24 10:10 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2411298	1	12/03/24 23:09	12/04/24 10:02	DJS	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	ND		5.00	1	12/04/2024 09:30	WG2411298

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	ND		5.00	1	12/04/2024 09:38	WG2411298

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	56.6		5.00	1	12/04/2024 09:41	WG2411298

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	496		5.00	1	12/04/2024 09:44	WG2411298

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	19.8		5.00	1	12/04/2024 09:46	WG2411298

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Molybdenum	ND		5.00	1	12/04/2024 09:12	WG2411298

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	8.65		5.00	1	12/04/2024 09:49	WG2411298

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	ND		5.00	1	12/04/2024 09:52	WG2411298

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	ND		5.00	1	12/04/2024 09:54	WG2411298

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	ND		5.00	1	12/04/2024 09:57	WG2411298

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	ND		5.00	1	12/04/2024 10:00	WG2411298

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	ND		5.00	1	12/04/2024 10:02	WG2411298

Method Blank (MB)

(MB) R4153445-1 12/04/24 09:07

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Molybdenum	U		1.16	5.00

Laboratory Control Sample (LCS)

(LCS) R4153445-2 12/04/24 09:09

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Molybdenum	1000	1040	104	80.0-120	

L1803346-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803346-06 12/04/24 09:12 • (MS) R4153445-4 12/04/24 09:17 • (MSD) R4153445-5 12/04/24 09:20

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Molybdenum	1000	ND	1020	1030	102	102	1	75.0-125			0.484	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
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Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
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Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier | Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
SCS Engineers - KS
8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Report to: **Jason Franks**

Email To: **jfranks@scsengineers.com;jrockhold@scsengine**

Project Description: **Evergy Sibley Gen Station FAI ACM 2024**

City/State Collected: Sibley, MO

Please Circle: PT MT CT ET

Phone: **913-681-0030**

Client Project # **27222162.23 - 3**

Lab Project # **AQUAOPKS-SIBLEY**

Collected by (print): B. O'Rourke

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: STD

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Analysis / Container / Preservative: Mo - 6010 250mlHDPE-HNO3	Remarks	Sample # (lab only)
MW-807	G	GW	-	11-22-24	1205	1	X		01
MW-808		GW			1120	1	X		02
MW-809		GW			1215	1	X		03
MW-810		GW			1130	1	X		04
MW-811		GW			1055	1	X		05
MW-812		GW			1010	1	X		06
MW-813		GW			1015	1	X		07
MW-815		GW			1045	1	X		08
MW-816		GW			1115	1	X		09
MW-819		GW			1140	1	X		10

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking # 4757 0933 2829

Relinquished by : (Signature) — Date: 11-22-24 — Time: 1400 — Received by: (Signature)

Relinquished by : (Signature) — Date: — Time: — Received by: (Signature)

Relinquished by : (Signature) — Date: — Time: — Received for lab by: (Signature) CRodero — Date: 11-23-24 — Time: 0900

Trip Blank Received: Yes / (No) HCL / MeoH TBR

Temp: 0.1+0.0-0.1 °C TLA9 — Bottles Received: 13

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

Sample Receipt Checklist

COC Seal Present/Intact: ✓NP	Y	N
COC Signed/Accurate:	Y	N
Bottles arrive intact:	Y	N
Correct bottles used:	Y	N
Sufficient volume sent:	Y	N
If Applicable		
VOA Zero Headspace:	Y	N
Preservation Correct/Checked:	Y	N
RAD Screen <0.5 mR/hr:	Y	N

Chain of Custody Page 1 of 2

Pace® PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
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

SDG # L1603340

F072

Acctnum: **AQUAOPKS**
Template: **T208643**
Prelogin: **P1115411**
PM: **206 - Jeff Carr**
PB: BW 11/18

Shipped Via: **FedEX Standard**

Page 2 of 2

Company Name/Address:
SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Pres Chk

Report to:
Jason Franks

Email To:
jfranks@scsengineers.com;jrockhold@scsengine

Project Description:
Evergy Sibley Gen Station FAI ACM 2024

City/State Collected: **Sibley, MO**

Please Circle: PT MT CT ET

Phone: **913-681-0030**

Client Project #
27222162.23 - 3

Lab Project #
AQUAOPKS-SIBLEY

Collected by (print):
B. Bzovka

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: STD

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Mo - 6010 250mlHDPE-HNO3									Remarks	Sample # (lab only)
							<2										
MW-822	G	GW	—	11-22-24	1215	1	X										11
812 MS/MSD	↓	GW	↓	↓	1010	1	X										12
DUPLICATE	↓	GW	↓	↓	1010	1	X										13

Analysis / Container / Preservative

Chain of Custody Page 2 of 2

Pace
PEOPLE ADVANCING SCIENCE

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SDG # L1803344

Table #

Acctnum: **AQUAOPKS**
Template: **T208643**
Prelogin: **P1115411**
PM: **206 - Jeff Carr**
PB: BW 11/18

Shipped Via: **FedEX Standard**

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ___

Remarks:

pH ___ Temp ___
Flow ___ Other ___

Samples returned via: ✓ UPS __ FedEx __ Courier ___

Tracking # 4257 0933 2829

Sample Receipt Checklist
COC Seal Present/Intact: NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	11-22-24	1400			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 0.1+0.8=0.9 °C TLA9 Bottles Received: 13	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) CRODEN	Date: 11-23-24 Time: 0900	Hold: / Condition: NCF / OK

ANALYTICAL REPORT

December 05, 2024

SCS Engineers - KS

Sample Delivery Group:	L1803355
Samples Received:	11/23/2024
Project Number:	27224507.00 - C
Description:	Evergy Sibley Gen Station GW 2023-24

Report To:

Jason Franks
8575 W. 110th Street
Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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MW-801 L1803355-01 GW

Collected by: B. O' Rourke | Collected date/time: 11/21/24 10:40 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408255	1	11/26/24 08:10	11/26/24 12:01	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407608	1	11/27/24 19:43	11/27/24 19:43	ZSA	Mt. Juliet, TN
Mercury by Method 7470A	WG2407432	1	12/02/24 16:24	12/03/24 17:45	LAS	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2411301	1	12/04/24 12:45	12/04/24 17:57	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2409760	1	12/03/24 08:56	12/04/24 19:55	LD	Mt. Juliet, TN

MW-802 L1803355-02 GW

Collected by: B. O' Rourke | Collected date/time: 11/21/24 11:25 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408255	1	11/26/24 08:10	11/26/24 12:01	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407608	1	11/27/24 20:50	11/27/24 20:50	ZSA	Mt. Juliet, TN
Mercury by Method 7470A	WG2407432	1	12/02/24 16:24	12/03/24 18:23	LAS	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2411301	1	12/04/24 12:45	12/04/24 18:04	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2409760	1	12/03/24 08:56	12/04/24 21:32	LD	Mt. Juliet, TN

MW-803 L1803355-03 GW

Collected by: B. O' Rourke | Collected date/time: 11/21/24 12:05 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408255	1	11/26/24 08:10	11/26/24 12:01	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407608	1	11/27/24 21:04	11/27/24 21:04	ZSA	Mt. Juliet, TN
Mercury by Method 7470A	WG2407432	1	12/02/24 16:24	12/04/24 12:07	NDL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2411301	1	12/04/24 12:45	12/04/24 18:06	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2409760	1	12/03/24 08:56	12/04/24 21:36	LD	Mt. Juliet, TN

MW-804 L1803355-04 GW

Collected by: B. O' Rourke | Collected date/time: 11/21/24 12:40 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408255	1	11/26/24 08:10	11/26/24 12:01	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407608	1	11/27/24 21:44	11/27/24 21:44	ZSA	Mt. Juliet, TN
Mercury by Method 7470A	WG2407432	1	12/02/24 16:24	12/04/24 12:10	NDL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2411301	1	12/04/24 12:45	12/04/24 18:08	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411321	1	12/02/24 21:06	12/03/24 10:32	JPD	Mt. Juliet, TN

MW-805 L1803355-05 GW

Collected by: B. O' Rourke | Collected date/time: 11/21/24 13:05 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408255	1	11/26/24 08:10	11/26/24 12:01	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407608	1	11/27/24 21:58	11/27/24 21:58	ZSA	Mt. Juliet, TN
Mercury by Method 7470A	WG2407432	1	12/02/24 16:24	12/04/24 12:12	NDL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2411301	1	12/04/24 12:45	12/04/24 18:09	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411321	1	12/02/24 21:06	12/03/24 10:35	JPD	Mt. Juliet, TN

MW-806R L1803355-06 GW

Collected by: B. O' Rourke
Collected date/time: 11/21/24 13:40
Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408255	1	11/26/24 08:10	11/26/24 12:01	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407608	1	11/27/24 22:11	11/27/24 22:11	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407608	5	11/30/24 16:26	11/30/24 16:26	ZSA	Mt. Juliet, TN
Mercury by Method 7470A	WG2407432	1	12/02/24 16:24	12/04/24 12:15	NDL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2411301	1	12/04/24 12:45	12/04/24 18:15	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411321	1	12/02/24 21:06	12/03/24 10:38	JPD	Mt. Juliet, TN

DUPLICATE L1803355-07 GW

Collected by: B. O' Rourke
Collected date/time: 11/21/24 10:40
Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408255	1	11/26/24 08:10	11/26/24 12:01	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407612	1	11/27/24 18:45	11/27/24 18:45	DLH	Mt. Juliet, TN
Mercury by Method 7470A	WG2407432	1	12/02/24 16:24	12/04/24 12:17	NDL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2411301	1	12/04/24 12:45	12/04/24 18:16	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411321	1	12/02/24 21:06	12/03/24 10:59	JPD	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	422000		10000	1	11/26/2024 12:01	WG2408255

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	72900	J6	1000	1	11/27/2024 19:43	WG2407608
Fluoride	170		150	1	11/27/2024 19:43	WG2407608
Sulfate	36100		5000	1	11/27/2024 19:43	WG2407608

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	12/03/2024 17:45	WG2407432

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	97.7		5.00	1	12/04/2024 17:57	WG2411301
Boron	ND		200	1	12/04/2024 17:57	WG2411301
Calcium	97400	V	1000	1	12/04/2024 17:57	WG2411301
Chromium	ND		10.0	1	12/04/2024 17:57	WG2411301
Lithium	ND		15.0	1	12/04/2024 17:57	WG2411301
Molybdenum	ND		5.00	1	12/04/2024 17:57	WG2411301

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic	ND		2.00	1	12/04/2024 19:55	WG2409760
Cadmium	ND		1.00	1	12/04/2024 19:55	WG2409760
Cobalt	ND		2.00	1	12/04/2024 19:55	WG2409760
Lead	ND		2.00	1	12/04/2024 19:55	WG2409760
Selenium	2.99		2.00	1	12/04/2024 19:55	WG2409760

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	207000		10000	1	11/26/2024 12:01	WG2408255

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	20400		1000	1	11/27/2024 20:50	WG2407608
Fluoride	157		150	1	11/27/2024 20:50	WG2407608
Sulfate	28900		5000	1	11/27/2024 20:50	WG2407608

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	12/03/2024 18:23	WG2407432

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	106		5.00	1	12/04/2024 18:04	WG2411301
Boron	ND		200	1	12/04/2024 18:04	WG2411301
Calcium	32700		1000	1	12/04/2024 18:04	WG2411301
Chromium	ND		10.0	1	12/04/2024 18:04	WG2411301
Lithium	ND		15.0	1	12/04/2024 18:04	WG2411301
Molybdenum	ND		5.00	1	12/04/2024 18:04	WG2411301

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic	ND		2.00	1	12/04/2024 21:32	WG2409760
Cadmium	ND		1.00	1	12/04/2024 21:32	WG2409760
Cobalt	ND		2.00	1	12/04/2024 21:32	WG2409760
Lead	ND		2.00	1	12/04/2024 21:32	WG2409760
Selenium	2.31		2.00	1	12/04/2024 21:32	WG2409760

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	487000		10000	1	11/26/2024 12:01	WG2408255

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	26600		1000	1	11/27/2024 21:04	WG2407608
Fluoride	228		150	1	11/27/2024 21:04	WG2407608
Sulfate	99900		5000	1	11/27/2024 21:04	WG2407608

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	12/04/2024 12:07	WG2407432

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	127		5.00	1	12/04/2024 18:06	WG2411301
Boron	2930		200	1	12/04/2024 18:06	WG2411301
Calcium	119000		1000	1	12/04/2024 18:06	WG2411301
Chromium	ND		10.0	1	12/04/2024 18:06	WG2411301
Lithium	18.4		15.0	1	12/04/2024 18:06	WG2411301
Molybdenum	ND		5.00	1	12/04/2024 18:06	WG2411301

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic	2.97		2.00	1	12/04/2024 21:36	WG2409760
Cadmium	ND		1.00	1	12/04/2024 21:36	WG2409760
Cobalt	ND		2.00	1	12/04/2024 21:36	WG2409760
Lead	ND		2.00	1	12/04/2024 21:36	WG2409760
Selenium	ND		2.00	1	12/04/2024 21:36	WG2409760

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	563000		10000	1	11/26/2024 12:01	WG2408255

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	17500		1000	1	11/27/2024 21:44	WG2407608
Fluoride	211		150	1	11/27/2024 21:44	WG2407608
Sulfate	ND		5000	1	11/27/2024 21:44	WG2407608

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	12/04/2024 12:10	WG2407432

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	402		5.00	1	12/04/2024 18:08	WG2411301
Boron	4830		200	1	12/04/2024 18:08	WG2411301
Calcium	134000		1000	1	12/04/2024 18:08	WG2411301
Chromium	ND		10.0	1	12/04/2024 18:08	WG2411301
Lithium	21.0		15.0	1	12/04/2024 18:08	WG2411301
Molybdenum	ND		5.00	1	12/04/2024 18:08	WG2411301

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic	2.15		2.00	1	12/03/2024 10:32	WG2411321
Cadmium	ND		1.00	1	12/03/2024 10:32	WG2411321
Cobalt	ND		2.00	1	12/03/2024 10:32	WG2411321
Lead	2.32		2.00	1	12/03/2024 10:32	WG2411321
Selenium	ND		2.00	1	12/03/2024 10:32	WG2411321

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	331000		10000	1	11/26/2024 12:01	WG2408255

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	7340		1000	1	11/27/2024 21:58	WG2407608
Fluoride	178		150	1	11/27/2024 21:58	WG2407608
Sulfate	46300		5000	1	11/27/2024 21:58	WG2407608

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	12/04/2024 12:12	WG2407432

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	138		5.00	1	12/04/2024 18:09	WG2411301
Boron	ND		200	1	12/04/2024 18:09	WG2411301
Calcium	96600		1000	1	12/04/2024 18:09	WG2411301
Chromium	ND		10.0	1	12/04/2024 18:09	WG2411301
Lithium	ND		15.0	1	12/04/2024 18:09	WG2411301
Molybdenum	ND		5.00	1	12/04/2024 18:09	WG2411301

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic	ND		2.00	1	12/03/2024 10:35	WG2411321
Cadmium	ND		1.00	1	12/03/2024 10:35	WG2411321
Cobalt	ND		2.00	1	12/03/2024 10:35	WG2411321
Lead	ND		2.00	1	12/03/2024 10:35	WG2411321
Selenium	ND		2.00	1	12/03/2024 10:35	WG2411321

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	715000		10000	1	11/26/2024 12:01	WG2408255

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	27400		1000	1	11/27/2024 22:11	WG2407608
Fluoride	158		150	1	11/27/2024 22:11	WG2407608
Sulfate	272000		25000	5	11/30/2024 16:26	WG2407608

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	12/04/2024 12:15	WG2407432

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	55.2		5.00	1	12/04/2024 18:15	WG2411301
Boron	3030		200	1	12/04/2024 18:15	WG2411301
Calcium	167000		1000	1	12/04/2024 18:15	WG2411301
Chromium	ND		10.0	1	12/04/2024 18:15	WG2411301
Lithium	18.7		15.0	1	12/04/2024 18:15	WG2411301
Molybdenum	1380		5.00	1	12/04/2024 18:15	WG2411301

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic	3.86		2.00	1	12/03/2024 10:38	WG2411321
Cadmium	ND		1.00	1	12/03/2024 10:38	WG2411321
Cobalt	ND		2.00	1	12/03/2024 10:38	WG2411321
Lead	ND		2.00	1	12/03/2024 10:38	WG2411321
Selenium	ND		2.00	1	12/03/2024 10:38	WG2411321

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	424000		10000	1	11/26/2024 12:01	WG2408255

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Chloride	74000		1000	1	11/27/2024 18:45	WG2407612
Fluoride	179		150	1	11/27/2024 18:45	WG2407612
Sulfate	36000		5000	1	11/27/2024 18:45	WG2407612

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury	ND		0.200	1	12/04/2024 12:17	WG2407432

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Barium	102		5.00	1	12/04/2024 18:16	WG2411301
Boron	ND		200	1	12/04/2024 18:16	WG2411301
Calcium	105000		1000	1	12/04/2024 18:16	WG2411301
Chromium	ND		10.0	1	12/04/2024 18:16	WG2411301
Lithium	ND		15.0	1	12/04/2024 18:16	WG2411301
Molybdenum	ND		5.00	1	12/04/2024 18:16	WG2411301

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic	ND		2.00	1	12/03/2024 10:59	WG2411321
Cadmium	ND		1.00	1	12/03/2024 10:59	WG2411321
Cobalt	ND		2.00	1	12/03/2024 10:59	WG2411321
Lead	ND		2.00	1	12/03/2024 10:59	WG2411321
Selenium	2.94		2.00	1	12/03/2024 10:59	WG2411321

Method Blank (MB)

(MB) R4151917-1 11/26/24 12:01

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Dissolved Solids	U		10000	10000

L1803264-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1803264-01 11/26/24 12:01 • (DUP) R4151917-3 11/26/24 12:01

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1400000	1380000	1	1.15		10

L1803397-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1803397-07 11/26/24 12:01 • (DUP) R4151917-4 11/26/24 12:01

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	408000	408000	1	0.000		10

Laboratory Control Sample (LCS)

(LCS) R4151917-2 11/26/24 12:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	8990000	102	85.0-115	

Method Blank (MB)

(MB) R4151830-1 11/27/24 11:23

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		547	1000
Fluoride	U		76.1	150
Sulfate	U		637	5000

L1803249-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1803249-05 11/27/24 13:38 • (DUP) R4151830-3 11/27/24 14:05

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	24900	25000	1	0.479		15
Fluoride	171	183	1	6.44		15

L1803249-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1803249-05 11/27/24 13:52 • (DUP) R4151830-4 11/27/24 14:19

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	2110000	2110000	50	0.207		15

L1803355-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1803355-01 11/27/24 19:43 • (DUP) R4151830-8 11/27/24 20:10

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	72900	72400	1	0.713		15
Fluoride	170	174	1	1.98		15
Sulfate	36100	35700	1	1.07		15

Laboratory Control Sample (LCS)

(LCS) R4151830-2 11/27/24 11:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	38800	96.9	80.0-120	
Fluoride	8000	8170	102	80.0-120	
Sulfate	40000	38900	97.2	80.0-120	

L1803249-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803249-05 11/27/24 13:38 • (MS) R4151830-5 11/27/24 14:32 • (MSD) R4151830-6 11/27/24 14:46

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	24900	59200	59500	85.8	86.6	1	80.0-120			0.567	15
Fluoride	8000	171	6970	6970	85.0	85.0	1	80.0-120			0.0703	15

L1803355-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803355-01 11/27/24 19:43 • (MS) R4151830-9 11/27/24 20:23 • (MSD) R4151830-10 11/27/24 20:37

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	72900	97300	98400	61.0	63.8	1	80.0-120	J6	J6	1.17	15
Fluoride	8000	170	7990	8300	97.7	102	1	80.0-120			3.84	15
Sulfate	40000	36100	68800	68900	81.8	82.0	1	80.0-120			0.110	15

Method Blank (MB)

(MB) R4152254-1 11/27/24 18:14

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		547	1000
Fluoride	U		76.1	150
Sulfate	U		637	5000

L1803357-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1803357-02 11/27/24 19:01 • (DUP) R4152254-3 11/28/24 02:59

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	81800	81400	1	0.445		15
Fluoride		190	1	19.9	P1	15
Sulfate	7240	7140	1	1.34		15

L1803397-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1803397-06 11/27/24 23:16 • (DUP) R4152254-5 11/28/24 03:30

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	4020	3690	1	8.56		15
Fluoride	223	268	1	18.2	P1	15
Sulfate	18200	18000	1	1.06		15

Laboratory Control Sample (LCS)

(LCS) R4152254-2 11/27/24 18:30

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39700	99.4	80.0-120	
Fluoride	8000	8200	103	80.0-120	
Sulfate	40000	40000	100	80.0-120	

L1803357-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1803357-02 11/27/24 19:01 • (MS) R4152254-4 11/28/24 03:15

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	81800	106000	61.5	1	80.0-120	E J6
Fluoride	8000		8410	102	1	80.0-120	
Sulfate	40000	7240	47100	99.5	1	80.0-120	

L1803397-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803397-06 11/27/24 23:16 • (MS) R4152254-7 11/28/24 04:02 • (MSD) R4152254-8 11/28/24 04:18

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	4020	43700	43700	99.3	99.1	1	80.0-120			0.201	15
Fluoride	8000	223	8450	8430	103	103	1	80.0-120			0.226	15
Sulfate	40000	18200	56200	56200	95.1	95.1	1	80.0-120			0.0187	15

Method Blank (MB)

(MB) R4153292-1 12/03/24 17:40

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Mercury	U		0.0700	0.200

Laboratory Control Sample (LCS)

(LCS) R4153292-2 12/03/24 17:42

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Mercury	3.00	3.07	102	80.0-120	

L1803355-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803355-01 12/03/24 17:45 • (MS) R4153292-4 12/03/24 17:50 • (MSD) R4153292-5 12/03/24 17:53

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Mercury	3.00	ND	3.10	3.05	103	102	1	75.0-125			1.62	20

Method Blank (MB)

(MB) R4153687-1 12/04/24 17:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Barium	U		0.736	5.00
Boron	U		20.0	200
Calcium	U		79.3	1000
Chromium	U		1.40	10.0
Lithium	U		4.85	15.0
Molybdenum	U		1.16	5.00

Laboratory Control Sample (LCS)

(LCS) R4153687-2 12/04/24 17:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium	1000	1010	101	80.0-120	
Boron	1000	983	98.3	80.0-120	
Calcium	10000	9860	98.6	80.0-120	
Chromium	1000	1010	101	80.0-120	
Lithium	1000	1040	104	80.0-120	
Molybdenum	1000	983	98.3	80.0-120	

L1803355-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803355-01 12/04/24 17:57 • (MS) R4153687-4 12/04/24 18:01 • (MSD) R4153687-5 12/04/24 18:02

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Barium	1000	97.7	1080	1070	98.0	97.4	1	75.0-125			0.504	20
Boron	1000	ND	1080	1080	98.0	98.8	1	75.0-125			0.766	20
Calcium	10000	97400	111000	112000	132	145	1	75.0-125	V	V	1.17	20
Chromium	1000	ND	987	980	98.5	97.8	1	75.0-125			0.700	20
Lithium	1000	ND	1030	1040	102	103	1	75.0-125			1.30	20
Molybdenum	1000	ND	960	968	95.9	96.7	1	75.0-125			0.848	20

Method Blank (MB)

(MB) R4153699-1 12/04/24 19:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Arsenic	U		0.120	2.00
Cadmium	U		0.120	1.00
Cobalt	U		0.100	2.00
Lead	U		0.500	2.00
Selenium	U		0.250	2.00

Laboratory Control Sample (LCS)

(LCS) R4153699-2 12/04/24 19:51

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	50.0	48.3	96.6	80.0-120	
Cadmium	50.0	49.6	99.2	80.0-120	
Cobalt	50.0	49.5	98.9	80.0-120	
Lead	50.0	47.8	95.7	80.0-120	
Selenium	50.0	46.5	93.0	80.0-120	

L1803355-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803355-01 12/04/24 19:55 • (MS) R4153699-4 12/04/24 20:01 • (MSD) R4153699-5 12/04/24 20:04

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	50.0	ND	48.0	47.5	95.0	94.0	1	75.0-125			1.08	20
Cadmium	50.0	ND	49.3	48.1	98.5	96.3	1	75.0-125			2.30	20
Cobalt	50.0	ND	48.3	47.1	96.7	94.2	1	75.0-125			2.58	20
Lead	50.0	ND	47.5	46.9	95.0	93.7	1	75.0-125			1.34	20
Selenium	50.0	2.99	50.1	48.9	94.1	91.8	1	75.0-125			2.34	20

Method Blank (MB)

(MB) R4152823-1 12/03/24 10:10

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Arsenic	U		0.120	2.00
Cadmium	U		0.120	1.00
Cobalt	U		0.100	2.00
Lead	U		0.500	2.00
Selenium	U		0.250	2.00

Laboratory Control Sample (LCS)

(LCS) R4152823-2 12/03/24 10:14

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	50.0	49.2	98.4	80.0-120	
Cadmium	50.0	50.0	99.9	80.0-120	
Cobalt	50.0	50.1	100	80.0-120	
Lead	50.0	48.3	96.7	80.0-120	
Selenium	50.0	50.9	102	80.0-120	

L1803377-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803377-01 12/03/24 10:17 • (MS) R4152823-4 12/03/24 10:23 • (MSD) R4152823-5 12/03/24 10:26

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	50.0	ND	48.5	48.7	96.3	96.7	1	75.0-125			0.389	20
Cadmium	50.0	1.37	49.2	49.7	95.7	96.6	1	75.0-125			0.942	20
Cobalt	50.0	ND	47.9	48.4	95.1	96.2	1	75.0-125			1.20	20
Lead	50.0	ND	47.1	47.3	94.3	94.6	1	75.0-125			0.291	20
Selenium	50.0	ND	48.3	47.5	95.8	94.2	1	75.0-125			1.69	20

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Report to: **Jason Franks**

Email To: **jfranks@scsengineers.com;jrockhold@scsengine**

Project Description: **Evergy Sibley Gen Station GW 2023-24**

City/State Collected: Sibley, MO

Please Circle: PT MT CT ET

Phone: **913-681-0030**

Client Project # **27224507.00 - C**

Lab Project # **AQUAOPKS-SIBLEY**

Collected by (print): B. Rockhold

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: STD

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Chloride, F, SO4 125mlHDPE-NoPres	Metals 250mlHDPE-HNO3	TDS 1L-HDPE NoPres	Pres Chk	Remarks	Sample # (lab only)
MW-801	G	GW	-	11-21-24	1040	3	X	X	X			01
MW-802		GW			1125	3	X	X	X			02
MW-803		GW			1205	3	X	X	X			03
MW-804		GW			1240	3	X	X	X			04
MW-805		GW			1305	3	X	X	X			05
MW-806R		GW			1340	3	X	X	X			06
801 MS/MSD		GW			1040	3	X	X	X			-09
DUPLICATE		GW			1040	3	X	X	X			07

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
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

SDG # L1803355
F073

Acctnum: **AQUAOPKS**
Template: **T198904**
Prelogin: **P1115415**
PM: **206 - Jeff Carr**
PB: BW 11/18

Shipped Via: **FedEX Standard**

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: 6010 - Ba,B,Ca,Cr,Li,Mo
6020 - As,Cd,Co,Pb,Se
7470 - Hg

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking # 4257 0933 3089

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 0.8 +0.0 -0.8 °C TUM Bottles Received: 24

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	11-22-24	1400	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			CRonero

Date: 11-23-24 Time: 0900

ANALYTICAL REPORT

December 20, 2024

SCS Engineers - KS

Sample Delivery Group:	L1803436
Samples Received:	11/23/2024
Project Number:	27224507.00 - C
Description:	Evergy Sibley Gen Station GW 2024

Report To:

Jason Franks
8575 W. 110th Street
Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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MW-801 L1803436-01 Non-Potable Water

Collected by: B. O'Rourke | Collected date/time: 11/21/24 10:40 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2412913	1	12/05/24 12:30	12/09/24 20:55	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2417643	1	12/12/24 12:29	12/16/24 23:35	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2417643	1	12/12/24 12:29	12/16/24 23:35	ZRG	Mt. Juliet, TN

MW-802 L1803436-02 Non-Potable Water

Collected by: B. O'Rourke | Collected date/time: 11/21/24 11:25 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2412913	1	12/05/24 12:30	12/09/24 20:55	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2417643	1	12/12/24 12:29	12/16/24 23:35	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2417643	1	12/12/24 12:29	12/16/24 23:35	ZRG	Mt. Juliet, TN

MW-803 L1803436-03 Non-Potable Water

Collected by: B. O'Rourke | Collected date/time: 11/21/24 12:05 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2412913	1	12/05/24 12:30	12/09/24 20:55	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2417643	1	12/12/24 12:29	12/16/24 23:35	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2417643	1	12/12/24 12:29	12/16/24 23:35	ZRG	Mt. Juliet, TN

MW-804 L1803436-04 Non-Potable Water

Collected by: B. O'Rourke | Collected date/time: 11/21/24 12:40 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2412913	1	12/05/24 12:30	12/09/24 20:55	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2417643	1	12/12/24 12:29	12/17/24 09:39	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2417643	1	12/12/24 12:29	12/17/24 09:39	ZRG	Mt. Juliet, TN

MW-805 L1803436-05 Non-Potable Water

Collected by: B. O'Rourke | Collected date/time: 11/21/24 13:05 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2412913	1	12/05/24 12:30	12/09/24 20:55	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2418329	1	12/13/24 15:20	12/17/24 20:53	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2418329	1	12/13/24 15:20	12/17/24 20:53	ZRG	Mt. Juliet, TN

MW-806R L1803436-06 Non-Potable Water

Collected by: B. O'Rourke | Collected date/time: 11/21/24 13:40 | Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2412913	1	12/05/24 12:30	12/09/24 20:55	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2418329	1	12/13/24 15:20	12/18/24 09:01	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2418329	1	12/13/24 15:20	12/18/24 09:01	ZRG	Mt. Juliet, TN

DUPLICATE L1803436-07 Non-Potable Water

Collected by: B. O'Rourke
Collected date/time: 11/21/24 10:40
Received date/time: 11/23/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2412913	1	12/05/24 12:30	12/09/24 20:55	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2418329	1	12/13/24 15:20	12/17/24 20:53	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2418329	1	12/13/24 15:20	12/17/24 20:53	ZRG	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.110	U	0.616	1.11	1.17	0.609	12/09/2024 20:55	WG2412913
(T) Barium	*92.1*					*30.0-143*	*12/09/2024 20:55*	WG2412913
(T) Yttrium	*95.7*					*30.0-136*	*12/09/2024 20:55*	WG2412913

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.000	U	0.618	1.19	12/16/2024 23:35	WG2417643

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	-0.0203	U	0.0513	0.0955	0.196	0.149	12/16/2024 23:35	WG2417643
(T) Barium-133	*98.9*					*30.0-143*	*12/16/2024 23:35*	WG2417643

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.123	U	0.346	0.627	0.656	0.342	12/09/2024 20:55	WG2412913
(T) Barium	*99.2*					*30.0-143*	*12/09/2024 20:55*	WG2412913
(T) Yttrium	*98.1*					*30.0-136*	*12/09/2024 20:55*	WG2412913

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.0753	U	0.405	0.740	12/16/2024 23:35	WG2417643

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.0753	U	0.210	0.289	0.343	0.223	12/16/2024 23:35	WG2417643
(T) Barium-133	*110*					*30.0-143*	*12/16/2024 23:35*	WG2417643

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.146	U	0.313	0.530	0.584	0.304	12/09/2024 20:55	WG2412913
(T) Barium	*84.2*					*30.0-143*	*12/09/2024 20:55*	WG2412913
(T) Yttrium	*99.7*					*30.0-136*	*12/09/2024 20:55*	WG2412913

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.357	J	0.360	0.608	12/16/2024 23:35	WG2417643

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.211		0.178	0.344	0.168	0.139	12/16/2024 23:35	WG2417643
(T) Barium-133	*95.5*					*30.0-143*	*12/16/2024 23:35*	WG2417643

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.800		0.376	0.654	0.686	0.358	12/09/2024 20:55	WG2412913
(T) Barium	*100*					*30.0-143*	*12/09/2024 20:55*	WG2412913
(T) Yttrium	*103*					*30.0-136*	*12/09/2024 20:55*	WG2412913

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.08		0.455	0.760	12/17/2024 09:39	WG2417643

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.279	J	0.257	0.408	0.327	0.214	12/17/2024 09:39	WG2417643
(T) Barium-133	*108*					*30.0-143*	*12/17/2024 09:39*	WG2417643

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.436	J	0.242	0.440	0.443	0.232	12/09/2024 20:55	WG2412913
(T) Barium	*102*					*30.0-143*	*12/09/2024 20:55*	WG2412913
(T) Yttrium	*109*					*30.0-136*	*12/09/2024 20:55*	WG2412913

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.656		0.305	0.476	12/17/2024 20:53	WG2418329

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.220		0.185	0.336	0.175	0.144	12/17/2024 20:53	WG2418329
(T) Barium-133	*99.0*					*30.0-143*	*12/17/2024 20:53*	WG2418329

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.376	U	0.400	0.680	0.768	0.401	12/09/2024 20:55	WG2412913
(T) Barium	*57.7*					*30.0-143*	*12/09/2024 20:55*	WG2412913
(T) Yttrium	*101*					*30.0-136*	*12/09/2024 20:55*	WG2412913

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	2.75		0.790	0.848	12/18/2024 09:01	WG2418329

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	2.75	J6	0.681	1.94	0.359	0.241	12/18/2024 09:01	WG2418329
(T) Barium-133	*91.6*					*30.0-143*	*12/18/2024 09:01*	WG2418329

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.383	J	0.235	0.441	0.432	0.227	12/09/2024 20:55	WG2412913
(T) Barium	*92.5*					*30.0-143*	*12/09/2024 20:55*	WG2412913
(T) Yttrium	*106*					*30.0-136*	*12/09/2024 20:55*	WG2412913

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.60		0.496	0.500	12/17/2024 20:53	WG2418329

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	1.22		0.437	1.04	0.252	0.184	12/17/2024 20:53	WG2418329
(T) Barium-133	*90.2*					*30.0-143*	*12/17/2024 20:53*	WG2418329

Method Blank (MB)

(MB) R4156239-1 12/09/24 20:55

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.000	U	0.142	0.271	0.143
(T) Barium	*111*		*111*		
(T) Yttrium	*92.4*		*92.4*		

L1803946-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1803946-01 12/09/24 20:55 • (DUP) R4156239-5 12/09/24 20:55

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	-0.0954	0.199	0.385	0.204	-0.00277	0.339	0.640	0.334	0.000	0.236	U	20	3
(T) Barium	*92.3*				*99.6*	*99.6*							
(T) Yttrium	*99.9*				*101*	*101*							

Laboratory Control Sample (LCS)

(LCS) R4156239-2 12/09/24 20:55

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.67	93.3	80.0-120	
(T) Barium			*103*		
(T) Yttrium			*84.1*		

L1803436-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803436-01 12/09/24 20:55 • (MS) R4156239-3 12/09/24 20:55 • (MSD) R4156239-4 12/09/24 20:55

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	-0.110	11.9	12.0	71.0	71.8	1	70.0-130			1.17		20
(T) Barium		*92.1*			*90.8*	*110*							
(T) Yttrium		*95.7*			*101*	*106*							

Method Blank (MB)

(MB) R4159030-1 12/16/24 23:35

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.00636	U	0.0131	0.0248	0.0188
(T) Barium-133	*88.5*		*88.5*		

L1803306-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1803306-01 12/16/24 23:35 • (DUP) R4159030-4 12/16/24 23:35

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	4.77	0.789	0.156	0.129	4.55	0.795	0.235	0.171	4.72	0.196		20	3
(T) Barium-133	*95.1*				*104*	*104*							

Laboratory Control Sample (LCS)

(LCS) R4159030-2 12/16/24 23:35

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	4.33	86.6	80.0-120	
(T) Barium-133			*97.3*		

L1803436-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803436-01 12/16/24 23:35 • (MS) R4159030-5 12/17/24 09:39 • (MSD) R4159030-3 12/16/24 23:35

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	-0.0203	18.8	19.7	94.0	98.6	1	75.0-125			4.78		20
(T) Barium-133		*98.9*			*90.0*	*95.7*							

Method Blank (MB)

(MB) R4159716-1 12/17/24 20:52

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	-0.00237	U	0.0345	0.0825	0.0591
(T) Barium-133	*82.8*		*82.8*		

L1809001-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1809001-05 12/17/24 20:53 • (DUP) R4159716-5 12/17/24 20:52

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.348	0.223	0.194	0.147	0.134	0.196	0.295	0.214	88.9	0.721	J	20	3
(T) Barium-133	*100*				*96.5*	*96.5*							

Laboratory Control Sample (LCS)

(LCS) R4159716-2 12/17/24 20:52

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	4.95	99.0	80.0-120	
(T) Barium-133			*83.4*		

L1803436-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803436-06 12/18/24 09:01 • (MS) R4159716-3 12/17/24 20:52 • (MSD) R4159716-4 12/17/24 20:52

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	2.75	19.5	16.8	83.7	70.5	1	75.0-125		J6	14.6		20
(T) Barium-133		*91.6*			*58.7*	*79.1*							

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
U	Below Detectable Limits: Indicates that the analyte was not detected.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th Street
Overland Park, KS 66210

Pres Chk

Report to:
Jason Franks

Email To:
jfranks@scsengineers.com;jrockhold@scsengine

Project Description:
Evergy Sibley Gen Station GW 2024

City/State Collected: Sibley, MO

Please Circle: PT MT CT ET

Phone: **913-681-0030**

Client Project #
27224507.00 - C

Lab Project #
AQUAOPKS-SIBLEY

Collected by (print):
B. O'Rourke

Site/Facility ID #

P.O. #

Collected by (signature):

Quote #

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed: STD

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	RA-226, RA-228 1L-HDPE-Add HNO3	Remarks	Sample # (lab only)
MW-801	G	NPW	-	11-21-24	1040	3	X		-01
MW-802		NPW			1125	3	X		-02
MW-803		NPW			1205	3	X		-03
MW-804		NPW			1240	3	X		-04
MW-805		NPW			1305	3	X		-05
MW-806R		NPW			1340	3	X		-06
DUPLICATE		NPW			1040	3	X		-07
801 MS		NPW			1040	3	X		-01
801 MSD		NPW			1040	3	X		-01

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
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

SDG # L1803136
Table # K004
Acctnum: **AQUAOPKS**
Template: **T198905**
Prelogin: **P1115414**
PM: **206 - Jeff Carr**
PB: BW 11/18
Shipped Via: **FedEX Standard**

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: RA 226/228 - Report separately and combined.

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	11-22-24	1400			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: TLAB °C 6.9+0=6.9 Bottles Received: 18	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/23/24 Time: 0900	Hold: Condition: NCF / OK

L4803436

Fed Ex tracking #	Gun ID	Temperature
425709333023	TLA9	6.9+0=6.9
425709278585	TLA9	7.8+0=7.8

Name

Date

ANALYTICAL REPORT

December 16, 2024

SCS Engineers - KS

Sample Delivery Group:	L1808193
Samples Received:	12/11/2024
Project Number:	27222162.23
Description:	Evergy - Sibley Generating Station

Report To: Jason Franks
8575 W. 110th Street
Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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SAMPLE SUMMARY

MW-809 L1808193-01 GW

Collected by: Birtta Coleman
Collected date/time: 12/10/24 12:10
Received date/time: 12/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2418844	1	12/14/24 20:55	12/15/24 10:54	MAP	Mt. Juliet, TN

MW-810 L1808193-02 GW

Collected by: Birtta Coleman
Collected date/time: 12/10/24 12:25
Received date/time: 12/11/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2418844	1	12/14/24 20:55	12/15/24 10:56	MAP	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	462		5.00	1	12/15/2024 10:54	WG2418844

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Molybdenum	44.1		5.00	1	12/15/2024 10:56	WG2418844

QUALITY CONTROL SUMMARY

L1808193-01,02

Method Blank (MB)

(MB) R4157969-1 12/15/24 10:35

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Molybdenum	U		1.16	5.00

Laboratory Control Sample (LCS)

(LCS) R4157969-2 12/15/24 10:36

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Molybdenum	1000	1010	101	80.0-120	

L1808253-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1808253-03 12/15/24 10:38 • (MS) R4157969-4 12/15/24 10:41 • (MSD) R4157969-5 12/15/24 10:43

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Molybdenum	1000	ND	1020	1020	102	102	1	75.0-125			0.267	20

GLOSSARY OF TERMS

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Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
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Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
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Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier | Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

SCS Engineers
8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th St
Overland Park, KS 66210

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: **Jason Franks**

Email To: **jfranks@scsengineers.com;**

Project Description: **Evergy Sibley GW**

City/State Collected: **Sibley MO**

Please Circle: PT MT (CT) ET

Phone: **913-681-0030**
Fax:

Client Project # **27222162.23 - 5**

Lab Project # **AQUAOPKS-SIBLEY**

SDG # L1806903

F041

Collected by (print): **Britta Coleman**

Site/Facility ID #

P.O. #

Acctnum: **AQUAOPKS**
Template: **T229665**
Prelogin:
PM: **206-Jeff Carr**
PB:

Collected by (signature):

Immediately Packed on Ice N ____ Y X

Rush? (Lab MUST Be Notified)
____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day

Quote #

Date Results Needed: **Standard**

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Mo - 6010 250mlHDPE-HN03	Remarks	Sample # (lab only)
MW-809	**Grab**	**GW**	**NA**	**12/10/24**	**1210**	**1**	X		01
MW-810	**Grab**	**GW**	**NA**	**12/10/24**	**1225**	**1**	X		02

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other _____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 5300 4291 1851 2

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y	N
COC Signed/Accurate:		Y	N
Bottles arrive intact:		Y	N
Correct bottles used:		Y	N
Sufficient volume sent:		Y	N
If Applicable			
VOA Zero Headspace:		Y	N
Preservation Correct/Checked:		Y	N
RAD Screen <0.5 mR/hr:		Y	N

	Date:	Time:			
Relinquished by : (Signature)	12-10-24	1400	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 0.4+0=0.4 °C ms49	Bottles Received: 2
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) CRobins	Date: 12.11.24	Time: 0900

PH – 10BDH0941
TRC – 3327A333

Date/Time

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

December 30, 2024

SCS Engineers - KS

Sample Delivery Group:	L1813233
Samples Received:	12/28/2024
Project Number:	27222162.23 #6
Description:	Evergy - Sibley FAI

Report To: Jason Franks
8575 W. 110th Street
Overland Park, KS 66210

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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B-12 0-5 L1813233-01 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 09:55 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426252	1	12/30/24 09:01	12/30/24 09:13	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 09:25	MAP	Mt. Juliet, TN

B-12 5-10 L1813233-02 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 10:00 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426252	1	12/30/24 09:01	12/30/24 09:13	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 09:27	MAP	Mt. Juliet, TN

B-12 10-13 L1813233-03 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 10:05 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426252	1	12/30/24 09:01	12/30/24 09:13	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 09:38	MAP	Mt. Juliet, TN

B-12 13-15 L1813233-04 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 10:10 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426252	1	12/30/24 09:01	12/30/24 09:13	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 09:40	MAP	Mt. Juliet, TN

B-12 15-20 L1813233-05 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 10:20 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426252	1	12/30/24 09:01	12/30/24 09:13	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 09:42	MAP	Mt. Juliet, TN

B-12 20-25 L1813233-06 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 10:25 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426252	1	12/30/24 09:01	12/30/24 09:13	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 09:43	MAP	Mt. Juliet, TN

B-12 25-30 L1813233-07 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 10:30 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426252	1	12/30/24 09:01	12/30/24 09:13	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 09:45	MAP	Mt. Juliet, TN

B-13 0-5 L1813233-08 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 11:05 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426252	1	12/30/24 09:01	12/30/24 09:13	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 10:18	MAP	Mt. Juliet, TN

B-13 5-10 L1813233-09 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 11:10 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426252	1	12/30/24 09:01	12/30/24 09:13	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 09:48	MAP	Mt. Juliet, TN

B-13 10-12.5 L1813233-10 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 11:15 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426253	1	12/30/24 08:50	12/30/24 08:59	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 09:50	MAP	Mt. Juliet, TN

B-13 12.5-15 L1813233-11 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 11:20 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426253	1	12/30/24 08:50	12/30/24 08:59	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 09:52	MAP	Mt. Juliet, TN

B-13 15-20 L1813233-12 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 11:25 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426253	1	12/30/24 08:50	12/30/24 08:59	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 09:53	MAP	Mt. Juliet, TN

B-13 20-25 L1813233-13 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 11:30 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426253	1	12/30/24 08:50	12/30/24 08:59	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 09:58	MAP	Mt. Juliet, TN

B-13 25-28 L1813233-14 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 11:40 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426253	1	12/30/24 08:50	12/30/24 08:59	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425999	1	12/29/24 21:50	12/30/24 11:17	DJS	Mt. Juliet, TN

B-14 0-5 L1813233-15 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 12:05 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426253	1	12/30/24 08:50	12/30/24 08:59	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 10:00	MAP	Mt. Juliet, TN

B-14 5-10 L1813233-16 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 12:10 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426253	1	12/30/24 08:50	12/30/24 08:59	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 10:02	MAP	Mt. Juliet, TN

B-14 10-15 L1813233-17 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 12:15 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426253	1	12/30/24 08:50	12/30/24 08:59	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 10:03	MAP	Mt. Juliet, TN

B-14 15-20 L1813233-18 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 12:20 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426253	1	12/30/24 08:50	12/30/24 08:59	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 10:05	MAP	Mt. Juliet, TN

B-14 20-25 L1813233-19 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 12:30 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426253	1	12/30/24 08:50	12/30/24 08:59	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425931	1	12/28/24 19:59	12/29/24 11:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2425918	1	12/28/24 15:41	12/28/24 19:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2425998	1	12/29/24 22:29	12/30/24 10:07	MAP	Mt. Juliet, TN

B-14 25-30 L1813233-20 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 12:50 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426254	1	12/30/24 08:39	12/30/24 08:48	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425932	1	12/29/24 10:28	12/29/24 16:30	BRT	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2426055	1	12/29/24 10:23	12/29/24 13:56	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2426000	1	12/29/24 21:47	12/30/24 08:56	MAP	Mt. Juliet, TN

B-14 30-33 L1813233-21 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 13:05 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426254	1	12/30/24 08:39	12/30/24 08:48	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425932	1	12/29/24 10:28	12/29/24 16:30	BRT	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2426055	1	12/29/24 10:23	12/29/24 13:56	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2426000	1	12/29/24 21:47	12/30/24 08:36	MAP	Mt. Juliet, TN

B-15 0-5 L1813233-22 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 13:20 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426254	1	12/30/24 08:39	12/30/24 08:48	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425932	1	12/29/24 10:28	12/29/24 16:30	BRT	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2426055	1	12/29/24 10:23	12/29/24 13:56	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2426000	1	12/29/24 21:47	12/30/24 08:57	MAP	Mt. Juliet, TN

B-15 5-10 L1813233-23 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 13:25 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426254	1	12/30/24 08:39	12/30/24 08:48	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425932	1	12/29/24 10:28	12/29/24 16:30	BRT	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2426055	1	12/29/24 10:23	12/29/24 13:56	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2426000	1	12/29/24 21:47	12/30/24 08:59	MAP	Mt. Juliet, TN

B-15 10-13 L1813233-24 Solid

Collected by: Matt VanderPutten | Collected date/time: 12/23/24 13:30 | Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426254	1	12/30/24 08:39	12/30/24 08:48	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425932	1	12/29/24 10:28	12/29/24 16:30	BRT	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2426055	1	12/29/24 10:23	12/29/24 13:56	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2426000	1	12/29/24 21:47	12/30/24 09:01	MAP	Mt. Juliet, TN

B-15 13-15 L1813233-25 Solid

Collected by: Matt VanderPutten
Collected date/time: 12/23/24 13:35
Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426254	1	12/30/24 08:39	12/30/24 08:48	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425932	1	12/29/24 10:28	12/29/24 16:30	BRT	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2426055	1	12/29/24 10:23	12/29/24 13:56	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2426000	1	12/29/24 21:47	12/30/24 09:02	MAP	Mt. Juliet, TN

B-15 15-20 L1813233-26 Solid

Collected by: Matt VanderPutten
Collected date/time: 12/23/24 13:40
Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426254	1	12/30/24 08:39	12/30/24 08:48	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425932	1	12/29/24 10:28	12/29/24 16:30	BRT	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2426055	1	12/29/24 10:23	12/29/24 13:56	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2426000	1	12/29/24 21:47	12/30/24 09:04	MAP	Mt. Juliet, TN

B-15 20-25 L1813233-27 Solid

Collected by: Matt VanderPutten
Collected date/time: 12/23/24 13:50
Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426254	1	12/30/24 08:39	12/30/24 08:48	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425932	1	12/29/24 10:28	12/29/24 16:30	BRT	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2426055	1	12/29/24 10:23	12/29/24 13:56	BMD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2426000	1	12/29/24 21:47	12/30/24 09:06	MAP	Mt. Juliet, TN

B-15 25-30 L1813233-28 Solid

Collected by: Matt VanderPutten
Collected date/time: 12/23/24 14:00
Received date/time: 12/28/24 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2426254	1	12/30/24 08:39	12/30/24 08:48	CMB	Mt. Juliet, TN
Wet Chemistry by Method 2580 B-2011	WG2425932	1	12/29/24 10:28	12/29/24 16:30	BRT	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2426055	1	12/29/24 10:23	12/29/24 13:56	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2426000	1	12/29/24 21:47	12/30/24 09:07	MAP	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.4		1	12/30/2024 09:13	WG2426252

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	198	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	7.89	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-01 WG2425918: 7.89 at 21.2C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	21600		12.3	1	12/30/2024 09:25	WG2425998
Molybdenum	18.3		0.614	1	12/30/2024 09:25	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.5		1	12/30/2024 09:13	WG2426252

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	196	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	7.47	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-02 WG2425918: 7.47 at 21.2C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	16900		12.7	1	12/30/2024 09:27	WG2425998
Molybdenum	ND		0.637	1	12/30/2024 09:27	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.0		1	12/30/2024 09:13	WG2426252

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	161	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	7.93	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-03 WG2425918: 7.93 at 21C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	14500		12.3	1	12/30/2024 09:38	WG2425998
Molybdenum	ND		0.617	1	12/30/2024 09:38	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.4		1	12/30/2024 09:13	WG2426252

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	191	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.23	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-04 WG2425918: 8.23 at 20.8C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	14000		12.8	1	12/30/2024 09:40	WG2425998
Molybdenum	ND		0.638	1	12/30/2024 09:40	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	74.1		1	12/30/2024 09:13	WG2426252

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	190	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.04	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-05 WG2425918: 8.04 at 20.9C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	17300		13.5	1	12/30/2024 09:42	WG2425998
Molybdenum	4.59		0.674	1	12/30/2024 09:42	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	76.1		1	12/30/2024 09:13	WG2426252

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	195	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	7.89	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-06 WG2425918: 7.89 at 21C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	21100		13.1	1	12/30/2024 09:43	WG2425998
Molybdenum	1.83		0.657	1	12/30/2024 09:43	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	77.0		1	12/30/2024 09:13	WG2426252

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	189	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.01	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-07 WG2425918: 8.01 at 20.9C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	11900		13.0	1	12/30/2024 09:45	WG2425998
Molybdenum	1.38		0.649	1	12/30/2024 09:45	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.6		1	12/30/2024 09:13	WG2426252

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	187	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.33	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-08 WG2425918: 8.33 at 20.7C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	22400		12.1	1	12/30/2024 10:18	WG2425998
Molybdenum	59.5		0.606	1	12/30/2024 10:18	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.5		1	12/30/2024 09:13	WG2426252

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	195	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.16	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-09 WG2425918: 8.16 at 20.6C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	21300		12.7	1	12/30/2024 09:48	WG2425998
Molybdenum	27.5		0.637	1	12/30/2024 09:48	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	74.8		1	12/30/2024 08:59	WG2426253

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	175	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.60	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-10 WG2425918: 8.6 at 21.2C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	11700		13.4	1	12/30/2024 09:50	WG2425998
Molybdenum	2.06		0.668	1	12/30/2024 09:50	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.1		1	12/30/2024 08:59	WG2426253

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	181	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.10	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-11 WG2425918: 8.1 at 21.3C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	18000		12.3	1	12/30/2024 09:52	WG2425998
Molybdenum	45.0		0.617	1	12/30/2024 09:52	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.4		1	12/30/2024 08:59	WG2426253

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	179	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.52	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-12 WG2425918: 8.52 at 21.3C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	13600		12.8	1	12/30/2024 09:53	WG2425998
Molybdenum	28.5		0.638	1	12/30/2024 09:53	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	77.2		1	12/30/2024 08:59	WG2426253

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	174	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.20	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-13 WG2425918: 8.2 at 21.3C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	10000		13.0	1	12/30/2024 09:58	WG2425998
Molybdenum	9.75		0.648	1	12/30/2024 09:58	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.8		1	12/30/2024 08:59	WG2426253

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	173	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.76	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-14 WG2425918: 8.76 at 21.1C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	13800		11.4	1	12/30/2024 11:17	WG2425999
Molybdenum	1.53		0.569	1	12/30/2024 11:17	WG2425999

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.0		1	12/30/2024 08:59	WG2426253

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	179	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.07	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-15 WG2425918: 8.07 at 20.7C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	19500		11.9	1	12/30/2024 10:00	WG2425998
Molybdenum	0.833		0.595	1	12/30/2024 10:00	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.6		1	12/30/2024 08:59	WG2426253

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	184	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	7.92	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-16 WG2425918: 7.92 at 20.8C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	23000		12.3	1	12/30/2024 10:02	WG2425998
Molybdenum	40.7		0.613	1	12/30/2024 10:02	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.5		1	12/30/2024 08:59	WG2426253

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	177	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.38	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-17 WG2425918: 8.38 at 20.8C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	17400		12.7	1	12/30/2024 10:03	WG2425998
Molybdenum	4.16		0.637	1	12/30/2024 10:03	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.3		1	12/30/2024 08:59	WG2426253

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	181	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.68	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-18 WG2425918: 8.68 at 20.7C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	13600		12.8	1	12/30/2024 10:05	WG2425998
Molybdenum	9.52		0.638	1	12/30/2024 10:05	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	75.9		1	12/30/2024 08:59	WG2426253

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	179	T8	1	12/29/2024 11:00	WG2425931

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.14	T8	1	12/28/2024 19:20	WG2425918

Sample Narrative:

L1813233-19 WG2425918: 8.14 at 20.5C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	16300		13.2	1	12/30/2024 10:07	WG2425998
Molybdenum	14.8		0.659	1	12/30/2024 10:07	WG2425998

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	77.2		1	12/30/2024 08:48	WG2426254

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	177	T8	1	12/29/2024 16:30	WG2425932

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.29	T8	1	12/29/2024 13:56	WG2426055

Sample Narrative:

L1813233-20 WG2426055: 8.29 at 20.5C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	15200		13.0	1	12/30/2024 08:56	WG2426000
Molybdenum	11.9		0.648	1	12/30/2024 08:56	WG2426000

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.7		1	12/30/2024 08:48	WG2426254

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	164	T8	1	12/29/2024 16:30	WG2425932

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.48	T8	1	12/29/2024 13:56	WG2426055

Sample Narrative:

L1813233-21 WG2426055: 8.48 at 20.5C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	15600	V	11.9	1	12/30/2024 08:36	WG2426000
Molybdenum	2.68		0.597	1	12/30/2024 08:36	WG2426000

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.0		1	12/30/2024 08:48	WG2426254

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	175	T8	1	12/29/2024 16:30	WG2425932

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	7.83	T8	1	12/29/2024 13:56	WG2426055

Sample Narrative:

L1813233-22 WG2426055: 7.83 at 20.6C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	23800		12.0	1	12/30/2024 08:57	WG2426000
Molybdenum	ND		0.602	1	12/30/2024 08:57	WG2426000

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.1		1	12/30/2024 08:48	WG2426254

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	162	T8	1	12/29/2024 16:30	WG2425932

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.21	T8	1	12/29/2024 13:56	WG2426055

Sample Narrative:

L1813233-23 WG2426055: 8.21 at 20.5C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	18600		11.8	1	12/30/2024 08:59	WG2426000
Molybdenum	0.623		0.588	1	12/30/2024 08:59	WG2426000

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.7		1	12/30/2024 08:48	WG2426254

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	179	T8	1	12/29/2024 16:30	WG2425932

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	7.81	T8	1	12/29/2024 13:56	WG2426055

Sample Narrative:

L1813233-24 WG2426055: 7.81 at 20.3C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	25900		12.4	1	12/30/2024 09:01	WG2426000
Molybdenum	229		0.620	1	12/30/2024 09:01	WG2426000

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.8		1	12/30/2024 08:48	WG2426254

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	177	T8	1	12/29/2024 16:30	WG2425932

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	7.69	T8	1	12/29/2024 13:56	WG2426055

Sample Narrative:

L1813233-25 WG2426055: 7.69 at 20.4C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	11000		12.1	1	12/30/2024 09:02	WG2426000
Molybdenum	15.5		0.604	1	12/30/2024 09:02	WG2426000

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	77.4		1	12/30/2024 08:48	WG2426254

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	160	T8	1	12/29/2024 16:30	WG2425932

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.37	T8	1	12/29/2024 13:56	WG2426055

Sample Narrative:

L1813233-26 WG2426055: 8.37 at 20.3C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	11000		12.9	1	12/30/2024 09:04	WG2426000
Molybdenum	12.7		0.646	1	12/30/2024 09:04	WG2426000

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	74.1		1	12/30/2024 08:48	WG2426254

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	171	T8	1	12/29/2024 16:30	WG2425932

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.16	T8	1	12/29/2024 13:56	WG2426055

Sample Narrative:

L1813233-27 WG2426055: 8.16 at 20.5C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	10200		13.5	1	12/30/2024 09:06	WG2426000
Molybdenum	11.8		0.675	1	12/30/2024 09:06	WG2426000

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.0		1	12/30/2024 08:48	WG2426254

Wet Chemistry by Method 2580 B-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	mV			date / time	
ORP	169	T8	1	12/29/2024 16:30	WG2425932

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.23	T8	1	12/29/2024 13:56	WG2426055

Sample Narrative:

L1813233-28 WG2426055: 8.23 at 20.4C

Metals (ICP) by Method 6010D

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Iron	15100		11.6	1	12/30/2024 09:07	WG2426000
Molybdenum	2.58		0.581	1	12/30/2024 09:07	WG2426000

Method Blank (MB)

(MB) R4162984-1 12/30/24 09:13

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00500	J		

L1813233-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-01 12/30/24 09:13 • (DUP) R4162984-3 12/30/24 09:13

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	81.4	81.0	1	0.450		10

Laboratory Control Sample (LCS)

(LCS) R4162984-2 12/30/24 09:13

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	90.0-110	

Method Blank (MB)

(MB) R4162979-1 12/30/24 08:59

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00500	J		

L1813233-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-11 12/30/24 08:59 • (DUP) R4162979-3 12/30/24 08:59

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	81.1	79.9	1	1.51		10

Laboratory Control Sample (LCS)

(LCS) R4162979-2 12/30/24 08:59

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.1	100	90.0-110	

Method Blank (MB)

(MB) R4162972-1 12/30/24 08:48

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00700	J		

L1813233-21 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-21 12/30/24 08:48 • (DUP) R4162972-3 12/30/24 08:48

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	83.7	85.8	1	2.47		10

Laboratory Control Sample (LCS)

(LCS) R4162972-2 12/30/24 08:48

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	90.0-110	

QUALITY CONTROL SUMMARY

L1813233-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19

L1813233-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-01 12/29/24 11:00 • (DUP) R4162674-3 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	198	198	1	0.300		10

L1813233-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-02 12/29/24 11:00 • (DUP) R4162674-4 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	196	197	1	0.600		10

L1813233-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-03 12/29/24 11:00 • (DUP) R4162674-5 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	161	163	1	1.40		10

L1813233-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-04 12/29/24 11:00 • (DUP) R4162674-6 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	191	191	1	0.200		10

L1813233-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-05 12/29/24 11:00 • (DUP) R4162674-7 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	190	190	1	0.700		10

L1813233-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-06 12/29/24 11:00 • (DUP) R4162674-8 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	195	195	1	0.300		10

L1813233-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-07 12/29/24 11:00 • (DUP) R4162674-9 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	189	190	1	0.900		10

L1813233-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-08 12/29/24 11:00 • (DUP) R4162674-10 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	187	189	1	2.10		10

L1813233-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-09 12/29/24 11:00 • (DUP) R4162674-11 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	195	193	1	2.10		10

L1813233-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-10 12/29/24 11:00 • (DUP) R4162674-12 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	175	179	1	3.60		10

L1813233-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-11 12/29/24 11:00 • (DUP) R4162674-13 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	181	183	1	2.30		10

L1813233-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-12 12/29/24 11:00 • (DUP) R4162674-14 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	179	181	1	2.20		10

QUALITY CONTROL SUMMARY

L1813233-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19

L1813233-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-13 12/29/24 11:00 • (DUP) R4162674-15 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	174	171	1	2.30		10

L1813233-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-14 12/29/24 11:00 • (DUP) R4162674-16 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	173	173	1	0.000		10

L1813233-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-15 12/29/24 11:00 • (DUP) R4162674-17 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	179	179	1	0.600		10

L1813233-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-16 12/29/24 11:00 • (DUP) R4162674-18 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	184	184	1	0.700		10

L1813233-17 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-17 12/29/24 11:00 • (DUP) R4162674-19 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	177	179	1	2.70		10

L1813233-18 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-18 12/29/24 11:00 • (DUP) R4162674-20 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	181	183	1	2.10		10

L1813233-19 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-19 12/29/24 11:00 • (DUP) R4162674-21 12/29/24 11:00

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	179	181	1	2.10		10

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4162674-1 12/29/24 11:00 • (LCSD) R4162674-2 12/29/24 11:00

Analyte	Spike Amount mV	LCS Result mV	LCSD Result mV	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	Diff mV	Diff Limits mV
ORP	228	225	222	98.6	97.5	90.0-110			2.50	10

L1813233-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-20 12/29/24 16:30 • (DUP) R4162727-3 12/29/24 16:30

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	177	172	1	5.40		10

L1813233-21 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-21 12/29/24 16:30 • (DUP) R4162727-4 12/29/24 16:30

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	164	158	1	6.10		10

L1813233-22 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-22 12/29/24 16:30 • (DUP) R4162727-5 12/29/24 16:30

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	175	179	1	4.50		10

L1813233-23 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-23 12/29/24 16:30 • (DUP) R4162727-6 12/29/24 16:30

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	162	169	1	6.80		10

L1813233-24 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-24 12/29/24 16:30 • (DUP) R4162727-7 12/29/24 16:30

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	179	179	1	0.600		10

L1813233-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-25 12/29/24 16:30 • (DUP) R4162727-8 12/29/24 16:30

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	177	182	1	5.00		10

L1813233-26 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-26 12/29/24 16:30 • (DUP) R4162727-9 12/29/24 16:30

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	160	164	1	3.60		10

L1813233-27 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-27 12/29/24 16:30 • (DUP) R4162727-10 12/29/24 16:30

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	171	175	1	4.60		10

L1813233-28 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-28 12/29/24 16:30 • (DUP) R4162727-11 12/29/24 16:30

Analyte	Original Result mV	DUP Result mV	Dilution	DUP Diff mV	DUP Qualifier	DUP Diff Limits mV
ORP	169	171	1	2.60		10

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4162727-1 12/29/24 16:30 • (LCSD) R4162727-2 12/29/24 16:30

Analyte	Spike Amount mV	LCS Result mV	LCSD Result mV	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	Diff mV	Diff Limits mV
ORP	228	218	216	95.4	94.9	90.0-110			1.10	10

L1813233-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-02 12/28/24 19:20 • (DUP) R4162604-2 12/28/24 19:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.47	7.43	1	0.537		1

Sample Narrative:

OS: 7.47 at 21.2C

DUP: 7.43 at 21.1C

L1813233-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-14 12/28/24 19:20 • (DUP) R4162604-3 12/28/24 19:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	8.76	8.71	1	0.572		1

Sample Narrative:

OS: 8.76 at 21.1C

DUP: 8.71 at 21.1C

Laboratory Control Sample (LCS)

(LCS) R4162604-1 12/28/24 19:20

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	su	su	%	%	
pH	10.0	9.97	99.7	99.0-101	

Sample Narrative:

LCS: 9.97 at 20C

L1813233-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1813233-25 12/29/24 13:56 • (DUP) R4162678-2 12/29/24 13:56

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.69	7.69	1	0.000		1

Sample Narrative:

OS: 7.69 at 20.4C

DUP: 7.69 at 20.4C

Laboratory Control Sample (LCS)

(LCS) R4162678-1 12/29/24 13:56

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	su	su	%	%	
pH	10.0	10.0	100	99.0-101	

Sample Narrative:

LCS: 10 at 20.5C

Method Blank (MB)

(MB) R4163012-1 12/30/24 09:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Iron	U		2.24	10.0
Molybdenum	U		0.0170	0.500

Laboratory Control Sample (LCS)

(LCS) R4163012-2 12/30/24 09:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron	1000	1110	111	80.0-120	
Molybdenum	100	112	112	80.0-120	

L1813161-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1813161-01 12/30/24 09:15 • (MS) R4163012-5 12/30/24 09:20 • (MSD) R4163012-6 12/30/24 09:22

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	1000	14200	13400	14100	0.000	0.000	1	75.0-125	V	V	4.99	20
Molybdenum	100	ND	89.2	86.7	89.2	86.7	1	75.0-125			2.80	20

Method Blank (MB)

(MB) R4162946-1 12/30/24 10:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Iron	U		2.24	10.0
Molybdenum	0.124	J	0.0170	0.500

Laboratory Control Sample (LCS)

(LCS) R4162946-2 12/30/24 10:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron	1000	997	99.7	80.0-120	
Molybdenum	100	101	101	80.0-120	

L1813004-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1813004-05 12/30/24 10:37 • (MS) R4162946-5 12/30/24 10:42 • (MSD) R4162946-6 12/30/24 10:43

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	1110	10800	12100	12200	120	129	1	75.0-125		V	0.838	20
Molybdenum	111	0.637	107	109	96.0	97.9	1	75.0-125			1.88	20

Method Blank (MB)

(MB) R4163011-2 12/30/24 08:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Iron	U		2.24	10.0
Molybdenum	0.0279	J	0.0170	0.500

Laboratory Control Sample (LCS)

(LCS) R4163011-1 12/30/24 08:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron	1000	1070	107	80.0-120	
Molybdenum	100	110	110	80.0-120	

L1813233-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1813233-21 12/30/24 08:36 • (MS) R4163011-5 12/30/24 08:41 • (MSD) R4163011-6 12/30/24 08:42

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	1190	15600	16600	18700	81.8	257	1	75.0-125		V	11.9	20
Molybdenum	119	2.68	122	114	99.7	93.4	1	75.0-125			6.41	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

SCS Engineers
8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th St
Overland Park, KS 66210

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: **John Rockhold**

Email To: **jrockhold@SCSEngineers.com**

Project Description: **Evergy Sibley FAI**

City/State Collected: **Sibley, MO**

Please Circle: PT MT CT ET

Phone: **913-302-8254**
Fax:

Client Project # **27222162.23 #6**

Lab Project #

SDG # L1187074

D119

Collected by (print): **Matt VanderPutten**

Site/Facility ID #

P.O. #

Acctnum: **AQUAOPKS**

Template: **T229665**

Prelogin:

PM: **206-Jeff Carr**

PB:

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: **Standard**

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Iron & Molybdenum 2oz clear	ORP & pH 4oz clear	Remarks	Sample # (lab only)
B-12 0-5	Grab	SS	0-5	12/23/24	955	2	X	X		-01
B-12 5-10	Grab	SS	5-10	12/23/24	1000	2	X	X		-02
B-12 10-13	Grab	SS	10-13	12/23/24	1005	2	X	X		-03
B-12 13-15	Grab	SS	13-15	12/23/24	1010	2	X	X		-04
B-12 15-20	Grab	SS	15-20	12/23/24	1020	2	X	X		-05
B-12 15-20	Grab	SS	20-25	12/23/24	1025	2	X	X		-06
B-12 25-30	Grab	SS	25-30	12/23/24	1030	2	X	X		-07
B-13 0-5	Grab	SS	0-5	12/23/24	1105	2	X	X		-08
B-13 5-10	Grab	SS	5-10	12/23/24	1110	2	X	X		-09
B-13 10-12.5	Grab	SS	10-12.5	12/23/24	1115	2	X	X		-10

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:
Ran out of 4oz jars so used 8oz

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 4041 0473 9210

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	12/27/24	1100		0
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.5 °C Bottles Received: 56
				If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 12/28/24 Time: 0830
				Hold: / Condition: NCF / OK

SCS Engineers
8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th St
Overland Park, KS 66210

Pres Chk

Report to: **John Rockhold**

Email To: **jrockhold@SCSEngineers.com**

Project Description: **Evergy Sibley FAI**

City/State Collected: **Sibley, MO**

Please Circle: PT MT (CT) ET

Phone: **913-302-8254**
Fax:

Client Project # **27222162.23 #6**

Lab Project #

Collected by (print): **Matt VanderPutten**

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y X

Rush? (Lab MUST Be Notified)
____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day

Quote #

Date Results Needed: **Standard**

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1813777

Table #

Acctnum: **AQUAOPKS**
Template: **T229665**
Prelogin:
PM: **206-Jeff Carr**
PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Iron & Molybdenum 2oz clear	ORP & pH 4oz clear	Remarks	Sample # (lab only)
B-13 12.5-15	Grab	SS	12.5-15	12/23/24	1120	2	X	X		-11
B-13 15-20	Grab	SS	15-20	12/23/24	1125	2	X	X		-12
B-13 20-25	Grab	SS	20-25	12/23/24	1130	2	X	X		-13
B-13 25-28	Grab	SS	25-28	12/23/24	1140	2	X	X		-14
B-14 0-5	Grab	SS	0-5	12/23/24	1205	2	X	X		-15
B-14 5-10	Grab	SS	5-10	12/23/24	1210	2	X	X		-16
B-14 10-15	Grab	SS	10-15	12/23/24	1215	2	X	X		-17
B-14 15-20	Grab	SS	15-20	12/23/24	1220	2	X	X		-18
B-14 20-25	Grab	SS	20-25	12/23/24	1230	2	X	X		-19
B-14 25-30	Grab	SS	25-30	12/23/24	1250	2	X	X		-20

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:
Ran out of 4oz jars so used 8oz

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 4041 0473 9210

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

	Date:	Time:		
Relinquished by : (Signature)	12/27/24	1100	Received by: (Signature)	Trip Blank Received: Yes (No) HCL / MeoH TBR: 0
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.5 °C Bottles Received: 2.5 56
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 12/28/24 Time: 0830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

SCS Engineers
8575 W. 110th Street
Overland Park, KS 66210

Billing Information:
Accounts Payable
8575 W. 110th St
Overland Park, KS 66210

Pres Chk

Report to: **John Rockhold**

Email To: **jrockhold@SCSEngineers.com**

Project Description: **Evergy Sibley FAI**

City/State Collected: **Sibley, MO**

Please Circle: PT MT (CT) ET

Phone: **913-302-8254**
Fax:

Client Project # **27222162.23 #6**

Lab Project #

Collected by (print): **Matt VanderPutten**

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y X

Rush? (Lab MUST Be Notified)
____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day

Quote #

Date Results Needed: **Standard**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Iron & Molybdenum 2oz clear	ORP & pH 4oz clear
B-14 30-33	Grab	SS	30-33	12/23/24	1305	2	X	X
B-15 0-5	Grab	SS	0-5	12/23/24	1320	2	X	X
B-15 5-10	Grab	SS	5-10	12/23/24	1325	2	X	X
B-15 10-13	Grab	SS	10-13	12/23/24	1330	2	X	X
B-15 13-15	Grab	SS	13-15	12/23/24	1335	2	X	X
B-15 15-20	Grab	SS	15-20	12/23/24	1340	2	X	X
B-15 20-25	Grab	SS	20-25	12/23/24	1350	2	X	X
B-15 25-30	Grab	SS	25-30	12/23/24	1400	2	X	X

Chain of Custody Page ___ of ___

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Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1272[illegible]

Table #

Acctnum: **AQUAOPKS**
Template: **T229665**
Prelogin:
PM: **206-Jeff Carr**
PB:

Shipped Via:

Remarks	Sample # (lab only)
	-21
	-22
	-23
	-24
	-25
	-26
	-27
	-28

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:
Ran out of 4oz jars so used 8oz

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 4041 0473 9210

Sample Receipt Checklist
COC Seal Present/Intact: __NP (Y) __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	12/27/24	1100	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / (No) HCL / MeoH TBR
0

Temp: 2.5 to -2.5 °C Bottles Received: 56

Date: 12/28/24 Time: 0830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

APPENDIX D

STATISTICAL ANALYSES

D.1 Fall 2023 Semiannual Assessment Monitoring Statistical Analyses

D.2 Spring 2024 Semiannual and Annual Assessment Monitoring Statistical Analyses

Appendix D.1

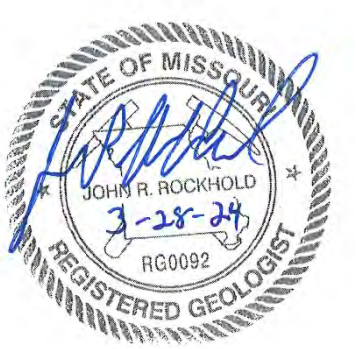
Fall 2023 Semiannual Assessment Monitoring Statistical Analyses

SCS ENGINEERS

Environmental Consulting & Contracting

MEMORANDUM

March 28, 2024



To: Sibley Generating Station
33200 E Johnson Road
Sibley, Missouri 64088
Evergy Missouri West, Inc.

From: SCS Engineers
John Rockhold, P.G.
Douglas Doerr, P.E.

RE: Determination of Statistically Significant Increases/Levels – Fly Ash Impoundment
November 2023 Semi-Annual Assessment Monitoring 40 CFR 257.95

Statistical analysis of monitoring data from the groundwater monitoring system for the Fly Ash Impoundment at the Sibley Generating Station has been completed in substantial compliance with the "Statistical Method Certification by A Qualified Professional Engineer" dated October 12, 2017. Groundwater samples were collected on November 15, 2023. Review and validation of the results from the November 2023 Assessment Monitoring Event was completed on January 2, 2024 which constitutes completion and finalization of assessment monitoring laboratory analyses. A statistical analysis was then conducted to determine whether there were statistically significant increases (SSIs) over background values and whether the concentrations were at statistically significant levels (SSLs) above their groundwater protection standard (GWPS) for each constituent analyzed as part of the Assessment Monitoring Event.

The completed statistical evaluation identified two Appendix IV constituents above their prediction limits and one Appendix IV constituent above its GWPS at an SSL established for specific wells.

Constituent/Monitoring Well	*UPL/**GWPS	Observation November 15, 2023	Verification
Molybdenum			
MW-806R	1.395/1.395	1.64	NA
Selenium			
MW-801	0.00234/0.05	0.00263	NA

*UPL – Upper Prediction Limit
**GWPS – Groundwater Protection Standard
NA – Not Applicable

Determination: A statistical evaluation was completed for the Appendix IV assessment monitoring constituents in accordance with the certified statistical method. The statistical evaluation identified an SSIs above the background prediction limit for molybdenum in monitoring well MW-806R and for selenium in monitoring well MW-801. The detected molybdenum in monitoring well MW-806R was

also identified at an SSL above its GWPS. However, the selenium concentrations in monitoring well MW-801 was below its respective GWPS.

Attached to this memorandum are the following backup information:

Attachment 1: Sanitas™ Output:

Statistical evaluation output from Sanitas™ for the prediction limit analysis. This includes prediction limit plots, prediction limit background data, assessment sample results, verification re-sample results (when applicable), and a Prediction Limit summary table. Output documentation includes the analytical data used for the statistical analyses.

Attachment 2: Sanitas™ Configuration Settings:

Screen shots of the applicable Sanitas™ configuration settings for the statistical prediction limit analysis. This includes data configuration, output configuration, prediction limit configuration and other tests configuration.

Revision Number	Revision Date	Attachment Revised	Summary of Revisions

Sibley Generating Station
Determination of Statistically Significant Increases
Fly Ash Impoundment
March 28, 2024

ATTACHMENT 1

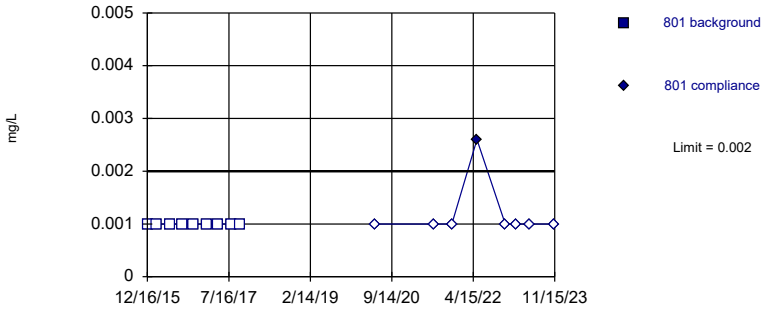
Sanitas™ Output

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Arsenic Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

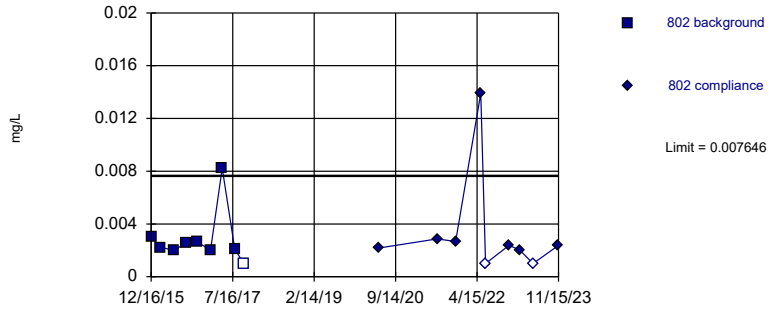
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=0.1368, Std. Dev.=0.02743, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7996, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Arsenic Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

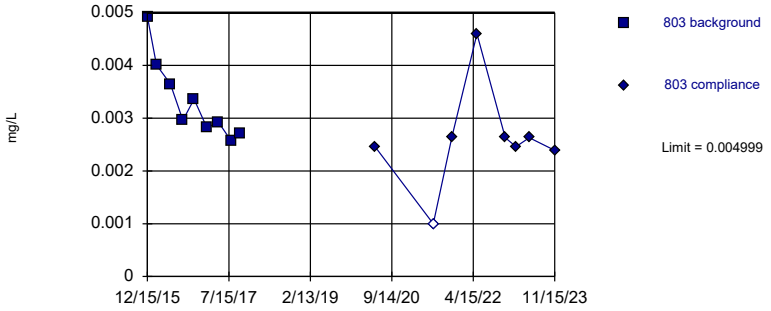
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.003324, Std. Dev.=0.0007636, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8749, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Arsenic Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

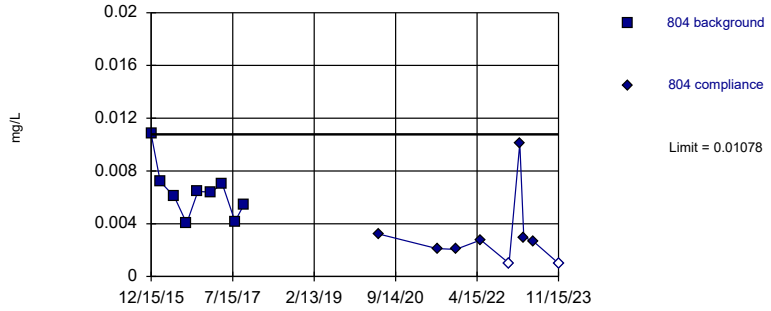
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.006396, Std. Dev.=0.001997, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8818, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Arsenic Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Arsenic Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

	801	801	802	802	803	803	804	804
12/15/2015					0.00493		0.0108	
12/16/2015	<0.002		0.00304					
2/17/2016	<0.002		0.00223		0.00401		0.00719	
5/26/2016	<0.002		0.002		0.00365		0.00607	
8/23/2016	<0.002		0.00257		0.00296		0.00403	
11/10/2016	<0.002		0.00262		0.00336		0.00644	
2/9/2017	<0.002		0.002		0.00282		0.0064	
5/3/2017	<0.002		0.00823		0.00292		0.007	
8/1/2017	<0.002		0.00206		0.00257		0.00418	
10/4/2017	<0.002		<0.002		0.0027		0.00545	
5/18/2020		<0.002		0.00218		0.00246		0.00322
7/6/2021		<0.002		0.00286		<0.002		0.00211
11/15/2021		<0.002		0.00267		0.00265		0.00205
5/12/2022		0.0026		0.0139		0.0046		0.00277
6/15/2022				<0.002				
11/29/2022		<0.002		0.00238		0.00263		<0.002
2/13/2023		<0.002		0.00202		0.00246		0.0101
3/13/2023								0.00297
5/18/2023		<0.002		<0.002		0.00263		0.00269
11/15/2023		<0.002		0.00238		0.00239		<0.002

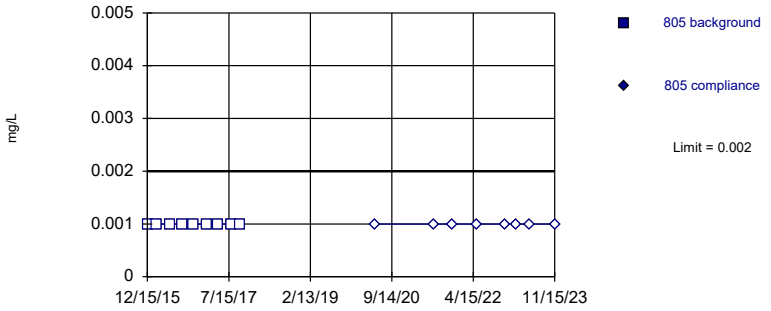
ND substitution: RL/2.

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

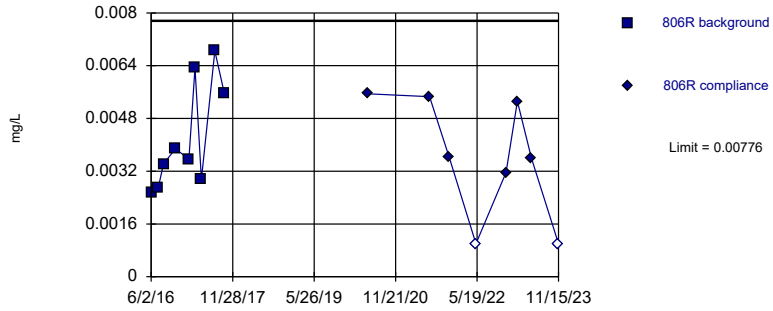
Constituent: Arsenic Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.004201, Std. Dev.=0.001623, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8645, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

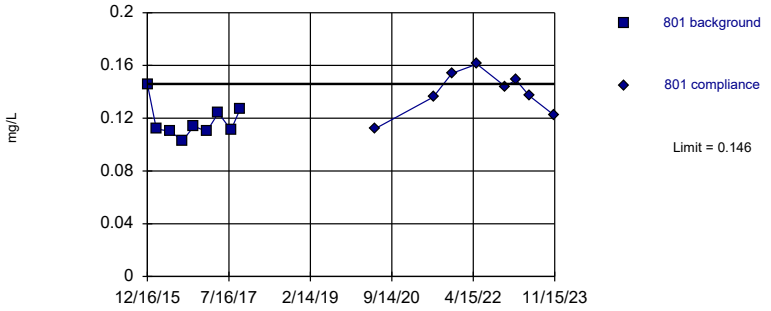
Constituent: Arsenic Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1174, Std. Dev.=0.013, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8491, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

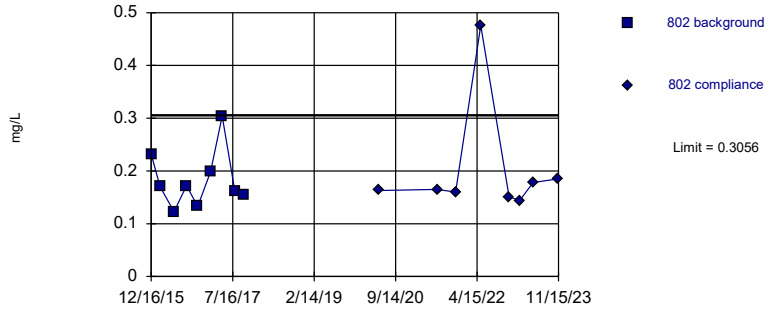
Constituent: Barium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1831, Std. Dev.=0.05583, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8822, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Arsenic, Barium Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

	805	805	806R	806R	801	801	802	802
12/15/2015	<0.002							
12/16/2015					0.146		0.232	
2/17/2016	<0.002				0.112		0.17	
5/26/2016	<0.002				0.11		0.123	
6/2/2016			0.00256					
7/19/2016			0.00269					
8/23/2016	<0.002		0.00342		0.103		0.172	
11/10/2016	<0.002				0.114		0.133	
11/11/2016			0.00388					
2/9/2017	<0.002		0.00357		0.11		0.198	
3/22/2017			0.00634					
5/3/2017	<0.002		0.00295		0.124		0.304	
8/1/2017	<0.002		0.00685		0.111		0.162	
10/4/2017	<0.002		0.00555		0.127		0.154	
5/18/2020		<0.002		0.00555		0.112		0.163
7/6/2021		<0.002		0.00546		0.136		0.165
11/15/2021		<0.002		0.00362		0.154		0.16
5/12/2022		<0.002		<0.002		0.161		0.476
11/29/2022		<0.002		0.00316		0.144		0.151
2/13/2023		<0.002		0.00532		0.149		0.144
5/18/2023		<0.002		0.00359		0.137		0.178
11/15/2023		<0.002		<0.002		0.122		0.185

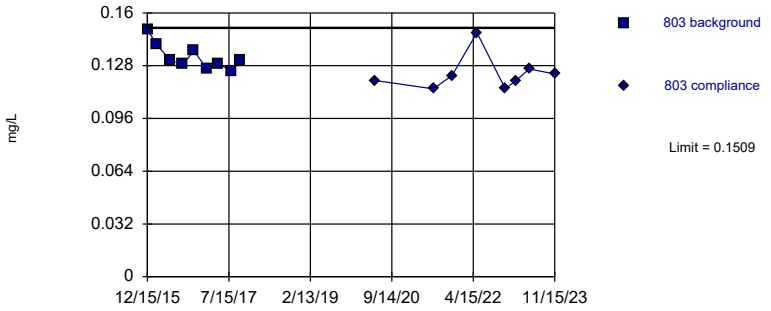
ND substitution: RL/2.

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1332, Std. Dev.=0.008074, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8745, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

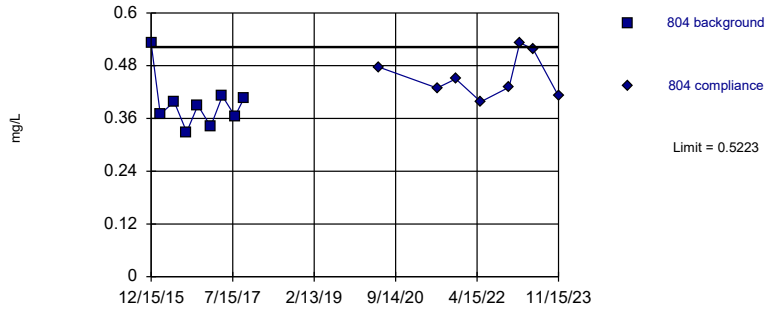
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.3936, Std. Dev.=0.05871, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8386, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

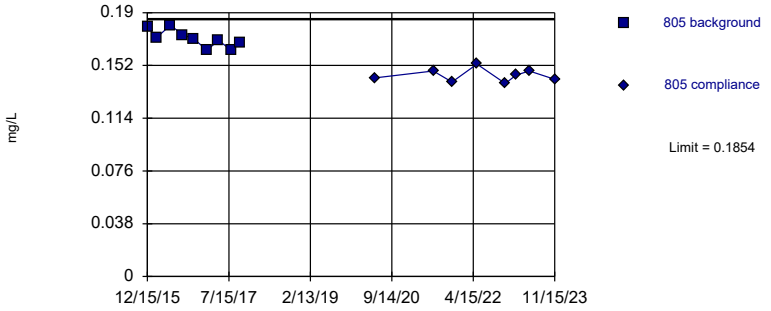
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1713, Std. Dev.=0.006403, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9324, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

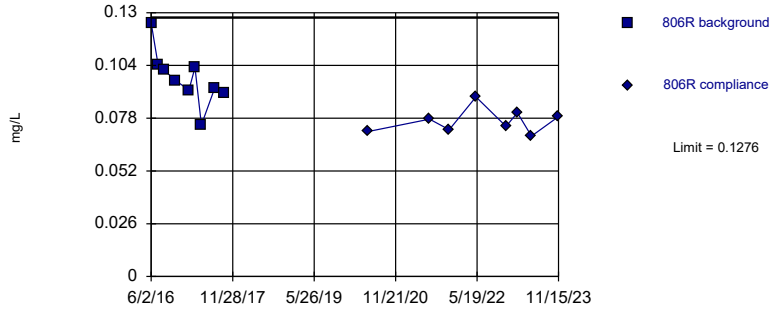
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.09781, Std. Dev.=0.01358, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9367, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Barium Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

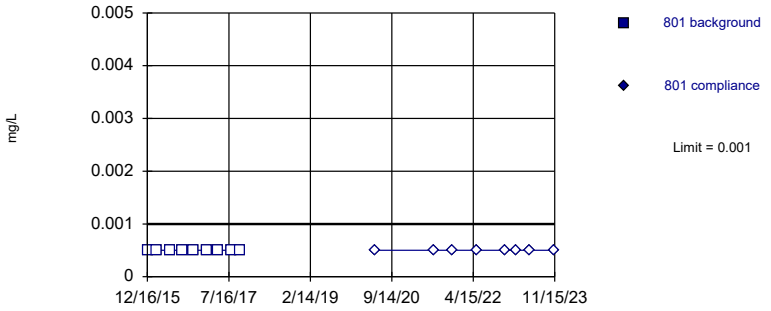
	803	803	804	804	805	805	806R	806R
12/15/2015	0.15		0.531		0.18			
2/17/2016	0.141		0.37		0.172			
5/26/2016	0.131		0.398		0.181			
6/2/2016							0.125	
7/19/2016							0.104	
8/23/2016	0.129		0.329		0.174		0.102	
11/10/2016	0.137		0.39		0.171			
11/11/2016							0.0966	
2/9/2017	0.126		0.342		0.163		0.0919	
3/22/2017							0.103	
5/3/2017	0.129		0.411		0.17		0.0747	
8/1/2017	0.125		0.365		0.163		0.093	
10/4/2017	0.131		0.406		0.168		0.0901	
5/18/2020		0.119		0.477		0.143		0.0714
7/6/2021		0.114		0.429		0.148		0.0775
11/15/2021		0.122		0.45		0.14		0.0723
5/12/2022		0.148		0.398		0.153		0.0885
11/29/2022		0.114		0.431		0.139		0.074
2/13/2023		0.119		0.532		0.145		0.0807
5/18/2023		0.126		0.518		0.148		0.0692
11/15/2023		0.123		0.411		0.142		0.0788

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Cadmium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

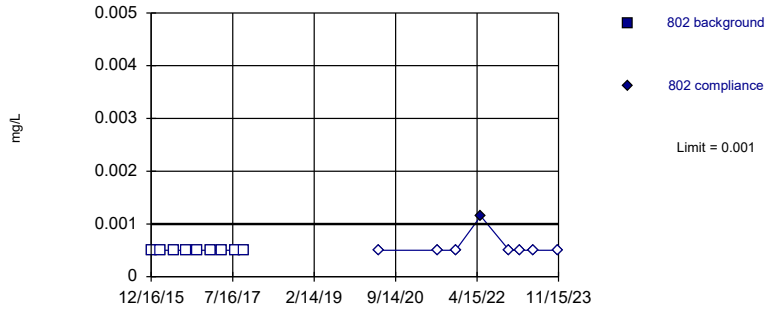
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Cadmium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

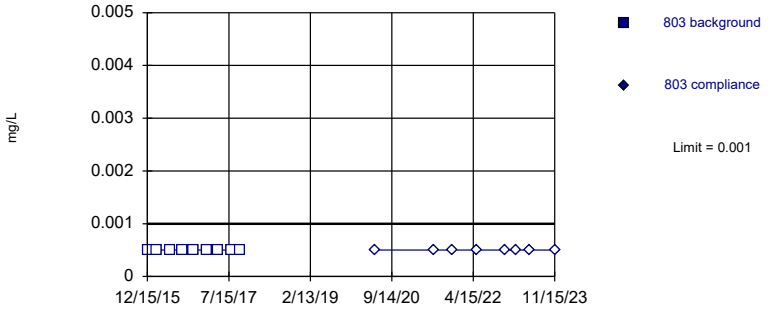
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Cadmium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

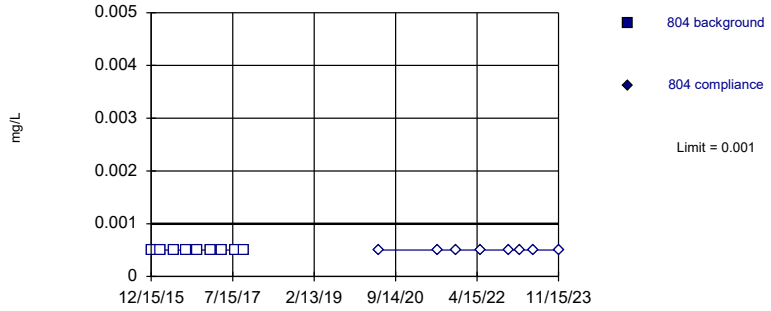
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Cadmium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Cadmium Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

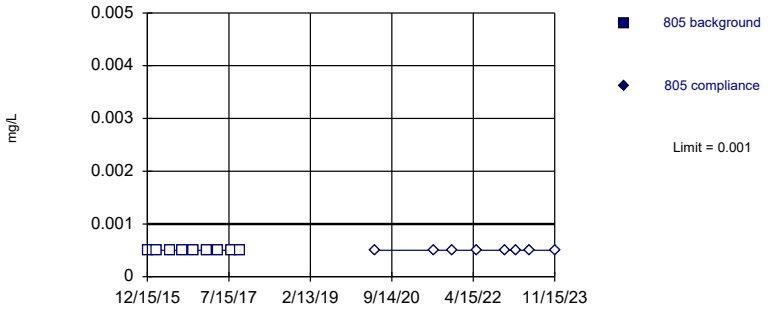
	801	801	802	802	803	803	804	804
12/15/2015					<0.001		<0.001	
12/16/2015	<0.001		<0.001					
2/17/2016	<0.001		<0.001		<0.001		<0.001	
5/26/2016	<0.001		<0.001		<0.001		<0.001	
8/23/2016	<0.001		<0.001		<0.001		<0.001	
11/10/2016	<0.001		<0.001		<0.001		<0.001	
2/9/2017	<0.001		<0.001		<0.001		<0.001	
5/3/2017	<0.001		<0.001		<0.001		<0.001	
8/1/2017	<0.001		<0.001		<0.001		<0.001	
10/4/2017	<0.001		<0.001		<0.001		<0.001	
5/18/2020		<0.001		<0.001		<0.001		<0.001
7/6/2021		<0.001		<0.001		<0.001		<0.001
11/15/2021		<0.001		<0.001		<0.001		<0.001
5/12/2022		<0.001		0.00115		<0.001		<0.001
11/29/2022		<0.001		<0.001		<0.001		<0.001
2/13/2023		<0.001		<0.001		<0.001		<0.001
5/18/2023		<0.001		<0.001		<0.001		<0.001
11/15/2023		<0.001		<0.001		<0.001		<0.001

ND substitution: RL/2.

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



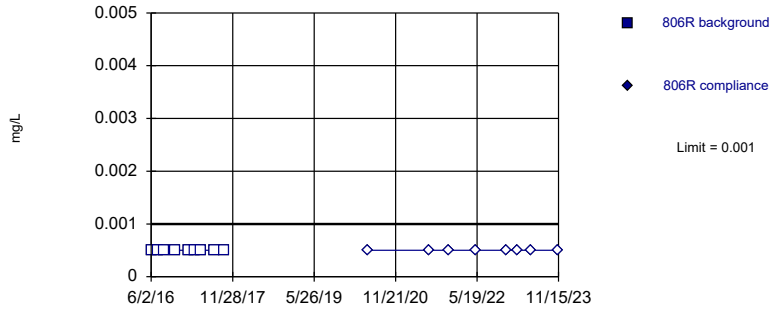
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Cadmium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



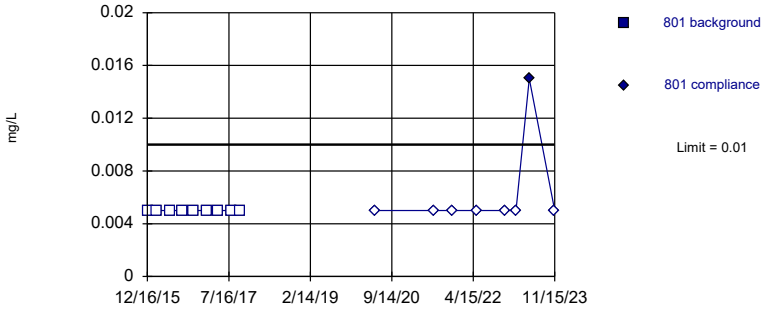
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Cadmium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



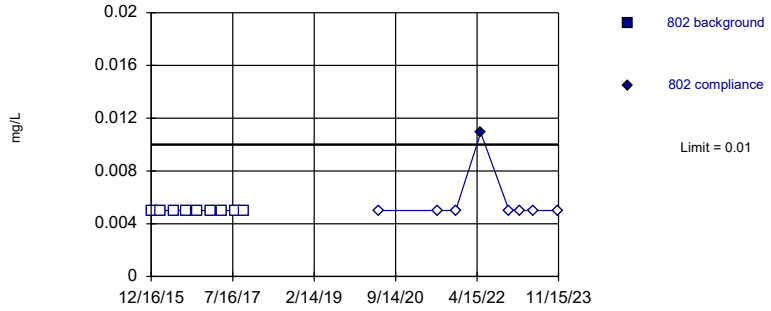
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Cadmium, Chromium Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

	805	805	806R	806R	801	801	802	802
12/15/2015	<0.001							
12/16/2015					<0.01		<0.01	
2/17/2016	<0.001				<0.01		<0.01	
5/26/2016	<0.001				<0.01		<0.01	
6/2/2016			<0.001					
7/19/2016			<0.001					
8/23/2016	<0.001		<0.001		<0.01		<0.01	
11/10/2016	<0.001				<0.01		<0.01	
11/11/2016			<0.001					
2/9/2017	<0.001		<0.001		<0.01		<0.01	
3/22/2017			<0.001					
5/3/2017	<0.001		<0.001		<0.01		<0.01	
8/1/2017	<0.001		<0.001		<0.01		<0.01	
10/4/2017	<0.001		<0.001		<0.01		<0.01	
5/18/2020		<0.001		<0.001		<0.01		<0.01
7/6/2021		<0.001		<0.001		<0.01		<0.01
11/15/2021		<0.001		<0.001		<0.01		<0.01
5/12/2022		<0.001		<0.001		<0.01		0.0109
11/29/2022		<0.001		<0.001		<0.01		<0.01
2/13/2023		<0.001		<0.001		<0.01		<0.01
5/18/2023		<0.001		<0.001		0.015		<0.01
11/15/2023		<0.001		<0.001		<0.01		<0.01

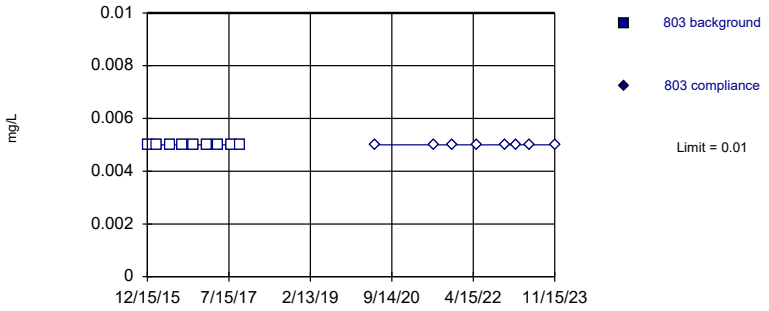
ND substitution: RL/2.

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

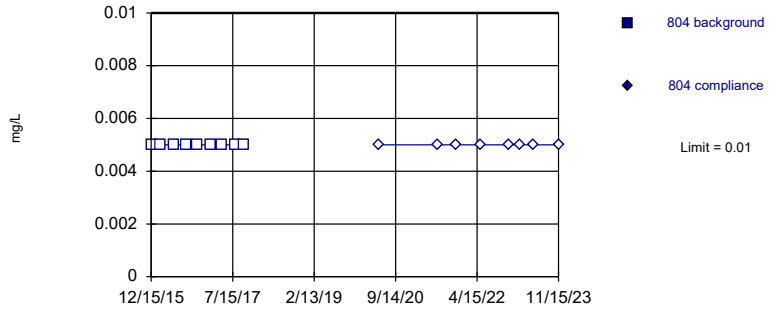
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

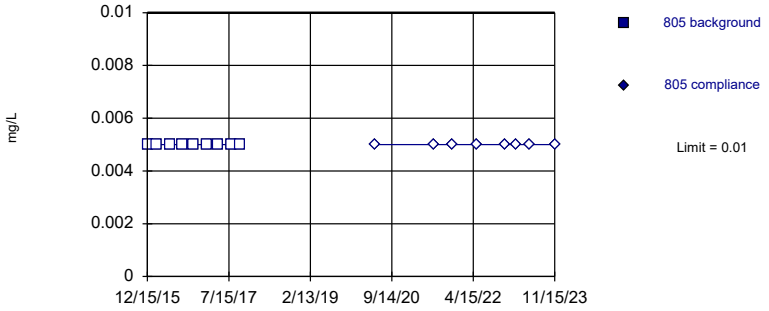
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

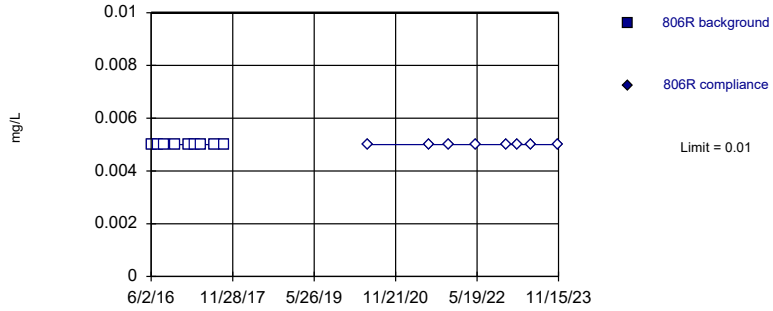
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Chromium Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

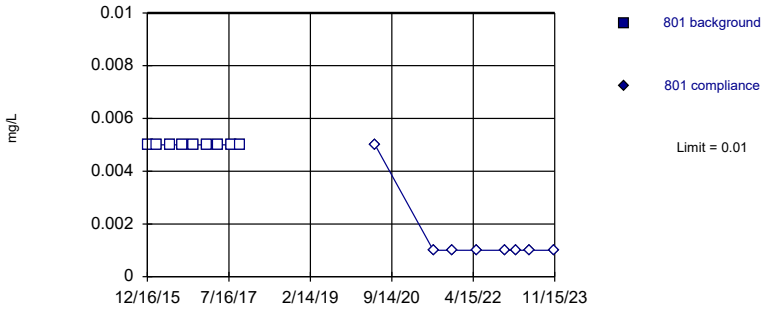
	803	803	804	804	805	805	806R	806R
12/15/2015	<0.01		<0.01		<0.01			
2/17/2016	<0.01		<0.01		<0.01			
5/26/2016	<0.01		<0.01		<0.01			
6/2/2016							<0.01	
7/19/2016							<0.01	
8/23/2016	<0.01		<0.01		<0.01		<0.01	
11/10/2016	<0.01		<0.01		<0.01			
11/11/2016							<0.01	
2/9/2017	<0.01		<0.01		<0.01		<0.01	
3/22/2017							<0.01	
5/3/2017	<0.01		<0.01		<0.01		<0.01	
8/1/2017	<0.01		<0.01		<0.01		<0.01	
10/4/2017	<0.01		<0.01		<0.01		<0.01	
5/18/2020		<0.01		<0.01		<0.01		<0.01
7/6/2021		<0.01		<0.01		<0.01		<0.01
11/15/2021		<0.01		<0.01		<0.01		<0.01
5/12/2022		<0.01		<0.01		<0.01		<0.01
11/29/2022		<0.01		<0.01		<0.01		<0.01
2/13/2023		<0.01		<0.01		<0.01		<0.01
5/18/2023		<0.01		<0.01		<0.01		<0.01
11/15/2023		<0.01		<0.01		<0.01		<0.01

ND substitution: RL/2.

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Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



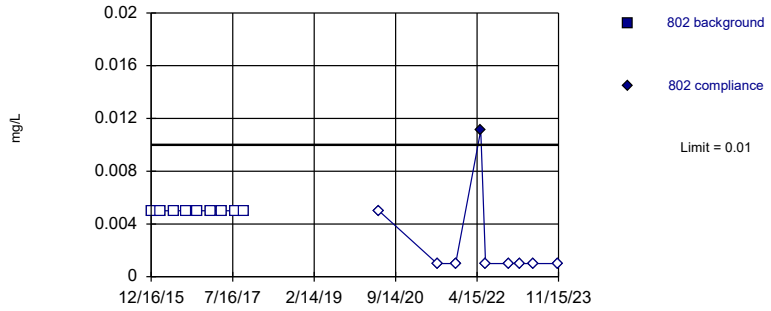
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Cobalt Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



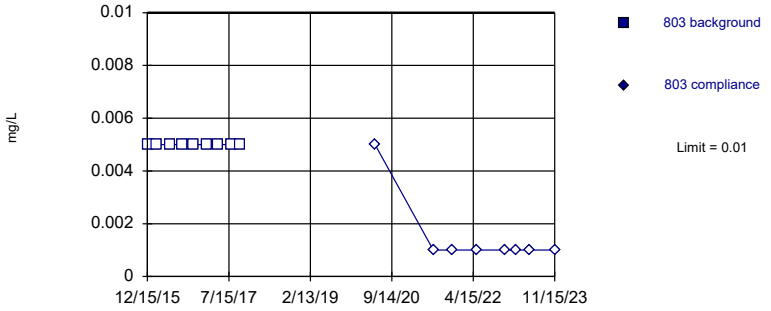
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Cobalt Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



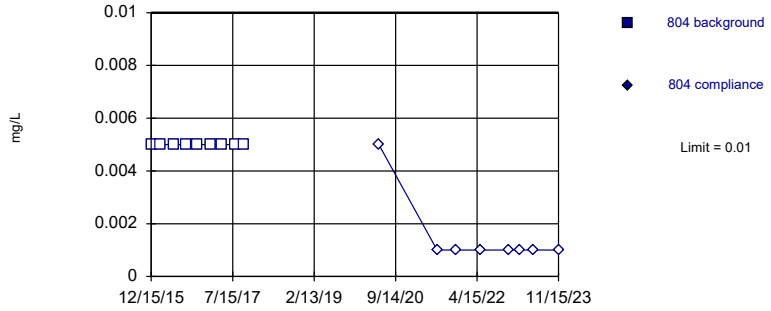
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Cobalt Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Cobalt Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Cobalt Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

	801	801	802	802	803	803	804	804
12/15/2015					<0.01		<0.01	
12/16/2015	<0.01		<0.01					
2/17/2016	<0.01		<0.01		<0.01		<0.01	
5/26/2016	<0.01		<0.01		<0.01		<0.01	
8/23/2016	<0.01		<0.01		<0.01		<0.01	
11/10/2016	<0.01		<0.01		<0.01		<0.01	
2/9/2017	<0.01		<0.01		<0.01		<0.01	
5/3/2017	<0.01		<0.01		<0.01		<0.01	
8/1/2017	<0.01		<0.01		<0.01		<0.01	
10/4/2017	<0.01		<0.01		<0.01		<0.01	
5/18/2020		<0.01		<0.01		<0.01		<0.01
7/6/2021		<0.002		<0.002		<0.002		<0.002
11/15/2021		<0.002		<0.002		<0.002		<0.002
5/12/2022		<0.002		0.0111		<0.002		<0.002
6/15/2022				<0.002				
11/29/2022		<0.002		<0.002		<0.002		<0.002
2/13/2023		<0.002		<0.002		<0.002		<0.002
5/18/2023		<0.002		<0.002		<0.002		<0.002
11/15/2023		<0.002		<0.002		<0.002		<0.002

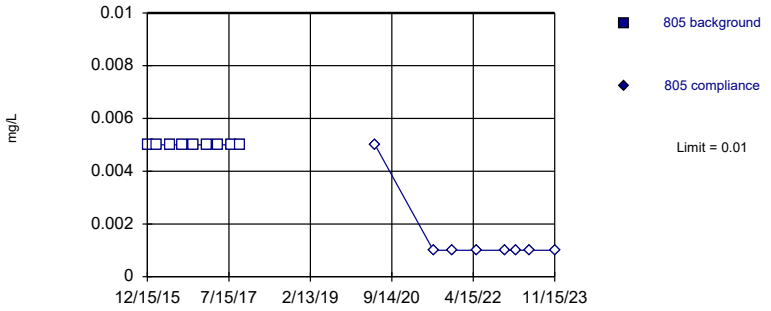
ND substitution: RL/2.

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

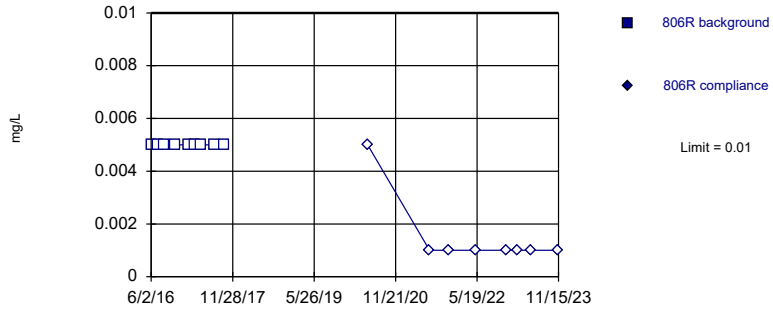
Constituent: Cobalt Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

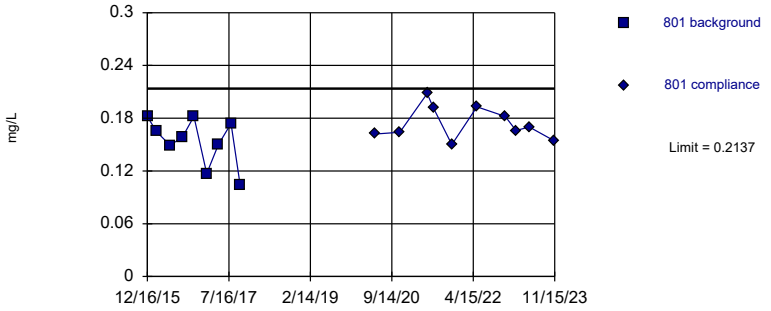
Constituent: Cobalt Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1536, Std. Dev.=0.02744, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.894, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

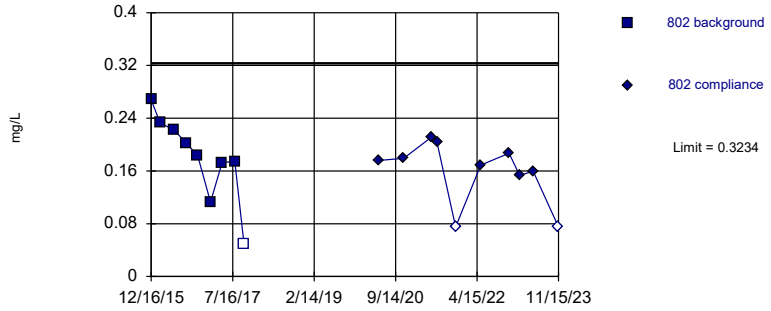
Constituent: Fluoride Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1798, Std. Dev.=0.06546, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9411, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Fluoride Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Cobalt, Fluoride Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

	805	805	806R	806R	801	801	802	802
12/15/2015	<0.01							
12/16/2015					0.182		0.268	
2/17/2016	<0.01				0.165		0.233	
5/26/2016	<0.01				0.149		0.222	
6/2/2016			<0.01					
7/19/2016			<0.01					
8/23/2016	<0.01		<0.01		0.159		0.202	
11/10/2016	<0.01				0.182		0.183	
11/11/2016			<0.01					
2/9/2017	<0.01		<0.01		0.117		0.113	
3/22/2017			<0.01					
5/3/2017	<0.01		<0.01		0.15		0.173	
8/1/2017	<0.01		<0.01		0.174		0.174	
10/4/2017	<0.01		<0.01		0.104		<0.1	
5/18/2020		<0.01		<0.01		0.162		0.176
11/11/2020						0.164		0.179
5/24/2021						0.208		
5/25/2021								0.211
7/6/2021		<0.002		<0.002		0.192		0.203
11/15/2021		<0.002		<0.002		0.15		<0.15
5/12/2022		<0.002		<0.002		0.193		0.169
11/29/2022		<0.002		<0.002		0.182		0.187
2/13/2023		<0.002		<0.002		0.166		0.153
5/18/2023		<0.002		<0.002		0.17		0.16
11/15/2023		<0.002		<0.002		0.154		<0.15

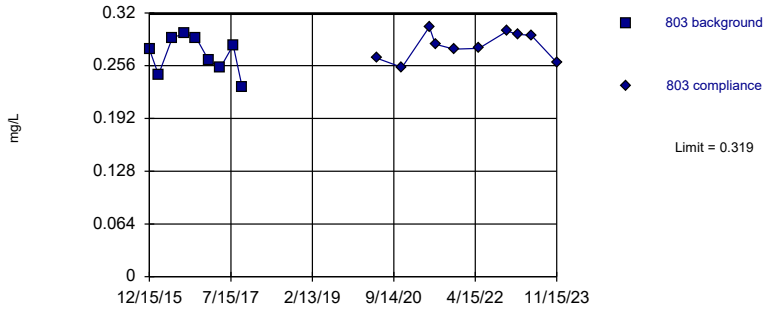
ND substitution: RL/2.

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.2692, Std. Dev.=0.0227, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9261, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Fluoride Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

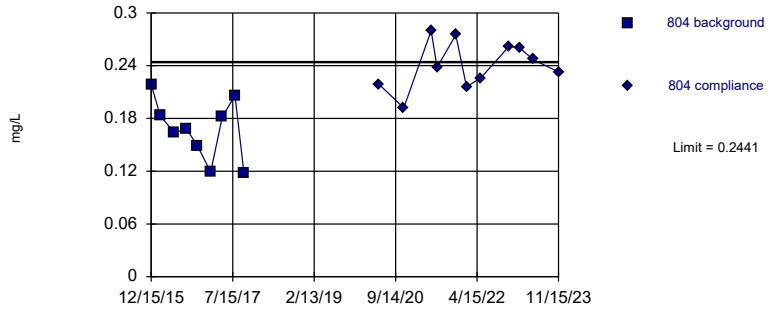
Sibley Generating Station UWL Data: Sibley

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1674, Std. Dev.=0.03496, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9484, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Fluoride Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

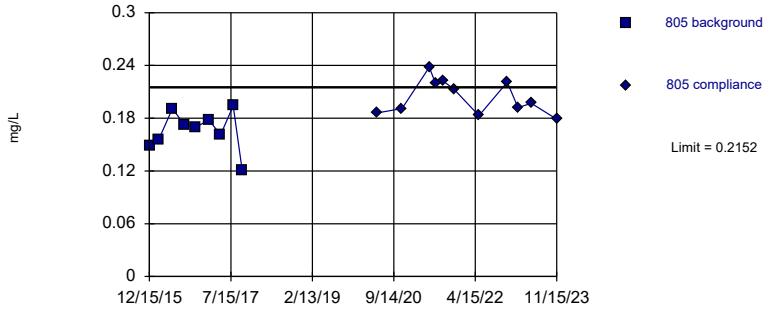
Sibley Generating Station UWL Data: Sibley

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1656, Std. Dev.=0.02263, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9537, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Fluoride Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

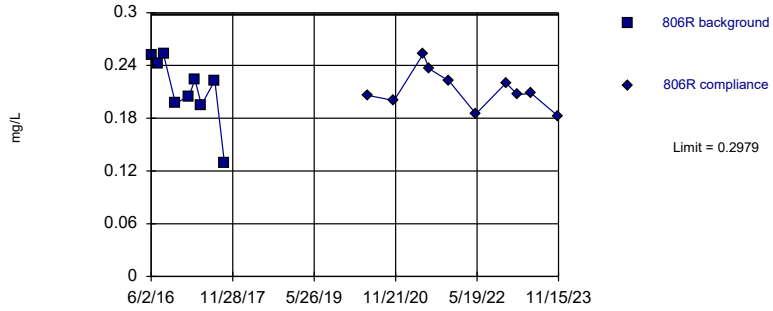
Sibley Generating Station UWL Data: Sibley

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.2133, Std. Dev.=0.03854, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8789, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Fluoride Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Fluoride Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

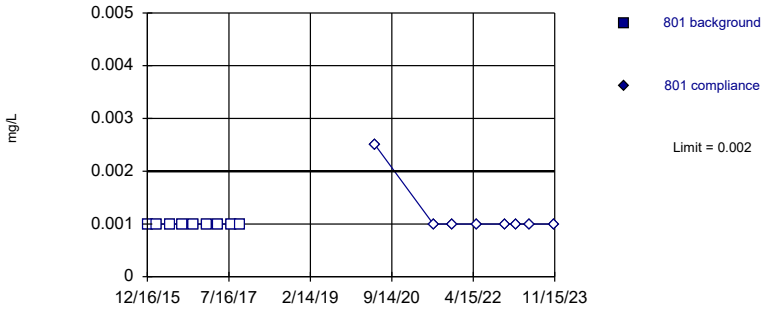
	803	803	804	804	805	805	806R	806R
12/15/2015	0.276		0.219		0.148			
2/17/2016	0.245		0.183		0.155			
5/26/2016	0.29		0.164		0.191			
6/2/2016							0.252	
7/19/2016							0.242	
8/23/2016	0.295		0.168		0.172		0.253	
11/10/2016	0.29		0.148		0.17			
11/11/2016							0.197	
2/9/2017	0.262		0.119		0.178		0.205	
3/22/2017							0.224	
5/3/2017	0.254		0.182		0.161		0.195	
8/1/2017	0.281		0.206		0.194		0.223	
10/4/2017	0.23		0.118		0.121		0.129	
5/18/2020		0.265		0.219		0.186		0.206
11/11/2020		0.254		0.192		0.191		0.2
5/24/2021								0.253
5/25/2021		0.303		0.28		0.238		
7/6/2021		0.282		0.238		0.22		0.236
9/2/2021						0.222		
11/15/2021		0.276		0.275		0.213		0.222
1/31/2022				0.216				
5/12/2022		0.277		0.226		0.183		0.185
11/29/2022		0.298		0.262		0.221		0.22
2/13/2023		0.294		0.26		0.192		0.207
5/18/2023		0.293		0.247		0.197		0.208
11/15/2023		0.26		0.233		0.179		0.182

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

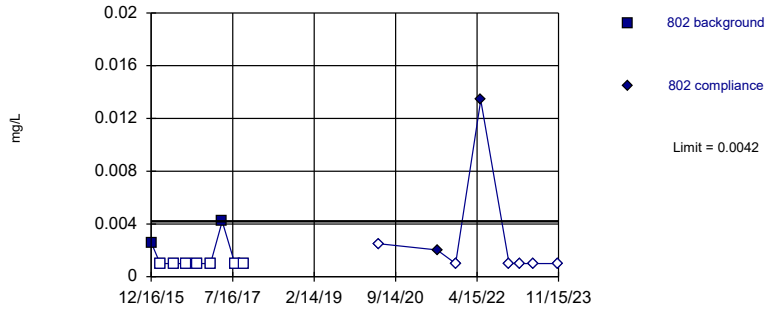
Constituent: Lead Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

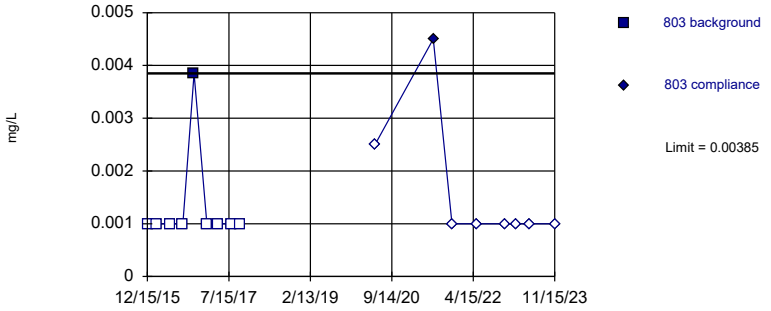
Constituent: Lead Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

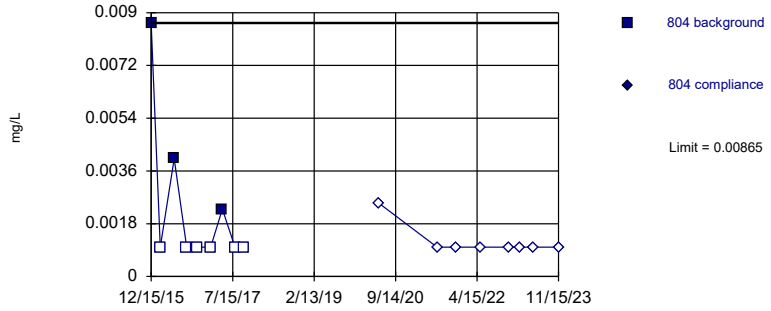
Constituent: Lead Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Lead Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Lead Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

	801	801	802	802	803	803	804	804
12/15/2015					<0.002		0.00865	
12/16/2015	<0.002		0.0026					
2/17/2016	<0.002		<0.002		<0.002		<0.002	
5/26/2016	<0.002		<0.002		<0.002		0.00402	
8/23/2016	<0.002		<0.002		<0.002		<0.002	
11/10/2016	<0.002		<0.002		0.00385		<0.002	
2/9/2017	<0.002		<0.002		<0.002		<0.002	
5/3/2017	<0.002		0.0042		<0.002		0.0023	
8/1/2017	<0.002		<0.002		<0.002		<0.002	
10/4/2017	<0.002		<0.002		<0.002		<0.002	
5/18/2020		<0.005		<0.005		<0.005		<0.005
7/6/2021		<0.002		0.00203		0.0045		<0.002
11/15/2021		<0.002		<0.002		<0.002		<0.002
5/12/2022		<0.002		0.0134		<0.002		<0.002
11/29/2022		<0.002		<0.002		<0.002		<0.002
2/13/2023		<0.002		<0.002		<0.002		<0.002
5/18/2023		<0.002		<0.002		<0.002		<0.002
11/15/2023		<0.002		<0.002		<0.002		<0.002

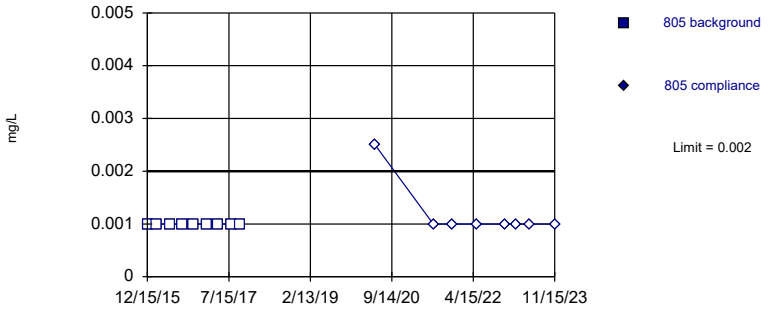
ND substitution: RL/2.

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Lead Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

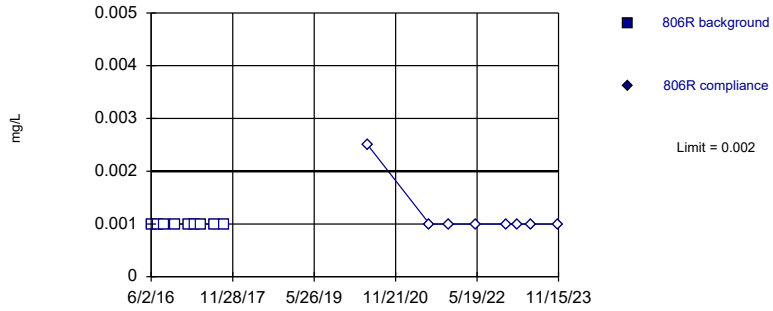
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Lead Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

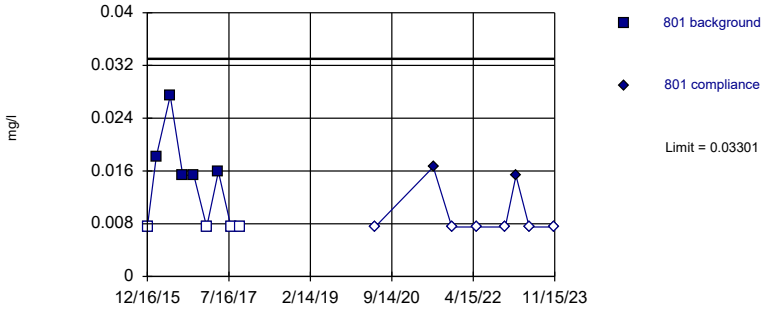
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Aitchison`s Adjustment): Mean=0.01024, Std. Dev.=0.01038, n=9, 44.44% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8326, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Lithium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

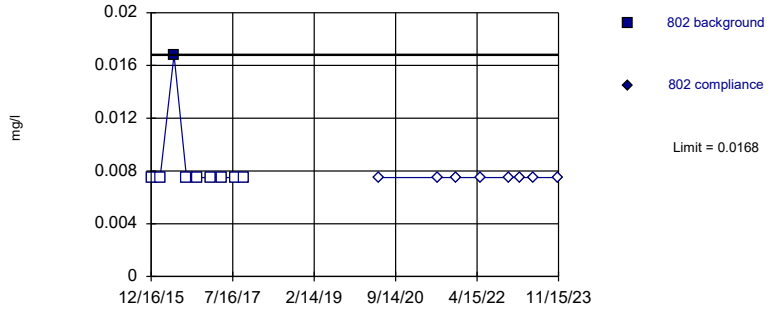
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Lithium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Lead, Lithium Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

	805	805	806R	806R	801	801	802	802
12/15/2015	<0.002							
12/16/2015					<0.015		<0.015	
2/17/2016	<0.002				0.0182		<0.015	
5/26/2016	<0.002				0.0274		0.0168	
6/2/2016			<0.002					
7/19/2016			<0.002					
8/23/2016	<0.002		<0.002		0.0154		<0.015	
11/10/2016	<0.002				0.0153		<0.015	
11/11/2016			<0.002					
2/9/2017	<0.002		<0.002		<0.015		<0.015	
3/22/2017			<0.002					
5/3/2017	<0.002		<0.002		0.0159		<0.015	
8/1/2017	<0.002		<0.002		<0.015		<0.015	
10/4/2017	<0.002		<0.002		<0.015		<0.015	
5/18/2020		<0.005		<0.005		<0.015		<0.015
7/6/2021		<0.002		<0.002		0.0166		<0.015
11/15/2021		<0.002		<0.002		<0.015		<0.015
5/12/2022		<0.002		<0.002		<0.015		<0.015
11/29/2022		<0.002		<0.002		<0.015		<0.015
2/13/2023		<0.002		<0.002		0.0153		<0.015
5/18/2023		<0.002		<0.002		<0.015		<0.015
11/15/2023		<0.002		<0.002		<0.015		<0.015

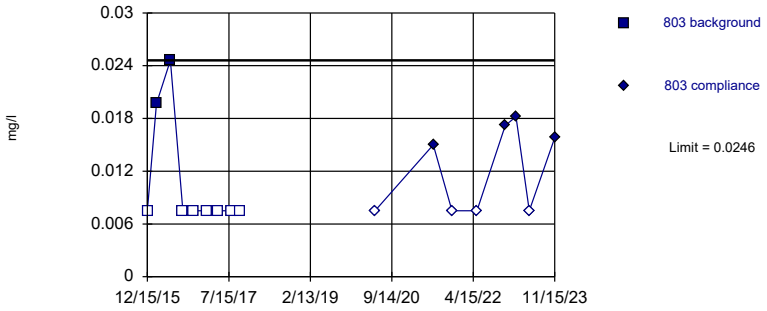
ND substitution: RL/2.

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Lithium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

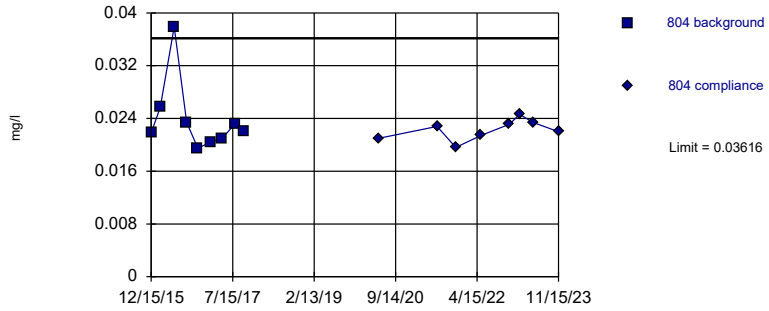
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-3.754, Std. Dev.=0.1981, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7756, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Lithium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

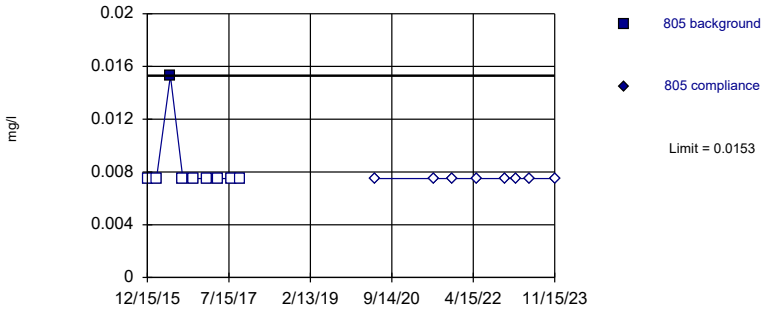
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Lithium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

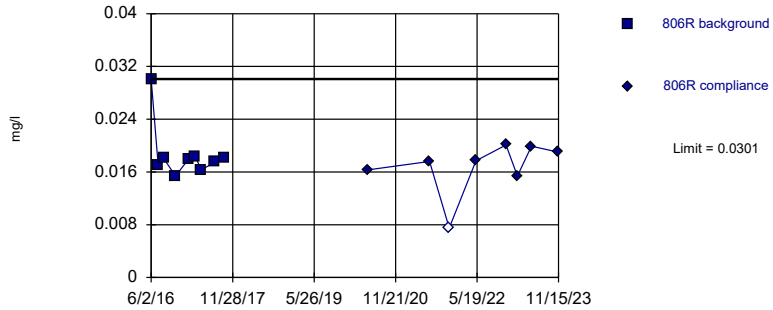
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 9 background values. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Lithium Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Lithium Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

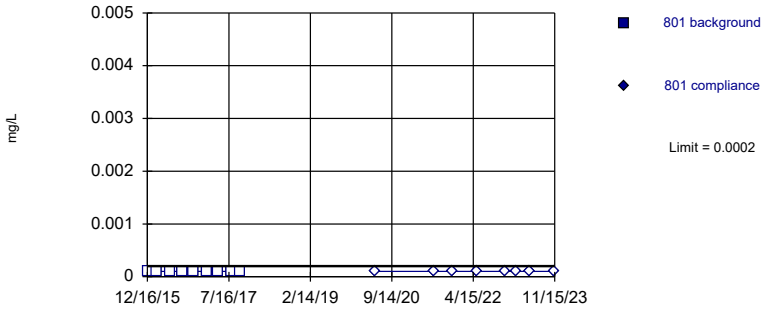
	803	803	804	804	805	805	806R	806R
12/15/2015	<0.015		0.0218		<0.015			
2/17/2016	0.0197		0.0257		<0.015			
5/26/2016	0.0246		0.0379		0.0153			
6/2/2016							0.0301	
7/19/2016							0.017	
8/23/2016	<0.015		0.0234		<0.015		0.0181	
11/10/2016	<0.015		0.0195		<0.015			
11/11/2016							0.0154	
2/9/2017	<0.015		0.0204		<0.015		0.018	
3/22/2017							0.0184	
5/3/2017	<0.015		0.021		<0.015		0.0163	
8/1/2017	<0.015		0.0232		<0.015		0.0175	
10/4/2017	<0.015		0.022		<0.015		0.0182	
5/18/2020		<0.015		0.021		<0.015		0.0163
7/6/2021		0.015		0.0228		<0.015		0.0176
11/15/2021		<0.015		0.0196		<0.015		<0.015
5/12/2022		<0.015		0.0214		<0.015		0.0177
11/29/2022		0.0172		0.0231		<0.015		0.0201
2/13/2023		0.0182		0.0246		<0.015		0.0154
5/18/2023		<0.015		0.0234		<0.015		0.0199
11/15/2023		0.0158		0.022		<0.015		0.019

ND substitution: RL/2.

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



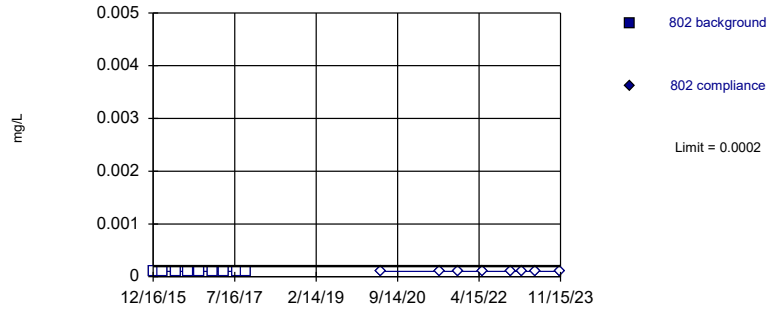
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Mercury Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



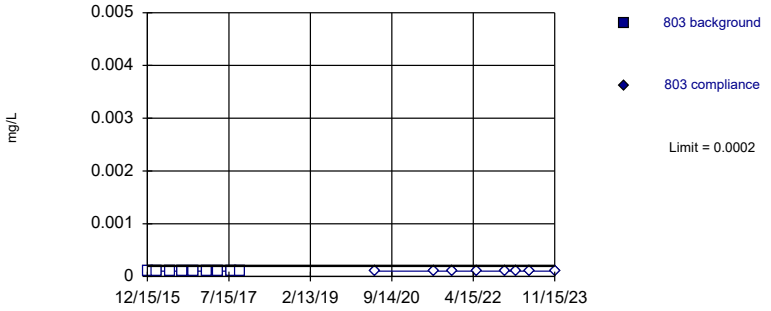
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Mercury Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



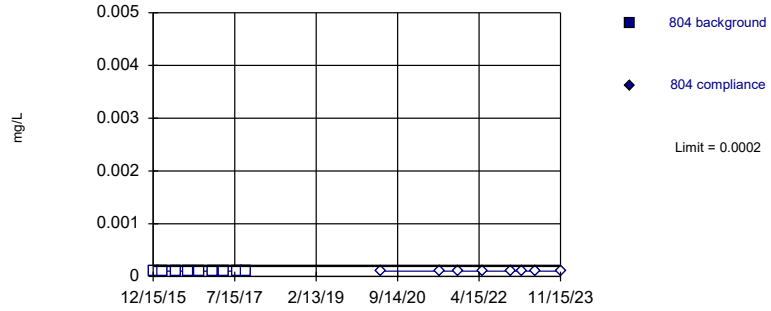
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Mercury Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Mercury Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Mercury Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

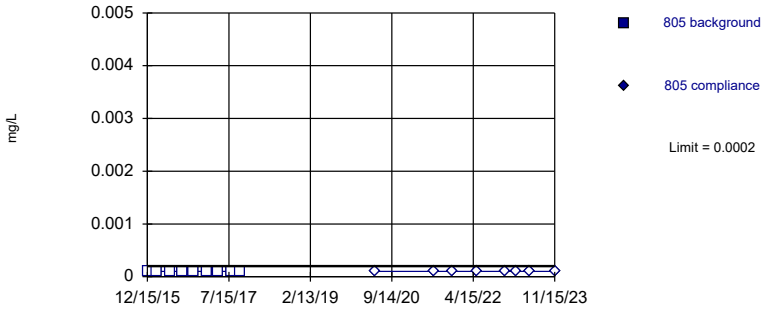
	801	801	802	802	803	803	804	804
12/15/2015					<0.0002		<0.0002	
12/16/2015	<0.0002		<0.0002					
2/17/2016	<0.0002		<0.0002		<0.0002		<0.0002	
5/26/2016	<0.0002		<0.0002		<0.0002		<0.0002	
8/23/2016	<0.0002		<0.0002		<0.0002		<0.0002	
11/10/2016	<0.0002		<0.0002		<0.0002		<0.0002	
2/9/2017	<0.0002		<0.0002		<0.0002		<0.0002	
5/3/2017	<0.0002		<0.0002		<0.0002		<0.0002	
8/1/2017	<0.0002		<0.0002		<0.0002		<0.0002	
10/4/2017	<0.0002		<0.0002		<0.0002		<0.0002	
5/18/2020		<0.0002		<0.0002		<0.0002		<0.0002
7/6/2021		<0.0002		<0.0002		<0.0002		<0.0002
11/15/2021		<0.0002		<0.0002		<0.0002		<0.0002
5/12/2022		<0.0002		<0.0002		<0.0002		<0.0002
11/29/2022		<0.0002		<0.0002		<0.0002		<0.0002
2/13/2023		<0.0002		<0.0002		<0.0002		<0.0002
5/18/2023		<0.0002		<0.0002		<0.0002		<0.0002
11/15/2023		<0.0002		<0.0002		<0.0002		<0.0002

ND substitution: RL/2.

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



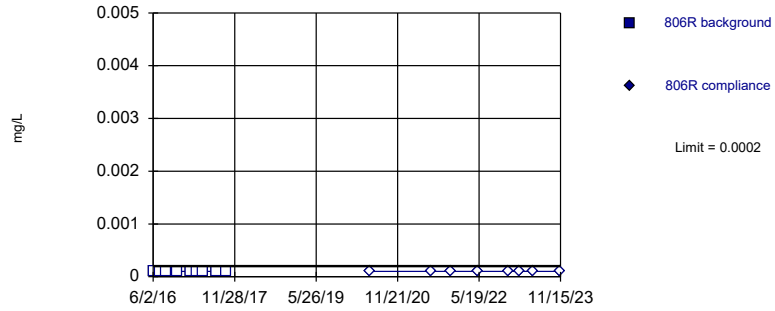
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Mercury Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



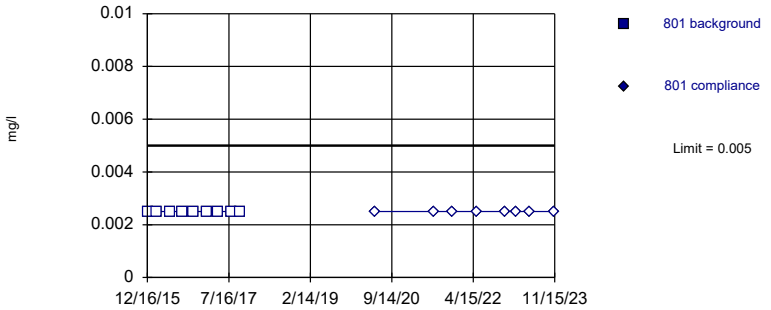
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Mercury Analysis Run 3/11/2024 1:01 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



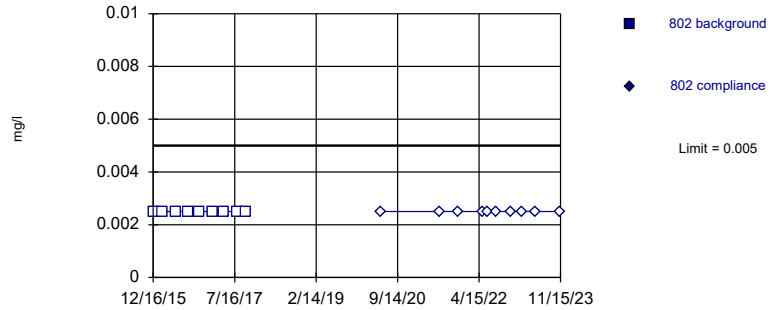
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Molybdenum Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Molybdenum Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Mercury, Molybdenum Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

	805	805	806R	806R	801	801	802	802
12/15/2015	<0.0002							
12/16/2015					<0.005		<0.005	
2/17/2016	<0.0002				<0.005		<0.005	
5/26/2016	<0.0002				<0.005		<0.005	
6/2/2016			<0.0002					
7/19/2016			<0.0002					
8/23/2016	<0.0002		<0.0002		<0.005		<0.005	
11/10/2016	<0.0002				<0.005		<0.005	
11/11/2016			<0.0002					
2/9/2017	<0.0002		<0.0002		<0.005		<0.005	
3/22/2017			<0.0002					
5/3/2017	<0.0002		<0.0002		<0.005		<0.005	
8/1/2017	<0.0002		<0.0002		<0.005		<0.005	
10/4/2017	<0.0002		<0.0002		<0.005		<0.005	
5/18/2020		<0.0002		<0.0002		<0.005		<0.005
7/6/2021		<0.0002		<0.0002		<0.005		<0.005
11/15/2021		<0.0002		<0.0002		<0.005		<0.005
5/12/2022		<0.0002		<0.0002		<0.005		<0.005
6/15/2022								<0.005
8/19/2022								<0.005
11/29/2022		<0.0002		<0.0002		<0.005		<0.005
2/13/2023		<0.0002		<0.0002		<0.005		<0.005
5/18/2023		<0.0002		<0.0002		<0.005		<0.005
11/15/2023		<0.0002		<0.0002		<0.005		<0.005

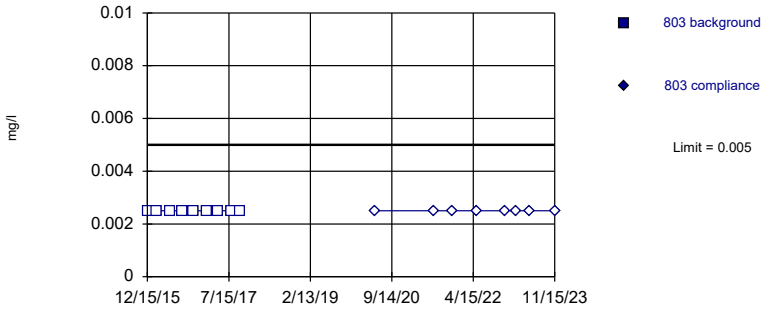
ND substitution: RL/2.

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

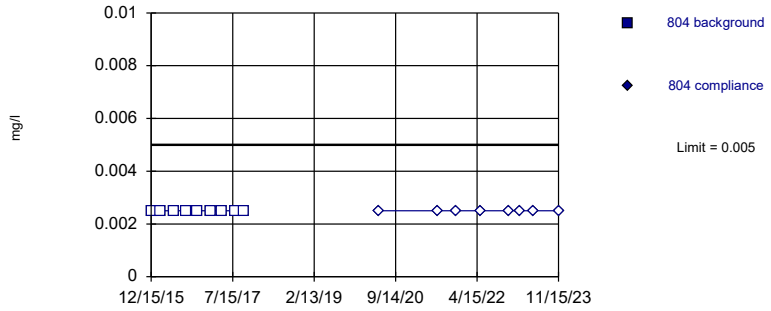
Constituent: Molybdenum Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

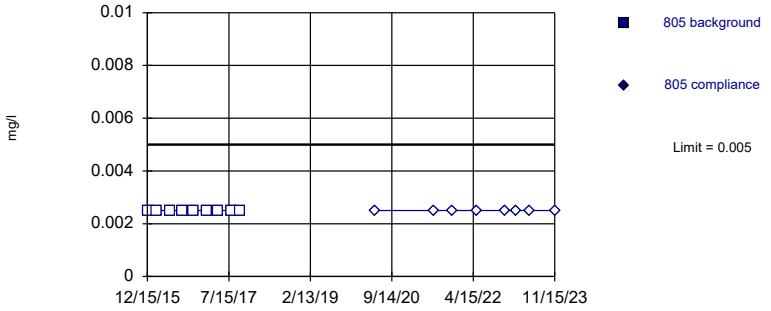
Constituent: Molybdenum Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

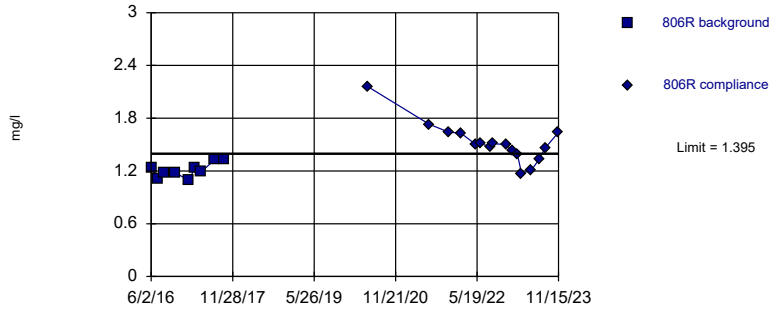
Constituent: Molybdenum Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

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Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.21, Std. Dev.=0.08456, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9266, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Molybdenum Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Molybdenum Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

	803	803	804	804	805	805	806R	806R
12/15/2015	<0.005		<0.005		<0.005			
2/17/2016	<0.005		<0.005		<0.005			
5/26/2016	<0.005		<0.005		<0.005			
6/2/2016							1.24	
7/19/2016							1.11	
8/23/2016	<0.005		<0.005		<0.005		1.18	
11/10/2016	<0.005		<0.005		<0.005			
11/11/2016							1.18	
2/9/2017	<0.005		<0.005		<0.005		1.09	
3/22/2017							1.24	
5/3/2017	<0.005		<0.005		<0.005		1.19	
8/1/2017	<0.005		<0.005		<0.005		1.33	
10/4/2017	<0.005		<0.005		<0.005		1.33	
5/18/2020		<0.005		<0.005		<0.005		2.16
7/6/2021		<0.005		<0.005		<0.005		1.73
11/15/2021		<0.005		<0.005		<0.005		1.64
1/31/2022								1.63
5/12/2022		<0.005		<0.005		<0.005		1.5
6/15/2022								1.51
8/18/2022								1.47
9/1/2022								1.51
11/29/2022		<0.005		<0.005		<0.005		1.5
1/11/2023								1.43
2/13/2023		<0.005		<0.005		<0.005		1.39
3/13/2023								1.17
5/18/2023		<0.005		<0.005		<0.005		1.21
7/7/2023								1.33
8/17/2023								1.46
11/15/2023		<0.005		<0.005		<0.005		1.64

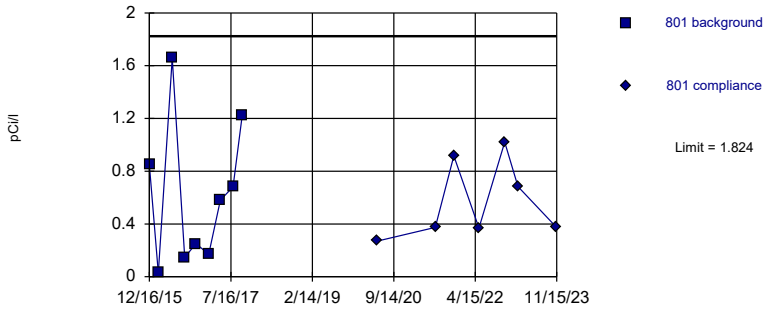
ND substitution: RL/2.

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.6204, Std. Dev.=0.5487, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.913, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Radium Combined Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV

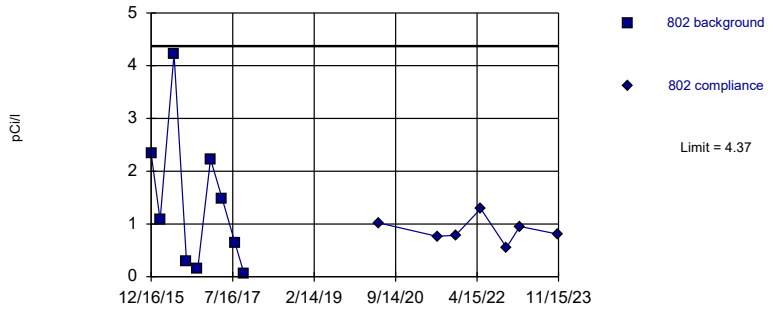
Sibley Generating Station UWL Data: Sibley

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.388, Std. Dev.=1.36, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8858, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Radium Combined Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV

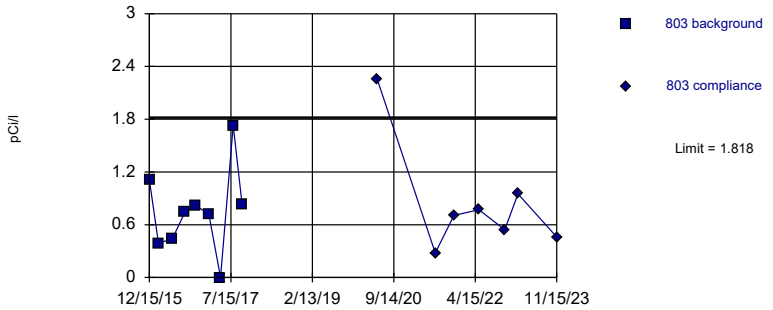
Sibley Generating Station UWL Data: Sibley

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.7523, Std. Dev.=0.486, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9475, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Radium Combined Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV

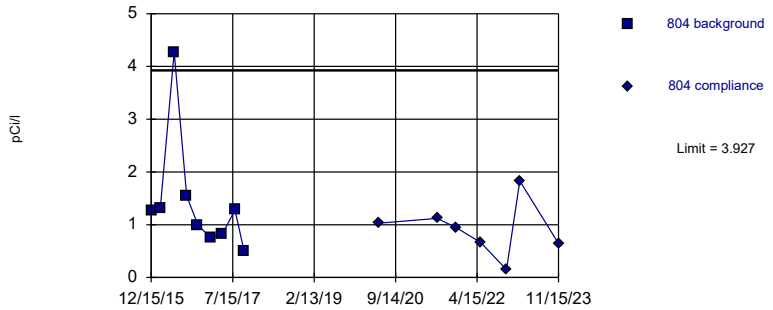
Sibley Generating Station UWL Data: Sibley

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=1.133, Std. Dev.=0.3871, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.797, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Radium Combined Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Radium Combined Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

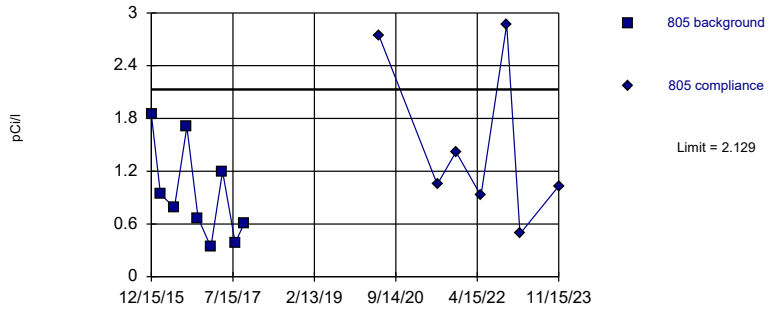
	801	801	802	802	803	803	804	804
12/15/2015					1.11		1.257	
12/16/2015	0.848		2.334					
2/17/2016	0.028		1.075		0.389		1.308	
5/26/2016	1.658		4.222		0.441		4.27	
8/23/2016	0.146		0.287		0.741		1.545	
11/10/2016	0.251		0.144		0.817		1	
2/9/2017	0.17		2.23		0.717		0.749	
5/3/2017	0.582		1.48		0		0.822	
8/1/2017	0.681		0.65		1.73		1.28	
10/4/2017	1.22		0.066		0.826		0.511	
5/18/2020		0.27		1.02		2.26		1.03
7/6/2021		0.374		0.765		0.278		1.12
11/15/2021		0.916		0.786		0.707		0.949
5/12/2022		0.369 (J)		1.29		0.77		0.661
11/11/2022		1.02		0.552		0.543		0.15
2/13/2023		0.683		0.952		0.951		1.83
11/15/2023		0.373 (J)		0.804 (J)		0.46 (J)		0.645

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.9412, Std. Dev.=0.5416, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9047, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Radium Combined Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV

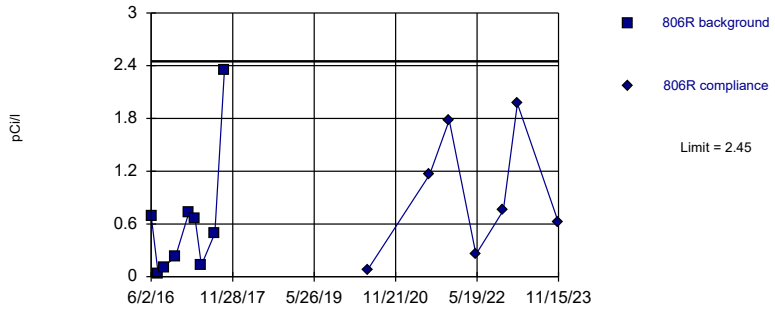
Sibley Generating Station UWL Data: Sibley

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.6773, Std. Dev.=0.4049, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9055, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Radium Combined Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV

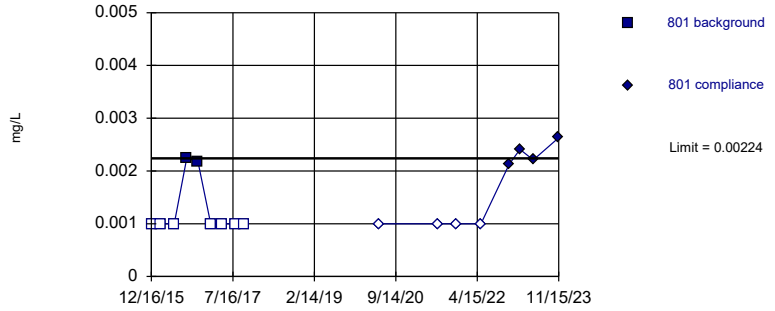
Sibley Generating Station UWL Data: Sibley

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Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Selenium Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV

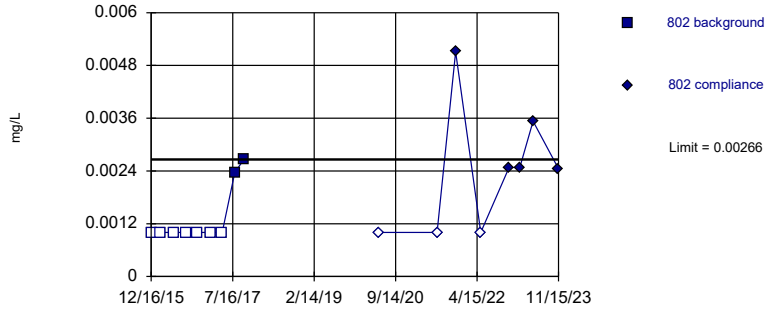
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Selenium Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Radium Combined, Selenium Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

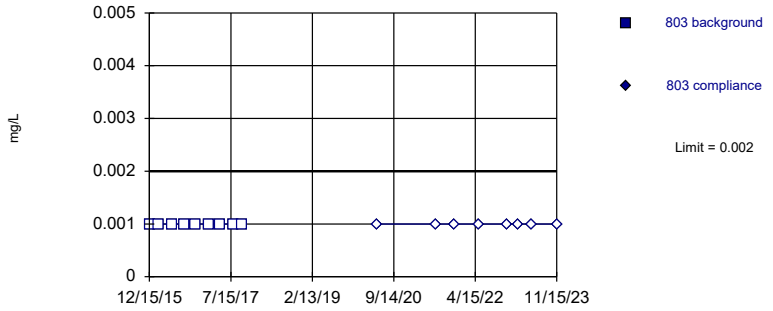
	805	805	806R	806R	801	801	802	802
12/15/2015	1.843							
12/16/2015					<0.002		<0.002	
2/17/2016	0.94				<0.002		<0.002	
5/26/2016	0.785				<0.002		<0.002	
6/2/2016			0.695					
7/19/2016			0.034					
8/23/2016	1.705		0.109		0.00224		<0.002	
11/10/2016	0.668				0.00218		<0.002	
11/11/2016			0.228					
2/9/2017	0.338		0.731		<0.002		<0.002	
3/22/2017			0.668					
5/3/2017	1.2		0.131		<0.002		<0.002	
8/1/2017	0.387		0.494		<0.002		0.00237	
10/4/2017	0.605		2.35		<0.002		0.00266	
5/18/2020		2.74		0.078		<0.002		<0.002
7/6/2021		1.05		1.16		<0.002		<0.002
11/15/2021		1.42		1.78		<0.002		0.00511
5/12/2022		0.922		0.253 (J)		<0.002		<0.002
11/11/2022		2.87		0.754				
11/29/2022						0.00213		0.00248
2/13/2023		0.489 (J)		1.97		0.00241		0.00248
5/18/2023						0.00221		0.00353
11/15/2023		1.03		0.616		0.00263		0.00245

ND substitution: RL/2.

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



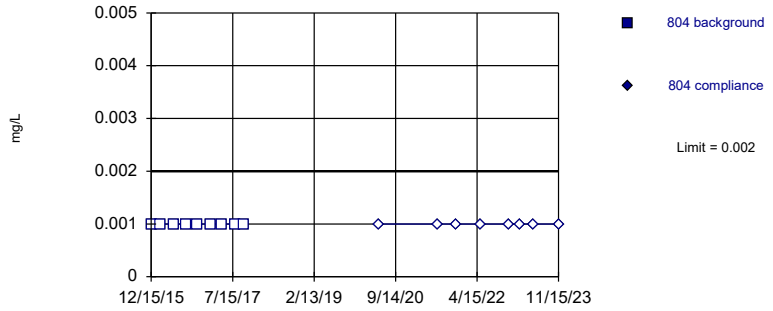
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Selenium Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



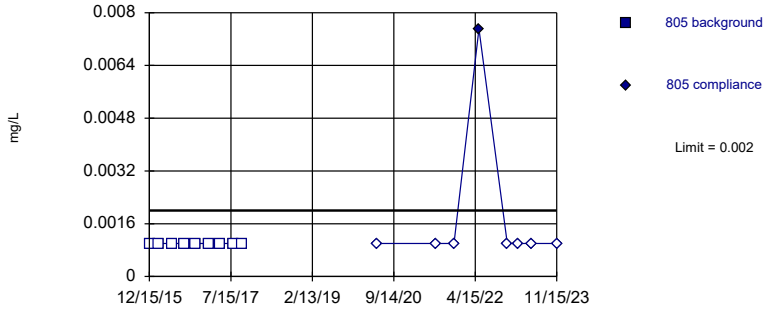
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Selenium Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



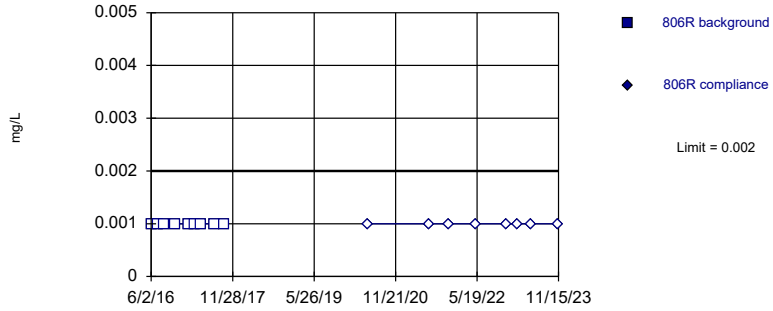
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Selenium Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Sanitas™ v.10.0.16 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Selenium Analysis Run 3/11/2024 1:02 PM View: Ash Pond IV
Sibley Generating Station UWL Data: Sibley

Prediction Limit

Constituent: Selenium Analysis Run 3/11/2024 1:05 PM View: Ash Pond IV

Sibley Generating Station UWL Data: Sibley

	803	803	804	804	805	805	806R	806R
12/15/2015	<0.002		<0.002		<0.002			
2/17/2016	<0.002		<0.002		<0.002			
5/26/2016	<0.002		<0.002		<0.002			
6/2/2016							<0.002	
7/19/2016							<0.002	
8/23/2016	<0.002		<0.002		<0.002		<0.002	
11/10/2016	<0.002		<0.002		<0.002			
11/11/2016							<0.002	
2/9/2017	<0.002		<0.002		<0.002		<0.002	
3/22/2017							<0.002	
5/3/2017	<0.002		<0.002		<0.002		<0.002	
8/1/2017	<0.002		<0.002		<0.002		<0.002	
10/4/2017	<0.002		<0.002		<0.002		<0.002	
5/18/2020		<0.002		<0.002		<0.002		<0.002
7/6/2021		<0.002		<0.002		<0.002		<0.002
11/15/2021		<0.002		<0.002		<0.002		<0.002
5/12/2022		<0.002		<0.002		0.00751		<0.002
11/29/2022		<0.002		<0.002		<0.002		<0.002
2/13/2023		<0.002		<0.002		<0.002		<0.002
5/18/2023		<0.002		<0.002		<0.002		<0.002
11/15/2023		<0.002		<0.002		<0.002		<0.002

ND substitution: RL/2.

Prediction Limit

Sibley Generating Station UWL Data: Sibley Printed 3/11/2024, 1:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	801	0.002	n/a	11/15/2023	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	802	0.007646	n/a	11/15/2023	0.00238	No	9	11.11	x^(1/3)	0.0005852	Param Intra 1 of 3
Arsenic (mg/L)	803	0.004999	n/a	11/15/2023	0.00239	No	9	0	No	0.0005852	Param Intra 1 of 3
Arsenic (mg/L)	804	0.01078	n/a	11/15/2023	0.001ND	No	9	0	No	0.0005852	Param Intra 1 of 3
Arsenic (mg/L)	805	0.002	n/a	11/15/2023	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	806R	0.00776	n/a	11/15/2023	0.001ND	No	9	0	No	0.0005852	Param Intra 1 of 3
Barium (mg/L)	801	0.146	n/a	11/15/2023	0.122	No	9	0	No	0.0005852	Param Intra 1 of 3
Barium (mg/L)	802	0.3056	n/a	11/15/2023	0.185	No	9	0	No	0.0005852	Param Intra 1 of 3
Barium (mg/L)	803	0.1509	n/a	11/15/2023	0.123	No	9	0	No	0.0005852	Param Intra 1 of 3
Barium (mg/L)	804	0.5223	n/a	11/15/2023	0.411	No	9	0	No	0.0005852	Param Intra 1 of 3
Barium (mg/L)	805	0.1854	n/a	11/15/2023	0.142	No	9	0	No	0.0005852	Param Intra 1 of 3
Barium (mg/L)	806R	0.1276	n/a	11/15/2023	0.0788	No	9	0	No	0.0005852	Param Intra 1 of 3
Cadmium (mg/L)	801	0.001	n/a	11/15/2023	0.0005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	802	0.001	n/a	11/15/2023	0.0005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	803	0.001	n/a	11/15/2023	0.0005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	804	0.001	n/a	11/15/2023	0.0005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	805	0.001	n/a	11/15/2023	0.0005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	806R	0.001	n/a	11/15/2023	0.0005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Chromium (mg/L)	801	0.01	n/a	11/15/2023	0.005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Chromium (mg/L)	802	0.01	n/a	11/15/2023	0.005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Chromium (mg/L)	803	0.01	n/a	11/15/2023	0.005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Chromium (mg/L)	804	0.01	n/a	11/15/2023	0.005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Chromium (mg/L)	805	0.01	n/a	11/15/2023	0.005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Chromium (mg/L)	806R	0.01	n/a	11/15/2023	0.005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	801	0.01	n/a	11/15/2023	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	802	0.01	n/a	11/15/2023	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	803	0.01	n/a	11/15/2023	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	804	0.01	n/a	11/15/2023	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	805	0.01	n/a	11/15/2023	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	806R	0.01	n/a	11/15/2023	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Fluoride (mg/L)	801	0.2137	n/a	11/15/2023	0.154	No	9	0	No	0.0005852	Param Intra 1 of 3
Fluoride (mg/L)	802	0.3234	n/a	11/15/2023	0.075ND	No	9	11.11	No	0.0005852	Param Intra 1 of 3
Fluoride (mg/L)	803	0.319	n/a	11/15/2023	0.26	No	9	0	No	0.0005852	Param Intra 1 of 3
Fluoride (mg/L)	804	0.2441	n/a	11/15/2023	0.233	No	9	0	No	0.0005852	Param Intra 1 of 3
Fluoride (mg/L)	805	0.2152	n/a	11/15/2023	0.179	No	9	0	No	0.0005852	Param Intra 1 of 3
Fluoride (mg/L)	806R	0.2979	n/a	11/15/2023	0.182	No	9	0	No	0.0005852	Param Intra 1 of 3
Lead (mg/L)	801	0.002	n/a	11/15/2023	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Lead (mg/L)	802	0.0042	n/a	11/15/2023	0.001ND	No	9	77.78	n/a	0.004675	NP Intra (NDs) 1 of 3
Lead (mg/L)	803	0.00385	n/a	11/15/2023	0.001ND	No	9	88.89	n/a	0.004675	NP Intra (NDs) 1 of 3
Lead (mg/L)	804	0.00865	n/a	11/15/2023	0.001ND	No	9	66.67	n/a	0.004675	NP Intra (NDs) 1 of 3
Lead (mg/L)	805	0.002	n/a	11/15/2023	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Lead (mg/L)	806R	0.002	n/a	11/15/2023	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Lithium (mg/l)	801	0.03301	n/a	11/15/2023	0.0075ND	No	9	44.44	No	0.0005852	Param Intra 1 of 3
Lithium (mg/l)	802	0.0168	n/a	11/15/2023	0.0075ND	No	9	88.89	n/a	0.004675	NP Intra (NDs) 1 of 3
Lithium (mg/l)	803	0.0246	n/a	11/15/2023	0.0158	No	9	77.78	n/a	0.004675	NP Intra (NDs) 1 of 3
Lithium (mg/l)	804	0.03616	n/a	11/15/2023	0.022	No	9	0	ln(x)	0.0005852	Param Intra 1 of 3
Lithium (mg/l)	805	0.0153	n/a	11/15/2023	0.0075ND	No	9	88.89	n/a	0.004675	NP Intra (NDs) 1 of 3
Lithium (mg/l)	806R	0.0301	n/a	11/15/2023	0.019	No	9	0	n/a	0.004675	NP Intra (normality) ...
Mercury (mg/L)	801	0.0002	n/a	11/15/2023	0.0001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Mercury (mg/L)	802	0.0002	n/a	11/15/2023	0.0001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3

Prediction Limit

Sibley Generating Station UWL Data: Sibley Printed 3/11/2024, 1:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Mercury (mg/L)	803	0.0002	n/a	11/15/2023	0.0001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Mercury (mg/L)	804	0.0002	n/a	11/15/2023	0.0001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Mercury (mg/L)	805	0.0002	n/a	11/15/2023	0.0001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Mercury (mg/L)	806R	0.0002	n/a	11/15/2023	0.0001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Molybdenum (mg/l)	801	0.005	n/a	11/15/2023	0.0025ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Molybdenum (mg/l)	802	0.005	n/a	11/15/2023	0.0025ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Molybdenum (mg/l)	803	0.005	n/a	11/15/2023	0.0025ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Molybdenum (mg/l)	804	0.005	n/a	11/15/2023	0.0025ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Molybdenum (mg/l)	805	0.005	n/a	11/15/2023	0.0025ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Molybdenum (mg/l)	**806R**	**1.395**	**n/a**	**11/15/2023**	**1.64**	**Yes**	**9**	**0**	**No**	**0.0005852**	**Param Intra 1 of 3**
Radium Combined (pCi/l)	801	1.824	n/a	11/15/2023	0.373J	No	9	0	No	0.0005852	Param Intra 1 of 3
Radium Combined (pCi/l)	802	4.37	n/a	11/15/2023	0.804J	No	9	0	No	0.0005852	Param Intra 1 of 3
Radium Combined (pCi/l)	803	1.818	n/a	11/15/2023	0.46J	No	9	0	No	0.0005852	Param Intra 1 of 3
Radium Combined (pCi/l)	804	3.927	n/a	11/15/2023	0.645	No	9	0	sqrt(x)	0.0005852	Param Intra 1 of 3
Radium Combined (pCi/l)	805	2.129	n/a	11/15/2023	1.03	No	9	0	No	0.0005852	Param Intra 1 of 3
Radium Combined (pCi/l)	806R	2.45	n/a	11/15/2023	0.616	No	9	0	sqrt(x)	0.0005852	Param Intra 1 of 3
Selenium (mg/L)	**801**	**0.00224**	**n/a**	**11/15/2023**	**0.00263**	**Yes**	**9**	**77.78**	**n/a**	**0.004675**	**NP Intra (NDs) 1 of 3**
Selenium (mg/L)	802	0.00266	n/a	11/15/2023	0.00245	No	9	77.78	n/a	0.004675	NP Intra (NDs) 1 of 3
Selenium (mg/L)	803	0.002	n/a	11/15/2023	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Selenium (mg/L)	804	0.002	n/a	11/15/2023	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Selenium (mg/L)	805	0.002	n/a	11/15/2023	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Selenium (mg/L)	806R	0.002	n/a	11/15/2023	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3

ATTACHMENT 2

Sanitas™ Configuration Settings

Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

Exclude data flags: i

Data Reading Options

- (•) Individual Observations
- ( ) Mean of Each: ( ) Month
- ( ) Median of Each: ( ) Season

Non-Detect / Trace Handling...

Setup Seasons...

[ ] Automatically Process Resamples...

Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

- [ ] Black and White Output
- [x] Four Plots Per Page
  - [x] Always Combine Data Pages...
  - [x] Include Tick Marks on Data Page
- [ ] Use Constituent Name for Graph Title
- [ ] Draw Border Around Text Reports and Data Pages
- [x] Enlarge/Reduce Fonts (Graphs): 100%
- [x] Enlarge/Reduce Fonts (Data/Text Reports): 100%
- [x] Wide Margins (on reports without explicit setting)
- [ ] Use CAS# (Not Const. Name)
- [ ] Truncate File Names to 20 Characters
- [ ] Include Limit Lines when found in Database...
- [ ] Show Deselected Data on Time Series Lighter
- [ ] Show Deselected Data on all Data Pages Light

Setup Symbols and Colors...

- [x] Prompt to Overwrite/Append Summary Tables
- [ ] Round Limits to 2 Sig. Digits (when not set in data file)
- [ ] User-Set Scale
- [x] Indicate Background Data
- [ ] Show Exact Dates
- [ ] Thick Plot Lines

Zoom Factor: 200%

Output Decimal Precision

- ( ) Less Precision
- (•) Normal Precision
- ( ) More Precision

- [x] Store Print Jobs in Multiple Constituent Mode

Store All Print Jobs...

Printer: Adobe PDF

Printers...

Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

- [ ] Use Modified Alpha... 0.02
- [x] Test Residuals For Normality (Parametric test only) using Shapiro-Wilk/Francia at Alpha = 0.01
  - [ ] Continue Parametric if Unable to Normalize

Transformation (Parametric test only)

- (•) Use Ladder of Powers
- ( ) Natural Log or No Transformation
- ( ) Never Transform
- ( ) Use Specific Transformation:

- [ ] Use Best W Statistic
- [ ] Plot Transformed Values

Use Non-Parametric Test (Sen's Slope/Mann-Kendall) when Non-Detects Percent > 75

- [ ] Include 95. % Confidence Interval around Trend Line
  - [x] Only when Trend is Significant
  - [x] Include Details of Interaction with Limit Lines (if applicable, in Multiple Constituent mode)
- [ ] Automatically Remove Outliers (Parametric test only)
- [ ] Limit data to most recent values (dropping any earlier observations)

Note: there is no "Always Use Non-Parametric" checkbox on this tab because, for consistency with prior versions, Sen's Slope / Mann-Kendall (the non-parametric alternative) is available as a report in its own right, under Analysis->Intrawell->Trend.

Data | Output | Trend Test | Control Cht | **Prediction Lim** | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

☑ Test for Normality using Shapiro-Wilk/Francia at Alpha = 0.01

☑ Use Non-Parametric Test when Non-Detects Percent > 50

Use Aitchison's Adjustment when Non-Detects Percent > 15

☐ Optional Further Refinement: Use Aitchison's when NDs % > 50

☐ Use Poisson Prediction Limit when Non-Detects Percent > 90

Transformation

- ◉ Use Ladder of Powers
- ○ Natural Log or No Transformation
- ○ Never Transform
- ○ Use Specific Transformation: Natural Log

☐ Use Best W Statistic

☐ Plot Transformed Values

Deseasonalize (Intra- and InterWell)

- ○ If Seasonality Is Detected
- ○ If Seasonality Is Detected Or Insufficient to Test
- ○ Always (When Sufficient Data) ◉ Never

☐ Always Use Non-Parametric

Facility α

Statistical Evaluations per Year: 2

Constituents Analyzed: 15

Downgradient (Compliance) Wells: 6

Sampling Plan

Comparing Individual Observations

○ 1 of 1 ○ 1 of 2 ◉ 1 of 3 ○ 1 of 4

○ 2 of 4 ("Modified California")

IntraWell Other

☐ Stop if Background Trend Detected at Alpha = 0.05

☑ Plot Background Data

Override Standard Deviation:

Override DF: Override Kappa:

☐ Automatically Remove Background Outliers

☐ 2-Tailed Test Mode...

☐ Show Deselected Data Lighter

Non-Parametric Limit = Highest Background Value

Non-Parametric Limit when 100% Non-Detects:

- ○ Highest/Second Highest Background Value
- ◉ Most Recent PQL if available, or MDL
- ○ Most Recent Background Value (subst. method)

Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

Rank Von Neumann, Wilcoxon Rank Sum / Mann-Whitney

- [ ] Use Modified Alpha...
- [ ] 2-Tailed Test Mode...
- [ ] Combine Background Wells on Mann-Whitney...

Outlier Tests

- ( ) EPA 1989 Outlier Screening (fixed alpha of 0.05)
- (•) Dixon's at α= 0.05 or if n > 22 Rosner's at α= 0.01 [x] Use EPA Screening to establish Suspected Outliers
- ( ) Tukey's Outlier Screening, with IQR Multiplier = 3.0 [ ] Use Ladder of Powers to achieve Best W Stat
- [x] Test For Normality using Shapiro-Wilk/Francia at Alpha = 0.1
  - (•) Stop if Non-Normal
  - ( ) Continue with Parametric Test if Non-Normal
  - ( ) Tukey's if Non-Normal, with IQR Multiplier = 3.0 [ ] Use Ladder of Powers to achieve Best W Stat
- [x] No Outlier If Less Than 3.0 Times Median
- [ ] Apply Rules found in Ohio Guidance Document 0715
- [ ] Combine Background Wells on the Outlier Report...

Piper, Stiff Diagram

- [ ] Combine Wells
- [ ] Combine Dates
- (•) Use Default Constituent Names
- ( ) Use Constituent Definition File Edit
- [x] Label Constituents
- [x] Label Axes
- [x] Note Cation-Anion Balance (Piper only)

Appendix D.2

Spring 2024 Semiannual and Annual Assessment Monitoring Statistical Analyses

SCS ENGINEERS

Environmental Consulting & Contracting

MEMORANDUM

October 3, 2024



To: Sibley Generating Station
33200 E Johnson Road
Sibley, Missouri 64088
Evergy Missouri West, Inc.

From: SCS Engineers
John Rockhold, R.G.
Douglas Doerr, P.E.

RE: Determination of Statistically Significant Increases/Levels – Fly Ash Impoundment
May 2024 Semi-Annual Assessment Monitoring 40 CFR 257.95

Statistical analysis of monitoring data from the groundwater monitoring system for the Fly Ash Impoundment at the Sibley Generating Station has been completed in substantial compliance with the "Statistical Method Certification by A Qualified Professional Engineer" dated October 12, 2017. Groundwater samples were collected on May 23, 2024. Review and validation of the results from the May 2024 Assessment Monitoring Event was completed on July 5, 2024, which constitutes completion and finalization of assessment monitoring laboratory analyses. A statistical analysis was then conducted to determine whether there were statistically significant increases (SSIs) over background values and whether the concentrations were at statistically significant levels (SSLs) above their groundwater protection standard (GWPS) for each constituent analyzed as part of the Assessment Monitoring Event.

The completed statistical evaluation identified four Appendix IV constituents above their prediction limits established for specific wells. None of the detected Appendix IV constituents were observed above their GWPSs.

Monitoring Well	Constituent	*UPL	**GWPS	Observation May 23, 2024
MW-801	Fluoride	0.2137	4	0.292
	Selenium	0.00224	0.050	0.00266
MW-802	Selenium	0.00266	0.050	0.00667***
MW-803	Barium	0.1509	2	1.04
	Lithium	0.0246	0.040	0.0301
MW-804	Fluoride	0.2441	4	0.335
MW-805	Fluoride	0.2152	4	0.328
MW-806R	Fluoride	0.2979	4	1.76

*UPL – Upper Prediction Limit
**GWPS – Groundwater Protection Standard
*** - Observation Date May 28, 2024

Determination: A statistical evaluation was completed for the Appendix IV assessment monitoring constituents in accordance with the certified statistical method. The statistical evaluation identified eight SSIs above their respective background prediction limits. Identified SSIs included: barium in MW-803; fluoride in MW-801, MW-804, MW-805, and MW-806R; lithium in MW-803; and selenium in MW-801 and MW-802. None of the detected Appendix IV constituents were observed above their GWPSs.

Attached to this memorandum are the following backup information:

Attachment 1: Sanitas™ Output:

Statistical evaluation output from Sanitas™ for the prediction limit analysis. This includes prediction limit plots, prediction limit background data, assessment sample results, verification re-sample results (when applicable), and a Prediction Limit summary table. Output documentation includes the analytical data used for the statistical analyses.

Attachment 2: Sanitas™ Configuration Settings:

Screen shots of the applicable Sanitas™ configuration settings for the statistical prediction limit analysis. This includes data configuration, output configuration, prediction limit configuration and other tests configuration.

Revision Number	Revision Date	Attachment Revised	Summary of Revisions

Sibley Generating Station
Determination of Statistically Significant Increases/Levels
Fly Ash Impoundment
October 3, 2024

ATTACHMENT 1

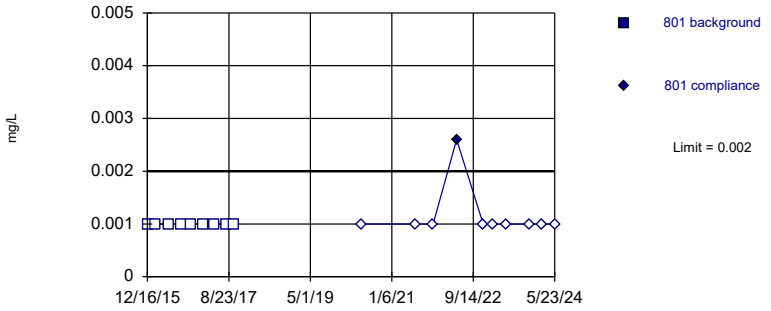
Sanitas™ Output

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

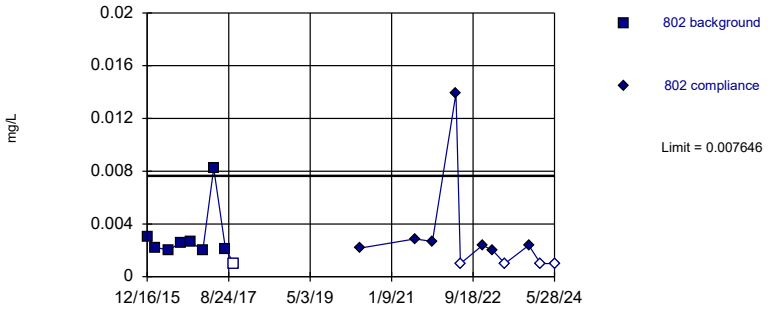
Constituent: Arsenic Analysis Run 8/21/2024 10:36 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=0.1368, Std. Dev.=0.02743, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7996, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

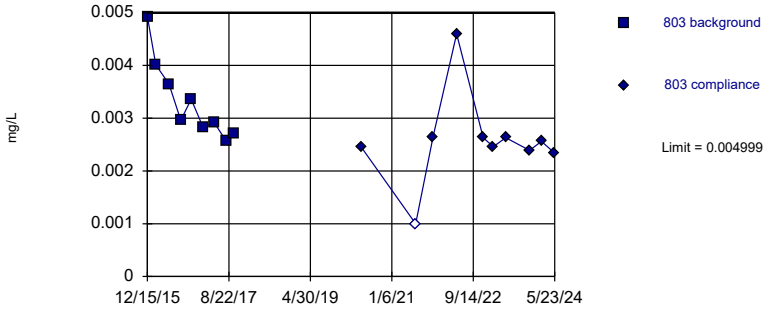
Constituent: Arsenic Analysis Run 8/21/2024 10:36 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.003324, Std. Dev.=0.0007636, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8749, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

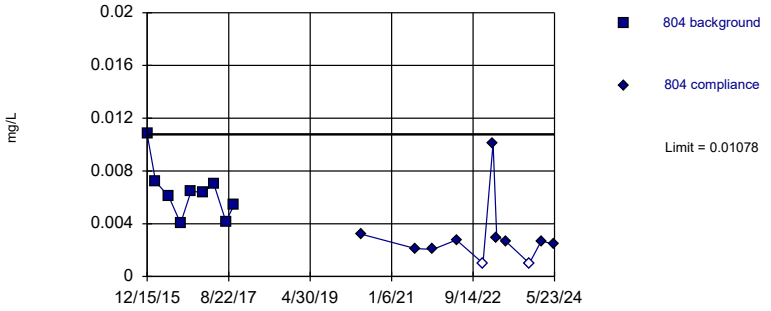
Constituent: Arsenic Analysis Run 8/21/2024 10:36 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.006396, Std. Dev.=0.001997, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8818, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Arsenic Analysis Run 8/21/2024 10:36 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Arsenic Analysis Run 8/21/2024 10:40 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

	801	801	802	802	803	803	804	804
12/15/2015					0.00493		0.0108	
12/16/2015	<0.002		0.00304					
2/17/2016	<0.002		0.00223		0.00401		0.00719	
5/26/2016	<0.002		0.002		0.00365		0.00607	
8/23/2016	<0.002		0.00257		0.00296		0.00403	
11/10/2016	<0.002		0.00262		0.00336		0.00644	
2/9/2017	<0.002		0.002		0.00282		0.0064	
5/3/2017	<0.002		0.00823		0.00292		0.007	
8/1/2017	<0.002		0.00206		0.00257		0.00418	
10/4/2017	<0.002		<0.002		0.0027		0.00545	
5/18/2020		<0.002		0.00218		0.00246		0.00322
7/6/2021		<0.002		0.00286		<0.002		0.00211
11/15/2021		<0.002		0.00267		0.00265		0.00205
5/12/2022		0.0026		0.0139		0.0046		0.00277
6/15/2022				<0.002				
11/29/2022		<0.002		0.00238		0.00263		<0.002
2/13/2023		<0.002		0.00202		0.00246		0.0101
3/13/2023								0.00297
5/18/2023		<0.002		<0.002		0.00263		0.00269
11/15/2023		<0.002		0.00238		0.00239		<0.002
2/12/2024		<0.002		<0.002		0.00256		0.00269
5/23/2024		<0.002				0.00234		0.00245
5/28/2024				<0.002				

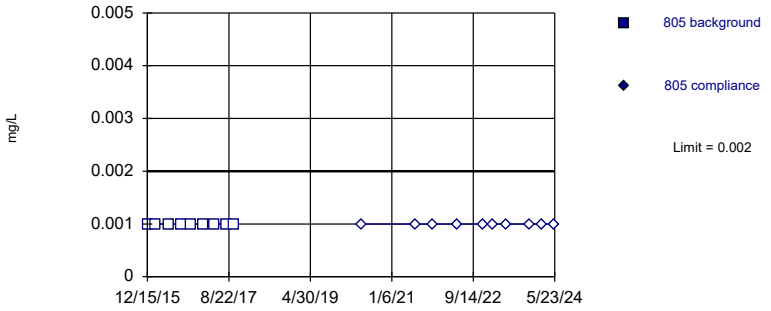
ND substitution: RL/2.

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

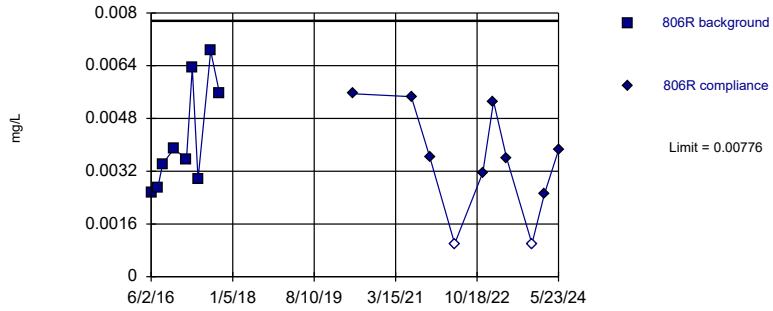
Constituent: Arsenic Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.004201, Std. Dev.=0.001623, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8645, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

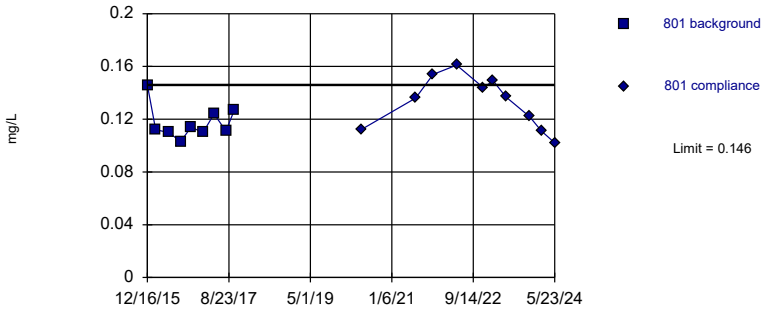
Constituent: Arsenic Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1174, Std. Dev.=0.013, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8491, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

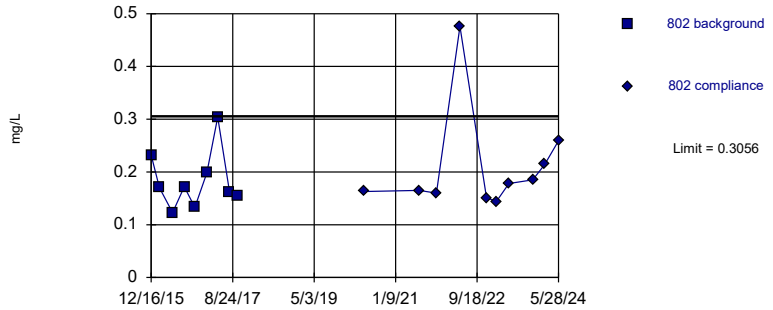
Constituent: Barium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1831, Std. Dev.=0.05583, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8822, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Arsenic, Barium Analysis Run 8/21/2024 10:40 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

	805	805	806R	806R	801	801	802	802
12/15/2015	<0.002							
12/16/2015					0.146		0.232	
2/17/2016	<0.002				0.112		0.17	
5/26/2016	<0.002				0.11		0.123	
6/2/2016			0.00256					
7/19/2016			0.00269					
8/23/2016	<0.002		0.00342		0.103		0.172	
11/10/2016	<0.002				0.114		0.133	
11/11/2016			0.00388					
2/9/2017	<0.002		0.00357		0.11		0.198	
3/22/2017			0.00634					
5/3/2017	<0.002		0.00295		0.124		0.304	
8/1/2017	<0.002		0.00685		0.111		0.162	
10/4/2017	<0.002		0.00555		0.127		0.154	
5/18/2020		<0.002		0.00555		0.112		0.163
7/6/2021		<0.002		0.00546		0.136		0.165
11/15/2021		<0.002		0.00362		0.154		0.16
5/12/2022		<0.002		<0.002		0.161		0.476
11/29/2022		<0.002		0.00316		0.144		0.151
2/13/2023		<0.002		0.00532		0.149		0.144
5/18/2023		<0.002		0.00359		0.137		0.178
11/15/2023		<0.002		<0.002		0.122		0.185
2/12/2024		<0.002		0.00251		0.111		0.214
5/23/2024		<0.002		0.00384		0.102		
5/28/2024								0.259

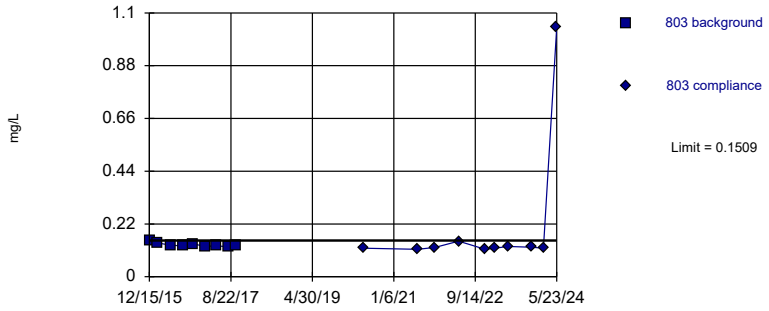
ND substitution: RL/2.

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Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1332, Std. Dev.=0.008074, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8745, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

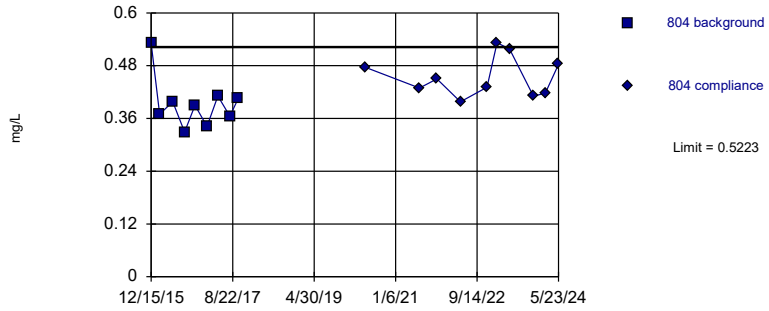
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.3936, Std. Dev.=0.05871, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8386, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

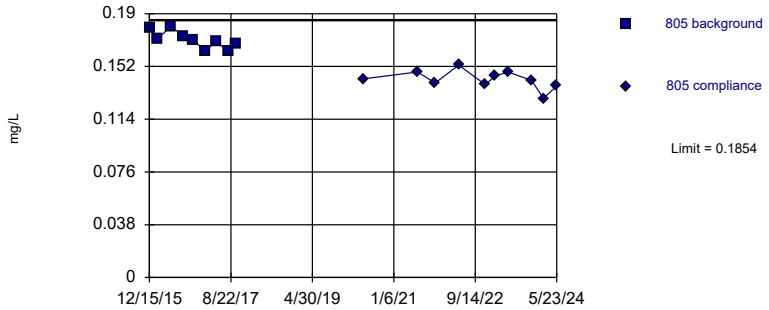
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1713, Std. Dev.=0.006403, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9324, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

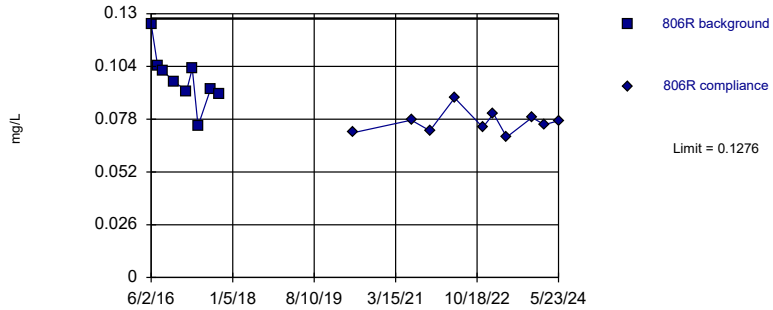
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.09781, Std. Dev.=0.01358, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9367, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Barium Analysis Run 8/21/2024 10:40 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

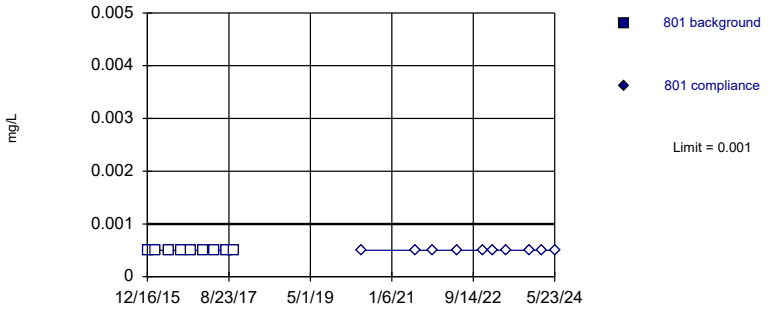
	803	803	804	804	805	805	806R	806R
12/15/2015	0.15		0.531		0.18			
2/17/2016	0.141		0.37		0.172			
5/26/2016	0.131		0.398		0.181			
6/2/2016							0.125	
7/19/2016							0.104	
8/23/2016	0.129		0.329		0.174		0.102	
11/10/2016	0.137		0.39		0.171			
11/11/2016							0.0966	
2/9/2017	0.126		0.342		0.163		0.0919	
3/22/2017							0.103	
5/3/2017	0.129		0.411		0.17		0.0747	
8/1/2017	0.125		0.365		0.163		0.093	
10/4/2017	0.131		0.406		0.168		0.0901	
5/18/2020		0.119		0.477		0.143		0.0714
7/6/2021		0.114		0.429		0.148		0.0775
11/15/2021		0.122		0.45		0.14		0.0723
5/12/2022		0.148		0.398		0.153		0.0885
11/29/2022		0.114		0.431		0.139		0.074
2/13/2023		0.119		0.532		0.145		0.0807
5/18/2023		0.126		0.518		0.148		0.0692
11/15/2023		0.123		0.411		0.142		0.0788
2/12/2024		0.119		0.417		0.129		0.0753
5/23/2024		1.04		0.483		0.138		0.0772

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Cadmium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

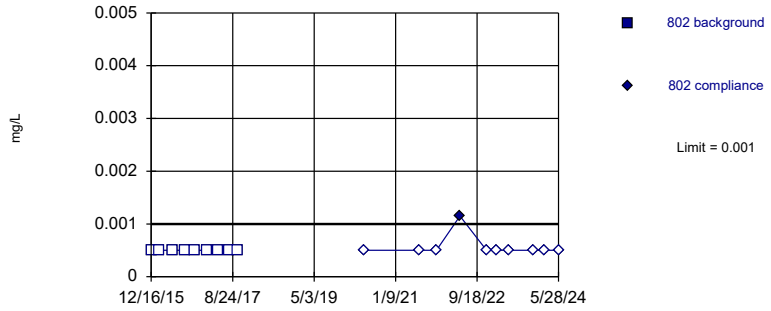
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Cadmium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

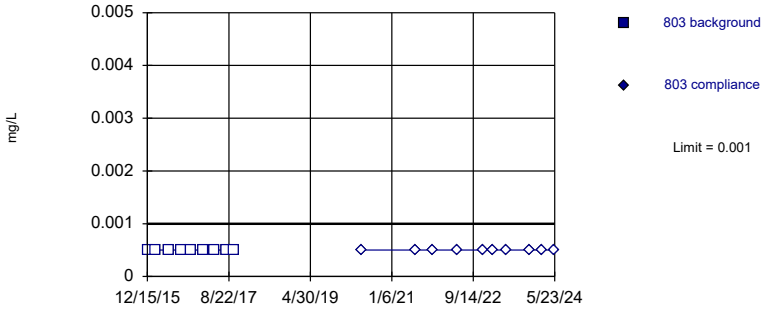
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Cadmium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

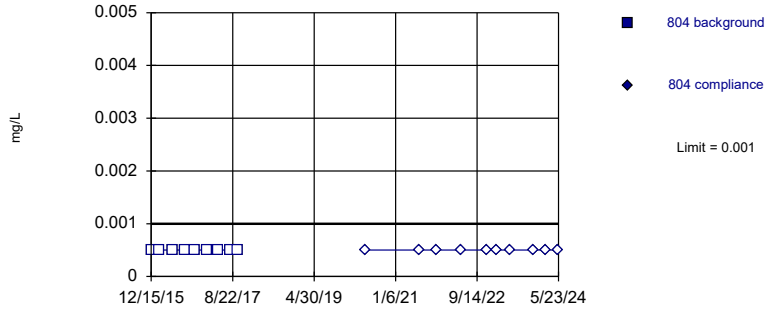
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Cadmium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Cadmium Analysis Run 8/21/2024 10:40 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

	801	801	802	802	803	803	804	804
12/15/2015					<0.001		<0.001	
12/16/2015	<0.001		<0.001					
2/17/2016	<0.001		<0.001		<0.001		<0.001	
5/26/2016	<0.001		<0.001		<0.001		<0.001	
8/23/2016	<0.001		<0.001		<0.001		<0.001	
11/10/2016	<0.001		<0.001		<0.001		<0.001	
2/9/2017	<0.001		<0.001		<0.001		<0.001	
5/3/2017	<0.001		<0.001		<0.001		<0.001	
8/1/2017	<0.001		<0.001		<0.001		<0.001	
10/4/2017	<0.001		<0.001		<0.001		<0.001	
5/18/2020		<0.001		<0.001		<0.001		<0.001
7/6/2021		<0.001		<0.001		<0.001		<0.001
11/15/2021		<0.001		<0.001		<0.001		<0.001
5/12/2022		<0.001		0.00115		<0.001		<0.001
11/29/2022		<0.001		<0.001		<0.001		<0.001
2/13/2023		<0.001		<0.001		<0.001		<0.001
5/18/2023		<0.001		<0.001		<0.001		<0.001
11/15/2023		<0.001		<0.001		<0.001		<0.001
2/12/2024		<0.001		<0.001		<0.001		<0.001
5/23/2024		<0.001				<0.001		<0.001
5/28/2024				<0.001				

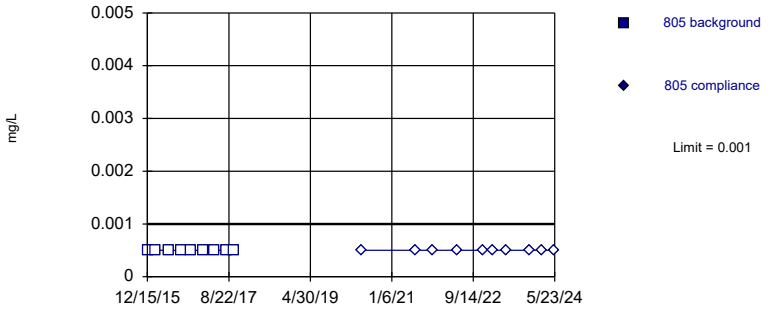
ND substitution: RL/2.

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Cadmium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

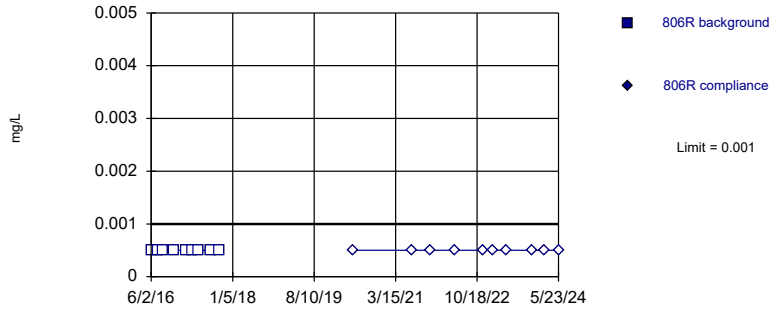
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Cadmium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

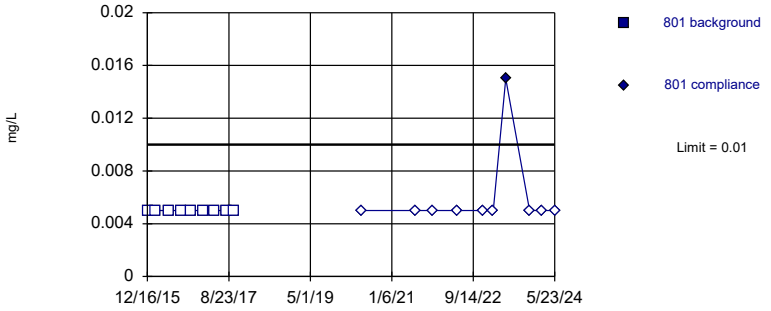
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

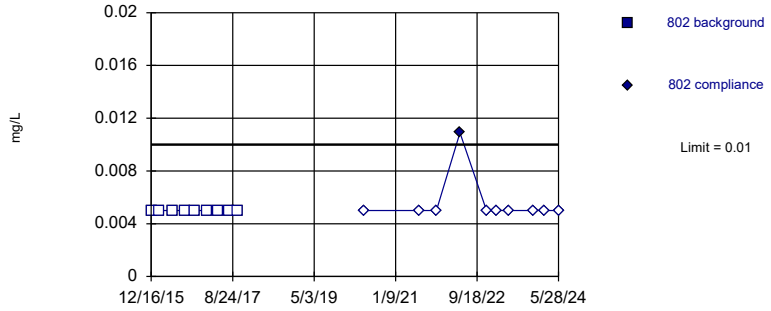
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Cadmium, Chromium Analysis Run 8/21/2024 10:40 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

	805	805	806R	806R	801	801	802	802
12/15/2015	<0.001							
12/16/2015					<0.01		<0.01	
2/17/2016	<0.001				<0.01		<0.01	
5/26/2016	<0.001				<0.01		<0.01	
6/2/2016			<0.001					
7/19/2016			<0.001					
8/23/2016	<0.001		<0.001		<0.01		<0.01	
11/10/2016	<0.001				<0.01		<0.01	
11/11/2016			<0.001					
2/9/2017	<0.001		<0.001		<0.01		<0.01	
3/22/2017			<0.001					
5/3/2017	<0.001		<0.001		<0.01		<0.01	
8/1/2017	<0.001		<0.001		<0.01		<0.01	
10/4/2017	<0.001		<0.001		<0.01		<0.01	
5/18/2020		<0.001		<0.001		<0.01		<0.01
7/6/2021		<0.001		<0.001		<0.01		<0.01
11/15/2021		<0.001		<0.001		<0.01		<0.01
5/12/2022		<0.001		<0.001		<0.01		0.0109
11/29/2022		<0.001		<0.001		<0.01		<0.01
2/13/2023		<0.001		<0.001		<0.01		<0.01
5/18/2023		<0.001		<0.001		0.015		<0.01
11/15/2023		<0.001		<0.001		<0.01		<0.01
2/12/2024		<0.001		<0.001		<0.01		<0.01
5/23/2024		<0.001		<0.001		<0.01		
5/28/2024								<0.01

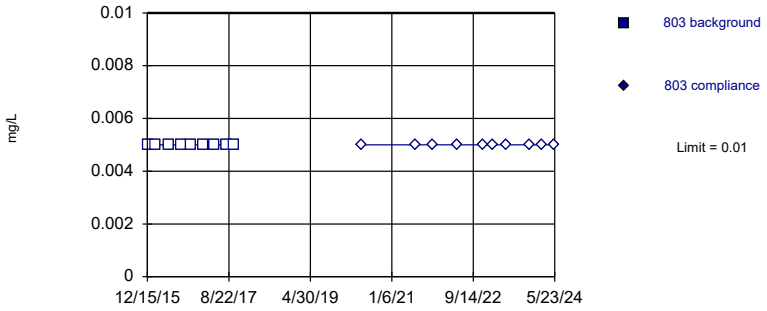
ND substitution: RL/2.

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

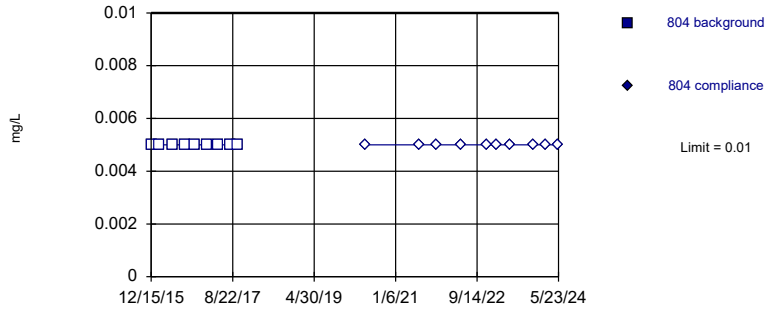
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

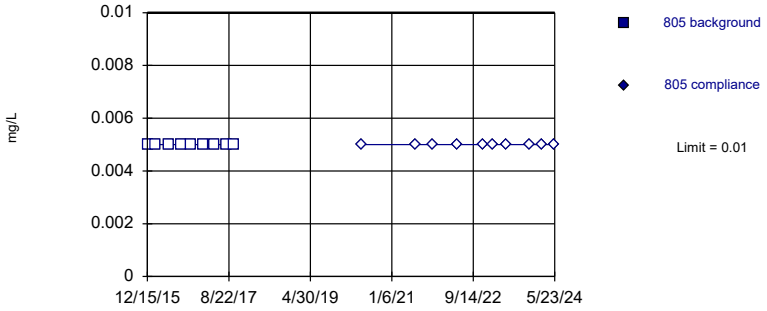
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

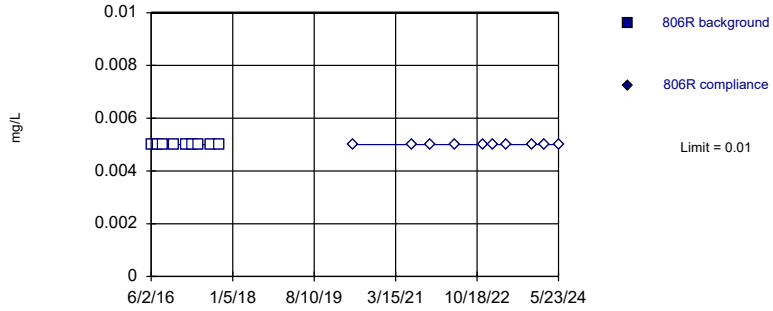
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Chromium Analysis Run 8/21/2024 10:40 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

	803	803	804	804	805	805	806R	806R
12/15/2015	<0.01		<0.01		<0.01			
2/17/2016	<0.01		<0.01		<0.01			
5/26/2016	<0.01		<0.01		<0.01			
6/2/2016							<0.01	
7/19/2016							<0.01	
8/23/2016	<0.01		<0.01		<0.01		<0.01	
11/10/2016	<0.01		<0.01		<0.01			
11/11/2016							<0.01	
2/9/2017	<0.01		<0.01		<0.01		<0.01	
3/22/2017							<0.01	
5/3/2017	<0.01		<0.01		<0.01		<0.01	
8/1/2017	<0.01		<0.01		<0.01		<0.01	
10/4/2017	<0.01		<0.01		<0.01		<0.01	
5/18/2020		<0.01		<0.01		<0.01		<0.01
7/6/2021		<0.01		<0.01		<0.01		<0.01
11/15/2021		<0.01		<0.01		<0.01		<0.01
5/12/2022		<0.01		<0.01		<0.01		<0.01
11/29/2022		<0.01		<0.01		<0.01		<0.01
2/13/2023		<0.01		<0.01		<0.01		<0.01
5/18/2023		<0.01		<0.01		<0.01		<0.01
11/15/2023		<0.01		<0.01		<0.01		<0.01
2/12/2024		<0.01		<0.01		<0.01		<0.01
5/23/2024		<0.01		<0.01		<0.01		<0.01

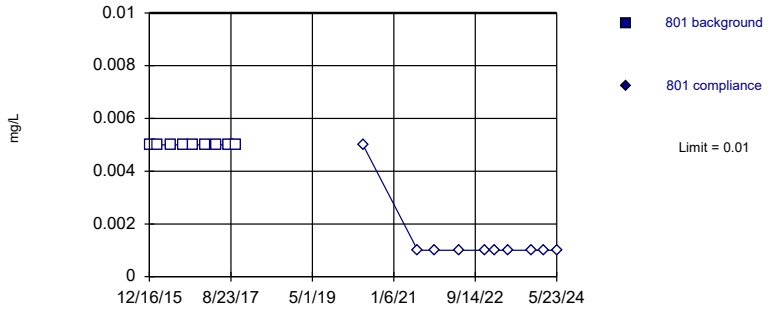
ND substitution: RL/2.

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

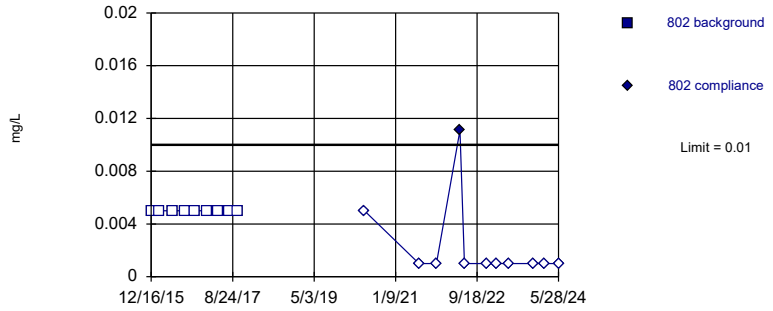
Constituent: Cobalt Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

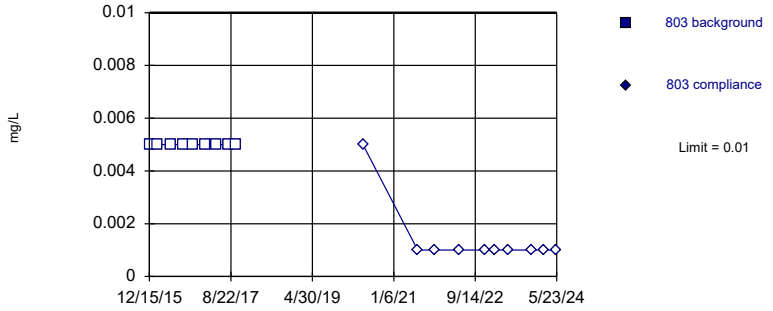
Constituent: Cobalt Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

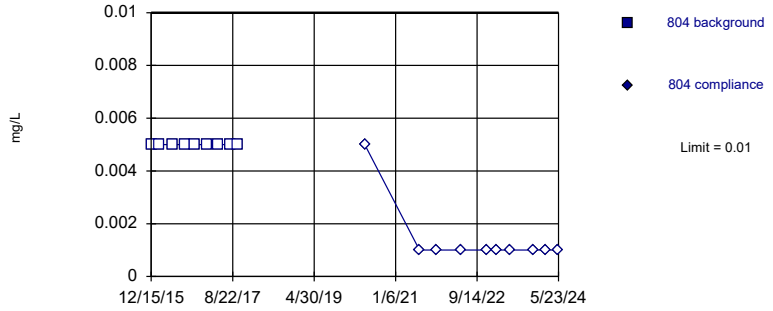
Constituent: Cobalt Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Cobalt Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Cobalt Analysis Run 8/21/2024 10:40 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

	801	801	802	802	803	803	804	804
12/15/2015					<0.01		<0.01	
12/16/2015	<0.01		<0.01					
2/17/2016	<0.01		<0.01		<0.01		<0.01	
5/26/2016	<0.01		<0.01		<0.01		<0.01	
8/23/2016	<0.01		<0.01		<0.01		<0.01	
11/10/2016	<0.01		<0.01		<0.01		<0.01	
2/9/2017	<0.01		<0.01		<0.01		<0.01	
5/3/2017	<0.01		<0.01		<0.01		<0.01	
8/1/2017	<0.01		<0.01		<0.01		<0.01	
10/4/2017	<0.01		<0.01		<0.01		<0.01	
5/18/2020		<0.01		<0.01		<0.01		<0.01
7/6/2021		<0.002		<0.002		<0.002		<0.002
11/15/2021		<0.002		<0.002		<0.002		<0.002
5/12/2022		<0.002		0.0111		<0.002		<0.002
6/15/2022				<0.002				
11/29/2022		<0.002		<0.002		<0.002		<0.002
2/13/2023		<0.002		<0.002		<0.002		<0.002
5/18/2023		<0.002		<0.002		<0.002		<0.002
11/15/2023		<0.002		<0.002		<0.002		<0.002
2/12/2024		<0.002		<0.002		<0.002		<0.002
5/23/2024		<0.002				<0.002		<0.002
5/28/2024				<0.002				

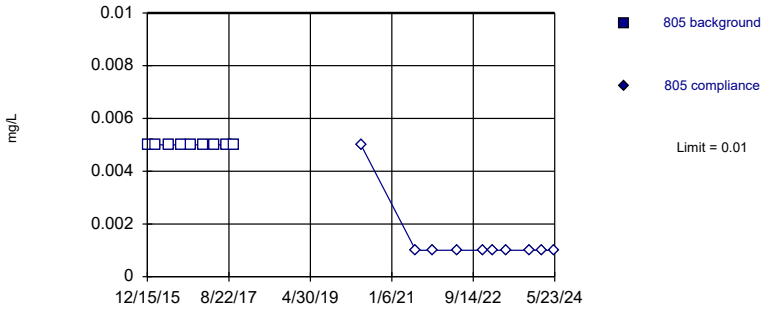
ND substitution: RL/2.

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

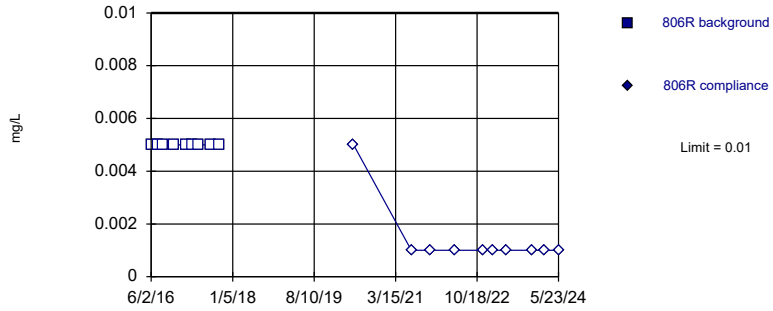
Constituent: Cobalt Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

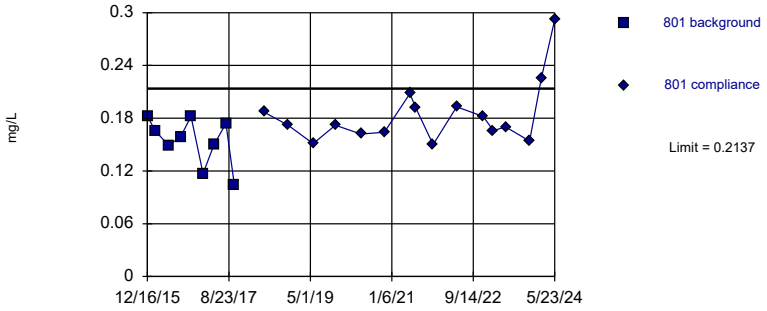
Constituent: Cobalt Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1536, Std. Dev.=0.02744, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.894, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

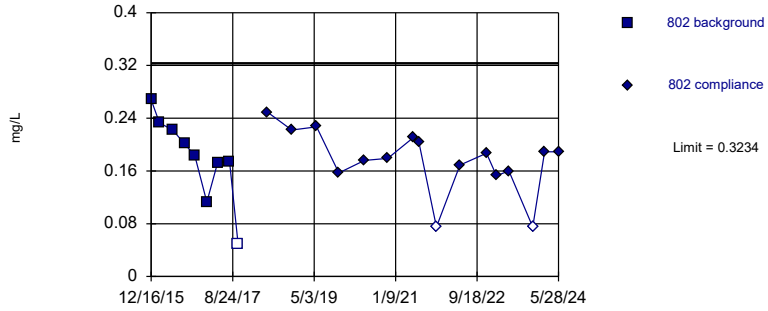
Constituent: Fluoride Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1798, Std. Dev.=0.06546, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9411, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Fluoride Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Cobalt, Fluoride Analysis Run 8/21/2024 10:40 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

	805	805	806R	806R	801	801	802	802
12/15/2015	<0.01							
12/16/2015					0.182		0.268	
2/17/2016	<0.01				0.165		0.233	
5/26/2016	<0.01				0.149		0.222	
6/2/2016			<0.01					
7/19/2016			<0.01					
8/23/2016	<0.01		<0.01		0.159		0.202	
11/10/2016	<0.01				0.182		0.183	
11/11/2016			<0.01					
2/9/2017	<0.01		<0.01		0.117		0.113	
3/22/2017			<0.01					
5/3/2017	<0.01		<0.01		0.15		0.173	
8/1/2017	<0.01		<0.01		0.174		0.174	
10/4/2017	<0.01		<0.01		0.104		<0.1	
5/16/2018						0.187		0.249
11/15/2018						0.172		0.222
5/22/2019						0.151		0.227
11/6/2019						0.172		0.157
5/18/2020		<0.01		<0.01		0.162		0.176
11/11/2020						0.164		0.179
5/24/2021						0.208		
5/25/2021								0.211
7/6/2021		<0.002		<0.002		0.192		0.203
11/15/2021		<0.002		<0.002		0.15		<0.15
5/12/2022		<0.002		<0.002		0.193		0.169
11/29/2022		<0.002		<0.002		0.182		0.187
2/13/2023		<0.002		<0.002		0.166		0.153
5/18/2023		<0.002		<0.002		0.17		0.16
11/15/2023		<0.002		<0.002		0.154		<0.15
2/12/2024		<0.002		<0.002		0.226 (D)		0.189 (D)
5/23/2024		<0.002		<0.002		0.292		
5/28/2024								0.189

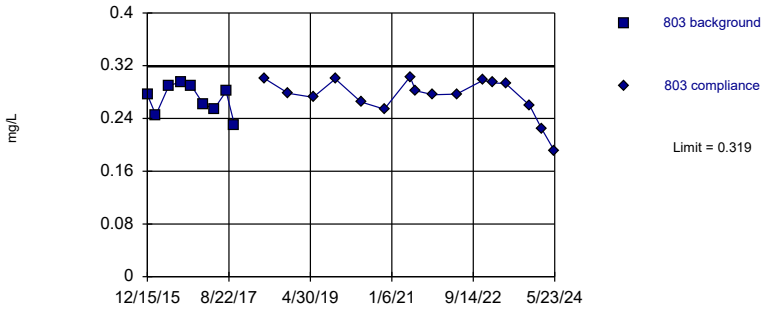
ND substitution: RL/2.

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.2692, Std. Dev.=0.0227, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9261, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Fluoride Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

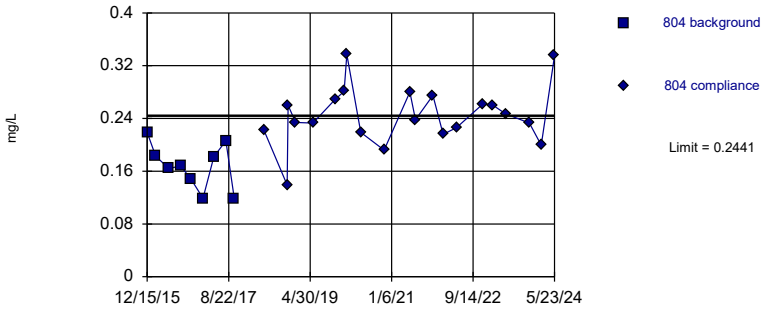
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

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Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1674, Std. Dev.=0.03496, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9484, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Fluoride Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

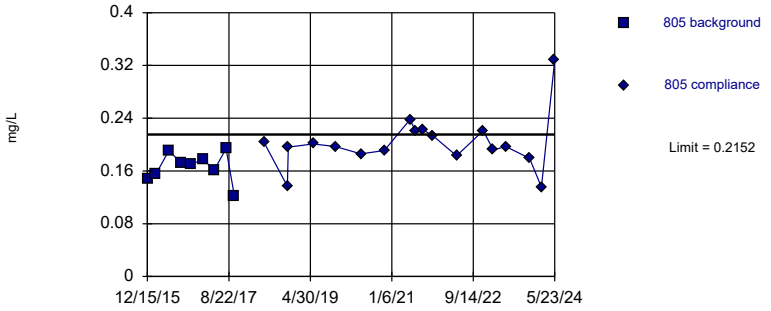
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1656, Std. Dev.=0.02263, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9537, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Fluoride Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

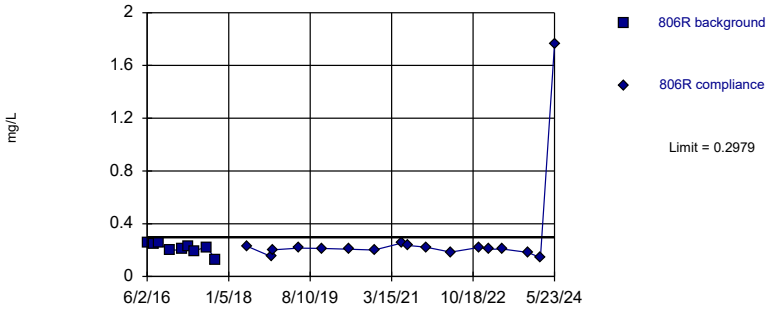
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

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Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.2133, Std. Dev.=0.03854, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8789, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Fluoride Analysis Run 8/21/2024 10:37 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Fluoride Analysis Run 8/21/2024 10:40 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

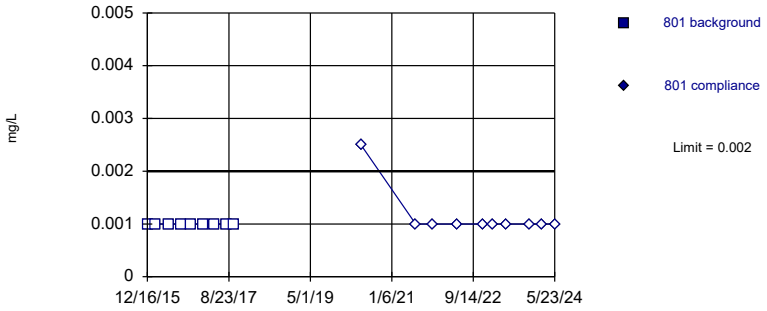
	803	803	804	804	805	805	806R	806R
12/15/2015	0.276		0.219		0.148			
2/17/2016	0.245		0.183		0.155			
5/26/2016	0.29		0.164		0.191			
6/2/2016							0.252	
7/19/2016							0.242	
8/23/2016	0.295		0.168		0.172		0.253	
11/10/2016	0.29		0.148		0.17			
11/11/2016							0.197	
2/9/2017	0.262		0.119		0.178		0.205	
3/22/2017							0.224	
5/3/2017	0.254		0.182		0.161		0.195	
8/1/2017	0.281		0.206		0.194		0.223	
10/4/2017	0.23		0.118		0.121		0.129	
5/16/2018		0.301		0.222		0.203		0.229
11/8/2018				0.139		0.137		0.15
11/15/2018		0.278		0.26		0.196		0.202
1/11/2019				0.234				
5/22/2019		0.272		0.233		0.201		0.215
11/6/2019		0.3		0.269		0.197		0.213
1/13/2020				0.281				
2/3/2020				0.337				
5/18/2020		0.265		0.219		0.186		0.206
11/11/2020		0.254		0.192		0.191		0.2
5/24/2021								0.253
5/25/2021		0.303		0.28		0.238		
7/6/2021		0.282		0.238		0.22		0.236
9/2/2021						0.222		
11/15/2021		0.276		0.275		0.213		0.222
1/31/2022				0.216				
5/12/2022		0.277		0.226		0.183		0.185
11/29/2022		0.298		0.262		0.221		0.22
2/13/2023		0.294		0.26		0.192		0.207
5/18/2023		0.293		0.247		0.197		0.208
11/15/2023		0.26		0.233		0.179		0.182
2/12/2024		0.225 (D)		0.1995 (D)		0.1355 (D)		0.142 (D)
5/23/2024		0.19		0.335		0.328		1.76

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

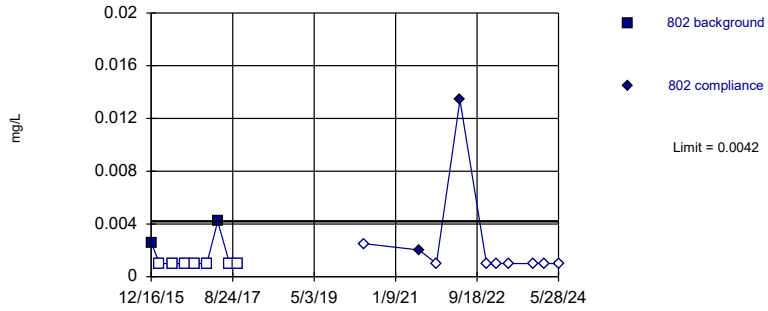
Constituent: Lead Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

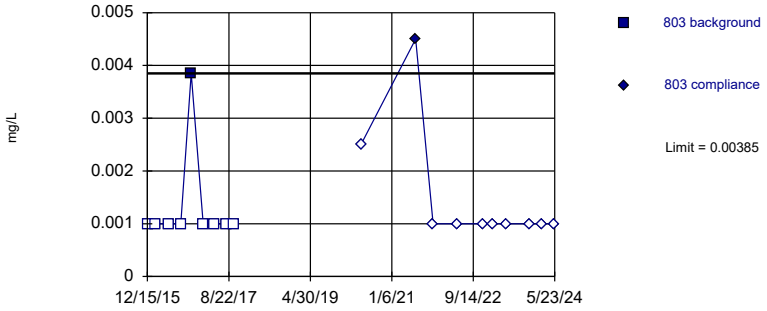
Constituent: Lead Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

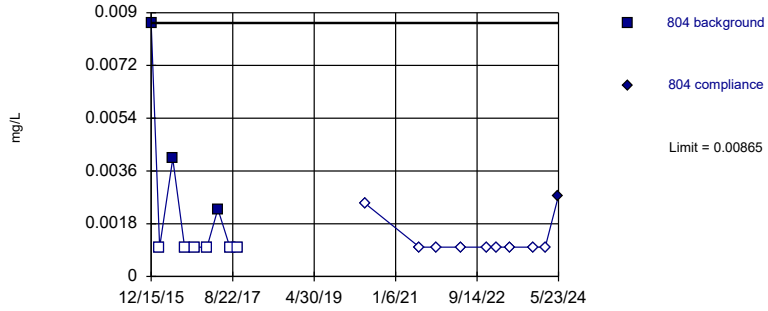
Constituent: Lead Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Lead Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Lead Analysis Run 8/21/2024 10:40 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

	801	801	802	802	803	803	804	804
12/15/2015					<0.002		0.00865	
12/16/2015	<0.002		0.0026					
2/17/2016	<0.002		<0.002		<0.002		<0.002	
5/26/2016	<0.002		<0.002		<0.002		0.00402	
8/23/2016	<0.002		<0.002		<0.002		<0.002	
11/10/2016	<0.002		<0.002		0.00385		<0.002	
2/9/2017	<0.002		<0.002		<0.002		<0.002	
5/3/2017	<0.002		0.0042		<0.002		0.0023	
8/1/2017	<0.002		<0.002		<0.002		<0.002	
10/4/2017	<0.002		<0.002		<0.002		<0.002	
5/18/2020		<0.005		<0.005		<0.005		<0.005
7/6/2021		<0.002		0.00203		0.0045		<0.002
11/15/2021		<0.002		<0.002		<0.002		<0.002
5/12/2022		<0.002		0.0134		<0.002		<0.002
11/29/2022		<0.002		<0.002		<0.002		<0.002
2/13/2023		<0.002		<0.002		<0.002		<0.002
5/18/2023		<0.002		<0.002		<0.002		<0.002
11/15/2023		<0.002		<0.002		<0.002		<0.002
2/12/2024		<0.002		<0.002		<0.002		<0.002
5/23/2024		<0.002				<0.002		0.00276
5/28/2024				<0.002				

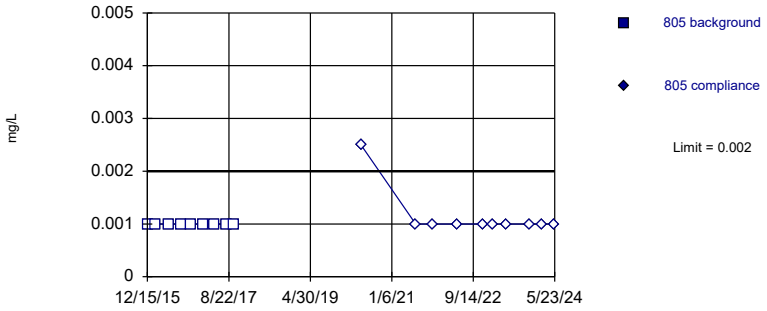
ND substitution: RL/2.

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

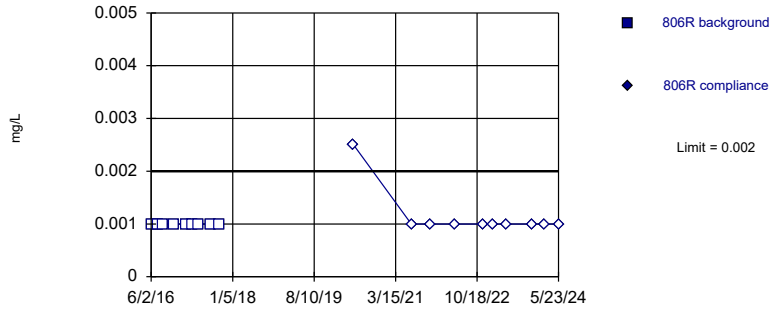
Constituent: Lead Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

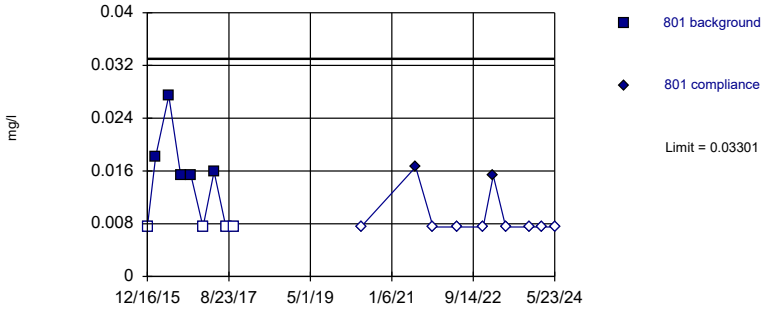
Constituent: Lead Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Aitchison`s Adjustment): Mean=0.01024, Std. Dev.=0.01038, n=9, 44.44% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8326, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

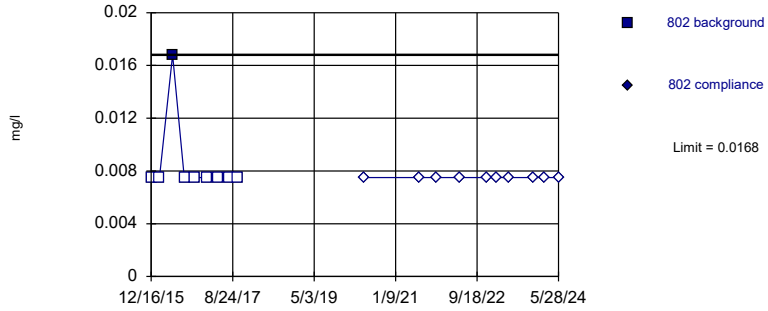
Constituent: Lithium Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Lithium Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Lead, Lithium Analysis Run 8/21/2024 10:40 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

	805	805	806R	806R	801	801	802	802
12/15/2015	<0.002							
12/16/2015					<0.015		<0.015	
2/17/2016	<0.002				0.0182		<0.015	
5/26/2016	<0.002				0.0274		0.0168	
6/2/2016			<0.002					
7/19/2016			<0.002					
8/23/2016	<0.002		<0.002		0.0154		<0.015	
11/10/2016	<0.002				0.0153		<0.015	
11/11/2016			<0.002					
2/9/2017	<0.002		<0.002		<0.015		<0.015	
3/22/2017			<0.002					
5/3/2017	<0.002		<0.002		0.0159		<0.015	
8/1/2017	<0.002		<0.002		<0.015		<0.015	
10/4/2017	<0.002		<0.002		<0.015		<0.015	
5/18/2020		<0.005		<0.005		<0.015		<0.015
7/6/2021		<0.002		<0.002		0.0166		<0.015
11/15/2021		<0.002		<0.002		<0.015		<0.015
5/12/2022		<0.002		<0.002		<0.015		<0.015
11/29/2022		<0.002		<0.002		<0.015		<0.015
2/13/2023		<0.002		<0.002		0.0153		<0.015
5/18/2023		<0.002		<0.002		<0.015		<0.015
11/15/2023		<0.002		<0.002		<0.015		<0.015
2/12/2024		<0.002		<0.002		<0.015		<0.015
5/23/2024		<0.002		<0.002		<0.015		
5/28/2024								<0.015

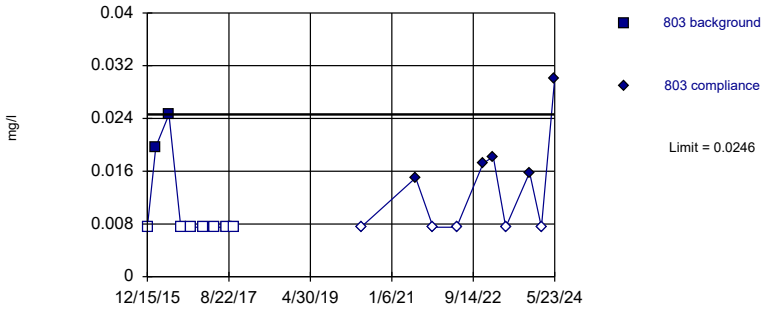
ND substitution: RL/2.

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Lithium Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV

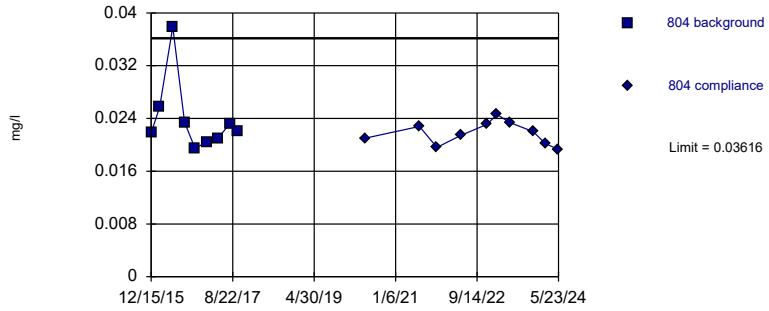
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-3.754, Std. Dev.=0.1981, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7756, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Lithium Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV

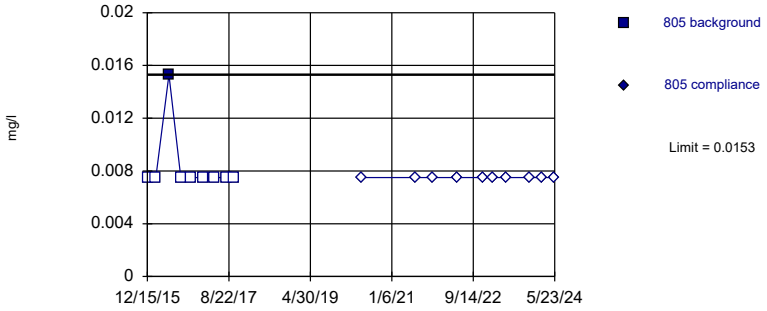
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Lithium Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV

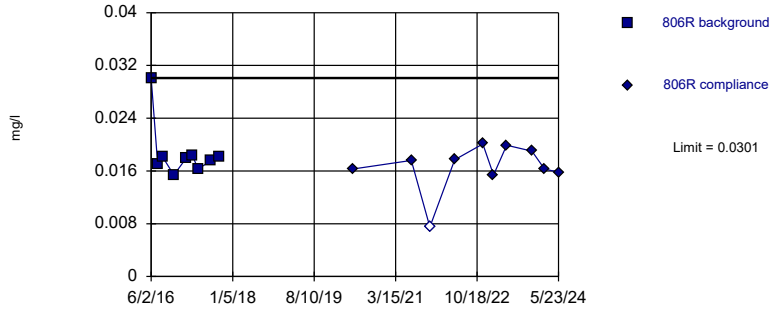
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 9 background values. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Lithium Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Lithium Analysis Run 8/21/2024 10:40 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

	803	803	804	804	805	805	806R	806R
12/15/2015	<0.015		0.0218		<0.015			
2/17/2016	0.0197		0.0257		<0.015			
5/26/2016	0.0246		0.0379		0.0153			
6/2/2016							0.0301	
7/19/2016							0.017	
8/23/2016	<0.015		0.0234		<0.015		0.0181	
11/10/2016	<0.015		0.0195		<0.015			
11/11/2016							0.0154	
2/9/2017	<0.015		0.0204		<0.015		0.018	
3/22/2017							0.0184	
5/3/2017	<0.015		0.021		<0.015		0.0163	
8/1/2017	<0.015		0.0232		<0.015		0.0175	
10/4/2017	<0.015		0.022		<0.015		0.0182	
5/18/2020		<0.015		0.021		<0.015		0.0163
7/6/2021		0.015		0.0228		<0.015		0.0176
11/15/2021		<0.015		0.0196		<0.015		<0.015
5/12/2022		<0.015		0.0214		<0.015		0.0177
11/29/2022		0.0172		0.0231		<0.015		0.0201
2/13/2023		0.0182		0.0246		<0.015		0.0154
5/18/2023		<0.015		0.0234		<0.015		0.0199
11/15/2023		0.0158		0.022		<0.015		0.019
2/12/2024		<0.015		0.0202		<0.015		0.0163
5/23/2024		0.0301 (B)		0.0193 (B)		<0.015		0.0158 (B)

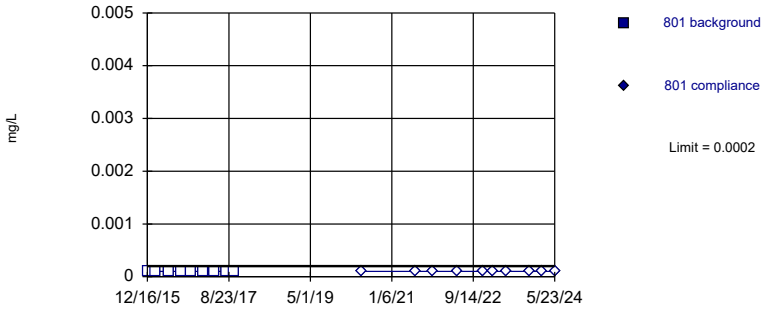
ND substitution: RL/2.

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Mercury Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV

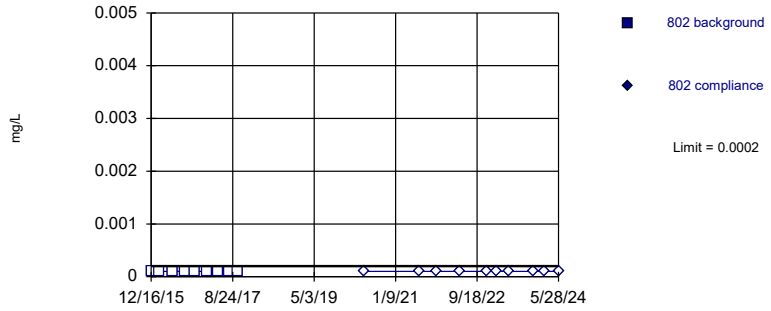
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Mercury Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV

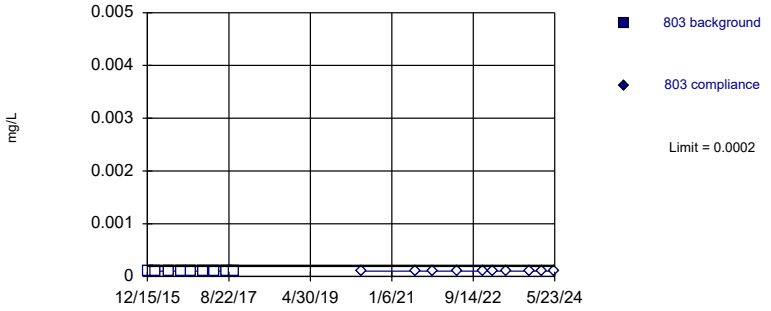
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Mercury Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV

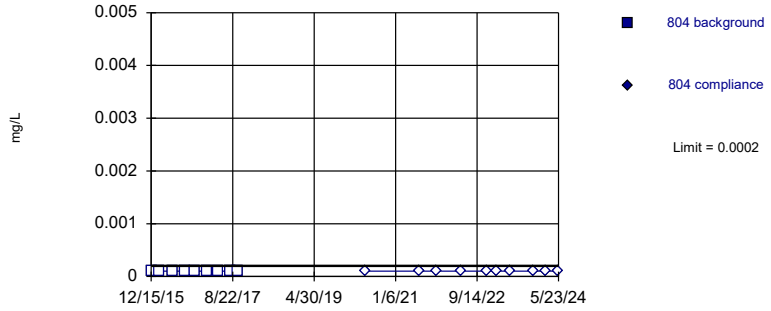
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Mercury Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Mercury Analysis Run 8/21/2024 10:40 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

	801	801	802	802	803	803	804	804
12/15/2015					<0.0002		<0.0002	
12/16/2015	<0.0002		<0.0002					
2/17/2016	<0.0002		<0.0002		<0.0002		<0.0002	
5/26/2016	<0.0002		<0.0002		<0.0002		<0.0002	
8/23/2016	<0.0002		<0.0002		<0.0002		<0.0002	
11/10/2016	<0.0002		<0.0002		<0.0002		<0.0002	
2/9/2017	<0.0002		<0.0002		<0.0002		<0.0002	
5/3/2017	<0.0002		<0.0002		<0.0002		<0.0002	
8/1/2017	<0.0002		<0.0002		<0.0002		<0.0002	
10/4/2017	<0.0002		<0.0002		<0.0002		<0.0002	
5/18/2020		<0.0002		<0.0002		<0.0002		<0.0002
7/6/2021		<0.0002		<0.0002		<0.0002		<0.0002
11/15/2021		<0.0002		<0.0002		<0.0002		<0.0002
5/12/2022		<0.0002		<0.0002		<0.0002		<0.0002
11/29/2022		<0.0002		<0.0002		<0.0002		<0.0002
2/13/2023		<0.0002		<0.0002		<0.0002		<0.0002
5/18/2023		<0.0002		<0.0002		<0.0002		<0.0002
11/15/2023		<0.0002		<0.0002		<0.0002		<0.0002
2/12/2024		<0.0002		<0.0002		<0.0002		<0.0002
5/23/2024		<0.0002				<0.0002		<0.0002
5/28/2024				<0.0002				

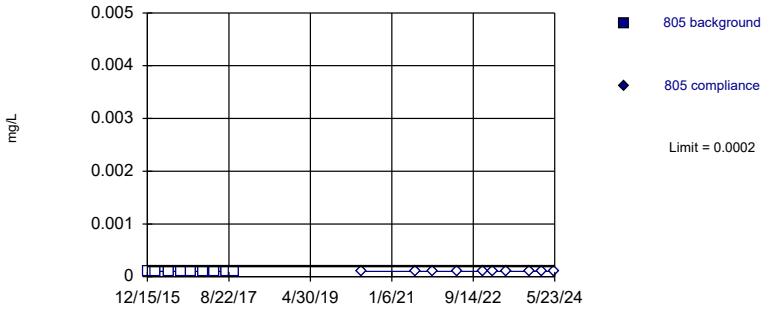
ND substitution: RL/2.

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Mercury Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV

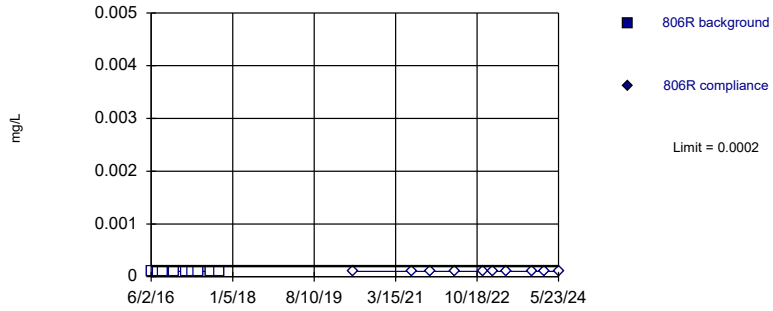
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Mercury Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV

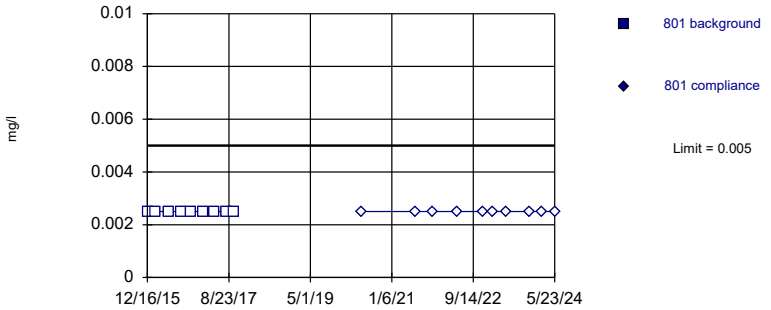
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Molybdenum Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV

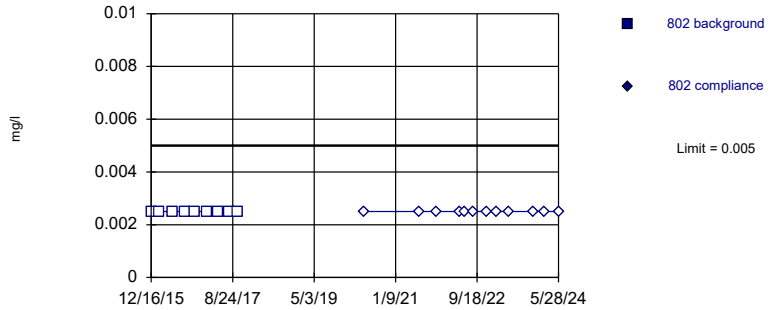
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Molybdenum Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Mercury, Molybdenum Analysis Run 8/21/2024 10:40 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

	805	805	806R	806R	801	801	802	802
12/15/2015	<0.0002							
12/16/2015					<0.005		<0.005	
2/17/2016	<0.0002				<0.005		<0.005	
5/26/2016	<0.0002				<0.005		<0.005	
6/2/2016			<0.0002					
7/19/2016			<0.0002					
8/23/2016	<0.0002		<0.0002		<0.005		<0.005	
11/10/2016	<0.0002				<0.005		<0.005	
11/11/2016			<0.0002					
2/9/2017	<0.0002		<0.0002		<0.005		<0.005	
3/22/2017			<0.0002					
5/3/2017	<0.0002		<0.0002		<0.005		<0.005	
8/1/2017	<0.0002		<0.0002		<0.005		<0.005	
10/4/2017	<0.0002		<0.0002		<0.005		<0.005	
5/18/2020		<0.0002		<0.0002		<0.005		<0.005
7/6/2021		<0.0002		<0.0002		<0.005		<0.005
11/15/2021		<0.0002		<0.0002		<0.005		<0.005
5/12/2022		<0.0002		<0.0002		<0.005		<0.005
6/15/2022								<0.005
8/19/2022								<0.005
11/29/2022		<0.0002		<0.0002		<0.005		<0.005
2/13/2023		<0.0002		<0.0002		<0.005		<0.005
5/18/2023		<0.0002		<0.0002		<0.005		<0.005
11/15/2023		<0.0002		<0.0002		<0.005		<0.005
2/12/2024		<0.0002		<0.0002		<0.005		<0.005
5/23/2024		<0.0002		<0.0002		<0.005		
5/28/2024								<0.005

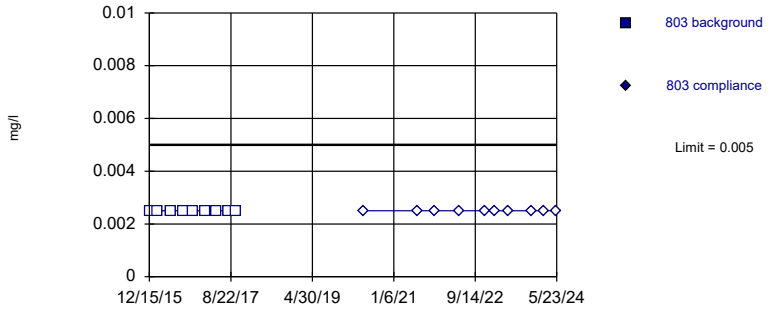
ND substitution: RL/2.

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Molybdenum Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV

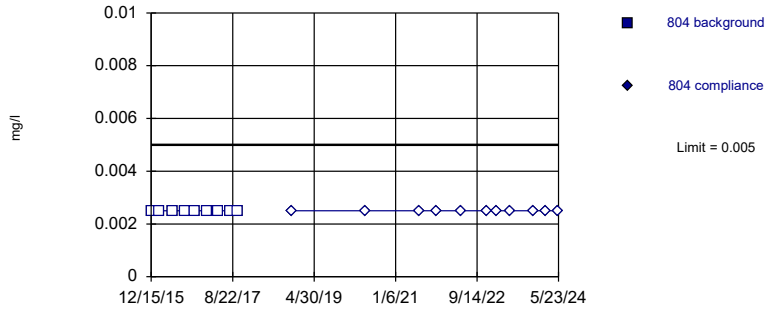
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Molybdenum Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV

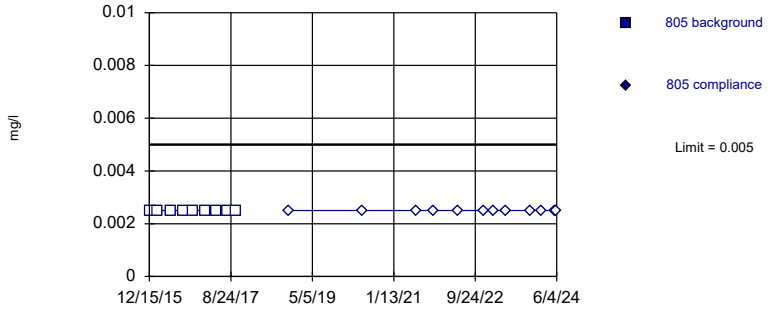
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Molybdenum Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV

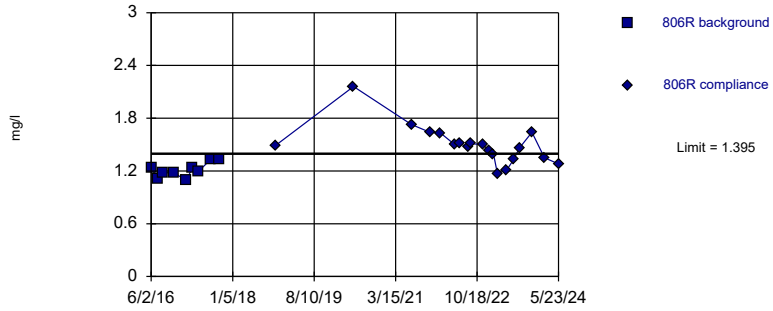
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.21, Std. Dev.=0.08456, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9266, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Molybdenum Analysis Run 8/21/2024 10:38 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Molybdenum Analysis Run 8/21/2024 10:40 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

	803	803	804	804	805	805	806R	806R
12/15/2015	<0.005		<0.005		<0.005			
2/17/2016	<0.005		<0.005		<0.005			
5/26/2016	<0.005		<0.005		<0.005			
6/2/2016							1.24	
7/19/2016							1.11	
8/23/2016	<0.005		<0.005		<0.005		1.18	
11/10/2016	<0.005		<0.005		<0.005			
11/11/2016							1.18	
2/9/2017	<0.005		<0.005		<0.005		1.09	
3/22/2017							1.24	
5/3/2017	<0.005		<0.005		<0.005		1.19	
8/1/2017	<0.005		<0.005		<0.005		1.33	
10/4/2017	<0.005		<0.005		<0.005		1.33	
11/8/2018				<0.005		<0.005		1.49
5/18/2020		<0.005		<0.005		<0.005		2.16
7/6/2021		<0.005		<0.005		<0.005		1.73
11/15/2021		<0.005		<0.005		<0.005		1.64
1/31/2022								1.63
5/12/2022		<0.005		<0.005		<0.005		1.5
6/15/2022								1.51
8/18/2022								1.47
9/1/2022								1.51
11/29/2022		<0.005		<0.005		<0.005		1.5
1/11/2023								1.43
2/13/2023		<0.005		<0.005		<0.005		1.39
3/13/2023								1.17
5/18/2023		<0.005		<0.005		<0.005		1.21
7/7/2023								1.33
8/17/2023								1.46
11/15/2023		<0.005		<0.005		<0.005		1.64
2/12/2024		<0.005		<0.005		<0.005		1.35
5/23/2024		<0.005		<0.005		<0.005		1.28
6/4/2024						<0.005		

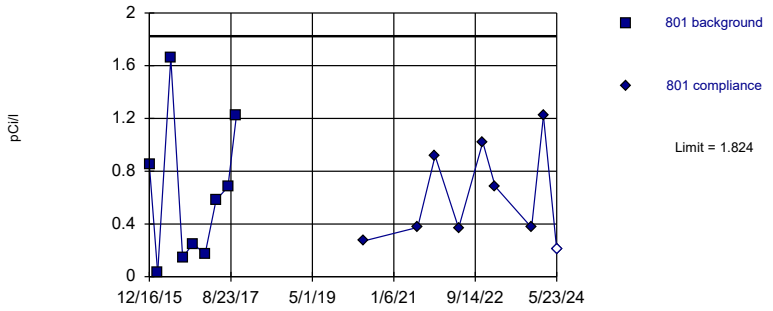
ND substitution: RL/2.

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.6204, Std. Dev.=0.5487, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.913, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Radium Combined Analysis Run 8/21/2024 10:39 AM View: Ash Pond IV

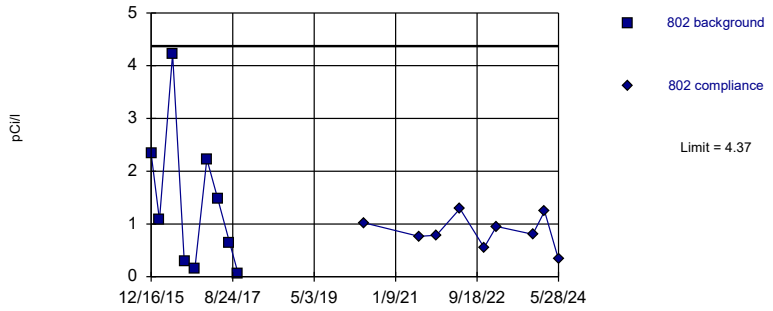
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.388, Std. Dev.=1.36, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8858, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Radium Combined Analysis Run 8/21/2024 10:39 AM View: Ash Pond IV

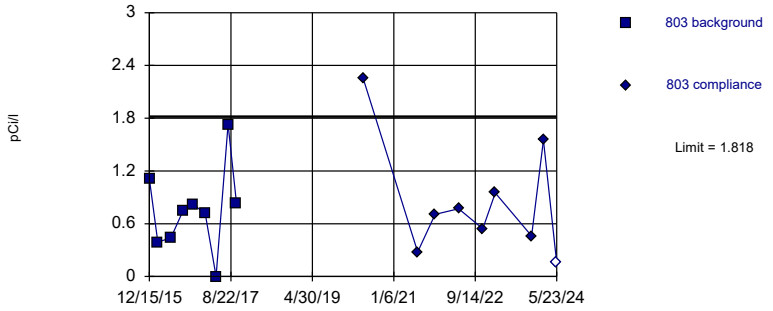
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.7523, Std. Dev.=0.486, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9475, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Radium Combined Analysis Run 8/21/2024 10:39 AM View: Ash Pond IV

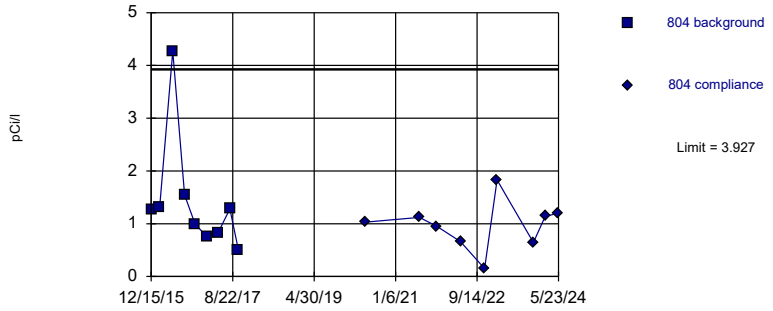
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=1.133, Std. Dev.=0.3871, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.797, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Radium Combined Analysis Run 8/21/2024 10:39 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Radium Combined Analysis Run 8/21/2024 10:40 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

	801	801	802	802	803	803	804	804
12/15/2015					1.11		1.257	
12/16/2015	0.848		2.334					
2/17/2016	0.028		1.075		0.389		1.308	
5/26/2016	1.658		4.222		0.441		4.27	
8/23/2016	0.146		0.287		0.741		1.545	
11/10/2016	0.251		0.144		0.817		1	
2/9/2017	0.17		2.23		0.717		0.749	
5/3/2017	0.582		1.48		0		0.822	
8/1/2017	0.681		0.65		1.73		1.28	
10/4/2017	1.22		0.066		0.826		0.511	
5/18/2020		0.27		1.02		2.26		1.03
7/6/2021		0.374		0.765		0.278		1.12
11/15/2021		0.916		0.786		0.707		0.949
5/12/2022		0.369 (J)		1.29		0.77		0.661
11/11/2022		1.02		0.552		0.543		0.15
2/13/2023		0.683		0.952		0.951		1.83
11/15/2023		0.373 (J)		0.804 (J)		0.46 (J)		0.645
2/12/2024		1.22		1.24		1.55		1.14
5/23/2024		<0.414				<0.307		1.2
5/28/2024				0.328 (J)				

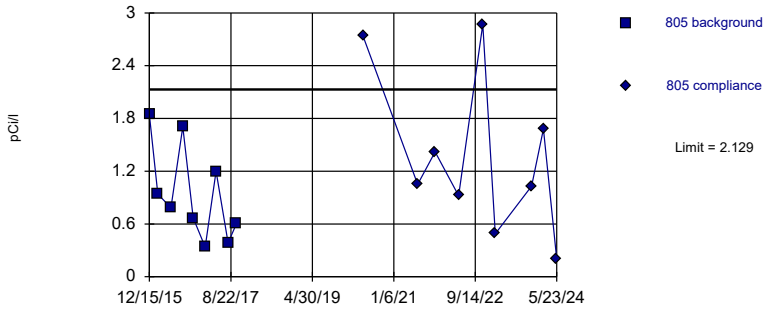
ND substitution: RL/2.

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.9412, Std. Dev.=0.5416, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9047, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Radium Combined Analysis Run 8/21/2024 10:39 AM View: Ash Pond IV

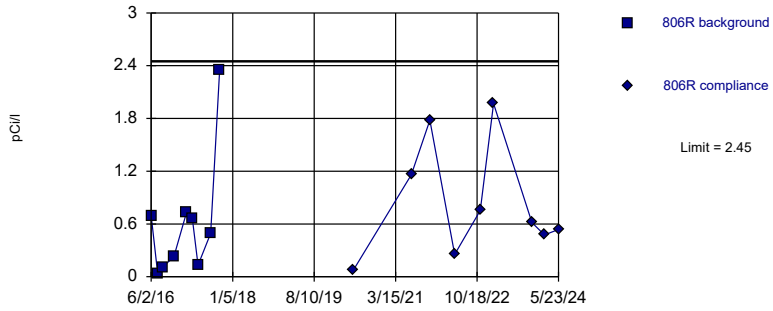
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.6773, Std. Dev.=0.4049, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9055, critical = 0.764. Kappa = 2.193 (c=15, w=6, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Radium Combined Analysis Run 8/21/2024 10:39 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

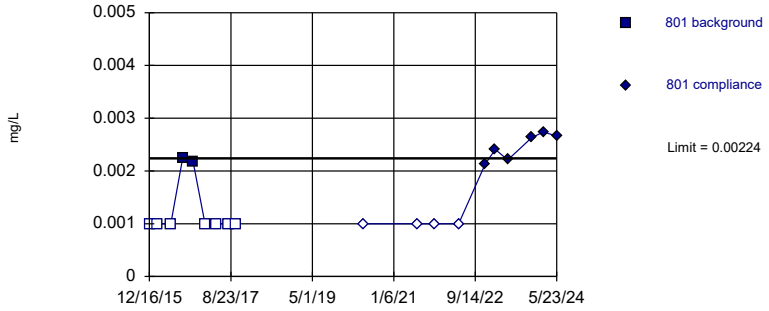
Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Selenium Analysis Run 8/21/2024 10:39 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

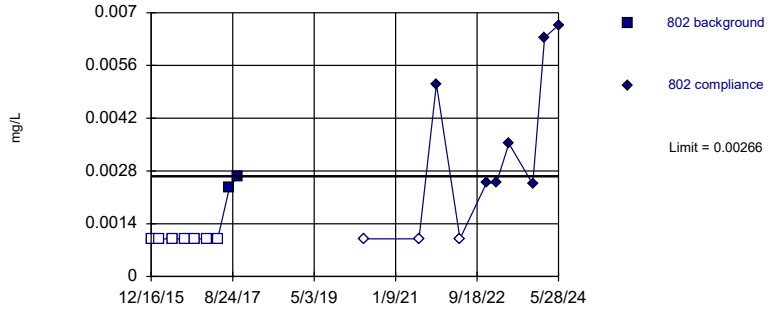
Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Selenium Analysis Run 8/21/2024 10:39 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Radium Combined, Selenium Analysis Run 8/21/2024 10:40 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

	805	805	806R	806R	801	801	802	802
12/15/2015	1.843							
12/16/2015					<0.002		<0.002	
2/17/2016	0.94				<0.002		<0.002	
5/26/2016	0.785				<0.002		<0.002	
6/2/2016			0.695					
7/19/2016			0.034					
8/23/2016	1.705		0.109		0.00224		<0.002	
11/10/2016	0.668				0.00218		<0.002	
11/11/2016			0.228					
2/9/2017	0.338		0.731		<0.002		<0.002	
3/22/2017			0.668					
5/3/2017	1.2		0.131		<0.002		<0.002	
8/1/2017	0.387		0.494		<0.002		0.00237	
10/4/2017	0.605		2.35		<0.002		0.00266	
5/18/2020		2.74		0.078		<0.002		<0.002
7/6/2021		1.05		1.16		<0.002		<0.002
11/15/2021		1.42		1.78		<0.002		0.00511
5/12/2022		0.922		0.253 (J)		<0.002		<0.002
11/11/2022		2.87		0.754				
11/29/2022						0.00213		0.00248
2/13/2023		0.489 (J)		1.97		0.00241		0.00248
5/18/2023						0.00221		0.00353
11/15/2023		1.03		0.616		0.00263		0.00245
2/12/2024		1.68		0.475		0.00274		0.00634
5/23/2024		0.2 (J)		0.537 (J)		0.00266		
5/28/2024								0.00667

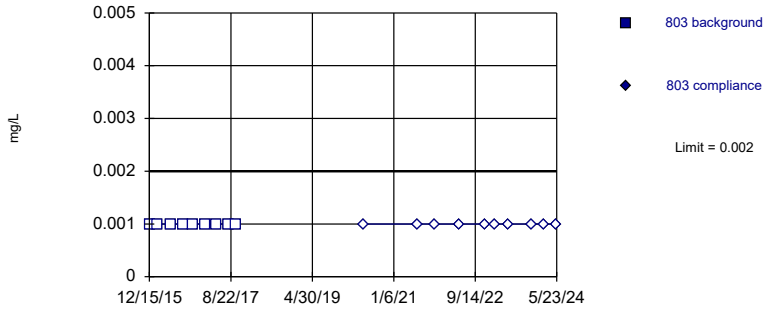
ND substitution: RL/2.

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Selenium Analysis Run 8/21/2024 10:39 AM View: Ash Pond IV

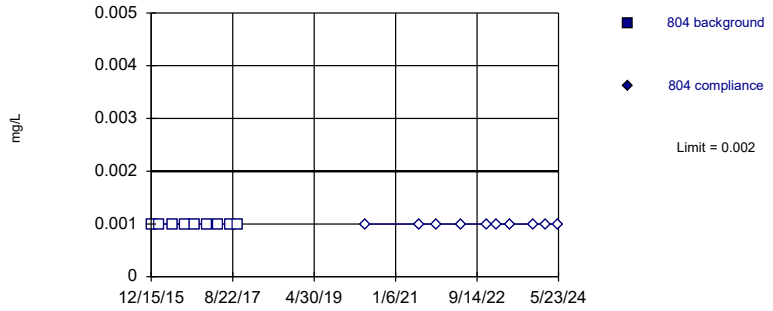
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Selenium Analysis Run 8/21/2024 10:39 AM View: Ash Pond IV

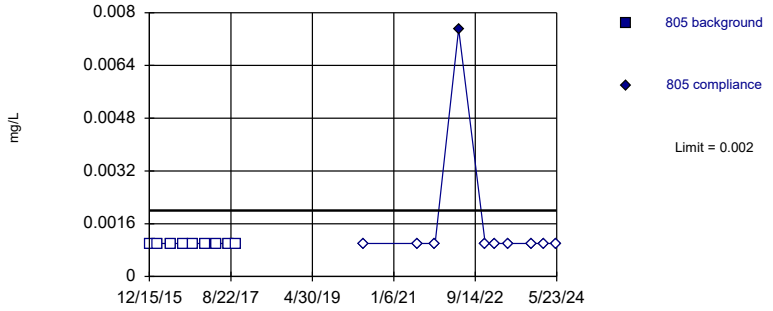
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Selenium Analysis Run 8/21/2024 10:39 AM View: Ash Pond IV

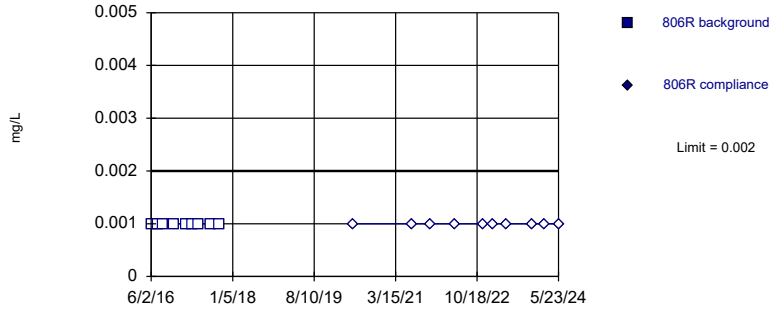
Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Sanitas™ v.10.0.20 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Selenium Analysis Run 8/21/2024 10:39 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

Prediction Limit

Constituent: Selenium Analysis Run 8/21/2024 10:41 AM View: Ash Pond IV

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley

	803	803	804	804	805	805	806R	806R
12/15/2015	<0.002		<0.002		<0.002			
2/17/2016	<0.002		<0.002		<0.002			
5/26/2016	<0.002		<0.002		<0.002			
6/2/2016							<0.002	
7/19/2016							<0.002	
8/23/2016	<0.002		<0.002		<0.002		<0.002	
11/10/2016	<0.002		<0.002		<0.002			
11/11/2016							<0.002	
2/9/2017	<0.002		<0.002		<0.002		<0.002	
3/22/2017							<0.002	
5/3/2017	<0.002		<0.002		<0.002		<0.002	
8/1/2017	<0.002		<0.002		<0.002		<0.002	
10/4/2017	<0.002		<0.002		<0.002		<0.002	
5/18/2020		<0.002		<0.002		<0.002		<0.002
7/6/2021		<0.002		<0.002		<0.002		<0.002
11/15/2021		<0.002		<0.002		<0.002		<0.002
5/12/2022		<0.002		<0.002		0.00751		<0.002
11/29/2022		<0.002		<0.002		<0.002		<0.002
2/13/2023		<0.002		<0.002		<0.002		<0.002
5/18/2023		<0.002		<0.002		<0.002		<0.002
11/15/2023		<0.002		<0.002		<0.002		<0.002
2/12/2024		<0.002		<0.002		<0.002		<0.002
5/23/2024		<0.002		<0.002		<0.002		<0.002

ND substitution: RL/2.

Prediction Limit

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley Printed 8/21/2024, 10:41 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	801	0.002	n/a	5/23/2024	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	802	0.007646	n/a	5/28/2024	0.001ND	No	9	11.11	x^(1/3)	0.0005852	Param Intra 1 of 3
Arsenic (mg/L)	803	0.004999	n/a	5/23/2024	0.00234	No	9	0	No	0.0005852	Param Intra 1 of 3
Arsenic (mg/L)	804	0.01078	n/a	5/23/2024	0.00245	No	9	0	No	0.0005852	Param Intra 1 of 3
Arsenic (mg/L)	805	0.002	n/a	5/23/2024	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	806R	0.00776	n/a	5/23/2024	0.00384	No	9	0	No	0.0005852	Param Intra 1 of 3
Barium (mg/L)	801	0.146	n/a	5/23/2024	0.102	No	9	0	No	0.0005852	Param Intra 1 of 3
Barium (mg/L)	802	0.3056	n/a	5/28/2024	0.259	No	9	0	No	0.0005852	Param Intra 1 of 3
Barium (mg/L)	**803**	**0.1509**	**n/a**	**5/23/2024**	**1.04**	**Yes**	**9**	**0**	**No**	**0.0005852**	**Param Intra 1 of 3**
Barium (mg/L)	804	0.5223	n/a	5/23/2024	0.483	No	9	0	No	0.0005852	Param Intra 1 of 3
Barium (mg/L)	805	0.1854	n/a	5/23/2024	0.138	No	9	0	No	0.0005852	Param Intra 1 of 3
Barium (mg/L)	806R	0.1276	n/a	5/23/2024	0.0772	No	9	0	No	0.0005852	Param Intra 1 of 3
Cadmium (mg/L)	801	0.001	n/a	5/23/2024	0.0005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	802	0.001	n/a	5/28/2024	0.0005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	803	0.001	n/a	5/23/2024	0.0005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	804	0.001	n/a	5/23/2024	0.0005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	805	0.001	n/a	5/23/2024	0.0005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	806R	0.001	n/a	5/23/2024	0.0005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Chromium (mg/L)	801	0.01	n/a	5/23/2024	0.005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Chromium (mg/L)	802	0.01	n/a	5/28/2024	0.005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Chromium (mg/L)	803	0.01	n/a	5/23/2024	0.005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Chromium (mg/L)	804	0.01	n/a	5/23/2024	0.005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Chromium (mg/L)	805	0.01	n/a	5/23/2024	0.005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Chromium (mg/L)	806R	0.01	n/a	5/23/2024	0.005ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	801	0.01	n/a	5/23/2024	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	802	0.01	n/a	5/28/2024	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	803	0.01	n/a	5/23/2024	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	804	0.01	n/a	5/23/2024	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	805	0.01	n/a	5/23/2024	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	806R	0.01	n/a	5/23/2024	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Fluoride (mg/L)	**801**	**0.2137**	**n/a**	**5/23/2024**	**0.292**	**Yes**	**9**	**0**	**No**	**0.0005852**	**Param Intra 1 of 3**
Fluoride (mg/L)	802	0.3234	n/a	5/28/2024	0.189	No	9	11.11	No	0.0005852	Param Intra 1 of 3
Fluoride (mg/L)	803	0.319	n/a	5/23/2024	0.19	No	9	0	No	0.0005852	Param Intra 1 of 3
Fluoride (mg/L)	**804**	**0.2441**	**n/a**	**5/23/2024**	**0.335**	**Yes**	**9**	**0**	**No**	**0.0005852**	**Param Intra 1 of 3**
Fluoride (mg/L)	**805**	**0.2152**	**n/a**	**5/23/2024**	**0.328**	**Yes**	**9**	**0**	**No**	**0.0005852**	**Param Intra 1 of 3**
Fluoride (mg/L)	**806R**	**0.2979**	**n/a**	**5/23/2024**	**1.76**	**Yes**	**9**	**0**	**No**	**0.0005852**	**Param Intra 1 of 3**
Lead (mg/L)	801	0.002	n/a	5/23/2024	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Lead (mg/L)	802	0.0042	n/a	5/28/2024	0.001ND	No	9	77.78	n/a	0.004675	NP Intra (NDs) 1 of 3
Lead (mg/L)	803	0.00385	n/a	5/23/2024	0.001ND	No	9	88.89	n/a	0.004675	NP Intra (NDs) 1 of 3
Lead (mg/L)	804	0.00865	n/a	5/23/2024	0.00276	No	9	66.67	n/a	0.004675	NP Intra (NDs) 1 of 3
Lead (mg/L)	805	0.002	n/a	5/23/2024	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Lead (mg/L)	806R	0.002	n/a	5/23/2024	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Lithium (mg/l)	801	0.03301	n/a	5/23/2024	0.0075ND	No	9	44.44	No	0.0005852	Param Intra 1 of 3
Lithium (mg/l)	802	0.0168	n/a	5/28/2024	0.0075ND	No	9	88.89	n/a	0.004675	NP Intra (NDs) 1 of 3
Lithium (mg/l)	**803**	**0.0246**	**n/a**	**5/23/2024**	**0.0301**	**Yes**	**9**	**77.78**	**n/a**	**0.004675**	**NP Intra (NDs) 1 of 3**
Lithium (mg/l)	804	0.03616	n/a	5/23/2024	0.0193	No	9	0	ln(x)	0.0005852	Param Intra 1 of 3
Lithium (mg/l)	805	0.0153	n/a	5/23/2024	0.0075ND	No	9	88.89	n/a	0.004675	NP Intra (NDs) 1 of 3
Lithium (mg/l)	806R	0.0301	n/a	5/23/2024	0.0158	No	9	0	n/a	0.004675	NP Intra (normality) ...
Mercury (mg/L)	801	0.0002	n/a	5/23/2024	0.0001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Mercury (mg/L)	802	0.0002	n/a	5/28/2024	0.0001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3

Prediction Limit

Sibley Generating Station UWL Client: SCS Engineers Data: Sibley Printed 8/21/2024, 10:41 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Mercury (mg/L)	803	0.0002	n/a	5/23/2024	0.0001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Mercury (mg/L)	804	0.0002	n/a	5/23/2024	0.0001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Mercury (mg/L)	805	0.0002	n/a	5/23/2024	0.0001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Mercury (mg/L)	806R	0.0002	n/a	5/23/2024	0.0001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Molybdenum (mg/l)	801	0.005	n/a	5/23/2024	0.0025ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Molybdenum (mg/l)	802	0.005	n/a	5/28/2024	0.0025ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Molybdenum (mg/l)	803	0.005	n/a	5/23/2024	0.0025ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Molybdenum (mg/l)	804	0.005	n/a	5/23/2024	0.0025ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Molybdenum (mg/l)	805	0.005	n/a	6/4/2024	0.0025ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Molybdenum (mg/l)	806R	1.395	n/a	5/23/2024	1.28	No	9	0	No	0.0005852	Param Intra 1 of 3
Radium Combined (pCi/l)	801	1.824	n/a	5/23/2024	0.207ND	No	9	0	No	0.0005852	Param Intra 1 of 3
Radium Combined (pCi/l)	802	4.37	n/a	5/28/2024	0.328J	No	9	0	No	0.0005852	Param Intra 1 of 3
Radium Combined (pCi/l)	803	1.818	n/a	5/23/2024	0.1535ND	No	9	0	No	0.0005852	Param Intra 1 of 3
Radium Combined (pCi/l)	804	3.927	n/a	5/23/2024	1.2	No	9	0	sqrt(x)	0.0005852	Param Intra 1 of 3
Radium Combined (pCi/l)	805	2.129	n/a	5/23/2024	0.2J	No	9	0	No	0.0005852	Param Intra 1 of 3
Radium Combined (pCi/l)	806R	2.45	n/a	5/23/2024	0.537J	No	9	0	sqrt(x)	0.0005852	Param Intra 1 of 3
Selenium (mg/L)	**801**	**0.00224**	**n/a**	**5/23/2024**	**0.00266**	**Yes**	**9**	**77.78**	**n/a**	**0.004675**	**NP Intra (NDs) 1 of 3**
Selenium (mg/L)	**802**	**0.00266**	**n/a**	**5/28/2024**	**0.00667**	**Yes**	**9**	**77.78**	**n/a**	**0.004675**	**NP Intra (NDs) 1 of 3**
Selenium (mg/L)	803	0.002	n/a	5/23/2024	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Selenium (mg/L)	804	0.002	n/a	5/23/2024	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Selenium (mg/L)	805	0.002	n/a	5/23/2024	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Selenium (mg/L)	806R	0.002	n/a	5/23/2024	0.001ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3

ATTACHMENT 2

Sanitas™ Configuration Settings

Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

Exclude data flags: i

Data Reading Options

- (•) Individual Observations
- ( ) Mean of Each: ( ) Month
- ( ) Median of Each: ( ) Season

Non-Detect / Trace Handling...

Setup Seasons...

[ ] Automatically Process Resamples...

Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

- [ ] Black and White Output
- [x] Four Plots Per Page
  - [x] Always Combine Data Pages...
  - [x] Include Tick Marks on Data Page
- [ ] Use Constituent Name for Graph Title
- [ ] Draw Border Around Text Reports and Data Pages
- [x] Enlarge/Reduce Fonts (Graphs): 100%
- [x] Enlarge/Reduce Fonts (Data/Text Reports): 100%
- [x] Wide Margins (on reports without explicit setting)
- [ ] Use CAS# (Not Const. Name)
- [ ] Truncate File Names to 20 Characters
- [ ] Include Limit Lines when found in Database...
- [ ] Show Deselected Data on Time Series Lighter
- [ ] Show Deselected Data on all Data Pages Light

Setup Symbols and Colors...

- [x] Prompt to Overwrite/Append Summary Tables
- [ ] Round Limits to 2 Sig. Digits (when not set in data file)
- [ ] User-Set Scale
- [x] Indicate Background Data
- [ ] Show Exact Dates
- [ ] Thick Plot Lines

Zoom Factor: 200%

Output Decimal Precision

- ( ) Less Precision
- (•) Normal Precision
- ( ) More Precision

- [x] Store Print Jobs in Multiple Constituent Mode

Store All Print Jobs...

Printer: Adobe PDF

Printers...

Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

- [ ] Use Modified Alpha... 0.02
- [x] Test Residuals For Normality (Parametric test only) using Shapiro-Wilk/Francia at Alpha = 0.01
  - [ ] Continue Parametric if Unable to Normalize

Transformation (Parametric test only)

- (•) Use Ladder of Powers
- ( ) Natural Log or No Transformation
- ( ) Never Transform
- ( ) Use Specific Transformation:

- [ ] Use Best W Statistic
- [ ] Plot Transformed Values

Use Non-Parametric Test (Sen's Slope/Mann-Kendall) when Non-Detects Percent > 75

- [ ] Include 95. % Confidence Interval around Trend Line
  - [x] Only when Trend is Significant
  - [x] Include Details of Interaction with Limit Lines (if applicable, in Multiple Constituent mode)
- [ ] Automatically Remove Outliers (Parametric test only)
- [ ] Limit data to most recent values (dropping any earlier observations)

Note: there is no "Always Use Non-Parametric" checkbox on this tab because, for consistency with prior versions, Sen's Slope / Mann-Kendall (the non-parametric alternative) is available as a report in its own right, under Analysis->Intrawell->Trend.

Data | Output | Trend Test | Control Cht | **Prediction Lim** | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

☑ Test for Normality using Shapiro-Wilk/Francia at Alpha = 0.01

☑ Use Non-Parametric Test when Non-Detects Percent > 50

Use Aitchison's Adjustment when Non-Detects Percent > 15

☐ Optional Further Refinement: Use Aitchison's when NDs % > 50

☐ Use Poisson Prediction Limit when Non-Detects Percent > 90

Transformation

- ◉ Use Ladder of Powers
- ○ Natural Log or No Transformation
- ○ Never Transform
- ○ Use Specific Transformation: Natural Log

☐ Use Best W Statistic

☐ Plot Transformed Values

Deseasonalize (Intra- and InterWell)

- ○ If Seasonality Is Detected
- ○ If Seasonality Is Detected Or Insufficient to Test
- ○ Always (When Sufficient Data) ◉ Never

☐ Always Use Non-Parametric

Facility α

Statistical Evaluations per Year: 2

Constituents Analyzed: 15

Downgradient (Compliance) Wells: 6

Sampling Plan

Comparing Individual Observations

○ 1 of 1 ○ 1 of 2 ◉ 1 of 3 ○ 1 of 4

○ 2 of 4 ("Modified California")

IntraWell Other

☐ Stop if Background Trend Detected at Alpha = 0.05

☑ Plot Background Data

Override Standard Deviation:

Override DF: Override Kappa:

☐ Automatically Remove Background Outliers

☐ 2-Tailed Test Mode...

☐ Show Deselected Data Lighter

Non-Parametric Limit = Highest Background Value

Non-Parametric Limit when 100% Non-Detects:

- ○ Highest/Second Highest Background Value
- ◉ Most Recent PQL if available, or MDL
- ○ Most Recent Background Value (subst. method)

Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

Rank Von Neumann, Wilcoxon Rank Sum / Mann-Whitney

- [ ] Use Modified Alpha...
- [ ] 2-Tailed Test Mode...
- [ ] Combine Background Wells on Mann-Whitney...

Outlier Tests

- ( ) EPA 1989 Outlier Screening (fixed alpha of 0.05)
- (•) Dixon's at α= 0.05 or if n > 22 Rosner's at α= 0.01 [x] Use EPA Screening to establish Suspected Outliers
- ( ) Tukey's Outlier Screening, with IQR Multiplier = 3.0 [ ] Use Ladder of Powers to achieve Best W Stat
- [x] Test For Normality using Shapiro-Wilk/Francia at Alpha = 0.1
  - (•) Stop if Non-Normal
  - ( ) Continue with Parametric Test if Non-Normal
  - ( ) Tukey's if Non-Normal, with IQR Multiplier = 3.0 [ ] Use Ladder of Powers to achieve Best W Stat
- [x] No Outlier If Less Than 3.0 Times Median
- [ ] Apply Rules found in Ohio Guidance Document 0715
- [ ] Combine Background Wells on the Outlier Report...

Piper, Stiff Diagram

- [ ] Combine Wells
- [ ] Combine Dates
- (•) Use Default Constituent Names
- ( ) Use Constituent Definition File Edit
- [x] Label Constituents
- [x] Label Axes
- [x] Note Cation-Anion Balance (Piper only)