2020 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

CCR LANDFILL IATAN GENERATING STATION PLATTE COUNTY, MISSOURI

Presented To: Evergy Metro, Inc.



27213167.20 | January 2021 Revision 1, April 2021 Revision 2, December 16, 2022

> 8575 W 110th Street, Suite 100 Overland Park, Kansas 66210 913-681-0030

CERTIFICATIONS

I, John R. Rockhold, being a qualified groundwater scientist and Registered Geologist in the State of Missouri, do hereby certify that the 2020 Annual Groundwater Monitoring and Corrective Action Report for the CCR Landfill at the latan 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, Douglas L. Doerr, being a qualified licensed Professional Engineer in the State of Missouri, do hereby certify that the 2020 Annual Groundwater Monitoring and Corrective Action Report for the CCR Landfill at the latan Generating Station was prepared by me or under my direct supervision and fulfills the requirements of 40 CFR 257.90(e).



Douglas L. Doerr, P.E.

SCS Engineers

| Revision Number | Revision Date | Revision Sections | Summary of Revisions |
|--------------------|-------------------|---------------------------------|--|
| 0 | January 29, 2021 | N A | Original |
| 1 | April 7, 2021 | Table of Contents Appendix A | Addition of Potentiometric Surface Maps to Appendix A. |
| 2 | December 16, 2022 | Addendum 1 | Added Addendum 1 |
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1 INTRODUCTION

This 2020 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. Specifically, this report was prepared for Evergy Metro, 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 2020 Annual Groundwater Monitoring and Corrective Action Report for the CCR Landfill at the latan 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, 2020), the CCR Landfill was operating under a detection monitoring program in compliance with § 257.94.

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, 2020), the CCR Landfill was operating under a detection monitoring program in compliance with § 257.94.

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

| Monitoring Event | nitoring Event Monitoring Well | | ASD |
|------------------|--------------------------------|----------|------------|
| Fall 2019 | MW-1 | Fluoride | Successful |
| Spring 2020 | MW-10 | Sulfate | Successful |

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

Not applicable because an assessment monitoring program was not initiated.

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 \S 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;

Not applicable because there was no assessment monitoring conducted.

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

Not applicable because there was no assessment of corrective measures initiated for the CCR Unit.

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

Not applicable because there was no assessment of corrective measures initiated for the CCR Unit.

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

Not applicable because there was no assessment of corrective measures initiated for the CCR Unit.

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; and

Not applicable because corrective measures are not required.

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.

Not applicable because corrective measures are not required.

2 § 257.90(E) ANNUAL REPORT REQUIREMENTS

Annual groundwater monitoring and corrective action report. For existing CCR landfills and existing CCR surface impoundments, no later than January 31, 2018, and annually thereafter, the owner or operator must prepare an annual groundwater monitoring and corrective action report. For new CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units, the owner or operator must prepare the initial annual groundwater monitoring and corrective action report no later than January 31 of the year following the calendar year a groundwater monitoring system has been established for such CCR unit as required by this subpart, and annually thereafter. For the preceding calendar year, the annual report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. For purposes of this section, the owner or operator has prepared the annual report when the report is placed in the facility's operating record as required by § 257.105(h)(1). 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 CCR Landfill and all background (or upgradient) and downgradient monitoring wells with identification numbers for the CCR Landfill groundwater monitoring program is provided as **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 wells were decommissioned as part of the CCR groundwater monitoring program for the CCR Landfill in 2020.

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;

Only detection monitoring was required to be conducted during the reporting period (2020). Samples collected in 2020 were collected and analyzed for Appendix III detection monitoring constituents. Additionally, Appendix IV constituents were analyzed with the spring event for potential future updating of background data in conformance with EPA Unified Guidance and industry standards. Results of the sampling events are provided in **Appendix B**, **Table 1** (Appendix III with Supplemental Appendix IV Detection Monitoring Results), and **Table 2** (Detection Monitoring Field Measurements). These tables include Fall 2019 semiannual detection monitoring data, verification sample data, and supplementary

Appendix IV sample data; and, the initial Fall 2020 semiannual detection monitoring data. The dates of sample collection and the monitoring program requiring the sample 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); and

There was no transition between monitoring programs in 2020. Only detection monitoring was conducted in 2020.

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. In addition, the information, if applicable, is provided.

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 detection monitoring.

Summary of Key Actions Completed.

- a. completion of the Fall 2019 verification sampling and analyses per the certified statistical method,
- b. completion of the statistical evaluation of the Fall 2019 semiannual detection monitoring sampling and analysis event per the certified statistical method,
- c. completion of the 2019 Annual Groundwater Monitoring and Corrective Action Report,
- d. completion of a successful alternative source demonstration for the Fall 2019 semiannual detection monitoring sampling and analysis event,
- e. completion of the Spring 2020 semiannual detection monitoring sampling and analysis event with subsequent verification sampling per the certified statistical method, and supplemental Appendix IV sample analysis,
- f. completion of the statistical evaluation of the Spring 2020 semiannual detection monitoring sampling and analysis event per the certified statistical method,
- g. completion of a successful alternative source demonstration for the Spring 2020 semiannual detection monitoring sampling and analysis event, and
- *h.* initiation of the Fall 2020 semiannual detection monitoring sampling and analysis event.

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 (2021).

Completion of verification sampling and data analysis, and the statistical evaluation of Fall 2020 detection monitoring sampling and analysis event. Semiannual Spring and Fall 2021 groundwater sampling and analysis. Completion of the statistical evaluation of the Spring 2021 detection monitoring sampling and analysis event, and, if required, alternative source demonstration(s).

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 $\S 257.90(e)$.

Not applicable because no alternative monitoring frequency for detection monitoring and certification was pursued.

2.5.3 § 257.94(e)(2) Detection Monitoring Alternate Source Demonstration

Demonstration that a source other than the CCR unit caused the statistically significant increase (SSI) over background levels for a constituent or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. In addition, certification of the demonstration is to be included in the annual report.

The following demonstration reports are included as **Appendix C**:

- C.1 CCR Groundwater Monitoring Alternative Source Demonstration Report November 2019 Groundwater Monitoring Event, CCR Landfill, latan Generating Station (June 2020).
- C.2 CCR Groundwater Monitoring Alternative Source Demonstration Report May 2020 Groundwater Monitoring Event, CCR Landfill, latan Generating Station (December 2020).

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).

Not applicable because there was no assessment monitoring conducted.

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

Include the concentrations of Appendix III and detected Appendix IV constituents from the assessment monitoring, the established background concentrations, and the established groundwater protection standards.

Not applicable because there was no assessment monitoring conducted.

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. 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 there was no assessment monitoring conducted.

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.

Not applicable because there was no assessment monitoring conducted.

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.

3 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 latan Generating Station at the time of fieldwork. This report includes a review 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 limitation 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 Metro, Inc. for specific application to the latan Generating Station CCR Landfill. No warranties, express or implied, are intended or made.

APPENDIX A

FIGURES

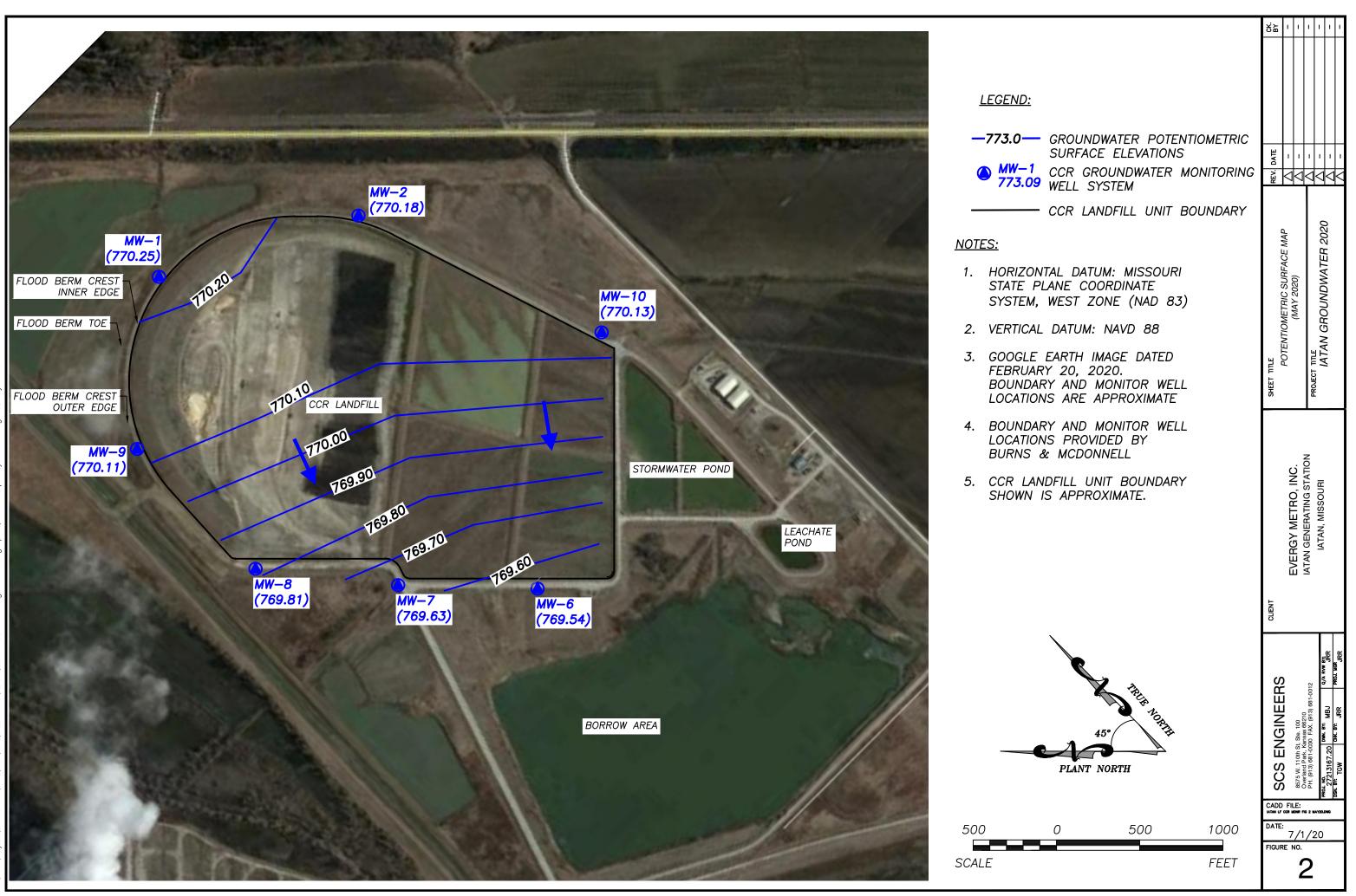
Figure 1: Site Map

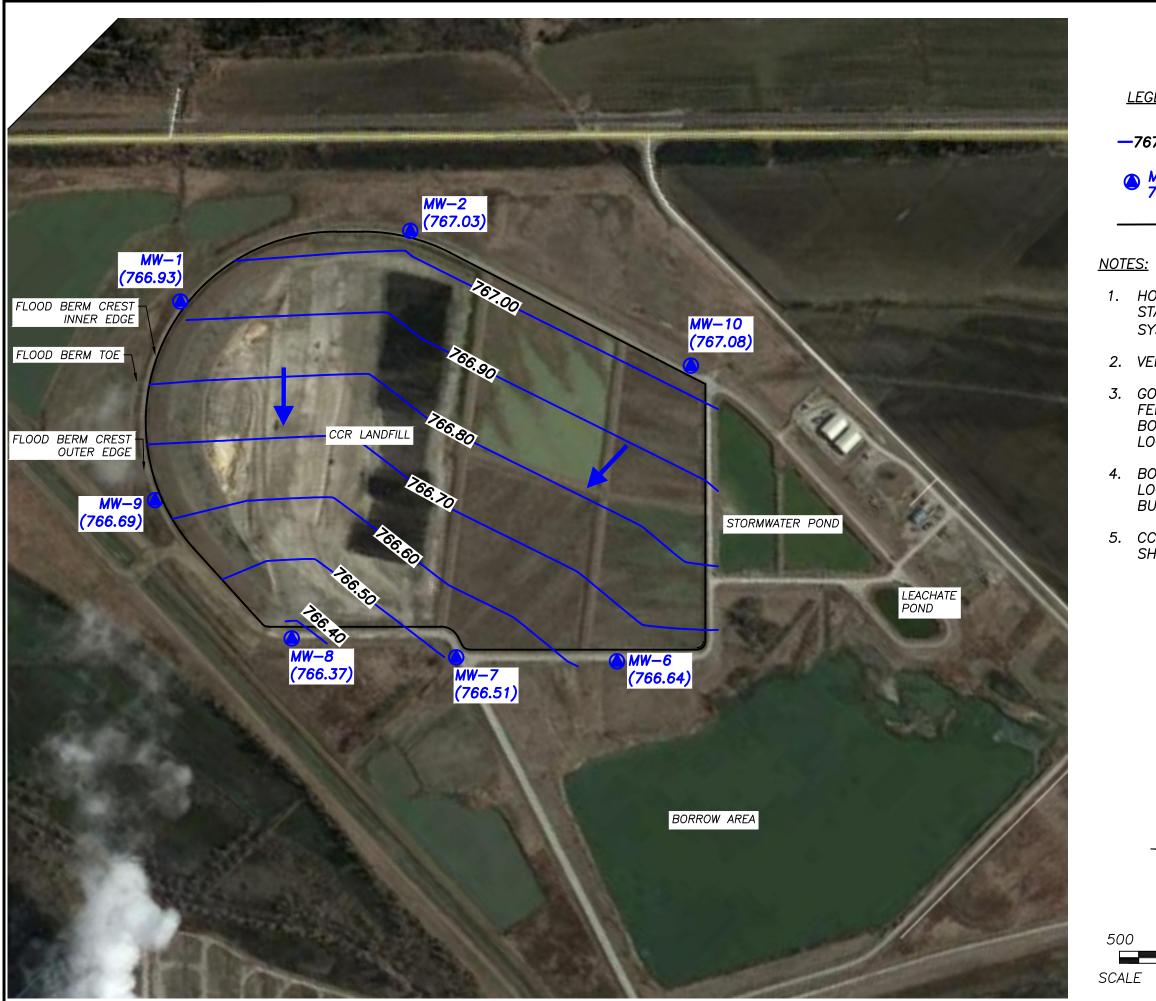
Figure 2: Potentiometric Surface Map (May 2020)

Figure 3: Potentiometric Surface Map (November 2020)



| SEND: MW-1 CCR GROUNDWATER MONITORING WELL SYSTEM CCR LANDFILL UNIT BOUNDARY ORIZONTAL DATUM: MISSOURI TATE PLANE COORDINATE YSTEM, WEST ZONE (NAD 83) ERTICAL DATUM: NAVD 88 DOCLE EARTH MAGE DATED | <u>ш</u> | $\frac{\Delta}{2020 \text{ GROUNDWATER MONITORING}} \xrightarrow{\Delta}{-} = \frac{-}{-}$ $\frac{\Delta}{2020 \text{ GROUNDWATER MONITORING}} \xrightarrow{\Delta}{-} = \frac{-}{-}$ $\frac{\Delta}{-} = \frac{-}{-}$ $\frac{\Delta}{-} = \frac{-}{-}$ |
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| MW-1 CCR GROUNDWATER MONITORING WELL SYSTEM CCR LANDFILL UNIT BOUNDARY ORIZONTAL DATUM: MISSOURI TATE PLANE COORDINATE YSTEM, WEST ZONE (NAD 83) ERTICAL DATUM: NAVD 88 | REV. | |
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| BOUNDARY ORIZONTAL DATUM: MISSOURI TATE PLANE COORDINATE YSTEM, WEST ZONE (NAD 83) ERTICAL DATUM: NAVD 88 | REV. | WATER MONITORING ろ TION ACTION REPORT |
| TATE PLANE COORDINATE YSTEM, WEST ZONE (NAD 83) ERTICAL DATUM: NAVD 88 | SITE MAP CCR LANDFILL IDWATER MONITORING SYSTEM | WATER MONITORING TION ACTION REPORT |
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| OUNDARY AND MONITOR WELL OCATIONS PROVIDED BY URNS & MCDONNELL CR LANDFILL UNIT BOUNDARY HOWN IS APPROXIMATE. | CLIENT EVERGY METRO, INC. INTAN GENERATING STATION | WESTON, MISSOURI |
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| <u>GEND:</u> | | | | | | |
| 57.0 GROUNDWATER POTENTIOMETRIC SURFACE ELEVATIONS MW-1 CCR GROUNDWATER MONITORING | V. DATE | - | - | - | - | |
| 773.09 WELL SYSTEM | REV. | 4 | 4 | | 4 | |
| UTILITY WASTE LANDFILL UNIT BOUNDARY | 1 | J. | | | <i>320</i> | |
| | | CE MA | | | ER 2(| |
| ORIZONTAL DATUM: MISSOURI TATE PLANE COORDINATE YSTEM, WEST ZONE (NAD 83) | | PUTENTIOMETRIC SURFACE MAP | (NUVEMBER 2020) | | ATAN GROUNDWATER 2020 | |
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| OOGLE EARTH IMAGE DATED EBRUARY 20, 2020. OUNDARY AND MONITOR WELL OCATIONS ARE APPROXIMATE | SHEET TITLE | POIE | | PROJECT TITLE | IATAI | |
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APPENDIX B

TABLES

Table 1: Appendix III with Supplemental Appendix IV Detection Monitoring Results

Table 2: Detection Monitoring Field Measurements

Table 1

CCR Landfill

Appendix III with Supplemental Appendix IV Detection Monitoring Results Evergy latan Generating Station

| ntal olved lids Antimony Arsen g/L) (mg/L) (mg/L |
|---|
| |
| |
| |
| 07 <0.00400 0.013 |
| 20 |
| |
| 59 <0.00400 0.021 |
| 40 |
| |
| 91 <0.00400 0.021 |
| |
| |
| 48 |
| |
| 25 <0.00400 0.0076 |
| |
| 53 |
| |
| 16 <0.00400 0.011 |
| |
| 71 |
| |
| 85 <0.00400 0.019 |
| 75 |
| |
| VU.UU4UU U.UIS |
| |
| |
| 5 |

* 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

Table 2CCR LandfillDetection Monitoring Field MeasurementsEvergy latan Generating Station

| Well Number | Sample Date | рН (S.U.) | Specific Conductivity (µS) | Temperature (°C) | Turbidity (NTU) | ORP (mV) | DO (mg/L) | Water Level (ft btoc) | Groundwater Elevation (ft NGVD) |
|----------------|----------------|--------------|----------------------------------|---------------------|--------------------|-------------|--------------|--------------------------|---------------------------------------|
| MW-1 | 01/15/20 | **7.04 | 899 | 13.12 | 1.2 | -100 | 0.00 | 17.42 | 771.27 |
| MW-1 | 02/04/20 | **6.91 | 895 | 12.77 | 7.0 | -99 | 0.00 | 17.70 | 770.99 |
| MW-1 | 05/20/20 | 6.81 | 892 | 14.71 | 12.9 | -123 | 0.00 | 18.44 | 770.25 |
| MW-1 | 11/09/20 | 7.34 | 792 | 15.75 | 0.6 | -116 | 0.73 | 21.76 | 766.93 |
| MW-2 | 01/15/20 | **7.02 | 1110 | 13.71 | 0.9 | -100 | 0.00 | 18.30 | 771.31 |
| MW-2 | 05/20/20 | 6.81 | 1090 | 15.15 | 11.2 | -112 | 0.00 | 19.43 | 770.18 |
| MW-2 | 11/09/20 | 7.26 | 941 | 15.94 | 10.7 | -111 | 0.69 | 22.58 | 767.03 |
| MW-6 | 01/15/20 | *7.26 | 915 | 13.12 | 10.5 | -100 | 0.00 | 18.80 | 770.85 |
| MW-6 | 05/20/20 | 6.83 | 890 | 15.27 | 15.7 | -74 | 0.00 | 20.11 | 769.54 |
| MW-6 | 07/13/20 | *6.84 | 857 | 15.44 | 28.1 | -65 | 0.00 | 20.81 | 768.84 |
| MW-6 | 08/25/20 | *7.15 | 821 | 18.68 | 17.5 | -117 | 2.55 | 20.69 | 768.96 |
| MW-6 | 11/09/20 | 7.09 | 1010 | 16.16 | 9.9 | -103 | 0.19 | 23.01 | 766.64 |
| MW-7 | 01/15/20 | *7.15 | 1120 | 14.21 | 6.5 | -71 | 0.00 | 18.83 | 770.82 |
| MW-7 | 05/20/20 | 6.82 | 897 | 14.69 | 5.0 | 5 | 0.00 | 20.02 | 769.63 |
| MW-7 | 07/13/20 | *6.87 | 814 | 14.58 | 13.8 | -35 | 0.00 | 20.84 | 768.81 |
| MW-7 | 11/09/20 | 7.45 | 719 | 16 | 5.8 | -60 | 0.60 | 23.14 | 766.51 |
| MW-8 | 01/15/20 | *7.31 | 915 | 12.25 | 8.7 | -71 | 0.00 | 18.81 | 770.90 |
| MW-8 | 05/20/20 | 6.98 | 904 | 15.19 | 0.0 | -62 | 0.00 | 19.90 | 769.81 |
| MW-8 | 08/25/20 | *7.23 | 915 | 18.86 | 0.0 | -75 | 1.69 | 20.45 | 769.26 |
| MW-8 | 11/09/20 | 7.52 | 879 | 15.8 | 0.0 | -91 | 1.43 | 23.34 | 766.37 |
| MW-9 | 01/15/20 | **7.24 | 768 | 12.29 | 15.2 | -100 | 0.00 | 18.75 | 771.15 |
| MW-9 | 05/20/20 | 7.02 | 726 | 17.05 | 24.0 | -17 | 0.00 | 19.79 | 770.11 |
| MW-9 | 11/09/20 | 7.00 | 850 | 15.69 | 23.5 | -112 | 0.16 | 23.21 | 766.69 |
| MW-10 | 01/15/20 | **7.18 | 1080 | 12.74 | 4.2 | -49 | 0.00 | 18.23 | 771.23 |
| MW-10 | 05/20/20 | 6.92 | 1040 | 15.51 | 0.0 | -83 | 0.61 | 19.33 | 770.13 |
| MW-10 | 07/13/20 | **6.96 | 1070 | 15.36 | 15.3 | -49 | 0.00 | 20.20 | 769.26 |
| MW-10 | 08/25/20 | **7.00 | 1120 | 19.34 | 0.0 | -64 | 8.83 | 20.03 | 769.43 |
| MW-10 | 11/09/20 | 7.02 | 1110 | 15.75 | 0.0 | -59 | 1.34 | 22.38 | 767.08 |

* 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

APPENDIX C

ALTERNATIVE SOURCE DEMONSTRATION

- C.1 CCR Groundwater Monitoring Alternative Source Demonstration Report November 2019 Groundwater Monitoring Event, CCR Landfill, latan Generating Station (June 2020)
- C.2 CCR Groundwater Monitoring Alternative Source Demonstration Report May 2020 Groundwater Monitoring Event, CCR Landfill, latan Generating Station (December 2020)

C.1 CCR Groundwater Monitoring Alternative Source Demonstration Report November 2019 Groundwater Monitoring Event, CCR Landfill, latan Generating Station (June 2020)

CCR GROUNDWATER MONITORING ALTERNATIVE SOURCE DEMONSTRATION REPORT NOVEMBER 2019 GROUNDWATER MONITORING EVENT

CCR LANDFILL IATAN GENERATING STATION PLATTE COUNTY, MISSOURI

Presented To:

Evergy Metro, Inc.

Presented By:

SCS ENGINEERS

8575 West 110th Street, Suite 100

Overland Park, Kansas 66210

June 2020

File No. 27213167.20

CERTIFICATIONS

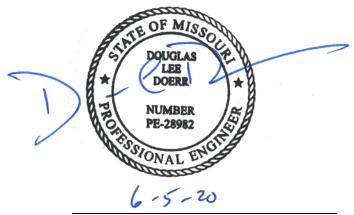
I, John R. Rockhold, being a qualified groundwater scientist and Registered Geologist in the State of Missouri, do hereby certify the accuracy of the information in the CCR Groundwater Monitoring Alternative Source Demonstration Report for the CCR Landfill at the latan Generating Station. The Alternative Source Demonstration was prepared by me or under my direct supervision in accordance with generally accepted hydrogeological practices and the local standard of care.



John R. Rockhold, R.G.

SCS Engineers

I, Douglas L. Doerr, being a qualified licensed Professional Engineer in the State of Missouri, do hereby certify the accuracy of the information in the CCR Groundwater Monitoring Alternative Source Demonstration Report for the CCR Landfill at the latan Generating Station. The Alternative Source Demonstration was prepared by me or under my direct supervision in accordance with generally accepted engineering practices and the local standard of care.



Douglas L. Doerr, P.E.

SCS Engineers

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1 REGULATORY FRAMEWORK

Certain owners or operators of Coal Combustion Residuals (CCR) units are required to complete groundwater monitoring activities to evaluate whether a release from the unit has occurred. Included in the activities is the completion of a statistical analysis of the groundwater quality data as prescribed in § 257.93(h) of the CCR Final Rule. If the initial analysis indicates a statistically significant increase (SSI) over background levels, the owner or operator may perform an alternative source demonstration (ASD). In accordance with § 257.94(e)(2), the owner or operator of the CCR unit may demonstrate that a source other than the CCR unit caused the SSI over background levels for a constituent, or that the SSI 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 SSI over background levels to include obtaining a certification from a qualified professional engineer 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 § 257.94. 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.

2 STATISTICAL RESULTS

Statistical analysis of monitoring data from the groundwater monitoring system for the CCR Landfill at the latan 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 4, 2019. Review and validation of the results from the November 2019 Detection Monitoring Event was completed on December 12, 2019, which constitutes completion and finalization of detection monitoring laboratory analyses. A statistical analysis was then conducted to determine whether there was a statistically significant increase (SSI) over background values for each constituent listed in Appendix III to Part 257-Constituents for Detection Monitoring. Two rounds of verification sampling were conducted for certain constituents on January 15, 2020 and February 4, 2020.

The completed statistical evaluation identified one Appendix III constituent above the prediction limit established for monitoring well MW-1.

| Constituent/Monitoring Well | *UPL | Observation November 4, 2019 | 1st Verification January 15, 2020 | 2nd Verification February 4, 2020 | |
|-----------------------------|--------|---------------------------------|--------------------------------------|--------------------------------------|--|
| Fluoride | | | | | |
| MW-1 | 0.3201 | 0.488 | 0.326 | 0.329 | |

*UPL – Upper Prediction Limit

Determination: A statistical evaluation was completed for all Appendix III detection monitoring constituents in accordance with the certified statistical method. The statistical evaluation identified a SSI above the background prediction limit for fluoride in monitoring well MW-1.

3 ALTERNATIVE SOURCE DEMONSTRATION

An Alternative Source Demonstration (ASD) is a means to provide supporting lines of evidence that something other than a release from a regulated CCR unit caused an SSI. For the above identified SSI for the CCR Landfill at the latan Generating Station, there are multiple lines of supporting evidence to indicate the above SSI was not caused by a release from the CCR Landfill. Select multiple lines of supporting evidence are described as follows.

3.1 BOX AND WHISKERS PLOTS

A commonly accepted method to demonstrate and visualize the distribution of data in a given data set is to construct box and whiskers plots. The basic box plotted graphically locates the median, 25th and 75th percentiles of the data set; the "whiskers" extend to the minimum and maximum values of the data set. The range between the ends of a box plot represents the Interquartile Range, which can be used as an estimate of spread or variability. The mean is denoted by a "+".

When comparing multiple wells or well groups, box plots for each well can be lined up on the same axis to roughly compare the variability in each well. This may be used as an exploratory screening for the test of homogeneity of variance across multiple wells.

Box and whiskers plots for all of the groundwater monitoring system wells were prepared to allow comparison of the fluoride concentrations between MW-1 and the other monitoring wells both upgradient and downgradient. The fluoride box and whiskers plot for MW-1 indicates the fluoride concentrations in MW-1 are generally below the concentrations in the other wells although there can be some overlap as indicated by the whiskers. This demonstrates that a source other than the CCR Landfill caused the SSI over background levels, or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Box and whisker plots are provided in **Appendix A**.

3.2 PIPER DIAGRAM PLOTS

Piper diagrams are a form of tri-linear diagram, and a widely-accepted method to provide a visual representation of the ion concentration of groundwater. Piper diagrams portray water compositions and facilitate the interpretation and presentation of chemical analyses. They may be used to visually compare the chemical composition of water quality across wells, and aid in determining whether the waters are similar or dis-similar, and can over time indicate whether the waters are mixing.

A piper diagram has two triangular plots on the right and left side of a 4-sided center field. The three major cations are plotted in the left triangle and anions in the right. Each of the three cation/anion variables, in milliequivalents, is divided by the sum of the three values, to produce a percent of total cation/anions. These percentages determine the location of the associated symbol. The data points in the center field are located by extending the points in the lower triangles to the point of intersection. In order for a piper diagram to be produced, the selected data file must contain the following constituents: Sodium (Na), Potassium (K), Calcium (Ca), Magnesium (Mg), Chloride (Cl), Sulfate (SO₄), Carbonate (CO₃), and Bicarbonate (HCO₃).

A piper diagram generated for MW-1 and leachate is provided in **Appendix B** along with analytical results. The piper diagram indicates the groundwater from monitoring well MW-1 does not plot near where the leachate plots. Therefore, the groundwater from MW-1 does not exhibit the same geochemical characteristics as the leachate. The groundwater and the leachate plot in totally different hydrochemical facies indicating there is no mixing of the two types of water (groundwater and leachate). This demonstrates that a source other than the CCR Landfill caused the SSI over background levels or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality.

3.3 TIME SERIES PLOTS

Time series plots provide a graphical method to view changes in data at a particular well (monitoring point) or wells over time. Time series plots display the variability in concentration levels over time and can be used to indicate possible outliers or data errors (i.e. "spikes"). More than one well can be compared on the same plot to look for differences between wells. Non-detect data is plotted as censored data at one-half of the laboratory reporting limit. Time series plots can also be used to examine the data for trends.

The times series plot for fluoride in monitoring well MW-1 was compared to the time series plot for fluoride in the other monitoring wells both upgradient and downgradient. The fluoride time series plot for MW-1 indicates the fluoride concentrations in MW-1 are generally below the concentrations in the other wells both upgradient and downgradient. This demonstrates that a source other than the CCR Landfill caused the SSI over background levels, or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Time series plots are provided in **Appendix C**.

4 CONCLUSION

Our opinion is that a sufficient body of evidence is available and presented above to demonstrate that a source other than the CCR Landfill caused the SSI over background levels, or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Based on the successful ASD, the owner or operator of the CCR Landfill may continue with the detection monitoring program under § 257.94.

5 GENERAL COMMENTS

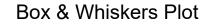
This report has been prepared and reviewed under the direction of a qualified groundwater scientist and qualified professional engineer. Please note that SCS Engineers does not warrant the work of regulatory agencies or other third parties supplying information used in the assimilation of this report. 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 Metro, Inc. for specific application to the latan Generating Station. No warranties, express or implied, are intended or made.

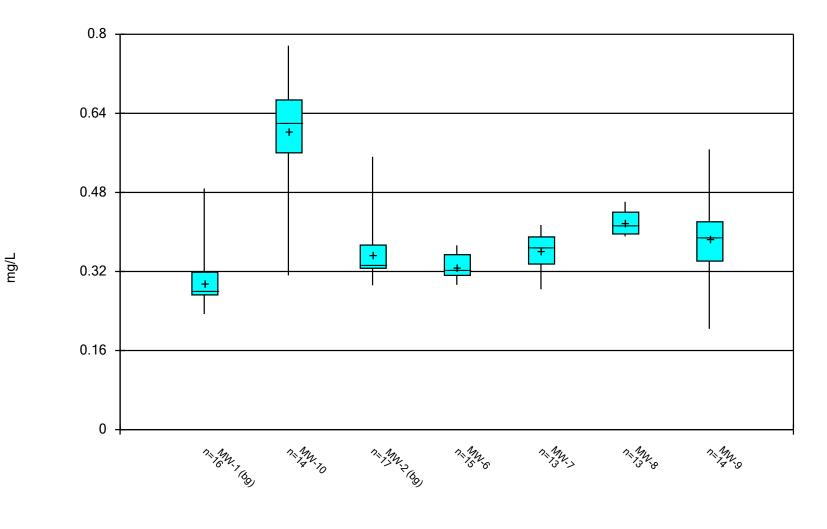
The signatures of the certifying registered geologist and professional engineer on this document represents that to the best of their knowledge, information, and belief in the exercise of their professional

judgement in accordance with the standard of practice, it is their professional opinions that the aforementioned information is accurate as of the date of such signatures. Any opinion or decisions by them are made on the basis of their experience, qualifications, and professional judgement and are not to be construed as warranties or guaranties. In addition, opinions relating to regulatory, environmental, geologic, geochemical and geotechnical conditions interpretations or other estimates are based on available data, and actual conditions may vary from those encountered at the times and locations where data are obtained, despite the use of due care.

Appendix A

Box and Whiskers Plots





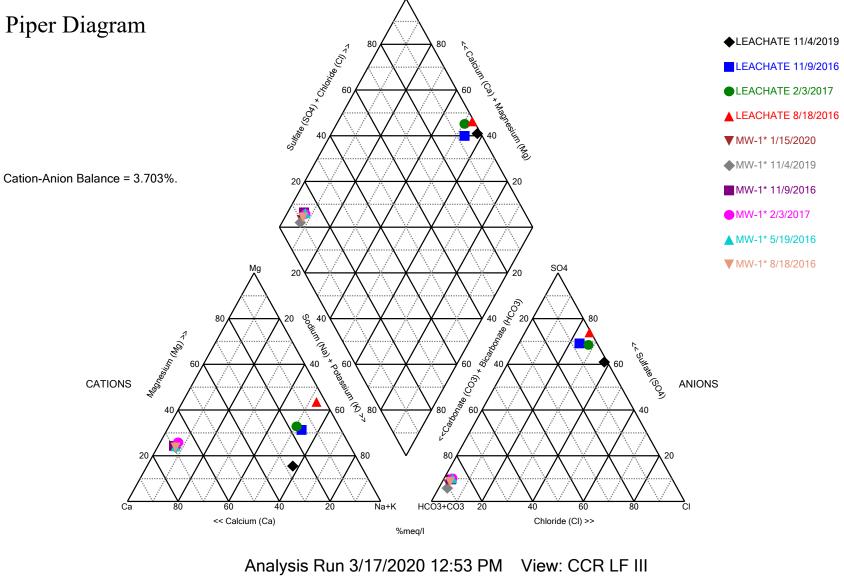
Constituent: Fluoride Analysis Run 3/17/2020 12:15 PM View: CCR LF III Iatan Utility Waste LF Client: SCS Engineers Data: Iatan jrr

Box & Whiskers Plot

| | latan Utility Waste I | LF Client: | SCS Engineers | Data: latan jrr | Printed 3/17/2020, | 12:18 PM | | | |
|-----------------|-----------------------|------------|---------------|-----------------|--------------------|---------------|-------------|-------------|-------------|
| Constituent | Well | <u>N</u> | <u>Mean</u> | Std. Dev. | Std. Err. | <u>Median</u> | <u>Min.</u> | <u>Max.</u> | <u>%NDs</u> |
| Fluoride (mg/L) | MW-1 (bg) | 16 | 0.2973 | 0.05805 | 0.01451 | 0.282 | 0.234 | 0.488 | 0 |
| Fluoride (mg/L) | MW-10 | 14 | 0.6032 | 0.1056 | 0.02823 | 0.6225 | 0.312 | 0.777 | 0 |
| Fluoride (mg/L) | MW-2 (bg) | 17 | 0.3526 | 0.05801 | 0.01407 | 0.333 | 0.292 | 0.552 | 0 |
| Fluoride (mg/L) | MW-6 | 15 | 0.33 | 0.02589 | 0.006685 | 0.325 | 0.293 | 0.373 | 0 |
| Fluoride (mg/L) | MW-7 | 13 | 0.3618 | 0.03574 | 0.009914 | 0.369 | 0.284 | 0.414 | 0 |
| Fluoride (mg/L) | MW-8 | 13 | 0.4198 | 0.02385 | 0.006616 | 0.415 | 0.391 | 0.461 | 0 |
| Fluoride (mg/L) | MW-9 | 14 | 0.3854 | 0.0788 | 0.02106 | 0.3885 | 0.204 | 0.567 | 0 |

Appendix B

Piper Diagram Plots and Analytical Results



latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Piper Diagram

Analysis Run 3/17/2020 12:53 PM View: CCR LF III

Iatan Utility Waste LF Client: SCS Engineers Data: Iatan jrr

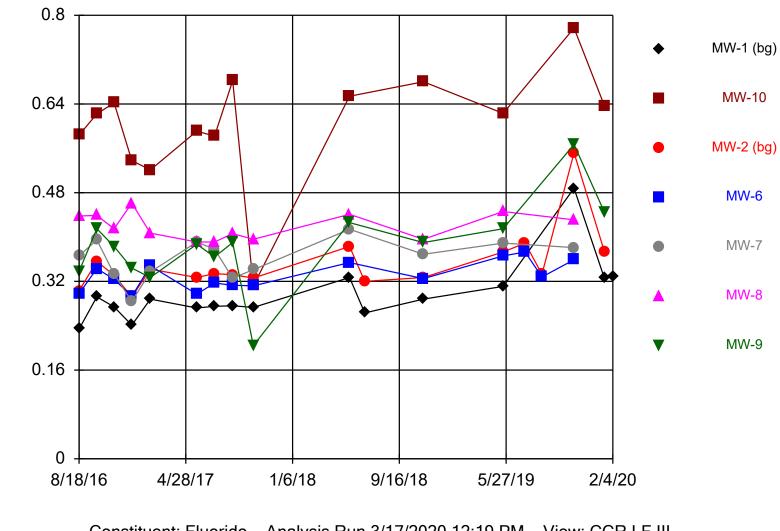
| Totals (ppm) | Na | K | Ca | Mg | Cl | SO4 | HCO3 | CO3 |
|--------------------|------|------|-----|------|------|-------|------|-----|
| MW-1* 5/19/2016 | 11.3 | 6.56 | 130 | 27.3 | 6.02 | 34.4 | 374 | 10 |
| MW-1* 8/18/2016 | 11.7 | 6.56 | 134 | 27.4 | 5.93 | 32.4 | 436 | 10 |
| MW-1* 11/9/2016 | 11.1 | 6 | 136 | 28.4 | 5.95 | 33.2 | 383 | 10 |
| MW-1* 2/3/2017 | 11 | 5.93 | 116 | 26.8 | 6 | 36.9 | 394 | 10 |
| MW-1* 11/4/2019 | 11.8 | 6.49 | 132 | 27 | 6.61 | 22.3 | 420 | 10 |
| MW-1* 1/15/2020 | 11.6 | 6.17 | 129 | 26.7 | 5.32 | 27.3 | 406 | 10 |
| LEACHATE 8/18/2016 | 9250 | 689 | 573 | 4240 | 6990 | 28000 | 644 | 10 |
| LEACHATE 11/9/2016 | 1230 | 90.7 | 334 | 398 | 876 | 3460 | 480 | 10 |
| LEACHATE 2/3/2017 | 1880 | 121 | 560 | 671 | 1760 | 6070 | 505 | 10 |
| LEACHATE 11/4/2019 | 1110 | 51.7 | 460 | 163 | 2340 | 5230 | 206 | 10 |
| | | | | | | | | |

Appendix C

Time Series Plots

mg/L

Time Series



Constituent: Fluoride Analysis Run 3/17/2020 12:19 PM View: CCR LF III Iatan Utility Waste LF Client: SCS Engineers Data: Iatan jrr C.2 CCR Groundwater Monitoring Alternative Source Demonstration Report May 2020 Groundwater Monitoring Event, CCR Landfill, latan Generating Station (December 2020)

CCR GROUNDWATER MONITORING ALTERNATIVE SOURCE DEMONSTRATION REPORT MAY 2020 GROUNDWATER MONITORING EVENT

CCR LANDFILL IATAN GENERATING STATION PLATTE COUNTY, MISSOURI

Presented To:

Evergy Metro, Inc.

Presented By:

SCS ENGINEERS

8575 West 110th Street, Suite 100

Overland Park, Kansas 66210

December 2020

File No. 27213167.20

CERTIFICATIONS

I, John R. Rockhold, being a qualified groundwater scientist and Registered Geologist in the State of Missouri, do hereby certify the accuracy of the information in the CCR Groundwater Monitoring Alternative Source Demonstration Report for the CCR Landfill at the latan Generating Station. The Alternative Source Demonstration was prepared by me or under my direct supervision in accordance with generally accepted hydrogeological practices and the local standard of care.



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SCS Engineers

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Douglas L. Doerr, P.E.

SCS Engineers

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| 4 | Conc | lusion | 3 | | | | | |
| 5 | Gene | eral Comments | 3 | | | | | |

Appendices

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1 REGULATORY FRAMEWORK

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2 STATISTICAL RESULTS

Statistical analysis of monitoring data from the groundwater monitoring system for the CCR Landfill at the latan 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 20, 2020. Review and validation of the results from the May 2020 Detection Monitoring Event was completed on June 29, 2020, which constitutes completion and finalization of detection monitoring laboratory analyses. A statistical analysis was then conducted to determine whether there was a statistically significant increase (SSI) over background values for each constituent listed in Appendix III to Part 257-Constituents for Detection Monitoring. Two rounds of verification sampling were conducted for certain constituents on July 13, 2020 and August 25, 2020.

The completed statistical evaluation identified one Appendix III constituent above the prediction limit established for monitoring well MW-10.

| Constituent/Monitoring Well | *UPL | Observation May 20, 2020 | 1st Verification July 13, 2020 | 2nd Verification August 25, 2020 | |
|-----------------------------|------|-----------------------------|-----------------------------------|-------------------------------------|--|
| Sulfate | | | | | |
| MW-10 | 39.5 | 43.1 | 47.7 | 47.9 | |

*UPL – Upper Prediction Limit

Determination: A statistical evaluation was completed for all Appendix III detection monitoring constituents in accordance with the certified statistical method. The statistical evaluation identified a SSI above the background prediction limit for sulfate in monitoring well MW-10.

3 ALTERNATIVE SOURCE DEMONSTRATION

An Alternative Source Demonstration (ASD) is a means to provide supporting lines of evidence that something other than a release from a regulated CCR unit caused an SSI. For the above identified SSI for the CCR Landfill at the latan Generating Station, there are multiple lines of supporting evidence to indicate the above SSI was not caused by a release from the CCR Landfill. Select multiple lines of supporting evidence are described as follows.

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When comparing multiple wells or well groups, box plots for each well can be lined up on the same axis to roughly compare the variability in each well. This may be used as an exploratory screening for the test of homogeneity of variance across multiple wells.

Box and whiskers plots for all of the groundwater monitoring system wells were prepared to allow comparison of the sulfate concentrations between MW-10 and the other monitoring wells both upgradient and downgradient. The sulfate box and whiskers plot for MW-10 indicates the sulfate concentrations in MW-10 are within or below the concentration ranges for the other wells. This demonstrates that a source other than the CCR Landfill caused the SSI over background levels, or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Box and whisker plots are provided in **Appendix A**.

3.2 PIPER DIAGRAM PLOTS

Piper diagrams are a form of tri-linear diagram, and a widely-accepted method to provide a visual representation of the ion concentration of groundwater. Piper diagrams portray water compositions and facilitate the interpretation and presentation of chemical analyses. They may be used to visually compare the chemical composition of water quality across wells, and aid in determining whether the waters are similar or dis-similar, and can over time indicate whether the waters are mixing.

A piper diagram has two triangular plots on the right and left side of a 4-sided center field. The three major cations are plotted in the left triangle and anions in the right. Each of the three cation/anion variables, in milliequivalents, is divided by the sum of the three values, to produce a percent of total cation/anions. These percentages determine the location of the associated symbol. The data points in the center field are located by extending the points in the lower triangles to the point of intersection. In order for a piper diagram to be produced, the selected data file must contain the following constituents: Sodium (Na), Potassium (K), Calcium (Ca), Magnesium (Mg), Chloride (Cl), Sulfate (SO₄), Carbonate (CO₃), and Bicarbonate (HCO₃).

A piper diagram generated for MW-10 and leachate is provided in **Appendix B** along with analytical results. The piper diagram indicates the groundwater from monitoring well MW-10 does not plot near

where the leachate plots. Therefore, the groundwater from MW-10 does not exhibit the same geochemical characteristics as the leachate. The groundwater and the leachate plot in totally different hydrochemical facies indicating there is no mixing of the two types of water (groundwater and leachate). This demonstrates that a source other than the CCR Landfill caused the SSI over background levels or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality.

3.3 TIME SERIES PLOTS

Time series plots provide a graphical method to view changes in data at a particular well (monitoring point) or wells over time. Time series plots display the variability in concentration levels over time and can be used to indicate possible outliers or data errors (i.e. "spikes"). More than one well can be compared on the same plot to look for differences between wells. Non-detect data is plotted as censored data at one-half of the laboratory reporting limit. Time series plots can also be used to examine the data for trends.

The time series plot for sulfate in monitoring well MW-10 was compared to the time series plot for sulfate in the other monitoring wells both upgradient and downgradient. The sulfate time series plot for MW-10 indicates the sulfate concentrations in MW-10 are generally below the concentrations in the other wells both upgradient and downgradient. This demonstrates that a source other than the CCR Landfill caused the SSI over background levels, or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Time series plots are provided in **Appendix C**.

4 CONCLUSION

Our opinion is that a sufficient body of evidence is available and presented above to demonstrate that a source other than the CCR Landfill caused the SSI over background levels, or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Based on the successful ASD, the owner or operator of the CCR Landfill may continue with the detection monitoring program under § 257.94.

5 GENERAL COMMENTS

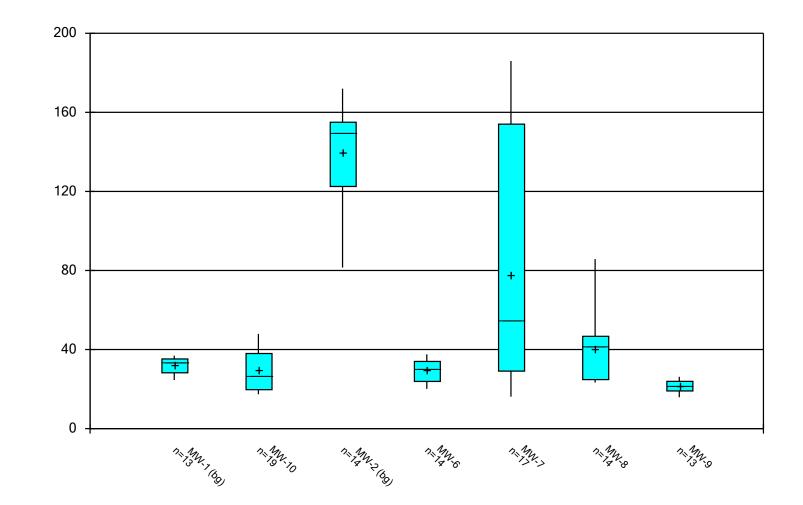
This report has been prepared and reviewed under the direction of a qualified groundwater scientist and qualified professional engineer. Please note that SCS Engineers does not warrant the work of regulatory agencies or other third parties supplying information used in the assimilation of this report. 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 Metro, Inc. for specific application to the latan Generating Station. No warranties, express or implied, are intended or made.

The signatures of the certifying registered geologist and professional engineer on this document represents that to the best of their knowledge, information, and belief in the exercise of their professional judgement in accordance with the standard of practice, it is their professional opinions that the aforementioned information is accurate as of the date of such signatures. Any opinion or decisions by them are made on the basis of their experience, qualifications, and professional judgement and are not

to be construed as warranties or guaranties. In addition, opinions relating to regulatory, environmental, geologic, geochemical and geotechnical conditions interpretations or other estimates are based on available data, and actual conditions may vary from those encountered at the times and locations where data are obtained, despite the use of due care.

Appendix A

Box and Whiskers Plots



Box & Whiskers Plot

Constituent: Sulfate Analysis Run 10/6/2020 9:06 AM View: CCR LF III Iatan Utility Waste LF Client: SCS Engineers Data: Iatan jrr

mg/L

Box & Whiskers Plot

| | latan Utility Waste LF | Client: | SCS Engineers | Data: latan jrr I | Printed 10/6/2020, 9 | 9:07 AM | | | |
|------------------|------------------------|---------|---------------|-------------------|----------------------|---------------|------|------|-------------|
| Constituent W | ell I | N | Mean | Std. Dev. | Std. Err. | <u>Median</u> | Min. | Max. | <u>%NDs</u> |
| Sulfate (mg/L) M | W-1 (bg) | 13 | 32.23 | 3.873 | 1.074 | 33.2 | 24.6 | 36.9 | 0 |
| Sulfate (mg/L) M | W-10 | 19 | 29.99 | 10.27 | 2.356 | 26.5 | 17.4 | 47.9 | 0 |
| Sulfate (mg/L) M | W-2 (bg) | 14 | 139.9 | 23.33 | 6.236 | 149.5 | 81.5 | 172 | 0 |
| Sulfate (mg/L) M | W-6 | 14 | 29.51 | 5.861 | 1.566 | 30.55 | 20.1 | 37.6 | 0 |
| Sulfate (mg/L) M | W-7 | 17 | 78.09 | 60.56 | 14.69 | 54.4 | 16.2 | 186 | 0 |
| Sulfate (mg/L) M | W-8 | 14 | 40.42 | 16.76 | 4.48 | 41.85 | 23.3 | 85.8 | 0 |
| Sulfate (mg/L) M | W-9 | 13 | 21.45 | 3.217 | 0.8922 | 21.5 | 15.9 | 26.2 | 0 |

Appendix B

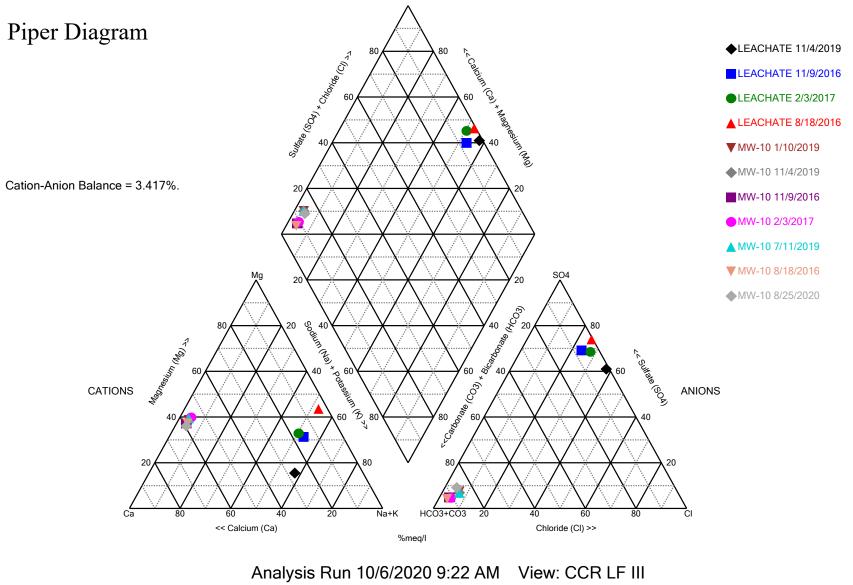
Piper Diagram Plots and Analytical Results

Piper Diagram

Analysis Run 10/6/2020 9:24 AM View: CCR LF III

Iatan Utility Waste LF Client: SCS Engineers Data: Iatan jrr

| Totals (ppm) | Na | K | Ca | Mg | Cl | S04 | HCO3 | CO3 |
|--------------------|------|------|-----|------|------|-------|------|-----|
| MW-10 8/18/2016 | 7.77 | 4.45 | 123 | 47.3 | 7.47 | 17.8 | 480 | 10 |
| MW-10 11/9/2016 | 7.11 | 4.02 | 124 | 47.3 | 9.15 | 17.4 | 428 | 10 |
| MW-10 2/3/2017 | 7.2 | 3.93 | 109 | 46.7 | 10.3 | 19.1 | 442 | 10 |
| MW-10 1/10/2019 | 8.51 | 5.08 | 157 | 64.3 | 21 | 38 | 555 | 10 |
| MW-10 7/11/2019 | 8.12 | 5.11 | 153 | 63.8 | 22.5 | 33 | 537 | 10 |
| MW-10 11/4/2019 | 7.41 | 4.57 | 142 | 54.2 | 21.6 | 33.6 | 526 | 10 |
| MW-10 8/25/2020 | 11.9 | 4.51 | 163 | 59.1 | 16.4 | 47.9 | 589 | 10 |
| LEACHATE 8/18/2016 | 9250 | 689 | 573 | 4240 | 6990 | 28000 | 644 | 10 |
| LEACHATE 11/9/2016 | 1230 | 90.7 | 334 | 398 | 876 | 3460 | 480 | 10 |
| LEACHATE 2/3/2017 | 1880 | 121 | 560 | 671 | 1760 | 6070 | 505 | 10 |
| LEACHATE 11/4/2019 | 1110 | 51.7 | 460 | 163 | 2340 | 5230 | 206 | 10 |
| | | | | | | | | |



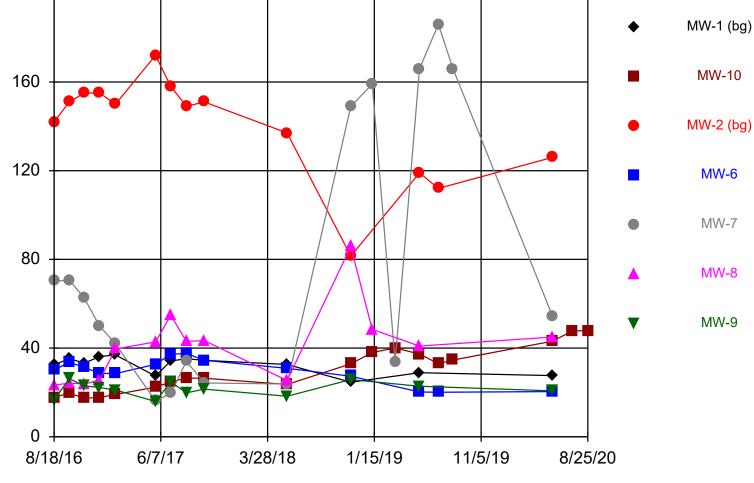
latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Appendix C

Time Series Plots

200





Constituent: Sulfate Analysis Run 10/6/2020 9:12 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

mg/L

ADDENDUM 1

2020 Annual Groundwater Monitoring and Corrective Action Report Addendum 1

SCS ENGINEERS

December 16, 2022 File No. 27213167.20

| То: | Evergy Metro, Inc. Jared Morrison – Director, Water and Waste Programs |
|----------|--|
| From: | SCS Engineers Douglas L. Doerr, P.E. John R. Rockhold, P.G. |
| Subject: | 2020 Annual Groundwater Monitoring and Corrective Action Report Addendum 1 Evergy Metro, Inc. CCR Landfill latan Generating Station – Platte County, Missouri |

The CCR Landfill at the latan Generating Station is subject to the groundwater monitoring and corrective action requirements of the "Coal Combustion Residuals (CCR) Final Rule" (Rule); as described in CFR 40 257.90 through CFR 40 257.98. An Annual Groundwater Monitoring and Corrective Action (GWMCA) Report documenting activities completed in 2020 for the CCR Landfill was completed and placed in the facility's operating record on January 29, 2021, as required by the Rule. The report was subsequently revised and placed in the operating record April 7, 2021. The Annual GWMCA report was to fulfill the requirements specified in 40 CFR 257.90(e).

This Addendum has been prepared to supplement the operating record in recognition of comments received by Evergy from the U.S. Environmental Protection Agency (USEPA) on January 11, 2022. In addition to the information listed in 40 CFR 257.90(e), 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 40 CFR 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 in the attachments to this addendum.

The attachments to this addendum are as follows:

• Attachment 1 – Laboratory Analytical Reports:

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:

0

Jared Morrison December 16, 2022 Page 2

- January 2020 First verification sampling for the Fall 2019 detection monitoring event.
- February 2020 Second verification sampling for the Fall 2019 detection monitoring event.
- May 2020 Spring 2020 semiannual detection monitoring sampling event and Appendix IV.
- July 2020 First verification sampling for the Spring 2020detection monitoring sampling event.
- August 2020 Second verification sampling for the Spring 2020 detection monitoring sampling event.
- November 2020 Fall 2020 semiannual detection monitoring sampling event.
- Attachment 2 Statistical Analyses:

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 2020 included the following:

- Fall 2019 semiannual detection monitoring statistical analyses.
- Spring 2020 semiannual detection monitoring statistical analyses.
- Attachment 3 Groundwater Potentiometric Surface Maps:

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:

- May 2020 Spring 2020 semiannual detection monitoring sampling event.
- November 2020 Fall 2020 semiannual detection monitoring sampling event.

Jared Morrison December 16, 2022

ATTACHMENT 1

Laboratory Analytical Reports

Jared Morrison December 16, 2022

ATTACHMENT 1-1 January 2020 Sampling Event Laboratory Report



ANALYTICAL REPORT

January 24, 2020

SCS Engineers - KS

Sample Delivery Group: Samples Received: Project Number: Description: L1180954 01/18/2020 27213167.19 Evergy latan Generating Station

Report To:

Jason Franks 8575 W. 110th Street Overland Park, KS 66210 Cp ²Tc ³Ss ⁴Cn ⁵Sr ⁶Qc ⁷Gl ⁸Al ⁹Sc

Entire Report Reviewed By:

Vubb law

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.

ACCOUNT: SCS Engineers - KS PROJECT: 27213167.19

SDG: L1180954 DATE/TIME: 01/24/20 09:20 PAGE: 1 of 21

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SDG: L1180954

DATE/TIME: 01/24/20 09:20

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

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|-------------------------------|--------------|----------|--------------------------------|---------------------------------------|--------------------------|----------------|
| MW-1 L1180954-01 GW | | | Collected by Jason R Franks | Collected date/time 01/15/20 14:05 | Received da 01/18/20 08: | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG1414370 | 1 | 01/22/20 21:27 | 01/22/20 21:27 | ELN | Mt. Juliet, TN |
| MW-2 L1180954-02 GW | | | Collected by Jason R Franks | Collected date/time 01/15/20 13:30 | Received da 01/18/20 08: | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG1414370 | 1 | 01/22/20 21:43 | 01/22/20 21:43 | ELN | Mt. Juliet, TN |
| MW-9 L1180954-03 GW | | | Collected by Jason R Franks | Collected date/time 01/15/20 14:50 | Received da 01/18/20 08: | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG1414370 | 1 | 01/22/20 21:59 | 01/22/20 21:59 | ELN | Mt. Juliet, TN |
| DUPLICATE 1 L1180954-04 GW | | | Collected by Jason R Franks | Collected date/time 01/15/20 14:50 | Received da 01/18/20 08: | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG1414370 | 1 | 01/22/20 23:38 | 01/22/20 23:38 | ELN | Mt. Juliet, TN |
| MW-10 L1180954-05 GW | | | Collected by Jason R Franks | Collected date/time 01/15/20 12:50 | Received da 01/18/20 08: | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG1414370 | 1 | 01/22/20 23:54 | 01/22/20 23:54 | ELN | Mt. Juliet, TN |
| MW-101 L1180954-06 GW | | | Collected by Jason R Franks | Collected date/time 01/16/20 11:00 | Received da 01/18/20 08: | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG1414370 | 1 | 01/23/20 00:11 | 01/23/20 00:11 | ELN | Mt. Juliet, TN |
| MW-104 L1180954-07 GW | | | Collected by Jason R Franks | Collected date/time 01/15/20 11:50 | Received da 01/18/20 08: | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Metals (ICP) by Method 6010B | WG1414408 | 1 | 01/22/20 09:57 | 01/23/20 14:47 | EL | Mt. Juliet, TN |
| DUPLICATE 2 L1180954-08 GW | | | Collected by Jason R Franks | Collected date/time 01/15/20 11:50 | Received da 01/18/20 08: | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Metals (ICP) by Method 6010B | WG1414408 | 1 | 01/22/20 09:57 | 01/23/20 15:55 | EL | Mt. Juliet, TN |
| | | | | | | |

PROJECT: 27213167.19

SDG: L1180954 DATE/TIME: 01/24/20 09:20 ₩

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| MW-105 L1180954-09 GW | | | Collected by Jason R Franks | Collected date/time 01/16/20 12:50 | Received da 01/18/20 08: | |
|-------------------------------|-----------|----------|--------------------------------|---------------------------------------|--------------------------|----------------|
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG1414370 | 1 | 01/23/20 00:27 | 01/23/20 00:27 | ELN | Mt. Juliet, TN |
| MW-107 L1180954-10 GW | | | Collected by Jason R Franks | Collected date/time 01/16/20 13:45 | Received da 01/18/20 08: | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG1414370 | 1 | 01/23/20 00:44 | 01/23/20 00:44 | ELN | Mt. Juliet, TN |

SDG: L1180954

CASE NARRATIVE

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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.

Jubb land

Jeff Carr Project Manager

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SDG: L1180954 DATE/TIME: 01/24/20 09:20

SAMPLE RESULTS - 01 L1180954

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| | Result | Qualifier | RDL | Dilution | Analysis | Batch | — Ср |
|----------|--------|-----------|------|----------|------------------|------------------|------|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Fluoride | 326 | | 100 | 1 | 01/22/2020 21:27 | <u>WG1414370</u> | Tc |



SAMPLE RESULTS - 02 L1180954

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| | Result | Qualifier | RDL | Dilution | Analysis | Batch | 'Ср |
|----------|--------|-----------|------|----------|------------------|-----------|---------|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Fluoride | 374 | | 100 | 1 | 01/22/2020 21:43 | WG1414370 | Tc |

Collected date/time: 01/15/20 14:50

SAMPLE RESULTS - 03 L1180954



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| Result | Qualifier | RDL | Dilution | Analysis | Batch | |
|--------|------------|---------|----------------------|------------------------|--|--|
| ug/l | | ug/l | | date / time | | |
| ND | | 1000 | 1 | 01/22/2020 21:59 | WG1414370 | |
| 445 | | 100 | 1 | 01/22/2020 21:59 | <u>WG1414370</u> | |
| | ug/l ND | ug/l ND | ug/l ug/l ND 1000 | ug/l ug/l ND 1000 1 | ug/l ug/l date / time ND 1000 1 01/22/2020 21:59 | ug/l ug/l date / time ND 1000 1 01/22/2020 21:59 WG1414370 |

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Wet Chemistry by Method 9056A

| | Result | Qualifier F | RDL | Dilution | Analysis | Batch |
|----------|--------|-------------|------|----------|------------------|-----------|
| Analyte | ug/l | ι | ug/l | | date / time | |
| Chloride | ND | 1 | 1000 | 1 | 01/22/2020 23:38 | WG1414370 |
| Fluoride | 438 | 1 | 100 | 1 | 01/22/2020 23:38 | WG1414370 |

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| | | Result | Qualifier | RDL | Dilution | Analysis | Batch | 1 | C |
| Analyte | | ug/l | | ug/l | | date / time | | 2 | _ |
| Fluoride | | 637 | | 100 | 1 | 01/22/2020 23:54 | WG1414370 | - | Т |

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Wet Chemistry by Method 9056A

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|--------|-----------|--------------|------------------------|--------------------------|--|--|
| Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| ug/l | | ug/l | | date / time | | [|
| 6380 | | 1000 | 1 | 01/23/2020 00:11 | WG1414370 | |
| 380 | | 100 | 1 | 01/23/2020 00:11 | WG1414370 | L |
| | 6380 | ug/l 6380 | ug/l ug/l 6380 1000 | ug/l ug/l 6380 1000 1 | ug/l ug/l date / time 6380 1000 1 01/23/2020 00:11 | ug/l ug/l date / time 6380 1000 1 01/23/2020 00:11 WG1414370 |

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SDG: L1180954

Collected date/time: 01/15/20 11:50

SAMPLE RESULTS - 07 L1180954



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ch |
|---------|--------|-----------|------|----------|------------------|-----------|----|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Calcium | 55400 | | 1000 | 1 | 01/23/2020 14:47 | WG1414408 | Tc |





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Metals (ICP) by Method 6010B

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|---------|--------|-----------|------|----------|------------------|-----------|-----|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ľ |
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Calcium | 55900 | | 1000 | 1 | 01/23/2020 15:55 | WG1414408 | T |

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| | | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ср |
| Analyte | | ug/l | | ug/l | | date / time | | 2 |
| Chloride | | 20400 | | 1000 | 1 | 01/23/2020 00:27 | WG1414370 | ⁻Tc |

| ACCOUNT: | |
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| SCS Engineers - KS | |

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Wet Chemistry by Method 9056A

| Wet Chemistry by Method 3030A | | | | | | | | | |
|-------------------------------|--------|-----------|------|----------|------------------|-----------|--|-----|--|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | Ср | |
| Analyte | ug/l | | ug/l | | date / time | | | 2 | |
| Chloride | 34300 | | 1000 | 1 | 01/23/2020 00:44 | WG1414370 | | ⁻Tc | |

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SDG: L1180954 DATE/TIME: 01/24/20 09:20

PAGE: 15 of 21

WG1414370

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY <u>L1180954-01,02,03,04,05,06,09,10</u>

| (MB) R3493292-1 | 01/22/20 10:15 | | | | |
|-----------------|----------------|--------------|--------|--------|--|
| | MB Result | MB Qualifier | MB MDL | MB RDL | |
| Analyte | ug/l | | ug/l | ug/l | |
| Chloride | U | | 51.9 | 1000 | |
| Fluoride | U | | 9.90 | 100 | |
| | | | | | |

L1180954-03 Original Sample (OS) • Duplicate (DUP)

| (OS) L1180954-03 01/22/20 | 0 21:59 • (DUP) | R3493292-5 | 01/22/20 | 22:16 | | |
|---------------------------|-----------------|------------|----------|---------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| Chloride | ND | 821 | 1 | 2.33 | J | 15 |
| Fluoride | 445 | 437 | 1 | 1.79 | | 15 |

Laboratory Control Sample (LCS)

| (LCS) R3493292-2 01/22/ | /20 10:31 | | | | |
|-------------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Chloride | 40000 | 39100 | 97.7 | 80.0-120 | |
| Fluoride | 8000 | 7950 | 99.4 | 80.0-120 | |

L1180954-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1180954-03 01/22/20 21:59 • (MS) R3493292-6 01/22/20 22:32 • (MSD) R3493292-7 01/22/20 22:49 | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Chloride | 50000 | ND | 46900 | 47200 | 92.2 | 92.7 | 1 | 80.0-120 | | | 0.588 | 15 |
| Fluoride | 5000 | 445 | 5030 | 5080 | 91.7 | 92.7 | 1 | 80.0-120 | | | 0.989 | 15 |

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Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

Method Blank (MB)

| (MB) R3493571-1 01/2 | 23/20 14:39 | | | |
|----------------------|-------------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Calcium | U | | 46.3 | 1000 |

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

| (LCS) R3493571-2 01/23/20 | D 14:41 • (LCSD) | R3493571-3 (| 01/23/20 14:44 | | | | | | | |
|---------------------------|------------------|--------------|----------------|----------|-----------|-------------|---------------|----------------|------|------------|
| | Spike Amount | LCS Result | LCSD Result | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | % | % | % | | | % | % |
| Calcium | 10000 | 9550 | 9860 | 95.5 | 98.6 | 80.0-120 | | | 3.16 | 20 |

L1180954-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1180954-07 01/23/2 | 20 14:47 • (MS) F | R3493571-5 01/ | /23/20 14:52 • | (MSD) R34935 | 71-6 01/23/20 | 14:54 | | | | | | |
|--------------------------|-------------------|-----------------|----------------|--------------|---------------|----------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Calcium | 10000 | 55400 | 64000 | 64000 | 85.4 | 86.3 | 1 | 75.0-125 | | | 0.145 | 20 |

SDG: L1180954 DATE/TIME: 01/24/20 09:20

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GLOSSARY OF TERMS

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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 |

PROJECT: 27213167.19

SDG: L1180954 DATE/TIME: 01/24/20 09:20

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ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

State Accreditations

| Alabama | 40660 | Nebra |
|------------------------|-------------|--------|
| Alaska | 17-026 | Neva |
| Arizona | AZ0612 | New I |
| Arkansas | 88-0469 | New. |
| California | 2932 | New I |
| Colorado | TN00003 | New Y |
| Connecticut | PH-0197 | North |
| Florida | E87487 | North |
| Georgia | NELAP | North |
| Georgia ¹ | 923 | North |
| Idaho | TN00003 | Ohio- |
| Illinois | 200008 | Oklah |
| Indiana | C-TN-01 | Orego |
| lowa | 364 | Penns |
| Kansas | E-10277 | Rhode |
| Kentucky ¹⁶ | 90010 | South |
| Kentucky ² | 16 | South |
| Louisiana | AI30792 | Tenne |
| Louisiana ¹ | LA180010 | Texas |
| Maine | TN0002 | Texas |
| Maryland | 324 | Utah |
| Massachusetts | M-TN003 | Verm |
| Michigan | 9958 | Virgin |
| Minnesota | 047-999-395 | Wash |
| Mississippi | TN00003 | West |
| Missouri | 340 | Wisco |
| Montana | CERT0086 | Wyom |
| | | |

| Nebraska | NE-OS-15-05 |
|-----------------------------|------------------|
| Nevada | TN-03-2002-34 |
| New Hampshire | 2975 |
| New Jersey-NELAP | TN002 |
| New Mexico ¹ | n/a |
| New York | 11742 |
| North Carolina | Env375 |
| North Carolina ¹ | DW21704 |
| North Carolina ³ | 41 |
| North Dakota | R-140 |
| Ohio-VAP | CL0069 |
| Oklahoma | 9915 |
| Oregon | TN200002 |
| Pennsylvania | 68-02979 |
| Rhode Island | LAO00356 |
| South Carolina | 84004 |
| South Dakota | n/a |
| Tennessee 1 4 | 2006 |
| Texas | T104704245-18-15 |
| Texas ⁵ | LAB0152 |
| Utah | TN00003 |
| Vermont | VT2006 |
| Virginia | 460132 |
| Washington | C847 |
| West Virginia | 233 |
| Wisconsin | 9980939910 |
| | |

Third Party Federal Accreditations

| 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

Our Locations

SCS Engineers - KS

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.

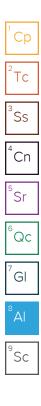


27213167.19

L1180954

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| CCC Frankran KC | | | Billing Info | ormation: | | | | | £ | Analysis | Container / | Preservative | Chain of Custody Page of | | | |
|---|--|---|--------------------------------------|---|-------------------------|-------|---------------|---|---------------------------|-----------------|-------------------------|--|--|---|--|--|
| SCS Engineers - KS 8575 W. 110th Street Overland Park, KS 66210 | | | 8575 W | Accounts Payable 8575 W. 110th Street Overland Park, KS 66210 | | | 22 | | | | | | | - Pace, Nettone Co | Analytical [®] Inter for Teeting & Innovetio | |
| Report to: Jason Franks | | | | Email To: jfranks@scsengineers.com; | | | | | | | | | | 12065 Lebanon Rd | | |
| Project City/State | | | Jay.martin | jay.martin@kcpl.com; | | | | | res | | | | | Mount Juliet, TN 37 Phone: 615-758-585 | · 2006-05 | |
| Description: Evergy latan Generating Statio Collected | | | MES | TON, MC | Please Circ PT MT CT | | | | NoF | | | | | Phone: 800-767-585 Fax: 615-758-5859 | | |
| Phone: 913-681-0030 Fax: 913-681-0012 | Client Proje 2721316 | | Lab Project # AQUAOPKS-IATAN | | | | 33 | res | HDPE-I | Se l | | | | SDS # 6180954 | | |
| Collected by (print): | Site/Facilit | y ID # | | P.O. # | | | E-HNC | PE-Nol | 125m | E-Nol | | | | M165 | | |
| Collected by (signature): | Rush? (Lab MUST Be M Same Day Five Day Next Day5 Day (| | Day y (Rad Only) Date Results Needed | | | | 250mHDPE-HND3 | 25mlHDPE-NoPres | Fluoride 125miHDPE-NoPres | (5mlHDPE-NoPres | | | | 5056)295 | | |
| | | | 10 Day (Rad Only) | | | | | r i | le, F | e 12 | | | | PM: 206 - Jeff C PB: | arr | |
| Sample ID | Comp/Gra | b Matrix * | Depth | Date | Time | Cntrs | Calcium | Chloride | Chloride, | Fluoride | | | | Shipped Via: | Sample # (lab only) | |
| MW-1 | GRA | GW | -7 | 1/15/2020 | 1405 | 1 | 0 | 0 | 0 | T X | | | | | - 01 | |
| WW-2 | T | GW | - | 11100 | 1330 | 1 | | | | x | | | 4 | | | |
| MŴ-9 | | GW | - | 1 | 1450 | 1 | | | X | | | | | | 07 | |
| DUPLICATE 1 | | GW | - | | 1450 | 1 | | | X | | | | | | 04 | |
| MW-9 MS/MSD | | GW | - | | 1450 | 1 | | | X | | | | | | -09 | |
| WW-10 | | GW | - | 1 | 1250 | 1 | | | | x | | | | -05 | -06- | |
| MW-101 | | GW | - | 1/10/202 | 1.55 | 1 | | | x | | | | | -06 | -67 | |
| WW-104 | | GW | - | 1.1000 | 1150 | 1 | X | | | | | | | -07 | -08 | |
| DUPLICATE 2 | | GW | (| | 1150 | 1 | x | | | | | | | -08 | -09- | |
| MW-104 MS/MSD | V | GW | 1 | | IISD | 1 | x | _ | | | | | | | -10 | |
| Matrix: S - Soil AIR - Air F - Filter W - Groundwater B - Bioassay WW - WasteWater W - Drinking Water | Remarks: | | | | | | | | | pH Flow | | emp | COC Seal COC Sign Bottles Correct | ample Receipt Ch Present/Intact; ed/Accurate; arrive intact; bottles used; nt volume sent; | ecklist NP Y N VY N VY N | |
| OT - Other UPSFedEx Coul Relinquished by : (Signature) Date: Relinquished by : (Signature) Date: | | ier <u>SUA</u> Tracking # Time: Received by: (Signatur | | | ura H | ,10 | 7 | Trip Blank Received: Yes / No HCL / MeoH | | | VOA Zero Preserva | Sufficient volume sent: _YN If Applicable _YN VOA Zero Headspace: _YN Preservation Correct/Checked: _YN RAD Screen <0.5 mR/hr: | | | | |
| | | Date: | Time: Received by: (Signatur | | | | <u>v</u> | | 100 | remp: | | TBR lottles Received: | If preserva | tion required by Logi | n: Date/Time | |
| elinquished by : (Signature) | Relinquished by : (Signature) Date: | | Ti | Time: Received for lab by: (S | | | | Signature) | | | Date: Time: 1-18-20 8ch | | | | Condition: NCF / OK | |

| | | | Billing Info | rmation: | | | | 1 | A | nalvsis / | Contain | er / Preserva | tive | | Chain of Custody | Page of | |
|--|------------------------------|--------------------------|-----------------------------|---|------------------|--------------------|------------------|--|------------------|------------------|-----------------------------|---------------|---|--|---|---|--|
| SCS Engineers - KS 8575 W. 110th Street Overland Park, KS 66210 | | | 8575 W. | ounts Payable 5 W. 110th Street erland Park, KS 66210 | | | | | | | | | | | Netional Cen | nalytical [®] ter for Teating & Innovatio | |
| Report to: Jason Franks | | | | franks@scsenginee @kcpl.com; | rs.com; | | | | res | | | | | | 12065 Lebanon Rd Mount Juliet, TN 371 Phone: 615-758-5858 | 2. 新聞会行 | |
| Description: Evergy latan Generating Statio Collected: | | City/State Collected: | Please Circle: | | | | | 1 | NoP | | | | | Phone: 800-767-5859 Fax: 615-758-5859 | | | |
| Phone: 913-681-0030 ax: 913-681-0012 | Client Project 27213167.1 | | × _~. | Lab Project # AQUAOPKS-I/ | ATAN | | 250miHDPE-HNO3 | Pres | HDPE | Pres | | | | | | - Caurin | |
| ASON RERAM | JASON & FRANK | | | P.O. # | | | | DPE-No | e 125n | DPE-No | | | | | Table # Acctnum: AQUAOPKS | | |
| lected by (signature): Rush? (Lab MUST Be Notified) Same DayFive Day Next Day5 Day (Rad Only) Two Day10 Day (Rad Only) | | Day (Rad Only) | Quote # Date Results Needed | | | | 125mlHDPE-NoPres | Chloride 125mlHDPE-NoPres Chloride, Fluoride 125mlHDPE-NoPres | 125mIHDPE-NoPres | | | | Template: T136056 Prelogin: P750295 PM: 206 - Jeff Carr | | | | |
| Packed on Ice N Y Sample ID | Three Da | | Depth | Date | Time | No. of Cntrs | Ę | Chloride | oride | Fluoride | | | | | PB: Shipped Via: | | |
| | | | Т | | I | 4 | Cal | | ਲ | Flu | | | | | Remarks | Sample # (lab only) | |
| WW-105 | GRAB | GW | - | 1/16/2020 | 1250 | 1 | | X | | | | | | | -09 | -++ | |
| MW-107 | | GW | - | 1 | 1345 | 1 | | X | | | | | | | -10 | -10 | |
| | | | | | | | | | | | | | | | jii a | | |
| | | | | <u>.</u> | | 2 | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| I | | | | | | | | | | | | | | | | | |
| | 2 | | | | | | | - | | | | | | | | | |
| * Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater | | 1 | | | | рн Flow | | | | | _ Temp | | COC Sea COC Sig Bottles | Sample Receipt Checklist COC Seal Present/Intact:MPYN COC Signed/Accurate:YN Bottles arrive intact:YN Correct bottles used:N | | | |
| DW - Drinking Water DT - Other | Samples retur UPS Fe | ned via: dExCou | urier <u>5</u> | WA Tra | acking # | | | | | | | | _ | Sufficient volume sent: ZY If Applicable YOA Zero Headspace; Y | | | |
| Relinquished by : (Signature) | | | Time: Ref 1521 | ceived by: (Sign | A | ul | l | | Trip Blan | nk Recei | ved: Yes /v HCL / TBR | MeoH | RAD Sci | vation Correct/Che ceen <0.5 mR/hr: | | | |
| telinquisped by : (6ignature) | M | Date: | 1 | Time: Ref | ceived by: (Sign | ature) | | | | Temp: 1. 7+0. | 2 = 21 | C Bottles Re | peived: | If preser | vation required by Log | in: Date/Time | |
| Relinquished by : (Signature) | | Date: | | Tíme: Re | ceived for lab b | y: (Signa | ature | ~ | | Date: | 2-0 | Time: | to | Hold: | | Condition: NCF / OK | |



ANALYTICAL REPORT

January 24, 2020

SCS Engineers - KS

Sample Delivery Group: Samples Received: Project Number: Description: L1180951 01/18/2020 27213167.19 Evergy latan Generating Station

Report To:

Jason Franks 8575 W. 110th Street Overland Park, KS 66210 Cp ²Tc ³Ss ⁴Cn ⁵Sr ⁶Qc ⁷Gl ⁸Al ⁹Sc

Entire Report Reviewed By:

Jubb land

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.

ACCOUNT: SCS Engineers - KS PROJECT: 27213167.19

SDG: L1180951 DATE/TIME: 01/24/20 09:12

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| ² Tc | |
| ³ Ss | |
| ⁴ Cn | |
| ⁵ Sr | |
| ⁶ Qc | |
| ⁷ Gl | |
| ⁸ AI | |
| °Sc | |

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SDG: L1180951 DATE/TIME: 01/24/20 09:12

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

*

Ср

Tc

Ss

Cn

Sr

Qc

GI

ΆI

Sc

| | SAMPLES | ONE LAB. NATIONW | | | | |
|---|-----------|------------------|--------------------------------|---------------------------------------|--------------------------------------|----------------|
| MW-1 L1180951-01 GW | | | Collected by Jason R Franks | Collected date/time 01/15/20 14:05 | Received da 01/18/20 08: | |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Wet Chemistry by Method 2320 B-2011 | WG1414276 | 1 | 01/21/20 14:49 | 01/21/20 14:49 | DGR | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1415117 | 1 | 01/22/20 22:33 | 01/22/20 22:33 | ELN | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1414408 | 1 | 01/22/20 09:57 | 01/23/20 15:28 | EL | Mt. Juliet, TN |
| MW-2 L1180951-02 GW | | | Collected by Jason R Franks | Collected date/time 01/15/20 13:30 | Received da 01/18/20 08: | |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| viction and the second s | Baten | Dilution | date/time | date/time | Analyst | Eocation |
| Net Chemistry by Method 2320 B-2011 | WG1414276 | 1 | 01/21/20 14:58 | 01/21/20 14:58 | DGR | Mt. Juliet, TI |
| Net Chemistry by Method 9056A | WG1415117 | 1 | 01/22/20 23:26 | 01/22/20 23:26 | ELN | Mt. Juliet, Tl |
| Wet Chemistry by Method 9056A | WG1415117 | 5 | 01/23/20 05:41 | 01/23/20 05:41 | ELN | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1414408 | 1 | 01/22/20 09:57 | 01/23/20 15:31 | EL | Mt. Juliet, TN |
| MW-9 L1180951-03 GW | | | Collected by Jason R Franks | Collected date/time 01/15/20 14:50 | Received da 01/18/20 08: | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 2320 B-2011 | WG1414276 | 1 | 01/21/20 15:16 | 01/21/20 15:16 | DGR | Mt. Juliet, TI |
| Net Chemistry by Method 9056A | WG1415117 | 1 | 01/22/20 23:39 | 01/22/20 23:39 | ELN | Mt. Juliet, TI |
| Metals (ICP) by Method 6010B | WG1414408 | 1 | 01/22/20 09:57 | 01/23/20 15:34 | EL | Mt. Juliet, TI |
| MW-10 L1180951-04 GW | | | Collected by Jason R Franks | Collected date/time 01/15/20 12:50 | Received date/time 01/18/20 08:00 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 2320 B-2011 | WG1414276 | 1 | 01/21/20 15:24 | 01/21/20 15:24 | DGR | Mt. Juliet, TI |
| Net Chemistry by Method 9056A | WG1415117 | 1 | 01/22/20 23:52 | 01/22/20 23:52 | ELN | Mt. Juliet, TI |
| Metals (ICP) by Method 6010B | WG1414408 | 1 | 01/22/20 09:57 | 01/23/20 15:36 | EL | Mt. Juliet, TI |
| | | | Collected by | Collected date/time | Received da | te/time |
| MW-101 L1180951-05 GW | | | Jason R Franks | 01/16/20 11:00 | 01/18/20 08: | 00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Net Chemistry by Method 2320 B-2011 | WG1414276 | 1 | 01/21/20 15:32 | 01/21/20 15:32 | DGR | Mt. Juliet, TI |
| Wet Chemistry by Method 9056A | WG1415117 | 1 | 01/23/20 00:05 | 01/23/20 00:05 | ELN | Mt. Juliet, TI |
| Metals (ICP) by Method 6010B | WG1414408 | 1 | 01/22/20 09:57 | 01/23/20 15:44 | EL | Mt. Juliet, Tl |
| MW-104 L1180951-06 GW | | | Collected by Jason R Franks | Collected date/time 01/16/20 11:50 | Received da 01/18/20 08: | |
| | | D.1: | | | | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 2320 B-2011 | WG1414276 | 1 | 01/21/20 15:49 | 01/21/20 15:49 | DGR | Mt. Juliet, Tl |
| Wet Chemistry by Method 9056A | WG1415117 | 5 | 01/23/20 05:54 | 01/23/20 05:54 | ELN | Mt. Juliet, TI |
| | WG1414408 | 1 | 01/22/20 09:57 | 01/23/20 15:47 | EL | Mt. Juliet, TN |

PROJECT: 27213167.19

SDG: L1180951 DATE/TIME: 01/24/20 09:12

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

| | | | Collected by | Collected date/time | Received da | te/time |
|-------------------------------------|-----------|----------|----------------|---------------------|--------------|----------------|
| MW-105 L1180951-07 GW | | | Jason R Franks | 01/16/20 12:50 | 01/18/20 08: | 00 |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Wet Chemistry by Method 2320 B-2011 | WG1414276 | 1 | 01/21/20 15:57 | 01/21/20 15:57 | DGR | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1415117 | 5 | 01/23/20 06:08 | 01/23/20 06:08 | ELN | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1414408 | 1 | 01/22/20 09:57 | 01/23/20 15:50 | EL | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | te/time |
| MW-107 L1180951-08 GW | | | Jason R Franks | 01/16/20 13:45 | 01/18/20 08: | 00 |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Wet Chemistry by Method 2320 B-2011 | WG1414276 | 1 | 01/21/20 16:05 | 01/21/20 16:05 | DGR | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1415117 | 5 | 01/23/20 06:21 | 01/23/20 06:21 | ELN | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1414408 | 1 | 01/22/20 09:57 | 01/23/20 15:52 | EL | Mt. Juliet, TN |
| | | | | | | |

³Ss ⁴Cn ⁵Sr ⁶Qc ⁷Gl ⁸Al ⁹Sc

*

Ср

Tc

SDG: L1180951 DATE/TIME: 01/24/20 09:12

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.

Jubb land

Jeff Carr Project Manager

Τс Ss Cn Sr Qc GI AI Sc

PROJECT: 27213167.19

SDG: L1180951 DATE/TIME: 01/24/20 09:12

PAGE: 5 of 20

SAMPLE RESULTS - 01 L1180951

Cn

⁷Gl

Wet Chemistry by Method 2320 B-2011

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ср |
|------------------------|--------|-----------|-------|----------|------------------|-----------|-----------------|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Alkalinity,Bicarbonate | 406000 | | 20000 | 1 | 01/21/2020 14:49 | WG1414276 | Tc |
| Alkalinity,Carbonate | ND | | 20000 | 1 | 01/21/2020 14:49 | WG1414276 | |
| Sample Narrative | | | | | | | ³ Ss |

Sample Narrative:

L1180951-01 WG1414276: Endpoint pH 4.5

Wet Chemistry by Method 9056A

| | · · · · · · · · · · · · · · · · · · · | | | | | 5 |
|----------|---------------------------------------|---------------|----------|------------------|-----------|-----------------|
| | Result | Qualifier RDL | Dilution | Analysis | Batch | ິSr |
| Analyte | ug/l | ug/l | | date / time | | |
| Chloride | 5320 | 1000 | 1 | 01/22/2020 22:33 | WG1415117 | ⁶ OC |
| Sulfate | 27300 | 5000 | 1 | 01/22/2020 22:33 | WG1415117 | |
| | | | | | | |

Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
|-----------|--------|-----------|------|----------|------------------|-----------|---|
| Analyte | ug/l | | ug/l | | date / time | | Ŭ |
| Calcium | 129000 | | 1000 | 1 | 01/23/2020 15:28 | WG1414408 | L |
| Magnesium | 26700 | | 1000 | 1 | 01/23/2020 15:28 | WG1414408 | 9 |
| Potassium | 6170 | | 1000 | 1 | 01/23/2020 15:28 | WG1414408 | |
| Sodium | 11600 | | 1000 | 1 | 01/23/2020 15:28 | WG1414408 | |

SDG: L1180951 Collected date/time: 01/15/20 13:30

SAMPLE RESULTS - 02

*

Cn

⁷Gl

Wet Chemistry by Method 2320 B-2011

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ср |
|------------------------|--------|-----------|-------|----------|------------------|-----------|-----------------|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Alkalinity,Bicarbonate | 427000 | | 20000 | 1 | 01/21/2020 14:58 | WG1414276 | Tc |
| Alkalinity,Carbonate | ND | | 20000 | 1 | 01/21/2020 14:58 | WG1414276 | |
| | | | | | | | ³ Ss |

Sample Narrative:

L1180951-02 WG1414276: Endpoint pH 4.5

Wet Chemistry by Method 9056A

| | | | | | | 5 |
|----------|--------|---------------|----------|------------------|-----------|-----------------|
| | Result | Qualifier RDL | Dilution | Analysis | Batch | ິSr |
| Analyte | ug/l | ug/l | | date / time | | |
| Chloride | 6840 | 1000 | 1 | 01/22/2020 23:26 | WG1415117 | ⁶ Oc |
| Sulfate | 125000 | 25000 | 5 | 01/23/2020 05:41 | WG1415117 | |
| | | | | | | |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
|-----------|--------|-----------|------|----------|------------------|-----------|--|
| Analyte | ug/l | | ug/l | | date / time | | |
| Calcium | 165000 | | 1000 | 1 | 01/23/2020 15:31 | WG1414408 | |
| Magnesium | 33800 | | 1000 | 1 | 01/23/2020 15:31 | WG1414408 | |
| Potassium | 5710 | | 1000 | 1 | 01/23/2020 15:31 | WG1414408 | |
| Sodium | 12400 | | 1000 | 1 | 01/23/2020 15:31 | WG1414408 | |

Collected date/time: 01/15/20 14:50

SAMPLE RESULTS - 03

ONE LAB. NATIONWIDE.



Cn

Qc

7

Wet Chemistry by Method 2320 B-2011

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | C |
|------------------------|--------|-----------|-------|----------|------------------|-----------|-----------------|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Alkalinity,Bicarbonate | 350000 | | 20000 | 1 | 01/21/2020 15:16 | WG1414276 | ² Τ(|
| Alkalinity,Carbonate | ND | | 20000 | 1 | 01/21/2020 15:16 | WG1414276 | |
| Comple Negrative | | | | | | | ³ Ss |

Sample Narrative:

L1180951-03 WG1414276: Endpoint pH 4.5

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Sulfate | 23400 | | 5000 | 1 | 01/22/2020 23:39 | WG1415117 |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | G |
|-----------|--------|-----------|------|----------|------------------|-----------|-----------------|
| Analyte | ug/l | | ug/l | | date / time | | 8 |
| Calcium | 104000 | | 1000 | 1 | 01/23/2020 15:34 | WG1414408 | Ă |
| Magnesium | 28400 | | 1000 | 1 | 01/23/2020 15:34 | WG1414408 | |
| Potassium | 4940 | | 1000 | 1 | 01/23/2020 15:34 | WG1414408 | ⁹ Sc |
| Sodium | 6440 | | 1000 | 1 | 01/23/2020 15:34 | WG1414408 | |

Collected date/time: 01/15/20 12:50

SAMPLE RESULTS - 04



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Wet Chemistry by Method 2320 B-2011

| Analyte ug/l date / time Alkalinity,Bicarbonate 496000 20000 1 01/21/2020 15:24 WG1414276 Alkalinity,Carbonate ND 20000 1 01/21/2020 15:24 WG1414276 | | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ср |
|--|------------------------|--------|-----------|-------|----------|------------------|-----------|----|
| · · · · · · · · · · · · · · · · · · · | Analyte | ug/l | | ug/l | | date / time | | 2 |
| Alkalinity,Carbonate ND 20000 1 01/21/2020 15:24 WG1414276 | Alkalinity,Bicarbonate | 496000 | | 20000 | 1 | 01/21/2020 15:24 | WG1414276 | Tc |
| | Alkalinity,Carbonate | ND | | 20000 | 1 | 01/21/2020 15:24 | WG1414276 | |

Sample Narrative:

L1180951-04 WG1414276: Endpoint pH 4.5

Wet Chemistry by Method 9056A

| | | | | | | 5 |
|----------|----------|--------------|----------|------------------|-----------|-----------------|
| | Result Q | ualifier RDL | Dilution | Analysis | Batch | ິSr |
| Analyte | ug/l | ug/l | | date / time | | |
| Chloride | 18100 | 1000 | 1 | 01/22/2020 23:52 | WG1415117 | ⁶ OC |
| Sulfate | 28500 | 5000 | 1 | 01/22/2020 23:52 | WG1415117 | |
| | | | | | | |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | 8 |
|-----------|--------|-----------|------|----------|------------------|-----------|---|
| Analyte | ug/l | | ug/l | | date / time | | Ĭ |
| Calcium | 134000 | | 1000 | 1 | 01/23/2020 15:36 | WG1414408 | |
| Magnesium | 52800 | | 1000 | 1 | 01/23/2020 15:36 | WG1414408 | 9 |
| Potassium | 4390 | | 1000 | 1 | 01/23/2020 15:36 | WG1414408 | Ň |
| Sodium | 7650 | | 1000 | 1 | 01/23/2020 15:36 | WG1414408 | |

Collected date/time: 01/16/20 11:00

SAMPLE RESULTS - 05

ONE LAB. NATIONWIDE.



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Wet Chemistry by Method 2320 B-2011

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ср |
|------------------------|--------|-----------|-------|----------|------------------|-----------|-----------------|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Alkalinity,Bicarbonate | 513000 | | 20000 | 1 | 01/21/2020 15:32 | WG1414276 | Tc |
| Alkalinity,Carbonate | ND | | 20000 | 1 | 01/21/2020 15:32 | WG1414276 | |
| | | | | | | | ³ Ss |

Sample Narrative:

L1180951-05 WG1414276: Endpoint pH 4.5

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Sulfate | ND | | 5000 | 1 | 01/23/2020 00:05 | WG1415117 |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | GI |
|-----------|--------|-----------|------|----------|------------------|-----------|-----|
| Analyte | ug/l | | ug/l | | date / time | | 8 |
| Calcium | 131000 | | 1000 | 1 | 01/23/2020 15:44 | WG1414408 | ĬA |
| Magnesium | 33900 | | 1000 | 1 | 01/23/2020 15:44 | WG1414408 | |
| Potassium | 5540 | | 1000 | 1 | 01/23/2020 15:44 | WG1414408 | °Sc |
| Sodium | 36600 | | 1000 | 1 | 01/23/2020 15:44 | WG1414408 | 50 |

Collected date/time: 01/16/20 11:50

SAMPLE RESULTS - 06 L1180951



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Wet Chemistry by Method 2320 B-2011

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ср |
|------------------------|--------|-----------|-------|----------|------------------|-----------|-----------------|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Alkalinity,Bicarbonate | 178000 | | 20000 | 1 | 01/21/2020 15:49 | WG1414276 | Tc |
| Alkalinity,Carbonate | ND | | 20000 | 1 | 01/21/2020 15:49 | WG1414276 | |
| Sample Narrative | | | | | | | ³ Ss |

Sample Narrative:

L1180951-06 WG1414276: Endpoint pH 4.5

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | ٌSr |
|-------------------|--------------|-----------|-------|----------|------------------|-----------|-----------------|
| Analyte | ug/l | | ug/l | | date / time | | |
| Chloride | 23500 | | 5000 | 5 | 01/23/2020 05:54 | WG1415117 | ⁶ Qc |
| Sulfate | 145000 | | 25000 | 5 | 01/23/2020 05:54 | WG1415117 | |
| | | | | | | | 7 |
| Metals (ICP) by I | Method 6010B | | | | | | Í GI |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | 8 |
|-----------|--------|-----------|------|----------|------------------|-----------|-----------------|
| Analyte | ug/l | | ug/l | | date / time | | Ă١ |
| Magnesium | 11600 | | 1000 | 1 | 01/23/2020 15:47 | WG1414408 | |
| Potassium | 3680 | | 1000 | 1 | 01/23/2020 15:47 | WG1414408 | ⁹ Sc |
| Sodium | 78000 | | 1000 | 1 | 01/23/2020 15:47 | WG1414408 | |

Collected date/time: 01/16/20 12:50

SAMPLE RESULTS - 07



Cn

Qc

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Wet Chemistry by Method 2320 B-2011

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ср |
|------------------------|--------|-----------|-------|----------|------------------|-----------|-----------------|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Alkalinity,Bicarbonate | 226000 | | 20000 | 1 | 01/21/2020 15:57 | WG1414276 | Tc |
| Alkalinity,Carbonate | ND | | 20000 | 1 | 01/21/2020 15:57 | WG1414276 | |
| | | | | | | | ³ Ss |

Sample Narrative:

L1180951-07 WG1414276: Endpoint pH 4.5

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Sulfate | 308000 | | 25000 | 5 | 01/23/2020 06:08 | WG1415117 |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | G |
|-----------|--------|-----------|------|----------|------------------|-----------|-----------------|
| Analyte | ug/l | | ug/l | | date / time | | 8 |
| Calcium | 77900 | | 1000 | 1 | 01/23/2020 15:50 | WG1414408 | ĬAĬ |
| Magnesium | 18100 | | 1000 | 1 | 01/23/2020 15:50 | WG1414408 | |
| Potassium | 4530 | | 1000 | 1 | 01/23/2020 15:50 | WG1414408 | ⁹ Sc |
| Sodium | 130000 | | 1000 | 1 | 01/23/2020 15:50 | WG1414408 | 50 |

Collected date/time: 01/16/20 13:45

SAMPLE RESULTS - 08



Cn

Qc

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Wet Chemistry by Method 2320 B-2011

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | (|
|------------------------|--------|-----------|-------|----------|------------------|-----------|---|
| Analyte | ug/l | | ug/l | | date / time | | |
| Alkalinity,Bicarbonate | 154000 | | 20000 | 1 | 01/21/2020 16:05 | WG1414276 | |
| Alkalinity,Carbonate | ND | | 20000 | 1 | 01/21/2020 16:05 | WG1414276 | |
| | | | | | | | 3 |

Sample Narrative:

L1180951-08 WG1414276: Endpoint pH 4.5

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Sulfate | 206000 | | 25000 | 5 | 01/23/2020 06:21 | WG1415117 |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | GI |
|-----------|--------|-----------|------|----------|------------------|-----------|-----|
| Analyte | ug/l | | ug/l | | date / time | | 8 |
| Calcium | 38300 | | 1000 | 1 | 01/23/2020 15:52 | WG1414408 | ٦A |
| Magnesium | 7690 | | 1000 | 1 | 01/23/2020 15:52 | WG1414408 | |
| Potassium | 5810 | | 1000 | 1 | 01/23/2020 15:52 | WG1414408 | °Sc |
| Sodium | 122000 | | 1000 | 1 | 01/23/2020 15:52 | WG1414408 | 50 |

WG1414276

Wet Chemistry by Method 2320 B-2011

QUALITY CONTROL SUMMARY

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Method Blank (MB)

| (MB) R3492737-1 01/21/ | 20 13:30 | | | |
|------------------------|-----------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Alkalinity,Bicarbonate | 3930 | J | 2710 | 20000 |
| Alkalinity,Carbonate | U | | 2710 | 20000 |
| | | | | |

Sample Narrative:

BLANK: Endpoint pH 4.5

L1180372-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1180372-01 01/21/2 | 20 13:52 • (DUP) F | R3492737-2 (| 01/21/20 14 | :00 | | | |
|--------------------------|--------------------|--------------|-------------|---------|---------------|-------------------|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | |
| Analyte | ug/l | ug/l | | % | | % | |
| Alkalinity,Bicarbonate | 108000 | 108000 | 1 | 0.0384 | | 20 | |
| Alkalinity,Carbonate | ND | 0.000 | 1 | 0.000 | | 20 | |

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

L1180951-05 Original Sample (OS) • Duplicate (DUP)

| (OS) L1180951-05 01/21/20 15:32 • (DUP) R3492737-4 01/21/20 15:40 | | | | | | | | | |
|---|-----------------|------------|----------|---------|---------------|-------------------|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | |
| Analyte | ug/l | ug/l | | % | | % | | | |
| Alkalinity,Bicarbonate | 513000 | 514000 | 1 | 0.209 | | 20 | | | |
| Alkalinity,Carbonate | ND | 0.000 | 1 | 0.000 | | 20 | | | |

Sample Narrative:

OS: Endpoint pH 4.5 DUP: Endpoint pH 4.5

| ACCOUNT: |
|--------------------|
| SCS Engineers - KS |

PROJECT: 27213167.19

SDG: L1180951 DATE/TIME: 01/24/20 09:12

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WG1415117

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

Method Blank (MB)

| (MB) R3493466-1 (| 01/22/20 19:54 | | | | |
|-------------------|----------------|--------------|--------|--------|--|
| | MB Result | MB Qualifier | MB MDL | MB RDL | |
| Analyte | ug/l | | ug/l | ug/l | |
| Chloride | 418 | J | 51.9 | 1000 | |
| Sulfate | 564 | J | 77.4 | 5000 | |
| | | | | | |

L1180951-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1180951-01 01/22/20 22:33 • (DUP) R3493466-3 01/22/20 22:47

| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | Limits |
|----------|-----------------|------------|----------|---------|---------------|--------|
| Analyte | ug/l | ug/l | | % | | % |
| Chloride | 5320 | 5210 | 1 | 2.19 | | 15 |
| Sulfate | 27300 | 27000 | 1 | 1.21 | | 15 |

L1181246-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1181246-01 01/23/20 | 04:36 • (DUP) | R3493466-6 | 01/23/20 (| 04:49 | | | | | |
|---------------------------|-----------------|------------|------------|---------|---------------|-------------------|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | |
| Analyte | ug/l | ug/l | | % | | % | | | |
| Chloride | 68300 | 69900 | 1 | 2.38 | | 15 | | | |
| Sulfate | 23200 | 23900 | 1 | 3.34 | | 15 | | | |

Laboratory Control Sample (LCS)

| (LCS) R3493466-2 01/2 | 22/20 20:07 | | | | |
|-----------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Chloride | 40000 | 39700 | 99.3 | 80.0-120 | |
| Sulfate | 40000 | 40100 | 100 | 80.0-120 | |

L1180951-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1180951-01 01/22/20 |) 22:33 • (MS) R | 3493466-4 01 | /22/20 23:00 | • (MSD) R3493 | 466-5 01/22/2 | 0 23:13 | | | | | | |
|---------------------------|------------------|-----------------|--------------|---------------|---------------|----------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Chloride | 50000 | 5320 | 58300 | 58100 | 106 | 105 | 1 | 80.0-120 | | | 0.346 | 15 |
| Sulfate | 50000 | 27300 | 80300 | 80100 | 106 | 106 | 1 | 80.0-120 | | | 0.244 | 15 |

| ACCOUNT: | PROJECT: | SDG: | DATE/TIME: | PAGE: |
|--------------------|-------------|----------|----------------|----------|
| SCS Engineers - KS | 27213167.19 | L1180951 | 01/24/20 09:12 | 15 of 20 |



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QUALITY CONTROL SUMMARY <u>L1180951-01,02,03,04,05,06,07,08</u>

L1181246-01 Original Sample (OS) • Matrix Spike (MS)

| (OS) L1181246-01 01/23/20 | 0 04:36 • (MS) R | 3493466-7 01 | /23/20 05:0 | 2 | | | |
|---------------------------|------------------|-----------------|-------------|---------|----------|-------------|--------------|
| | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
| Analyte | ug/l | ug/l | ug/l | % | | % | |
| Chloride | 50000 | 68300 | 116000 | 96.3 | 1 | 80.0-120 | E |
| Sulfate | 50000 | 23200 | 75400 | 105 | 1 | 80.0-120 | |

SDG: L1180951 DATE/TIME: 01/24/20 09:12

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WG1414408

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

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Method Blank (MB)

(MB) R3493571-1 01/23/20 14:39

| | MB Result | MB Qualifier | MB MDL | MB RDL | |
|-----------|-----------|--------------|--------|--------|--|
| Analyte | ug/l | | ug/l | ug/l | |
| Calcium | U | | 46.3 | 1000 | |
| Magnesium | 45.8 | J | 11.1 | 1000 | |
| Potassium | U | | 102 | 1000 | |
| Sodium | U | | 98.5 | 1000 | |
| | | | | | |

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

| (LCS) R3493571-2 01/23/20 14:41 • (LCSD) R3493571-3 01/23/20 14:44 | | | | | | | | | | |
|--|--------------|------------|-------------|----------|-----------|-------------|---------------|----------------|------|------------|
| | Spike Amount | LCS Result | LCSD Result | LCS Rec. | LCSD Rec. | Rec. Limits | LCS Qualifier | LCSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | % | % | % | | | % | % |
| Calcium | 10000 | 9550 | 9860 | 95.5 | 98.6 | 80.0-120 | | | 3.16 | 20 |
| Magnesium | 10000 | 9390 | 9690 | 93.9 | 96.9 | 80.0-120 | | | 3.12 | 20 |
| Potassium | 10000 | 9100 | 9340 | 91.0 | 93.4 | 80.0-120 | | | 2.67 | 20 |
| Sodium | 10000 | 9610 | 9930 | 96.1 | 99.3 | 80.0-120 | | | 3.24 | 20 |

L1180954-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1180954-07 01/23/20 14:47 • (MS) R3493571-5 01/23/20 14:52 • (MSD) R3493571-6 01/23/20 14:54 | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|--------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Calcium | 10000 | 55400 | 64000 | 64000 | 85.4 | 86.3 | 1 | 75.0-125 | | | 0.145 | 20 |
| Magnesium | 10000 | 11500 | 20800 | 20800 | 92.4 | 92.7 | 1 | 75.0-125 | | | 0.141 | 20 |
| Potassium | 10000 | 3680 | 13100 | 13000 | 94.0 | 93.0 | 1 | 75.0-125 | | | 0.821 | 20 |
| Sodium | 10000 | 78000 | 85800 | 85800 | 77.9 | 78.3 | 1 | 75.0-125 | | | 0.0424 | 20 |

SDG: L1180951 DATE/TIME: 01/24/20 09:12

GLOSSARY OF TERMS

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Ср

Τс

Ss

Cn

Sr

Qc

GI

AI

Sc

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). |

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

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PROJECT: 27213167.19

SDG: L1180951 DATE/TIME: 01/24/20 09:12

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ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

State Accreditations

| Alabama | 40660 | Nebraska |
|-----------------------|-------------|-----------------------------|
| Alaska | 17-026 | Nevada |
| Arizona | AZ0612 | New Hampshire |
| Arkansas | 88-0469 | New Jersey–NELAP |
| California | 2932 | New Mexico ¹ |
| Colorado | TN00003 | New York |
| Connecticut | PH-0197 | North Carolina |
| Florida | E87487 | North Carolina ¹ |
| Georgia | NELAP | North Carolina ³ |
| Georgia ¹ | 923 | North Dakota |
| Idaho | TN00003 | Ohio-VAP |
| Illinois | 200008 | Oklahoma |
| Indiana | C-TN-01 | Oregon |
| lowa | 364 | Pennsylvania |
| Kansas | E-10277 | Rhode Island |
| Kentucky 16 | 90010 | South Carolina |
| Kentucky ² | 16 | South Dakota |
| Louisiana | Al30792 | Tennessee ¹⁴ |
| Louisiana 1 | LA180010 | Texas |
| Maine | TN0002 | Texas ⁵ |
| Maryland | 324 | Utah |
| Massachusetts | M-TN003 | Vermont |
| Michigan | 9958 | Virginia |
| Minnesota | 047-999-395 | Washington |
| Mississippi | TN00003 | West Virginia |
| Missouri | 340 | Wisconsin |
| Montana | CERT0086 | Wyoming |
| | | |

| Nebraska | NE-OS-15-05 |
|-----------------------------|------------------|
| Nevada | TN-03-2002-34 |
| New Hampshire | 2975 |
| New Jersey-NELAP | TN002 |
| New Mexico ¹ | n/a |
| New York | 11742 |
| North Carolina | Env375 |
| North Carolina ¹ | DW21704 |
| North Carolina ³ | 41 |
| North Dakota | R-140 |
| Ohio-VAP | CL0069 |
| Oklahoma | 9915 |
| Oregon | TN200002 |
| Pennsylvania | 68-02979 |
| Rhode Island | LAO00356 |
| South Carolina | 84004 |
| South Dakota | n/a |
| Tennessee ¹⁴ | 2006 |
| Texas | T104704245-18-15 |
| Texas ⁵ | LAB0152 |
| Utah | TN00003 |
| Vermont | VT2006 |
| Virginia | 460132 |
| Washington | C847 |
| West Virginia | 233 |
| Wisconsin | 9980939910 |
| Wyoming | A2LA |
| | |

Third Party Federal Accreditations

| 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

Our Locations

SCS Engineers - KS

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



27213167.19

L1180951

01/24/20 09:12

| | $\phi = \frac{1}{2} \phi$ | | Billing Information: | | | | | | A | nalvsis / | / Contai | ner / Preserv | ative | Fernander | Chain of Custody | Page of | | | | | |
|--|------------------------------------|---|----------------------|---------------------------------------|----------------------|--------------|------------------|------------------------------|--------------------|------------------|------------------|---------------|---------|--|--|--|----------|--|--|--------------------------|--|
| 8575 V | | Accounts Payable 8575 W. 110th Street Overland Park, KS 66210 | | | 8575 W. 110th Street | | | | | | | | | | | Analytical [®] Iter for Testing & Innovail | | | | | |
| eport to: ason Franks | | | jay.martin | franks@scsenginee @kcpl.com; | rs.com; | | | NO3 | | | oPres | | | | 12065 Lebanon Rd Mount Juliet, TN 371 Phone: 615-758-585 | | | | | | |
| roject escription: Evergy latan Gene | erating Statio | City/State Collected: | LIA | STAN | Please Circl | | es | H | NO | | E-N | | | | Phone: 800-767-585 Fax: 615-758-5859 | 0.33% | | | | | |
| hone:913-681-0030 ax: 913-681-0012 | Client Project 27213167.1 | | | Lab Project # AQUAOPKS-I | ATAN | | 125mlHDPE-NoPres | 250mlHDPE-HNO3 | 6010 250mHDPE-HNO3 | 125mlHDPE-NoPres | 125mlHDPE-NoPres | | | | | 1 <i>30951</i> 164 | | | | | |
| ollected by (print): | and the state of the second second | Site/Facility ID # P.O. # Rush? (Lab MUST Be Notified). Quote # | | | MIHDI | 6010 250 | 50ml | HDPE- | 9056 12 | | | | Acc | AVFRO | | | | | | | |
| ollected by (signature): | Rush? (L Same Da | | | | | | 1111111112 | 1. 1. | 6010 2 | 125ml | 1 | | | | Template: T152 Prelogin: P750 | 293 | | | | | |
| nmediately acked on Ice N Y | Two Day | | | Next Day 5 Day (R Two Day 10 Day (| | Next Day 5 D | | Next Day 5 Day 10 Day 10 Day | | Date Resu | lts Needed | No. of | , ALKCA | Mg, Na | 1 | 1 10 | Chioride | | | PM: 206 - Jeff Ca PB: | |
| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | Cntrs | ALKBI, | Ca, K, | K, Mg, Na | s04 - | S04, (| | | | Shipped Via: Remarks | Sample # (lab only) | | | | | |
| //W-1 | GRAC | GW | - | 1/15/202 | 6 1405 | 3 | X | X | | | X | | | | | -01 | | | | | |
| /w-2 | | GW | - | | 1330 | 3 | X | X | | | X | | | | | 02 | | | | | |
| 1W-9 | | GW | - | | 1450 | 3 | X | X | | x | | | | | | 03 | | | | | |
| 1W-10 | | GW | - | | 1250 | 3 | X | X | | | X | | | | | 04 | | | | | |
| /W-101 | | GW | - | 1/16/2020 | 1100 | 3 | X | X | | x | | | | | | 09 | | | | | |
| /W-104 | | GW | - | | 1150 | 3 | X | | X | | X | | | | | 06 | | | | | |
| NW-105 | | GW | - | | 1250 | 3 | X | x | | х | | | | | | 07 | | | | | |
| WW-107 | | GW | 1 | V | 1345 | 3 | X | X | | X | | | | | | 08 | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | -776) - 184 | | | | | | | | | | | | | | | | |
| Matrix: 55 - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other | Samples retur | | 5 | | acking # | | | | | pH Flov | - | Temp Other | | COC Sea COC Sig Bottles Correct | ample Receipt Ch Present/Intact ned/Accurate: arrive intact: bottles used: ent volume sent: <u>If Applicab</u> | | | | | | |
| Relinquished by (Signature) | _UPS _ Fe | Date: | 1 | AON J | ceived by: (Signat | ture | en | E. | | Trip Bla | nk Rece | | / MeoH | Preserv | o Headspace: ation Correct/Ch een <0.5 mR/hr: | YY | | | | | |
| Relinquished by : (Signature) | | Date: | 10000 | | ceived by: (Signat | ture) | -14 | | | Temp: 1, 9+0 | | C Bottles | | If preserv | ration required by Log | gin: Date/Time | | | | | |
| Relinquished by : (Signature) | | Date: | i and | Time: Re | eived for lab by: | (Signa | ture) | | | Date: | 8- | Time: | 84 | Hold: | | Condition: NCF / OK | | | | | |

Jared Morrison December 16, 2022

ATTACHMENT 1-2 February 2020 Sampling Event Laboratory Report



ANALYTICAL REPORT

SCS Engineers - KS

Sample Delivery Group: Samples Received: Project Number: Description: L1186248 02/05/2020 27213167.19 Evergy latan Generating Station

Report To:

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

Тс Ss Cn Sr ʹQc Gl AI Sc

Entire Report Reviewed By:

Jubb land

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.

ACCOUNT: SCS Engineers - KS PROJECT: 27213167.19

SDG: L1186248 DATE/TIME: 02/10/20 08:38

PAGE: 1 of 18

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| ³ Ss |
| ⁴ Cn |
| ⁵Sr |
| ⁶ Qc |
| ⁷ Gl |
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SDG: L1186248

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

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| MW-1 L1186248-01 GW | | | Collected by Jason R. Franks | Collected date/time 02/04/20 10:00 | Received da 02/05/20 08 | |
|-------------------------------|-----------|----------|---------------------------------|---------------------------------------|--------------------------------------|----------------|
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG1423103 | 1 | 02/06/20 05:48 | 02/06/20 05:48 | ELN | Mt. Juliet, TN |
| DUPLICATE 1 L1186248-02 GW | | | Collected by Jason R. Franks | Collected date/time 02/04/20 10:00 | Received da 02/05/20 08 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG1423103 | 1 | 02/06/20 06:31 | 02/06/20 06:31 | ELN | Mt. Juliet, TN |
| MW-104 L1186248-03 GW | | | Collected by Jason R. Franks | Collected date/time 02/04/20 10:05 | Received da 02/05/20 08 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Metals (ICP) by Method 6010B | WG1423537 | 1 | 02/06/20 17:16 | 02/07/20 11:39 | TRB | Mt. Juliet, TN |
| DUPLICATE 2 L1186248-04 GW | | | Collected by Jason R. Franks | Collected date/time 02/04/20 10:05 | Received da 02/05/20 08 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Metals (ICP) by Method 6010B | WG1423537 | 1 | 02/06/20 17:16 | 02/07/20 11:54 | TRB | Mt. Juliet, TN |
| WW-105 L1186248-05 GW | | | Collected by Jason R. Franks | Collected date/time 02/04/20 10:40 | Received da 02/05/20 08 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Vet Chemistry by Method 9056A | WG1423103 | 1 | 02/06/20 06:46 | 02/06/20 06:46 | ELN | Mt. Juliet, TN |
| MW-107 L1186248-06 GW | | | Collected by Jason R. Franks | Collected date/time 02/04/20 11:05 | Received da 02/05/20 08 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Vet Chemistry by Method 9056A | WG1423103 | 1 | 02/06/20 07:00 | 02/06/20 07:00 | ELN | Mt. Juliet, TN |
| DUPLICATE 3 L1186248-07 GW | | | Collected by Jason R. Franks | Collected date/time 02/04/20 11:05 | Received date/time 02/05/20 08:00 | |
| DUILICATES LINUZ-0-07 OW | | | | | | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |

PROJECT: 27213167.19

SDG: L1186248 DATE/TIME: 02/10/20 08:38

CASE NARRATIVE

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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.

Jubb land

Jeff Carr Project Manager

Τс Ss Cn Sr Qc GI AI Sc

PROJECT: 27213167.19

SDG: L1186248 DATE/TIME: 02/10/20 08:38

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SAMPLE RESULTS - 01

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Wet Chemistry by Method 9056A

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|----------|--------|-----------|------|----------|------------------|-----------|---|----|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | C |
| Analyte | ug/l | | ug/l | | date / time | | ī | 2 |
| Fluoride | 329 | | 100 | 1 | 02/06/2020 05:48 | WG1423103 | | ٦ |



SDG: L1186248

SAMPLE RESULTS - 02 L1186248

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Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ср |
|----------|--------|-----------|------|----------|------------------|-----------|-----|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Fluoride | 331 | | 100 | 1 | 02/06/2020 06:31 | WG1423103 | ⁻Tc |



SDG: L1186248

Collected date/time: 02/04/20 10:05

SAMPLE RESULTS - 03



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| · · · · · · | | | | | | | 1'0 |
|-------------|--------|--------------------|------|----------|------------------|-----------|-----|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Calcium | 51300 | $\underline{\vee}$ | 1000 | 1 | 02/07/2020 11:39 | WG1423537 | T |



SAMPLE RESULTS - 04



| . , , , | Result | Qualifier | RDL | Dilution | Analysis | Batch | | Ср |
|---------|--------|-----------|------|----------|------------------|-----------|---|----|
| Analyte | ug/l | | ug/l | | date / time | | F | 2 |
| Calcium | 50800 | | 1000 | 1 | 02/07/2020 11:54 | WG1423537 | | Tc |

| ³ Ss ⁴ Cn ⁵ Sr ⁶ Qc ⁷ Gl ⁸ Al | |
|--|-----------------|
| Ss ⁴ Cn ⁵ Sr ⁶ Qc ⁷ Gl ⁸ Al | |
| ⁵ Sr ⁶ Qc ⁷ Gl ⁸ Al | ³ Ss |
| ⁵ Sr ⁶ Qc ⁷ Gl ⁸ Al | |
| Sr ⁶ Qc ⁷ Gl ⁸ Al | ⁴ Cn |
| Sr ⁶ Qc ⁷ Gl ⁸ Al | |
| ⁷ Gl ⁸ Al | ⁵Sr |
| ⁷ Gl ⁸ Al | |
| ⁸ Al | ⁶ Qc |
| ⁸ Al | |
| Al | ⁷ Gl |
| Al | |
| °Sc | ⁸ Al |
| °Sc | |
| | °Sc |

SAMPLE RESULTS - 05 L1186248

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Wet Chemistry by Method 9056A

| | , , | | | | | | | l'Cn l |
|----------|-----|--------|-----------|------|----------|------------------|-----------|--------|
| | | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ср |
| Analyte | | ug/l | | ug/l | | date / time | | 2 |
| Chloride | | 20900 | | 1000 | 1 | 02/06/2020 06:46 | WG1423103 | ⁻Tc |

| ACCOUNT: |
|--------------------|
| SCS Engineers - KS |

SAMPLE RESULTS - 06 L1186248

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Wet Chemistry by Method 9056A

| | | | | | | | | l'Cn | L |
|----------|--------|-----------|------|----------|------------------|-----------|--|------|---|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | CP | l |
| Analyte | ug/l | | ug/l | | date / time | | | 2 | 1 |
| Chloride | 27500 | | 1000 | 1 | 02/06/2020 07:00 | WG1423103 | | Tc | l |

| ³ Ss |
|-----------------|
| ⁴ Cn |
| ⁵Sr |
| ⁶ Qc |
| ⁷ Gl |
| ⁸ Al |
| ⁹ Sc |

SDG: L1186248

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SAMPLE RESULTS - 07

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Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | Cp | |
|----------|--------|-----------|------|----------|------------------|-----------|--|----|---|
| Analyte | ug/l | | ug/l | | date / time | | | 2 | ì |
| Chloride | 27400 | | 1000 | 1 | 02/06/2020 08:12 | WG1423103 | | Tc | |

| ³ Ss ⁴ Cn ⁵ Sr ⁶ Qc ⁷ Gl ⁸ Al | | |
|--|-----------------|--|
| Ss ⁴ Cn ⁵ Sr ⁶ Qc ⁷ Gl ⁸ Al | | |
| ⁵ Sr ⁶ Qc ⁷ Gl ⁸ Al | ³ Ss | |
| ⁵ Sr ⁶ Qc ⁷ Gl ⁸ Al | | |
| Sr ⁶ Qc ⁷ Gl ⁸ Al | ⁴ Cn | |
| Sr ⁶ Qc ⁷ Gl ⁸ Al | | |
| ⁷ Gl ⁸ Al | ⁵Sr | |
| ⁷ Gl ⁸ Al | | |
| ⁸ AI | ⁶ Qc | |
| ⁸ AI | | |
| AI | ⁷ Gl | |
| AI | | |
| ⁹ Sc | ⁸ Al | |
| °Sc | | |
| | ⁹ Sc | |

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DATE/TIME: 02/10/20 08:38 PAGE: 11 of 18

WG1423103

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY L1186248-01,02,05,06,07

| Method Blat | | | | | | | | | | |
|-----------------|----------------|--------------|--------|--------|--|----------------|--|--|--|--|
| (MB) R3497541-1 | 02/05/20 22:50 | | | | | | | | | |
| | MB Result | MB Qualifier | MB MDL | MB RDL | | 2 | | | | |
| Analyte | ug/l | | ug/l | ug/l | | ĒΤ. | | | | |
| Chloride | U | | 51.9 | 1000 | | | | | | |
| Fluoride | U | | 9.90 | 100 | | ³ S | | | | |
| | | | | | | 1 7 | | | | |

L1186180-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1186180-01 02/05/20 23:34 • (DUP) R3497541-3 02/05/20 23:48 | | | | | | | | | | | |
|---|-----------------|------------|----------|---------|---------------|-------------------|--|--|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | | | |
| Analyte | ug/l | ug/l | | % | | % | | | | | |
| Chloride | 11400 | 11300 | 1 | 0.369 | | 15 | | | | | |
| Fluoride | 744 | 745 | 1 | 0.188 | | 15 | | | | | |

L1186330-01 Original Sample (OS) • Duplicate (DUP)

| DS) L1186330-01 02/06/20 09:24 • (DUP) R3497541-18 02/06/20 09:39 | | | | | | | | | | | | |
|---|-----------------|------------|----------|---------|---------------|-------------------|--|--|--|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | | | | |
| Analyte | ug/l | ug/l | | % | | % | | | | | | |
| Chloride | 11400 | 11400 | 1 | 0.176 | | 15 | | | | | | |
| Fluoride | 845 | 852 | 1 | 0.837 | | 15 | | | | | | |

Laboratory Control Sample (LCS)

| (LCS) R3497541-2 02/05/20 23:05 | | | | | | | | | | | |
|---------------------------------|--------------|------------|----------|-------------|---------------|--|--|--|--|--|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | | | | | | |
| Analyte | ug/l | ug/l | % | % | | | | | | | |
| Chloride | 40000 | 39700 | 99.3 | 80.0-120 | | | | | | | |
| Fluoride | 8000 | 8070 | 101 | 80.0-120 | | | | | | | |

L1186188-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1186188-01 02/06/20 00:02 • (MS) R3497541-4 02/06/20 00:17 • (MSD) R3497541-5 02/06/20 00:31 | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Chloride | 50000 | 6360 | 51200 | 51300 | 89.6 | 89.9 | 1 | 80.0-120 | | | 0.334 | 15 |
| Fluoride | 5000 | 323 | 4730 | 4780 | 88.1 | 89.1 | 1 | 80.0-120 | | | 0.981 | 15 |

| ACCOUNT: | PROJECT: | SDG: | DATE/TIME: | PAGE: |
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| SCS Engineers - KS | 27213167.19 | L1186248 | 02/10/20 08:38 | 12 of 18 |



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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY L1186248-01,02,05,06,07

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| L1186188-03 Origina | | Aatrix Spiko (MS) . | Matrix Spiko | Duplicate (MSD) |
|----------------------|-------------------|---------------------|--------------|-----------------|
| LIIOOIOO-OS Oligilia | i Sample (OS) • N | auix spike (ivis) • | Matrix Spike | |

| (OS) L1186188-03 02/06/2 | (OS) L1186188-03 02/06/20 01:00 • (MS) R3497541-6 02/06/20 01:14 • (MSD) R3497541-7 02/06/20 01:58 | | | | | | | | | | | |
|--------------------------|--|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Chloride | 50000 | 20300 | 65700 | 66100 | 90.7 | 91.5 | 1 | 80.0-120 | | | 0.595 | 15 |
| Fluoride | 5000 | 337 | 4800 | 4890 | 89.2 | 91.0 | 1 | 80.0-120 | | | 1.82 | 15 |

L1186193-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1186193-01 02/06/20 | 0 02:26 • (MS) | R3497541-8 02 | 2/06/20 02:41 | • (MSD) R3497 | 541-9 02/06/20 | 0 02:55 | | | | | | |
|---------------------------|----------------|-----------------|---------------|---------------|----------------|----------|----------|-------------|--------------|---------------|------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Chloride | 50000 | 59800 | 103000 | 104000 | 86.4 | 88.5 | 1 | 80.0-120 | E | E | 1.02 | 15 |
| Fluoride | 5000 | 209 | 4350 | 4470 | 82.8 | 85.3 | 1 | 80.0-120 | | | 2.83 | 15 |

L1186202-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1186202-01 02/06/20 03:24 • (MS) R3497541-10 02/06/20 03:38 • (MSD) R3497541-11 02/06/20 03:53 | | | | | | | | | | | | | 8 |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|--------|------------|---|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits | L |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % | ſ |
| Chloride | 50000 | 227000 | 261000 | 261000 | 68.4 | 68.6 | 1 | 80.0-120 | EV | EV | 0.0293 | 15 | |
| Fluoride | 5000 | 1050 | 5500 | 5530 | 89.0 | 89.6 | 1 | 80.0-120 | | | 0.493 | 15 | Ľ |

L1186202-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1186202-03 02/06/2 | 20 04:51 • (MS) | R3497541-12 (| 02/06/20 05:0 | 95 • (MSD) R349 | 97541-13 02/0 | 6/20 05:19 | | | | | | |
|--------------------------|-----------------|-----------------|---------------|-----------------|---------------|------------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Chloride | 50000 | 25300 | 71900 | 72400 | 93.3 | 94.2 | 1 | 80.0-120 | | | 0.642 | 15 |
| Fluoride | 5000 | 130 | 4630 | 4690 | 90.1 | 91.2 | 1 | 80.0-120 | | | 1.17 | 15 |

L1186248-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1186248-01 02/06/2 | 20 05:48 • (MS) | R3497541-14 (| 02/06/20 06:0 | 3 • (MSD) R349 | 97541-15 02/0 | 6/20 06:17 | | | | | | |
|--------------------------|-----------------|-----------------|---------------|----------------|---------------|------------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Chloride | 50000 | 5610 | 51800 | 52200 | 92.4 | 93.3 | 1 | 80.0-120 | | | 0.805 | 15 |
| Fluoride | 5000 | 329 | 4880 | 4940 | 90.9 | 92.1 | 1 | 80.0-120 | | | 1.24 | 15 |

| ACCOUNT: | PROJECT: | SDG: | DATE/TIME: |
|--------------------|-------------|----------|----------------|
| SCS Engineers - KS | 27213167.19 | L1186248 | 02/10/20 08:38 |

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY L1186248-01,02,05,06,07

L1186248-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1186248-06 02/06 | /20 07:00 • (MS | S) R3497541-16 | 02/06/20 07 | :43 • (MSD) R34 | 97541-17 02/ | 06/20 07:58 | | | | | | |
|------------------------|-----------------|-----------------|-------------|-----------------|--------------|-------------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Chloride | 50000 | 27500 | 72500 | 72700 | 89.9 | 90.5 | 1 | 80.0-120 | | | 0.373 | 15 |
| Fluoride | 5000 | 792 | 5410 | 5420 | 92.3 | 92.6 | 1 | 80.0-120 | | | 0.272 | 15 |

SDG: L1186248

DATE/TIME: 02/10/20 08:38

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WG1423537

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

Method Blank (MB)

| (MB) R3497928-1 0 | 2/07/20 11:34 | | | |
|-------------------|---------------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Calcium | U | | 46.3 | 1000 |

Laboratory Control Sample (LCS)

| (LCS) R3497928-2 02; | (LCS) R3497928-2 02/07/20 11:36 | | | | | |
|----------------------|---------------------------------|------------|----------|-------------|---------------|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | |
| Analyte | ug/l | ug/l | % | % | | |
| Calcium | 10000 | 9810 | 98.1 | 80.0-120 | | |

L1186248-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1186248-03 02/07/2 | 20 11:39 • (MS) I | R3497928-4 0 | 2/07/20 11:44 • | (MSD) R34979 | 928-5 02/07/2 | 0 11:46 | | | | | | |
|--------------------------|-------------------|-----------------|-----------------|--------------|---------------|----------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Calcium | 10000 | 51300 | 57900 | 57800 | 65.5 | 64.5 | 1 | 75.0-125 | V | V | 0.171 | 20 |

| ACCOUNT: |
|--------------------|
| SCS Engineers - KS |

SDG: L1186248 DATE/TIME: 02/10/20 08:38 Sc

Тс

GLOSSARY OF TERMS

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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 |

| E | The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL). |
|---|---|
| V | The sample concentration is too high to evaluate accurate spike recoveries. |

PROJECT: 27213167.19

SDG: L1186248 DATE/TIME: 02/10/20 08:38 PAGE: 16 of 18

ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

State Accreditations

| Alabama | 40660 | Nebraska |
|-----------------------|-------------|-------------------------|
| Alaska | 17-026 | Nevada |
| Arizona | AZ0612 | New Hampshi |
| Arkansas | 88-0469 | New Jersey-N |
| California | 2932 | New Mexico ¹ |
| Colorado | TN00003 | New York |
| Connecticut | PH-0197 | North Carolina |
| Florida | E87487 | North Carolina |
| Georgia | NELAP | North Carolina |
| Georgia ¹ | 923 | North Dakota |
| Idaho | TN00003 | Ohio-VAP |
| Illinois | 200008 | Oklahoma |
| Indiana | C-TN-01 | Oregon |
| lowa | 364 | Pennsylvania |
| Kansas | E-10277 | Rhode Island |
| Kentucky 16 | 90010 | South Carolina |
| Kentucky ² | 16 | South Dakota |
| Louisiana | AI30792 | Tennessee ¹⁴ |
| Louisiana 1 | LA180010 | Texas |
| Maine | TN0002 | Texas ⁵ |
| Maryland | 324 | Utah |
| Massachusetts | M-TN003 | Vermont |
| Michigan | 9958 | Virginia |
| Minnesota | 047-999-395 | Washington |
| Mississippi | TN00003 | West Virginia |
| Missouri | 340 | Wisconsin |
| Montana | CERT0086 | Wyoming |
| | | |

| Nebraska | NE-OS-15-05 |
|-----------------------------|------------------|
| Nevada | TN-03-2002-34 |
| New Hampshire | 2975 |
| New Jersey-NELAP | TN002 |
| New Mexico ¹ | n/a |
| New York | 11742 |
| North Carolina | Env375 |
| North Carolina ¹ | DW21704 |
| North Carolina ³ | 41 |
| North Dakota | R-140 |
| Ohio–VAP | CL0069 |
| Oklahoma | 9915 |
| Oregon | TN200002 |
| Pennsylvania | 68-02979 |
| Rhode Island | LAO00356 |
| South Carolina | 84004 |
| South Dakota | n/a |
| Tennessee ¹⁴ | 2006 |
| Texas | T104704245-18-15 |
| Texas ⁵ | LAB0152 |
| Utah | TN00003 |
| Vermont | VT2006 |
| Virginia | 460132 |
| Washington | C847 |
| West Virginia | 233 |
| Wisconsin | 9980939910 |
| Wyoming | A2LA |
| | |

Third Party Federal Accreditations

| 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

Our Locations

SCS Engineers - KS

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



27213167.19

L1186248

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| | | | | Billing In | forma | ation: | | 13 | | | A | nalvsis / Co | ontainei | / Preserv | /ative | | Chain of C | ustody | Page of |
|--|--------------------|---|-------------------------------------|---|-------------------------|---|---------------------------------|-------------|-----------------|---------------------|---------------------|--------------|----------|--|-----------|--|---|---|---|
| SCS Engineers - KS 3575 W. 110th Street Overland Park, KS 66210 | | | | 8575 V | V. 11 | ayable - LOth Street Park, KS 662 | | Pres Chk | 42 | | | | | | | | -/4 | ace/ | Analytical [®] Inter for Teating & Innovetion |
| Report to: I ason Franks | | | | jay.mart | tin@k | nks@scsengin ccpl.com; | s@scsengineers.com; pl.com; | | | | | | | | | | 12065 Lebe Mount Julie Phone: 615 Phone: 800 | et, TN 37 5-758-585 | 8 |
| Project Description: Evergy latan Genera | ting Sta | | ty/State ollected: | WEG | 5Th | NMC | Please Circ | | | | | | | | | | Fax: 615-75 | 58-5859 | 回经常新 |
| Phone: 913-681-0030 Fax: 913-681-0012 | Client Pr 27213 | oject # | | V. C. | Constant and the second | ab Project # | -IATAN | | 103 | oPres | oPres | | | | | | SDG # Table # | 11 | 186248 |
| JASON K. FRANKS | Site/Faci | lity ID # | | | P.O. # | | | | DPE-HI | DPE-N | DPE-N | | | | | | Acctnum | | JAOPKS |
| Collected by (signature): | Sa N Ti | ime Day ext Day | MUST Be Five I 5 Day 10 Da | Day (Rad Only) | L | Quote # Date Re | sults Needed | No. of | m 250mHDPE-HN03 | de 125mlHDPE-NoPres | de 125mlHDPE-NoPres | | | | | | Prelogin PM: 206 PB: | (P75) | 3038 |
| Sample ID | Comp/0 | Grab | Matrix * | Dept | n | Date | Time | Cntrs | Calcium | Chloride | Fluoride | | | | | | Shipped Rem | | Sample # (lab only) |
| MW-1 | GCA | B | GW | | | 52/4/20 | 1000 | 1 | | | X | | | | 1 | | | | -01 |
| MW-1 MS/MSD | | | GW | | | | 1000 | 1 | | | X | | | | T. | | | | 01 |
| DUPLICATE 1 | | | GW | | | | 10005 | 1 | | | X | | | | | | | Z. | 62 |
| MW-104 | | | GW | | | | 1005 | 1 | X | | | | | | | | | | 03 |
| MW-104 MS/MSD | | | GW | | | and the | 1005 | 1 | X | | | | | | | | | | 03 |
| DUPLICATE 2 | | 1-1 | GW | 1971 - 1972 1971 - 1972 1971 - 1972 | | | 1005 | 1 | X | | | | | | | | | 1 | 04 |
| MW-105 | 1 | | GW | | 199 | | 1040 | 1 | | X | | | | | | | 2 - 62 | | 09 |
| MW-107 | | | GW | | | | 1105 | 1 | | X | | | | | | | al . | | 06 |
| MW-107 MS/MSD | | | GW | | | 1 | 1105 | 1 | | X | | | | | 1 | | | | 06 |
| DUPLICATE 3 | | | GW | | | V | 1105 | 1 | | X | | | | | | | | | 07 |
| * Matrix: SS-Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water | Remark | | | | | A 1 | | | | | | pH Flow _ | | Temp_ | | COC Sea COC Sig Bottles Correct | Sample Rece Present/1 ped/Accurat arrive int bottles us ent volume | Intact te: tact: sed: sent: | |
| OT - Other Relinquished by : (Signature) | | | Date: 2 | irier <u>C</u> | Tin | ne: | Tracking # Received by: Sign | lature) | | c | | Trip Blank | k Receiv | | L/MeoH | Preserv | If Ap ro Headspace vation Corre- ceen <0.5 ml | e; ect/Cl | ecked; _Y _N ZY _N ZY _N |
| Relinquished by : (Signature) | 2 | | Date: 2/4/ | 20 | Tin | and a state of the state of the | Received by: (Sign | lature) | | | | Temp: U | AS°C | And the second | Received: | If preser | vation require | d by Lo | gin; Date/Time |
| Relinquished by : (Signature) | | and the second se | Date: | 1. | _ | | Received for lab b | y: (Signa | ature) | | | Date: | 5-2 | Time: | 300 | Hold: | | | Condition: NCF / OK |

ATTACHMENT 1-3 May 2020 Sampling Event Laboratory Report



ANALYTICAL REPORT

SCS Engineers - KS

Sample Delivery Group: Samples Received: Project Number: Description: L1221447 05/22/2020 27213167.19 Evergy - latan Generating Station

Report To:

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

Тс Ss Cn Śr ʹQc Gl ΆI Sc

Entire Report Reviewed By:

Jubb land

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.

ACCOUNT: SCS Engineers - KS PROJECT: 27213167.19

SDG: L1221447 DATE/TIME: 05/31/20 19:20 PAGE: 1 of 17

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| ² Tc | |
| ³ Ss | |
| ⁴ Cn | |
| ⁵Sr | |
| ⁶ Qc | |
| ⁷ Gl | |
| ⁸ AI | |

Sc

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SDG: L1221447 DATE/TIME: 05/31/20 19:20 PAGE: 2 of 17

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

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| MW-1 L1221447-01 GW | | | Collected by Jason R. Franks | Collected date/time 05/20/20 09:55 | Received da 05/22/20 09 | |
|--|-----------|----------|---------------------------------|------------------------------------|-------------------------|----------------|
| | | Dil ii | | | | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Gravimetric Analysis by Method 2540 C-2011 | WG1482636 | 1 | 05/27/20 18:24 | 05/27/20 23:25 | TH | Mt. Juliet, TI |
| Wet Chemistry by Method 9056A | WG1482574 | 1 | 05/29/20 11:57 | 05/29/20 11:57 | ELN | Mt. Juliet, TI |
| Metals (ICP) by Method 6010B | WG1481517 | 1 | 05/27/20 23:36 | 05/29/20 12:11 | TRB | Mt. Juliet, TI |
| | | | Collected by | Collected date/time | Received da | te/time |
| MW-2 L1221447-02 GW | | | Jason R. Franks | 05/20/20 10:55 | 05/22/20 09 |):00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Gravimetric Analysis by Method 2540 C-2011 | WG1482636 | 1 | 05/27/20 18:24 | 05/27/20 23:25 | TH | Mt. Juliet, Tl |
| Wet Chemistry by Method 9056A | WG1482574 | 1 | 05/28/20 22:30 | 05/28/20 22:30 | ELN | Mt. Juliet, TI |
| Wet Chemistry by Method 9056A | WG1482574 | 5 | 05/28/20 22:41 | 05/28/20 22:41 | ELN | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1481517 | 1 | 05/27/20 23:36 | 05/29/20 12:13 | TRB | Mt. Juliet, TI |
| | | | Collected by | Collected date/time | | |
| MW-6 L1221447-03 GW | | | Jason R. Franks | 05/20/20 09:40 | 05/22/20 09 |):00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Gravimetric Analysis by Method 2540 C-2011 | WG1482636 | 1 | 05/27/20 18:24 | 05/27/20 23:25 | TH | Mt. Juliet, TI |
| Wet Chemistry by Method 9056A | WG1482574 | 1 | 05/28/20 22:52 | 05/28/20 22:52 | ELN | Mt. Juliet, TI |
| Metals (ICP) by Method 6010B | WG1481517 | 1 | 05/27/20 23:36 | 05/29/20 12:16 | TRB | Mt. Juliet, TI |
| | | | Collected by | Collected date/time | Received da | te/time |
| MW-7 L1221447-04 GW | | | Jason R. Franks | 05/20/20 10:30 | 05/22/20 09 |):00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Gravimetric Analysis by Method 2540 C-2011 | WG1482636 | 1 | 05/27/20 18:24 | 05/27/20 23:25 | TH | Mt. Juliet, Ti |
| Wet Chemistry by Method 9056A | WG1482574 | 1 | 05/28/20 23:03 | 05/28/20 23:03 | ELN | Mt. Juliet, TI |
| Metals (ICP) by Method 6010B | WG1481517 | 1 | 05/27/20 23:36 | 05/29/20 11:21 | TRB | Mt. Juliet, Tl |
| | | | Collected by Jason R. Franks | Collected date/time 05/20/20 12:00 | Received da 05/22/20 09 | |
| MW-8 L1221447-05 GW | | | | | | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Gravimetric Analysis by Method 2540 C-2011 | WG1482636 | 1 | 05/27/20 18:24 | 05/27/20 23:25 | TH | Mt. Juliet, TI |
| Wet Chemistry by Method 9056A | WG1482574 | 1 | 05/28/20 23:46 | 05/28/20 23:46 | ELN | Mt. Juliet, T |
| Metals (ICP) by Method 6010B | WG1481517 | 1 | 05/27/20 23:36 | 05/29/20 12:19 | TRB | Mt. Juliet, TI |
| | | | Collected by | Collected date/time | Received da | |
| DUPLICATE L1221447-06 GW | | | Jason R. Franks | 05/20/20 10:35 | 05/22/20 09 | 00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Gravimetric Analysis by Method 2540 C-2011 | WG1482636 | 1 | 05/27/20 18:24 | 05/27/20 23:25 | TH | Mt. Juliet, T |
| Wet Chemistry by Method 9056A | WG1482574 | 1 | 05/29/20 00:19 | 05/29/20 00:19 | ELN | Mt. Juliet, TI |
| Metals (ICP) by Method 6010B | WG1481517 | 1 | 05/27/20 23:36 | 05/29/20 12:21 | TRB | Mt. Juliet, TI |

PROJECT: 27213167.19

SDG: L1221447 DATE/TIME: 05/31/20 19:20

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.

Jubb land

Jeff Carr Project Manager

Τс Ss Cn Sr Qc GI AI Sc

SDG: L1221447 DATE/TIME: 05/31/20 19:20 PAGE: 4 of 17

SAMPLE RESULTS - 01 L1221447

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Gravimetric Analysis by Method 2540 C-2011

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ср | |
|------------------|--------|-----------|-------|----------|------------------|-----------|----|---|
| Analyte | ug/l | | ug/l | | date / time | | 2 | ī |
| Dissolved Solids | 507000 | | 10000 | 1 | 05/27/2020 23:25 | WG1482636 | Tc | |

Wet Chemistry by Method 9056A

Collected date/time: 05/20/20 09:55

| Wet Chemistry b | Wet Chemistry by Method 9056A | | | | | | | | | | |
|-----------------|-------------------------------|-----------|------|----------|------------------|-----------|----|--|--|--|--|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | | | | |
| Analyte | ug/l | | ug/l | | date / time | | 4 | | | | |
| Chloride | 5600 | | 1000 | 1 | 05/29/2020 11:57 | WG1482574 | | | | | |
| Fluoride | 240 | | 150 | 1 | 05/29/2020 11:57 | WG1482574 | 5 | | | | |
| Sulfate | 27600 | | 5000 | 1 | 05/29/2020 11:57 | WG1482574 | ľS | | | | |

Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Boron | ND | | 200 | 1 | 05/29/2020 12:11 | WG1481517 |
| Calcium | 131000 | | 1000 | 1 | 05/29/2020 12:11 | WG1481517 |

SDG: L1221447

SAMPLE RESULTS - 02 L1221447

Qc

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Gravimetric Analysis by Method 2540 C-2011

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ср | l |
|------------------|--------|-----------|-------|----------|------------------|-----------|--------|---|
| Analyte | ug/l | | ug/l | | date / time | | 2 | ì |
| Dissolved Solids | 659000 | | 13300 | 1 | 05/27/2020 23:25 | WG1482636 | Tc | |

Wet Chemistry by Method 9056A

Collected date/time: 05/20/20 10:55

| Wet Chemistry by Method 9056A | | | | | | | | | | |
|-------------------------------|--------|-----------|-------|----------|------------------|------------------|--|--|--|--|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | | | |
| Analyte | ug/l | | ug/l | | date / time | | | | | |
| Chloride | 7280 | | 1000 | 1 | 05/28/2020 22:30 | WG1482574 | | | | |
| Fluoride | 286 | | 150 | 1 | 05/28/2020 22:30 | <u>WG1482574</u> | | | | |
| Sulfate | 126000 | | 25000 | 5 | 05/28/2020 22:41 | WG1482574 | | | | |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Boron | ND | | 200 | 1 | 05/29/2020 12:13 | WG1481517 |
| Calcium | 164000 | | 1000 | 1 | 05/29/2020 12:13 | WG1481517 |

SAMPLE RESULTS - 03 L1221447

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Sc

Gravimetric Analysis by Method 2540 C-2011

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ср |
|------------------|--------|-----------|-------|----------|------------------|-----------|--------|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Dissolved Solids | 491000 | | 10000 | 1 | 05/27/2020 23:25 | WG1482636 | Tc |

Wet Chemistry by Method 9056A

Collected date/time: 05/20/20 09:40

| Wet Chemistry by | y Method 9056/ | А | | | | | ³ Ss |
|------------------|----------------|-----------|------|----------|------------------|-----------|-------------------|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | - ⁴ Cn |
| Chloride | 1550 | | 1000 | 1 | 05/28/2020 22:52 | WG1482574 | CII |
| Fluoride | 264 | | 150 | 1 | 05/28/2020 22:52 | WG1482574 | 5 |
| Sulfate | 20400 | | 5000 | 1 | 05/28/2020 22:52 | WG1482574 | Sr |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Boron | ND | | 200 | 1 | 05/29/2020 12:16 | WG1481517 |
| Calcium | 138000 | | 1000 | 1 | 05/29/2020 12:16 | WG1481517 |

SAMPLE RESULTS - 04 L1221447

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Gravimetric Analysis by Method 2540 C-2011

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ср |
|------------------|--------|-----------|-------|----------|------------------|-----------|--------|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Dissolved Solids | 525000 | | 10000 | 1 | 05/27/2020 23:25 | WG1482636 | Tc |

Wet Chemistry by Method 9056A

Collected date/time: 05/20/20 10:30

| Wet Chemistry k | by Method 9056A | 4 | | | | | 3 |
|-----------------|-----------------|-----------|------|----------|------------------|-----------|---|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | L |
| Analyte | ug/l | | ug/l | | date / time | | 4 |
| Chloride | 8490 | | 1000 | 1 | 05/28/2020 23:03 | WG1482574 | |
| Fluoride | 291 | | 150 | 1 | 05/28/2020 23:03 | WG1482574 | 5 |
| Sulfate | 54400 | | 5000 | 1 | 05/28/2020 23:03 | WG1482574 | |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Boron | ND | | 200 | 1 | 05/29/2020 11:21 | WG1481517 |
| Calcium | 140000 | | 1000 | 1 | 05/29/2020 11:21 | WG1481517 |

SAMPLE RESULTS - 05 L1221447

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Gravimetric Analysis by Method 2540 C-2011

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|------------------|--------|-----------|-------|----------|------------------|-----------|----------|---|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | <u> </u> | |
| Analyte | ug/l | | ug/l | | date / time | | 2 | 1 |
| Dissolved Solids | 516000 | | 10000 | 1 | 05/27/2020 23:25 | WG1482636 | Tc | |

Wet Chemistry by Method 9056A

Collected date/time: 05/20/20 12:00

| Wet Chemistry by | / Method 9056/ | 4 | | | | | ³ Ss |
|------------------|----------------|-----------|------|----------|------------------|-----------|-----------------|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | ⁴ Cn |
| Chloride | 4890 | | 1000 | 1 | 05/28/2020 23:46 | WG1482574 | |
| Fluoride | 336 | | 150 | 1 | 05/28/2020 23:46 | WG1482574 | 5 |
| Sulfate | 45000 | | 5000 | 1 | 05/28/2020 23:46 | WG1482574 | Sr |

Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Boron | ND | | 200 | 1 | 05/29/2020 12:19 | WG1481517 |
| Calcium | 144000 | | 1000 | 1 | 05/29/2020 12:19 | WG1481517 |

SDG: L1221447

SAMPLE RESULTS - 06 L1221447

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Gravimetric Analysis by Method 2540 C-2011

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ср |
|------------------|--------|-----------|-------|----------|------------------|-----------|--------|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Dissolved Solids | 524000 | | 10000 | 1 | 05/27/2020 23:25 | WG1482636 | Tc |

Wet Chemistry by Method 9056A

| Wet Chemistry by | Method 9056A | Ą | | | | | ³ Ss |
|------------------|--------------|-----------|------|----------|------------------|-----------|-----------------|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | 4 Cn |
| Chloride | 8590 | | 1000 | 1 | 05/29/2020 00:19 | WG1482574 | CII |
| Fluoride | 291 | | 150 | 1 | 05/29/2020 00:19 | WG1482574 | 5 |
| Sulfate | 54500 | | 5000 | 1 | 05/29/2020 00:19 | WG1482574 | Sr |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Boron | ND | | 200 | 1 | 05/29/2020 12:21 | WG1481517 |
| Calcium | 142000 | | 1000 | 1 | 05/29/2020 12:21 | WG1481517 |

WG1482636

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

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Method Blank (MB)

| (MB) R3533284-1 05/ | /27/20 23:25 | | | |
|---------------------|--------------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Dissolved Solids | U | | 2820 | 10000 |

L1221447-06 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221447-06 05/27/20 23:25 • (DUP) R3533284-3 05/27/20 23:25 | | | | | | | | | | |
|---|-----------------|------------|----------|---------|---------------|-------------------|--|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | | |
| Analyte | ug/l | ug/l | | % | | % | | | | |
| Dissolved Solids | 524000 | 522000 | 1 | 0.382 | | 5 | | | | |

Laboratory Control Sample (LCS)

| (LCS) R3533284-2 0 | (LCS) R3533284-2 05/27/20 23:25 | | | | | | | | | |
|--------------------|---------------------------------|------------|----------|-------------|---------------|--|--|--|--|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | | | | | |
| Analyte | ug/l | ug/l | % | % | | | | | | |
| Dissolved Solids | 8800000 | 8620000 | 98.0 | 85.0-115 | | | | | | |

PROJECT: 27213167.19

SDG: L1221447 DATE/TIME: 05/31/20 19:20 PAGE: 11 of 17 Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY L1221447-01,02,03,04,05,06

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Method Blank (MB)

| (MB) R3533055-1 | 05/28/20 19:37 |
|-----------------|----------------|
| | |

| (MB) R3533055-1 | 05/28/20 19:37 | | | | |
|-----------------|----------------|--------------|--------|--------|--|
| | MB Result | MB Qualifier | MB MDL | MB RDL | |
| Analyte | ug/l | | ug/l | ug/l | |
| Chloride | U | | 379 | 1000 | |
| Fluoride | U | | 64.0 | 150 | |
| Sulfate | U | | 594 | 5000 | |

L1221751-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221751-01 | 05/29/20 01:46 • (DUP) | R3533055-7 | 05/29/20 | 01:57 | | |
|------------------|------------------------|------------|----------|---------|---------------|---------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD |

| | - | | | | Limits |
|----------|-------|-------|---|-------|--------|
| Analyte | ug/l | ug/l | | % | % |
| Chloride | 85900 | 84800 | 1 | 1.31 | 15 |
| Fluoride | ND | ND | 1 | 0.696 | 15 |
| Sulfate | 10100 | 10000 | 1 | 1.15 | 15 |

L1221447-03 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221447-03 05/28/20 22:52 • (DUP) R3533055-9 05/29/20 11:46 | | | | | | | | | | |
|---|-----------------|------------|----------|---------|---------------|-------------------|--|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | | |
| Analyte | ug/l | ug/l | | % | | % | | | | |
| Chloride | 1550 | 1500 | 1 | 2.85 | | 15 | | | | |
| Fluoride | 264 | 278 | 1 | 5.35 | | 15 | | | | |
| Sulfate | 20400 | 20300 | 1 | 0.228 | | 15 | | | | |

Laboratory Control Sample (LCS)

| (LCS) R3533055-2 05/28/20 19:47 | | | | | | | | | |
|---------------------------------|--------------|------------|----------|-------------|---------------|--|--|--|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | | | | |
| Analyte | ug/l | ug/l | % | % | | | | | |
| Chloride | 40000 | 39900 | 99.8 | 80.0-120 | | | | | |
| Fluoride | 8000 | 8350 | 104 | 80.0-120 | | | | | |
| Sulfate | 40000 | 38900 | 97.1 | 80.0-120 | | | | | |

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| SCS Engineers - KS |

PROJECT: 27213167.19

SDG: L1221447

DATE/TIME: 05/31/20 19:20

PAGE: 12 of 17

QUALITY CONTROL SUMMARY

L1221288-01 Original Sample (OS) • Matrix Spike (MS)

| (OS) L1221288-01 05/28/2 | DS) L1221288-01 05/28/20 20:42 • (MS) R3533055-4 05/28/20 20:53 | | | | | | | | | | | |
|--------------------------|---|-----------------|-----------|---------|----------|-------------|--------------|--|--|--|--|--|
| | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier | | | | | |
| Analyte | ug/l | ug/l | ug/l | % | | % | | | | | | |
| Chloride | 50000 | 1360 | 52300 | 102 | 1 | 80.0-120 | | | | | | |
| Fluoride | 5000 | 185 | 5470 | 106 | 1 | 80.0-120 | | | | | | |
| Sulfate | 50000 | 16100 | 65400 | 98.7 | 1 | 80.0-120 | | | | | | |

L1221447-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221447-04 05/28/20 23:03 • (MS) R3533055-5 05/28/20 23:14 • (MSD) R3533055-6 05/28/20 23:25 | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Chloride | 50000 | 8490 | 58600 | 59000 | 100 | 101 | 1 | 80.0-120 | | | 0.714 | 15 |
| Fluoride | 5000 | 291 | 5310 | 5340 | 100 | 101 | 1 | 80.0-120 | | | 0.421 | 15 |
| Sulfate | 50000 | 54400 | 99300 | 101000 | 89.7 | 92.9 | 1 | 80.0-120 | | E | 1.56 | 15 |

DATE/TIME: 05/31/20 19:20 Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY L1221447-01,02,03,04,05,06

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| Method | Rlank I | |
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| Method | DIDIIK | |

| (MB) R3533271-1 05 | /29/20 11:06 | | | |
|--------------------|--------------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Boron | U | | 25.4 | 200 |
| Calcium | U | | 389 | 1000 |

Laboratory Control Sample (LCS)

| (LCS) R3533271-2 05/29/2 | 20 11:09 | | | | |
|--------------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Boron | 1000 | 956 | 95.6 | 80.0-120 | |
| Calcium | 10000 | 9590 | 95.9 | 80.0-120 | |

L1221445-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221445-09 05/29/2 | 20 11:11 • (MS) R3 | 3533271-4 05/ | 29/20 11:16 • (N | /ISD) R3533271 | -5 05/29/2011 | 1:19 | | | | | | |
|--------------------------|--------------------|-----------------|------------------|----------------|---------------|----------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Boron | 1000 | 3960 | 4820 | 4860 | 86.4 | 90.4 | 1 | 75.0-125 | | | 0.829 | 20 |
| Calcium | 10000 | 43300 | 51300 | 51600 | 79.8 | 83.4 | 1 | 75.0-125 | | | 0.688 | 20 |

L1221447-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221447-04 05/29/2 | 0 11:21 • (MS) R | 3533271-6 05/ | /29/20 11:24 • (| (MSD) R353327 | 71-7 05/29/20 | 11:26 | | | | | | |
|--------------------------|------------------|-----------------|------------------|---------------|---------------|----------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Boron | 1000 | ND | 1050 | 1070 | 95.2 | 97.0 | 1 | 75.0-125 | | | 1.71 | 20 |
| Calcium | 10000 | 140000 | 148000 | 149000 | 83.1 | 89.5 | 1 | 75.0-125 | | | 0.430 | 20 |

DATE/TIME: 05/31/20 19:20

GLOSSARY OF TERMS

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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). |

ACCOUNT: SCS Engineers - KS

PROJECT: 27213167.19

SDG: L1221447

DATE/TIME: 05/31/20 19:20 PAGE: 15 of 17

ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

State Accreditations

| Alabama | 40660 | Nebraska |
|------------------------|-------------|-----------------------------|
| Alaska | 17-026 | Nevada |
| Arizona | AZ0612 | New Hampshire |
| Arkansas | 88-0469 | New Jersey–NELAP |
| California | 2932 | New Mexico ¹ |
| Colorado | TN00003 | New York |
| Connecticut | PH-0197 | North Carolina |
| Florida | E87487 | North Carolina ¹ |
| Georgia | NELAP | North Carolina ³ |
| Georgia ¹ | 923 | North Dakota |
| Idaho | TN00003 | Ohio-VAP |
| Illinois | 200008 | Oklahoma |
| Indiana | C-TN-01 | Oregon |
| lowa | 364 | Pennsylvania |
| Kansas | E-10277 | Rhode Island |
| Kentucky ¹⁶ | 90010 | South Carolina |
| Kentucky ² | 16 | South Dakota |
| Louisiana | AI30792 | Tennessee ¹⁴ |
| Louisiana ¹ | LA180010 | Texas |
| Maine | TN0002 | Texas ⁵ |
| Maryland | 324 | Utah |
| Massachusetts | M-TN003 | Vermont |
| Michigan | 9958 | Virginia |
| Minnesota | 047-999-395 | Washington |
| Mississippi | TN00003 | West Virginia |
| Missouri | 340 | Wisconsin |
| Montana | CERT0086 | Wyoming |
| | | |

| Nebraska | NE-OS-15-05 |
|-----------------------------|------------------|
| Nevada | TN-03-2002-34 |
| New Hampshire | 2975 |
| New Jersey-NELAP | TN002 |
| New Mexico ¹ | n/a |
| New York | 11742 |
| North Carolina | Env375 |
| North Carolina ¹ | DW21704 |
| North Carolina ³ | 41 |
| North Dakota | R-140 |
| Ohio-VAP | CL0069 |
| Oklahoma | 9915 |
| Oregon | TN200002 |
| Pennsylvania | 68-02979 |
| Rhode Island | LAO00356 |
| South Carolina | 84004 |
| South Dakota | n/a |
| Tennessee ¹⁴ | 2006 |
| Texas | T104704245-18-15 |
| Texas ⁵ | LAB0152 |
| Utah | TN00003 |
| Vermont | VT2006 |
| Virginia | 460132 |
| Washington | C847 |
| West Virginia | 233 |
| Wisconsin | 9980939910 |
| Wyoming | A2LA |
| | |

Third Party Federal Accreditations

| 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

Our Locations

SCS Engineers - KS

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



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| SCS Engineers - KS | | | Billing Info | | | | | | | A | | Contai | ner / Pres | ervative | | | Chain of Cust | ody Page <u>/</u> of <u>/</u> | | |
|---|-------------------------------|---|--------------|--|----------|--|-------------|--------------------------------------|----------------------------------|--------|------------|----------|---------------|-----------|---------|--|--|-------------------------------|-----|--|
| 8575 W. 110th Street Overland Park, KS 66210 | Street , KS 66210 | | | Accounts Payable 8575 W. 110th Street Overland Park, KS 6621 | | | treet | 0 | Pres Chk | | n | | | | | | | | Pal | Ce Analytical* as Center for Testing & Innovation |
| Report to: Jason Franks | | | | Email To: Jfranks@scsengineers | | | | scsengineers.com;jay.martin@evergy.c | | | Pres | | | | | | | | | 12065 Lebanon Mount Juliet, T Phone: 615-758 |
| Project Description: Evergy - latan Generating Station | | City/State Collected: | 11 10 | | | Please C PT MT C | | -Nof | 1.2.2 1.2.2 1.2.2 1.2.2 | | | | | | | | Phone: 800-767 Fax: 615-758-58 | 7-5859 859 | | |
| Phone: 913-681-0030 | Client Project 27213167. | | | Lab Proje | | ATAN | | SmiHDPE-NoPres | HNO3 | | | | | | | | SDG # /2 | .21447 010 | | |
| Collected by (print): (1450NR. FRANKS | Site/Facility ID # | | | P.O. # | | | | 12 | IHDPE- | loPres | | | | | | Acctnum: AQUAOPKS | | | | |
| Collected by (signature): | Same Da | Itent Project # Itab Project # Itab Project # AQUAOPKS-IATAN AQUAOPKS-IATAN Iten State ree/Facility ID # P.O. # Iten State Rush? (Lab MUST Be Notified) Quote # Same Day Five Day Next Day S Day (Rad Only) Date Results Needed No. Two Day 10 Day (Rad Only) Date Results Needed No. | | | | Template: T136059 Prelogin: P769374 PM: 206 - Jeff Carr PB: | | | | | | | | | | | | | | |
| Sample ID | Comp/Grab | Matrix * | Depth | Da | te | Time | of Cntrs | Anions (Cld, | B, Ca - I | TDS 25 | | | | | | 1.31.3 1.21.3 1.31.3 1.21.3 1. | Shipped Via Remarks | : Sample # (lab only) | | |
| MW-1 | GRAG | GW | - | 5/00 | 20 | 0955 | 3 | X | X | X | | | | | | | | -01 | | |
| MW-2 | | GW | - | 1 | 1 | 1055 | 3 | x | x | x | | | terre and | | | | and the second s | 02 | | |
| MW-6 | 1 | GW | - | | | 0940 | 3 | X | X | x | | | | | | 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1 | | | | |
| MW-7 | | GW | - | | | 1030 | 3 | X | X | X | | | | | | | | 03 | | |
| WW-8 | | GW | - | | | 1200 | 3 | x | X | X | | | | | | trans in | - 744 | 05 | | |
| DUPLICATE | | GW | Carrier of | | | 1035 | 3 | X | X | X | | | in the second | | | | | - 16 | | |
| mw7ms/msd | | GW | | N | / | 1640 | 3 | X | X | X | | | | | | | a starting | 04 | | |
| | | | | | | 1070 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | andra di | | | |
| torenti, si sefficiele | | | | | | | | | | | Catali | | | | | - | | | | |
| ' Matrix: 55 - Soil AIR - Air F - Filter 5W - Groundwater B - Bioassay NW - WasteWater | lemarks: | | | | | | | | | | pH Flow | | _ Temp _ | | Bott] | Seal Pr Signed/ les arr | Accurate: ive intact | ct: _NP _Y _N | | |
| OW - Drinking Water OT - Other | Samples returned UPS FedEx | | | | Tracking | g.# | | | | | | | | | Suff | icient | tles used: volume sent <u>If Applic</u> adspace: | t:N able Y N | | |
| Placen K. Shake | - Da | te: [/21/2 | o Time | 300 | Receive | d by: (Signat | ure) | 5/21/ | 200 | T | rip Blan | k Receiv | ved: Yes | 2/MeoH | Prese | ervatio | on Correct/0 <0.5 mR/hr | | | |
| Relinquished by : (Signature) | Dat | frommer | Time | | Receive | d by: (Signat | ure) | | | T | emp:11 | A | | Received: | If pres | servation | n required by | Login: Date/Time | | |
| Relinquished by : (Signature) | Dat | te: | Time | • | Receive | d for lab by; | (Signatu | rte) | | D |)ate: | 1/1 | Time: | 9:00 | Hold: | | | Condition? NCF | | |



ANALYTICAL REPORT

SCS Engineers - KS

Sample Delivery Group: Samples Received: Project Number: Description: L1221408 05/22/2020 27213167.19 Evergy - latan Generating Station

Report To:

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

Тс Ss Cn Śr ʹQc Gl ΆI Sc

Entire Report Reviewed By:

Jubb land

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.

ACCOUNT: SCS Engineers - KS PROJECT: 27213167.19

SDG: L1221408 DATE/TIME: 05/31/20 19:13

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SDG: L1221408 DATE/TIME: 05/31/20 19:13

SAMPLE SUMMARY

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| | | | Collected by | Collected date/time | Received date/time 05/22/20 09:00 | | |
|---|------------------------|----------|-----------------|---------------------|--------------------------------------|----------------------------------|--|
| MW-9 L1221408-01 GW | | | Jason R. Franks | 05/20/20 12:30 | | | |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location | |
| | | | date/time | date/time | | | |
| Gravimetric Analysis by Method 2540 C-2011 | WG1481644 | 1 | 05/24/20 11:02 | 05/24/20 13:06 | TH | Mt. Juliet, TN | |
| Wet Chemistry by Method 9056A | WG1482430 | 1 | 05/27/20 03:35 | 05/27/20 03:35 | ELN | Mt. Juliet, TN | |
| Metals (ICP) by Method 6010B | WG1481516 | 1 | 05/27/20 23:07 | 05/28/20 20:21 | EL | Mt. Juliet, TN | |
| | | | Collected by | Collected date/time | Received da | te/time | |
| MW-10 L1221408-02 GW | | | Jason R. Franks | 05/20/20 13:50 | 05/22/20 09 | 9:00 | |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location | |
| | | | date/time | date/time | | | |
| | | | date/ time | dates time | | | |
| Gravimetric Analysis by Method 2540 C-2011 | WG1481935 | 1 | 05/26/20 11:00 | 05/26/20 12:23 | MMF | Mt. Juliet, TN | |
| Gravimetric Analysis by Method 2540 C-2011 Wet Chemistry by Method 9056A | WG1481935 WG1482430 | 1 | | | MMF ELN | Mt. Juliet, TN Mt. Juliet, TN | |

SDG: L1221408

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.

Jubb land

Jeff Carr Project Manager

Τс Ss Cn Sr Qc GI AI Sc

SDG: L1221408 DATE/TIME: 05/31/20 19:13 PAGE: 4 of 14

SAMPLE RESULTS - 01 L1221408

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Gravimetric Analysis by Method 2540 C-2011

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | Ср |
|------------------|--------|-----------|-------|----------|------------------|-----------|---|----|
| Analyte | ug/l | | ug/l | | date / time | | 2 |] |
| Dissolved Solids | 385000 | | 10000 | 1 | 05/24/2020 13:06 | WG1481644 | 2 | Тс |

Wet Chemistry by Method 9056A

Collected date/time: 05/20/20 12:30

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
|---------|--------|-----------|------|----------|------------------|-----------|--|
| Analyte | ug/l | quanner | ug/l | Diración | date / time | Buten | |
| hloride | ND | | 1000 | 1 | 05/27/2020 03:35 | WG1482430 | |
| luoride | 389 | | 150 | 1 | 05/27/2020 03:35 | WG1482430 | |
| Sulfate | 20700 | | 5000 | 1 | 05/27/2020 03:35 | WG1482430 | |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Boron | ND | | 200 | 1 | 05/28/2020 20:21 | WG1481516 |
| Calcium | 105000 | | 1000 | 1 | 05/28/2020 20:21 | WG1481516 |

SAMPLE RESULTS - 02 L1221408

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Gravimetric Analysis by Method 2540 C-2011

| | Result | Qualifier I | RDL | Dilution | Analysis | Batch | Ср |
|------------------|--------|-------------|-------|----------|------------------|-----------|-----|
| Analyte | ug/l | ι | ug/l | | date / time | | 2 |
| Dissolved Solids | 585000 | 1 | 13300 | 1 | 05/26/2020 12:23 | WG1481935 | ⁻Tc |

Wet Chemistry by Method 9056A

| Wet Chemistry by Method 9056A | | | | | | | | | | |
|-------------------------------|--------|-----------|------|----------|------------------|-----------|---|--|--|--|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | L | | | |
| Analyte | ug/l | | ug/l | | date / time | | 4 | | | |
| Chloride | 16400 | | 1000 | 1 | 05/27/2020 03:50 | WG1482430 | | | | |
| Fluoride | 517 | | 150 | 1 | 05/27/2020 03:50 | WG1482430 | 5 | | | |
| Sulfate | 43100 | | 5000 | 1 | 05/27/2020 03:50 | WG1482430 | Č | | | |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Boron | ND | | 200 | 1 | 05/28/2020 20:23 | WG1481516 |
| Calcium | 150000 | | 1000 | 1 | 05/28/2020 20:23 | WG1481516 |

WG1481644

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

Method Blank (MB)

| (MB) R3531804-1 05/2 | (MB) R3531804-1 05/24/20 13:06 | | | | | | |
|----------------------|--------------------------------|--------------|--------|--------|--|--|--|
| | MB Result | MB Qualifier | MB MDL | MB RDL | | | |
| Analyte | ug/l | | ug/l | ug/l | | | |
| Dissolved Solids | U | | 2820 | 10000 | | | |

Laboratory Control Sample (LCS)

| (LCS) R3531804-2 05/ | LCS) R3531804-2 05/24/20 13:06 | | | | | | | | |
|----------------------|--------------------------------|------------|----------|-------------|---------------|--|--|--|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | | | | |
| Analyte | ug/l | ug/l | % | % | | | | | |
| Dissolved Solids | 8800000 | 7740000 | 88.0 | 85.0-115 | | | | | |

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WG1481935

Gravimetric Analysis by Method 2540 C-2011

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Method Blank (MB)

| (MB) R3532683-1 05/ | /26/20 12:23 | | | |
|---------------------|--------------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Dissolved Solids | U | | 2820 | 10000 |

Laboratory Control Sample (LCS)

| (LCS) R3532683-2 05/26/20 12:23 | | | | | | | |
|---------------------------------|--------------|------------|----------|-------------|---------------|--|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | | |
| Analyte | ug/l | ug/l | % | % | | | |
| Dissolved Solids | 8800000 | 8340000 | 94.8 | 85.0-115 | | | |

| ACCOUNT: | |
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| SCS Engineers - KS | |

PROJECT: 27213167.19

SDG: L1221408 DATE/TIME: 05/31/20 19:13 PAGE: 8 of 14 Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY L1221408-01,02

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Method Blank (MB)

| (MB) R3532165-1 | 05/26/20 22:11 |
|-----------------|----------------|
| | |

| (MD) 100021001 | | | | | |
|----------------|-----------|--------------|--------|--------|-----------------|
| | MB Result | MB Qualifier | MB MDL | MB RDL | 2 |
| Analyte | ug/l | | ug/l | ug/l | Tc |
| Chloride | U | | 379 | 1000 | |
| Fluoride | U | | 64.0 | 150 | ³ Ss |
| Sulfate | U | | 594 | 5000 | 00 |
| | | | | | ⁴ Cn |

L1221322-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221322-01 05/27/2 | OS) L1221322-01 05/27/20 02:51 • (DUP) R3532165-3 05/27/20 03:06 | | | | | | | | | |
|--------------------------|--|------------|----------|---------|---------------|-------------------|--|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | | |
| Analyte | ug/l | ug/l | | % | | % | | | | |
| Chloride | 19800 | 19700 | 1 | 0.150 | | 15 | | | | |
| Fluoride | 506 | 508 | 1 | 0.335 | | 15 | | | | |
| Sulfate | 10300 | 10300 | 1 | 0.116 | | 15 | | | | |

L1221445-04 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221445-04 05/27/20 06:50 • (DUP) R3532165-5 05/27/20 07:05 | | | | | | | | | |
|---|-----------------|------------|----------|---------|---------------|-------------------|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | |
| Analyte | ug/l | ug/l | | % | | % | | | |
| Chloride | 24100 | 24100 | 1 | 0.0328 | | 15 | | | |
| Fluoride | 539 | 548 | 1 | 1.53 | | 15 | | | |

L1221445-04 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221445-04 | 05/27/20 11:33 • (DUP) | | | | | DUP RPD |
|------------------|-------------------------|--------|----------|--------------|---------------|------------------------|
| Analyte | Original Result ua/l | ua/l | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
| Sulfate | 139000 | 139000 | 5 | 0.299 | | 15 |

Laboratory Control Sample (LCS) (LCC) D2E221CE 2, 0E/20/20 22:20

| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|----------|--------------|------------|----------|-------------|---------------|
| Analyte | ug/l | ug/l | % | % | |
| Chloride | 40000 | 39600 | 98.9 | 80.0-120 | |
| Fluoride | 8000 | 8260 | 103 | 80.0-120 | |
| Sulfate | 40000 | 38700 | 96.7 | 80.0-120 | |

| ACCOUNT: | PROJECT: | SDG: | DATE/TIME: | PAGE: |
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| SCS Engineers - KS | 27213167.19 | L1221408 | 05/31/20 19:13 | 9 of 14 |

QUALITY CONTROL SUMMARY

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L1221322-01 Original Sample (OS) • Matrix Spike (MS)

| (OS) L1221322-01 05/27/2 | DS) L1221322-01 05/27/20 02:51 • (MS) R3532165-4 05/27/20 03:20 | | | | | | | | | |
|--------------------------|---|-----------------|-----------|---------|----------|-------------|--------------|--|--|--|
| | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier | | | |
| Analyte | ug/l | ug/l | ug/l | % | | % | | | | |
| Chloride | 50000 | 19800 | 72600 | 106 | 1 | 80.0-120 | | | | |
| Fluoride | 5000 | 506 | 5580 | 102 | 1 | 80.0-120 | | | | |
| Sulfate | 50000 | 10300 | 62000 | 103 | 1 | 80.0-120 | | | | |

L1221445-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221445-09 05/27/20 09:19 • (MS) R3532165-6 05/27/20 09:34 • (MSD) R3532165-7 05/27/20 09:49 | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Chloride | 50000 | 29400 | 76900 | 77400 | 94.9 | 96.0 | 1 | 80.0-120 | | | 0.676 | 15 |
| Fluoride | 5000 | 583 | 5250 | 5320 | 93.4 | 94.8 | 1 | 80.0-120 | | | 1.33 | 15 |

| ACCOUNT: | |
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| SCS Engineers - | КS |

DATE/TIME: 05/31/20 19:13

PAGE: 10 of 14 Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY L1221408-01,02

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Method Blank (MB)

| Method Blau | ik (IVIB) | | | | |
|-----------------|----------------|--------------|--------|--------|--|
| (MB) R3532814-1 | 05/28/20 19:42 | | | | |
| | MB Result | MB Qualifier | MB MDL | MB RDL | |
| Analyte | ug/l | | ug/l | ug/l | |
| Boron | U | | 25.4 | 200 | |
| Calcium | U | | 389 | 1000 | |
| | | | | | |

Laboratory Control Sample (LCS)

| (LCS) R3532814-2 05/28/20 19:44 | | | | | | | | |
|---------------------------------|--------------|------------|----------|-------------|---------------|--|--|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | | | |
| Analyte | ug/l | ug/l | % | % | | | | |
| Boron | 1000 | 926 | 92.6 | 80.0-120 | | | | |
| Calcium | 10000 | 9550 | 95.5 | 80.0-120 | | | | |

DATE/TIME: 05/31/20 19:13

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GLOSSARY OF TERMS

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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.

PROJECT: 27213167.19

SDG: L1221408 DATE/TIME: 05/31/20 19:13

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ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

State Accreditations

| Alabama | 40660 | Nebraska |
|-----------------------|-------------|-----------------------------|
| Alaska | 17-026 | Nevada |
| Arizona | AZ0612 | New Hampshire |
| Arkansas | 88-0469 | New Jersey–NELAP |
| California | 2932 | New Mexico ¹ |
| Colorado | TN00003 | New York |
| Connecticut | PH-0197 | North Carolina |
| Florida | E87487 | North Carolina ¹ |
| Georgia | NELAP | North Carolina ³ |
| Georgia ¹ | 923 | North Dakota |
| Idaho | TN00003 | Ohio-VAP |
| Illinois | 200008 | Oklahoma |
| Indiana | C-TN-01 | Oregon |
| lowa | 364 | Pennsylvania |
| Kansas | E-10277 | Rhode Island |
| Kentucky 16 | 90010 | South Carolina |
| Kentucky ² | 16 | South Dakota |
| Louisiana | AI30792 | Tennessee ¹⁴ |
| Louisiana 1 | LA180010 | Texas |
| Maine | TN0002 | Texas ⁵ |
| Maryland | 324 | Utah |
| Massachusetts | M-TN003 | Vermont |
| Michigan | 9958 | Virginia |
| Minnesota | 047-999-395 | Washington |
| Mississippi | TN00003 | West Virginia |
| Missouri | 340 | Wisconsin |
| Montana | CERT0086 | Wyoming |
| | | |

| Nebraska | NE-OS-15-05 |
|-----------------------------|------------------|
| Nevada | TN-03-2002-34 |
| New Hampshire | 2975 |
| New Jersey-NELAP | TN002 |
| New Mexico 1 | n/a |
| New York | 11742 |
| North Carolina | Env375 |
| North Carolina ¹ | DW21704 |
| North Carolina ³ | 41 |
| North Dakota | R-140 |
| Ohio-VAP | CL0069 |
| Oklahoma | 9915 |
| Oregon | TN200002 |
| Pennsylvania | 68-02979 |
| Rhode Island | LAO00356 |
| South Carolina | 84004 |
| South Dakota | n/a |
| Tennessee 1 4 | 2006 |
| Texas | T104704245-18-15 |
| Texas ⁵ | LAB0152 |
| Utah | TN00003 |
| Vermont | VT2006 |
| Virginia | 460132 |
| Washington | C847 |
| West Virginia | 233 |
| Wisconsin | 9980939910 |
| Wyoming | A2LA |
| | |

Third Party Federal Accreditations

| 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

Our Locations

SCS Engineers - KS

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.

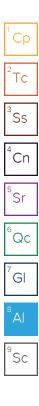


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|--|--------------------------------|------------------------------|---|---------------|---|----------------|--------------|------------------|------------------|----------------|-----------|--------------------------|-----------------------------|---|--|-------------------|--|
| CS Engineers - KS 575 W. 110th Street verland Park, KS 66210 | | | Accounts Payable 8575 W. 110th Street Overland Park, KS 66210 Email To: jfranks@scsengineers.com;jay.martin@eve | | | | | 17 | | | | | | | - / | 2 ace Ar | nalytical* e tor festing & innovetion |
| eport to: ason Franks | | 125mlHDPE-NoPres DPE-HNO3 | | | | | | | | | | | Mount Julier Phone: 615- | 12065 Lebanon Rd. Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 | | | |
| Project Description: Evergy - latan Generating Station | | City/State Collected: | WEST | on MC | Please C PT MT | | PE-NG |)3 | | | | | | | Fax: 615-75 | | |
| Phone: 913-681-0030 | Client Project # 27213167.1 | | | Lab Project # | | | IdHIn | ONH- | | | | | | | | G005 | 1 million and a million of the second se |
| Collected by (print): JASON R. FEANKS | Site/Facility ID | # | 894499 1575 | P.O. # | n an an Anna Anna Anna Anna Anna Anna A | | | 250mIHDPE-HNO3 | NoPres | | | | | | Acctnum: AQUAOPK | | |
| Jean R. John | Same Da | ab MUST Be | Five Day | | Quote # Date Results Needed | | d, F, SO4) | | 250miHDPE-NoPres | | | | | | Template: T166691 Prelogin: P769391 PM: 206 - Jeff Carr | | 391 |
| Immediately Packed on Ice N Y | Two Day Three Da | 10 D | ay (Rad Only) | | | No. oí | Anions (Cld, | Ca - 6010 | 250m | | | | | | PB: Shipped | Via: | |
| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | Cntrs | Anio | B, Ca | TDS | | | | | | Rema | arks | Sample # (lab only) |
| MW-9 | GRAS | GW | 1 | 5/20/2 | x 1230 | 3 | X | X | X | | | | | | | - | -01 |
| MW-10 | ~ | GW | | 1 V | 1350 | 3 | X | X | X | | | | | | | | 02 |
| | | | 1.000 | | | | | | | | | | 12.3 | | 1. 1. | | |
| | | | | | 149-54 | | - Andrewski | | | | | | | | | | |
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| | Contraction of the | | | | | 1. Sec. 14. | 1 | | | - 1 | | | | , iii | ample Recei 1 Present/In | pt Chec | :klist |
| SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater | Remarks: | | | | | | | | | pH Flow | | Temp Other | | COC Sign Bottles Correct | ned/Accurate arrive inta bottles use | e: act: ed: | |
| DW - Drinking Water Samples ret | | Courie | ***** | | acking.# | atural | | -1. 1 | | Trip Blar | nk Receiv | ed: Yes/N | vo) | VOA Zero Preserva | <u>If Applicable</u> VOA Zero Headspace: Y N Preservation Correct/Checked: Y | | |
| Relinquished by : (Signature) Relinquished by : (Signature) | ke ! | 5/21/2 ate: | Tim 20 (3 Tim | 300 | eceived by: (Sign eceived by: (Sign | lin | ~ 5 | 130 | 20 | Temp | | | MeoH | | een <0.5 mR/ | | r: Date/Time |
| Relinquished by : (Signature) | D | ate: | Tím | ie: Ri | eceived for lab b | y: (Signa | ature) | | | 4.(01 Date: | 0:4. | <u>6</u> Time: 9:1 | | Hold: | | | Condition: NCF / ØK |



ANALYTICAL REPORT

Revised Report

SCS Engineers - KS

Sample Delivery Group: Samples Received: Project Number: Description: L1221510 05/22/2020 27213167.19 Evergy - latan Generating Station

Report To:

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

Entire Report Reviewed By:

Jubb land

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.

ACCOUNT: SCS Engineers - KS PROJECT: 27213167.19

SDG: L1221510 DATE/TIME: 07/10/20 12:10 PAGE: 1 of 41

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²Cp ²Tc ³Ss ⁴Cn ⁵Sr ⁶Qc ⁷Gl ⁸Al ⁹Sc

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ACCOUNT: SCS Engineers - KS PROJECT: 27213167.19

SDG: L1221510 DATE/TIME: 07/10/20 12:10 PAGE: 2 of 41

SAMPLE SUMMARY

| | SAMPLES | SUMN | /IARY | | ONE I | AB. NATIONWI |
|--|--|------------------|---|---|--------------------------|--|
| MW-3 L1221510-01 GW | | | Collected by Jason R. Franks | Collected date/time 05/20/20 11:35 | Received da 05/22/20 09 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Calculated Results | WG1481517 | 1 | 05/29/20 12:24 | 05/29/20 12:24 | TRB | Mt. Juliet, TN |
| Gravimetric Analysis by Method 2540 C-2011 | WG1481381 | 1 | 05/23/20 14:05 | 05/23/20 14:57 | TH | Mt. Juliet, TN |
| Net Chemistry by Method 410.4 | WG1483083 | 1 | 05/27/20 23:32 | 05/28/20 03:44 | AKA | Mt. Juliet, TN |
| Wet Chemistry by Method 9020B | WG1482110 | 1 | 05/27/20 14:47 | 05/27/20 14:47 | VRP | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1482574 | 1 | 05/29/20 00:41 | 05/29/20 00:41 | ELN | Mt. Juliet, TN |
| Wet Chemistry by Method 9060A | WG1482704 | 1 | 05/28/20 02:13 | 05/28/20 02:13 | VRP | Mt. Juliet, TN |
| Mercury by Method 7470A | WG1481265 | 1 | 05/23/20 21:56 | 05/26/20 14:52 | TCT | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1481517 | 1 | 05/27/20 23:36 | 05/29/20 12:24 | TRB | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020 | WG1481528 | 1 | 05/28/20 07:49 | 05/28/20 20:19 | JPD | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020 | WG1481528 | 1 | 05/28/20 07:49 | 05/29/20 09:36 | JPD | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | te/time |
| MW-4 L1221510-02 GW | | | Jason R. Franks | 05/20/20 12:35 | 05/22/20 09 | 9:00 |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Calculated Results | WG1481518 | 1 | 05/29/20 00:12 | 05/29/20 00:12 | TRB | Mt. Juliet, TN |
| Gravimetric Analysis by Method 2540 C-2011 | WG1481381 | 1 | 05/23/20 14:05 | 05/23/20 14:57 | TH | Mt. Juliet, TN |
| Wet Chemistry by Method 410.4 | WG1483083 | 1 | 05/27/20 23:32 | 05/28/20 03:44 | AKA | Mt. Juliet, TN |
| Wet Chemistry by Method 9020B | WG1482110 | 1 | 05/27/20 15:29 | 05/27/20 15:29 | VRP | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1482574 | 1 | 05/29/20 00:52 | 05/29/20 00:52 | ELN | Mt. Juliet, TN |
| Wet Chemistry by Method 9060A | WG1482704 | 1 | 05/28/20 02:34 | 05/28/20 02:34 | VRP | Mt. Juliet, TN |
| Mercury by Method 7470A | WG1481265 | 1 | 05/23/20 21:56 | 05/26/20 14:54 | TCT | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1481518 | 1 | 05/28/20 17:24 | 05/29/20 00:12 | TRB | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020 | WG1481528 | 1 | 05/28/20 07:49 | 05/28/20 20:22 | JPD | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020 | WG1481528 | 1 | 05/28/20 07:49 | 05/29/20 09:39 | JPD | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | te/time |
| MW-5 L1221510-03 GW | | | Jason R. Franks | 05/20/20 10:20 | 05/22/20 09 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Calculated Results | WG1481518 | 1 | 05/29/20 00:15 | 05/29/20 00:15 | TRB | Mt. Juliet, TN |
| Gravimetric Analysis by Method 2540 C-2011 | WG1481381 | 1 | 05/23/20 14:05 | 05/23/20 14:57 | TH | Mt. Juliet, TN |
| Net Chemistry by Method 410.4 | WG1483083 | 1 | 05/27/20 23:32 | 05/28/20 03:45 | AKA | Mt. Juliet, TN |
| Net Chemistry by Method 9020B | WG1482110 | 1 | 05/27/20 15:48 | 05/27/20 15:48 | VRP | Mt. Juliet, TN |
| Net Chemistry by Method 9056A | WG1482574 | 1 | 05/29/20 01:02 | 05/29/20 01:02 | ELN | Mt. Juliet, TN |
| Net Chemistry by Method 9056A | WG1482574 | 10 | 05/29/20 01:13 | 05/29/20 01:13 | ELN | Mt. Juliet, TN |
| Net Chemistry by Method 9060A | WG1482704 | 1 | 05/28/20 03:34 | 05/28/20 03:34 | VRP | Mt. Juliet, TN |
| Mercury by Method 7470A | WG1481265 | 1 | 05/23/20 21:56 | 05/26/20 14:56 | TCT | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1481518 | 1 | 05/28/20 17:24 | 05/29/20 00:15 | TRB | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020 | WG1481528 | 1 | 05/28/20 07:49 | 05/28/20 20:25 | JPD | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020 | WG1481528 | 1 | 05/28/20 07:49 | 05/29/20 09:56 | JPD | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | | |
| MW-1 L1221510-04 GW | | | Jason R. Franks | 05/20/20 09:55 | 05/22/20 09 |):00 |
| | | _ | _ | | Applyct | Location |
| | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Method | Batch WG1481518 | Dilution 1 | | | JDG | Mt. Juliet, TN |
| Method Calculated Results | | | date/time | date/time | | |
| Method Calculated Results Wet Chemistry by Method 410.4 | WG1481518 | 1 | date/time 05/29/20 00:18 | date/time 05/29/20 00:18 | JDG | Mt. Juliet, TN Mt. Juliet, TN |
| Method Calculated Results Wet Chemistry by Method 410.4 Wet Chemistry by Method 9020B | WG1481518 WG1483083 | 1 | date/time 05/29/20 00:18 05/27/20 23:32 | date/time 05/29/20 00:18 05/28/20 03:45 | JDG AKA | Mt. Juliet, TN Mt. Juliet, TN Mt. Juliet, TN |
| Method Calculated Results Wet Chemistry by Method 410.4 Wet Chemistry by Method 9020B Wet Chemistry by Method 9060A | WG1481518 WG1483083 WG1482110 | 1 1 1 | date/time 05/29/20 00:18 05/27/20 23:32 05/27/20 16:09 | date/time 05/29/20 00:18 05/28/20 03:45 05/27/20 16:09 | JDG AKA VRP | Mt. Juliet, TN |
| Method Calculated Results Wet Chemistry by Method 410.4 Wet Chemistry by Method 9020B Wet Chemistry by Method 9060A Mercury by Method 7470A Metals (ICP) by Method 6010B | WG1481518 WG1483083 WG1482110 WG1482704 | 1 1 1 1 | date/time 05/29/20 00:18 05/27/20 23:32 05/27/20 16:09 05/28/20 03:48 | date/time 05/29/20 00:18 05/28/20 03:45 05/27/20 16:09 05/28/20 03:48 | JDG AKA VRP VRP | Mt. Juliet, TN Mt. Juliet, TN Mt. Juliet, TN Mt. Juliet, TN |

ACCOUNT: SCS Engineers - KS PROJECT: 27213167.19

SDG: L1221510 DATE/TIME: 07/10/20 12:10

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SAMPLE SUMMARY

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| MW-1 L1221510-04 GW | | | Collected by Jason R. Franks | Collected date/time 05/20/20 09:55 | Received da 05/22/20 09 | |
|--|------------------------|----------|---------------------------------|---------------------------------------|----------------------------|----------------------------------|
| Aethod | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| etals (ICPMS) by Method 6020 | WG1481528 | 1 | 05/28/20 07:49 | 05/29/20 10:00 | JPD | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | ite/time |
| MW-2 L1221510-05 GW | | | Jason R. Franks | 05/20/20 10:55 | 05/22/20 09 | 9:00 |
| <i>l</i> ethod | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Calculated Results | WG1481518 | 1 | 05/29/20 00:20 | 05/29/20 00:20 | JDG | Mt. Juliet, TN |
| Net Chemistry by Method 410.4 | WG1483083 | 1 | 05/27/20 23:32 | 05/28/20 03:46 | AKA | Mt. Juliet, TN |
| Net Chemistry by Method 9020B | WG1482110 | 1 | 05/27/20 16:29 | 05/27/20 16:29 | VRP | Mt. Juliet, TN |
| Vet Chemistry by Method 9060A | WG1482704 | 1 | 05/28/20 05:33 | 05/28/20 05:33 | VRP | Mt. Juliet, TN |
| Vercury by Method 7470A | WG1481265 | 1 | 05/23/20 21:56 | 05/26/20 14:59 | TCT | Mt. Juliet, TN |
| Aetals (ICP) by Method 6010B | WG1481518 | 1 | 05/28/20 17:24 | 05/29/20 00:20 | JDG | Mt. Juliet, TN |
| | WG1481528 | 1 | 05/28/20 07:49 | 05/28/20 20:39 | JPD | Mt. Juliet, TN |
| Aetals (ICPMS) by Method 6020 Aetals (ICPMS) by Method 6020 | WG1481528 | 1 | 05/28/20 07:49 | 05/29/20 10:03 | JPD | Mt. Juliet, TN |
| | | | | Callestad data hima | De estivadade | 4 - 14 ² |
| MW-6 L1221510-06 GW | | | Collected by Jason R. Franks | Collected date/time 05/20/20 09:40 | Received da 05/22/20 09 | |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Calculated Results | WG1481518 | 1 | 05/29/20 00:28 | 05/29/20 00:28 | JDG | Mt. Juliet, TN |
| Net Chemistry by Method 410.4 | WG1483083 | 1 | 05/27/20 23:32 | 05/28/20 03:46 | AKA | Mt. Juliet, TN |
| Net Chemistry by Method 9020B | WG1482110 | 1 | 05/27/20 16:50 | 05/27/20 16:50 | VRP | Mt. Juliet, TN |
| Vet Chemistry by Method 9060A | WG1482704 | 1 | 05/28/20 05:49 | 05/28/20 05:49 | VRP | Mt. Juliet, TN |
| Mercury by Method 7470A | WG1481265 | 1 | 05/23/20 21:56 | 05/26/20 15:01 | TCT | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1481518 | 1 | 05/28/20 17:24 | 05/29/20 00:28 | JDG | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020 | WG1481528 | 1 | 05/28/20 07:49 | 05/28/20 20:42 | JPD | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020 | WG1481528 | 1 | 05/28/20 07:49 | 05/29/20 10:06 | JPD | Mt. Juliet, TN Mt. Juliet, TN |
| | | | Collected by | | D | |
| MW-7 L1221510-07 GW | | | | Collected date/time 05/20/20 10:30 | Received da 05/22/20 09 | |
| / ethod | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Calculated Results | WG1481518 | 1 | 05/29/20 00:02 | 05/29/20 00:02 | JDG | Mt. Juliet, TN |
| Net Chemistry by Method 410.4 | WG1483083 | 1 | 05/27/20 23:32 | 05/28/20 03:47 | AKA | Mt. Juliet, TN |
| Vet Chemistry by Method 9020B | WG1482710 | 1 | 05/27/20 18:23 | 05/27/20 18:23 | VRP | Mt. Juliet, TN |
| Net Chemistry by Method 9060A | WG1482704 | 1 | 05/28/20 06:09 | 05/28/20 06:09 | VRP | Mt. Juliet, TN |
| Mercury by Method 7470A | WG1481265 | 1 | 05/23/20 21:56 | 05/26/20 12:29 | TCT | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1481518 | 1 | 05/28/20 17:24 | 05/29/20 00:02 | JDG | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020 | WG1481528 | 1 | 05/28/20 07:49 | 05/28/20 16:32 | LD | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | ite/time |
| MW-8 L1221510-08 GW | | | Jason R. Franks | 05/20/20 12:00 | 05/22/20 09 | 9:00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Calculated Results | WG1481518 | 1 | 05/29/20 00:31 | 05/29/20 00:31 | JDG | Mt. Juliet, TN |
| Net Chemistry by Method 410.4 | WG1483083 | 1 | 05/27/20 23:32 | 05/28/20 03:49 | AKA | Mt. Juliet, TN |
| Vet Chemistry by Method 9020B | WG1482110 | 1 | 05/27/20 17:44 | 05/27/20 17:44 | VRP | Mt. Juliet, TN |
| Vet Chemistry by Method 9060A | WG1482704 | 1 | 05/28/20 07:06 | 05/28/20 07:06 | VRP | Mt. Juliet, TN |
| Aercury by Method 7470A | WG1481265 | 1 | 05/23/20 21:56 | 05/26/20 15:03 | TCT | Mt. Juliet, TN |
| Vetals (ICP) by Method 6010B | WG1481265 WG1481518 | 1 | 05/28/20 21.56 | 05/29/20 00:31 | JDG | Mt. Juliet, TN Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020 | WG1481518 WG1481529 | 1 | 05/28/20 08:10 | 05/28/20 11:04 | LD | Mt. Juliet, TN Mt. Juliet, TN |
| | | | | | | |
| ACCOUNT: SCS Engineers - KS | PROJECT: | | SDG: | DAT | E/TIME: | |
| | | | L1221510 | 07/10 | | |

SAMPLE SUMMARY

| DUPLICATE L1221510-09 GW | | | Collected by Jason R. Franks | Collected date/time 05/20/20 10:35 | Received date/time 05/22/20 09:00 | | |
|-------------------------------|-----------|----------|---------------------------------|---------------------------------------|--------------------------------------|----------------|--|
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location | |
| | | | date/time | date/time | | | |
| Calculated Results | WG1481518 | 1 | 05/29/20 00:34 | 05/29/20 00:34 | JDG | Mt. Juliet, TN | |
| Vet Chemistry by Method 410.4 | WG1483083 | 1 | 05/27/20 23:32 | 05/28/20 03:49 | AKA | Mt. Juliet, TN | |
| Net Chemistry by Method 9020B | WG1482110 | 1 | 05/27/20 18:03 | 05/27/20 18:03 | VRP | Mt. Juliet, TN | |
| Net Chemistry by Method 9060A | WG1482704 | 1 | 05/28/20 07:19 | 05/28/20 07:19 | VRP | Mt. Juliet, TN | |
| Mercury by Method 7470A | WG1481265 | 1 | 05/23/20 21:56 | 05/26/20 15:05 | TCT | Mt. Juliet, TN | |
| Metals (ICP) by Method 6010B | WG1481518 | 1 | 05/28/20 17:24 | 05/29/20 00:34 | JDG | Mt. Juliet, TN | |
| Metals (ICPMS) by Method 6020 | WG1481529 | 1 | 05/28/20 08:10 | 05/28/20 11:07 | LD | Mt. Juliet, TN | |

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ACCOUNT: SCS Engineers - KS PROJECT: 27213167.19

SDG: L1221510

PAGE: 5 of 41

CASE NARRATIVE

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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.

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Jeff Carr Project Manager

²Tc ³Ss ⁴Cn ⁵Sr ⁶Qc ⁷Gl

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Report Revision History

Level II Report - Version 1: 06/01/20 09:55

Project Narrative

This report has been revised. Collection dates have been changed to 5/20 and T8 qualifiers have been removed from samples -01,-02 and -03.

PROJECT: 27213167.19

SDG: L1221510 DATE/TIME: 07/10/20 12:10 PAGE: 6 of 41

| MW-3 Collected date/time: 05/20/2 | 0 11:35 | | | L1221 | SULTS - 0′ 1510 | | |
|--------------------------------------|------------|-----------|-------|----------|--------------------|------------------|-----------------|
| Calculated Results | | | | | | | |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Hardness (calculated) as CaCO3 | 619000 | | 2500 | 1 | 05/29/2020 12:24 | <u>WG1481517</u> | Тс |
| Gravimetric Analysis b | y Method 2 | 2540 C-20 |)11 | | | | ^³ Ss |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | ⁴ Cr |
| Dissolved Solids | 591000 | | 13300 | 1 | 05/23/2020 14:57 | <u>WG1481381</u> | |
| Wet Chemistry by Met | hod 410.4 | | | | | | ⁵Sr |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | 6 |
| Analyte | ug/l | | ug/l | | date / time | | Qc |
| COD | 21500 | | 20000 | 1 | 05/28/2020 03:44 | WG1483083 | 7 |
| Wet Chemistry by Met | hod 9020B | } | | | | | [′] GI |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | ⁸ Al |
| Analyte | ug/l | | ug/l | | date / time | | A |
| ТОХ | ND | | 100 | 1 | 05/27/2020 14:47 | WG1482110 | 9 |
| Wet Chemistry by Met | hod 9056A | λ. | | | | | ິSc |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | |
| Chloride | 11700 | | 1000 | 1 | 05/29/2020 00:41 | WG1482574 | |
| Fluoride | 299 | | 150 | 1 | 05/29/2020 00:41 | WG1482574 | |
| Sulfate | 75600 | | 5000 | 1 | 05/29/2020 00:41 | WG1482574 | |
| Wet Chemistry by Met | hod 9060A | A. | | | | | |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | |
| TOC (Total Organic Carbon) | 1800 | B | 1000 | 1 | 05/28/2020 02:13 | WG1482704 | |
| Mercury by Method 74 | 170A | | | | | | |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | |
| Mercury | ND | | 0.200 | 1 | 05/26/2020 14:52 | WG1481265 | |
| Metals (ICP) by Method | d 6010B | | | | | | |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | |
| Aluminum | ND | | 200 | 1 | 05/29/2020 12:24 | WG1481517 | |
| Barium | 297 | | 5.00 | 1 | 05/29/2020 12:24 | WG1481517 | |
| Boron | ND | | 200 | 1 | 05/29/2020 12:24 | WG1481517 | |
| Calcium | 182000 | | 1000 | 1 | 05/29/2020 12:24 | WG1481517 | |
| Chromium | ND | | 10.0 | 1 | 05/29/2020 12:24 | WG1481517 | |
| Cobalt | ND | | 10.0 | 1 | 05/29/2020 12:24 | WG1481517 | |
| Iron | 2950 | | 100 | 1 | 05/29/2020 12:24 | WG1481517 | |
| Magnesium | 40100 | | 1000 | 1 | 05/29/2020 12:24 | <u>WG1481517</u> | |
| Manganoso | 597 | | 10.0 | 1 | 05/20/2020 12:24 | W/C1/101E17 | |

Magnesium 40100 1000 05/29/2020 12:24 1 Manganese 587 10.0 05/29/2020 12:24 1 ND Nickel 10.0 05/29/2020 12:24 1 Silver ND 5.00 1 05/29/2020 12:24

Sodium

6550

PROJECT: 27213167.19

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3000

SDG: L1221510

05/29/2020 12:24

DATE/TIME: 07/10/20 12:10

WG1481517

WG1481517

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WG1481517

SAMPLE RESULTS - 01

ONE LAB. NATIONWIDE.

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| Collected date/time: | 05/20/20 11:35 |
|----------------------|----------------|
| Metals (ICPMS) | by Method 6020 |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
|-----------|--------|-----------|------|----------|------------------|------------------|--|
| Analyte | ug/l | | ug/l | | date / time | | |
| Antimony | ND | | 4.00 | 1 | 05/28/2020 20:19 | WG1481528 | |
| Arsenic | 9.22 | | 2.00 | 1 | 05/28/2020 20:19 | <u>WG1481528</u> | |
| Beryllium | ND | | 2.00 | 1 | 05/29/2020 09:36 | WG1481528 | |
| Cadmium | ND | | 1.00 | 1 | 05/28/2020 20:19 | <u>WG1481528</u> | |
| Copper | ND | | 5.00 | 1 | 05/28/2020 20:19 | WG1481528 | |
| Lead | ND | | 5.00 | 1 | 05/28/2020 20:19 | <u>WG1481528</u> | |
| Selenium | ND | | 2.00 | 1 | 05/28/2020 20:19 | WG1481528 | |
| Thallium | ND | | 2.00 | 1 | 05/28/2020 20:19 | <u>WG1481528</u> | |
| Zinc | ND | | 25.0 | 1 | 05/28/2020 20:19 | WG1481528 | |

| MW-4 Collected date/time: 05/20/2 | 0 12:35 | | SAMP | LE RE | SULTS - 02 510 | 2 ONE LAB. NATIC | DNWIDE. 🧩 |
|--------------------------------------|------------|-----------|-------|----------|-------------------|------------------|-----------------|
| Calculated Results | | | | | | | 1 |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | —— Ср |
| Analyte | ug/l | | ug/l | | date / time | — | |
| Hardness (calculated) as CaCO3 | 566000 | | 2500 | 1 | 05/29/2020 00:12 | WG1481518 | Tc |
| Gravimetric Analysis b | y Method 2 | 2540 C-20 | 011 | | | | ³ Ss |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | ⁴ Cn |
| Dissolved Solids | 533000 | | 10000 | 1 | 05/23/2020 14:57 | WG1481381 | CII |
| Wet Chemistry by Met | hod 410.4 | | | | | | ⁵ Sr |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | 6 |
| Analyte | ug/l | | ug/l | | date / time | | ଁ Q c |
| COD | ND | | 20000 | 1 | 05/28/2020 03:44 | WG1483083 | |
| Wet Chemistry by Met | hod 9020E | 3 | | | | | [′] Gl |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | 8 1 |
| Analyte | ug/l | | ug/l | | date / time | | ĬĂĬ |
| ТОХ | ND | | 100 | 1 | 05/27/2020 15:29 | WG1482110 | 9 |
| Wet Chemistry by Met | hod 90564 | 4 | | | | | Sc |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | |
| Chloride | 6420 | | 1000 | 1 | 05/29/2020 00:52 | WG1482574 | |
| Fluoride | 463 | | 150 | 1 | 05/29/2020 00:52 | WG1482574 | |
| Sulfate | 23300 | | 5000 | 1 | 05/29/2020 00:52 | WG1482574 | |
| Wet Chemistry by Met | hod 90604 | 4 | | | | | |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | |
| TOC (Total Organic Carbon) | 3250 | | 1000 | 1 | 05/28/2020 02:34 | WG1482704 | |
| Mercury by Method 74 | 170A | | | | | | |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | |
| Mercury | ND | | 0.200 | 1 | 05/26/2020 14:54 | WG1481265 | |
| Metals (ICP) by Method | d 6010B | | | | | | |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | |
| Aluminum | ND | | 200 | 1 | 05/29/2020 00:12 | WG1481518 | |
| Barium | 434 | | 5.00 | 1 | 05/29/2020 00:12 | WG1481518 | |
| Boron | ND | | 200 | 1 | 05/29/2020 00:12 | WG1481518 | |
| Calcium | 149000 | | 1000 | 1 | 05/29/2020 00:12 | WG1481518 | |
| Chromium | ND | | 10.0 | 1 | 05/29/2020 00:12 | WG1481518 | |
| Cobalt | ND | | 10.0 | 1 | 05/29/2020 00:12 | WG1481518 | |
| Iron | 6650 | | 100 | 1 | 05/29/2020 00:12 | WG1481518 | |
| Magnacium | 47200 | | 1000 | 4 | 05/20/2020 00:12 | WC1401E10 | |

ACCOUNT: SCS Engineers - KS

47300

1210

ND

ND

7280

Magnesium

Manganese

Nickel

Silver

Sodium

PROJECT: 27213167.19

1

1

1

1

1

1000

10.0

10.0

5.00

3000

SDG: L1221510

05/29/2020 00:12

05/29/2020 00:12

05/29/2020 00:12

05/29/2020 00:12

05/29/2020 00:12

WG1481518

WG1481518

WG1481518

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WG1481518

DATE/TIME: 07/10/20 12:10 PAGE: 9 of 41

SAMPLE RESULTS - 02

ONE LAB. NATIONWIDE.

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| Collected date/time: | 05/20/20 12:35 |
|----------------------|----------------|
| Metals (ICPMS) | by Method 6020 |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
|-----------|--------|-----------|------|----------|------------------|-----------|--|
| Analyte | ug/l | | ug/l | | date / time | | |
| Antimony | ND | | 4.00 | 1 | 05/28/2020 20:22 | WG1481528 | |
| Arsenic | 58.1 | | 2.00 | 1 | 05/28/2020 20:22 | WG1481528 | |
| Beryllium | ND | | 2.00 | 1 | 05/29/2020 09:39 | WG1481528 | |
| Cadmium | ND | | 1.00 | 1 | 05/28/2020 20:22 | WG1481528 | |
| Copper | ND | | 5.00 | 1 | 05/28/2020 20:22 | WG1481528 | |
| Lead | ND | | 5.00 | 1 | 05/28/2020 20:22 | WG1481528 | |
| Selenium | ND | | 2.00 | 1 | 05/28/2020 20:22 | WG1481528 | |
| Thallium | ND | | 2.00 | 1 | 05/28/2020 20:22 | WG1481528 | |
| Zinc | ND | | 25.0 | 1 | 05/28/2020 20:22 | WG1481528 | |

| MW-5 Collected date/time: 05/20/2 | 0 10:20 | | SAMPI | LE RE: | SULTS - 03 510 | ONE LAB. NATIONWIDE. | * |
|---|--|--------------------------------------|---|---|--|---|-------------------|
| Calculated Results | | | | | | | 1 |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | - Ср |
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Hardness (calculated) as CaCO3 | 893000 | | 2500 | 1 | 05/29/2020 00:15 | <u>WG1481518</u> | Tc |
| Gravimetric Analysis b | y Method 2 | 540 C-20 |)11 | | | | ³ Ss |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | - ^⁴ Cn |
| Dissolved Solids | 1440000 | <u>13</u> | 25000 | 1 | 05/23/2020 14:57 | <u>WG1481381</u> | |
| Wet Chemistry by Met | hod 410.4 | | | | | | ⁵Sr |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | 6 |
| Analyte | ug/l | | ug/l | | date / time | | ČQc |
| COD | 28400 | | 20000 | 1 | 05/28/2020 03:45 | <u>WG1483083</u> | 7 |
| Wet Chemistry by Met | hod 9020E | } | | | | | [′] GI |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | 8 |
| Analyte | ug/l | | ug/l | | date / time | | ĨĂ |
| TOX | ND | | 100 | 1 | 05/27/2020 15:48 | WG1482110 | 9 |
| Wet Chemistry by Met | hod 9056A Result | Qualifier | RDL | Dilution | Analysis | Batch | د د |
| | Result | Quaimer | NDL | Dilution | Analysis | Bateri | |
| Analyte | ua/l | | ua/l | | date / time | | |
| | ug/l | | ug/l | 10 | date / time 05/29/2020 01:13 | WG1482574 | _ |
| Chloride | 160000 | | 10000 | 10 | 05/29/2020 01:13 | WG1482574 WG1482574 | |
| Analyte Chloride Fluoride Sulfate | - | | | 10 1 10 | | WG1482574 WG1482574 WG1482574 WG1482574 | |
| Chloride Fluoride Sulfate | 160000 318 836000 | | 10000 150 | 1 | 05/29/2020 01:13 05/29/2020 01:02 | WG1482574 | |
| Chloride Fluoride | 160000 318 836000 | Qualifier | 10000 150 | 1 | 05/29/2020 01:13 05/29/2020 01:02 | WG1482574 | - |
| Chloride Fluoride Sulfate | 160000 318 836000 hod 9060A | | 10000 150 50000 | 1 10 | 05/29/2020 01:13 05/29/2020 01:02 05/29/2020 01:13 | WG1482574 WG1482574 | |
| Chloride Fluoride Sulfate Wet Chemistry by Met | 160000 318 836000 hod 9060A Result | | 10000 150 50000 RDL | 1 10 | 05/29/2020 01:13 05/29/2020 01:02 05/29/2020 01:13 Analysis | WG1482574 WG1482574 | |
| Chloride Fluoride Sulfate Wet Chemistry by Met Analyte TOC (Total Organic Carbon) | 160000 318 836000 hod 9060A Result ug/l 3100 | | 10000 150 50000 RDL ug/l | 1 10 Dilution | 05/29/2020 01:13 05/29/2020 01:02 05/29/2020 01:13 05/29/2020 01:13 Analysis date / time | WG1482574 WG1482574 Batch | - |
| Chloride Fluoride Sulfate Wet Chemistry by Met Analyte TOC (Total Organic Carbon) | 160000 318 836000 hod 9060A Result ug/l 3100 | | 10000 150 50000 RDL ug/l | 1 10 Dilution | 05/29/2020 01:13 05/29/2020 01:02 05/29/2020 01:13 05/29/2020 01:13 Analysis date / time | WG1482574 WG1482574 Batch | - |
| Chloride Fluoride Sulfate Wet Chemistry by Met Analyte TOC (Total Organic Carbon) Mercury by Method 74 | 160000 318 836000 hod 9060A Result ug/l 3100 | Qualifier | 10000 150 50000 RDL ug/l 1000 | 1 10 Dilution 1 | 05/29/2020 01:13 05/29/2020 01:02 05/29/2020 01:13 Analysis date / time 05/28/2020 03:34 | WG1482574 WG1482574 Batch WG1482704 | |
| Chloride Fluoride Sulfate Wet Chemistry by Met | 160000 318 836000 hod 9060A Result ug/l 3100 F70A Result | Qualifier | 10000 150 50000 RDL ug/l 1000 RDL | 1 10 Dilution 1 | 05/29/2020 01:13 05/29/2020 01:02 05/29/2020 01:13 Analysis date / time 05/28/2020 03:34 Analysis | WG1482574 WG1482574 Batch WG1482704 | - |
| Chloride Fluoride Sulfate Wet Chemistry by Met Analyte TOC (Total Organic Carbon) Mercury by Method 74 Analyte | 160000 318 836000 hod 9060A Result ug/l 3100 F70A Result ug/l ND | Qualifier | 10000 150 50000 RDL ug/l 1000 RDL ug/l | 1 10 Dilution 1 Dilution | 05/29/2020 01:13 05/29/2020 01:02 05/29/2020 01:13 Analysis date / time 05/28/2020 03:34 Analysis date / time | WG1482574 WG1482574 Batch WG1482704 Batch | - |
| Chloride Fluoride Sulfate Wet Chemistry by Meth Analyte TOC (Total Organic Carbon) Mercury by Method 74 Analyte Mercury Metals (ICP) by Method | 160000 318 836000 hod 9060A Result ug/l 3100 FOA Result ug/l ND d 6010B Result | Qualifier | 10000 150 50000 RDL ug/l 1000 RDL ug/l 0.200 RDL | 1 10 Dilution 1 Dilution | 05/29/2020 01:13 05/29/2020 01:02 05/29/2020 01:13 Analysis date / time 05/28/2020 03:34 Analysis date / time 05/26/2020 14:56 Analysis | WG1482574 WG1482574 Batch WG1482704 Batch | - |
| Chloride Fluoride Sulfate Wet Chemistry by Met Analyte TOC (Total Organic Carbon) Mercury by Method 74 Analyte Mercury | 160000 318 836000 hod 9060A Result ug/l 3100 F70A Result ug/l ND d 6010B Result ug/l | <u>Qualifier</u> <u>Qualifier</u> | 10000 150 50000 RDL ug/l 1000 RDL ug/l 0.200 | 1 10 Dilution 1 Dilution | 05/29/2020 01:13 05/29/2020 01:02 05/29/2020 01:13 Analysis date / time 05/28/2020 03:34 Analysis date / time 05/26/2020 14:56 Analysis date / time | WG1482574 WG1482574 Batch WG1482704 Batch WG1481265 Batch | - |
| Chloride Fluoride Sulfate Wet Chemistry by Met Analyte TOC (Total Organic Carbon) Mercury by Method 74 Analyte Mercury Metals (ICP) by Method | 160000 318 836000 hod 9060A Result ug/l 3100 F70A Result ug/l ND d 6010B Result ug/l ND | <u>Qualifier</u> <u>Qualifier</u> | 10000 150 50000 RDL ug/l 1000 RDL ug/l 0.200 RDL ug/l 200 | 1 10 Dilution 1 Dilution | 05/29/2020 01:13 05/29/2020 01:02 05/29/2020 01:13 Analysis date / time 05/28/2020 03:34 Analysis date / time 05/26/2020 14:56 Analysis date / time 05/29/2020 00:15 | WG1482574 WG1482574 Batch WG1482704 Batch WG1481265 Batch WG1481265 WG1481518 | |
| Chloride Fluoride Sulfate Wet Chemistry by Met Analyte TOC (Total Organic Carbon) Mercury by Method 74 Analyte Metals (ICP) by Method Analyte Aluminum | 160000 318 836000 hod 9060A Result ug/l 3100 F70A Result ug/l ND d 6010B Result ug/l | <u>Qualifier</u> <u>Qualifier</u> | 10000 150 50000 RDL ug/l 0.200 RDL ug/l ug/l | 1 10 Dilution 1 Dilution 1 Dilution 1 | 05/29/2020 01:13 05/29/2020 01:02 05/29/2020 01:13 Analysis date / time 05/28/2020 03:34 Analysis date / time 05/26/2020 14:56 Analysis date / time | WG1482574 WG1482574 Batch WG1482704 Batch WG1481265 Batch | - |
| Chloride Fluoride Sulfate Wet Chemistry by Met Analyte TOC (Total Organic Carbon) Mercury by Method 74 Analyte Mercury Metals (ICP) by Method Analyte Aluminum Barium | 160000 318 836000 hod 9060A Result ug/l 3100 470A Result ug/l ND d 6010B Result ug/l ND 192 1390 | <u>Qualifier</u> <u>Qualifier</u> | 10000 150 50000 RDL ug/l 1000 RDL ug/l 0.200 RDL ug/l 200 5.00 200 | 1 10 Dilution 1 Dilution 1 Dilution 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 05/29/2020 01:13 05/29/2020 01:02 05/29/2020 01:03 Analysis date / time 05/28/2020 03:34 Analysis date / time 05/26/2020 14:56 Analysis date / time 05/29/2020 00:15 05/29/2020 00:15 | WG1482574 WG1482574 Batch WG1482704 Batch WG1481265 WG1481265 Batch WG1481518 WG1481518 WG1481518 WG1481518 WG1481518 WG1481518 | |
| Chloride Fluoride Sulfate Wet Chemistry by Meth Analyte TOC (Total Organic Carbon) Mercury by Method 74 Analyte Mercury Metals (ICP) by Method Analyte Aluminum Barium Boron | 160000 318 836000 hod 9060A Result ug/l 3100 FOA Result ug/l ND d 6010B Result ug/l ND d 6010B Result ug/l 192 1390 265000 | <u>Qualifier</u> <u>Qualifier</u> | 10000 150 50000 RDL ug/l 1000 RDL ug/l 0.200 RDL ug/l 200 5.00 200 1000 | 1 10 Dilution 1 Dilution 1 Dilution 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 05/29/2020 01:13 05/29/2020 01:02 05/29/2020 01:03 Analysis date / time 05/28/2020 03:34 Analysis date / time 05/26/2020 14:56 So5/29/2020 00:15 05/29/2020 00:15 05/29/2020 00:15 05/29/2020 00:15 | WG1482574 WG1482574 Batch WG1482704 Batch WG1481265 WG1481265 WG1481518 WG1481518 | |
| Chloride Fluoride Sulfate Wet Chemistry by Met Analyte TOC (Total Organic Carbon) Mercury by Method 74 Analyte Metals (ICP) by Method Analyte Aluminum | 160000 318 836000 hod 9060A Result ug/l 3100 FOA Result ug/l ND d 6010B Result ug/l ND d 6010B Result ug/l 192 1390 265000 ND | <u>Qualifier</u> <u>Qualifier</u> | 10000 150 50000 RDL ug/l 1000 RDL ug/l 0.200 RDL ug/l 200 5.00 200 1000 10.0 | 1 10 Dilution 1 Dilution 1 Dilution 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 05/29/2020 01:13 05/29/2020 01:02 05/29/2020 01:13 Analysis date / time 05/28/2020 03:34 Analysis date / time 05/26/2020 14:56 Sof/29/2020 01:5 05/29/2020 00:15 05/29/2020 00:15 05/29/2020 00:15 05/29/2020 00:15 | WG1482574 WG1482574 Batch WG1482704 Batch WG1481265 WG1481265 WG1481265 WG1481518 WG1481518 | |
| Chloride Fluoride Sulfate Wet Chemistry by Met Analyte TOC (Total Organic Carbon) Mercury by Method 74 Analyte Mercury Metals (ICP) by Method Analyte Aluminum Barium Boron Calcium | 160000 318 836000 hod 9060A Result ug/l 3100 FOA Result ug/l ND d 6010B Result ug/l ND d 6010B Result ug/l 192 1390 265000 | <u>Qualifier</u> <u>Qualifier</u> | 10000 150 50000 RDL ug/l 1000 RDL ug/l 0.200 RDL ug/l 200 5.00 200 1000 | 1 10 Dilution 1 Dilution 1 1 Dilution 1 1 1 1 1 1 | 05/29/2020 01:13 05/29/2020 01:02 05/29/2020 01:03 Analysis date / time 05/28/2020 03:34 Analysis date / time 05/26/2020 14:56 So5/29/2020 00:15 05/29/2020 00:15 05/29/2020 00:15 05/29/2020 00:15 | WG1482574 WG1482574 Batch WG1482704 Batch WG1481265 WG1481265 WG1481518 WG1481518 | |

WG1481518 Magnesium 55900 1000 05/29/2020 00:15 1 WG1481518 Manganese 1270 10.0 1 05/29/2020 00:15 ND WG1481518 Nickel 10.0 1 05/29/2020 00:15 Silver ND 5.00 1 05/29/2020 00:15 WG1481518 159000 3000 WG1481518 Sodium 1 05/29/2020 00:15

PROJECT: 27213167.19

SDG: L1221510

Collected date/time: 05/20/20 10:20 Metals (ICPMS) by Method 6020

SAMPLE RESULTS - 03 L1221510

ONE LAB. NATIONWIDE.

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| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|-----------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Antimony | ND | | 4.00 | 1 | 05/28/2020 20:25 | WG1481528 |
| Arsenic | 11.5 | | 2.00 | 1 | 05/28/2020 20:25 | WG1481528 |
| Beryllium | ND | | 2.00 | 1 | 05/29/2020 09:56 | WG1481528 |
| Cadmium | ND | | 1.00 | 1 | 05/28/2020 20:25 | WG1481528 |
| Copper | ND | | 5.00 | 1 | 05/28/2020 20:25 | WG1481528 |
| Lead | ND | | 5.00 | 1 | 05/28/2020 20:25 | WG1481528 |
| Selenium | ND | | 2.00 | 1 | 05/28/2020 20:25 | WG1481528 |
| Thallium | ND | | 2.00 | 1 | 05/28/2020 20:25 | WG1481528 |
| Zinc | ND | | 25.0 | 1 | 05/28/2020 20:25 | WG1481528 |

SDG: L1221510

| MW-1 Collected date/time: 05/20/ | 20 09:55 | | SAMP | LE RE | SULTS - 04 | 4 | ONE LAB. NATIONWIDE. | * |
|-------------------------------------|------------|-----------|-------|----------|------------------|-----------|----------------------|-----------------|
| Calculated Results | | | | | | | | 1 |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | Ср |
| Analyte | ug/l | | ug/l | | date / time | | | 2 |
| Hardness (calculated) as CaCO3 | 448000 | | 2500 | 1 | 05/29/2020 00:18 | WG1481518 | | Tc |
| Wet Chemistry by Me | thod 410.4 | | | | | | | ³ Ss |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | |
| Analyte | ug/l | | ug/l | | date / time | | | ⁴ Cn |
| COD | ND | | 20000 | 1 | 05/28/2020 03:45 | WG1483083 | | CIT |
| Wet Chemistry by Me | thod 90208 | 3 | | | | | | ⁵ Sr |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | 6 |
| Analyte | ug/l | | ug/l | | date / time | | | [°] Qc |
| ТОХ | ND | | 100 | 1 | 05/27/2020 16:09 | WG1482110 | | |
| | | | | | | | | ⁷ Gl |
| Wet Chemistry by Me | thod 9060 | 4 | | | | | | |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | ⁸ Al |
| Analyte | ug/l | | ug/l | | date / time | | | |
| TOC (Total Organic Carbon) | 1790 | B | 1000 | 1 | 05/28/2020 03:48 | WG1482704 | | ⁹ Sc |
| Mercury by Method 7 | 470A | | | | | | | |
| | Desult | Qualifian | וחח | Dilution | A | Batah | | |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Mercury | ND | | 0.200 | 1 | 05/26/2020 14:57 | WG1481265 |

Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|-----------|--------|-----------|------|----------|------------------|------------------|
| | | Quaimer | | Dilution | | Batch |
| Analyte | ug/l | | ug/l | | date / time | |
| Aluminum | ND | | 200 | 1 | 05/29/2020 00:18 | WG1481518 |
| Barium | 239 | | 5.00 | 1 | 05/29/2020 00:18 | WG1481518 |
| Chromium | ND | | 10.0 | 1 | 05/29/2020 00:18 | WG1481518 |
| Cobalt | ND | | 10.0 | 1 | 05/29/2020 00:18 | <u>WG1481518</u> |
| Iron | 11000 | | 100 | 1 | 05/29/2020 00:18 | WG1481518 |
| Magnesium | 28500 | | 1000 | 1 | 05/29/2020 00:18 | <u>WG1481518</u> |
| Manganese | 638 | | 10.0 | 1 | 05/29/2020 00:18 | WG1481518 |
| Nickel | ND | | 10.0 | 1 | 05/29/2020 00:18 | <u>WG1481518</u> |
| Silver | ND | | 5.00 | 1 | 05/29/2020 00:18 | WG1481518 |
| Sodium | 11500 | | 3000 | 1 | 05/29/2020 00:18 | WG1481518 |
| | | | | | | |

Metals (ICPMS) by Method 6020

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|-----------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Antimony | ND | | 4.00 | 1 | 05/28/2020 20:29 | WG1481528 |
| Arsenic | 13.6 | | 2.00 | 1 | 05/28/2020 20:29 | WG1481528 |
| Beryllium | ND | | 2.00 | 1 | 05/29/2020 10:00 | WG1481528 |
| Cadmium | ND | | 1.00 | 1 | 05/28/2020 20:29 | WG1481528 |
| Copper | ND | | 5.00 | 1 | 05/28/2020 20:29 | WG1481528 |
| Lead | ND | | 5.00 | 1 | 05/28/2020 20:29 | WG1481528 |
| Selenium | ND | | 2.00 | 1 | 05/28/2020 20:29 | WG1481528 |
| Thallium | ND | | 2.00 | 1 | 05/28/2020 20:29 | WG1481528 |
| Zinc | ND | | 25.0 | 1 | 05/28/2020 20:29 | WG1481528 |

PROJECT: 27213167.19

SDG: L1221510

| MW-2 Collected date/time: 05/20/2 | 20 10:55 | | SAMP | LE RES | SULTS - 05 ₅10 | 5 | ONE LAB. NATIONWIDE. |
|--------------------------------------|----------------------|-----------|---------------|---------------|---------------------------------|--------------------|----------------------|
| Calculated Results | | | | | | | |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | |
| Hardness (calculated) as CaCO3 | 558000 | | 2500 | 1 | 05/29/2020 00:20 | WG1481518 | |
| Wet Chemistry by Met | thod 410.4 Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Arrahar | | | | | | | |
| Analyte | ug/l | | ug/l | | date / time | | |
| COD | ug/l ND | | ug/l 20000 | 1 | date / time 05/28/2020 03:46 | WG1483083 | |
| | ND | | 0 | 1 | | <u>WG1483083</u> | |
| COD | ND | Qualifier | 0 | 1 Dilution | | WG1483083 Batch | |
| COD | ND thod 9020B | | 20000 | | 05/28/2020 03:46 | | |

Wet Chemistry by Method 9060A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | ⁸ A I |
|----------------------------|--------|-----------|------|----------|------------------|-----------|------------------|
| Analyte | ug/l | | ug/l | | date / time | | AI |
| TOC (Total Organic Carbon) | 1780 | B | 1000 | 1 | 05/28/2020 05:33 | WG1482704 | ⁹ Sc |

Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Mercury | ND | | 0.200 | 1 | 05/26/2020 14:59 | WG1481265 |

Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|-----------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Aluminum | ND | | 200 | 1 | 05/29/2020 00:20 | WG1481518 |
| Barium | 216 | | 5.00 | 1 | 05/29/2020 00:20 | WG1481518 |
| Chromium | ND | | 10.0 | 1 | 05/29/2020 00:20 | WG1481518 |
| Cobalt | ND | | 10.0 | 1 | 05/29/2020 00:20 | WG1481518 |
| Iron | 13000 | | 100 | 1 | 05/29/2020 00:20 | WG1481518 |
| Magnesium | 35300 | | 1000 | 1 | 05/29/2020 00:20 | WG1481518 |
| Manganese | 750 | | 10.0 | 1 | 05/29/2020 00:20 | WG1481518 |
| Nickel | ND | | 10.0 | 1 | 05/29/2020 00:20 | WG1481518 |
| Silver | ND | | 5.00 | 1 | 05/29/2020 00:20 | WG1481518 |
| Sodium | 12100 | | 3000 | 1 | 05/29/2020 00:20 | WG1481518 |

Metals (ICPMS) by Method 6020

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|-----------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Antimony | ND | | 4.00 | 1 | 05/28/2020 20:39 | WG1481528 |
| Arsenic | 21.9 | | 2.00 | 1 | 05/28/2020 20:39 | WG1481528 |
| Beryllium | ND | | 2.00 | 1 | 05/29/2020 10:03 | WG1481528 |
| Cadmium | ND | | 1.00 | 1 | 05/28/2020 20:39 | WG1481528 |
| Copper | ND | | 5.00 | 1 | 05/28/2020 20:39 | WG1481528 |
| Lead | ND | | 5.00 | 1 | 05/28/2020 20:39 | WG1481528 |
| Selenium | ND | | 2.00 | 1 | 05/28/2020 20:39 | WG1481528 |
| Thallium | ND | | 2.00 | 1 | 05/28/2020 20:39 | WG1481528 |
| Zinc | ND | | 25.0 | 1 | 05/28/2020 20:39 | WG1481528 |

PROJECT: 27213167.19

SDG: L1221510 DATE/TIME: 07/10/20 12:10 Ср

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| MW-6 Collected date/time: 05/20/2 | 0 09:40 | | SAMP | LE RE | SULTS - 06 510 | 6 | ONE LAB. NATIONWIDE. | * |
|--------------------------------------|-----------|-----------|-------|----------|-------------------|-----------|----------------------|-----------------|
| Calculated Results | | | | | | | | 1 |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | Ср |
| Analyte | ug/l | | ug/l | | date / time | | | 2 |
| Hardness (calculated) as CaCO3 | 473000 | | 2500 | 1 | 05/29/2020 00:28 | WG1481518 | | ⁻Tc |
| Wet Chemistry by Met | hod 410.4 | | | | | | | ³ Ss |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | |
| Analyte | ug/l | | ug/l | | date / time | | | ⁴ Cn |
| COD | 25300 | | 20000 | 1 | 05/28/2020 03:46 | WG1483083 | | СП |
| Wet Chemistry by Met | hod 9020B | } | | | | | | ⁵Sr |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | 6 |
| Analyte | ug/l | | ug/l | | date / time | | | [°] Qc |
| ТОХ | ND | | 100 | 1 | 05/27/2020 16:50 | WG1482110 | | |
| Wet Chemistry by Met | hod 9060A | A. | | | | | | ⁷ Gl |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | ⁸ Al |
| Analyte | ug/l | | ug/l | | date / time | | | AI |
| TOC (Total Organic Carbon) | 1920 | B | 1000 | 1 | 05/28/2020 05:49 | WG1482704 | | ⁹ Sc |
| Mercury by Method 74 | 70A | | | | | | | |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | |

date / time

05/26/2020 15:01

WG1481265

Metals (ICP) by Method 6010B

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| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|-----------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Aluminum | ND | | 200 | 1 | 05/29/2020 00:28 | WG1481518 |
| Barium | 281 | | 5.00 | 1 | 05/29/2020 00:28 | WG1481518 |
| Chromium | ND | | 10.0 | 1 | 05/29/2020 00:28 | WG1481518 |
| Cobalt | ND | | 10.0 | 1 | 05/29/2020 00:28 | WG1481518 |
| Iron | 7500 | | 100 | 1 | 05/29/2020 00:28 | WG1481518 |
| Magnesium | 31000 | | 1000 | 1 | 05/29/2020 00:28 | WG1481518 |
| Manganese | 595 | | 10.0 | 1 | 05/29/2020 00:28 | WG1481518 |
| Nickel | ND | | 10.0 | 1 | 05/29/2020 00:28 | WG1481518 |
| Silver | ND | | 5.00 | 1 | 05/29/2020 00:28 | WG1481518 |
| Sodium | 6180 | | 3000 | 1 | 05/29/2020 00:28 | WG1481518 |

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Metals (ICPMS) by Method 6020

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|-----------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Antimony | ND | | 4.00 | 1 | 05/28/2020 20:42 | WG1481528 |
| Arsenic | 21.5 | | 2.00 | 1 | 05/28/2020 20:42 | WG1481528 |
| Beryllium | ND | | 2.00 | 1 | 05/29/2020 10:06 | WG1481528 |
| Cadmium | ND | | 1.00 | 1 | 05/28/2020 20:42 | WG1481528 |
| Copper | ND | | 5.00 | 1 | 05/28/2020 20:42 | WG1481528 |
| Lead | ND | | 5.00 | 1 | 05/28/2020 20:42 | WG1481528 |
| Selenium | ND | | 2.00 | 1 | 05/28/2020 20:42 | WG1481528 |
| Thallium | ND | | 2.00 | 1 | 05/28/2020 20:42 | WG1481528 |
| Zinc | ND | | 25.0 | 1 | 05/28/2020 20:42 | WG1481528 |

PROJECT: 27213167.19

SDG: L1221510

| MW-7 | |
|---------------------|------------------|
| Collected date/time | : 05/20/20 10:30 |

SAMPLE RESULTS - 07 L1221510



| Calculated | Results |
|------------|---------|

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| Calculated Results | | | | | | | 1 |
|--------------------------------|------------|--------------|-------|----------|------------------|-----------|---|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Hardness (calculated) as CaCO3 | 480000 | | 2500 | 1 | 05/29/2020 00:02 | WG1481518 | 2 |
| Wet Chemistry by Met | thod 410.4 | | | | | | 3 |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | L |
| Analyte | ug/l | | ug/l | | date / time | | 4 |
| COD | ND | | 20000 | 1 | 05/28/2020 03:47 | WG1483083 | |
| Wet Chemistry by Met | thod 90201 | 3 | | | | | 5 |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | 0 |
| ТОХ | ND | <u>J3 J5</u> | 100 | 1 | 05/27/2020 18:23 | WG1482710 | |
| Wet Chemistry by Met | thod 9060, | 4 | | | | | / |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | 8 |
| Analyte | ug/l | | ug/l | | date / time | | |
| TOC (Total Organic Carbon) | 1820 | B | 1000 | 1 | 05/28/2020 06:09 | WG1482704 | 9 |
| Mercury by Method 74 | 470A | | | | | | |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | |
| | | | | | | | |

05/26/2020 12:29

WG1481265

Metals (ICP) by Method 6010B

ND

Mercury

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|-----------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Aluminum | ND | | 200 | 1 | 05/29/2020 00:02 | WG1481518 |
| Barium | 223 | <u>01</u> | 5.00 | 1 | 05/29/2020 00:02 | WG1481518 |
| Chromium | ND | | 10.0 | 1 | 05/29/2020 00:02 | WG1481518 |
| Cobalt | ND | | 10.0 | 1 | 05/29/2020 00:02 | WG1481518 |
| Iron | 1240 | | 100 | 1 | 05/29/2020 00:02 | WG1481518 |
| Magnesium | 29800 | <u>01</u> | 1000 | 1 | 05/29/2020 00:02 | WG1481518 |
| Manganese | 574 | <u>01</u> | 10.0 | 1 | 05/29/2020 00:02 | WG1481518 |
| Nickel | ND | | 10.0 | 1 | 05/29/2020 00:02 | WG1481518 |
| Silver | ND | | 5.00 | 1 | 05/29/2020 00:02 | WG1481518 |
| Sodium | 8090 | | 3000 | 1 | 05/29/2020 00:02 | WG1481518 |
| | | | | | | |

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Metals (ICPMS) by Method 6020

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|-----------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Antimony | ND | | 4.00 | 1 | 05/28/2020 16:32 | WG1481528 |
| Arsenic | 7.68 | | 2.00 | 1 | 05/28/2020 16:32 | WG1481528 |
| Beryllium | ND | | 2.00 | 1 | 05/28/2020 16:32 | WG1481528 |
| Cadmium | ND | | 1.00 | 1 | 05/28/2020 16:32 | WG1481528 |
| Copper | ND | | 5.00 | 1 | 05/28/2020 16:32 | WG1481528 |
| Lead | ND | | 5.00 | 1 | 05/28/2020 16:32 | WG1481528 |
| Selenium | ND | | 2.00 | 1 | 05/28/2020 16:32 | WG1481528 |
| Thallium | ND | | 2.00 | 1 | 05/28/2020 16:32 | WG1481528 |
| Zinc | ND | | 25.0 | 1 | 05/28/2020 16:32 | WG1481528 |

PROJECT: 27213167.19

SDG: L1221510

| MW-8 Collected date/time: 05/20/2 | 20 12:00 | | SAMP | | SULTS - 08 510 | 3 | ONE LAB. NATIONWIDE. | 1 |
|--------------------------------------|------------|-----------|-------|----------|-------------------|-----------|----------------------|---|
| Calculated Results | | | | | | | | 1 |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | |
| Analyte | ug/l | | ug/l | | date / time | | | 5 |
| Hardness (calculated) as CaCO3 | 480000 | | 2500 | 1 | 05/29/2020 00:31 | WG1481518 | | |
| Wet Chemistry by Me | thod 410.4 | | | | | | | 3 |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | |
| Analyte | ug/l | | ug/l | | date / time | | | 4 |
| COD | ND | | 20000 | 1 | 05/28/2020 03:49 | WG1483083 | | L |
| Wet Chemistry by Me | thod 9020E | 3 | | | | | | Ş |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | 6 |
| Analyte | ug/l | | ug/l | | date / time | | | ľ |
| ТОХ | ND | | 100 | 1 | 05/27/2020 17:44 | WG1482110 | | |
| Wet Chemistry by Me | thod 90604 | 4 | | | | | | 7 |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | ٤ |
| Analyte | ug/l | | ug/l | | date / time | | | |
| TOC (Total Organic Carbon) | 1710 | B | 1000 | 1 | 05/28/2020 07:06 | WG1482704 | | ć |

Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Mercury | ND | | 0.200 | 1 | 05/26/2020 15:03 | WG1481265 |

Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|-----------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Aluminum | ND | | 200 | 1 | 05/29/2020 00:31 | WG1481518 |
| Barium | 217 | | 5.00 | 1 | 05/29/2020 00:31 | WG1481518 |
| Chromium | ND | | 10.0 | 1 | 05/29/2020 00:31 | WG1481518 |
| Cobalt | ND | | 10.0 | 1 | 05/29/2020 00:31 | WG1481518 |
| Iron | 3340 | | 100 | 1 | 05/29/2020 00:31 | WG1481518 |
| Magnesium | 28000 | | 1000 | 1 | 05/29/2020 00:31 | WG1481518 |
| Manganese | 645 | | 10.0 | 1 | 05/29/2020 00:31 | WG1481518 |
| Nickel | ND | | 10.0 | 1 | 05/29/2020 00:31 | WG1481518 |
| Silver | ND | | 5.00 | 1 | 05/29/2020 00:31 | WG1481518 |
| Sodium | 6510 | | 3000 | 1 | 05/29/2020 00:31 | WG1481518 |

Metals (ICPMS) by Method 6020

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|-----------|--------|-----------|------|----------|------------------|------------------|
| Analyte | ug/l | | ug/l | | date / time | |
| Antimony | ND | | 4.00 | 1 | 05/28/2020 11:04 | <u>WG1481529</u> |
| Arsenic | 11.5 | | 2.00 | 1 | 05/28/2020 11:04 | WG1481529 |
| Beryllium | ND | | 2.00 | 1 | 05/28/2020 11:04 | WG1481529 |
| Cadmium | ND | | 1.00 | 1 | 05/28/2020 11:04 | WG1481529 |
| Copper | ND | | 5.00 | 1 | 05/28/2020 11:04 | WG1481529 |
| Lead | ND | | 5.00 | 1 | 05/28/2020 11:04 | WG1481529 |
| Selenium | ND | | 2.00 | 1 | 05/28/2020 11:04 | WG1481529 |
| Thallium | ND | | 2.00 | 1 | 05/28/2020 11:04 | WG1481529 |
| Zinc | ND | | 25.0 | 1 | 05/28/2020 11:04 | WG1481529 |

PROJECT: 27213167.19

SDG: L1221510 DATE/TIME: 07/10/20 12:10 Ср

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ONE LAB. NATIONWIDE. DUPLICATE SAMPLE RESULTS - 09 Collected date/time: 05/20/20 10:35 L1221510 **Calculated Results** Qualifier RDL Dilution Result Analysis Batch Analyte ug/l ug/l date / time Hardness (calculated) as CaCO3 482000 2500 1 05/29/2020 00:34 WG1481518 Wet Chemistry by Method 410.4 Result Qualifier RDL Dilution Analysis Batch Analyte ug/l ug/l date / time COD ND 20000 05/28/2020 03:49 WG1483083 1 Wet Chemistry by Method 9020B Result Qualifier RDL Dilution Analysis Batch Analyte ug/l date / time ug/l TOX ND 05/27/2020 18:03 100 1 WG1482110 Wet Chemistry by Method 9060A

Result Qualifier RDL Dilution Analysis Batch AI Analyte date / time ug/l ug/l TOC (Total Organic Carbon) 1800 05/28/2020 07:19 B 1000 1 WG1482704 Sc

Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Mercury | ND | | 0.200 | 1 | 05/26/2020 15:05 | WG1481265 |

Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|-----------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Aluminum | ND | | 200 | 1 | 05/29/2020 00:34 | WG1481518 |
| Barium | 223 | | 5.00 | 1 | 05/29/2020 00:34 | WG1481518 |
| Chromium | ND | | 10.0 | 1 | 05/29/2020 00:34 | WG1481518 |
| Cobalt | ND | | 10.0 | 1 | 05/29/2020 00:34 | WG1481518 |
| Iron | 1250 | | 100 | 1 | 05/29/2020 00:34 | WG1481518 |
| Magnesium | 30000 | | 1000 | 1 | 05/29/2020 00:34 | WG1481518 |
| Manganese | 566 | | 10.0 | 1 | 05/29/2020 00:34 | WG1481518 |
| Nickel | ND | | 10.0 | 1 | 05/29/2020 00:34 | WG1481518 |
| Silver | ND | | 5.00 | 1 | 05/29/2020 00:34 | WG1481518 |
| Sodium | 8240 | | 3000 | 1 | 05/29/2020 00:34 | WG1481518 |

Metals (ICPMS) by Method 6020

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|-----------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Antimony | ND | | 4.00 | 1 | 05/28/2020 11:07 | WG1481529 |
| Arsenic | 7.34 | | 2.00 | 1 | 05/28/2020 11:07 | WG1481529 |
| Beryllium | ND | | 2.00 | 1 | 05/28/2020 11:07 | WG1481529 |
| Cadmium | ND | | 1.00 | 1 | 05/28/2020 11:07 | WG1481529 |
| Copper | ND | | 5.00 | 1 | 05/28/2020 11:07 | WG1481529 |
| Lead | ND | | 5.00 | 1 | 05/28/2020 11:07 | WG1481529 |
| Selenium | ND | | 2.00 | 1 | 05/28/2020 11:07 | WG1481529 |
| Thallium | ND | | 2.00 | 1 | 05/28/2020 11:07 | WG1481529 |
| Zinc | ND | | 25.0 | 1 | 05/28/2020 11:07 | WG1481529 |

PROJECT: 27213167.19

SDG: L1221510

DATE/TIME: 07/10/20 12:10



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QUALITY CONTROL SUMMARY

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Method Blank (MB)

| (MB) R3531269-1 05/23 | 3/20 14:57 | | | |
|-----------------------|------------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Dissolved Solids | U | | 2820 | 10000 |

L1221510-03 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221510-03 05 | 5/23/20 14:57 • (DUI | P) R3531269-3 | 05/23/20 | 14:57 | | |
|---------------------|----------------------|---------------|----------|---------|---------------|-------------------|
| | Original Resu | It DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| Dissolved Solids | 1440000 | 1600000 | 1 | 10.7 | J3 | 5 |

Laboratory Control Sample (LCS)

| (LCS) R3531269-2 05 | (LCS) R3531269-2 05/23/20 14:57 | | | | | |
|---------------------|---------------------------------|------------|----------|-------------|---------------|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | |
| Analyte | ug/l | ug/l | % | % | | |
| Dissolved Solids | 8800000 | 8390000 | 95.3 | 85.0-115 | | |

SDG: L1221510 DATE/TIME: 07/10/20 12:10 PAGE: 19 of 41

Wet Chemistry by Method 410.4

QUALITY CONTROL SUMMARY L1221510-01,02,03,04,05,06,07,08,09

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Method Blank (MB)

| (MB) R3532385-1 05 | 5/28/20 03:42 | | | |
|--------------------|---------------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| COD | U | | 11700 | 20000 |

L1220720-03 Original Sample (OS) • Duplicate (DUP)

| (OS) L1220720-03 05/28/ | /20 03:43 • (DU | P) R3532385- | 3 05/28/2 | 20 03:43 | | |
|-------------------------|-----------------|--------------|-----------|----------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| COD | 21500 | 21100 | 1 | 1.67 | | 20 |

L1221510-02 Original Sample (OS) • Duplicate (DUP)

| L1221510-02 Origin | L1221510-02 Original Sample (OS) • Duplicate (DUP) | | | | | | | | | |
|--------------------------|---|------------|----------|---------|---------------|-------------------|-----------------|--|--|--|
| (OS) L1221510-02 05/28/2 | (OS) L1221510-02 05/28/20 03:44 • (DUP) R3532385-4 05/28/20 03:45 | | | | | | | | | |
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | ⁸ Al | | | |
| Analyte | ug/l | ug/l | | % | | % | | | | |
| COD | ND | 22100 | 1 | 11.2 | | 20 | °Sc | | | |

Laboratory Control Sample (LCS)

| (LCS) R3532385-2 05/2 | LCS) R3532385-2 05/28/20 03:42 | | | | | | | | |
|-----------------------|--------------------------------|------------|----------|-------------|---------------|--|--|--|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | | | | |
| Analyte | ug/l | ug/l | % | % | | | | | |
| COD | 222000 | 230000 | 104 | 90.0-110 | | | | | |

L1221510-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221510-07 05/28/20 03:47 • (MS) R3532385-5 05/28/20 03:47 • (MSD) R3532385-6 05/28/20 03:47 | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| COD | 400000 | ND | 424000 | 423000 | 102 | 102 | 1 | 80.0-120 | | | 0.151 | 20 |

| ACCOUNT: | PROJECT: | SDG: | DATE/TIME: | PAGE: |
|--------------------|-------------|----------|----------------|----------|
| SCS Engineers - KS | 27213167.19 | L1221510 | 07/10/20 12:10 | 20 of 41 |

Wet Chemistry by Method 9020B

QUALITY CONTROL SUMMARY L1221510-01,02,03,04,05,06,08,09

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Method Blank (MB)

| Method Diai | k (IVID) | | | | | | |
|--------------------------------|-----------|--------------------|--------|--|--|--|--|
| (MB) R3532062-2 05/26/20 13:02 | | | | | | | |
| | MB Result | MB Qualifier MB MD | MB RDL | | | | |
| Analyte | ug/l | ug/l | ug/l | | | | |
| ТОХ | U | 27.7 | 100 | | | | |
| | | | | | | | |
| | | | | | | | |

Method Blank (MB)

| (MB) R3532486-2 C | (MB) R3532486-2 05/27/20 13:05 | | | | | | | |
|-------------------|--------------------------------|--------------|--------|--------|--|--|--|--|
| | MB Result | MB Qualifier | MB MDL | MB RDL | | | | |
| Analyte | ug/l | | ug/l | ug/l | | | | |
| TOX | U | | 27.7 | 100 | | | | |

L1221167-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221167-01 05/26/2 | 0 16:01 • (DUP) | R3532062-3 | 05/26/20 | 16:32 | | |
|--------------------------|-----------------|------------|----------|---------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| TOX | ND | ND | 1 | 0.000 | | 20 |

L1221355-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221355-01 05/26/2 | OS) L1221355-01 05/26/20 17:02 • (DUP) R3532062-6 05/26/20 17:12 | | | | | | | | |
|--------------------------|--|------------|----------|---------|---------------|-------------------|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | |
| Analyte | ug/l | ug/l | | % | | % | | | |
| ТОХ | ND | ND | 1 | 0.000 | | 20 | | | |

L1221355-02 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221355-02 05/26/2 | S) L1221355-02 05/26/20 17:21 • (DUP) R3532062-7 05/26/20 17:31 | | | | | | | | |
|--------------------------|---|------------|----------|---------|---------------|-------------------|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | |
| Analyte | ug/l | ug/l | | % | | % | | | |
| TOX | ND | ND | 1 | 0.000 | | 20 | | | |

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| SCS Engineers - KS |

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L1221355-03 Original Sample (OS) • Duplicate (DUP)

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

L1221355-04 Original Sample (OS) • Duplicate (DUP)

| L1221355-04 Original Sample (OS) • Duplicate (DUP) | | | | | | | | | |
|---|-----------------|------------|----------|---------|---------------|-------------------|--|-----------------|--|
| (OS) L1221355-04 05/26/20 19:24 • (DUP) R3532062-9 05/26/20 19:34 | | | | | | | | | |
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | ⁵Sr | |
| Analyte | ug/l | ug/l | | % | | % | | | |
| ТОХ | ND | ND | 1 | 0.000 | | 20 | | ⁶ Qc | |

L1221433-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221433-01 05/26/20 19:44 • (DUP) R3532062-10 05/26/20 19:53 | | | | | | | | | |
|--|-----------------|------------|----------|---------|---------------|-------------------|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | |
| Analyte | ug/l | ug/l | | % | | % | | | |
| ТОХ | ND | ND | 1 | 0.000 | | 20 | | | |

L1221433-02 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221433-02 05/26/20 20:03 • (DUP) R3532062-11 05/26/20 20:12 | | | | | | | | | | |
|--|-----------------|------------|----------|---------|---------------|-------------------|--|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | | |
| Analyte | ug/l | ug/l | | % | | % | | | | |
| ТОХ | ND | ND | 1 | 200 | <u>P1</u> | 20 | | | | |

L1221433-03 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221433-03 05/26/2 | (OS) L1221433-03 05/26/20 20:22 • (DUP) R3532062-12 05/26/20 20:32 | | | | | | | | | | |
|--------------------------|--|------------|----------|---------|---------------|-------------------|--|--|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | | | |
| Analyte | ug/l | ug/l | | % | | % | | | | | |
| TOX | ND | ND | 1 | 200 | P1 | 20 | | | | | |

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QUALITY CONTROL SUMMARY L1221510-01,02,03,04,05,06,08,09

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L1221433-04 Original Sample (OS) • Duplicate (DUP)

| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | IP RPD nits | |
|---------|-----------------|------------|----------|---------|---------------|----------------|--|
| Analyte | ug/l | ug/l | | % | | | |
| TOX | ND | ND | 1 | 0.000 | | | |

L1221433-05 Original Sample (OS) • Duplicate (DUP)

| L1221433-05 Original Sample (OS) • Duplicate (DUP) | | | | | | | | |
|--|--------------------|---------------|------------|---------|---------------|-------------------|--|--|
| (OS) L1221433-05 05/2 | 27/20 13:45 • (DUP | e) R3532486-4 | 1 05/27/20 | D 13:55 | | | | |
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | |
| Analyte | ug/l | ug/l | | % | | % | | |
| TOX | ND | ND | 1 | 0.000 | | 20 | | |

L1221433-06 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221433-06 05/27/20 14:05 • (DUP) R3532486-5 05/27/20 14:16 | | | | | | | | | |
|---|-----------------|------------|----------|---------|---------------|-------------------|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | |
| Analyte | ug/l | ug/l | | % | | % | | | |
| ТОХ | ND | ND | 1 | 200 | P1 | 20 | | | |

L1221433-07 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221433-07 05/27/20 14:27 • (DUP) R3532486-6 05/27/20 14:37 | | | | | | | | | | | |
|---|-----------------|------------|----------|---------|---------------|-------------------|--|--|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | | | |
| Analyte | ug/l | ug/l | | % | | % | | | | | |
| ТОХ | ND | ND | 1 | 0.000 | | 20 | | | | | |

L1221510-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221510-01 05/27/2 | (OS) L1221510-01 05/27/20 14:47 • (DUP) R3532486-7 05/27/20 14:57 | | | | | | | | | | |
|--------------------------|---|------------|----------|---------|---------------|-------------------|--|--|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | | | |
| Analyte | ug/l | ug/l | | % | | % | | | | | |
| ТОХ | ND | ND | 1 | 0.000 | | 20 | | | | | |

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QUALITY CONTROL SUMMARY L1221510-01,02,03,04,05,06,08,09

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L1221510-02 Original Sample (OS) • Duplicate (DUP)

| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | P RPD its | |
|---------|-----------------|------------|----------|---------|---------------|--------------|--|
| Analyte | ug/l | ug/l | | % | | | |
| TOX | ND | ND | 1 | 0.000 | | | |

L1221510-03 Original Sample (OS) • Duplicate (DUP)

| L1221510-03 Orig | ginal Sample | (OS) • Dup | olicate (I | DUP) | | | ⁴ Cn |
|-----------------------|--------------------|---------------|------------|---------|---------------|-------------------|-----------------|
| (OS) L1221510-03 05/2 | :7/20 15:48 • (DUF | P) R3532486-9 | 9 05/27/20 |) 15:58 | | | |
| | Original Result | t DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | ⁵ Sr |
| Analyte | ug/l | ug/l | | % | | % | |
| ТОХ | ND | ND | 1 | 0.000 | | 20 | ⁶ Q¢ |

L1221510-04 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221510-04 05/27/2 | 20 16:09 • (DUP |) R3532486-10 | 05/27/2 | 0 16:19 | | |
|--------------------------|-----------------|---------------|----------|---------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| TOX | ND | ND | 1 | 0.000 | | 20 |

L1221510-05 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221510-05 05/27/2 | 20 16:29 • (DUP |) R3532486-11 | 1 05/27/20 |) 16:39 | | |
|--------------------------|-----------------|---------------|------------|---------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| TOX | ND | ND | 1 | 0.000 | | 20 |

L1221510-06 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221510-06 05/27/2 | 20 16:50 • (DUP) |) R3532486-12 | 2 05/27/2 | 0 17:00 | | |
|--------------------------|------------------|---------------|-----------|---------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| ТОХ | ND | ND | 1 | 0.000 | | 20 |

| ACCOUNT: | |
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| SCS Engineers - KS | |

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QUALITY CONTROL SUMMARY L1221510-01,02,03,04,05,06,08,09

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L1221510-08 Original Sample (OS) • Duplicate (DUP)

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

L1221510-09 Original Sample (OS) • Duplicate (DUP)

| L1221510-09 C | riginal Sample | (OS) • Dup | olicate (l | OUP) | | |
|--------------------|----------------------|---------------|------------|---------|---------------|-------------------|
| (OS) L1221510-09 0 | 5/27/20 18:03 • (DUP |) R3532486-14 | 4 05/27/2 | 0 18:13 | | |
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| ТОХ | ND | ND | 1 | 0.000 | | 20 |

Laboratory Control Sample (LCS)

| (LCS) R3532062-1 05 | 5/26/20 12:06 | | | | |
|---------------------|---------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| ТОХ | 200 | 212 | 106 | 85.0-115 | |

Laboratory Control Sample (LCS)

| (LCS) R3532486-1 05/27/20 12:37 | | | | | | | |
|---------------------------------|--------------|------------|----------|-------------|---------------|--|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | | |
| Analyte | ug/l | ug/l | % | % | | | |
| TOX | 200 | 212 | 106 | 85.0-115 | | | |

L1221167-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221167-01 05/26/20 | 0 16:01 • (MS) R3 | 3532062-4 05 | 5/26/20 16:42 • | (MSD) R35320 | 062-5 05/26/2 | 20 16:52 | | | | | | |
|---------------------------|-------------------|-----------------|-----------------|--------------|---------------|----------|----------|-------------|--------------|---------------|------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| ТОХ | 200 | ND | 212 | 206 | 106 | 103 | 1 | 80.0-120 | | | 2.78 | 20 |

| ACCOUNT: | PROJECT: | SDG: | DATE/TIME: | PAGE: |
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QUALITY CONTROL SUMMARY L1221510-07

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Method Blank (MB)

| (MB) R3532485-2 05 | 5/27/20 13:05 | | | |
|--------------------|---------------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| ТОХ | U | | 27.7 | 100 |

L1221510-07 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221510-07 05/27/2 | 0 18:23 • (DUP) | R3532485-3 | 05/27/20 | 18:36 | | |
|--------------------------|-----------------|------------|----------|---------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| ТОХ | ND | ND | 1 | 0.000 | | 20 |

L1219683-05 Original Sample (OS) • Duplicate (DUP)

| L1219683-05 C | riginal Sample | (OS) • Du | plicate (| DUP) | | |
|--------------------|----------------------|--------------|------------|---------|---------------|-------------------|
| (OS) L1219683-05 0 | 5/27/20 19:58 • (DUF | P) R3532485- | 7 05/27/20 | 0 20:08 | | |
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| ТОХ | ND | ND | 1 | 0.000 | | 20 |

L1221617-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221617-01 05/28/20 | 0 15:56 • (DUP) | R3533100-3 | 05/28/20 | 16:07 | | |
|---------------------------|-----------------|------------|----------|---------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| ТОХ | ND | ND | 1 | 0.000 | | 20 |

Laboratory Control Sample (LCS)

| (LCS) R3532485-1 05/27/ | /20 12:37 | | | | |
|-------------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| ТОХ | 200 | 212 | 106 | 85.0-115 | |

| ACCOUNT: |
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| SCS Engineers - KS |

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QUALITY CONTROL SUMMARY

L1221510-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221510-07 05/27/20 | 0 18:23 • (MS) R | 3532485-4 0 | 5/27/20 18:45 • | (MSD) R35324 | 185-5 05/27/2 | 0 18:56 | | | | | | |
|---------------------------|------------------|-----------------|-----------------|--------------|---------------|----------|----------|-------------|--------------|---------------|-----|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | | | | | 0/ | 0/ | | 0/ | | | 0/ | 0/ |
| Analyte | ug/i | ug/l | ug/l | ug/l | % | % | | % | | | % | % |

| ACCOUNT: |
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| SCS Engineers - KS |

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SDG: L1221510 DATE/TIME: 07/10/20 12:10 PAGE: 27 of 41

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY L1221510-01,02,03

| (MB) R3533055-1 C | 05/28/20 19:37 | | | |
|-------------------|----------------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Chloride | U | | 379 | 1000 |
| Fluoride | U | | 64.0 | 150 |
| Sulfate | U | | 594 | 5000 |

L1221751-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221751-01 05/29/2 | 20 01:46 • (DUP) | R3533055-7 | 05/29/20 | 01:57 | | |
|--------------------------|------------------|------------|----------|---------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| Chloride | 85900 | 84800 | 1 | 1.31 | | 15 |
| Fluoride | ND | ND | 1 | 0.696 | | 15 |
| Sulfate | 10100 | 10000 | 1 | 1.15 | | 15 |

L1221447-03 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221447-03 05/28/2 | 20 22:52 • (DUF | P) R3533055-9 | 9 05/29/2 | 20 11:46 | | |
|--------------------------|-----------------|---------------|-----------|----------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| Chloride | 1550 | 1500 | 1 | 2.85 | | 15 |
| Fluoride | 264 | 278 | 1 | 5.35 | | 15 |
| Sulfate | 20400 | 20300 | 1 | 0.228 | | 15 |

Laboratory Control Sample (LCS)

| (LCS) R3533055-2 05/2 | 8/20 19:47 | | | | |
|-----------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Chloride | 40000 | 39900 | 99.8 | 80.0-120 | |
| Fluoride | 8000 | 8350 | 104 | 80.0-120 | |
| Sulfate | 40000 | 38900 | 97.1 | 80.0-120 | |

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SDG: L1221510

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QUALITY CONTROL SUMMARY

L1221288-01 Original Sample (OS) • Matrix Spike (MS)

| (OS) L1221288-01 05/28 | 8/20 20:42 • (MS) | R3533055-4 (| 05/28/20 20 | :53 | | | |
|------------------------|-------------------|-----------------|-------------|---------|----------|-------------|--------------|
| | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
| Analyte | ug/l | ug/l | ug/l | % | | % | |
| Chloride | 50000 | 1360 | 52300 | 102 | 1 | 80.0-120 | |
| Fluoride | 5000 | 185 | 5470 | 106 | 1 | 80.0-120 | |
| Sulfate | 50000 | 16100 | 65400 | 98.7 | 1 | 80.0-120 | |

L1221447-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221447-04 05/28/2 | 20 23:03 • (MS) | R3533055-5 | 05/28/20 23:14 | 4 • (MSD) R353 | 3055-6 05/28 | /20 23:25 | | | | | | |
|--------------------------|-----------------|-----------------|----------------|----------------|--------------|-----------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Chloride | 50000 | 8490 | 58600 | 59000 | 100 | 101 | 1 | 80.0-120 | | | 0.714 | 15 |
| Fluoride | 5000 | 291 | 5310 | 5340 | 100 | 101 | 1 | 80.0-120 | | | 0.421 | 15 |
| Sulfate | 50000 | 54400 | 99300 | 101000 | 89.7 | 92.9 | 1 | 80.0-120 | | E | 1.56 | 15 |

Wet Chemistry by Method 9060A

QUALITY CONTROL SUMMARY L1221510-01,02,03,04,05,06,07,08,09

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Method Blank (MB)

| (MB) R3532634-1 05/27/ | 20 20:44 | | | |
|----------------------------|-----------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| TOC (Total Organic Carbon) | 242 | J | 102 | 1000 |

L1221488-22 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221488-22 05/27/ | '20 23:38 • (DUF | P) R3532634-3 | 3 05/28/2 | 0 00:03 | | |
|----------------------------|------------------|---------------|-----------|---------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| TOC (Total Organic Carbon) | 817000 | 819000 | 10 | 0.245 | | 20 |

L1221510-04 Original Sample (OS) • Duplicate (DUP)

| L1221510-04 Origir | nal Sample (| (OS) • Dup | olicate (l | OUP) | | |
|----------------------------|-----------------|--------------|------------|---------|---------------|-------------------|
| OS) L1221510-04 05/28/2 | 20 03:48 • (DUF | P) R3532634- | 6 05/28/2 | 0 04:02 | | |
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| TOC (Total Organic Carbon) | 1790 | 1870 | 1 | 4.43 | | 20 |
| | | | | | | |

Laboratory Control Sample (LCS)

| (LCS) R3532634-2 05/27 | //20 21:23 | | | | |
|----------------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| TOC (Total Organic Carbon) | 75000 | 73500 | 98.0 | 85.0-115 | |

L1221510-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221510-02 05/28/2 | 20 02:34 • (MS) | R3532634-4 (| 05/28/20 02:5 | 57 • (MSD) R353 | 32634-5 05/2 | 8/20 03:19 | | | | | | |
|----------------------------|-----------------|-----------------|---------------|-----------------|--------------|------------|----------|-------------|--------------|---------------|------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| TOC (Total Organic Carbon) | 50000 | 3250 | 52000 | 52700 | 97.5 | 98.8 | 1 | 80.0-120 | | | 1.30 | 20 |

L1221510-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221510-07 05/28/2 | 20 06:09 • (MS) | R3532634-7 (| 05/28/20 06: | 31 • (MSD) R353 | 32634-8 05/2 | 28/20 06:53 | | | | | | | |
|----------------------------|-----------------|-----------------|--------------|-----------------|--------------|-------------|----------|-------------|--------------|---------------|---------|------------|----------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits | |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % | |
| TOC (Total Organic Carbon) | 50000 | 1820 | 50800 | 51600 | 98.0 | 99.6 | 1 | 80.0-120 | | | 1.58 | 20 | |
| A | CCOUNT: | | | PRC | JECT: | | | SDG: | | DATE | TIME: | | PAGE: |
| SCS E | Engineers - KS | | | 2721 | 3167.19 | | L1 | 221510 | | 07/10/2 | 0 12:10 | | 30 of 41 |

Mercury by Method 7470A

QUALITY CONTROL SUMMARY L1221510-01,02,03,04,05,06,07,08,09

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Method Blank (MB)

| (MB) R3531871-1 05 | 5/26/20 12:25 | | | | |
|--------------------|---------------|--------------|--------|--------|--|
| | MB Result | MB Qualifier | MB MDL | MB RDL | |
| Analyte | ug/l | | ug/l | ug/l | |
| Mercury | U | | 0.100 | 0.200 | |

Laboratory Control Sample (LCS)

| (LCS) R3531871-5 05/ | /26/20 12:27 | | | | |
|----------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Mercury | 3.00 | 2.73 | 91.0 | 80.0-120 | |

L1221510-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221510-07 05/26/20 12:29 • (MS) R3531871-6 05/26/20 12:31 • (MSD) R3531871-7 05/26/20 12:33 | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Mercury | 3.00 | ND | 2.75 | 2.73 | 91.8 | 90.9 | 1 | 75.0-125 | | | 1.00 | 20 |

| ACCOUNT: |
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| SCS Engineers - KS |

PROJECT: 27213167.19

SDG: L1221510 DATE/TIME: 07/10/20 12:10 PAGE: 31 of 41 Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

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Method Blank (MB)

| (MB) R3533271-1 | 05/29/20 | 11:06 |
|-----------------|----------|-----------|
| | | MB Result |

| | MB Result | MB Qualifier | MB MDL | MB RDL |
|-----------|-----------|--------------|--------|--------|
| Analyte | ug/l | | ug/l | ug/l |
| Aluminum | U | | 70.4 | 200 |
| Barium | U | | 0.895 | 5.00 |
| Boron | U | | 25.4 | 200 |
| Calcium | U | | 389 | 1000 |
| Chromium | U | | 5.00 | 10.0 |
| Cobalt | U | | 0.807 | 10.0 |
| Iron | U | | 45.8 | 100 |
| Magnesium | U | | 111 | 1000 |
| Manganese | U | | 3.27 | 10.0 |
| Nickel | U | | 2.98 | 10.0 |
| Silver | U | | 1.91 | 5.00 |
| Sodium | U | | 1400 | 3000 |
| | | | | |

Laboratory Control Sample (LCS)

| (LCS) R3533271-2 05/29/20 11:09 | | | | | | | | | | |
|---------------------------------|--------------|------------|----------|-------------|---------------|--|--|--|--|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | | | | | |
| Analyte | ug/l | ug/l | % | % | | | | | | |
| Aluminum | 10000 | 10100 | 101 | 80.0-120 | | | | | | |
| Barium | 1000 | 957 | 95.7 | 80.0-120 | | | | | | |
| Boron | 1000 | 956 | 95.6 | 80.0-120 | | | | | | |
| Calcium | 10000 | 9590 | 95.9 | 80.0-120 | | | | | | |
| Chromium | 1000 | 951 | 95.1 | 80.0-120 | | | | | | |
| Cobalt | 1000 | 965 | 96.5 | 80.0-120 | | | | | | |
| Iron | 10000 | 9460 | 94.6 | 80.0-120 | | | | | | |
| Magnesium | 10000 | 9910 | 99.1 | 80.0-120 | | | | | | |
| Manganese | 1000 | 941 | 94.1 | 80.0-120 | | | | | | |
| Nickel | 1000 | 962 | 96.2 | 80.0-120 | | | | | | |
| Silver | 200 | 174 | 86.9 | 80.0-120 | | | | | | |
| Sodium | 10000 | 9500 | 95.0 | 80.0-120 | | | | | | |

L1221445-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221445-09 | (OS) L1221445-09 05/29/20 11:11 • (MS) R3533271-4 05/29/20 11:16 • (MSD) R3533271-5 05/29/20 11:19 | | | | | | | | | | | | |
|------------------|--|-----------------|-----------|------------|----------|----------|----------|----------------|--------------|---------------|----------|------------|-------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits | |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % | |
| Aluminum | 10000 | 703 | 10000 | 10000 | 93.1 | 93.2 | 1 | 75.0-125 | | | 0.104 | 20 | |
| Barium | 1000 | 92.6 | 1050 | 1040 | 95.5 | 94.3 | 1 | 75.0-125 | | | 1.14 | 20 | |
| Boron | 1000 | 3960 | 4820 | 4860 | 86.4 | 90.4 | 1 | 75.0-125 | | | 0.829 | 20 | |
| ACCOUNT: | | | | PROJECT: | | | SDG: | | | DATE/TIME: | | | PAGE: |
| | | 27213167.19 | | | L1221510 | | | 07/10/20 12:10 | | | 32 of 41 | | |

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L1221445-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221445-09 05/29/20 11:11 • (MS) R3533271-4 05/29/20 11:16 • (MSD) R3533271-5 05/29/20 11:19 | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------------|--------------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Calcium | 10000 | 43300 | 51300 | 51600 | 79.8 | 83.4 | 1 | 75.0-125 | | | 0.688 | 20 |
| Chromium | 1000 | ND | 966 | 961 | 96.6 | 96.1 | 1 | 75.0-125 | | | 0.498 | 20 |
| Cobalt | 1000 | ND | 1010 | 1000 | 101 | 100 | 1 | 75.0-125 | | | 1.01 | 20 |
| Iron | 10000 | 2640 | 11700 | 11700 | 90.5 | 91.0 | 1 | 75.0-125 | | | 0.402 | 20 |
| Magnesium | 10000 | 8870 | 18300 | 18300 | 94.3 | 93.9 | 1 | 75.0-125 | | | 0.212 | 20 |
| Manganese | 1000 | 206 | 1140 | 1140 | 93.3 | 93.1 | 1 | 75.0-125 | | | 0.164 | 20 |
| Nickel | 1000 | ND | 1010 | 1000 | 101 | 99.7 | 1 | 75.0-125 | | | 1.03 | 20 |
| Silver | 200 | ND | 176 | 177 | 88.1 | 88.6 | 1 | 75.0-125 | | | 0.599 | 20 |
| Sodium | 10000 | 183000 | 186000 | 189000 | 32.6 | 63.2 | 1 | 75.0-125 | $\underline{\vee}$ | $\underline{\vee}$ | 1.63 | 20 |
| | | | | | | | | | | | | |

L1221447-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221447-04 05/29/20 11:21 • (MS) R3533271-6 05/29/20 11:24 • (MSD) R3533271-7 05/29/20 11:26 | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|--------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Aluminum | 10000 | ND | 9960 | 10200 | 99.6 | 102 | 1 | 75.0-125 | | | 2.08 | 20 |
| Barium | 1000 | 220 | 1170 | 1180 | 94.9 | 96.3 | 1 | 75.0-125 | | | 1.19 | 20 |
| Boron | 1000 | ND | 1050 | 1070 | 95.2 | 97.0 | 1 | 75.0-125 | | | 1.71 | 20 |
| Calcium | 10000 | 140000 | 148000 | 149000 | 83.1 | 89.5 | 1 | 75.0-125 | | | 0.430 | 20 |
| Chromium | 1000 | ND | 965 | 964 | 96.5 | 96.4 | 1 | 75.0-125 | | | 0.0506 | 20 |
| Cobalt | 1000 | ND | 979 | 993 | 97.8 | 99.2 | 1 | 75.0-125 | | | 1.40 | 20 |
| Iron | 10000 | 1300 | 10800 | 10900 | 95.1 | 96.4 | 1 | 75.0-125 | | | 1.20 | 20 |
| Magnesium | 10000 | 29300 | 38100 | 38300 | 87.5 | 90.0 | 1 | 75.0-125 | | | 0.646 | 20 |
| Manganese | 1000 | 597 | 1540 | 1530 | 94.1 | 93.3 | 1 | 75.0-125 | | | 0.501 | 20 |
| Nickel | 1000 | ND | 978 | 991 | 97.8 | 99.1 | 1 | 75.0-125 | | | 1.32 | 20 |
| Silver | 200 | ND | 181 | 180 | 90.5 | 90.0 | 1 | 75.0-125 | | | 0.485 | 20 |
| Sodium | 10000 | 7980 | 17400 | 17600 | 94.1 | 95.9 | 1 | 75.0-125 | | | 1.01 | 20 |
| | | | | | | | | | | | | |

SDG: L1221510 DATE/TIME: 07/10/20 12:10 PAGE: 33 of 41

QUALITY CONTROL SUMMARY L1221510-02,03,04,05,06,07,08,09

| (MB) R3532881-1 05/28/2 | 20 23:57 | | | | | |
|-------------------------|-----------|--------------|--------|--------|--|--|
| | MB Result | MB Qualifier | MB MDL | MB RDL | | |
| Analyte | ug/l | | ug/l | ug/l | | |
| Aluminum | U | | 70.4 | 200 | | |
| Barium | U | | 0.895 | 5.00 | | |
| Boron | U | | 25.4 | 200 | | |
| Calcium | U | | 389 | 1000 | | |
| Chromium | U | | 5.00 | 10.0 | | |
| Cobalt | U | | 0.807 | 10.0 | | |
| Iron | U | | 45.8 | 100 | | |
| Magnesium | U | | 111 | 1000 | | |
| Manganese | U | | 3.27 | 10.0 | | |
| Nickel | U | | 2.98 | 10.0 | | |
| Silver | U | | 1.91 | 5.00 | | |
| Sodium | U | | 1400 | 3000 | | |

Laboratory Control Sample (LCS)

| (LCS) R3532881-2 05/28 | /20 23:59 | | | | |
|------------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Aluminum | 10000 | 10100 | 101 | 80.0-120 | |
| Barium | 1000 | 961 | 96.1 | 80.0-120 | |
| Boron | 1000 | 964 | 96.4 | 80.0-120 | |
| Calcium | 10000 | 9870 | 98.7 | 80.0-120 | |
| Chromium | 1000 | 947 | 94.7 | 80.0-120 | |
| Cobalt | 1000 | 964 | 96.4 | 80.0-120 | |
| Iron | 10000 | 9740 | 97.4 | 80.0-120 | |
| Magnesium | 10000 | 10100 | 101 | 80.0-120 | |
| Manganese | 1000 | 940 | 94.0 | 80.0-120 | |
| Nickel | 1000 | 957 | 95.7 | 80.0-120 | |
| Silver | 200 | 178 | 89.2 | 80.0-120 | |
| Sodium | 10000 | 9800 | 98.0 | 80.0-120 | |

L1221510-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221510-07 | (OS) L1221510-07 05/29/20 00:02 • (MS) R3532881-4 05/29/20 00:07 • (MSD) R3532881-5 05/29/20 00:10 | | | | | | | | | | | | |
|------------------|--|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|---------|------------|----------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits | |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % | |
| Aluminum | 10000 | ND | 10100 | 10100 | 101 | 101 | 1 | 75.0-125 | | | 0.529 | 20 | |
| Barium | 1000 | 223 | 1180 | 1180 | 95.9 | 95.9 | 1 | 75.0-125 | | | 0.00880 | 20 | |
| Boron | 1000 | ND | 1070 | 1080 | 98.3 | 99.2 | 1 | 75.0-125 | | | 0.896 | 20 | |
| | ACCOUNT: | | | PRO. | JECT: | | | SDG: | | DATE/ | TIME: | | PAGE: |
| | SCS Engineers - KS | | | 27213 | 167.19 | | L1 | 221510 | | 07/10/20 | 0 12:10 | | 34 of 41 |

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QUALITY CONTROL SUMMARY L1221510-02,03,04,05,06,07,08,09

L1221510-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221510-07 05/29/20 00:02 • (MS) R3532881-4 05/29/20 00:07 • (MSD) R3532881-5 05/29/20 00:10 | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|--------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Calcium | 10000 | 143000 | 150000 | 150000 | 71.1 | 73.6 | 1 | 75.0-125 | V | V | 0.168 | 20 |
| Chromium | 1000 | ND | 957 | 956 | 95.7 | 95.6 | 1 | 75.0-125 | | | 0.133 | 20 |
| Cobalt | 1000 | ND | 979 | 980 | 97.9 | 98.0 | 1 | 75.0-125 | | | 0.136 | 20 |
| Iron | 10000 | 1240 | 11000 | 11000 | 97.1 | 97.4 | 1 | 75.0-125 | | | 0.265 | 20 |
| Magnesium | 10000 | 29800 | 38700 | 38700 | 89.3 | 89.6 | 1 | 75.0-125 | | | 0.0852 | 20 |
| Manganese | 1000 | 574 | 1500 | 1500 | 92.9 | 92.5 | 1 | 75.0-125 | | | 0.258 | 20 |
| Nickel | 1000 | ND | 975 | 968 | 97.5 | 96.8 | 1 | 75.0-125 | | | 0.715 | 20 |
| Silver | 200 | ND | 183 | 184 | 91.5 | 92.0 | 1 | 75.0-125 | | | 0.466 | 20 |
| Sodium | 10000 | 8090 | 17700 | 17900 | 96.4 | 97.7 | 1 | 75.0-125 | | | 0.720 | 20 |
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| SCS Engineers - | KS |

PROJECT: 27213167.19

SDG: L1221510 DATE/TIME: 07/10/20 12:10 PAGE: 35 of 41

QUALITY CONTROL SUMMARY

| (MB) R3532742-1 | 05/28/20 16:12 |
|-----------------|----------------|
| | MB Result |

| | MB Result | MB Qualifier | MB MDL | MB RDL |
|-----------|-----------|--------------|--------|--------|
| Analyte | ug/l | | ug/l | ug/l |
| Antimony | U | | 1.32 | 4.00 |
| Arsenic | U | | 0.735 | 2.00 |
| Beryllium | U | | 0.454 | 2.00 |
| Cadmium | U | | 0.478 | 1.00 |
| Copper | U | | 2.50 | 5.00 |
| Lead | U | | 2.49 | 5.00 |
| Selenium | U | | 0.657 | 2.00 |
| Thallium | U | | 0.460 | 2.00 |
| Zinc | U | | 9.96 | 25.0 |

Laboratory Control Sample (LCS)

| LCS) R3532742-2 05/28/20 16:15 | | | | | | | | | | |
|--------------------------------|--------------|------------|----------|-------------|---------------|--|--|--|--|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | | | | | |
| Analyte | ug/l | ug/l | % | % | | | | | | |
| Antimony | 50.0 | 46.9 | 93.7 | 80.0-120 | | | | | | |
| Arsenic | 50.0 | 46.5 | 93.0 | 80.0-120 | | | | | | |
| Beryllium | 50.0 | 46.3 | 92.7 | 80.0-120 | | | | | | |
| Cadmium | 50.0 | 51.9 | 104 | 80.0-120 | | | | | | |
| Copper | 50.0 | 42.9 | 85.8 | 80.0-120 | | | | | | |
| Lead | 50.0 | 49.3 | 98.5 | 80.0-120 | | | | | | |
| Selenium | 50.0 | 49.5 | 98.9 | 80.0-120 | | | | | | |
| Thallium | 50.0 | 47.3 | 94.7 | 80.0-120 | | | | | | |
| Zinc | 500 | 470 | 94.0 | 80.0-120 | | | | | | |

L1221405-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| | 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 | % | % | | % | | | % | % | |
| 50.0 | ND | 48.4 | 49.5 | 96.7 | 99.0 | 1 | 75.0-125 | | | 2.33 | 20 | |
| 50.0 | ND | 48.3 | 48.2 | 94.8 | 94.6 | 1 | 75.0-125 | | | 0.221 | 20 | |
| 50.0 | ND | 46.2 | 46.8 | 92.3 | 93.5 | 1 | 75.0-125 | | | 1.31 | 20 | |
| 50.0 | ND | 51.1 | 51.7 | 102 | 103 | 1 | 75.0-125 | | | 1.06 | 20 | |
| 50.0 | ND | 42.4 | 42.7 | 84.8 | 85.3 | 1 | 75.0-125 | | | 0.682 | 20 | |
| 50.0 | ND | 48.8 | 50.2 | 97.5 | 100 | 1 | 75.0-125 | | | 2.80 | 20 | |
| 50.0 | ND | 50.6 | 50.7 | 101 | 101 | 1 | 75.0-125 | | | 0.00162 | 20 | |
| 50.0 | ND | 46.6 | 47.8 | 93.1 | 95.6 | 1 | 75.0-125 | | | 2.66 | 20 | |
| 500 | ND | 480 | 474 | 95.9 | 94.9 | 1 | 75.0-125 | | | 1.13 | 20 | |
| | 50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.0 | 50.0 ND 50.0 ND | 50.0 ND 48.4 50.0 ND 48.3 50.0 ND 46.2 50.0 ND 51.1 50.0 ND 42.4 50.0 ND 48.8 50.0 ND 50.6 50.0 ND 50.6 50.0 ND 46.6 | 50.0 ND 48.4 49.5 50.0 ND 48.3 48.2 50.0 ND 46.2 46.8 50.0 ND 51.1 51.7 50.0 ND 42.4 42.7 50.0 ND 48.8 50.2 50.0 ND 50.6 50.7 50.0 ND 46.6 47.8 | 50.0 ND 48.4 49.5 96.7 50.0 ND 48.3 48.2 94.8 50.0 ND 46.2 46.8 92.3 50.0 ND 51.1 51.7 102 50.0 ND 42.4 42.7 84.8 50.0 ND 48.8 50.2 97.5 50.0 ND 50.6 50.7 101 50.0 ND 46.6 47.8 93.1 | 50.0 ND 48.4 49.5 96.7 99.0 50.0 ND 48.3 48.2 94.8 94.6 50.0 ND 46.2 46.8 92.3 93.5 50.0 ND 51.1 51.7 102 103 50.0 ND 42.4 42.7 84.8 85.3 50.0 ND 48.8 50.2 97.5 100 50.0 ND 46.6 50.7 101 101 50.0 ND 46.6 47.8 93.1 95.6 | 50 ND 48.4 49.5 96.7 99.0 1 50.0 ND 48.3 48.2 94.8 94.6 1 50.0 ND 46.2 46.8 92.3 93.5 1 50.0 ND 51.1 51.7 102 103 1 50.0 ND 42.4 42.7 84.8 85.3 1 50.0 ND 48.8 50.2 97.5 100 1 50.0 ND 50.6 50.7 101 101 1 50.0 ND 46.6 47.8 93.1 95.6 1 | 50.0 ND 48.4 49.5 96.7 99.0 1 75.0-125 50.0 ND 48.3 48.2 94.8 94.6 1 75.0-125 50.0 ND 46.2 46.8 92.3 93.5 1 75.0-125 50.0 ND 46.2 46.8 92.3 93.5 1 75.0-125 50.0 ND 51.1 51.7 102 103 1 75.0-125 50.0 ND 42.4 42.7 84.8 85.3 1 75.0-125 50.0 ND 48.8 50.2 97.5 100 1 75.0-125 50.0 ND 48.8 50.2 97.5 100 1 75.0-125 50.0 ND 50.6 50.7 101 101 1 75.0-125 50.0 ND 46.6 47.8 93.1 95.6 1 75.0-125 | 50.0ND48.449.596.799.0175.0-12550.0ND48.348.294.894.6175.0-12550.0ND46.246.892.393.5175.0-12550.0ND51.151.7102103175.0-12550.0ND42.442.784.885.3175.0-12550.0ND48.850.297.5100175.0-12550.0ND50.650.7101101175.0-12550.0ND46.647.893.195.6175.0-125 | 50.0ND48.449.596.799.0175.0-12550.0ND48.348.294.894.6175.0-12550.0ND46.246.892.393.5175.0-12550.0ND51.151.7102103175.0-12550.0ND42.442.784.885.3175.0-12550.0ND48.850.297.5100175.0-12550.0ND46.650.7101101175.0-12550.0ND46.647.893.195.6175.0-125 | 50.0ND48.449.596.799.0175.0-1252.3350.0ND48.348.294.894.6175.0-1250.22150.0ND46.246.892.393.5175.0-1251.3150.0ND51.151.7102103175.0-1251.0650.0ND42.442.784.885.3175.0-1250.68250.0ND48.850.297.5100175.0-1252.8050.0ND46.650.7101101175.0-1250.0016250.0ND46.647.893.195.6175.0-1252.66 | 50.0ND48.449.596.799.0175.0.1252.332050.0ND48.348.294.894.6175.0.1250.2212050.0ND46.246.892.393.5175.0.1251.312050.0ND51.151.7102103175.0.1251.062050.0ND42.442.784.885.3175.0.1250.6822050.0ND48.850.297.5100175.0.1252.802050.0ND48.850.297.5100175.0.1250.001622050.0ND46.650.7101101175.0.1252.662050.0ND46.647.893.195.6175.0.1252.6620 |

SCS Engineers - KS

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SDG: L1221510 DATE/TIME: 07/10/20 12:10 ²Tc ³Ss ⁴Cn ⁵Sr

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ONE LAB. NATIONWIDE.

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

L1221510-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221510-07 05/28/20 16:32 • (MS) R3532742-6 05/28/20 16:35 • (MSD) R3532742-7 05/28/20 16:38 | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Antimony | 50.0 | ND | 47.0 | 47.9 | 94.0 | 95.9 | 1 | 75.0-125 | | | 2.01 | 20 |
| Arsenic | 50.0 | 7.68 | 54.3 | 54.5 | 93.3 | 93.7 | 1 | 75.0-125 | | | 0.401 | 20 |
| Beryllium | 50.0 | ND | 45.0 | 46.6 | 89.9 | 93.2 | 1 | 75.0-125 | | | 3.54 | 20 |
| Cadmium | 50.0 | ND | 49.5 | 49.7 | 99.1 | 99.4 | 1 | 75.0-125 | | | 0.348 | 20 |
| Copper | 50.0 | ND | 40.7 | 40.9 | 81.4 | 81.9 | 1 | 75.0-125 | | | 0.622 | 20 |
| Lead | 50.0 | ND | 48.5 | 49.5 | 97.0 | 99.1 | 1 | 75.0-125 | | | 2.07 | 20 |
| Selenium | 50.0 | ND | 49.4 | 49.6 | 98.9 | 99.3 | 1 | 75.0-125 | | | 0.444 | 20 |
| Thallium | 50.0 | ND | 46.9 | 48.2 | 93.9 | 96.5 | 1 | 75.0-125 | | | 2.76 | 20 |
| Zinc | 500 | ND | 464 | 468 | 92.8 | 93.5 | 1 | 75.0-125 | | | 0.770 | 20 |

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Ss

Cn

ACCOUNT: SCS Engineers - KS PROJECT: 27213167.19

SDG: L1221510 DATE/TIME: 07/10/20 12:10 PAGE: 37 of 41

QUALITY CONTROL SUMMARY L1221510-08,09

| (MB) R3532615-1 | 05/28/20 10:43 | |
|-----------------|----------------|--|
| | MB Result | |

| | MB Result | MB Qualifier | MB MDL | MB RDL |
|-----------|-----------|--------------|--------|--------|
| Analyte | ug/l | | ug/l | ug/l |
| Antimony | U | | 1.32 | 4.00 |
| Arsenic | U | | 0.735 | 2.00 |
| Beryllium | U | | 0.454 | 2.00 |
| Cadmium | U | | 0.478 | 1.00 |
| Copper | U | | 2.50 | 5.00 |
| Lead | U | | 2.49 | 5.00 |
| Selenium | U | | 0.657 | 2.00 |
| Thallium | U | | 0.460 | 2.00 |
| Zinc | U | | 9.96 | 25.0 |

Laboratory Control Sample (LCS)

| (LCS) R3532615-2 05/28 | /20 10:46 | | | | | |
|------------------------|--------------|------------|----------|-------------|---------------|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | |
| Analyte | ug/l | ug/l | % | % | | |
| Antimony | 50.0 | 52.0 | 104 | 80.0-120 | | |
| Arsenic | 50.0 | 46.1 | 92.2 | 80.0-120 | | |
| Beryllium | 50.0 | 47.4 | 94.7 | 80.0-120 | | |
| Cadmium | 50.0 | 49.6 | 99.2 | 80.0-120 | | |
| Copper | 50.0 | 50.8 | 102 | 80.0-120 | | |
| Lead | 50.0 | 46.2 | 92.5 | 80.0-120 | | |
| Selenium | 50.0 | 51.8 | 104 | 80.0-120 | | |
| Thallium | 50.0 | 45.3 | 90.7 | 80.0-120 | | |
| Zinc | 500 | 455 | 90.9 | 80.0-120 | | |

L1221630-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits | |
|-----------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|--|
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % | |
| Antimony | 50.0 | ND | 53.1 | 56.9 | 106 | 114 | 1 | 75.0-125 | | | 6.88 | 20 | |
| Arsenic | 50.0 | 80.7 | 130 | 128 | 97.7 | 94.1 | 1 | 75.0-125 | | | 1.39 | 20 | |
| Beryllium | 50.0 | ND | 50.2 | 48.9 | 100 | 97.7 | 1 | 75.0-125 | | | 2.65 | 20 | |
| Cadmium | 50.0 | ND | 53.4 | 52.3 | 107 | 105 | 1 | 75.0-125 | | | 2.23 | 20 | |
| Copper | 50.0 | 7.63 | 57.9 | 55.5 | 101 | 95.6 | 1 | 75.0-125 | | | 4.36 | 20 | |
| Lead | 50.0 | ND | 47.7 | 47.9 | 95.4 | 95.8 | 1 | 75.0-125 | | | 0.407 | 20 | |
| Selenium | 50.0 | 6.53 | 64.5 | 64.7 | 116 | 116 | 1 | 75.0-125 | | | 0.333 | 20 | |
| Thallium | 50.0 | ND | 48.9 | 48.0 | 97.7 | 95.9 | 1 | 75.0-125 | | | 1.86 | 20 | |
| Zinc | 500 | ND | 476 | 457 | 95.2 | 91.5 | 1 | 75.0-125 | | | 3.98 | 20 | |
| | ACCOUNT: | | | PPC | DJECT: | | | SDG: | | DATE/ | TIME | | |

SCS Engineers - KS

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GLOSSARY OF TERMS

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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 |
|-----------|---|
| В | 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. |
| J3 | The associated batch QC was outside the established quality control range for precision. |
| J5 | The sample matrix interfered with the ability to make any accurate determination; spike value is high. |
| 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. |

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SDG: L1221510 DATE/TIME: 07/10/20 12:10

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ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

State Accreditations

| Alabama | 40660 | Nebraska |
|------------------------|-------------|-----------------------------|
| Alaska | 17-026 | Nevada |
| Arizona | AZ0612 | New Hampshire |
| Arkansas | 88-0469 | New Jersey–NELAP |
| California | 2932 | New Mexico ¹ |
| Colorado | TN00003 | New York |
| Connecticut | PH-0197 | North Carolina |
| Florida | E87487 | North Carolina ¹ |
| Georgia | NELAP | North Carolina ³ |
| Georgia ¹ | 923 | North Dakota |
| Idaho | TN00003 | Ohio–VAP |
| Illinois | 200008 | Oklahoma |
| Indiana | C-TN-01 | Oregon |
| lowa | 364 | Pennsylvania |
| Kansas | E-10277 | Rhode Island |
| Kentucky ¹⁶ | 90010 | South Carolina |
| Kentucky ² | 16 | South Dakota |
| Louisiana | AI30792 | Tennessee ¹⁴ |
| Louisiana 1 | LA180010 | Texas |
| Maine | TN0002 | Texas ⁵ |
| Maryland | 324 | Utah |
| Massachusetts | M-TN003 | Vermont |
| Michigan | 9958 | Virginia |
| Minnesota | 047-999-395 | Washington |
| Mississippi | TN00003 | West Virginia |
| Missouri | 340 | Wisconsin |
| Montana | CERT0086 | Wyoming |
| | | |

| Vebraska | NE-OS-15-05 |
|-----------------------------|------------------|
| Nevada | TN-03-2002-34 |
| New Hampshire | 2975 |
| New Jersey–NELAP | TN002 |
| New Mexico ¹ | n/a |
| New York | 11742 |
| North Carolina | Env375 |
| North Carolina ¹ | DW21704 |
| North Carolina ³ | 41 |
| North Dakota | R-140 |
| Ohio-VAP | CL0069 |
| Oklahoma | 9915 |
| Oregon | TN200002 |
| Pennsylvania | 68-02979 |
| Rhode Island | LAO00356 |
| South Carolina | 84004 |
| South Dakota | n/a |
| Tennessee ¹⁴ | 2006 |
| Texas | T104704245-18-15 |
| Texas⁵ | LAB0152 |
| Utah | TN00003 |
| Vermont | VT2006 |
| Virginia | 460132 |
| Washington | C847 |
| West Virginia | 233 |
| Wisconsin | 9980939910 |
| Wyoming | A2LA |
| | |

Third Party Federal Accreditations

| 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

Our Locations

SCS Engineers - KS

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



27213167.19

L1221510

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| | | | | Billing Information: | | | | | 1 | A | nalvsis | Contai | ner / Pre | eservativ | /e | | 24 ² | Chain of Custody | Page of | | | | | | | | | | | | | |
|---|--|--|---------------|----------------------|---|-----------|-----------|------------------|-----------------|----------------|---------------|------------------|------------------------------|----------------------------------|--|--|-------------------------------------|--|------------------------|--|------------------|----|---|---|--|--|----|--|--|--|-------------------------|---|
| SCS Engineers - KS 8575 W. 110th Street Over land Park, KS 66210 Report to: | | 8575 W. 110th Street | | | Accounts Payable 8575 W. 110th Street Overland Park, KS 66210 | | | | | 8575 W. 110 | | h Street | | | th Street | | | 5 W. 110th Street | | | | ll | n | n | | | 62 | | | | - Pace / Nettonal Ca | Analytical* Inter for Testing 8 innovelier |
| | | | | | | | | il To: | | | x | | | 8 | | | | | | | 12065 Lebanon Rd | | | | | | | | | | | |
| Jason Franks Project Description: | | | jfranks@s | csengineers. | harme barne | - he h | | Pre | | 103 | NO | | | | 72 | | | Mount Juliet, TN 372 Phone: 615-758-585 | 8 | | | | | | | | | | | | | |
| Evergy - latan Generating Station | | City/State Collected: | WEST | De A | | MT C | | N- | | Ę | E-H | | 1997 - 1997 1997 - 1997 | | | | 100 - 100 100 - 100 100 - 100 | Phone: 800-767-585 Fax: 615-758-5859 | 自然感 | | | | | | | | | | | | | |
| Phone: 913-681-0030 | Client Projec 27213167 | ent Project # 213167.19 | | Lab Project | t# PKS-IATA | v | j | 125mlHDPE-NoPres | | 250miHDPE-HNO3 | 50mIHDPE-HNO3 | | | | | | | 505 #12 21510 G007 | | | | | | | | | | | | | | |
| Collected by (print): JASON R. RANKS | Site/Facility | ID # | | P.O. # | 1 | | | | H2S04 | * | ** 250 | VoPres | G | H2S04 | | | | Acctnum: AQL | | | | | | | | | | | | | | |
| Collected by (signature): Rush? (Lab MUST Be Collected by (signature): Same Day Five | | Day Five | | Quote # | | | | , F, SO4) | 250miHDPE-H2SO4 | Metals | Metals | 250miHDPE-NoPres | TOC 250mlAmb-HCI | Amb-Add | | | | Template: T136 Prelogin: P769 | 9368 | | | | | | | | | | | | | |
| Immediately Packed on Ice N Y | Two D | ay 10 D. | ay (Rad Only) | Date r | Results Nee | 160 | No. of | ns (Cld, | 250ml | Hardness, 1 | Hardness, N | 250ml | 250ml | 1L-Am | | | | PM: 206 - Jeff C PB: | arr | | | | | | | | | | | | | |
| Sample ID | Comp/Grab | Matrix * | Depth | Date | | ime | Cntrs | Anions | COD | Hard | Hard | TDS 2 | TOC: | TOX | | | | Shipped Via: Remarks | Sample # (lab only) | | | | | | | | | | | | | |
| MW-3 | GRAG | GW | - | 5/20 | 20 101 | 35 | 6 | X | x | x | | x | x | x | | | 5 | | 101 | | | | | | | | | | | | | |
| MW-4 | | GW | - | 1 | M | 35 | 6 | x | x | x | | x | x | x | | | | 3 | 07 | | | | | | | | | | | | | |
| MW-5 | | GW | - | | | 20 | 6 | X | x | x | in the | x | x | x | | | | | 03 | | | | | | | | | | | | | |
| MW-1 | and the second | GW | - | | | 55 | 4 | | X | | x | | x | x | | | 1.1.1 | Martin - | 04 | | | | | | | | | | | | | |
| MW-2 | | GW | - | | a subscription and the subscription of | 55 | 4 | | x | | x | | x | x | | | | | 05 | | | | | | | | | | | | | |
| MW-6 | | GW | E | | | 140 | 4 | | X | | x | | x | x | | | | | 06 | | | | | | | | | | | | | |
| MW-7 | | GW | - | | | 30 | 4 | | X | | x | | x | x | | | 1992.193 | | 07 | | | | | | | | | | | | | |
| MW-8 | | GW | - | | 12 | | 4 | | X | | X | | X | X | 1 | | | and the second second | 08 | | | | | | | | | | | | | |
| DUPLICATE | | GW | - | | 11 A | 35 | 4 | | X | | X | | X | x | and and a second se | | | | 00 | | | | | | | | | | | | | |
| MS/MSD | | GW | 5 | | | 40 | 4 | | X | | X | | X | x | | | | | 2 | | | | | | | | | | | | | |
| * Matrix: Re SS - Soil AIR - Air F - Filter H GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water Sa OT - Other Sa | ,Cr,Co,Fe,N ,Na,Ni,Sb, | Mg,Mn,Na,N As,Be,Cd,Cu | e,Cd,Cu Zn | ,Pb,Se | ,TI,Zn | ** | | pH Flow | | Temp Other | | 2 | COC Si Bottle Correct | al Pr gned/ s arr t bot | le Receipt Che esent/Intact: Accurate: ive Intact: tles used: volume sent: | ANNA A A A A A A A A A A A A A A A A A | | | | | | | | | | | | | | | | |
| Relinquished by : (Signature) | and the second | $\underline{-}$ Courier ate: 5/21/20 | Time: | | racking # | Signat | re) | | 300 | 11110 | rip Blanl | Receiv | G | e / No D / Mec BR | хH | Preser | vatio | <u>If Applicabl</u> adspace: n Correct/Chec <0.5 mR/hr: | Y N | | | | | | | | | | | | | |
| Relipquished by : (Signature) | | ite: | Time: | Re | eceived by: | (Signatu | re) | | | | empt/ | ñ°C | and the second second second | 46 | ed: | If preser | vation | required by Logi | n: Date/Time | | | | | | | | | | | | | |
| Relinquished by : (Signature) | Da | ite: | Time: | Re | eceived for | ab by: (S | Signatu | re) | | D | ate: | | Time | and have been a thread of | | Hold: | | | Condition: NCF / OK | | | | | | | | | | | | | |



ANALYTICAL REPORT

SCS Engineers - KS

Sample Delivery Group: Samples Received: Project Number: Description: L1221443 05/22/2020 27213167.20 Evergy - latan Generating Station

Report To:

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

Тс Ss Cn Śr ʹQc Gl ΆI Sc

Entire Report Reviewed By:

Jubb land

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.

ACCOUNT: SCS Engineers - KS PROJECT: 27213167.20

SDG: L1221443 DATE/TIME: 05/31/20 15:07 PAGE: 1 of 19

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SDG: L1221443 DATE/TIME: 05/31/20 15:07

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

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| | JANIFLL | | MARI | | ONLE | |
|--|------------------------|----------|----------------------------------|---------------------------------------|------------------------------|----------------------------------|
| MW-1 L1221443-01 GW | | | Collected by | Collected date/time 05/20/20 09:55 | Received da 05/22/20 11:4 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Metals (ICP) by Method 6010B | WG1481516 | 1 | 05/27/20 23:07 | 05/28/20 20:51 | EL | Mt. Juliet, TI |
| MW-2 L1221443-02 GW | | | Collected by | Collected date/time 05/20/20 10:55 | Received da 05/22/20 11:4 | |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| Metals (ICP) by Method 6010B | WG1481516 | 1 | date/time 05/27/20 23:07 | date/time 05/28/20 20:53 | EL | Mt. Juliet, T |
| MW-6 L1221443-03 GW | | | Collected by | Collected date/time 05/20/20 09:40 | Received da 05/22/20 11:• | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Metals (ICP) by Method 6010B | WG1481516 | 1 | 05/27/20 23:07 | 05/28/20 20:56 | EL | Mt. Juliet, T |
| MW-7 L1221443-04 GW | | | Collected by | Collected date/time 05/20/20 10:30 | Received da 05/22/20 11:- | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Metals (ICP) by Method 6010B | WG1481516 | 1 | 05/27/20 23:07 | 05/28/20 19:57 | EL | Mt. Juliet, T |
| MW-8 L1221443-05 GW | | | Collected by | Collected date/time 05/20/20 12:00 | Received da 05/22/20 11:- | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Metals (ICP) by Method 6010B | WG1481516 | 1 | 05/27/20 23:07 | 05/28/20 20:59 | EL | Mt. Juliet, T |
| DUPLICATE L1221443-06 GW | | | Collected by | Collected date/time 05/20/20 10:35 | Received da 05/22/20 11:- | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Metals (ICP) by Method 6010B | WG1481516 | 1 | 05/27/20 23:07 | 05/28/20 21:01 | EL | Mt. Juliet, T |
| MW-9 L1221443-07 GW | | | Collected by | Collected date/time 05/20/20 12:30 | Received da 05/22/20 11:4 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Mercury by Method 7470A | WG1481265 | 1 | 05/23/20 21:56 | 05/26/20 14:44 | TCT | Mt. Juliet, T |
| Metals (ICP) by Method 6010B | WG1481517 | 1 | 05/27/20 23:36 | 05/29/20 11:29 | TRB | Mt. Juliet, T |
| Metals (ICPMS) by Method 6020 Metals (ICPMS) by Method 6020 | WG1481528 WG1481528 | 1 1 | 05/28/20 07:49 05/28/20 07:49 | 05/28/20 20:12 05/29/20 09:29 | JPD JPD | Mt. Juliet, TI Mt. Juliet, TI |
| אופנסוג נוערואוגן עץ ואפנווטע 20ע | WG1481528 | I | 05/26/20 07:49 | 03123120 03123 | JFD | wit. Jullet, T |
| MW-10 L1221443-08 GW | | | Collected by | Collected date/time 05/20/20 13:50 | Received da 05/22/20 11:- | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Mercury by Method 7470A | WG1481265 | 1 | 05/23/20 21:56 | 05/26/20 14:46 | TCT | Mt. Juliet, Tl |
| Metals (ICP) by Method 6010B | WG1481517 | 1 | 05/27/20 23:36 | 05/29/20 11:37 | TRB | Mt. Juliet, TI |
| Metals (ICPMS) by Method 6020 | WG1481528 | 1 | 05/28/20 07:49 | 05/28/20 20:15 | JPD | Mt. Juliet, T |
| Metals (ICPMS) by Method 6020 | WG1481528 | 1 | 05/28/20 07:49 | 05/29/20 09:32 | JPD | Mt. Juliet, TN |
| ACCOUNT: | PROJECT: | | SDG: | DAT | E/TIME: | |
| | 27212107 20 | | 11221442 | 05/04 | 120 15.07 | |

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L1221443

SCS Engineers - KS

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CASE NARRATIVE

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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.

Jubb land

Jeff Carr Project Manager

Τс Ss Cn Sr Qc GI AI Sc

SDG: L1221443 DATE/TIME: 05/31/20 15:07

Collected date/time: 05/20/20 09:55

SAMPLE RESULTS - 01 L1221443



Ср

Metals (ICP) by Method 6010B

| | | | | | | 10 |
|------------|--------|---------------|----------|------------------|-----------|--------|
| | Result | Qualifier RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | ug/l | | date / time | | 2 |
| Lithium | 51.5 | 15.0 | 1 | 05/28/2020 20:51 | WG1481516 | 1 |
| Molybdenum | ND | 5.00 | 1 | 05/28/2020 20:51 | WG1481516 | |

| ACCOUNT: | |
|--------------------|--|
| SCS Engineers - KS | |

PROJECT: 27213167.20

SDG: L1221443

DATE/TIME: 05/31/20 15:07 PAGE: 5 of 19

Collected date/time: 05/20/20 10:55

SAMPLE RESULTS - 02



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|------------|--------|-----------|------|----------|------------------|-----------|-----|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Lithium | 52.8 | | 15.0 | 1 | 05/28/2020 20:53 | WG1481516 | T |
| Molybdenum | ND | | 5.00 | 1 | 05/28/2020 20:53 | WG1481516 | |



Collected date/time: 05/20/20 09:40

SAMPLE RESULTS - 03



| | | | | | | | 1 Cn |
|------------|--------|-----------|------|----------|------------------|-----------|-----------|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ср |
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Lithium | 34.2 | | 15.0 | 1 | 05/28/2020 20:56 | WG1481516 | Tc |
| Molybdenum | ND | | 5.00 | 1 | 05/28/2020 20:56 | WG1481516 | |
| | | | | | | | 2 |



Collected date/time: 05/20/20 10:30

SAMPLE RESULTS - 04



| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
|------------|--------|-----------|------|----------|------------------|-----------|----|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Lithium | 39.4 | | 15.0 | 1 | 05/28/2020 19:57 | WG1481516 | Tc |
| Molybdenum | ND | | 5.00 | 1 | 05/28/2020 19:57 | WG1481516 | |

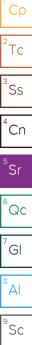
| ACCOUNT: | |
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| SCS Engineers - KS | |

IVI VV - O Collected date/time: 05/20/20 12:00

SAMPLE RESULTS - 05



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| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Lithium | 40.1 | | 15.0 | 1 | 05/28/2020 20:59 | WG1481516 | T |
| Molybdenum | ND | | 5.00 | 1 | 05/28/2020 20:59 | WG1481516 | |



SAMPLE RESULTS - 06



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| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|------------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Lithium | 39.7 | | 15.0 | 1 | 05/28/2020 21:01 | WG1481516 |
| Molybdenum | ND | | 5.00 | 1 | 05/28/2020 21:01 | WG1481516 |

Cobalt

Lithium

Molybdenum

VI VV - 9 Collected date/time: 05/20/20 12:30

SAMPLE RESULTS - 07

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Mercury by Method 7470A

| wichedry by wic | IIIOU / F/ OA | | | | | | 1 |
|-----------------|---------------|-----------|-------|----------|------------------|-----------|---|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | - |
| Mercury | ND | | 0.200 | 1 | 05/26/2020 14:44 | WG1481265 | - |
| Metals (ICP) by | Method 6010B | | | | | | |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | 4 |
| Barium | 109 | | 5.00 | 1 | 05/29/2020 11:29 | WG1481517 | |
| | | | | | | | |

05/29/2020 11:29

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WG1481517 WG1481517

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Metals (ICPMS) by Method 6020

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| Metals (ICPINS) (| by Method 6020 | | | | | | 7 |
|-------------------|----------------|-----------|------|----------|------------------|-----------|-------|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | - ÍGI |
| Analyte | ug/l | | ug/l | | date / time | | 8 |
| Antimony | ND | | 4.00 | 1 | 05/28/2020 20:12 | WG1481528 | Ĩ ĂI |
| Arsenic | 19.6 | | 2.00 | 1 | 05/28/2020 20:12 | WG1481528 | |
| Beryllium | ND | | 2.00 | 1 | 05/29/2020 09:29 | WG1481528 | °Sc |
| Cadmium | ND | | 1.00 | 1 | 05/28/2020 20:12 | WG1481528 | 50 |
| Lead | ND | | 5.00 | 1 | 05/28/2020 20:12 | WG1481528 | |
| Selenium | ND | | 2.00 | 1 | 05/28/2020 20:12 | WG1481528 | |
| Thallium | ND | | 2.00 | 1 | 05/28/2020 20:12 | WG1481528 | |

SDG: L1221443

SAMPLE RESULTS - 08 L1221443

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Collected date/time: 05/20/20 13:50 Mercury by Method 7470A

| Mercury by Method | 1/4/0A | | | | | | |
|---------------------|-----------|-----------|-------|----------|------------------|-----------|--|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | |
| Mercury | ND | | 0.200 | 1 | 05/26/2020 14:46 | WG1481265 | |
| | | | | | | | |
| Metals (ICP) by Met | nod 6010B | | | | | | |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | |
| Barium | 187 | | 5.00 | 1 | 05/29/2020 11:37 | WG1481517 | |
| Chromium | ND | | 10.0 | 1 | 05/29/2020 11:37 | WG1481517 | |
| Cobalt | ND | | 10.0 | 1 | 05/29/2020 11:37 | WG1481517 | |
| Lithium | 23.0 | | 15.0 | 1 | 05/29/2020 11:37 | WG1481517 | |
| Molybdenum | 25.3 | | 5.00 | 1 | 05/29/2020 11:37 | WG1481517 | |

Metals (ICPMS) by Method 6020

| Metals (ICPMS) t | by Method 6020 | | | | | | |
|------------------|----------------|-----------|------|----------|------------------|------------------|--|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | |
| Antimony | ND | | 4.00 | 1 | 05/28/2020 20:15 | <u>WG1481528</u> | |
| Arsenic | 15.3 | | 2.00 | 1 | 05/28/2020 20:15 | WG1481528 | |
| Beryllium | ND | | 2.00 | 1 | 05/29/2020 09:32 | WG1481528 | |
| Cadmium | ND | | 1.00 | 1 | 05/28/2020 20:15 | WG1481528 | |
| Lead | ND | | 5.00 | 1 | 05/28/2020 20:15 | WG1481528 | |
| Selenium | ND | | 2.00 | 1 | 05/28/2020 20:15 | WG1481528 | |
| Thallium | ND | | 2.00 | 1 | 05/28/2020 20:15 | WG1481528 | |
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WG1481265

Mercury by Method 7470A

QUALITY CONTROL SUMMARY

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Method Blank (MB)

| (MB) R3531871-1 05/ | /26/20 12:25 | | | |
|---------------------|--------------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Mercury | U | | 0.100 | 0.200 |

Laboratory Control Sample (LCS)

| (LCS) R3531871-5 05/26 | 6/20 12:27 | | | | |
|------------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Mercury | 3.00 | 2.73 | 91.0 | 80.0-120 | |

QUALITY CONTROL SUMMARY

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Method Blank (MB)

| (MB) R3532814-1 0 | 5/28/20 19:42 | | | | |
|-------------------|---------------|--------------|--------|--------|--|
| | MB Result | MB Qualifier | MB MDL | MB RDL | |
| Analyte | ug/l | | ug/l | ug/l | |
| Lithium | U | | 5.74 | 15.0 | |
| Molybdenum | U | | 1.04 | 5.00 | |
| | | | | | |

Laboratory Control Sample (LCS)

| (LCS) R3532814-2 05/ | /28/20 19:44 | | | | |
|----------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Lithium | 1000 | 924 | 92.4 | 80.0-120 | |
| Molybdenum | 1000 | 958 | 95.8 | 80.0-120 | |

L1221405-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221405-09 05/28/20 19:47 • (MS) R3532814-4 05/28/20 19:52 • (MSD) R3532814-5 05/28/20 19:55 | | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|---|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits | |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % | |
| Lithium | 1000 | ND | 939 | 908 | 92.8 | 89.7 | 1 | 75.0-125 | | | 3.27 | 20 | _ |
| Molybdenum | 1000 | 184 | 1160 | 1140 | 98.1 | 95.8 | 1 | 75.0-125 | | | 1.99 | 20 | |

L1221443-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221443-04 05/28/20 19:57 • (MS) R3532814-6 05/28/20 20:00 • (MSD) R3532814-7 05/28/20 20:02 | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Lithium | 1000 | 39.4 | 986 | 989 | 94.6 | 94.9 | 1 | 75.0-125 | | | 0.273 | 20 |
| Molybdenum | 1000 | ND | 974 | 984 | 97.2 | 98.2 | 1 | 75.0-125 | | | 0.973 | 20 |

| ACCOUNT: | |
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| SCS Engineers - | KS |

PROJECT: 27213167.20

SDG: L1221443 DATE/TIME: 05/31/20 15:07 PAGE: 14 of 19

QUALITY CONTROL SUMMARY L1221443-07,08

| (MB) R3533271-1 | 05/29/20 11:06 |
|-----------------|----------------|
| | |

| (IVID) R5555271-1 US | /29/20 11.06 | | | |
|----------------------|--------------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Barium | U | | 0.895 | 5.00 |
| Chromium | U | | 5.00 | 10.0 |
| Cobalt | U | | 0.807 | 10.0 |
| Lithium | U | | 5.74 | 15.0 |
| Molybdenum | 1.05 | J | 1.04 | 5.00 |

Laboratory Control Sample (LCS)

| (LCS) R3533271-2 C |)5/29/20 11:09 | | | | |
|--------------------|----------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Barium | 1000 | 957 | 95.7 | 80.0-120 | |
| Chromium | 1000 | 951 | 95.1 | 80.0-120 | |
| Cobalt | 1000 | 965 | 96.5 | 80.0-120 | |
| Lithium | 1000 | 938 | 93.8 | 80.0-120 | |
| Molybdenum | 1000 | 969 | 96.9 | 80.0-120 | |

L1221447-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221447-04 05/29/20 11:21 • (MS) R3533271-6 05/29/20 11:24 • (MSD) R3533271-7 05/29/20 11:26 | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|--------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Barium | 1000 | 220 | 1170 | 1180 | 94.9 | 96.3 | 1 | 75.0-125 | | | 1.19 | 20 |
| Chromium | 1000 | ND | 965 | 964 | 96.5 | 96.4 | 1 | 75.0-125 | | | 0.0506 | 20 |
| Cobalt | 1000 | ND | 979 | 993 | 97.8 | 99.2 | 1 | 75.0-125 | | | 1.40 | 20 |
| Lithium | 1000 | 44.0 | 981 | 994 | 93.7 | 95.0 | 1 | 75.0-125 | | | 1.27 | 20 |
| Molybdenum | 1000 | ND | 973 | 987 | 97.0 | 98.3 | 1 | 75.0-125 | | | 1.38 | 20 |

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QUALITY CONTROL SUMMARY

| (MB) R3532742-1 | 05/28/20 | 16: | 12 | |
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|-----------|-----------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Antimony | U | | 1.32 | 4.00 |
| Arsenic | U | | 0.735 | 2.00 |
| Beryllium | U | | 0.454 | 2.00 |
| Cadmium | U | | 0.478 | 1.00 |
| Lead | U | | 2.49 | 5.00 |
| Selenium | U | | 0.657 | 2.00 |
| Thallium | U | | 0.460 | 2.00 |
| | | | | |

Laboratory Control Sample (LCS)

| (LCS) R3532742-2 05/2 | 8/20 16:15 | | | | | 7 |
|-----------------------|--------------|------------|----------|-------------|---------------|-----|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | ΄GΙ |
| Analyte | ug/l | ug/l | % | % | | |
| Antimony | 50.0 | 46.9 | 93.7 | 80.0-120 | | 8 |
| Arsenic | 50.0 | 46.5 | 93.0 | 80.0-120 | | A |
| Beryllium | 50.0 | 46.3 | 92.7 | 80.0-120 | | 9 |
| Cadmium | 50.0 | 51.9 | 104 | 80.0-120 | | Sc |
| Lead | 50.0 | 49.3 | 98.5 | 80.0-120 | | |
| Selenium | 50.0 | 49.5 | 98.9 | 80.0-120 | | |
| Thallium | 50.0 | 47.3 | 94.7 | 80.0-120 | | |

DATE/TIME: 05/31/20 15:07 PAGE: 16 of 19 Тс

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GLOSSARY OF TERMS

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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 resul 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 |

PROJECT: 27213167.20

SDG: L1221443 DATE/TIME: 05/31/20 15:07

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ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

State Accreditations

| Alaska17-026NevadiArizonaAZ0612New HArkansas88-0469New JCalifornia2932New MColoradoTN00003New YConnecticutPH-0197North OFloridaE87487North OGeorgiaNELAPNorth OGeorgia^1923North OIllinois200008OklahoIndianaC-TN-01OregorIowa364PennsyKansasE-10277RhodeKentucky ¹⁶ 90010South ILouisianaAl30792TenneeLouisiana 1LA180010TexasMaineTN0003UtahMinne sota047-999-395WashirMinnesota047-999-395WashirMissouri340Wiscor | Alabama | 40660 | Nebras |
|--|------------------------|-------------|--------------------|
| ArizonaA20612New HArkansas88-0469New HCalifornia2932New MColoradoTN00003New MConnecticutPH-0197North GFloridaE87487North GGeorgiaNELAPNorth GGeorgia ¹ 923North GIdahoTN00003OhioIIllinois20008OklahoIndianaC-TN-01OregorIowa364PennsyKansasE-10277RhodeKentucky ¹⁶ 90010SouthLouisianaA130792TennesLouisiana 1LA180010TexasMaireTN0002TexasMarjand324UtahMinnesota047-999-395WashirMississippiTN00003West WMissouri340Wiscont | | | |
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| California2932ColoradoTN00003ConnecticutPH-0197FloridaE87487GeorgiaNELAPGeorgia ¹ 923IdahoTN00003Illinois200008IndianaC-TN-01Iowa364Kentucky ¹⁶ 90010Kentucky ² 16LouisianaAl30792LouisianaAl30792Louisiana324MaineTN0003Minnesota047-999-395MinssispipiTN0003Missouri340Wiscouri340 | | | |
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| Kentucky 1690010South IKentucky 216South ILouisianaAl30792TennesLouisiana 1LA180010TexasMaineTN0002TexasMaryland324UtahMassachusettsM-TN003VermoMichigan9958VirginiaMinnesota047-999-395WashirMississippiTN0003West VMissouri340Wiscont | lowa | 364 | Pennsy |
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| Kentucky 216South ILouisianaAl30792TennesLouisiana 1LA180010TexasMaineTN0002TexasMaryland324UtahMassachusettsM-TN003VermoMichigan9958VirginiaMinnesota047-999-395WashirMississippiTN0003West VMissouri340Wiscont | Kentucky ¹⁶ | 90010 | South C |
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| MaineTN0002TexasMaryland324UtahMassachusettsM-TN003VermoMichigan9958VirginiaMinnesota047-999-395WashirMississippiTN0003West VMissouri340Wiscont | Louisiana | AI30792 | Tennes |
| Maryland324UtahMassachusettsM-TN003VermoMichigan9958VirginiaMinnesota047-999-395WashirMississippiTN00003West VMissouri340Wiscont | Louisiana ¹ | LA180010 | Texas |
| MassachusettsM-TN003VermoMichigan9958VirginiaMinnesota047-999-395WashirMississippiTN00003West VMissouri340Wiscont | Maine | TN0002 | Texas ⁵ |
| Michigan9958VirginiaMinnesota047-999-395WashirMississippiTN00003West VMissouri340Wiscont | Maryland | 324 | Utah |
| Minnesota047-999-395WashirMississippiTN00003West VMissouri340Wiscon | Massachusetts | M-TN003 | Vermor |
| MississippiTN00003West VMissouri340Wiscon | Michigan | 9958 | Virginia |
| Missouri 340 Wiscon | Minnesota | 047-999-395 | Washin |
| | Mississippi | TN00003 | West V |
| Montana CERT0086 Wyomi | Missouri | 340 | Wiscon |
| | Montana | CERT0086 | Wyomii |

| lebraska | NE-OS-15-05 |
|-----------------------------|------------------|
| Nevada | TN-03-2002-34 |
| New Hampshire | 2975 |
| New Jersey–NELAP | TN002 |
| New Mexico ¹ | n/a |
| New York | 11742 |
| North Carolina | Env375 |
| North Carolina ¹ | DW21704 |
| North Carolina ³ | 41 |
| North Dakota | R-140 |
| Ohio-VAP | CL0069 |
| Oklahoma | 9915 |
| Oregon | TN200002 |
| Pennsylvania | 68-02979 |
| Rhode Island | LAO00356 |
| South Carolina | 84004 |
| South Dakota | n/a |
| Tennessee 14 | 2006 |
| Texas | T104704245-18-15 |
| Texas ⁵ | LAB0152 |
| Utah | TN00003 |
| Vermont | VT2006 |
| Virginia | 460132 |
| Washington | C847 |
| West Virginia | 233 |
| Wisconsin | 9980939910 |
| Wyoming | A2LA |
| | |

Third Party Federal Accreditations

| 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

Our Locations

SCS Engineers - KS

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



27213167.20

L1221443

PAGE: 18 of 19

05/31/20 15:07

Τс Ss Cn Sr Qc Gl AI Sc

| | | | Billing Infor | mation: | 1 | | | | A | nalysis / C | ontaine | r / Preservativ | e | | Chain of Custody | Page of |
|---|------------------------------|--------------------------------------|---------------|----------------|-----------------------|-----------|---------------|----------------|------|----------------|---------|--------------------------------|------------------------|---|---|--|
| SCS Engineers - KS | | Accounts 8575 W. | | | UC | UR | • | | | | | | - Pace, Nettonel Ca | Analytical* Inter for Testing 8 innovation | | |
| Overland Park, KS 66210 | | | Email To: | | | 1. | | | | | | | | | 12065 Lebanon Rd | |
| Jason Franks | | | | sengineers.com | n;jay.martin@ev | I | | | | | | | • | | Mount Juliet, TN 37 Phone: 615-758-58 Phone: 800-767-58 | 58 77 |
| Project Description: Evergy - latan Generating Station | | City/State Collected: | 11 JEST | ON ME | Please Cir PT MT C | | |)3 | | | | | | | Fax: 615-758-5859 | |
| Phone: 913-681-0030 | Client Project 27213167 | | | Lab Project # | S-IATAN | | EONH- | 250mlHDPE-HNO3 | | | | | | | sdg # 12: G00 | All and a second s |
| Collected by (print): JASON R. FRANKS | Site/Facility | ID # | | P.O. # | | | 250miHDPE-HNO | MIHDF | | | | | | | Acctnum: AQ | |
| Collected by (signature): Clason R. Fromhs | Same | (Lab MUST Be Day Five Day 5 Da | Day | Quote # | ults Needed | 1 | | 6010 250 | | | | | | | Template: T16 Prelogin: P77 PM: 206 - Jeff | 0300 |
| Immediately Packed on Ice N Y | Two D | Day 10 D | ay (Rad Only) | Dute nes | und necetu | No. of | Metals | I | | | | | | | PB; | |
| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | Cotrs | CCR N | Li, Mo | | | | | | | Shipped Via: Remarks | Sample # (lab only) |
| MW-1 | BRAS | GW | T_ | 5/20/2 | 0 0955 | 1 | -0 | X | | | | | | ľ | | -01 |
| MW-2 | DATS | GW | - | 1 1 | 1055 | 1 | | x | | | | | | | | 02 |
| MW-6 | | GW | - | | 0940 | 1 | | X | | | | | | | | 03 |
| MW-7 | | GW | - | | 1030 | 1 | | X | | | | | | | | 04 |
| MW-8 | | GW | - | | INDOO | 1 | | X | | | | | | | | 05 |
| DUPLICATE | | GW | | | 1039 | - 1 | | x | | | | | | | | 06 |
| MW7 MS/MSD | | GW | - | | IURIS | 1 | | X | | | | | | | | 64 |
| MW-9 | | GW | - | | 1230 | 1 | X | | | | | | | | | 07 |
| MW-10 | | GW | - | J | 1350 | 1 | X | | | | | | | | | 08 |
| | | | | | | J.A. | | | | | | | | | | |
| | Remarks:CCR I metals - Hg | Metals - 601 | 0 Metals-B | a,Cr,Co,Li,Mo | 6020 metals-S | ib,As,E | Se,Cd,P | b,Se,Tl | 7470 | pH _ Flow _ | | Temp Other | CC | C Seal | ample Receipt C Present/Intact med/Accurate: arrive intact: bottles used: | |
| Data Data Mana | Samples returne UPSFedI | ed via: ExCourie | r | Tra | cking # | + | | | | | | | sı V(| ufficie DA Zerc | ent volume sent: <u>If Applicat</u> Headspace: ition Correct/Ch | ele Y N |
| Relinguished by : (Signature) | | Date: 5/21/2 | 20 13 | 800 Ref | elved by: (Signa | the) | ,51 | 130 | ~ | Trip Blank | Receive | ed: Aes / No HCL / M TBR | BOH R | AD Scre | en <0.5 mR/hr: | <u>Y</u> N |
| Relinquished by : (Signature) | | Date: | Tim | e: Rec | ceived by: (Signa | ture) | | | | Temp! Hilde | 7 °C | Bottles Rece | | | ation required by Lo | |
| Relinquished by : (Signature) | | Date: | Tim | e: Rec | ceived for lab by | : (Signa | type) | \sim | | Date: 5/11 | 1-2 | Time: | | old: | | Condition: NCF / OK |

T



ANALYTICAL REPORT

SCS Engineers - KS

Sample Delivery Group: Samples Received: Project Number: Description: L1221466 05/22/2020 27213167.20 Evergy - latan Gen Station

Report To:

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

Entire Report Reviewed By:

tidson

Donna Eidson 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.

ACCOUNT: SCS Engineers - KS PROJECT: 27213167.20

SDG: L1221466 DATE/TIME: 07/07/20 11:46

PAGE: 1 of 18

Cp ²Tc ³Ss ⁴Cn ⁵Sr ⁶Qc ⁷Gl ⁸Al ⁹Sc

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| ² Tc | |
| ³ Ss | |
| ⁴ Cn | |
| ⁵ Sr | |
| ⁶ Qc | |
| ⁷ Gl | |

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SDG: L1221466 DATE/TIME: 07/07/20 11:46

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

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| MW-1 L1221466-01 Non-Potable Water | | | Collected by Jason R Franks | Collected date/time 05/20/20 09:55 | Received da 05/22/20 09 | |
|---------------------------------------|-----------|----------|--------------------------------|---------------------------------------|-------------------------|----------------|
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904 | WG1488903 | 1 | 06/09/20 13:42 | 06/18/20 10:35 | JMR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG1493951 | 1 | 06/17/20 14:23 | 06/18/20 17:45 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG1493951 | 1 | 06/17/20 14:23 | 06/18/20 17:45 | RGT | Mt. Juliet, TN |
| | | | Collected by Jason R Franks | Collected date/time 05/20/20 10:55 | Received da 05/22/20 09 | |
| MW-2 L1221466-02 Non-Potable Water | | | | | | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904 | WG1488903 | 1 | 06/09/20 13:42 | 06/18/20 10:35 | JMR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG1493951 | 1 | 06/17/20 14:23 | 06/18/20 17:45 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG1493951 | 1 | 06/17/20 14:23 | 06/18/20 17:45 | RGT | Mt. Juliet, TN |
| MW-6 L1221466-03 Non-Potable Water | | | Collected by Jason R Franks | Collected date/time 05/20/20 09:40 | Received da 05/22/20 09 | |
| Method | Batch | Dilution | Preparation | Analysis | | Location |
| vietiou | DdlCII | Dilution | date/time | date/time | Analyst | LUCALION |
| Radiochemistry by Method 904 | WG1488903 | 1 | 06/09/20 13:42 | 06/18/20 10:35 | JMR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG1493951 | 1 | 06/17/20 14:23 | 06/18/20 23:43 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG1493951 | 1 | 06/17/20 14:23 | 06/18/20 23:43 | RGT | Mt. Juliet, TN |
| MW-7 L1221466-04 Non-Potable Water | | | Collected by Jason R Franks | Collected date/time 05/20/20 10:30 | Received da 05/22/20 09 | |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | Batch | Dilution | date/time | date/time | Analyst | Location |
| Radiochemistry by Method 904 | WG1488903 | 1 | 06/09/20 13:42 | 06/18/20 10:35 | JMR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG1493951 | 1 | 06/17/20 14:23 | 06/18/20 23:43 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG1493951 | 1 | 06/17/20 14:23 | 06/18/20 23:43 | RGT | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | te/time |
| MW-8 L1221466-05 Non-Potable Water | | | Jason R Franks | 05/20/20 12:00 | 05/22/20 09 |):00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904 | WG1488903 | 1 | 06/09/20 13:42 | 06/18/20 10:35 | JMR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG1493951 | 1 | 06/17/20 14:23 | 06/18/20 23:43 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG1493951 | 1 | 06/17/20 14:23 | 06/18/20 23:43 | RGT | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | |
| MW-9 L1221466-06 Non-Potable Water | | | Jason R Franks | 05/20/20 12:30 | 05/22/20 09 |):00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904 | WG1488903 | 1 | 06/09/20 13:42 | 06/18/20 10:35 | JMR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG1493951 | 1 | 06/17/20 14:23 | 06/18/20 23:43 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG1493951 | 1 | 06/17/20 14:23 | 06/18/20 23:43 | RGT | Mt. Juliet, TN |

PROJECT: 27213167.20

SDG: L1221466 DATE/TIME: 07/07/20 11:46

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

| MW-10 L1221466-07 Non-Potable Water | | | Collected by Jason R Franks | Collected date/time 05/20/20 13:50 | Received da 05/22/20 09 | |
|---|-----------|----------|--------------------------------|---------------------------------------|----------------------------|----------------|
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904 | WG1488903 | 1 | 06/09/20 13:42 | 06/18/20 10:35 | JMR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG1493951 | 1 | 06/17/20 14:23 | 06/18/20 23:43 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG1493951 | 1 | 06/17/20 14:23 | 06/18/20 23:43 | RGT | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | te/time |
| DUPLICATE L1221466-08 Non-Potable Water | | | Jason R Franks | 05/20/20 10:35 | 05/22/20 09 | 0:00 |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Radiochemistry by Method 904 | WG1488903 | 1 | 06/09/20 13:42 | 06/18/20 10:35 | JMR | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG1493951 | 1 | 06/17/20 14:23 | 06/18/20 23:43 | RGT | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG1493951 | 1 | 06/17/20 14:23 | 06/18/20 23:43 | RGT | Mt. Juliet, TN |

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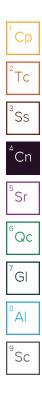
SDG: L1221466

CASE NARRATIVE

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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.

Donna Eidson Project Manager



SDG: L1221466 DATE/TIME: 07/07/20 11:46 PAGE:

5 of 18

IVI VV - I Collected date/time: 05/20/20 09:55

SAMPLE RESULTS - 01



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Radiochemistry by Method 904

| · · · · · · · · · · · · · · · · · · · | - , | | | | | | |
|---------------------------------------|--------|-----------|-------------|----------|------------------|-----------|--|
| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | |
| Analyte | pCi/l | | +/- | pCi/l | date / time | | |
| RADIUM-228 | 1.53 | | 0.605 | 0.902 | 06/18/2020 10:35 | WG1488903 | |
| (T) Barium | 95.6 | | | 62.0-143 | 06/18/2020 10:35 | WG1488903 | |
| (T) Yttrium | 97.2 | | | 79.0-136 | 06/18/2020 10:35 | WG1488903 | |
| | | | | | | | |

Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | Cn |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|--------|
| Analyte | pCi/l | | +/- | pCi/l | date / time | | 5 |
| Combined Radium | 1.88 | | 0.850 | 1.14 | 06/18/2020 17:45 | WG1493951 | ँSr |

Radiochemistry by Method SM7500Ra B M

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | |
|----------------|--------|-----------|-------------|----------|------------------|-----------|--|
| Analyte | pCi/l | | +/- | pCi/l | date / time | | |
| RADIUM-226 | 0.350 | | 0.245 | 0.237 | 06/18/2020 17:45 | WG1493951 | |
| (T) Barium-133 | 96.8 | | | 30.0-143 | 06/18/2020 17:45 | WG1493951 | |

SDG: L1221466

Collected date/time: 05/20/20 10:55

SAMPLE RESULTS - 02

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Radiochemistry by Method 904

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | | |
|-------------|--------|-----------|-------------|----------|------------------|-----------|--|-----------------|
| Analyte | pCi/l | | +/- | pCi/l | date / time | | | 2 |
| RADIUM-228 | 1.67 | | 0.601 | 1.08 | 06/18/2020 10:35 | WG1488903 | | ŤΤ |
| (T) Barium | 83.9 | | | 62.0-143 | 06/18/2020 10:35 | WG1488903 | | |
| (T) Yttrium | 112 | | | 79.0-136 | 06/18/2020 10:35 | WG1488903 | | ³ Ss |

Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | (| Cn |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|---|----|
| Analyte | pCi/l | | +/- | pCi/l | date / time | | 5 | |
| Combined Radium | 1.91 | | 0.824 | 1.35 | 06/18/2020 17:45 | WG1493951 | Ĩ | Sr |

Radiochemistry by Method SM7500Ra B M

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | |
|----------------|--------|-----------|-------------|----------|------------------|-----------|--|
| Analyte | pCi/l | | + / - | pCi/l | date / time | | |
| RADIUM-226 | 0.241 | | 0.223 | 0.265 | 06/18/2020 17:45 | WG1493951 | |
| (T) Barium-133 | 81.0 | | | 30.0-143 | 06/18/2020 17:45 | WG1493951 | |

Collected date/time: 05/20/20 09:40

SAMPLE RESULTS - 03



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Radiochemistry by Method 904

| | · , · · · · · · · · · · · · · · · · · · | | | | | | |
|-------------|---|-----------|-------------|----------|------------------|-----------|--|
| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | |
| Analyte | pCi/l | | +/- | pCi/l | date / time | | |
| RADIUM-228 | 0.713 | | 0.662 | 1.15 | 06/18/2020 10:35 | WG1488903 | |
| (T) Barium | 90.3 | | | 62.0-143 | 06/18/2020 10:35 | WG1488903 | |
| (T) Yttrium | 101 | | | 79.0-136 | 06/18/2020 10:35 | WG1488903 | |

Radiochemistry by Method Calculation

| Radiochemistry by Method Calculation | | | | | | | | ⁴ Cn |
|--------------------------------------|--------|-----------|-------------|-------|------------------|-----------|--|-----------------|
| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | | |
| Analyte | pCi/l | | +/- | pCi/l | date / time | | | 5 |
| Combined Radium | 0.737 | | 0.843 | 1.49 | 06/18/2020 23:43 | WG1493951 | | ँSr |

Radiochemistry by Method SM7500Ra B M

| | Result | Qualifier Uncertair | nty MDA | Analysis Date | Batch | |
|----------------|--------|---------------------|----------|------------------|-----------|--|
| Analyte | pCi/l | + / - | pCi/l | date / time | | |
| RADIUM-226 | 0.0238 | 0.181 | 0.34 | 06/18/2020 23:43 | WG1493951 | |
| (T) Barium-133 | 89.3 | | 30.0-143 | 06/18/2020 23:43 | WG1493951 | |

Collected date/time: 05/20/20 10:30

SAMPLE RESULTS - 04



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Radiochemistry by Method 904

| · · · · · · · · · · · · · · · · · · · | - , | | | | | | L'Ca |
|---------------------------------------|--------|-----------|-------------|----------|------------------|-----------|------|
| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | |
| Analyte | pCi/l | | +/- | pCi/l | date / time | | 2 |
| RADIUM-228 | 0.741 | | 0.529 | 0.9 | 06/18/2020 10:35 | WG1488903 | Tc |
| (T) Barium | 96.4 | | | 62.0-143 | 06/18/2020 10:35 | WG1488903 | |
| (T) Yttrium | 110 | | | 79.0-136 | 06/18/2020 10:35 | WG1488903 | ³Ss |

Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | C | n |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|----|---|
| Analyte | pCi/l | | +/- | pCi/l | date / time | | 5 | |
| Combined Radium | 1.81 | | 0.923 | 1.11 | 06/18/2020 23:43 | WG1493951 | ٽS | r |

Radiochemistry by Method SM7500Ra B M

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|----------------|--------|-----------|-------------|----------|------------------|-----------|
| Analyte | pCi/l | | +/- | pCi/l | date / time | |
| RADIUM-226 | 1.07 | | 0.394 | 0.21 | 06/18/2020 23:43 | WG1493951 |
| (T) Barium-133 | 91.9 | | | 30.0-143 | 06/18/2020 23:43 | WG1493951 |

IVI VV - O Collected date/time: 05/20/20 12:00

SAMPLE RESULTS - 05



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Radiochemistry by Method 904

| | - , | | | | | | |
|-------------|--------|-----------|-------------|----------|------------------|-----------|------------------|
| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | |
| Analyte | pCi/l | | +/- | pCi/l | date / time | | 2 |
| RADIUM-228 | 0.651 | | 0.609 | 0.951 | 06/18/2020 10:35 | WG1488903 | Tc |
| (T) Barium | 91.4 | | | 62.0-143 | 06/18/2020 10:35 | WG1488903 | |
| (T) Yttrium | 101 | | | 79.0-136 | 06/18/2020 10:35 | WG1488903 | ³ C c |

Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | Cn |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|--------|
| Analyte | pCi/l | | +/- | pCi/l | date / time | | 5 |
| Combined Radium | 1.23 | | 0.921 | 1.18 | 06/18/2020 23:43 | WG1493951 | ँSr |

Radiochemistry by Method SM7500Ra B M

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | |
|----------------|--------|-----------|-------------|----------|------------------|-----------|--|
| Analyte | pCi/l | | +/- | pCi/l | date / time | | |
| RADIUM-226 | 0.580 | | 0.312 | 0.233 | 06/18/2020 23:43 | WG1493951 | |
| (T) Barium-133 | 84.3 | | | 30.0-143 | 06/18/2020 23:43 | WG1493951 | |

Collected date/time: 05/20/20 12:30

SAMPLE RESULTS - 06

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Radiochemistry by Method 904

| | , | | | | | | - P |
|-------------|--------|-----------|-------------|----------|------------------|-----------|-----|
| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | |
| Analyte | pCi/l | | +/- | pCi/l | date / time | | Ì |
| RADIUM-228 | 0.996 | | 0.606 | 0.881 | 06/18/2020 10:35 | WG1488903 | |
| (T) Barium | 96.2 | | | 62.0-143 | 06/18/2020 10:35 | WG1488903 | |
| (T) Yttrium | 104 | | | 79.0-136 | 06/18/2020 10:35 | WG1488903 | |

Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | Cn |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|--------|
| Analyte | pCi/l | | + / - | pCi/l | date / time | | 5 |
| Combined Radium | 1.30 | | 0.855 | 1.15 | 06/18/2020 23:43 | WG1493951 | ଁSr |

Radiochemistry by Method SM7500Ra B M

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|----------------|--------|-----------|-------------|----------|------------------|-----------|
| Analyte | pCi/l | | +/- | pCi/l | date / time | |
| RADIUM-226 | 0.309 | | 0.249 | 0.267 | 06/18/2020 23:43 | WG1493951 |
| (T) Barium-133 | 87.1 | | | 30.0-143 | 06/18/2020 23:43 | WG1493951 |

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Radiochemistry by Method 904

| | , | | | | | | 1 Cn |
|-------------|--------|-----------|-------------|----------|------------------|-----------|-----------------|
| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | Cp |
| Analyte | pCi/l | | + / - | pCi/l | date / time | | 2 |
| RADIUM-228 | 0.601 | | 0.562 | 0.838 | 06/18/2020 10:35 | WG1488903 | Tc |
| (T) Barium | 95.1 | | | 62.0-143 | 06/18/2020 10:35 | WG1488903 | |
| (T) Yttrium | 99.9 | | | 79.0-136 | 06/18/2020 10:35 | WG1488903 | ³ Ss |

Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | Cn |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|--------|
| Analyte | pCi/l | | +/- | pCi/l | date / time | | 5 |
| Combined Radium | 0.857 | | 0.769 | 1.04 | 06/18/2020 23:43 | WG1493951 | ँSr |

Radiochemistry by Method SM7500Ra B M

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | |
|----------------|--------|-----------|-------------|----------|------------------|-----------|--|
| Analyte | pCi/l | | + / - | pCi/l | date / time | | |
| RADIUM-226 | 0.256 | | 0.207 | 0.205 | 06/18/2020 23:43 | WG1493951 | |
| (T) Barium-133 | 85.6 | | | 30.0-143 | 06/18/2020 23:43 | WG1493951 | |

DUPLICATE

Collected date/time: 05/20/20 10:35

SAMPLE RESULTS - 08 L1221466

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Radiochemistry by Method 904

| , | , | | | | | | l'Cn |
|-------------|--------|-----------|-------------|----------|------------------|-----------|------------------|
| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | Cp |
| Analyte | pCi/l | | +/- | pCi/l | date / time | | 2 |
| RADIUM-228 | 0.363 | | 0.615 | 0.974 | 06/18/2020 10:35 | WG1488903 | Tc |
| (T) Barium | 94.5 | | | 62.0-143 | 06/18/2020 10:35 | WG1488903 | |
| (T) Yttrium | 95.9 | | | 79.0-136 | 06/18/2020 10:35 | WG1488903 | ³ C c |

Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | Cn |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|--------|
| Analyte | pCi/l | | +/- | pCi/l | date / time | | 5 |
| Combined Radium | 0.544 | | 0.860 | 1.32 | 06/18/2020 23:43 | WG1493951 | ຶSr |

Radiochemistry by Method SM7500Ra B M

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch | |
|----------------|--------|-----------|-------------|----------|------------------|-----------|--|
| Analyte | pCi/l | | +/- | pCi/l | date / time | | |
| RADIUM-226 | 0.181 | | 0.245 | 0.35 | 06/18/2020 23:43 | WG1493951 | |
| (T) Barium-133 | 90.4 | | | 30.0-143 | 06/18/2020 23:43 | WG1493951 | |

Radiochemistry by Method 904

QUALITY CONTROL SUMMARY L1221466-01,02,03,04,05,06,07,08

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Method Blank (MB)

| Method Blank | (IVIB) | | | |
|--------------------|--------------|--------------|--------|--|
| (MB) R3541401-1 06 | /18/20 10:35 | | | |
| | MB Result | MB Qualifier | MB MDA | |
| Analyte | pCi/l | | pCi/l | |
| Radium-228 | -0.155 | | 0.503 | |
| (T) Barium | 91.7 | | | |
| (T) Yttrium | 98.9 | | | |

L1221466-04 Original Sample (OS) • Duplicate (DUP)

| (OS) L1221466-04 06/18 | /20 10:35 • (DUP) |) R3541401-5 | 06/18/20 1 | | | | | |
|------------------------|-------------------|--------------|------------|---------|---------|---------------|-------------------|---------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP RER | DUP Qualifier | DUP RPD Limits | DUP RER Limit |
| Analyte | pCi/l | pCi/l | | % | | | % | |
| Radium-228 | 0.741 | -0.289 | 1 | 200 | 1.20 | | 20 | 3 |
| (T) Barium | 96.4 | 92.0 | | | | | | |
| (T) Yttrium | 110 | 97.6 | | | | | | |

Laboratory Control Sample (LCS)

| (LCS) R3541401-2 06/ | /18/20 10:35 | | | | |
|----------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | pCi/l | pCi/l | % | % | |
| Radium-228 | 5.00 | 5.39 | 108 | 80.0-120 | |
| (T) Barium | | | 96.3 | | |
| (T) Yttrium | | | 97.9 | | |

L1221466-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221466-04 06/18/20 10:35 • (MS) R3541401-3 06/18/20 10:35 • (MSD) R3541401-4 06/18/20 10:35 | | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|--------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | MS RER | RPD Limits |
| Analyte | pCi/l | pCi/l | pCi/l | pCi/l | % | % | | % | | | % | | % |
| Radium-228 | 10.0 | 0.741 | 12.8 | 12.6 | 120 | 118 | 1 | 70.0-130 | | | 1.74 | | 20 |
| (T) Barium | | 96.4 | | | 91.4 | 98.0 | | | | | | | |
| (T) Yttrium | | 110 | | | 91.0 | 99.1 | | | | | | | |

| ACCOUNT: | PROJECT: | SDG: | DATE/TIME: | PAGE: |
|--------------------|-------------|----------|----------------|----------|
| SCS Engineers - KS | 27213167.20 | L1221466 | 07/07/20 11:46 | 14 of 18 |

Radiochemistry by Method SM7500Ra B M

QUALITY CONTROL SUMMARY L1221466-01,02,03,04,05,06,07,08

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Method Blank (MB)

| (MB) R3541403-1 06 | /18/20 17:45 | | |
|--------------------|--------------|--------------|--------|
| | MB Result | MB Qualifier | MB MDA |
| Analyte | pCi/l | | pCi/l |
| Radium-226 | -0.00599 | | 0.0578 |
| (T) Barium-133 | 83.6 | | |

Laboratory Control Sample (LCS)

| (LCS) R3541403-2 06 | 6/18/20 17:45 | | | | |
|---------------------|---------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | pCi/l | pCi/l | % | % | |
| Radium-226 | 5.02 | 5.79 | 115 | 80.0-120 | |
| (T) Barium-133 | | | 94.6 | | |

L1221466-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221466-04 06/ | <u> </u> | (| 1 1 | , | | 1 X | 50) | | | | | | | 8 |
|----------------------|----------|-----------------|-------|------------|---------|----------|----------|-------------|--------------|---------------|------|--------|------------|----|
| () | . , | Original Result | | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | MS RER | RPD Limits | AI |
| Analyte | pCi/l | pCi/l | pCi/l | pCi/l | % | % | | % | | | % | | % | 9 |
| Radium-226 | 20.1 | 1.07 | 21.1 | 22.4 | 99.4 | 106 | 1 | 75.0-125 | | | 5.99 | | 20 | Sc |
| (T) Barium-133 | | 91.9 | | | 82.2 | 90.6 | | | | | | | | |

L1221882-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1221882-01 06/19/2 | (OS) L1221882-01 06/19/20 07:25 • (MS) R3541403-5 06/18/20 17:45 • (MSD) R3541403-6 06/18/20 17:45 | | | | | | | | | | | | |
|--------------------------|--|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|--------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | MS RER | RPD Limits |
| Analyte | pCi/l | pCi/l | pCi/l | pCi/l | % | % | | % | | | % | | % |
| Radium-226 | 20.1 | 0.306 | 17.3 | 17.4 | 84.7 | 85.2 | 1 | 75.0-125 | | | 0.575 | | 20 |
| (T) Barium-133 | | 102 | | | 92.1 | 94.4 | | | | | | | |

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SDG: L1221466 DATE/TIME: 07/07/20 11:46

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GLOSSARY OF TERMS

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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 |

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

PROJECT: 27213167.20

SDG: L1221466 DATE/TIME: 07/07/20 11:46

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ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

State Accreditations

| Alabama | 40660 | Nebraska |
|------------------------|-------------|-----------------------------|
| Alaska | 17-026 | Nevada |
| Arizona | AZ0612 | New Hampshire |
| Arkansas | 88-0469 | New Jersey–NE |
| California | 2932 | New Mexico ¹ |
| Colorado | TN00003 | New York |
| Connecticut | PH-0197 | North Carolina |
| Florida | E87487 | North Carolina ¹ |
| Georgia | NELAP | North Carolina |
| Georgia ¹ | 923 | North Dakota |
| Idaho | TN00003 | Ohio–VAP |
| Illinois | 200008 | Oklahoma |
| Indiana | C-TN-01 | Oregon |
| lowa | 364 | Pennsylvania |
| Kansas | E-10277 | Rhode Island |
| Kentucky ¹⁶ | 90010 | South Carolina |
| Kentucky ² | 16 | South Dakota |
| Louisiana | AI30792 | Tennessee ^{1 4} |
| Louisiana ¹ | LA180010 | Texas |
| Maine | TN0002 | Texas ⁵ |
| Maryland | 324 | Utah |
| Massachusetts | M-TN003 | Vermont |
| Michigan | 9958 | Virginia |
| Minnesota | 047-999-395 | Washington |
| Mississippi | TN00003 | West Virginia |
| Missouri | 340 | Wisconsin |
| Montana | CERT0086 | Wyoming |
| | | |

| Nebraska | NE-OS-15-05 |
|-----------------------------|------------------|
| Nevada | TN-03-2002-34 |
| New Hampshire | 2975 |
| New Jersey–NELAP | TN002 |
| New Mexico ¹ | n/a |
| New York | 11742 |
| North Carolina | Env375 |
| North Carolina ¹ | DW21704 |
| North Carolina ³ | 41 |
| North Dakota | R-140 |
| Ohio-VAP | CL0069 |
| Oklahoma | 9915 |
| Oregon | TN200002 |
| Pennsylvania | 68-02979 |
| Rhode Island | LAO00356 |
| South Carolina | 84004 |
| South Dakota | n/a |
| Tennessee 14 | 2006 |
| Texas | T104704245-18-15 |
| Texas ⁵ | LAB0152 |
| Utah | TN00003 |
| Vermont | VT2006 |
| Virginia | 460132 |
| Washington | C847 |
| West Virginia | 233 |
| Wisconsin | 9980939910 |
| Wyoming | A2LA |
| | |

Third Party Federal Accreditations

| 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

Our Locations

SCS Engineers - KS

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



27213167.20

L1221466

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07/07/20 11:46

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| | Call States in a | | Billing Infor | rmation: | L. C. Alternation | | - (44. 44 A) (47. 4 | Analysis / C | <u>ontainer / Preservative</u> | 1 | Chain of Custody | Page of |
|--|----------------------------|--------------------------|---|---|-------------------|-----------|---------------------|--------------|---|---|--|--------------------|
| | | 8575 W. | Accounts Payable 8575 W. 110th Street Overland Park, KS 66210 | | | | | | | 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 | | |
| eport to: ason Franks | jfranks | | | mail To: iranks@scsengineers.com;jay.martin@evergy.c | | | | | | | | |
| roject Description: Evergy - latan Gen Station | i part di | City/State Collected: | WEST | DN.M | O Please C | | HNO3 | | | | Phone: 800-767-58 Fax: 615-758-5859 | 回然時期 |
| ohome: 913-681-0030 | Client Project 27213167 | | 7,1 (A) 8 (M) (A) | Lab Project # | | | E-Add H | | | | sdg # 12 1 G01 | |
| JASON R. FRANK | Site/Facility | ID # | | P.O. # | | | 11-HDPE | | | | Acctnum: AQ | |
| Japon (2 - Thank | | | Day (Rad Only) Date Res | | No. of | RA228 | | | | Template: T10 Prelogin: P76 PM: 206 - Jeff (PB: Shipped Via: | 9506 | |
| Sample ID | Comp/Grat | Matrix * | Depth | Date | Time | Cntrs | RA226, | | | | Remarks | Sample # (lab only |
| MW-1 | GRAB | NPW | | 5/20/2 | 0955 | 2 | X | | | | | 101 |
| MW-2 | 1 | NPW | | | 1055 | 2 | X | | | | | 92 |
| MW-6 | | NPW | - | | 0940 | 2 | X | | | | | 03 |
| MW-7 | 7 2 7 | NPW | _ | | 1030 | 2 | X | | | | | 04 |
| MW-8 | 384- | NPW | | | 1200 | 2 | X | | | | | 05 |
| MW-9 | | NPW | - | | 1230 | 2 | X | | | | the second second | 06 |
| MW-10 | A 1994 | NPW | - | NH PER | 1350 | 2 | X | | | | | 07 |
| DUPLICATE | | NPW | - | | 1035 | - 1 m | X | | | | | 03 |
| 100 7MS/MSO | 1 | NPW | - | | 1040 | | X | | | | 3 d' | 04 |
| MSD | Y | _NPW | | V | | 7 | -* | | | | | |
| SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater | Remarks: RA 2 | 226/228 - Re | port separa | itely and con | nbined. | | | pH | Temp Other | COC Seal COC Signe Bottles a Correct b | mple Receipt Ch Present/Intact: d/Accurate: rrive intact: ottles used: | |
| DW - Drinking Water Samples returned via: OT - Other UPSFedExCourier | | | | acking.# | | | | | VOA Zero | t volume sent: <u>If Applicabl</u> Headspace: | e Y N | |
| Relinquished by : (Signature) | / | Date: 5/21/2 | o 1 | 300 | delved by: (Signa | kn | 5/21 (| 6 | Received: Yes (No) HCL / MeoH TBR | RAD Scree | ion Correct/Che n <0.5 mR/hr: | · _Y _N |
| Relinquished by : (Signature) | | Date: | Time | e: Re | ceived by: (Signa | ature) | | Temp!! | Bottles Received | f: If preservat | ion required by Log | in: Date/Time |
| Relinquished by : (Signature) | | Date: | Time | e: Re | ceived for lab by | ; (Signat | ure) | Date; | Time: Tw \$:00 | Hold: | | NCF) / OK |

ATTACHMENT 1-4 July 2020 Sampling Event Laboratory Report



ANALYTICAL REPORT

SCS Engineers - KS

Sample Delivery Group: Samples Received: Project Number: Description: L1239953 07/15/2020 27213167.20 Evergy latan Generating Station

Report To:

Jason Franks 8575 W. 110th Street Overland Park, KS 66210 ²Tc ³Ss ⁴Cn ⁵Sr ⁶Qc ⁷Gl ⁸Al ⁹Sc

Entire Report Reviewed By:

Jubb land

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.

ACCOUNT: SCS Engineers - KS PROJECT: 27213167.20

SDG: L1239953 DATE/TIME: 07/22/20 22:17

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| ^³ Ss | |
| ⁴ Cn | |
| ⁵ Sr | |
| ⁶ Qc | |
| ⁷ Gl | |
| ⁸ Al | |
| ⁹ Sc | |

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

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| MW-10 L1239953-01 GW | | | Collected by Whit Martin | Collected date/time 07/13/20 09:35 | Received da 07/15/20 08 | |
|---|------------------------|----------|----------------------------------|---------------------------------------|--------------------------------------|----------------------------------|
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG1510013 | 1 | 07/16/20 23:29 | 07/16/20 23:29 | MSP | Mt. Juliet, TN |
| MW-104 L1239953-02 GW | | | Collected by Whit Martin | Collected date/time 07/13/20 13:00 | Received da 07/15/20 08 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Metals (ICP) by Method 6010B | WG1510363 | 1 | 07/18/20 00:01 | 07/18/20 07:45 | EL | Mt. Juliet, TN |
| DUPLICATE 1 L1239953-03 GW | | | Collected by Whit Martin | Collected date/time 07/13/20 13:00 | Received da 07/15/20 08 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Metals (ICP) by Method 6010B | WG1510363 | 1 | 07/18/20 00:01 | 07/18/20 08:03 | EL | Mt. Juliet, TN |
| MW-105 L1239953-04 GW | | | Collected by Whit Martin | Collected date/time 07/13/20 13:40 | Received da 07/15/20 08 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Gravimetric Analysis by Method 2540 C-2011 | WG1511173 | 1 | 07/18/20 07:28 | 07/18/20 08:14 | TH | Mt. Juliet, TN |
| DUPLICATE 2 L1239953-05 GW | | | Collected by Whit Martin | Collected date/time 07/13/20 13:40 | Received da 07/15/20 08 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Gravimetric Analysis by Method 2540 C-2011 | WG1511173 | 1 | 07/18/20 07:28 | 07/18/20 08:14 | TH | Mt. Juliet, TN |
| MW-109 L1239953-06 GW | | | Collected by Whit Martin | Collected date/time 07/13/20 11:25 | Received da 07/15/20 08 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A Metals (ICP) by Method 6010B | WG1510009 WG1510363 | 10 1 | 07/17/20 20:59 07/18/20 00:01 | 07/17/20 20:59 07/18/20 07:55 | ELN EL | Mt. Juliet, TN Mt. Juliet, TN |
| DUPLICATE 3 L1239953-07 GW | | | Collected by Whit Martin | Collected date/time 07/13/20 11:25 | Received date/time 07/15/20 08:30 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A Metals (ICP) by Method 6010B | WG1510013 WG1510363 | 5 1 | 07/17/20 12:57 07/18/20 00:01 | 07/17/20 12:57 07/18/20 08:11 | ELN EL | Mt. Juliet, TN Mt. Juliet, TN |
| MW-110 L1239953-08 GW | | | Collected by Whit Martin | Collected date/time 07/13/20 12:05 | Received da 07/15/20 08 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A Metals (ICP) by Method 6010B | WG1510013 WG1510364 | 1 | 07/17/20 00:02 07/19/20 23:32 | 07/17/20 00:02 07/20/20 13:54 | MSP EL | Mt. Juliet, TN Mt. Juliet, TN |

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 DATE/TIME:

 SCS Engineers - KS
 27213167.20
 L1239953
 07/22/20 22:17

SAMPLE SUMMARY

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| | | | Collected by | Collected date/time | Received date | e/time |
|-------------------------------|-------------|----------------|----------------|---------------------|---------------|----------------|
| DUPLICATE 4 L1239953-09 GW | Whit Martin | 07/13/20 12:05 | 07/15/20 08:3 | 0 | | |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Wet Chemistry by Method 9056A | WG1510013 | 1 | 07/17/20 00:51 | 07/17/20 00:51 | MSP | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1510363 | 1 | 07/18/20 00:01 | 07/18/20 08:13 | EL | Mt. Juliet, TN |



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CASE NARRATIVE

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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.

Jubb land

Jeff Carr Project Manager

Τс Ss Cn Sr Qc GI AI Sc

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| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | |
|---------|--------|-----------|------|----------|------------------|-----------|---|--|
| Analyte | ug/l | | ug/l | | date / time | | 2 | |
| Sulfate | 47700 | | 5000 | 1 | 07/16/2020 23:29 | WG1510013 | T | |



Collected date/time: 07/13/20 13:00

SAMPLE RESULTS - 02 L1239953



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
|---------|--------|-----------|------|----------|------------------|-----------|----|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Calcium | 59700 | | 1000 | 1 | 07/18/2020 07:45 | WG1510363 | Tc |





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Metals (ICP) by Method 6010B

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|---------|--------|-----------|------|----------|------------------|-----------|---------|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Calcium | 61100 | | 1000 | 1 | 07/18/2020 08:03 | WG1510363 | |

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Gravimetric Analysis by Method 2540 C-2011

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|------------------|--------|-----------|-------|----------|------------------|-----------|-----|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | ` |
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Dissolved Solids | 711000 | | 13300 | 1 | 07/18/2020 08:14 | WG1511173 | - |

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Gravimetric Analysis by Method 2540 C-2011

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|------------------|-------|--------|-----------|-------|----------|------------------|-----------|----|
| | | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | | ug/l | | ug/l | | date / time | | 2 |
| Dissolved Solids | | 715000 | | 13300 | 1 | 07/18/2020 08:14 | WG1511173 | - |

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SAMPLE RESULTS - 06 L1239953

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| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
|----------------------------|------------------------|-----------|-------------|----------|-------------------------|-----------|--|
| Analyte | ug/l | | ug/l | | date / time | | |
| Sulfate | 281000 | | 50000 | 10 | 07/17/2020 20:59 | WG1510009 | |
| | | | | | | | |
| Metals (ICP) by | Method 6010B | | | | | | |
| Metals (ICP) by | Method 6010B Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Metals (ICP) by Analyte | | Qualifier | RDL ug/l | Dilution | Analysis date / time | Batch | |

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| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
|-----------------|------------------------|-----------|-------------|----------|-------------------------|-----------|---|
| Analyte | ug/l | | ug/l | | date / time | | |
| Sulfate | 294000 | | 25000 | 5 | 07/17/2020 12:57 | WG1510013 | 2 |
| | | | | | | | |
| Metals (ICP) by | Method 6010B | | | | | | з |
| Metals (ICP) by | Method 6010B Result | Qualifier | RDL | Dilution | Analysis | Batch | 3 |
| Metals (ICP) by | | Qualifier | RDL ug/l | Dilution | Analysis date / time | Batch | |

SAMPLE RESULTS - 08 L1239953

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| | Result | Qualifier | RDL | Dilution | Analysis | Batch | C |
|-----------------|--------------|-----------|------|----------|------------------|-----------|-------------------|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Chloride | 23200 | | 1000 | 1 | 07/17/2020 00:02 | WG1510013 | ¯ ² Τι |
| Metals (ICP) by | Method 6010B | | | | | | ³ S |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | 4C |
| Boron | 3710 | | 200 | 1 | 07/20/2020 13:54 | WG1510364 | |
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SAMPLE RESULTS - 09 L1239953

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| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
|-----------------|--------------|-----------|------|----------|------------------|------------------|---|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Chloride | 23400 | | 1000 | 1 | 07/17/2020 00:51 | <u>WG1510013</u> | 2 |
| Metals (ICP) by | Method 6010B | | | | | | 3 |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | 4 |
| Boron | 3790 | | 200 | | 07/18/2020 08:13 | WG1510363 | |

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY L1239953-04,05

Method Blank (MB)

| (MB) R3550836-1 07 | 7/18/20 08:14 | | | |
|--------------------|---------------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Dissolved Solids | U | | 2820 | 10000 |

L1239902-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1239902-01 07/18/2 | 20 08:14 • (DUP) | R3550836-3 | 07/18/20 | 08:14 | | |
|--------------------------|------------------|------------|----------|---------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| Dissolved Solids | 3450000 | 3620000 | 1 | 4.81 | | 5 |

L1239953-05 Original Sample (OS) • Duplicate (DUP)

| L1239953-05 Or | riginal Sample | e (OS) • Du | plicate | (DUP) | | | GI |
|----------------------|----------------------|--------------|------------|---------|---------------|-------------------|-----------------|
| (OS) L1239953-05 07/ | //18/20 08:14 • (DUF | P) R3550836- | 4 07/18/20 | 0 08:14 | | | |
| | Original Result | t DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | ⁸ Al |
| Analyte | ug/l | ug/l | | % | | % | |
| Dissolved Solids | 715000 | 687000 | 1 | 4.00 | | 5 | ⁹ Sc |

Laboratory Control Sample (LCS)

| (LCS) R3550836-2 0 | 7/18/20 08:14 | | | | |
|--------------------|---------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Dissolved Solids | 8800000 | 8380000 | 95.2 | 85.0-115 | |

DATE/TIME: 07/22/20 22:17 Cn

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

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Method Blank (MB)

| (MB) R3550811-1 07/17 | 7/20 08:24 | | | |
|-----------------------|------------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Sulfate | U | | 594 | 5000 |

L1239942-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1239942-01 07/17/2 | 20 17:42 • (DUP) | R3550811-5 (| 07/17/20 17 | 7:53 | | |
|--------------------------|------------------|--------------|-------------|---------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| Sulfate | ND | ND | 1 | 2.18 | | 15 |

Laboratory Control Sample (LCS)

| (LCS) R3550811-2 07/1 | 17/20 08:35 | | | | |
|-----------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Sulfate | 40000 | 41000 | 102 | 80.0-120 | |

L1239916-01 Original Sample (OS) • Matrix Spike (MS)

| (OS) L1239916-01 07/17/20 | 0 17:20 • (MS) R | 3550811-4 07/ | 17/20 17:31 | | | | |
|---------------------------|------------------|-----------------|-------------|---------|----------|-------------|--------------|
| | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
| Analyte | ug/l | ug/l | ug/l | % | | % | |
| Sulfate | 50000 | 164000 | 211000 | 94.4 | 1 | 80.0-120 | E |

L1239953-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1239953-06 07/17/2 | 20 20:04 • (MS) | R3550811-6 C | 7/17/20 20:15 | • (MSD) R35508 | 811-7 07/17/20 | 20:26 | | | | | | |
|--------------------------|-----------------|-----------------|---------------|----------------|----------------|----------|----------|-------------|--------------|---------------|-----|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Sulfate | 50000 | 275000 | 315000 | 319000 | 80.2 | 88.2 | 1 | 80.0-120 | F | F | 126 | 15 |

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY L1239953-01,07,08,09

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Method Blank (MB)

| Method Biai | ik (ivid) | | | | 1 |
|-----------------|----------------|--------------|--------|--------|---|
| (MB) R3550475-1 | 07/16/20 17:01 | | | | |
| | MB Result | MB Qualifier | MB MDL | MB RDL | Б |
| Analyte | ug/l | | ug/l | ug/l | |
| Chloride | U | | 379 | 1000 | |
| Sulfate | U | | 594 | 5000 | |
| | | | | | |

L1238681-03 Original Sample (OS) • Duplicate (DUP)

| (OS) L1238681-03 07/16/2 | 20 20:28 • (DUP |) R3550475-3 | 07/16/20 | 20:45 | | | |
|--------------------------|-----------------|--------------|----------|---------|---------------|-------------------|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | |
| Analyte | ug/l | ug/l | | % | | % | |
| Chloride | ND | ND | 1 | 0.000 | | 15 | |
| Sulfate | ND | ND | 1 | 0.000 | | 15 | |

L1239953-09 Original Sample (OS) • Duplicate (DUP)

| L1239953-09 Or | iginal Sample | e (OS) • Du | iplicate | (DUP) | | | 8 |
|----------------------|---------------------|--------------|------------|---------|---------------|-------------------|-----|
| (OS) L1239953-09 07/ | /17/20 00:51 • (DUF |) R3550475-7 | 7 07/17/20 | 01:40 | | | AI |
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | °Sc |
| Analyte | ug/l | ug/l | | % | | % | 50 |
| Chloride | 23400 | 23100 | 1 | 1.21 | | 15 | |
| Sulfate | 190000 | 190000 | 1 | 0.0559 | E | 15 | |

Laboratory Control Sample (LCS)

| (LCS) R3550475-2 07/16/ | /20 17:18 | | | | |
|-------------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Chloride | 40000 | 39500 | 98.8 | 80.0-120 | |
| Sulfate | 40000 | 39800 | 99.5 | 80.0-120 | |

L1238681-05 Original Sample (OS) • Matrix Spike (MS)

| (OS) L1238681-05 07/16/2 | 20 21:01 • (MS) R | 3550475-4 07 | 7/16/20 21:18 | | | | |
|--------------------------|-------------------|-----------------|---------------|---------|----------|-------------|--------------|
| | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
| Analyte | ug/l | ug/l | ug/l | % | | % | |
| Chloride | 50000 | 15700 | 66100 | 101 | 1 | 80.0-120 | |
| Sulfate | 50000 | 10700 | 61900 | 102 | 1 | 80.0-120 | |

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| SCS Engineers - KS |

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QUALITY CONTROL SUMMARY

L1239953-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1239953-08 07/17/2 | 0 00:02 • (MS) | R3550475-5 | 07/17/20 00:18 | • (MSD) R3550 | 0475-6 07/17/2 | 0 00:34 | | | | | | |
|--------------------------|----------------|-----------------|----------------|---------------|----------------|----------|----------|-------------|--------------|---------------|--------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Chloride | 50000 | 23200 | 73700 | 73700 | 101 | 101 | 1 | 80.0-120 | | | 0.0700 | 15 |
| Sulfate | 50000 | 190000 | 233000 | 232000 | 85.6 | 84.4 | 1 | 80.0-120 | E | E | 0.256 | 15 |

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Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

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Method Blank (MB)

| Method Bidi | ik (ivid) | | | | |
|----------------|----------------|--------------|--------|--------|--|
| (MB) R3550923- | 07/18/20 07:39 | | | | |
| | MB Result | MB Qualifier | MB MDL | MB RDL | |
| Analyte | ug/l | | ug/l | ug/l | |
| Boron | U | | 25.4 | 200 | |
| Calcium | U | | 389 | 1000 | |
| | | | | | |

Laboratory Control Sample (LCS)

| (LCS) R3550923-2 07/18 | 3/20 07:42 | | | | |
|------------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Boron | 1000 | 991 | 99.1 | 80.0-120 | |
| Calcium | 10000 | 10500 | 105 | 80.0-120 | |

L1239953-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1239953-02 07/18/2 | 0 07:45 • (MS) | R3550923-4 (| 07/18/20 07:50 | • (MSD) R3550 | 0923-5 07/18/2 | 20 07:52 | | | | | | | 8 |
|--------------------------|----------------|-----------------|----------------|---------------|----------------|----------|----------|-------------|--------------|---------------|------|------------|---|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits | L |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % | 9 |
| Boron | 1000 | 1230 | 2230 | 2190 | 100 | 96.0 | 1 | 75.0-125 | | | 1.90 | 20 | |
| Calcium | 10000 | 59700 | 69700 | 68600 | 100 | 89.3 | 1 | 75.0-125 | | | 1.56 | 20 | |

L1239953-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1239953-06 07/18/20 07:55 • (MS) R3550923-6 07/18/20 07:57 • (MSD) R3550923-7 07/18/20 08:00 | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Boron | 1000 | 1340 | 2330 | 2280 | 98.9 | 93.8 | 1 | 75.0-125 | | | 2.20 | 20 |
| Calcium | 10000 | 87800 | 96700 | 95900 | 89.4 | 80.8 | 1 | 75.0-125 | | | 0.889 | 20 |

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| SCS Engineers - KS |

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Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

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Method Blank (MB)

| (MB) R3551331-1 07/20/2 | 0 13:49 | | | |
|-------------------------|-----------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Boron | U | | 25.4 | 200 |

Laboratory Control Sample (LCS)

| (LCS) R3551331-2 07/2 | 20/20 13:51 | | | | |
|-----------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Boron | 1000 | 962 | 96.2 | 80.0-120 | |

L1239953-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1239953-08 07/20 |)/20 13:54 • (MS |) R3551331-4 0 | 7/20/20 13:59 | • (MSD) R3551 | 331-5 07/20/2 | 0 14:02 | | | | | | |
|------------------------|------------------|-----------------|---------------|---------------|---------------|----------|----------|-------------|--------------|---------------|------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Boron | 1000 | 3710 | 4670 | 4570 | 96.3 | 85.8 | 1 | 75.0-125 | | | 2.28 | 20 |

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| SCS Engineers - KS |

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GLOSSARY OF TERMS

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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). |

PROJECT: 27213167.20

SDG: L1239953

DATE/TIME: 07/22/20 22:17

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ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

State Accreditations

| Alabama | 40660 | Nebraska |
|-----------------------|-------------|-----------------------------|
| Alaska | 17-026 | Nevada |
| Arizona | AZ0612 | New Hampshire |
| Arkansas | 88-0469 | New Jersey–NELAP |
| California | 2932 | New Mexico ¹ |
| Colorado | TN00003 | New York |
| Connecticut | PH-0197 | North Carolina |
| Florida | E87487 | North Carolina ¹ |
| Georgia | NELAP | North Carolina ³ |
| Georgia ¹ | 923 | North Dakota |
| Idaho | TN00003 | Ohio-VAP |
| Illinois | 200008 | Oklahoma |
| Indiana | C-TN-01 | Oregon |
| lowa | 364 | Pennsylvania |
| Kansas | E-10277 | Rhode Island |
| Kentucky 16 | 90010 | South Carolina |
| Kentucky ² | 16 | South Dakota |
| Louisiana | Al30792 | Tennessee ¹⁴ |
| Louisiana 1 | LA180010 | Texas |
| Maine | TN0002 | Texas ⁵ |
| Maryland | 324 | Utah |
| Massachusetts | M-TN003 | Vermont |
| Michigan | 9958 | Virginia |
| Minnesota | 047-999-395 | Washington |
| Mississippi | TN00003 | West Virginia |
| Missouri | 340 | Wisconsin |
| Montana | CERT0086 | Wyoming |
| | | |

| lebraska | NE-OS-15-05 |
|-----------------------------|------------------|
| V evada | TN-03-2002-34 |
| New Hampshire | 2975 |
| New Jersey–NELAP | TN002 |
| New Mexico ¹ | n/a |
| New York | 11742 |
| North Carolina | Env375 |
| North Carolina ¹ | DW21704 |
| North Carolina ³ | 41 |
| North Dakota | R-140 |
| Ohio-VAP | CL0069 |
| Oklahoma | 9915 |
| Oregon | TN200002 |
| Pennsylvania | 68-02979 |
| Rhode Island | LAO00356 |
| South Carolina | 84004 |
| South Dakota | n/a |
| Tennessee ¹⁴ | 2006 |
| Texas | T104704245-18-15 |
| Texas ⁵ | LAB0152 |
| Utah | TN00003 |
| Vermont | VT2006 |
| Virginia | 460132 |
| Washington | C847 |
| West Virginia | 233 |
| Wisconsin | 9980939910 |
| Wyoming | A2LA |
| | |

Third Party Federal Accreditations

| 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

Our Locations

SCS Engineers - KS

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



27213167.20

L1239953

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07/22/20 22:17

| | | | Billing Infor | rmation: | - 5-2- 5-3 | | | | 11.22 | A | nalysis / | Contair | ner / Prese | ervative | | | Chain of Custody | Page of |
|--|---|---------------------------|--------------------------|--|---------------------|---|---------------|----------------------------|----------------|-----------|---|---------------------------------------|--|----------|--|-------------|--|---------------------|
| SCS Engineers - KS 8575 W. 110th Street Overland Park, KS 66210 | | | Accounts Payable | | | Pres Chk | | | | | | | | | | Netional Ca | Analytical* inter for Testing 8 innovati | |
| Report to: Jason Franks | | | | ifranks@scsengineers.com;jay.martin@evergy.c | | | | | | | | | | | | 100 | 12065 Lebanon Rd Mount Juliet, TN 37 Phone: 615-758-58 | |
| Project Description: Evergy latan Generating Station | 175. | City/State Collected: | I de- eld. | | | Please Cir PT MT C | cle: | 1 | | | | | | | | | Phone: 800-767-585 Fax: 615-758-5859 | |
| Phone: 913-681-0030 | Client Project 27213167 | | Lab Project # AQUAOPK | | | | | | 250mlHDPE-HNO3 | PE-NoPres | res | | | | | | SDG# (12399953 J J139 | |
| Collected by (print): Whit Martin | Site/Facility | Site/Facility ID # P.O. # | | | | | | | | | PE-NoP | NoPres | | | | | | Acctnum: AQUAOPKS |
| Collected by (signature): MAMMATA Immediately Packed on Ice N Y _X | | | lve Day | | Date Results Needed | | No. of | 1 - 6010 250mlHDPE-HNO3 | | | Sulfate 125mlHDPE-NoPres | 250miHDPE-NoPres | 250miHDPE- | | | | Template: T136056 Prelogin: P784702 PM: 206 - Jeff Carr PB: Shipped Via: | |
| Sample ID | Comp/Gra | b Matrix * | Depth | | Date | Time | Cntrs | Boron | Calcium | Chlo | Sulfa | TDS | | | | | Remarks | Sample # (lab only) |
| MW-10 | Grab | GW | | 7/1 | 3/20 | 0935 | 1 | | | | X | | | | | | 1. a. | -01 |
| MW-104 | Grab | GW | | 7/1- | 3/20 | 1300 | 1 | | X | | | | | | | | | 02 |
| MW-104 MS/MSD | Grab | GW | | 7/13 | 3/20 | 13000 | 1 | | X | | | | | | | | - 22 | 02 |
| DUPLICATE 1 | Grab | GW | | 7/13 | 300 | 1300 | 1 | | X | | | | | | | 2 | | 03 |
| MW-105 | Grab | GW | | 7/1 | 3/20 | 1340 | 1 | | | | | x | | | | | | 64 |
| DUPLICATE 2 | Grab | GW | | 7/1 | 220 | 1340 | 1 | | | | | x | | | | 1 | | 05 |
| MW-109 | Grab | GW | | 7/1 | 3/20 | 1125 | 2 | X | | | X | | | J. | | | 1000 | 06 |
| MW-109 MS/MSD | Grab | GW | | 7/12 | 2/20 | 1130 | 2 | x | | | X | | | | | 14 | | 06 |
| DUPLICATE 3 | Grab | | | 11 | 3/20 | 1125 | 2 | X | | | X | | | | | | | 07 |
| MW-110 | | GW | | 1-11 | 2/10 | 1205 | 2 | X | | X | 1.000 | | | | | | | 08 |
| * Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other | Grab Remarks: Samples return UPS _ Fed | Tracki | | K | | 320 | | pH Flow | , | _ Temp _ | | COC S: Bottle Correct Suffic | Sample Receipt Checklist CoC Seal Present/Intact:NPY CoC Signed/Accurate:Y Bottles arrive intact:Y Correct bottles used:Y Sufficient volume sent:Y If Applicable | | | | | |
| Relinquished by : (Signature) | rea | Recei | /ed by: (Signat | | | 000000000000000000000000000000000000000 | Trip Blar | nk Recei | | | VOA Zero Headspace: Preservation Correct/Checked:N RAD Screen <0.5 mR/hr:YN | | | | | | | |
| Relinquished by : (Signature) | 7 -14 -20 1323 Date: Time: 7-14-20 1888 | | | | 1 / | ed by: (Signat | ture) | Temp. ACC Bottles Received | | | | | | | If preservation required by Login: Date/Ti | | | in: Date/Time |
| Relinquished by : (Signature) | Date: Time: | | | | ved for lab by: | (Signa | Dature) Date: | | | | | Time: | F:30 | Hold: | | | Condition: NCF / OR | |

| | | | Billing Infor | rmation: | | | | | A | nalvsis / | Contair | ner / Pre | servative | | | Chain of Custody | Page 2 of 2 | | |
|--|--|--------------------------|---|---------------------------------|--------------------------------------|------------------------------|----------------|----------------|--|--------------------------|---|--|------------------------|--|---|--|---|--|--|
| SCS Engineers - KS 8575 W. 110th Street Overland Park, KS 66210 | | | Accounts Payable 8575 W. 110th Street Overland Park, KS 66210 | | | | | | | | | | | | | Race/ Netional Ca | Analytical * new for Testing & innovatio | | |
| Report to: Jason Franks | Email To: jfranks@sc | | | | | | | | | | | 12065 Lebanon Rd Mount Juliet, TN 373 Phone: 615-758-585 | | | | | | | |
| Project Description: | | City/State | <u></u> | | ircle: | | | | | | | | | | Phone: 800-767-585 Fax: 615-758-5859 | | | | |
| Evergy latan Generating Station | Lollingt Deale | Collected: | | Itah Project # | PT MT (| | 03 | 1.67 | | | | | | | | leng n 1 | 1776663 | | |
| Phone: 913-681-0030 | Client Proje 27213167 | | | Lab Project # AQUAOPKS-IATAN | | | 250mlHDPE-HNO3 | 03 | Pres | Pres | | | | | | SDG # | 1239953 | | |
| Collected by (print): | Site/Facility | ID # | | P.O. # | | | | 250mIHDPE-HNO3 | | Sulfate 125mIHDPE-NoPres | 250miHDPE-NoPres | | | | | Acctnum: AQL | | | |
| Whit Martin Collected by (signature): Mat Martos | | (Lab MUST Be Day Five | | Quote # | Date Results Needed | | 0 250r | | | IHDP | DPE-1 | | | | | Template: T130 Prelogin: P784 | | | |
| Immediately Packed on Ice N Y X | Next | Day5 Day Day10 D | y (Rad Only) ay (Rad Only) | Date Resul | | | - 6010 | | | 125n | HIMO | | | | | PM: 206 - Jeff C PB: | arr | | |
| | Comp/Gra | 1 | Depth | Date | Time | of Cntrs | Boron | Calcium | oric | fate | | | | | | Shipped Via: | | | |
| Sample ID | Comp/Gra | | 1 ocpai | | 1 | | Boi | Cal | 24 | Sul | TDS | | | | | Remarks | Sample # (lab only) | | |
| MW-110 MS/MSD | Grab | GW | | 7/13/20 | 1210 | 2 | X | | X | | | | | | 1 | 2 7.5 | 08 | | |
| DUPLICATE 4 | Grab | GW | | 7/13/20 | 1205 | 2 | x | | x | | | | | | | | 69 | | |
| MW-105 MS/MSD | Grab | GW | | 7/13/20 | 1345 | 1 | | | | | X | | | | | and the second sec | 64 | | |
| | | | | 145746237 (7460) | | | | <u>1.</u> | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | 1. tre | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | and the second second | | | |
| * Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay | Remarks: | pH Temp Flow Other | | | | | | | Sample Receipt Checklist COC Seal Present/Intact: NP N COC Signed/Accurate: NP N Bottles arrive intact: N Correct bottles used: N Sufficient volume sent: Y N | | | | | | | | | | |
| WW - WasteWater DW - Drinking Water OT - Other | Samples returned via: UPSFedExCourier Tracking.# 1845 4330 1989 | | | | | | | | | | If Applicable VOA Zero Headspace; Y | | | | | | | | |
| Relinquished by : (Signature) Date: 7-14 | | Date: 7-14- | Time | Recet | | Trip Blank Received: (95/ No | | | | | | GL / MeoH | RAD Screen <0.5 mR/hr: | | | | | | |
| Relinguished by : (Signature) Date: 7-14-20 | | | 20 19 | Strength Rest Line And | Received by: (Signature) D Fad Ex | | | | | | Temp? A C Bottles Received: | | | | | If preservation required by Login: Date/Time | | | |
| Relinquished by : (Signature) | | Date: | Time | | ved for lab by | : (Signat | hu | f | | Date: Time: 8:30 | | | | | : | Condition: NCF / OK | | | |

Jared Morrison December 16, 2022

ATTACHMENT 1-5 August 2020 Sampling Event Laboratory Report



ANALYTICAL REPORT

September 02, 2020

SCS Engineers - KS

Sample Delivery Group: Samples Received: Project Number: Description: L1255433 08/27/2020 27213167.20 Evergy - latan Generating Station

Report To:

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

Entire Report Reviewed By:

Jubb land

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.

ACCOUNT: SCS Engineers - KS PROJECT: 27213167.20

SDG: L1255433 DATE/TIME: 09/02/20 11:05 PAGE: 1 of 18

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| ² Tc | |
| ³ Ss | |
| ⁴ Cn | |
| ⁵ Sr | |
| ⁶ Qc | |
| ⁷ Gl | |

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SDG: L1255433 DATE/TIME: 09/02/20 11:05

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

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| MW-10 L1255433-01 GW | | | Collected by Whit Martin | Collected date/time 08/25/20 12:45 | Received da 08/27/20 09 | |
|-------------------------------|-----------|----------|-----------------------------|---------------------------------------|----------------------------|----------------|
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG1533924 | 1 | 08/28/20 07:07 | 08/28/20 07:07 | LBR | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | ite/time |
| DUPLICATE1 L1255433-02 GW | | | Whit Martin | 08/25/20 12:45 | 08/27/20 09 |):30 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Net Chemistry by Method 9056A | WG1533924 | 1 | 08/28/20 07:39 | 08/28/20 07:39 | LBR | Mt. Juliet, TN |
| MW-104 L1255433-03 GW | | | Collected by Whit Martin | Collected date/time 08/25/20 14:15 | Received da 08/27/20 09 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Metals (ICP) by Method 6010B | WG1535076 | 1 | 09/01/20 18:24 | 09/02/20 02:50 | TRB | Mt. Juliet, TN |
| DUPLICATE 2 L1255433-04 GW | | | Collected by Whit Martin | Collected date/time 08/25/20 14:15 | Received da 08/27/20 09 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Metals (ICP) by Method 6010B | WG1535076 | 1 | 09/01/20 18:24 | 09/02/20 03:08 | TRB | Mt. Juliet, TN |
| MW-109 L1255433-05 GW | | | Collected by Whit Martin | Collected date/time 08/25/20 15:05 | Received da 08/27/20 09 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG1533924 | 10 | 08/28/20 08:12 | 08/28/20 08:12 | LBR | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1535076 | 1 | 09/01/20 18:24 | 09/02/20 03:16 | TRB | Mt. Juliet, TN |
| MW-110 L1255433-06 GW | | | Collected by Whit Martin | Collected date/time 08/25/20 15:50 | Received da 08/27/20 09 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG1533924 | 1 | 08/28/20 08:23 | 08/28/20 08:23 | LBR | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1535077 | 1 | 09/01/20 11:45 | 09/01/20 14:26 | CCE | Mt. Juliet, TN |
| DUPLICATE 3 L1255433-07 GW | | | Collected by Whit Martin | Collected date/time 08/25/20 15:50 | Received da 08/27/20 09 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG1533924 | 5 | 08/28/20 09:06 | 08/28/20 09:06 | LBR | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1535076 | 1 | 09/01/20 18:24 | 09/02/20 03:19 | TRB | Mt. Juliet, TN |

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SDG: L1255433 DATE/TIME: 09/02/20 11:05 PAGE: 3 of 18

CASE NARRATIVE

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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.

Jubb land

Jeff Carr Project Manager

Τс Ss Cn Sr Qc GI AI Sc

SDG: L1255433 DATE/TIME: 09/02/20 11:05 PAGE: 4 of 18

SAMPLE RESULTS - 01

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|---------|--------|-----------|------|----------|------------------|-----------|---------|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Sulfate | 47900 | | 5000 | 1 | 08/28/2020 07:07 | WG1533924 | 1 |



SAMPLE RESULTS - 02

*

Wet Chemistry by Method 9056A

| | Result | Qualifier RD | _ Dilution | Analysis | Batch | 'Ср |
|---------|--------|--------------|------------|------------------|-----------|-----|
| Analyte | ug/l | ug/ | | date / time | | 2 |
| Sulfate | 47800 | 50 | 00 1 | 08/28/2020 07:39 | WG1533924 | ⁻Tc |

| | ³ Ss |
|---|-----------------|
| | |
| | ⁴ Cn |
| | |
| | ⁵Sr |
| | |
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IVI VV - I U 4 Collected date/time: 08/25/20 14:15

SAMPLE RESULTS - 03



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Metals (ICP) by Method 6010B

| | | | | | | | l'c |
|---------|--------|-----------|------|----------|------------------|-----------|---------|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Calcium | 61900 | | 1000 | 1 | 09/02/2020 02:50 | WG1535076 | T |



ACCOUNT: SCS Engineers - KS PROJECT: 27213167.20

SDG: L1255433

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SAMPLE RESULTS - 04



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Metals (ICP) by Method 6010B

| | | | | | | | 1°C |
|---------|--------|-----------|------|----------|------------------|-----------|-----|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Calcium | 62200 | | 1000 | 1 | 09/02/2020 03:08 | WG1535076 | T |



SAMPLE RESULTS - 05

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| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
|----------------------------|------------------------|-----------|-------------|----------|-------------------------|-----------|--|
| Analyte | ug/l | | ug/l | | date / time | | |
| Sulfate | 183000 | | 50000 | 10 | 08/28/2020 08:12 | WG1533924 | |
| | | | | | | | |
| Metals (ICP) by | Method 6010B | | | | | | |
| Metals (ICP) by | Method 6010B Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Metals (ICP) by Analyte | | Qualifier | RDL ug/l | Dilution | Analysis date / time | Batch | |

SAMPLE RESULTS - 06 L1255433

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| | | • | | | | | |
|-----------------|--------------|-----------|------|----------|------------------|-----------|-----------------|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ct |
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Chloride | 20000 | | 1000 | 1 | 08/28/2020 08:23 | WG1533924 | Tc |
| Metals (ICP) by | Method 6010B | | | | | | ³ Ss |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | ⁴ Cr |
| Boron | 4130 | 01 | 200 | 1 | 09/01/2020 14:26 | WG1535077 | |
| | | | | | | | |

SAMPLE RESULTS - 07

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| 5 5 | | | | | | | i (|
|--------------------|-------------|-----------|------|----------|------------------|-----------|-----|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Chloride | 18200 | | 5000 | 5 | 08/28/2020 09:06 | WG1533924 | |
| Metals (ICP) by Me | ethod 6010B | | | | | | 3 |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | 4 |
| Boron | 4100 | | 200 | 1 | 09/02/2020 03:19 | WG1535076 | |

WG1533924

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

Method Blank (MB)

| (MB) R3565005-1 | 08/28/20 05:09 | | | | |
|-----------------|----------------|--------------|--------|--------|--|
| | MB Result | MB Qualifier | MB MDL | MB RDL | |
| Analyte | ug/l | | ug/l | ug/l | |
| Chloride | U | | 379 | 1000 | |
| Sulfate | U | | 594 | 5000 | |
| | | | | | |

L1255046-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1255046-01 0 | 8/28/20 06:23 • (DU | P) R3565005 | -3 08/28/2 | 20 06:34 | | |
|--------------------|---------------------|-------------|------------|----------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| Chloride | ND | ND | 1 | 0.000 | | 15 |
| Sulfate | 16100 | 16900 | 1 | 4.57 | | 15 |

L1255482-06 Original Sample (OS) • Duplicate (DUP)

| (OS) L1255482-06 08/28/ | /20 12:00 • (DU | P) R3565005- | 10 08/28/ | 20 12:33 | | | | | |
|-------------------------|-----------------|--------------|-----------|----------|---------------|-------------------|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | |
| Analyte | ug/l | ug/l | | % | | % | | | |
| Chloride | 20800 | 20600 | 1 | 1.01 | | 15 | | | |
| Sulfate | 27800 | 27600 | 1 | 0.647 | | 15 | | | |

Laboratory Control Sample (LCS)

| (LCS) R3565005-2 08/28 | 3/20 05:19 | | | | |
|------------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Chloride | 40000 | 39900 | 99.8 | 80.0-120 | |
| Sulfate | 40000 | 39900 | 99.7 | 80.0-120 | |

L1255433-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1255433-01 08/28/2 | 20 07:07 • (MS) | R3565005-4 | 08/28/20 07:1 | 8 • (MSD) R356 | 5005-5 08/28 | 3/20 07:28 | | | | | | |
|--------------------------|-----------------|-----------------|---------------|----------------|--------------|------------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Chloride | 50000 | 16600 | 69200 | 67900 | 105 | 102 | 1 | 80.0-120 | | | 1.91 | 15 |
| Sulfate | 50000 | 47900 | 98500 | 97900 | 101 | 100 | 1 | 80.0-120 | | | 0.558 | 15 |

| ACCOUNT: | PROJECT: | SDG: | DATE/TIME: | PAGE: |
|--------------------|-------------|----------|----------------|----------|
| SCS Engineers - KS | 27213167.20 | L1255433 | 09/02/20 11:05 | 12 of 18 |



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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

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L1255433-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1255433-06 08/28/ | 20 08:23 • (MS |) R3565005-6 | 08/28/20 08: | 34 • (MSD) R35 | 65005-7 08/2 | 28/20 08:45 | | | | | | |
|-------------------------|----------------|-----------------|--------------|----------------|--------------|-------------|----------|-------------|--------------|---------------|------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Chloride | 50000 | 20000 | 71300 | 70500 | 103 | 101 | 1 | 80.0-120 | | | 1.23 | 15 |
| Sulfate | 50000 | 182000 | 232000 | 225000 | 101 | 87.4 | 1 | 80.0-120 | E | E | 2.92 | 15 |

L1255482-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1255482-04 08/28/ | 20 11:17 • (MS) F | 23565005-8 0 | 8/28/20 11:27 | • (MSD) R3565 | 005-9 08/28/2 | 20 11:38 | | | | | | |
|-------------------------|-------------------|-----------------|---------------|---------------|---------------|----------|----------|-------------|--------------|---------------|--------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Chloride | 50000 | 8790 | 60500 | 60000 | 103 | 102 | 1 | 80.0-120 | | | 0.858 | 15 |
| Sulfate | 50000 | 80100 | 130000 | 130000 | 99.0 | 99.0 | 1 | 80.0-120 | E | E | 0.0218 | 15 |

DATE/TIME: 09/02/20 11:05

WG1535076

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

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Method Blank (MB)

| Method Bidi | ik (IVID) | | | | |
|-----------------|----------------|--------------|--------|--------|--|
| (MB) R3566413-1 | 09/02/20 02:45 | | | | |
| | MB Result | MB Qualifier | MB MDL | MB RDL | |
| Analyte | ug/l | | ug/l | ug/l | |
| Boron | U | | 25.4 | 200 | |
| Calcium | U | | 389 | 1000 | |
| | | | | | |

Laboratory Control Sample (LCS)

| Spike Amount LCS Result LCS Rec. Rec. Limits Analyte ug/l % | | (LCS) R3566413-2 09/02 | 2/20 02:47 | | | | | |
|---|---------------------------|------------------------|--------------|------------|----------|-------------|---------------|--|
| nalyte ug/l ug/l % % | | | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | |
| | on 1000 981 98.1 80.0-120 | Analyte | ug/l | ug/l | % | % | | |

L1255433-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1255433-03 09/02/ | 20 02:50 • (MS | 6) R3566413-4 | 09/02/20 02:5 | 55 • (MSD) R35 | 66413-5 09/02 | 2/20 02:58 | | | | | | | ⁸ Al |
|-------------------------|----------------|-----------------|---------------|----------------|---------------|------------|----------|-------------|--------------|---------------|---------|------------|-----------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits | |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % | 9 |
| Boron | 1000 | 1190 | 2130 | 2130 | 94.0 | 94.0 | 1 | 75.0-125 | | | 0.00512 | 20 | Sc |
| Calcium | 10000 | 61900 | 70400 | 70700 | 85.7 | 87.8 | 1 | 75.0-125 | | | 0.297 | 20 | |

DATE/TIME: 09/02/20 11:05

WG1535077

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

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Method Blank (MB)

| (MB) R3566148-1 09/0 | 1/20 14:20 | | | | |
|----------------------|------------|--------------|--------|--------|--|
| | MB Result | MB Qualifier | MB MDL | MB RDL | |
| Analyte | ug/l | | ug/l | ug/l | |
| Boron | U | | 25.4 | 200 | |

Laboratory Control Sample (LCS)

| (LCS) R3566148-2 09/0 | 01/20 14:23 | | | | |
|-----------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Boron | 1000 | 974 | 97.4 | 80.0-120 | |

L1255433-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1255433-06 09/01/2 | DS) L1255433-06 09/01/20 14:26 • (MS) R3566148-4 09/01/20 14:31 • (MSD) R3566148-5 09/01/20 14:34 | | | | | | | | | | | |
|--------------------------|---|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|--------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Boron | 1000 | 4130 | 5040 | 5050 | 91.5 | 92.0 | 1 | 75.0-125 | | | 0.0974 | 20 |

SDG: L1255433 DATE/TIME: 09/02/20 11:05

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GLOSSARY OF TERMS

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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). |
| | |

O1 The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

PROJECT: 27213167.20

SDG: L1255433 DATE/TIME: 09/02/20 11:05

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ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

State Accreditations

| Alahama | 40660 | Nahvas |
|------------------------|-------------|----------|
| Alabama | | Nebras |
| Alaska | 17-026 | Nevada |
| Arizona | AZ0612 | New H |
| Arkansas | 88-0469 | New Je |
| California | 2932 | New M |
| Colorado | TN00003 | New Ye |
| Connecticut | PH-0197 | North C |
| Florida | E87487 | North 0 |
| Georgia | NELAP | North 0 |
| Georgia ¹ | 923 | North [|
| Idaho | TN00003 | Ohio-\ |
| Illinois | 200008 | Oklaho |
| Indiana | C-TN-01 | Oregor |
| lowa | 364 | Pennsy |
| Kansas | E-10277 | Rhode |
| Kentucky ¹⁶ | 90010 | South (|
| Kentucky ² | 16 | South I |
| Louisiana | AI30792 | Tennes |
| Louisiana ¹ | LA180010 | Texas |
| Maine | TN0002 | Texas |
| Maryland | 324 | Utah |
| Massachusetts | M-TN003 | Vermo |
| Michigan | 9958 | Virginia |
| Minnesota | 047-999-395 | Washin |
| Mississippi | TN00003 | West V |
| Missouri | 340 | Wiscon |
| Montana | CERT0086 | Wyomi |
| | | |

| lebraska | NE-OS-15-05 |
|-----------------------------|------------------|
| Nevada | TN-03-2002-34 |
| New Hampshire | 2975 |
| New Jersey–NELAP | TN002 |
| New Mexico ¹ | n/a |
| New York | 11742 |
| North Carolina | Env375 |
| North Carolina ¹ | DW21704 |
| North Carolina ³ | 41 |
| North Dakota | R-140 |
| Ohio-VAP | CL0069 |
| Oklahoma | 9915 |
| Oregon | TN200002 |
| Pennsylvania | 68-02979 |
| Rhode Island | LAO00356 |
| South Carolina | 84004 |
| South Dakota | n/a |
| Tennessee 14 | 2006 |
| Texas | T104704245-18-15 |
| Texas ⁵ | LAB0152 |
| Utah | TN00003 |
| Vermont | VT2006 |
| Virginia | 460132 |
| Washington | C847 |
| West Virginia | 233 |
| Wisconsin | 9980939910 |
| Wyoming | A2LA |
| | |

Third Party Federal Accreditations

| 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

Our Locations

SCS Engineers - KS

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



27213167.20

L1255433

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| | | | Billing Info | rmation: | | | | - | Analysis / Container / Preservative Chain of Custody Pa | | | | | ody Page L of L | | | |
|--|---------------------------------|--|--|---------------|---------|----------------|---------|---|---|-------------------------------------|------------------|-------|-------------------|---|---|---|-----------------------|
| 8575 W. 110th Street Overland Park, KS 66210 Report to: | | 8575 W. | Accounts Payable 8575 W. 110th Street Overland Park, KS 66210 | | | | | 62 | | | | | | | 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 | | |
| | | Email To: jfranks@scsengineers.com;jay.martin | | | | vergy.c | | | | 1 | | | | | | | |
| Project Description: City/State Evergy - latan Generating Station Collected: | | Weston, MO Please Cit PT MT C | | | |)3 | EON | | | | | | | Phone: 800-767-5859 Fax: 615-758-5859 | | | |
| Phone: 913-681-0030 | Client Project # 27213167.20 | | , | Lab Proje | | ATAN | | E-HNC | PE-HN | Pres | | | | | | sDG#[255433 1124 | |
| Collected by (print): Whit Martin | Site/Facility ID # | | | P.O. # | | | | 250mHDPE-HNO3 | OMIHD | PE-No | VoPres | | | | | | QUAOPKS |
| ollected by (signature): What Market mmediately Packed on Ice N_Y_X | | Day Five Day 5 Day ay 10 Day | ST Be Notified) Five Day 5 Day (Rad Only) 10 Day (Rad Only) | | | | No. | - 6010 | m - 6010 250mHDPE-HNO3 | Chloride 125mHDPE-NoPres | 125mlHDPE-NoPres | | | | and and a second | Template: T Prelogin: P PM: 206 - Je PB: | 789892 |
| Sample ID | Comp/Grab | Matrix * | Depth | Da | | Time | Cntrs | Boron | Calcium | Chlori | S04 1 | | | | | Shipped Via Remarks | Sample # (lab only) |
| NW-10 | Grab | GW | 1 | 18/20 | sho | 1745 | 1 | | | | X | | | | 1. Sec. | a millioners. | I-AT |
| NW-10 MS/MSD | Grab | GW | | UIE | 100 | 1245 | 1 | | | | x | 1 | 212 | | | | |
| DUPLICATE 1 | Grab | Construction of the second | | | | 1245 | 1 | | 124.13 | | x | | | · Z hay | | | -02 |
| 1W-104 | Grab | GW | | | | 1415 | 1 | 1 | X | | | | | | | Sec. 1 | -03 |
| IW-104 MS/MSD | Grab | GW | | | | 1415 | 1 i | | X | | | 1 | | | | | |
| UPLICATE 2 | Grab | GW | | | | 1415 | 1 | | x | | 1999 | | | | | and the | -04 |
| IW-109 | Grab | GW | | 1 | | 1505 | 2 | X | | | X | | | | | er Kaiper - An | -05 |
| IW-110 | Grub | GW | | | | 1550 | 2 | X | Sec. | X | in a | | | 945 - | i de | 1 | -06 |
| IW-110 MS/MSD | Grab | GW | 1 | | | 1950 | 2 | X | | X | | | | | | | |
| UPLICATE 3 | Grab | GW | | | Second | 1950 | 2 | X | and a | X | 100 | | | funder | | | -67 |
| Matrix: S - Soil AIR - Air F - Filter W - Groundwater B - Bioassay VW - WasteWater | Remarks: | | | rit Geferk | | - | | | | | pH Flow | ALT . | Temp | - Co | C Seal P C Signed ottles ar orrect bo | ole Receipt resent/Intac /Accurate: rive intact ttles used: | t: NP Y N |
| DW - Drinking Water Samples returned via: DT - Other UPS FedEx Courier Relinquished by (Signature) Date; | | Tracking # 1840 | | | | 15 | L | 000000000000000000000000000000000000000 | 018 | 50 Trip Blank Received: Yes //Ng | | | VC P1 | Sufficient volume sent: If Applicable VOA Zero Headspace: Preservation Correct/Checked: N | | | |
| applicate | + 13 A | 3/26/20 | 7 12 | 240 | 10 | lan h | li | w | 26-0 | | | | HCL / Meol TBR | R7 | 4D Screen | <0.5 mR/hr | : <u> </u> |
| elinquished by : (Signature) | D | late: | Time | () | Receive | ed by: (Signat | ture) | | | | 4.3-5 | 5 °C | Bottles Received | f: If | preservatio | in required by | Login: Date/Time |
| Relinquished by : (Signature) | D | ate: | Time | Origer, | Receive | ed for lab by: | (Signat | ure) | | | Date: | ze | Time: BC | Ho | old: | | Condition: NCF / Ø |

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ANALYTICAL REPORT

September 03, 2020

SCS Engineers - KS

Sample Delivery Group: Samples Received: Project Number: Description:

L1255449 08/27/2020 27213167.20 Evergy latan Generating Station

Report To:

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

Тс Ss Cn Sr ʹQc Gl AI Sc

Entire Report Reviewed By:

Jubb land

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.

ACCOUNT: SCS Engineers - KS

PROJECT: 27213167.20

SDG: L1255449

DATE/TIME: 09/03/20 08:49

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| ² Tc | |
| ³ Ss | |
| ⁴ Cn | |
| ⁵Sr | |
| ⁶ Qc | |

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|-------------------------------------|----|
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SAMPLE SUMMARY

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| | SAMPLES | | IAR I | | ONEL | AD. NATIONW |
|---|---------------------------------|---------------------|-----------------------------|---------------------------------------|-------------------------|--|
| MW-10 L1255449-01 GW | | | Collected by Whit Martin | Collected date/time 08/25/20 12:45 | Received da 08/27/20 09 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 2320 B-2011 | WG1534047 | 1 | 08/29/20 23:39 | 08/29/20 23:39 | MCG | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1533924 | 1 | 08/28/20 09:17 | 08/28/20 09:17 | LBR | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1536087 | 1 | 09/02/20 10:42 | 09/02/20 12:22 | CCE | Mt. Juliet, TN |
| MW-104 L1255449-02 GW | | | Collected by Whit Martin | Collected date/time 08/25/20 14:15 | Received da 08/27/20 09 | |
| | Detek | Dilution | Due a cuetta a | Arraharia | Arrahart | Leasting |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 2320 B-2011 | WG1534047 | 1 | 08/29/20 23:55 | 08/29/20 23:55 | MCG | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1533924 | 1 | 08/28/20 09:28 | 08/28/20 09:28 | LBR | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1533924 | 10 | 08/28/20 09:39 | 08/28/20 09:39 | LBR | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1536087 | 1 | 09/02/20 10:42 | 09/02/20 12:37 | CCE | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received date/time | |
| MW-109 L1255449-03 GW | | | Whit Martin | 08/25/20 15:05 | 08/27/20 09 | :30 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 2320 B-2011 | WG1534047 | 1 | 08/30/20 00:05 | 08/30/20 00:05 | MCG | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1533924 | 1 | 08/28/20 09:50 | 08/28/20 09:50 | LBR | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1536087 | 1 | 09/02/20 10:42 | 09/02/20 12:40 | CCE | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | te/time |
| | | | Whit Martin | 08/25/20 15:50 | 08/27/20 09 | :30 |
| MW-110 L1255449-04 GW | | | | | | |
| | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| Method | | | Preparation date/time | Analysis date/time | | |
| MW-110 L1255449-04 GW Method Wet Chemistry by Method 2320 B-2011 Wet Chemistry by Method 9056A | Batch WG1534047 WG1534488 | Dilution 1 10 | Preparation | Analysis | Analyst MCG ELN | Location Mt. Juliet, TN Mt. Juliet, TN |

SDG: L1255449

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.

Jubb land

Jeff Carr Project Manager

Τс Ss Cn Sr Qc GI AI Sc

SDG: L1255449 DATE/TIME: 09/03/20 08:49 PAGE: 4 of 16

SAMPLE RESULTS - 01 L1255449



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Wet Chemistry by Method 2320 B-2011

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | Cp |
|------------------------|--------|-----------|-------|----------|------------------|------------------|-----------------|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Alkalinity,Bicarbonate | 589000 | | 20000 | 1 | 08/29/2020 23:39 | <u>WG1534047</u> | Tc |
| Alkalinity,Carbonate | ND | | 20000 | 1 | 08/29/2020 23:39 | <u>WG1534047</u> | |
| Sample Narrative: | | | | | | | ³ Ss |

Sample Narrative:

L1255449-01 WG1534047: Endpoint pH 4.5

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|----------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Chloride | 16400 | | 1000 | 1 | 08/28/2020 09:17 | WG1533924 |

Metals (ICP) by Method 6010B

| Metals (ICP) by M | lethod 6010B | | | | | | 7 |
|-------------------|--------------|-------------|------|----------|------------------|-----------|--------|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | — G |
| Analyte | ug/l | | ug/l | | date / time | | 8 |
| Calcium | 163000 | <u>01 V</u> | 1000 | 1 | 09/02/2020 12:22 | WG1536087 | Ă |
| Magnesium | 59100 | 01 | 1000 | 1 | 09/02/2020 12:22 | WG1536087 | |
| Potassium | 4510 | | 2000 | 1 | 09/02/2020 12:22 | WG1536087 | °Sc |
| Sodium | 11900 | | 3000 | 1 | 09/02/2020 12:22 | WG1536087 | 50 |

Collected date/time: 08/25/20 14:15

SAMPLE RESULTS - 02 L1255449



Cn

Wet Chemistry by Method 2320 B-2011

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | — Cp |
|------------------------|--------|-----------|-------|----------|------------------|-----------|-----------------|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Alkalinity,Bicarbonate | 223000 | | 20000 | 1 | 08/29/2020 23:55 | WG1534047 | Tc |
| Alkalinity,Carbonate | ND | | 20000 | 1 | 08/29/2020 23:55 | WG1534047 | |
| | | | | | | | ³ Ss |

Sample Narrative:

L1255449-02 WG1534047: Endpoint pH 4.5

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | °Sr |
|-------------------|--------------|-----------|-------|----------|------------------|------------------|----------|
| Analyte | ug/l | | ug/l | | date / time | | |
| Chloride | 22800 | | 1000 | 1 | 08/28/2020 09:28 | WG1533924 | 6 0 C |
| Sulfate | 126000 | | 50000 | 10 | 08/28/2020 09:39 | <u>WG1533924</u> | Qc |
| | | | | | | | 7 |
| Metals (ICP) by M | Vethod 6010B | | | | | | GI |

Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | 8 |
|-----------|--------|-----------|------|----------|------------------|-----------|---------|
| Analyte | ug/l | | ug/l | | date / time | | ັΑΙ |
| Magnesium | 13000 | | 1000 | 1 | 09/02/2020 12:37 | WG1536087 | |
| Potassium | 3760 | | 2000 | 1 | 09/02/2020 12:37 | WG1536087 | 9 20 |
| Sodium | 79600 | | 3000 | 1 | 09/02/2020 12:37 | WG1536087 | 50 |

SDG: L1255449

DATE/TIME: 09/03/20 08:49 PAGE:

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Collected date/time: 08/25/20 15:05

SAMPLE RESULTS - 03



Cn

Qc

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Wet Chemistry by Method 2320 B-2011

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | Ср |
|------------------------|--------|-----------|-------|----------|------------------|-----------|-----------------|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Alkalinity,Bicarbonate | 197000 | | 20000 | 1 | 08/30/2020 00:05 | WG1534047 | Tc |
| Alkalinity,Carbonate | ND | | 20000 | 1 | 08/30/2020 00:05 | WG1534047 | |
| Cample Navrative | | | | | | | ³ Ss |

Sample Narrative:

L1255449-03 WG1534047: Endpoint pH 4.5

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|----------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Chloride | 25200 | | 1000 | 1 | 08/28/2020 09:50 | WG1533924 |

Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | GI |
|-----------|--------|-----------|------|----------|------------------|-----------|-----|
| Analyte | ug/l | | ug/l | | date / time | | 8 |
| Calcium | 62300 | | 1000 | 1 | 09/02/2020 12:40 | WG1536087 | Ă |
| Magnesium | 12900 | | 1000 | 1 | 09/02/2020 12:40 | WG1536087 | |
| Potassium | 5780 | | 2000 | 1 | 09/02/2020 12:40 | WG1536087 | °Sc |
| Sodium | 96000 | | 3000 | 1 | 09/02/2020 12:40 | WG1536087 | 50 |

Collected date/time: 08/25/20 15:50

SAMPLE RESULTS - 04



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Qc

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Wet Chemistry by Method 2320 B-2011

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | — Ср |
|------------------------|--------|-----------|-------|----------|------------------|-----------|-----------------|
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Alkalinity,Bicarbonate | 293000 | | 20000 | 1 | 08/30/2020 00:16 | WG1534047 | Tc |
| Alkalinity,Carbonate | ND | | 20000 | 1 | 08/30/2020 00:16 | WG1534047 | |
| Comple Newstine | | | | | | | ³ Ss |

Sample Narrative:

L1255449-04 WG1534047: Endpoint pH 4.5

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Sulfate | 179000 | | 50000 | 10 | 08/29/2020 12:52 | WG1534488 |

Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | G |
|-----------|--------|-----------|------|----------|------------------|-----------|-----------------|
| Analyte | ug/l | | ug/l | | date / time | | 8 |
| Calcium | 37000 | | 1000 | 1 | 09/02/2020 14:44 | WG1536087 | ĬAĬ |
| Magnesium | 6680 | | 1000 | 1 | 09/02/2020 14:44 | WG1536087 | |
| Potassium | 6050 | | 2000 | 1 | 09/02/2020 14:44 | WG1536087 | ⁹ Sc |
| Sodium | 176000 | | 3000 | 1 | 09/02/2020 14:44 | WG1536087 | |

Wet Chemistry by Method 2320 B-2011

QUALITY CONTROL SUMMARY

Method Blank (MB)

| IVIELITOU DIALIK (IV | | | | |
|------------------------|------------|--------------|--------|--------|
| (MB) R3565352-1 08/2 | 9/20 16:02 | | | |
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Alkalinity,Bicarbonate | U | | 8450 | 20000 |
| Alkalinity,Carbonate | U | | 8450 | 20000 |
| ikalinity,CarDOllate | U | | 0400 | 20000 |

Sample Narrative:

BLANK: Endpoint pH 4.5

L1254487-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1254487-01 08/29 | 9/20 16:26 • (DUP |) R3565352-3 | 3 08/29/20 | D 16:34 | | | | | |
|------------------------|-------------------|--------------|------------|---------|---------------|-------------------|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | |
| Analyte | ug/l | ug/l | | % | | % | | | |
| Alkalinity,Bicarbonate | 249000 | 249000 | 1 | 0.255 | | 20 | | | |
| Alkalinity,Carbonate | ND | ND | 1 | 0.000 | | 20 | | | |
| | | | | | | | | | |

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1255084-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1255084-01 08/29/ | 20 23:19 • (DUP | 9) R3565352-6 | 6 08/29/2 | 0 23:29 | | |
|-------------------------|-----------------|---------------|-----------|---------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| Alkalinity,Bicarbonate | 22000 | 21900 | 1 | 0.607 | | 20 |
| Alkalinity,Carbonate | ND | ND | 1 | 0.000 | | 20 |

Sample Narrative:

OS: Endpoint pH 4.5 Headspace DUP: Endpoint pH 4.5

| ACCOUNT: |
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| SCS Engineers - KS |

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SDG: L1255449 DATE/TIME: 09/03/20 08:49

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WG1533924

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

| (MB) R3565005-1 | 08/28/20 05:09 | | | |
|-----------------|----------------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Chloride | U | | 379 | 1000 |
| Sulfate | U | | 594 | 5000 |
| Suifate | U | | 594 | 5000 |

L1255046-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1255046-01 08 | 8/28/20 06:23 • (DU | P) R3565005 | -3 08/28/2 | 20 06:34 | | | | | |
|---------------------|---------------------|-------------|------------|----------|---------------|-------------------|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | |
| Analyte | ug/l | ug/l | | % | | % | | | |
| Chloride | ND | ND | 1 | 0.000 | | 15 | | | |
| Sulfate | 16100 | 16900 | 1 | 4.57 | | 15 | | | |

L1255482-06 Original Sample (OS) • Duplicate (DUP)

| (OS) L1255482-06 08/28 | /20 12:00 • (DU | P) R3565005- | 10 08/28 | 20 12:33 | | | | |
|------------------------|-----------------|--------------|----------|----------|---------------|-------------------|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | |
| Analyte | ug/l | ug/l | | % | | % | | |
| Chloride | 20800 | 20600 | 1 | 1.01 | | 15 | | |
| Sulfate | 27800 | 27600 | 1 | 0.647 | | 15 | | |

Laboratory Control Sample (LCS)

| (LCS) R3565005-2 08/28/20 05:19 | | | | | | | | | | | | |
|---------------------------------|--------------|------------|----------|-------------|---------------|--|--|--|--|--|--|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | | | | | | | |
| Analyte | ug/l | ug/l | % | % | | | | | | | | |
| Chloride | 40000 | 39900 | 99.8 | 80.0-120 | | | | | | | | |
| Sulfate | 40000 | 39900 | 99.7 | 80.0-120 | | | | | | | | |

L1255433-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1255433-01 08/28/20 07:07 • (MS) R3565005-4 08/28/20 07:18 • (MSD) R3565005-5 08/28/20 07:28 | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Chloride | 50000 | 16600 | 69200 | 67900 | 105 | 102 | 1 | 80.0-120 | | | 1.91 | 15 |
| Sulfate | 50000 | 47900 | 98500 | 97900 | 101 | 100 | 1 | 80.0-120 | | | 0.558 | 15 |

| ACCOUNT: | |
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| SCS Engineers - KS | |

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SDG: L1255449 DATE/TIME: 09/03/20 08:49 PAGE: 10 of 16

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

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L1255433-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1255433-06 08/28/ | (OS) L1255433-06 08/28/20 08:23 • (MS) R3565005-6 08/28/20 08:34 • (MSD) R3565005-7 08/28/20 08:45 | | | | | | | | | | | | | | |
|-------------------------|--|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|--|--|--|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits | | | |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % | | | |
| Chloride | 50000 | 20000 | 71300 | 70500 | 103 | 101 | 1 | 80.0-120 | | | 1.23 | 15 | | | |
| Sulfate | 50000 | 182000 | 232000 | 225000 | 101 | 87.4 | 1 | 80.0-120 | E | E | 2.92 | 15 | | | |

L1255482-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1255482-04 08/28/ | (OS) L1255482-04 08/28/20 11:17 • (MS) R3565005-8 08/28/20 11:27 • (MSD) R3565005-9 08/28/20 11:38 | | | | | | | | | | | | | |
|-------------------------|--|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|--------|------------|--|--|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits | | |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % | | |
| Chloride | 50000 | 8790 | 60500 | 60000 | 103 | 102 | 1 | 80.0-120 | | | 0.858 | 15 | | |
| Sulfate | 50000 | 80100 | 130000 | 130000 | 99.0 | 99.0 | 1 | 80.0-120 | E | E | 0.0218 | 15 | | |

SDG: L1255449 DATE/TIME: 09/03/20 08:49

WG1534488

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY L1255449-04

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Method Blank (MB)

| (MB) R3565413-1 08/29/20 09:23 | | | | | | | | |
|--------------------------------|-----------|--------------|--------|--------|--|--|--|--|
| | MB Result | MB Qualifier | MB MDL | MB RDL | | | | |
| Analyte | ug/l | | ug/l | ug/l | | | | |
| Sulfate | U | | 594 | 5000 | | | | |

L1255052-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1255052-01 08/29/ | DS) L1255052-01 08/29/20 10:49 • (DUP) R3565413-3 08/29/20 11:06 | | | | | | | | | | | |
|-------------------------|--|------------|----------|---------|---------------|-------------------|--|--|--|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | | | | |
| Analyte | ug/l | ug/l | | % | | % | | | | | | |
| Sulfate | 506000 | 509000 | 10 | 0.607 | | 15 | | | | | | |

L1255539-09 Original Sample (OS) • Duplicate (DUP)

| L1255539-09 Orig | inal Sample | (OS) • Du | plicate | (DUP) | | | ⁷ Gl |
|------------------------|-------------------|---------------|-----------|---------|---------------|-------------------|-----------------|
| (OS) L1255539-09 08/29 |)/20 15:46 • (DUI | P) R3565413-6 | 6 08/29/2 | 0 16:04 | | | |
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | ⁸ Al |
| Analyte | ug/l | ug/l | | % | | % | |
| Sulfate | 314000 | 315000 | 1 | 0.227 | E | 15 | ⁹ Sc |

Laboratory Control Sample (LCS)

| (LCS) R3565413-2 08/29 | /20 09:41 | | | | |
|------------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Sulfate | 40000 | 43000 | 107 | 80.0-120 | |

L1255315-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1255315-01 08/29/2 | 20 11:23 • (MS) R | 3565413-4 08 | 3/29/20 11:40 • | (MSD) R35654 | 13-5 08/29/20 | D 11:58 | | | | | | |
|--------------------------|-------------------|-----------------|-----------------|--------------|---------------|----------|----------|-------------|--------------|---------------|-----|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| | | | | | | | | | | | | |

L1255620-02 Original Sample (OS) • Matrix Spike (MS)

| (OS) L1255620-02 08/29/2 | 20 16:56 • (MS) | R3565413-7 (| 08/29/20 17:11 | | | | |
|--------------------------|-----------------|-----------------|----------------|---------|----------|-------------|--------------|
| | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
| Analyte | ug/l | ug/l | ug/l | % | | % | |
| Sulfate | 50000 | 64100 | 117000 | 105 | 1 | 80.0-120 | E |

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|--------------------|-------------|----------|----------------|----------|
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Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

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Method Blank (MB)

| (MB) R3566516-1 09/0 | 2/20 12:17 |
|----------------------|------------|
|----------------------|------------|

| | MB Result | MB Qualifier | MB MDL | MB RDL | |
|-----------|-----------|--------------|--------|--------|--|
| alyte | ug/l | | ug/l | ug/l | |
| Calcium | U | | 389 | 1000 | |
| Magnesium | U | | 111 | 1000 | |
| Potassium | U | | 510 | 2000 | |
| Sodium | U | | 1400 | 3000 | |
| | | | | | |

Laboratory Control Sample (LCS)

| (LCS) R3566516-2 09/02 | 2/20 12:19 | | | | |
|------------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Calcium | 10000 | 9870 | 98.7 | 80.0-120 | |
| Magnesium | 10000 | 9390 | 93.9 | 80.0-120 | |
| Potassium | 10000 | 9370 | 93.7 | 80.0-120 | |
| Sodium | 10000 | 10100 | 101 | 80.0-120 | |

L1255449-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1255449-01 09/02/ | '20 12:22 • (MS) | R3566516-4 C | 09/02/20 12:2 | 7 • (MSD) R356 | 6516-5 09/0 | 2/20 12:29 | | | | | | |
|-------------------------|------------------|-----------------|---------------|----------------|-------------|------------|----------|-------------|--------------------|--------------------|--------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Calcium | 10000 | 163000 | 168000 | 167000 | 49.3 | 47.8 | 1 | 75.0-125 | $\underline{\vee}$ | $\underline{\vee}$ | 0.0895 | 20 |
| Magnesium | 10000 | 59100 | 67600 | 67500 | 84.9 | 83.4 | 1 | 75.0-125 | | | 0.217 | 20 |
| Potassium | 10000 | 4510 | 14100 | 13900 | 95.7 | 94.3 | 1 | 75.0-125 | | | 1.03 | 20 |
| Sodium | 10000 | 11900 | 21700 | 21600 | 98.3 | 97.3 | 1 | 75.0-125 | | | 0.478 | 20 |

SDG: L1255449 DATE/TIME: 09/03/20 08:49

GLOSSARY OF TERMS

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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 analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial |

| E | The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL). |
|----|---|
| O1 | The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference. |

The sample concentration is too high to evaluate accurate spike recoveries.

V

PROJECT: 27213167.20

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ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

State Accreditations

| Alabama | 40660 | Nebraska |
|------------------------|-------------|-------------------------|
| Alaska | 17-026 | Nevada |
| Arizona | AZ0612 | New Hampshire |
| Arkansas | 88-0469 | New Jersey–N |
| California | 2932 | New Mexico ¹ |
| Colorado | TN00003 | New York |
| Connecticut | PH-0197 | North Carolina |
| Florida | E87487 | North Carolina |
| Georgia | NELAP | North Carolina |
| Georgia ¹ | 923 | North Dakota |
| Idaho | TN00003 | Ohio–VAP |
| Illinois | 200008 | Oklahoma |
| Indiana | C-TN-01 | Oregon |
| lowa | 364 | Pennsylvania |
| Kansas | E-10277 | Rhode Island |
| Kentucky ¹⁶ | 90010 | South Carolina |
| Kentucky ² | 16 | South Dakota |
| Louisiana | AI30792 | Tennessee ¹⁴ |
| Louisiana ¹ | LA180010 | Texas |
| Maine | TN0002 | Texas ⁵ |
| Maryland | 324 | Utah |
| Massachusetts | M-TN003 | Vermont |
| Michigan | 9958 | Virginia |
| Minnesota | 047-999-395 | Washington |
| Mississippi | TN00003 | West Virginia |
| Missouri | 340 | Wisconsin |
| Montana | CERT0086 | Wyoming |
| | | |

| Vebraska | NE-OS-15-05 |
|-----------------------------|------------------|
| Nevada | TN-03-2002-34 |
| New Hampshire | 2975 |
| New Jersey–NELAP | TN002 |
| New Mexico ¹ | n/a |
| New York | 11742 |
| North Carolina | Env375 |
| North Carolina ¹ | DW21704 |
| North Carolina ³ | 41 |
| North Dakota | R-140 |
| Ohio-VAP | CL0069 |
| Oklahoma | 9915 |
| Oregon | TN200002 |
| Pennsylvania | 68-02979 |
| Rhode Island | LAO00356 |
| South Carolina | 84004 |
| South Dakota | n/a |
| Tennessee 1 4 | 2006 |
| Texas | T104704245-18-15 |
| Texas ⁵ | LAB0152 |
| Utah | TN00003 |
| Vermont | VT2006 |
| Virginia | 460132 |
| Washington | C847 |
| West Virginia | 233 |
| Wisconsin | 9980939910 |
| | |

Third Party Federal Accreditations

| 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

Our Locations

SCS Engineers - KS

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



27213167.20

L1255449

09/03/20 08:49

| | Billing Informat | | | ormation: | nation: | | | Analysis / Container / Preservative | | | | | | CH | Chain of Custody Page of | | |
|---|---|---|---|--|--------------------------|------------------|-------------------|-------------------------------------|---------------------|--|------------------|-----------------------|---|--|--|---|---------------------|
| SCS Engineers - KS 8575 W. 110th Street Overland Park, KS 66210 | | Accounts Payable 8575 W. 110th Stree Overland Park, KS 66 | | | | Pres Chk | | 52 | 10110101000000 | 5 | - | | | | | Pace Analytical* | |
| | | | | 66210 | | | VO3 | | | | oPres | | | 1 | / Netional Can | ter for Testing & Innovation | |
| Jason Franks | | | | il To: .ks@scsengineers.com;jay.martin@evergy.c | | | | | | | | | | | M | 2065 Lebanon Rd Iount Juliet, TN 371 hone: 615-758-5858 | |
| Project Description: Evergy latan Generating Station | | City/State Collected: | Veston | MO | Please PT MT | Circle: | res | HH | Pres | INO3 | 6 | PE-N | | | | hone: 800-767-5859 ax: 615-758-5859 | |
| Phone: 913-681-0030 | Client Project # 27213167.20 Site/Facility ID # | | Lab Project # AQUAOPKS-IATAN P.O. # | | | 125mlHDPE-NoPres | 10 250mlHDPE-HNO3 | Chloride - 9056 125mlHDPE-NoPres | 6010 250mlHDPE-HN03 | 125mlHDPE-NoPres | 125mlHDPE-NoPres | | | SI | DG # // | 255449 | |
| Collected by (print): Whit Martin | | | | | | | | | | | 9056 125 | | | | Acctnum: AQUAOPKS | | |
| Collected by (signature): What Market Immediately Packed on Ice N Y _X | SameNext | ? (Lab MUST Be Notified) te Day Five Day t Day 5 Day (Rad Only) to Day 10 Day (Rad Only) te Day | | Quote # Date Results Needer Sta | | No. of | ALKBI, ALKCA 1251 | Mg, Na - 6010 | ide - 9056 12 | Mg, Na - 6010 2 | 100 | Chlaride - 90 | | | Template:T1528 Prelogin: P7898 PM: 206 - Jeff Car PB: | | 896 |
| Sample ID | Comp/Gra | b Matrix * | Depth | Date | Time | Critrs | ALKBI | Ca, K, | Chlor | K, Mg | S04 - | S04, | | | St | hipped Via: Remarks | Sample # (lab only) |
| MW-10 | Grab | GW | | 8/25/2 | 01249 | 3 | X | X | X | | | | | | | | -0) |
| MW-104 | Grad | GW | | 8/25/20 | 0 1415 | 3 | X | | | X | | X | | | | and the second second | 62 |
| MW-109 | Grab | | | Black | 0 1509 | 3 | X | X | x | | | | | | | | 03 |
| MW-110 | Grak | | | 8/25/20 | 2 1550 | 3 | X | X | | | X | | | | | | ou |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| * Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater | Remarks: | | | | | | | | | pH Temp Flow Other | | | Sample Receipt Checklist COC Seal Present/Intact:NP _ YN COC Signed/Accurate:N Bottles arrive intact:N Correct bottles used:N | | | | |
| DW - Drinking Water OT - Other | Samples returned via: Tracking # (8 4) | | | | | | | | | | | Sufficien VOA Zero | | | ent vol <u>11</u> 10 Heads | lume sent: <u>f Applicable</u> space: | |
| | | | Time: 1270 Received by (Signature) & | | | | 1240 | | | Trip Blank Received: Yes / (No/ HCL / MeoH TBR | | | Preservation Correct/Checked:N RAD Screen <0.5 mR/hr:YN | | | | |
| Relinquished by : (Signature) | Date: Time | | | e: Rece | Received by: (Signature) | | | | 1 | Tether 115 °C Bottles Received: 4,3.5=3,8 (2 | | | | If preservation required by Login: Date/Time | | | |
| Relinquished by : (Signature) Date: | | Time | e: Rece | Received for lab by: (Signature) | | | | | Date: | 7-20 | Time 95 | 1: 30 | | | | Condition: NCF / OK | |

Jared Morrison December 16, 2022

ATTACHMENT 1-6 November 2020 Sampling Event Laboratory Report



ANALYTICAL REPORT

November 20, 2020

SCS Engineers - KS

Sample Delivery Group: Samples Received: Project Number: Description: L1284237 11/11/2020 27213167.20 Evergy - latan Generating Station

Report To:

Jason Franks 8575 W. 110th Street Overland Park, KS 66210 ²Tc ³Ss ⁴Cn ⁵Sr ⁶Qc ⁷Gl ⁸Al ⁹Sc

Entire Report Reviewed By:

Jubb land

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.

ACCOUNT: SCS Engineers - KS PROJECT: 27213167.20

SDG: L1284237 DATE/TIME: 11/20/20 11:17

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| * | |
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| ² Tc | |
| ³ Ss | |
| ⁴ Cn | |
| ⁵Sr | |
| ⁶ Qc | |

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SDG: L1284237 DATE/TIME: 11/20/20 11:17

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

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| MW-1 L1284237-01 GW | | | Collected by Jason R Franks | Collected date/time 11/09/20 14:10 | 11/11/20 12:40 | |
|--|-----------|----------|--------------------------------|---------------------------------------|--------------------------------|----------------|
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Gravimetric Analysis by Method 2540 C-2011 | WG1576584 | 1 | 11/15/20 06:42 | 11/15/20 14:37 | TH | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1578077 | 1 | 11/18/20 17:56 | 11/18/20 17:56 | ST | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1576871 | 1 | 11/16/20 22:11 | 11/17/20 17:04 | EL | Mt. Juliet, TN |
| MW-2 L1284237-02 GW | | | Collected by Jason R Franks | Collected date/time 11/09/20 14:55 | Received dat 11/11/20 12:40 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Gravimetric Analysis by Method 2540 C-2011 | WG1576584 | 1 | 11/15/20 06:42 | 11/15/20 14:37 | TH | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1578077 | 1 | 11/18/20 18:14 | 11/18/20 18:14 | ST | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1578077 | 5 | 11/18/20 18:33 | 11/18/20 18:33 | ST | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1576871 | 1 | 11/16/20 22:11 | 11/17/20 17:07 | EL | Mt. Juliet, TN |
| MW-6 L1284237-03 GW | | | Collected by Jason R Franks | Collected date/time 11/09/20 12:50 | Received dat 11/11/20 12:40 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Gravimetric Analysis by Method 2540 C-2011 | WG1576584 | 1 | 11/15/20 06:42 | 11/15/20 14:37 | TH | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1578077 | 1 | 11/18/20 18:51 | 11/18/20 18:51 | ST | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1576871 | 1 | 11/16/20 22:11 | 11/17/20 15:57 | EL | Mt. Juliet, TN |
| MW-7 L1284237-04 GW | | | Collected by Jason R Franks | Collected date/time 11/09/20 13:20 | Received dat 11/11/20 12:40 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Gravimetric Analysis by Method 2540 C-2011 | WG1576584 | 1 | 11/15/20 06:42 | 11/15/20 14:37 | TH | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1578077 | 1 | 11/18/20 20:23 | 11/18/20 20:23 | ST | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1576871 | 1 | 11/16/20 22:11 | 11/17/20 17:10 | EL | Mt. Juliet, TN |
| MW-8 L1284237-05 GW | | | Collected by Jason R Franks | Collected date/time 11/09/20 12:40 | Received dat 11/11/20 12:40 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Gravimetric Analysis by Method 2540 C-2011 | WG1576584 | 1 | 11/15/20 06:42 | 11/15/20 14:37 | TH | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1578077 | 1 | 11/18/20 21:00 | 11/18/20 21:00 | ST | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1576873 | 1 | 11/16/20 21:09 | 11/17/20 11:03 | CCE | Mt. Juliet, TN |
| DUPLICATE L1284237-06 GW | | | Collected by Jason R Franks | Collected date/time 11/09/20 12:50 | Received dat 11/11/20 12:40 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Gravimetric Analysis by Method 2540 C-2011 | WG1576584 | 1 | 11/15/20 06:42 | 11/15/20 14:37 | TH | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1578077 | 1 | 11/18/20 21:19 | 11/18/20 21:19 | ST | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1576873 | 1 | 11/16/20 21:09 | 11/17/20 11:06 | CCE | Mt. Juliet, TN |

PROJECT: 27213167.20

SDG: L1284237 DATE/TIME: 11/20/20 11:17

CASE NARRATIVE

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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.

Jubb land

Jeff Carr Project Manager

Τс Ss Cn Sr Qc GI AI Sc

SDG: L1284237 DATE/TIME: 11/20/20 11:17 PAGE: 4 of 18

SAMPLE RESULTS - 01 L1284237

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Gravimetric Analysis by Method 2540 C-2011

| Gravimetric Anarysis by Metriod 2040 C-2011 | | | | | | | | |
|---|--------|-----------|-------|----------|------------------|-----------|--|----|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | Ср |
| Analyte | ug/l | | ug/l | | date / time | | | 2 |
| Dissolved Solids | 520000 | <u>13</u> | 10000 | 1 | 11/15/2020 14:37 | WG1576584 | | Tc |

Wet Chemistry by Method 9056A

Collected date/time: 11/09/20 14:10

| Wet Chemistry by Method 9056A | | | | | | | | | |
|-------------------------------|--------|-----------|------|----------|------------------|------------------|---|--|--|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | L | | |
| Analyte | ug/l | | ug/l | | date / time | | 4 | | |
| Chloride | 5240 | | 1000 | 1 | 11/18/2020 17:56 | WG1578077 | | | |
| Fluoride | 271 | | 150 | 1 | 11/18/2020 17:56 | <u>WG1578077</u> | 9 | | |
| Sulfate | 30900 | | 5000 | 1 | 11/18/2020 17:56 | WG1578077 | | | |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Boron | ND | | 200 | 1 | 11/17/2020 17:04 | WG1576871 |
| Calcium | 134000 | | 1000 | 1 | 11/17/2020 17:04 | WG1576871 |

SAMPLE RESULTS - 02 L1284237

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Gravimetric Analysis by Method 2540 C-2011

| Gravinetie Anarysis by Method 20+0 C 2011 | | | | | | | | 1 Cn |
|---|--------|-----------|-------|----------|------------------|-----------|--|-----------------|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | Ср |
| Analyte | ug/l | | ug/l | | date / time | | | 2 |
| Dissolved Solids | 640000 | | 10000 | 1 | 11/15/2020 14:37 | WG1576584 | | ⁻ Tc |

Wet Chemistry by Method 9056A

Collected date/time: 11/09/20 14:55

| Wet Chemistry by Method 9056A | | | | | | | | | |
|-------------------------------|--------|-----------|-------|----------|------------------|-----------|---|-----------------|--|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | | |
| Analyte | ug/l | | ug/l | | date / time | | | ⁴ Cn | |
| Chloride | 7030 | | 1000 | 1 | 11/18/2020 18:14 | WG1578077 | | CII | |
| Fluoride | 313 | | 150 | 1 | 11/18/2020 18:14 | WG1578077 | - | 5 | |
| Sulfate | 129000 | | 25000 | 5 | 11/18/2020 18:33 | WG1578077 | | ဳSr | |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Boron | ND | | 200 | 1 | 11/17/2020 17:07 | WG1576871 |
| Calcium | 167000 | | 1000 | 1 | 11/17/2020 17:07 | WG1576871 |

SAMPLE RESULTS - 03 L1284237

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Gravimetric Analysis by Method 2540 C-2011

| | | | | | | I'C |
|------------------|--------|---------------|----------|------------------|-----------|---------|
| | Result | Qualifier RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | ug/l | | date / time | | 2 |
| Dissolved Solids | 548000 | 10000 | 1 | 11/15/2020 14:37 | WG1576584 | T |

Wet Chemistry by Method 9056A

Collected date/time: 11/09/20 12:50

| | Result | Qualifier | RDL | Dilution | Analysis | Datab |
|------------------|--------------|-----------|--------------|----------|---------------------------------|------------------------|
| | | Qualifier | RDL | Dilution | Analysis | Batch |
| Analyte | ug/l | | ug/l | | date / time | |
| Dissolved Solids | 548000 | | 10000 | 1 | 11/15/2020 14:37 | WG1576584 |
| | | | | | | |
| Wet Chemistry by | Mothod 9056 | \ \ | | | | |
| wet chemistry b | | 7 | | | | |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
| | | | | | | |
| Analyte | ug/l | | ug/l | | date / time | |
| Chloride | ug/l 1600 | | ug/l 1000 | 1 | date / time 11/18/2020 18:51 | WG1578077 |
| • | | | - | 1 | | WG1578077 WG1578077 |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Boron | ND | | 200 | 1 | 11/17/2020 15:57 | WG1576871 |
| Calcium | 160000 | | 1000 | 1 | 11/17/2020 15:57 | WG1576871 |

SAMPLE RESULTS - 04 L1284237

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Gravimetric Analysis by Method 2540 C-2011

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|------------------|--------|---------------|----------|------------------|-----------|---------|
| | Result | Qualifier RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | ug/l | | date / time | | 2 |
| Dissolved Solids | 453000 | 10000 | 1 | 11/15/2020 14:37 | WG1576584 | T |

Wet Chemistry by Method 9056A

Collected date/time: 11/09/20 13:20

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | | |
|------------------|--------------|-----------|-------|----------|------------------|------------------------|--|--|--|
| Analyte | ug/l | | ug/l | | date / time | | | | |
| Dissolved Solids | 453000 | | 10000 | 1 | 11/15/2020 14:37 | WG1576584 | | | |
| | | | | | | | | | |
| Wet Chemistry by | Method 90564 | Ą | | | | | | | |
| | Result | | RDL | Dilution | Analycic | Datch | | | |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | | |
| Analyte | ug/l | | ug/l | | date / time | | | | |
| , | ugn | | ag,. | | date / time | | | | |
| Chloride | 3180 | | 1000 | 1 | 11/18/2020 20:23 | WG1578077 | | | |
| | | | - | 1 | | WG1578077 WG1578077 | | | |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Boron | ND | | 200 | 1 | 11/17/2020 17:10 | WG1576871 |
| Calcium | 132000 | | 1000 | 1 | 11/17/2020 17:10 | WG1576871 |

SAMPLE RESULTS - 05 L1284237

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Gravimetric Analysis by Method 2540 C-2011

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|------------------|--------|---------------|----------|------------------|-----------|-------|
| | Result | Qualifier RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | ug/l | | date / time | | 2 |
| Dissolved Solids | 571000 | 10000 | 1 | 11/15/2020 14:37 | WG1576584 | ΓT |

Wet Chemistry by Method 9056A

Collected date/time: 11/09/20 12:40

| | | | /11 | | | |
|------------------|----------------|-----------|-------|----------|------------------|-----------|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
| Analyte | ug/l | | ug/l | | date / time | |
| Dissolved Solids | 571000 | | 10000 | 1 | 11/15/2020 14:37 | WG1576584 |
| | | | | | | |
| Wet Chemistry b | v Method 90564 | Ą | | | | |
| | Result | | RDL | Dilution | Analysis | Datab |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
| Analyte | ug/l | | ug/l | | date / time | |
| Chloride | 9920 | | 1000 | 1 | 11/18/2020 21:00 | WG1578077 |
| Fluoride | 357 | | 150 | 1 | 11/18/2020 21:00 | WG1578077 |
| Sulfate | 50500 | | 5000 | 1 | 11/18/2020 21:00 | WG1578077 |
| Juitate | 58500 | | | | | |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Boron | ND | | 200 | 1 | 11/17/2020 11:03 | WG1576873 |
| Calcium | 158000 | | 1000 | 1 | 11/17/2020 11:03 | WG1576873 |

SAMPLE RESULTS - 06 L1284237

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Gravimetric Analysis by Method 2540 C-2011

| | Result | Qualifier RDL | Dilution | Analysis | Batch | C |
|------------------|--------|---------------|----------|------------------|-----------|-------|
| Analyte | ug/l | ug/l | | date / time | | 2 |
| Dissolved Solids | 557000 | 10000 | 1 | 11/15/2020 14:37 | WG1576584 | ¯Τα |

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | | | | |
|----------------------|--------------|-----------|-------|----------|------------------|------------------------|--|--|--|--|--|
| Analyte | ug/l | | ug/l | | date / time | | | | | | |
| Dissolved Solids | 557000 | | 10000 | 1 | 11/15/2020 14:37 | WG1576584 | | | | | |
| Wet Chemistry by | Method 90564 | 7 | | | | | | | | | |
| Wet enemistry by | | | | | | | | | | | |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | | | | |
| Analyte | ug/l | | ug/l | | date / time | | | | | | |
| | | | 1000 | 1 | 11/10/2020 21:10 | WC1E70077 | | | | | |
| Chloride | 1580 | | 1000 | I | 11/18/2020 21:19 | WG1578077 | | | | | |
| Chloride Fluoride | 1580 304 | | 150 | 1 | 11/18/2020 21:19 | WG1578077 WG1578077 | | | | | |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Boron | ND | | 200 | 1 | 11/17/2020 11:06 | WG1576873 |
| Calcium | 162000 | | 1000 | 1 | 11/17/2020 11:06 | WG1576873 |

WG1576584

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY L1284237-01,02,03,04,05,06

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Method Blank (MB)

| (MB) R3593450-1 11/15 | 5/20 14:37 | | | |
|-----------------------|------------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Dissolved Solids | U | | 2820 | 10000 |

L1284237-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1284237-01 11/15/2 | 0 14:37 • (DUP) F | R3593450-3 | 11/15/20 14: | 37 | | |
|--------------------------|-------------------|------------|--------------|---------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| Dissolved Solids | 520000 | 490000 | 1 | 5.94 | J3 | 5 |

L1284370-01 Original Sample (OS) • Duplicate (DUP)

| L1284370-01 Orig | ginal Sample | (OS) • Du | plicate (| DUP) | | | 7 |
|-------------------------|------------------|--------------|-------------|---------|---------------|-------------------|---|
| (OS) L1284370-01 11/15/ | 20 14:37 • (DUP) | R3593450-4 | 11/15/20 14 | :37 | | | L |
| | Original Result | t DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | 8 |
| Analyte | ug/l | ug/l | | % | | % | L |
| Dissolved Solids | 213000 | 176000 | 1 | 19.0 | <u>J3</u> | 5 | 9 |

Laboratory Control Sample (LCS)

| (LCS) R3593450-2 11/ | 15/20 14:37 | | | | |
|----------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Dissolved Solids | 8800000 | 8270000 | 94.0 | 77.4-123 | |

DATE/TIME: 11/20/20 11:17

PAGE: 11 of 18 Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY L1284237-01,02,03,04,05,06

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Method Blank (MB)

| (1016) R5594545-1 11/16/20 10.51 | (MB) R3594543-1 | 11/18/20 10:51 |
|----------------------------------|-----------------|----------------|
|----------------------------------|-----------------|----------------|

| Analyte | ug/l | | | | |
|----------|------|------|------|--|--|
| | - 5 | ug/l | ug/l | | |
| Chloride | U | 379 | 1000 | | |
| Fluoride | U | 64.0 | 150 | | |
| Sulfate | U | 594 | 5000 | | |

L1284237-04 Original Sample (OS) • Duplicate (DUP)

| (OS) L1284237-04 | 11/18/20 20.23 • | (DUP) R3594543-7 | 11/18/20 20.42 |
|------------------|------------------|---|----------------|
| (00) L1207207-07 | 11/10/20 20.23 | (001) (000-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0- | 11/10/20 20.42 |

| | (-) | | | | | |
|----------|-----------------|------------|----------|---------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| Chloride | 3180 | 3170 | 1 | 0.258 | | 15 |
| Fluoride | 288 | 296 | 1 | 2.54 | | 15 |
| Sulfate | 34000 | 33900 | 1 | 0.142 | | 15 |

Laboratory Control Sample (LCS)

| (LCS) R3594543-2 11/18/2 | 20 11:09 | | | | |
|--------------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Chloride | 40000 | 39700 | 99.2 | 80.0-120 | |
| Fluoride | 8000 | 8300 | 104 | 80.0-120 | |
| Sulfate | 40000 | 40200 | 100 | 80.0-120 | |

L1284227-01 Original Sample (OS) • Matrix Spike (MS)

| (OS) L1284227-01 11/18/20 | OS) L1284227-01 11/18/20 15:10 • (MS) R3594543-4 11/18/20 15:29 | | | | | | | | | | | |
|---------------------------|---|-----------------|-----------|---------|----------|-------------|--------------|--|--|--|--|--|
| | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier | | | | | |
| Analyte | ug/l | ug/l | ug/l | % | | % | | | | | | |
| Chloride | 50000 | ND | 53400 | 105 | 1 | 80.0-120 | | | | | | |
| Fluoride | 5000 | ND | 5230 | 103 | 1 | 80.0-120 | | | | | | |
| Sulfate | 50000 | 103000 | 154000 | 102 | 1 | 80.0-120 | E | | | | | |

L1284237-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

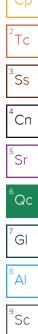
| (OS) L1284237-03 | DS) L1284237-03 11/18/20 18:51 • (MS) R3594543-5 11/18/20 19:10 • (MSD) R3594543-6 11/18/20 19:28 | | | | | | | | | | | | |
|--------------------|---|-----------------|-----------|-------------|---------|----------|----------|-------------|--------------|---------------|---------|------------|----------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits | |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % | |
| Chloride | 50000 | 1600 | 48900 | 48800 | 94.5 | 94.3 | 1 | 80.0-120 | | | 0.192 | 15 | |
| Fluoride | 5000 | 308 | 4950 | 4940 | 92.9 | 92.7 | 1 | 80.0-120 | | | 0.146 | 15 | |
| | | PRC | JECT: | | SDG: | | | DATE/ | TIME: | | PAGE: | | |
| SCS Engineers - KS | | | | 27213167.20 | | | L1: | 284237 | | 11/20/2 | 0 11:17 | | 12 of 18 |

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L1284237-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1284237-03 11/18/20 | (OS) L1284237-03 11/18/20 18:51 • (MS) R3594543-5 11/18/20 19:10 • (MSD) R3594543-6 11/18/20 19:28 | | | | | | | | | | | | | |
|---------------------------|--|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|--------|------------|--|--|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits | | |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % | | |
| Sulfate | 50000 | 24800 | 73400 | 73400 | 97.2 | 97.1 | 1 | 80.0-120 | | | 0.0673 | 15 | | |



ACCOUNT: SCS Engineers - KS PROJECT: 27213167.20

SDG: L1284237 DATE/TIME: 11/20/20 11:17 PAGE: 13 of 18

WG1576871

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY L1284237-01,02,03,04

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Method Blank (MB)

| (MB) R3594218-1 | 11/17/20 15:52 | | | | Cp |
|-----------------|----------------|--------------|--------|--------|-----------------|
| | MB Result | MB Qualifier | MB MDL | MB RDL | 2 |
| Analyte | ug/l | | ug/l | ug/l | Tc |
| Boron | U | | 20.0 | 200 | |
| Calcium | U | | 79.3 | 1000 | ³ SS |
| | | | | | 53 |

Laboratory Control Sample (LCS)

| (LCS) R3594218-2 | 11/17/20 15:55 | | | | | |
|------------------|----------------|------------|----------|-------------|--------------|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | CS Qualifier | |
| Analyte | ug/l | ug/l | % | % | | |
| Boron | 1000 | 960 | 96.0 | 80.0-120 | | |
| Calcium | 10000 | 9810 | 98.1 | 80.0-120 | | |

L1284237-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1284237-03 11/17/20 |) 15:57 • (MS) R3 | 3594218-4 11/17 | 7/20 16:03 • (N | ISD) R3594218 | -5 11/17/20 16: | 05 | | | | | | | 8 |
|---------------------------|-------------------|-----------------|-----------------|---------------|-----------------|----------|----------|-------------|--------------|---------------|-------|------------|---|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits | L |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % | g |
| Boron | 1000 | ND | 1090 | 1070 | 101 | 99.5 | 1 | 75.0-125 | | | 1.76 | 20 | · |
| Calcium | 10000 | 160000 | 170000 | 171000 | 104 | 110 | 1 | 75.0-125 | | | 0.314 | 20 | |

| ACCOUNT: | |
|-------------------|----|
| SCS Engineers - I | KS |

PROJECT: 27213167.20

SDG: L1284237 DATE/TIME: 11/20/20 11:17

PAGE: 14 of 18

WG1576873

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

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Method Blank (MB)

| (MB) R3594035-1 | 11/17/20 10:47 | | | | |
|-----------------|----------------|--------------|--------|--------|--|
| | MB Result | MB Qualifier | MB MDL | MB RDL | |
| Analyte | ug/l | | ug/l | ug/l | |
| Boron | U | | 20.0 | 200 | |
| Calcium | U | | 79.3 | 1000 | |
| | | | | | |

Laboratory Control Sample (LCS)

| (LCS) R3594035-2 11/ | 17/20 10:50 | | | | | |
|----------------------|--------------|------------|----------|-------------|---------------|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | |
| Analyte | ug/l | ug/l | % | % | | |
| Boron | 1000 | 999 | 99.9 | 80.0-120 | | |
| Calcium | 10000 | 10700 | 107 | 80.0-120 | | |

L1284240-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (C | S) L1284240-02 11/17/20 |) 10:53 • (MS) R | 3594035-4 11/ | 17/20 10:58 • (I | MSD) R359403 | 5-5 11/17/20 11: | :01 | | | | | | | ⁸ Al | Ē |
|----|-------------------------|------------------|-----------------|------------------|--------------|------------------|----------|----------|-------------|--------------------|--------------------|-------|------------|-----------------|----|
| | | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits | | I. |
| Ar | alyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % | 9 | |
| Bc | ron | 1000 | ND | 1100 | 1110 | 98.0 | 98.5 | 1 | 75.0-125 | | | 0.473 | 20 | SC | |
| Ca | llcium | 10000 | 158000 | 164000 | 163000 | 60.8 | 57.5 | 1 | 75.0-125 | $\underline{\vee}$ | $\underline{\vee}$ | 0.201 | 20 | | |

| ACCOUNT: | |
|-------------------|---|
| SCS Engineers - K | S |

PROJECT: 27213167.20

SDG: L1284237 DATE/TIME: 11/20/20 11:17

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GLOSSARY OF TERMS

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Ср

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Ss

Cn

Sr

Qc

GI

AI

Sc

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). |
|----|---|
| J3 | The associated batch QC was outside the established quality control range for precision. |

V The sample concentration is too high to evaluate accurate spike recoveries.

PROJECT: 27213167.20

SDG: L1284237 DATE/TIME: 11/20/20 11:17

PAGE: 16 of 18

ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

State Accreditations

| Alabama | 40660 | Nebras |
|------------------------|-------------|----------|
| Alaska | 17-026 | Nevad |
| Arizona | AZ0612 | New H |
| Arkansas | 88-0469 | New Je |
| California | 2932 | New M |
| Colorado | TN00003 | New Y |
| Connecticut | PH-0197 | North (|
| Florida | E87487 | North (|
| Georgia | NELAP | North (|
| Georgia ¹ | 923 | North I |
| ldaho | TN00003 | Ohio-V |
| Illinois | 200008 | Oklaho |
| Indiana | C-TN-01 | Oregor |
| lowa | 364 | Pennsy |
| Kansas | E-10277 | Rhode |
| Kentucky ¹⁶ | 90010 | South |
| Kentucky ² | 16 | South I |
| Louisiana | AI30792 | Tennes |
| Louisiana ¹ | LA180010 | Texas |
| Maine | TN0002 | Texas |
| Maryland | 324 | Utah |
| Massachusetts | M-TN003 | Vermo |
| Michigan | 9958 | Virginia |
| Minnesota | 047-999-395 | Washir |
| Mississippi | TN00003 | West V |
| Missouri | 340 | Wiscor |
| Montana | CERT0086 | Wyomi |
| | | |

| Vebraska | NE-OS-15-05 |
|-----------------------------|------------------|
| Nevada | TN-03-2002-34 |
| New Hampshire | 2975 |
| New Jersey–NELAP | TN002 |
| New Mexico ¹ | n/a |
| New York | 11742 |
| North Carolina | Env375 |
| North Carolina ¹ | DW21704 |
| North Carolina ³ | 41 |
| North Dakota | R-140 |
| Ohio-VAP | CL0069 |
| Oklahoma | 9915 |
| Oregon | TN200002 |
| Pennsylvania | 68-02979 |
| Rhode Island | LAO00356 |
| South Carolina | 84004 |
| South Dakota | n/a |
| Tennessee ¹⁴ | 2006 |
| Texas | T104704245-18-15 |
| Texas⁵ | LAB0152 |
| Utah | TN00003 |
| Vermont | VT2006 |
| Virginia | 460132 |
| Washington | C847 |
| West Virginia | 233 |
| Wisconsin | 9980939910 |
| Wyoming | A2LA |
| | |

Third Party Federal Accreditations

| 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

Our Locations

SCS Engineers - KS

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



27213167.20

L1284237

11/20/20 11:17

| The state of the s | I mark alt. | 14 M | Billing Info | rmation: | | | - | | A | nalvsis / C | ontainer / | Preservativ | /e | | Chain of Cu | ustody | Page of |
|--|---|--|--------------------------|----------------------------|---------------------|-------------|--|---------------------|------------------|------------------|------------|------------------------------|------------|--|---|---|---|
| | | | , to co arres i a jarora | | | Pres Chk | Contraction of the local division of the loc | 5 | | | | | | | - Providence | 2 ace A tional Cant | nalytical * er for Vesting & Innovatio |
| ason Franks | | Email To: jfranks@scsengineers.com;jay.martin@eve | | | | Pres | | | | | | | | 12065 Leban Mount Juliet, Phone: 615-7 | , TN 3712 758-5858 | | |
| Project Description: Evergy - latan Generating Station | | City/State Collected: | WES | NJ, KUT | Please C | ET | -NC | | | | | | | | Phone: 800-7 Fax: 615-758 | | 首監護 |
| hone: 913-681-0030 | Client Project 27213167. | | | Lab Project # AQUAOPKS- | IATAN | | 125mlHDPE-NoPres | -HNO3 | | | | | | | | | 1237 45 |
| TASAN R. FRANKS | Site/Facility I | D # | 4 4 | P.O. # | | | | IHDPE- | VoPres | | | | | | Tab Acctnum: | | |
| Jason R. January Jason R. Johnson | Rush? (Lab MUST Be N Same Day Five Day Next Day 5 Day (| | | | Date Results Needed | | Anions (Cld, F, SO4) | 6010 250mIHDPE-HNO3 | 250miHDPE-NoPres | | | | | | Prelogin: I | Template: T136059 Prelogin: P805776 PM: 206 - Jeff Carr | |
| Packed on Ice N Y | Three [| 1 | T The second | 57 | 1 | of Cntrs | SUC | Ca - 6 | 250 | | | | | | Shipped V | /ia: | |
| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | | Anic | B, C | TDS | | | | | | Remark | ks | Sample # (lab only) |
| NW-1 | GRAG | GW | - | 11/9/20 | 1410 | 3 | X | X | X | | | | | | 2.77 - 1.72 - 1.72 2.75 | | - 01 |
| MW-2 . | 1 | GW | - | | 1455 | 3 | X | x | x | | | | | | and the second | - | 02 |
| MM-6 | 34 | GW | | 1.46 | 1250 | 3 | X | x | x | | | | | | | | 03 |
| viw-7 | | GW | 1 months | | 1320 | 3 | X | X | X | | | | | | the star | | 04 |
| NM-8 | | GW | - | | 1240 | 3 | X | X | X | | | | 1 | | - 11/1-11 | 1.20 | 05 |
| DUPLICATE | 1 | GW | and the | NI | 1250 | 3 | X | X | x | and a | | | | | | | 06 |
| MS / MSD | | GW | | V | 1250 | 3 | X | x | X | | | | | | | | 03 |
| | in an | | | L. | | | | | | | | | 2 2 - 0 | | | | |
| | | (Constant | | Real and | 1.1.1 | | | 1 | | | | | | | | | |
| ss - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - Waste Water | Remarks: Samples returned UPSFedEx | | | Track | ng# | | | | | pH | | emp | | COC Seal COC Sign Bottles Correct Sufficient | arrive intac bottles used nt volume se <u>If Appli</u> | act: t: l: mt: | Klist NP Y N ZY N ZY N ZY N ZY N |
| Relinquished by : (Signatu) e) | Notecoder/New Sectors Stagened | ate: | / Time | 28 A | ed by (Signat | | - | | | frip Blank f | | Yes / No HCL / Mec TBR | H | Preserva RAD Scre | Headspace: tion Correct en <0.5 mR/h | ır: | <u>Y</u> N |
| Relinguished by : (Signature) | Di | ater Lí lo jé | 20 K | 00 F. | ved by: (Signat | | | | | remp: 3.2-0.1 | | iottles Receiva | | | tion required by | y login | Date/Time |
| Relinquished by : (Signature) | Di | ate: | Time | : Recei | red for lab by: | ~7 | Contraction Contraction Input | | | Date: | T D | ime: 1240 | | Hold: | | | Condition: NCF / OV |

land and the



ANALYTICAL REPORT

November 22, 2020

SCS Engineers - KS

Sample Delivery Group: Samples Received: Project Number: Description: L1284240 11/11/2020 27213167.20 Evergy - latan Generating Station

Report To:

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

Тс Ss Cn Sr ʹQc Gl AI Sc

Entire Report Reviewed By:

Jubb land

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.

ACCOUNT: SCS Engineers - KS PROJECT: 27213167.20

SDG: L1284240 DATE/TIME: 11/22/20 08:33

E: 33

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1 2

| ₩ | |
|-----------------|--|
| ¹ Cp | |
| ² Tc | |
| ³ Ss | |
| ⁴ Cn | |

Sr

Qc

GI

ΆI

Sc

| Ss: Sample Summary | 3 | |
|--|----|--|
| Cn: Case Narrative | 4 | |
| Sr: Sample Results | 5 | |
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| MW-10 L1284240-02 | 6 | |
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| Wet Chemistry by Method 9056A | 8 | |
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Cp: Cover Page

Tc: Table of Contents

SDG: L1284240 DATE/TIME: 11/22/20 08:33

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

| | | | Collected by | Collected date/time | Received dat | e/time |
|--|-----------|----------|----------------|---------------------|----------------|-----------------|
| MW-9 L1284240-01 GW | | | Jason R Franks | 11/09/20 14:45 | 11/11/20 12:40 |) |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Gravimetric Analysis by Method 2540 C-2011 | WG1576584 | 1 | 11/15/20 06:42 | 11/15/20 14:37 | TH | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1578226 | 1 | 11/21/20 00:43 | 11/21/20 00:43 | MCG | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG1576873 | 1 | 11/16/20 21:09 | 11/17/20 11:09 | CCE | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received dat | e/time |
| MW-10 L1284240-02 GW | | | Jason R Franks | 11/09/20 13:55 | 11/11/20 12:40 | 1 |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Gravimetric Analysis by Method 2540 C-2011 | WG1576584 | 1 | 11/15/20 06:42 | 11/15/20 14:37 | TH | Mt. Juliet, TN |
| | | 4 | 11/21/20 01:34 | 11/21/20 01:34 | MCG | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A | WG1578226 | 1 | 11/21/20 01.34 | 11/21/20 01.54 | IVICO | wit. Juliet, IN |

³Ss ⁴Cn ⁵Sr ⁶Qc ⁷Gl ⁸Al ⁹Sc

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Ср

Tc

SDG: L1284240

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.

Jubb land

Jeff Carr Project Manager

Τс Ss Cn Sr Qc GI AI Sc

ACCOUNT: SCS Engineers - KS PROJECT: 27213167.20

SDG: L1284240

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DATE/TIME: 11/22/20 08:33

PAGE: 4 of 13

SAMPLE RESULTS - 01 L1284240

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Gravimetric Analysis by Method 2540 C-2011

| | | | · · · | | | | 1 · | 0 |
|------------------|----------------|-----------|-------|----------|------------------|-----------|-----|----|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | Ct |
| Analyte | ug/l | | ug/l | | date / time | | | |
| Dissolved Solids | 475000 | | 10000 | 1 | 11/15/2020 14:37 | WG1576584 | 2 | To |
| Wet Chemistry by | / Method 9056A | A | | | | | 3 | Ss |
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | |
| Analyte | ug/l | | ug/l | | date / time | | 4 | |
| Chloride | 1300 | В | 1000 | 1 | 11/21/2020 00:43 | WG1578226 | | Ci |
| Fluorido | 324 | | 150 | 1 | 11/21/2020 00.43 | WC1578226 | | |

Wet Chemistry by Method 9056A

Collected date/time: 11/09/20 14:45

| | * | | | | | | 1 3 3 |
|----------|--------|-----------|------|----------|------------------|-----------|-------|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | ⁴Cn |
| Chloride | 1300 | B | 1000 | 1 | 11/21/2020 00:43 | WG1578226 | CII |
| Fluoride | 324 | | 150 | 1 | 11/21/2020 00:43 | WG1578226 | 5 |
| Sulfate | 17400 | | 5000 | 1 | 11/21/2020 00:43 | WG1578226 | Sr |
| | | | | | | | |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Boron | ND | | 200 | 1 | 11/17/2020 11:09 | WG1576873 |
| Calcium | 123000 | | 1000 | 1 | 11/17/2020 11:09 | WG1576873 |

SAMPLE RESULTS - 02 L1284240

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Gravimetric Analysis by Method 2540 C-2011

| | 3 | | | | | | I'C |
|------------------|--------|-----------|-------|----------|------------------|-----------|-----|
| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
| Analyte | ug/l | | ug/l | | date / time | | 2 |
| Dissolved Solids | 645000 | | 10000 | 1 | 11/15/2020 14:37 | WG1576584 | Tc |

Wet Chemistry by Method 9056A

Collected date/time: 11/09/20 13:55

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
|------------------|----------------|-------------|-------------|--------------------|-------------------------|---------------------------|--|
| Analyte | ug/l | | ug/l | | date / time | | |
| Dissolved Solids | 645000 | | 10000 | 1 | 11/15/2020 14:37 | WG1576584 | |
| Net Chemistry by | Mathad QOEE/ | \ | | | | | |
| Wet Chemistry by | | | RDL | Dilution | Analysis | Batch | |
| Analyte | Result | A Qualifier | RDL ug/l | Dilution | Analysis date / time | Batch | |
| | Result | | | Dilution 1 | | <u>Batch</u> WG1578226 | |
| Analyte | Result ug/l | | ug/l | Dilution 1 1 | date / time | | |

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|------|----------|------------------|-----------|
| Analyte | ug/l | | ug/l | | date / time | |
| Boron | ND | | 200 | 1 | 11/17/2020 10:53 | WG1576873 |
| Calcium | 158000 | \vee | 1000 | 1 | 11/17/2020 10:53 | WG1576873 |

WG1576584

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY L1284240-01,02

ONE LAB. NATIONWIDE.

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Method Blank (MB)

| (MB) R3593450-1 11/15/2 | 20 14:37 | | | |
|-------------------------|-----------|--------------|--------|--------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | ug/l | | ug/l | ug/l |
| Dissolved Solids | U | | 2820 | 10000 |

L1284237-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1284237-01 11/1 | 15/20 14:37 • (DUP) | R3593450-3 | 11/15/20 14: | 37 | | |
|-----------------------|---------------------|--------------|--------------|---------|---------------|-------------------|
| | Original Resul | t DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| Dissolved Solids | 520000 | 490000 | 1 | 5.94 | <u>J3</u> | 5 |

L1284370-01 Original Sample (OS) • Duplicate (DUP)

| L1284370-01 Orig | ginal Sample | (OS) • Du | plicate (| DUP) | | | 7 |
|-------------------------|------------------|--------------|-------------|---------|---------------|-------------------|---|
| (OS) L1284370-01 11/15/ | 20 14:37 • (DUP) | R3593450-4 | 11/15/20 14 | :37 | | | L |
| | Original Result | t DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | 8 |
| Analyte | ug/l | ug/l | | % | | % | L |
| Dissolved Solids | 213000 | 176000 | 1 | 19.0 | <u>J3</u> | 5 | 9 |

Laboratory Control Sample (LCS)

| (LCS) R3593450-2 11/ | /15/20 14:37 | | | | |
|----------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | ug/l | ug/l | % | % | |
| Dissolved Solids | 8800000 | 8270000 | 94.0 | 77.4-123 | |

DATE/TIME: 11/22/20 08:33 Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

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Method Blank (MB)

| (MB) R3595861-1 | 11/20/20 22:48 |
|-----------------|----------------|
| | |

| MB Result | MB Qualifier | MB MDL | MB RDL | |
|-----------|--------------|--------|---|--|
| ug/l | | ug/l | ug/l | |
| 447 | J | 379 | 1000 | |
| U | | 64.0 | 150 | |
| U | | 594 | 5000 | |
| | ug/l | ug/l | ug/l ug/l 447 <u>J</u> 379 U 64.0 | ug/l ug/l ug/l 447 J 379 1000 U 64.0 150 |

L1284109-01 Original Sample (OS) • Duplicate (DUP)

| (OS) L1284109-01 | 11/20/20 | 23.26 | (DUP) | R3595861-3 | 11/20/20 23:39 |
|------------------|----------|-------|-------|------------|----------------|
| (00) L120+100 01 | 11/20/20 | 20.20 | | 100000000 | 11/20/20 20.00 |

| () | (-) | | | | | |
|----------|-----------------|------------|----------|---------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | ug/l | ug/l | | % | | % |
| Chloride | 9110 | 9020 | 1 | 1.01 | | 15 |
| Fluoride | ND | ND | 1 | 19.3 | <u>P1</u> | 15 |
| Sulfate | 6210 | 6150 | 1 | 0.872 | | 15 |

L1284370-07 Original Sample (OS) • Duplicate (DUP)

| (OS) L1284370-07 11/21/20 | (OS) L1284370-07 11/21/20 04:11 • (DUP) R3595861-7 11/21/20 04:24 | | | | | | | | | | |
|---------------------------|---|------------|----------|---------|---------------|-------------------|--|--|--|--|--|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits | | | | | |
| Analyte | ug/l | ug/l | | % | | % | | | | | |
| Chloride | 33000 | 33100 | 1 | 0.269 | | 15 | | | | | |
| Fluoride | ND | 160 | 1 | 15.6 | <u>P1</u> | 15 | | | | | |
| Sulfate | 27200 | 27500 | 1 | 0.793 | | 15 | | | | | |

Laboratory Control Sample (LCS)

| (LCS) R3595861-2 11/20/ | CS) R3595861-2 11/20/20 23:00 | | | | | | | | | |
|-------------------------|-------------------------------|------------|----------|-------------|---------------|--|--|--|--|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | | | | | |
| Analyte | ug/l | ug/l | % | % | | | | | | |
| Chloride | 40000 | 39600 | 99.1 | 80.0-120 | | | | | | |
| Fluoride | 8000 | 7900 | 98.7 | 80.0-120 | | | | | | |
| Sulfate | 40000 | 40000 | 99.9 | 80.0-120 | | | | | | |

| ACCOUNT: |
|--------------------|
| SCS Engineers - KS |

PROJECT: 27213167.20

DATE/TIME: 11/22/20 08:33

PAGE: 8 of 13

QUALITY CONTROL SUMMARY

L1284110-01 Original Sample (OS) • Matrix Spike (MS)

| (OS) L1284110-01 11/20/2 | 0 23:52 • (MS) R | 3595861-4 11/2 | 1/20 00:05 | | | | |
|--------------------------|------------------|-----------------|------------|---------|----------|-------------|--------------|
| | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
| Analyte | ug/l | ug/l | ug/l | % | | % | |
| Chloride | 50000 | 80500 | 134000 | 107 | 1 | 80.0-120 | E |
| Fluoride | 5000 | 153 | 5740 | 112 | 1 | 80.0-120 | |
| Sulfate | 50000 | 6110 | 63400 | 115 | 1 | 80.0-120 | |

L1284240-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| (OS) L1284240-02 11/21/20 01:34 • (MS) R3595861-5 11/21/20 01:47 • (MSD) R3595861-6 11/21/20 02:00 | | | | | | | | | | | | |
|--|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % |
| Chloride | 50000 | 16700 | 73100 | 73800 | 113 | 114 | 1 | 80.0-120 | | | 0.959 | 15 |
| Fluoride | 5000 | 476 | 5910 | 5980 | 109 | 110 | 1 | 80.0-120 | | | 1.23 | 15 |
| Sulfate | 50000 | 42300 | 97100 | 98800 | 110 | 113 | 1 | 80.0-120 | | | 1.71 | 15 |

DATE/TIME: 11/22/20 08:33

WG1576873

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY L1284240-01,02

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Method Blank (MB)

| Method Blar | ik (MB) | | | | |
|-----------------|----------------|--------------|--------|--------|--|
| (MB) R3594035-1 | 11/17/20 10:47 | | | | |
| | MB Result | MB Qualifier | MB MDL | MB RDL | |
| Analyte | ug/l | | ug/l | ug/l | |
| Boron | U | | 20.0 | 200 | |
| Calcium | U | | 79.3 | 1000 | |
| | | | | | |

Laboratory Control Sample (LCS)

| (LCS) R3594035-2 1 | 11/17/20 10:50 | | | | | |
|--------------------|----------------|------------|----------|-------------|---------------|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | |
| Analyte | ug/l | ug/l | % | % | | |
| Boron | 1000 | 999 | 99.9 | 80.0-120 | | |
| Calcium | 10000 | 10700 | 107 | 80.0-120 | | |

L1284240-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

| | iginal sample | | unx opine | | ix opine D | uplicate (ii | 150) | | | | | | | |
|--|---------------|--------|-----------|--------|------------|--------------|------|----------|--------------------|--------------------|-------|---------|-----------------|----|
| (OS) L1284240-02 11/17/20 10:53 • (MS) R3594035-4 11/17/20 10:58 • (MSD) R3594035-5 11/17/20 11:01 | | | | | | | | | | | | | ⁸ AI | |
| Spike Amount Original Result MS Result MS Result MS Rec. MSD Rec. Dilution Rec. Limits MS Qualifier MSD Qualifier RPD RPD Limits | | | | | | | | | | | | <i></i> | | |
| Analyte | ug/l | ug/l | ug/l | ug/l | % | % | | % | | | % | % | | 9 |
| Boron | 1000 | ND | 1100 | 1110 | 98.0 | 98.5 | 1 | 75.0-125 | | | 0.473 | 20 | | SC |
| Calcium | 10000 | 158000 | 164000 | 163000 | 60.8 | 57.5 | 1 | 75.0-125 | $\underline{\vee}$ | $\underline{\vee}$ | 0.201 | 20 | | |

| ACCOUNT: | |
|-----------------|----|
| SCS Engineers - | KS |

PROJECT: 27213167.20

SDG: L1284240

DATE/TIME: 11/22/20 08:33

PAGE: 10 of 13

GLOSSARY OF TERMS

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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 |
|-----------|---|
| В | 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. |
| J3 | The associated batch QC was outside the established quality control range for precision. |
| 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. |

PROJECT: 27213167.20

SDG: L1284240

ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

State Accreditations

| Alabama | 40660 | Nebraska |
|------------------------|-------------|--------------------------|
| Alaska | 17-026 | Nevada |
| Arizona | AZ0612 | New Hampshir |
| Arkansas | 88-0469 | New Jersey–N |
| California | 2932 | New Mexico ¹ |
| Colorado | TN00003 | New York |
| Connecticut | PH-0197 | North Carolina |
| Florida | E87487 | North Carolina |
| Georgia | NELAP | North Carolina |
| Georgia ¹ | 923 | North Dakota |
| Idaho | TN00003 | Ohio-VAP |
| Illinois | 200008 | Oklahoma |
| Indiana | C-TN-01 | Oregon |
| lowa | 364 | Pennsylvania |
| Kansas | E-10277 | Rhode Island |
| Kentucky ¹⁶ | 90010 | South Carolina |
| Kentucky ² | 16 | South Dakota |
| Louisiana | AI30792 | Tennessee ^{1 4} |
| Louisiana ¹ | LA180010 | Texas |
| Maine | TN0002 | Texas ⁵ |
| Maryland | 324 | Utah |
| Massachusetts | M-TN003 | Vermont |
| Michigan | 9958 | Virginia |
| Minnesota | 047-999-395 | Washington |
| Mississippi | TN00003 | West Virginia |
| Missouri | 340 | Wisconsin |
| Montana | CERT0086 | Wyoming |
| | | |

| lebraska | NE-OS-15-05 |
|-----------------------------|------------------|
| Nevada | TN-03-2002-34 |
| New Hampshire | 2975 |
| New Jersey-NELAP | TN002 |
| New Mexico ¹ | n/a |
| New York | 11742 |
| North Carolina | Env375 |
| North Carolina ¹ | DW21704 |
| North Carolina ³ | 41 |
| North Dakota | R-140 |
| Ohio-VAP | CL0069 |
| Oklahoma | 9915 |
| Oregon | TN200002 |
| Pennsylvania | 68-02979 |
| Rhode Island | LAO00356 |
| South Carolina | 84004 |
| South Dakota | n/a |
| Tennessee ¹⁴ | 2006 |
| Texas | T104704245-18-15 |
| Texas ⁵ | LAB0152 |
| Utah | TN00003 |
| Vermont | VT2006 |
| Virginia | 460132 |
| Washington | C847 |
| West Virginia | 233 |
| Wisconsin | 9980939910 |
| Wyoming | A2LA |

Third Party Federal Accreditations

| 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

Our Locations

SCS Engineers - KS

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



27213167.20

L1284240

11/22/20 08:33

| SCS Engineers - KS 8575 W. 110th Street Overland Park, KS 66210 Report to: | | | Billing Information: | | | | Analysis / Container / Preservative | | | | Chain of Custody Page of | | | | |
|--|---|--|---------------------------------|--|--|---|-------------------------------------|--------------|-------|-------------------|--------------------------|-------------------|---|---|------------------------|
| | | Accounts Payable 8575 W. 110th Street Overland Park, KS 66210 | | Pres Chk | | ů | | | | | | - Pace | Analytical* Senter for Testing & Innoveti | | |
| | | Report to: | | Email To: jfranks@scsengineers.com;jay.martin@e | | Email To: jfranks@scsengineers.com;jay.martin@evergy.c | | | | | | | | | |
| Project Description: Evergy - latan Generating Station | -/ | City/State Collected: | WESTON, MO Please Cir PT MTC | | | | HON- | | | | | | | Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 | |
| Phone: 913-681-0030 | Client Project 27213167. | | Lab Project # | | market market and the second s | | 125mlHDPE-NoPres | HNO3 | | | | | | SDG # 12 | 342 <i>40</i> -244 |
| Collected by (print): DASUN R. FRANK | Site/Facility I | e/Facility ID # P.O. # | | P.O. # | | | | HDPE- | oPres | | | | | Table Acctnum: AQ | |
| Collected by (signature): | Client Project # Lab Project # AQUAOPKS-IATAN Contraction 27213167.20 AQUAOPKS-IATAN Hitting Stress Saudon Stress Site/Facility ID # P.O. # Contraction Saudon Stress Site/Facility ID # P.O. # Contraction Contraction Site/Facility ID # P.O. # Contraction Contraction Same Day Five Day Solar (Rad Only) Date Results Needed Solar (Solar Only) Three Day STO STO Step Stress Step Stress | | | Template:T166691 Prelogin: P805779 | | | | | | | | | | | |
| Imphediately Packed on Ice N Y | Next Da | 10 Da | r (Rad Only) ay (Rad Only) | Date Result | | No. of | s (Cld, | - 6010 | SomiH | | | | | PM: 206 - Jeff Carr PB: | |
| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | Cntrs | Anions | B, Ca | TDS 2 | | | | | Shipped Via: Remarks | Sample # (lab only |
| MW-9 | GRAB | GW | | 11/9/20 | And in case of the second second | 3 | x | X | X | | | | | | -01 |
| | GRAB | GW | - | 11/9/20 | 1355 | 3 | X | X | X | | | | | | 02 |
| | | | | | | | | | | | | | | | |
| | - | | | | | | | | | | | | | | |
| | | | | | | - 1964 | | 49-5-31 2 | | | | | | | |
| | 1 | | | | | | | | | | | | | | |
| | | | | States and | | | | | | | | | | 1.200 | |
| 55 - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay NW - WasteWater DW - Diricking Water | marks: | | | | | | | | | pH Flow | Temp Other | | COC Seal COC Signe Bottles a Correct h | ample Receipt Ch Present/Intact ed/Accurate: arrive intact: bottles used: | |
| Sar Sar | UPS FedEx | Courier | Time: /0 | - Trackin Receive | g.# 2d by: (Signati | ıre) | | | | Trip Blank Ri | eceived: Ye | CL / MeoH | VOA Zero Preservat | nt volume sent: <u>If Applicab</u> Headspace: tion Correct/Che en <0.5 mR/hr: | ¥ N |
| Relinquished by : (Signature) | Dat | 10/20 | Time: | Receive | ed by: (Signatu | ure) | | | | Temp: 3.2-0.13 | | BR s Received: | If preserval | tion required by Log | in: Date/Time |
| Relinquished by : (Signature) | Dat | And a real of the second s | Time: | the same set of the same set o | d for lab by: | șienatu M | | | | Date: | Time | 240 | Hold: | | Condition: NCF / OV |

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Jared Morrison December 16, 2022

ATTACHMENT 2 Statistical Analyses

Jared Morrison December 16, 2022

ATTACHMENT 2-1

Fall 2019 Semiannual Detection Monitoring Statistical Analyses

MEMORANDUM

March 10, 2020

To: latan Generating Station 20250 State Route 45 N Platte County, Missouri Evergy Metro, Inc.



From: SCS Engineers

RE: Determination of Statistically Significant Increases - CCR Landfill Fall 2019 Semiannual Detection Monitoring 40 CFR 257.94

Statistical analysis of monitoring data from the groundwater monitoring system for the CCR Landfill at the latan 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 4, 2019. Review and validation of the results from the November 2019 Detection Monitoring Event was completed on December 12, 2019, which constitutes completion and finalization of detection monitoring laboratory analyses. A statistical analysis was then conducted to determine whether there was a statistically significant increase (SSI) over background values for each constituent listed in Appendix III to Part 257-Constituents for Detection Monitoring. Two rounds of verification sampling were conducted for certain constituents on January 15, 2020 and February 4, 2020.

The completed statistical evaluation identified one Appendix III constituent above the prediction limit established for monitoring well MW-1.

| Constituent/Monitoring Well | *UPL | Observation November 4, 2019 | 1st Verification January 15, 2020 | 2nd Verification February 4, 2020 | |
|-----------------------------|--------|---------------------------------|--------------------------------------|--------------------------------------|--|
| Fluoride | | | | | |
| MW-1 | 0.3201 | 0.488 | 0.326 | 0.329 | |

*UPL – Upper Prediction Limit

Determination: A statistical evaluation was completed for all Appendix III detection monitoring constituents in accordance with the certified statistical method. The statistical evaluation identified a SSI above the background prediction limit for fluoride in monitoring well MW-1.

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, detection sample results, 1st verification re-sample results (when applicable), 2nd verification re-sample results (when applicable), extra sample results for pH because pH is collected as part of the

sampling procedure, 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 |
|--------------------|------------------|-----------------------|----------------------|
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latan Generating Station Determination of Statistically Significant Increases CCR Landfill March 10, 2020

ATTACHMENT 1

Sanitas[™] Output

Sanitas $^{\mbox{\tiny W}}$ v.9.6.25 Sanitas software licensed to SCS Engineers. UG Hollow symbols indicate censored values.

Prediction Limit Within Limit Intrawell Non-parametric 0.3 MW-1 background 0.24 MW-1 compliance 0.18 ng/L Limit = 0.20.12 10000-<u>1</u>0000 0 -0--0 0.06 0 8/18/16 4/9/17 11/30/17 7/22/18 3/14/19 11/4/19

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Boron Analysis Run 2/25/2020 9:43 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

0.3 MW-10 background 0.24 MW-10 compliance 0.18 mg/L Limit = 0.20.12 10000-10000 -0--0 -0 0.06 0 4/9/17 11/30/17 7/22/18 3/14/19 11/4/19 8/18/16

Prediction Limit

Intrawell Non-parametric

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Hollow symbols indicate censored values.

Within Limit

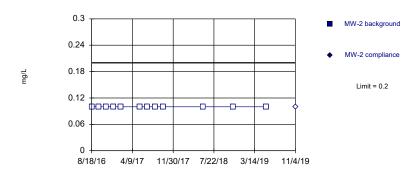
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Boron Analysis Run 2/25/2020 9:43 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Sanitas[™] v.9.6.25 Sanitas 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 = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Sanitas™ v.9.6.25 Sanitas software licensed to SCS Engineers. UG Hollow symbols indicate censored values. Prediction Limit Within Limit Intrawell Non-parametric 0.3 MW-6 background 0.24 MW-6 compliance 0.18 mg/L Limit = 0.2 0.12 00000-0000 ------0--0 0.06

0

8/18/16

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

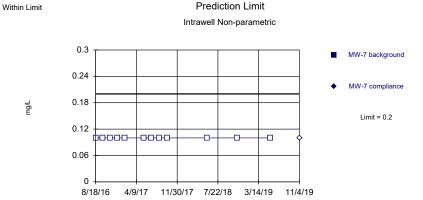
4/9/17 11/30/17 7/22/18 3/14/19 11/4/19

Constituent: Boron Analysis Run 2/25/2020 9:44 AM View: CCR LF III Iatan Utility Waste LF Client: SCS Engineers Data: Iatan jrr

Constituent: Boron Analysis Run 2/25/2020 10:03 AM View: CCR LF III

| 1 | MW-1 | MW-1 | MW-10 | MW-10 | MW-2 | MW-2 | MW-6 | MW-6 |
|------------|------|------|-------|-------|------|------|------|------|
| 8/18/2016 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 9/29/2016 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 11/9/2016 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 12/21/2016 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 2/3/2017 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 5/24/2017 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 7/5/2017 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 8/17/2017 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 10/5/2017 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 5/21/2018 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 11/12/2018 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 5/20/2019 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 11/4/2019 | | <0.2 | | <0.2 | | <0.2 | | <0.2 |
| | | | | | | | | |

Sanitas $^{\mbox{\tiny W}}$ v.9.6.25 Sanitas software licensed to SCS Engineers. UG Hollow symbols indicate censored values.



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

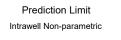
Constituent: Boron Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

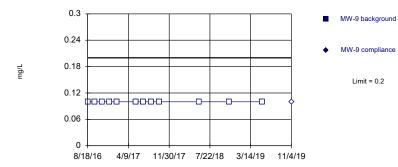
Prediction Limit Within Limit Intrawell Non-parametric 0.3 MW-8 background 0.24 MW-8 compliance 0.18 mg/L Limit = 0.20.12 10000-10000 -0--0 -0 0.06 0 4/9/17 11/30/17 7/22/18 3/14/19 11/4/19 8/18/16

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Boron Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Sanitas[™] v.9.6.25 Sanitas software licensed to SCS Engineers. UG Hollow symbols indicate censored values. Within Limit





Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

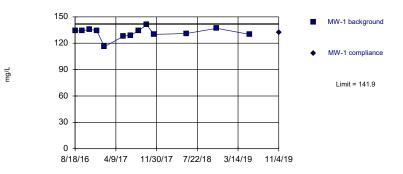
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Hollow symbols indicate censored values.



Prediction Limit

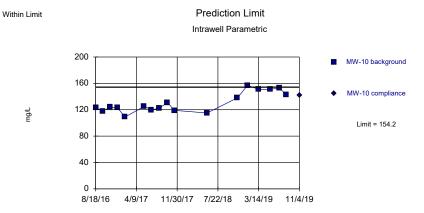


Background Data Summary: Mean=131.8, Std. Dev.=5.97, n=13. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8766, critical = 0.814. Kappa = 1.682 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.

Constituent: Boron, Calcium Analysis Run 2/25/2020 10:03 AM View: CCR LF III

| | | | | | Ũ | | | |
|------------|------|------|------|------|------|------|------|------|
| 1 | MW-7 | MW-7 | MW-8 | MW-8 | MW-9 | MW-9 | MW-1 | MW-1 |
| 8/18/2016 | <0.2 | | <0.2 | | <0.2 | | 134 | |
| 9/29/2016 | <0.2 | | <0.2 | | <0.2 | | 134 | |
| 11/9/2016 | <0.2 | | <0.2 | | <0.2 | | 136 | |
| 12/21/2016 | <0.2 | | <0.2 | | <0.2 | | 134 | |
| 2/3/2017 | <0.2 | | <0.2 | | <0.2 | | 116 | |
| 5/24/2017 | <0.2 | | <0.2 | | <0.2 | | 128 | |
| 7/5/2017 | <0.2 | | <0.2 | | <0.2 | | 129 | |
| 8/17/2017 | <0.2 | | <0.2 | | <0.2 | | 134 | |
| 10/5/2017 | <0.2 | | <0.2 | | <0.2 | | 141 | |
| 11/14/2017 | | | | | | | 130 | |
| 5/21/2018 | <0.2 | | <0.2 | | <0.2 | | 131 | |
| 11/12/2018 | <0.2 | | <0.2 | | <0.2 | | 137 | |
| 5/20/2019 | <0.2 | | <0.2 | | <0.2 | | 130 | |
| 11/4/2019 | | <0.2 | | <0.2 | | <0.2 | | 132 |
| | | | | | | | | |

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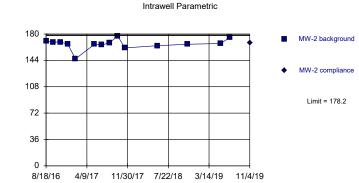


Background Data Summary: Mean=130.7, Std. Dev.=15.04, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8963, critical = 0.851. Kappa = 1.561 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.





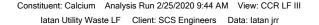
mg/L



Prediction Limit

Background Data Summary: Mean=166.4, Std. Dev.=7.175, n=14. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8366, critical = 0.825. Kappa = 1.648 (c=7, we7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.

Constituent: Calcium Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr



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Within Limit

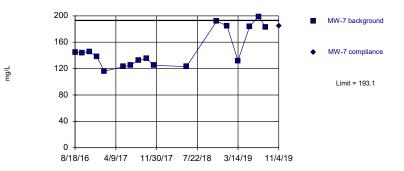
Prediction Limit Intrawell Parametric



Background Data Summary: Mean=144.7, Std. Dev.=7.032, n=14. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9678, critical = 0.825. Kappa = 1.648 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075. Sanitas™ v.9.6.25 Sanitas software licensed to SCS Engineers. UG



Prediction Limit Intrawell Parametric

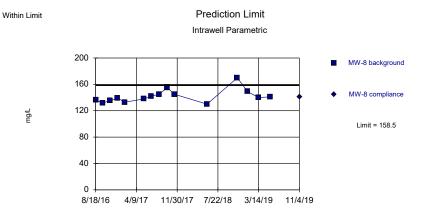


Background Data Summary (based on square root transformation): Mean=12.15, Std. Dev.=1.12, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8573, critical = 0.851. Kappa = 1.561 (c=7, wert, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 2/25/2020 10:03 AM View: CCR LF III

| MW-10 MW-2 MW-2 MW-6 MW-6 MW-7 MW-7 | | | | | | | | | | | |
|-------------------------------------|------------|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| | 8/18/2016 | 123 | | 170 | | 142 | | 145 | | | |
| | 9/29/2016 | 118 | | 169 | | 139 | | 144 | | | |
| | 11/9/2016 | 124 | | 169 | | 142 | | 146 | | | |
| | 12/21/2016 | 123 | | 166 | | 146 | | 138 | | | |
| | 2/3/2017 | 109 | | 146 | | 136 | | 116 | | | |
| | 5/24/2017 | 125 | | 166 | | 150 | | 123 | | | |
| | 7/5/2017 | 120 | | 165 | | 147 | | 125 | | | |
| | 8/17/2017 | 122 | | 168 | | 150 | | 133 | | | |
| | 10/5/2017 | 131 | | 177 | | 157 | | 135 | | | |
| | 11/14/2017 | 119 | | 161 | | 151 | | 125 | | | |
| | 5/21/2018 | 115 | | 164 | | 150 | | 123 | | | |
| | 11/12/2018 | 138 | | 166 | | 147 | | 192 | | | |
| | 1/10/2019 | 157 | | | | | | 185 | | | |
| | 3/14/2019 | 151 | | | | | | 132 | | | |
| | 5/20/2019 | 151 | | 167 | | 131 | | 184 | | | |
| | 7/11/2019 | 153 | | 175 | | 138 | | 199 | | | |
| | 8/20/2019 | 143 | | | | | | 183 | | | |
| | 11/4/2019 | | 142 | | 168 | | 134 | | 185 | | |
| | | | | | | | | | | | |

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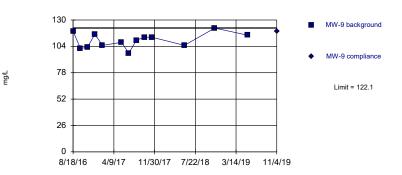


Background Data Summary: Mean=142, Std. Dev.=10.21, n=15. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8744, critical = 0.835. Kappa = 1.615 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

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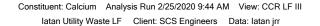


Prediction Limit Intrawell Parametric



Background Data Summary: Mean=109.9, Std. Dev.=7.272, n=13. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9797, critical = 0.814. Kappa = 1.682 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr



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Within Limit

Prediction Limit Intrawell Parametric

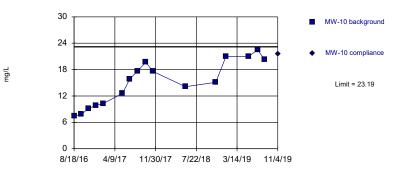


MW-1 compliance

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Prediction Limit Intrawell Parametric



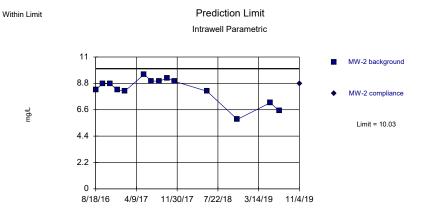
Background Data Summary: Mean=15.12, Std. Dev.=5.1, n=16. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9286, critical = 0.844. Kappa = 1.581 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Background Data Summary: Mean=5.966, Std. Dev.=0.4435, n=14. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9436, critical = 0.825. Kappa = 1.648 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium, Chloride Analysis Run 2/25/2020 10:03 AM View: CCR LF III

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|---|------|------|------|------|------|------|-------|-------|--|--|
| 1 | MW-8 | MW-8 | MW-9 | MW-9 | MW-1 | MW-1 | MW-10 | MW-10 | | |
| 8/18/2016 | 136 | | 119 | | 5.93 | | 7.47 | | | |
| 9/29/2016 | 132 | | 102 | | 6.07 | | 7.83 | | | |
| 11/9/2016 | 135 | | 103 | | 5.95 | | 9.15 | | | |
| 12/21/2016 | 139 | | 116 | | 5.97 | | 9.84 | | | |
| 2/3/2017 | 133 | | 105 | | 6 | | 10.3 | | | |
| 5/24/2017 | 138 | | 108 | | 5.61 | | 12.6 | | | |
| 7/5/2017 | 142 | | 97.2 | | 5.78 | | 15.9 | | | |
| 8/17/2017 | 145 | | 110 | | 6.13 | | 17.6 | | | |
| 10/5/2017 | 155 | | 113 | | 6.75 | | 19.7 | | | |
| 11/14/2017 | 145 | | 113 | | 6.73 | | 17.6 | | | |
| 12/29/2017 | | | | | 6.27 | | | | | |
| 5/21/2018 | 130 | | 105 | | 5.63 | | 14.1 | | | |
| 11/12/2018 | 170 | | 122 | | 5.04 | | 15.1 | | | |
| 1/10/2019 | 149 | | | | | | 21 | | | |
| 3/14/2019 | 140 | | | | | | | | | |
| 5/20/2019 | 141 | | 115 | | 5.66 | | 21 | | | |
| 7/11/2019 | | | | | | | 22.5 | | | |
| 8/20/2019 | | | | | | | 20.3 | | | |
| 11/4/2019 | | 141 | | 119 | | 6.61 | | 21.6 | | |
| | | | | | | | | | | |

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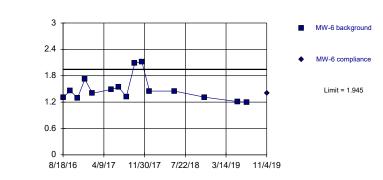
Background Data Summary: Mean=8.253, Std. Dev.=1.076, n=14. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8719, critical = 0.825. Kappa = 1.648 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075. Sanitas™ v.9.6.25 Sanitas software licensed to SCS Engineers. UG



mg/L

Prediction Limit





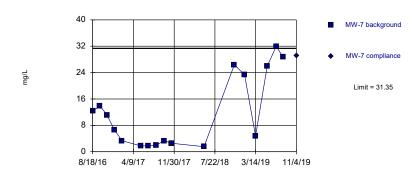
Background Data Summary (based on square root transformation): Mean=1.216, Std. Dev.=0.1104, n=15. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8387, critical = 0.835. Kappa = 1.615 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr Constituent: Chloride Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

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Within Limit

Prediction Limit

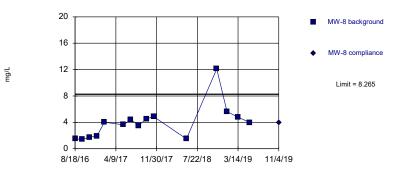


Background Data Summary (based on square root transformation): Mean=3.057, Std. Dev.=1.629, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8683, critical = 0.851. Kappa = 1.551 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

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Prediction Limit Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=1.907, Std. Dev.=0.5992, n=15. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8695, critical = 0.835. Kappa = 1.615 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

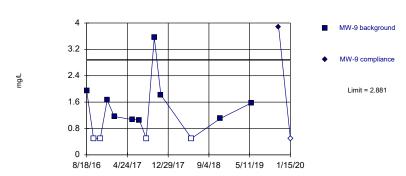
Constituent: Chloride Analysis Run 2/25/2020 10:03 AM View: CCR LF III

| MW-2 MW-2 MW-6 MW-6 MW-7 MW-7 MW-8 MW-8 | | | | | | | | | | | | |
|---|------------|------|------|------|-----|------|------|------|------|--|--|--|
| | 8/18/2016 | 8.26 | | 1.31 | | 12.3 | | 1.5 | | | | |
| | 9/29/2016 | 8.79 | | 1.46 | | 13.9 | | 1.42 | | | | |
| | 11/9/2016 | 8.76 | | 1.29 | | 11.1 | | 1.76 | | | | |
| | 12/21/2016 | 8.24 | | 1.72 | | 6.64 | | 1.89 | | | | |
| | 2/3/2017 | 8.17 | | 1.4 | | 3.32 | | 4.02 | | | | |
| | 5/24/2017 | 9.54 | | 1.49 | | 1.76 | | 3.63 | | | | |
| | 7/5/2017 | 8.99 | | 1.54 | | 1.81 | | 4.44 | | | | |
| | 8/17/2017 | 8.98 | | 1.32 | | 2 | | 3.53 | | | | |
| | 10/5/2017 | 9.23 | | 2.09 | | 3.32 | | 4.55 | | | | |
| | 11/14/2017 | 8.97 | | 2.12 | | 2.58 | | 4.86 | | | | |
| | 12/29/2017 | | | 1.45 | | | | | | | | |
| | 5/21/2018 | 8.14 | | 1.45 | | 1.54 | | 1.5 | | | | |
| | 11/12/2018 | 5.79 | | 1.31 | | 26.4 | | 12.1 | | | | |
| | 1/10/2019 | | | | | 23.3 | | 5.63 | | | | |
| | 3/14/2019 | | | | | 4.77 | | 4.79 | | | | |
| | 5/20/2019 | 7.18 | | 1.21 | | 26 | | 3.98 | | | | |
| | 7/11/2019 | 6.5 | | 1.2 | | 31.9 | | | | | | |
| | 8/20/2019 | | | | | 28.7 | | | | | | |
| | 11/4/2019 | | 8.77 | | 1.4 | | 29.1 | | 3.99 | | | |
| | | | | | | | | | | | | |

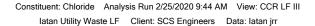
Sanitas^w v.9.6.25 Sanitas software licensed to SCS Engineers. UG Hollow symbols indicate censored values. Within Limit

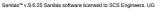
Prediction Limit





Background Data Summary (after Aitchison's Adjustment): Mean=1.151, Std. Dev.=1.028, n=13, 30.77% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8333, critical = 0.814. Kappa = 1.682 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

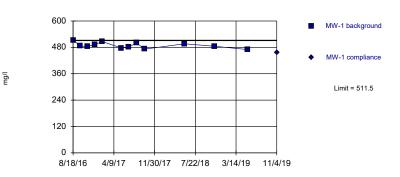












Intrawell Parametric

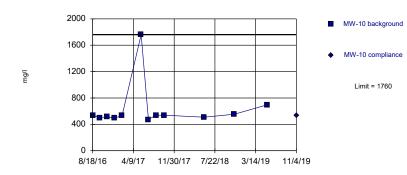
Background Data Summary: Mean=488.6, Std. Dev.=13.34, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9663, critical = 0.805. Kappa = 1.716 (c=7, we7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.

> Constituent: Dissolved Solids Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Sanitas™ v.9.6.25 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit Intrawell Non-parametric

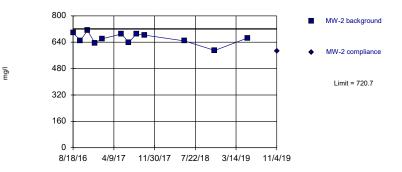


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 12 background values. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.





Prediction Limit



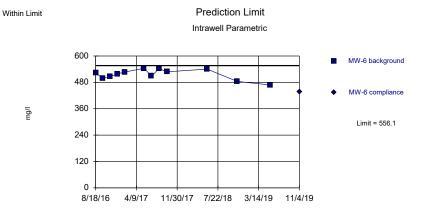
Background Data Summary: Mean=663.3, Std. Dev.=33.46, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9501, critical = 0.805. Kappa = 1.716 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Dissolved Solids Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Constituent: Chloride, Dissolved Solids Analysis Run 2/25/2020 10:03 AM View: CCR LF III

| | | | | | - | | | |
|------------|------|---------------------|------|------|-------|-------|------|------|
| I | MW-9 | MW-9 | MW-1 | MW-1 | MW-10 | MW-10 | MW-2 | MW-2 |
| 8/18/2016 | 1.95 | | 513 | | 532 | | 696 | |
| 9/29/2016 | <1 | | 486 | | 502 | | 651 | |
| 11/9/2016 | <1 | | 484 | | 516 | | 711 | |
| 12/21/2016 | 1.66 | | 493 | | 497 | | 636 | |
| 2/3/2017 | 1.16 | | 506 | | 531 | | 661 | |
| 5/24/2017 | 1.07 | | 477 | | 1760 | | 690 | |
| 7/5/2017 | 1.06 | | 481 | | 474 | | 638 | |
| 8/17/2017 | <1 | | 500 | | 539 | | 690 | |
| 10/5/2017 | 3.57 | | 472 | | 539 | | 683 | |
| 11/14/2017 | 1.82 | | | | | | | |
| 5/21/2018 | <1 | | 496 | | 509 | | 648 | |
| 11/12/2018 | 1.1 | | 485 | | 554 | | 590 | |
| 5/20/2019 | 1.57 | | 470 | | 697 | | 666 | |
| 11/4/2019 | | 3.88 | | 457 | | 534 | | 585 |
| 1/15/2020 | | <1 1st Verification | I | | | | | |
| | | | | | | | | |

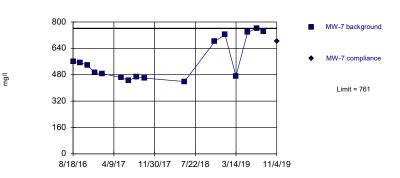
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Background Data Summary: Mean=515.5, Std. Dev.=23.66, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9399, critical = 0.805. Kappa = 1.716 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075. Sanitas™ v.9.6.25 Sanitas software licensed to SCS Engineers. UG



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 16 background values. Well-constituent pair annual alpha = 0.002051. Individual comparison alpha = 0.001026 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

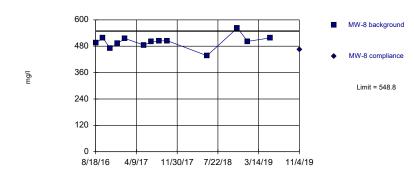
Constituent: Dissolved Solids Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Constituent: Dissolved Solids Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

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Within Limit

Prediction Limit

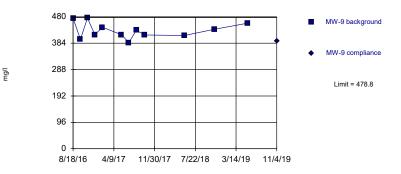


Background Data Summary: Mean=500.3, Std. Dev.=28.83, n=13. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9522, critical = 0.814. Kappa = 1.682 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.

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Prediction Limit Intrawell Parametric

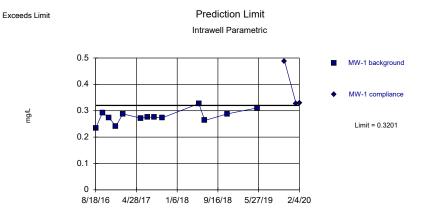


Background Data Summary: Mean=429.7, Std. Dev.=28.65, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9417, critical = 0.805. Kappa = 1.716 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Dissolved Solids Analysis Run 2/25/2020 10:03 AM View: CCR LF III

| | | | , | | | | | |
|------------|------|------|------|------|------|------|------|------|
| | MW-6 | MW-6 | MW-7 | MW-7 | MW-8 | MW-8 | MW-9 | MW-9 |
| 8/18/2016 | 522 | | 560 | | 494 | | 475 | |
| 9/29/2016 | 498 | | 554 | | 517 | | 398 | |
| 11/9/2016 | 506 | | 538 | | 471 | | 476 | |
| 12/21/2016 | 519 | | 492 | | 493 | | 415 | |
| 2/3/2017 | 527 | | 487 | | 515 | | 442 | |
| 5/24/2017 | 544 | | 462 | | 485 | | 415 | |
| 7/5/2017 | 508 | | 445 | | 500 | | 386 | |
| 8/17/2017 | 542 | | 466 | | 504 | | 431 | |
| 10/5/2017 | 528 | | 459 | | 505 | | 414 | |
| 5/21/2018 | 540 | | 439 | | 437 | | 412 | |
| 11/12/2018 | 484 | | 681 | | 563 | | 435 | |
| 1/10/2019 | | | 724 | | 502 | | | |
| 3/14/2019 | | | 472 | | | | | |
| 5/20/2019 | 468 | | 737 | | 518 | | 457 | |
| 7/11/2019 | | | 761 | | | | | |
| 8/20/2019 | | | 743 | | | | | |
| 11/4/2019 | | 437 | | 682 | | 465 | | 392 |
| | | | | | | | | |

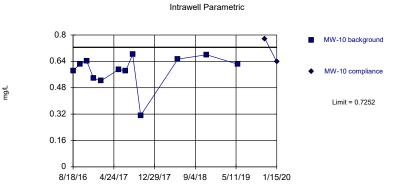
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Background Data Summary: Mean=0.278, Std. Dev.=0.02501, n=13. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9534, critical = 0.814. Kappa = 1.682 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

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Within Limit

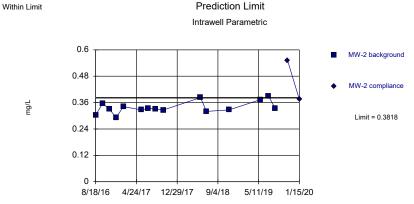


Prediction Limit

Background Data Summary (based on square transformation): Mean=0.3525, Std. Dev.=0.1011, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8795, critical = 0.805. Kappa = 1.716 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Fluoride Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr Constituent: Fluoride Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

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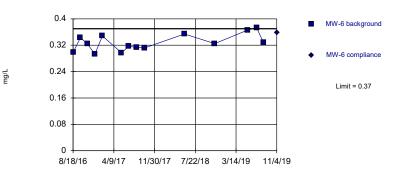


Background Data Summary: Mean=0.3379, Std. Dev.=0.02721, n=15. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9262, critical = 0.835. Kappa = 1.615 (c=7, w=7, 1 of 3, event alpha = 0.05123). Report alpha = 0.001075.

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Prediction Limit Intrawell Parametric

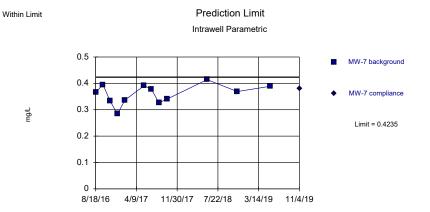


Background Data Summary: Mean=0.3279, Std. Dev.=0.02554, n=14. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9487, critical = 0.825. Kappa = 1.648 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Fluoride Analysis Run 2/25/2020 10:03 AM View: CCR LF III

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|------------|-------|--------------------|---------|--------------------|---------------------|--------------------|-------|-------|
| 1 | MW-1 | MW-1 | MW-10 | MW-10 | MW-2 | MW-2 | MW-6 | MW-6 |
| 8/18/2016 | 0.234 | | 0.584 | | 0.303 | | 0.298 | |
| 9/29/2016 | 0.292 | | 0.622 | | 0.356 | | 0.343 | |
| 11/9/2016 | 0.274 | | 0.642 | | 0.331 | | 0.324 | |
| 12/21/2016 | 0.241 | | 0.538 | | 0.292 | | 0.293 | |
| 2/3/2017 | 0.288 | | 0.521 | | 0.342 | | 0.348 | |
| 5/24/2017 | 0.272 | | 0.591 | | 0.327 | | 0.297 | |
| 7/5/2017 | 0.275 | | 0.582 | | 0.334 | | 0.317 | |
| 8/17/2017 | 0.276 | | 0.682 | | 0.332 | | 0.313 | |
| 10/5/2017 | 0.273 | | 0.312 | | 0.326 | | 0.312 | |
| 5/21/2018 | 0.327 | | 0.654 | | 0.383 | | 0.354 | |
| 6/26/2018 | 0.263 | | | | 0.32 | | | |
| 11/12/2018 | 0.288 | | 0.68 | | 0.327 | | 0.325 | |
| 5/20/2019 | 0.311 | | 0.623 | | 0.373 | | 0.366 | |
| 7/11/2019 | | | | | 0.389 | | 0.373 | |
| 8/20/2019 | | | | | 0.333 | | 0.328 | |
| 11/4/2019 | | 0.488 | | 0.777 | | 0.552 | | 0.359 |
| 1/15/2020 | | 0.326 1st Verifica | tion | 0.637 1st Verifica | ition | 0.374 1st Verifica | ition | |
| 2/4/2020 | | 0.329 2nd Verific | ation | | | | | |
| | | | | | | | | |

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Background Data Summary: Mean=0.3603, Std. Dev.=0.03685, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9559, critical = 0.805. Kappa = 1.716 (c=7, w=7, 1 of 3, event alpha = 0.001075.

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Prediction Limit

Intrawell Parametric

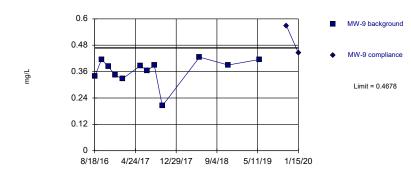
Background Data Summary: Mean=0.4189, Std. Dev.=0.02467, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8902, critical = 0.805. Kappa = 1.716 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.

Constituent: Fluoride Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr Constituent: Fluoride Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

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Within Limit

Prediction Limit

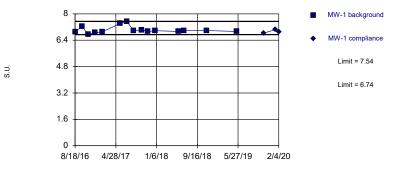


Background Data Summary: Mean=0.3653, Std. Dev.=0.05978, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8122, critical = 0.805. Kappa = 1.716 (c=7, w=7, 1 of 3, event alpha = 0.05123). Report alpha = 0.001075.

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Within Limits

Prediction Limit Intrawell Non-parametric

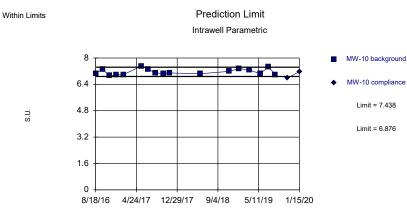


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 15 background values. Well-constituent pair annual alpha = 0.005248. Individual comparison alpha = 0.002625 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

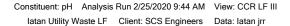
Constituent: Fluoride, pH Analysis Run 2/25/2020 10:03 AM View: CCR LF III

| | | | latari o | | Interior Engineero | buta. latan jii | | | |
|------------|-------|-----------|----------|-------|--------------------|--------------------|-------|------|--------------|
| 1 | MW-7 | I MW-7 | MW-8 | MW-8 | MW-9 | MW-9 | MW-1 | MW-1 | I |
| 8/18/2016 | 0.366 | | 0.438 | | 0.338 | | 6.89 | | |
| 9/29/2016 | 0.395 | | 0.439 | | 0.415 | | 7.24 | | |
| 11/9/2016 | 0.333 | | 0.415 | | 0.383 | | 6.74 | | |
| 12/21/2016 | 0.284 | | 0.461 | | 0.344 | | 6.86 | | |
| 2/3/2017 | 0.337 | | 0.407 | | 0.327 | | 6.91 | | |
| 5/24/2017 | 0.391 | | 0.391 | | 0.387 | | 7.41 | | |
| 7/5/2017 | 0.378 | | 0.391 | | 0.364 | | 7.54 | | |
| 8/17/2017 | 0.326 | | 0.406 | | 0.39 | | 6.98 | | |
| 10/5/2017 | 0.341 | | 0.396 | | 0.204 | | 7.03 | | |
| 11/14/2017 | | | | | | | 6.93 | | |
| 12/29/2017 | | | | | | | 6.98 | | |
| 5/21/2018 | 0.414 | | 0.441 | | 0.426 | | 6.93 | | |
| 6/26/2018 | | | | | | | 6.99 | | |
| 11/12/2018 | 0.369 | | 0.396 | | 0.39 | | 6.99 | | |
| 5/20/2019 | 0.389 | | 0.446 | | 0.415 | | 6.93 | | |
| 11/4/2019 | | 0.381 | | 0.431 | | 0.567 | | 6.84 | |
| 1/15/2020 | | | | | | 0.445 1st Verifica | ation | 7.04 | Extra Sample |
| 2/4/2020 | | | | | | | | 6.91 | Extra Sample |
| | | | | | | | | | |

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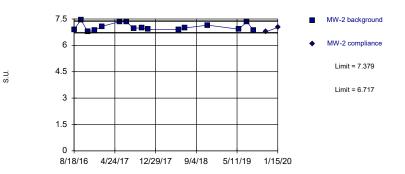
Background Data Summary: Mean=7.157, Std. Dev.=0.18, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.011, calculated = 0.0906, critical = 0.851. Kappa = 1.561 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.



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Within Limits

Prediction Limit



Background Data Summary: Mean=7.048, Std. Dev.=0.2096, n=16. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8784, critical = 0.844. Kappa = 1.581 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.

> Constituent: pH Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan irr

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Within Limits

Prediction Limit

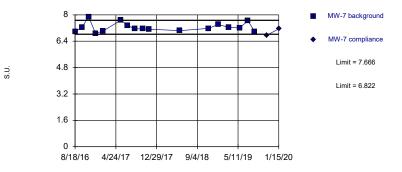


Background Data Summary: Mean=7.243, Std. Dev.=0.2171, n=16. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.011, calculated = 0.9298, critical = 0.844. Kappa = 1.581 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

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Prediction Limit Intrawell Parametric

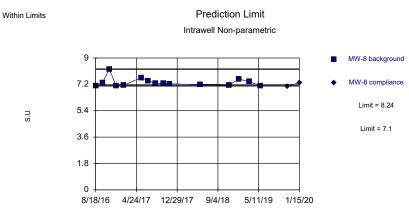


Background Data Summary: Mean=7.244, Std. Dev=0.2706, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.916, critical = 0.851. Kappa = 1.561 (c=7), w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

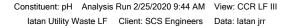
Constituent: pH Analysis Run 2/25/2020 10:03 AM View: CCR LF III

| | | | latari c | | ient. 000 Engineera | b Data. Iatari jii | | | |
|------------|-------|--------------------|----------|------------------|---------------------|--------------------|------|--------|-----------------|
| | MW-10 | MW-10 | MW-2 | MW-2 | MW-6 | MW-6 | MW-7 | MW-7 | |
| 8/18/2016 | 7.06 | | 6.9 | | 7.18 | | 6.97 | | |
| 9/29/2016 | 7.31 | | 7.45 | | 6.97 | | 7.25 | | |
| 11/9/2016 | 6.93 | | 6.79 | | 7.72 | | 7.87 | | |
| 12/21/2016 | 6.96 | | 6.85 | | 6.99 | | 6.88 | | |
| 2/3/2017 | 6.99 | | 7.08 | | 7.1 | | 7.01 | | |
| 5/24/2017 | 7.51 | | 7.35 | | 7.49 | | 7.67 | | |
| 7/5/2017 | 7.31 | | 7.33 | | 7.46 | | 7.36 | | |
| 8/17/2017 | 7.1 | | 6.97 | | 7.47 | | 7.15 | | |
| 10/5/2017 | 7.05 | | 7 | | 7.2 | | 7.15 | | |
| 11/14/2017 | 7.09 | | 6.91 | | 7.14 | | 7.13 | | |
| 12/29/2017 | | | | | 7.02 | | | | |
| 5/21/2018 | 7.04 | | 6.9 | | 7.08 | | 7.04 | | |
| 6/26/2018 | | | 6.99 | | | | | | |
| 11/12/2018 | 7.19 | | 7.15 | | 7.27 | | 7.18 | | |
| 1/10/2019 | 7.36 | | | | | | 7.42 | | |
| 3/14/2019 | 7.27 | | | | | | 7.24 | | |
| 5/20/2019 | 7.05 | | 6.92 | | 7.43 | | 7.21 | | |
| 7/11/2019 | 7.46 | | 7.33 | | 7.29 | | 7.63 | | |
| 8/20/2019 | 6.99 | | 6.85 | | 7.07 | | 6.99 | | |
| 11/4/2019 | | 6.78 | | 6.77 | | 6.87 | | 6.77 | |
| 1/15/2020 | | 7.18 1st Verificat | ion | 7.02 Extra Sampl | e | 7.26 1st Verificat | tion | 7.15 1 | st Verification |
| | | | | | | | | | |

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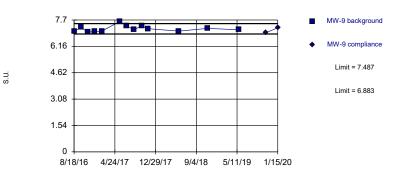
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 15 background values. Well-constituent pair annual alpha = 0.005248. Individual comparison alpha = 0.002625 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.







Prediction Limit Intrawell Parametric



Background Data Summary: Mean=7.185, Std. Dev.=0.1795, n=13. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.895, critical = 0.814. Kappa = 1.682 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

> Constituent: pH Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan irr

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Within Limit

Prediction Limit Intrawell Parametric

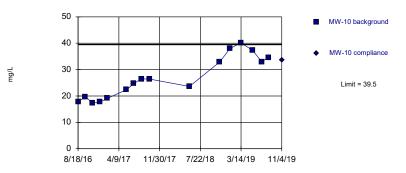


Limit = 39.1

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Prediction Limit Intrawell Parametric



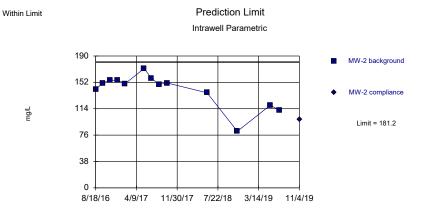
Background Data Summary: Mean=26.95, Std. Dev.=7.937, n=16. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9063, critical = 0.844. Kappa = 1.581 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Background Data Summary: Mean=32.62, Std. Dev.=3.775, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8898, critical = 0.805. Kappa = 1.716 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: pH, Sulfate Analysis Run 2/25/2020 10:03 AM View: CCR LF III

| MW-8 MW-8 MW-9 MW-9 MW-1 MW-10 MW-10 | | | | | | | | | | | |
|--------------------------------------|------|-------------|-------------|------------|--------|------|------|------|--|--|--|
| 8/18/2016 | 7.1 | | 7.02 | | 32.4 | | 17.8 | | | | |
| 9/29/2016 | 7.32 | | 7.28 | | 35.3 | | 19.7 | | | | |
| 11/9/2016 | 8.24 | | 6.99 | | 33.2 | | 17.4 | | | | |
| 12/21/2016 | 7.1 | | 7.02 | | 36.2 | | 17.7 | | | | |
| 2/3/2017 | 7.13 | | 7.05 | | 36.9 | | 19.1 | | | | |
| 5/24/2017 | 7.66 | | 7.61 | | 27.4 | | 22.4 | | | | |
| 7/5/2017 | 7.44 | | 7.37 | | 34.2 | | 24.7 | | | | |
| 8/17/2017 | 7.27 | | 7.13 | | 35.2 | | 26.5 | | | | |
| 10/5/2017 | 7.25 | | 7.35 | | 34.5 | | 26.4 | | | | |
| 11/14/2017 | 7.24 | | 7.19 | | | | | | | | |
| 5/21/2018 | 7.17 | | 7.05 | | 32.6 | | 23.6 | | | | |
| 11/12/2018 | 7.15 | | 7.21 | | 24.6 | | 32.9 | | | | |
| 1/10/2019 | 7.57 | | | | | | 38 | | | | |
| 3/14/2019 | 7.38 | | | | | | 40.1 | | | | |
| 5/20/2019 | 7.11 | | 7.13 | | 28.9 | | 37.3 | | | | |
| 7/11/2019 | | | | | | | 33 | | | | |
| 8/20/2019 | | | | | | | 34.6 | | | | |
| 11/4/2019 | | 7.07 | | 6.96 | | 22.3 | | 33.6 | | | |
| 1/15/2020 | | 7.31 1st Ve | erification | 7.24 Extra | Sample | | | | | | |
| | | | | | | | | | | | |

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Background Data Summary: Mean=141, Std. Dev.=23.93, n=13. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8552, critical = 0.814. Kappa = 1.682 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

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mg/L

Prediction Limit Intrawell Parametric





Background Data Summary: Mean=30.21, Std. Dev.=5.456, n=13. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9209, critical = 0.814. Kappa = 1.682 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Sulfate Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Constituent: Sulfate Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

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Within Limit

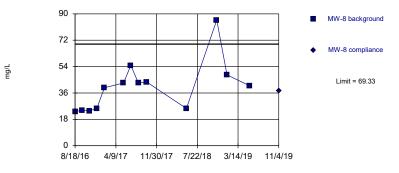
Prediction Limit Intrawell Parametric



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Prediction Limit Intrawell Parametric



Background Data Summary: Mean=40.07, Std. Dev.=17.39, n=13. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8273, critical = 0.814. Kappa = 1.682 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

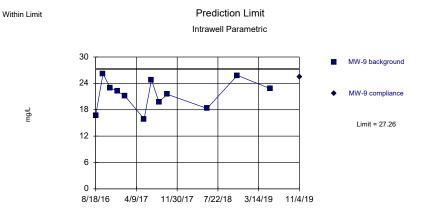
Background Data Summary (based on square root transformation): Mean=8.273, Std. Dev.=3.445, n=16. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8729, critical = 0.844. Kappa = 1.581 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

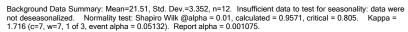
> Constituent: Sulfate Analysis Run 2/25/2020 9:44 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Constituent: Sulfate Analysis Run 2/25/2020 10:03 AM View: CCR LF III

| | 1 | MW-2 | MW-2 | MW-6 | MW-6 | MW-7 | MW-7 | MW-8 | MW-8 |
|--|------------|------|------|------|------|------|------|------|------|
| | 8/18/2016 | 142 | | 30.2 | | 70.2 | | 23.3 | |
| | 9/29/2016 | 151 | | 33.5 | | 70.6 | | 24.2 | |
| | 11/9/2016 | 155 | | 31.4 | | 62.6 | | 23.8 | |
| | 12/21/2016 | 155 | | 28.6 | | 50 | | 25.5 | |
| | 2/3/2017 | 150 | | 28.5 | | 41.9 | | 39.6 | |
| | 5/24/2017 | 172 | | 32.7 | | 16.2 | | 42.8 | |
| | 7/5/2017 | 158 | | 37.2 | | 19.5 | | 54.8 | |
| | 8/17/2017 | 149 | | 37.6 | | 34.1 | | 43 | |
| | 10/5/2017 | 151 | | 34.5 | | 24.3 | | 43.4 | |
| | 5/21/2018 | 137 | | 30.9 | | 23.8 | | 25.4 | |
| | 11/12/2018 | 81.5 | | 27.3 | | 149 | | 85.8 | |
| | 1/10/2019 | | | | | 159 | | 48.4 | |
| | 3/14/2019 | | | | | 33.9 | | | |
| | 5/20/2019 | 119 | | 20.2 | | 166 | | 40.9 | |
| | 7/11/2019 | 112 | | 20.1 | | 186 | | | |
| | 8/20/2019 | | | | | 166 | | | |
| | 11/4/2019 | | 98.8 | | 20.2 | | 170 | | 37.6 |
| | | | | | | | | | |

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Constituent: Sulfate Analysis Run 2/25/2020 9:44 AM View: CCR LF III Iatan Utility Waste LF Client: SCS Engineers Data: Iatan jrr

Constituent: Sulfate Analysis Run 2/25/2020 10:03 AM View: CCR LF III

| | MW-9 | MW-9 |
|------------|------|------|
| 8/18/2016 | 16.7 | |
| 9/29/2016 | 26.2 | |
| 11/9/2016 | 23 | |
| 12/21/2016 | 22.2 | |
| 2/3/2017 | 21.1 | |
| 5/24/2017 | 15.9 | |
| 7/5/2017 | 24.8 | |
| 8/17/2017 | 19.8 | |
| 10/5/2017 | 21.5 | |
| 5/21/2018 | 18.3 | |
| 11/12/2018 | 25.8 | |
| 5/20/2019 | 22.8 | |
| 11/4/2019 | | 25.4 |
| | | |

latan Utility Waste LF Client: SCS Engineers Data: latan jrr Printed 2/25/2020, 10:03 AM

| | | | | Ū. | Data. latan j | | | 20/2020, 10 | 7.00 AM | | |
|-------------------------|-------|-------------------|------------|-----------|---------------|-----|-------------|-------------|------------------|--------------|-----------------------|
| <u>Constituent</u> | Well | <u>Upper Lim.</u> | Lower Lim. | Date | Observ. | | <u>Bg N</u> | <u>%NDs</u> | <u>Transform</u> | <u>Alpha</u> | Method |
| Boron (mg/L) | MW-1 | 0.2 | n/a | 11/4/2019 | 0.1ND | | 12 | 100 | n/a | | () |
| Boron (mg/L) | MW-10 | 0.2 | n/a | 11/4/2019 | 0.1ND | | 12 | 100 | n/a | | NP Intra (NDs) 1 of 3 |
| Boron (mg/L) | MW-2 | 0.2 | n/a | 11/4/2019 | 0.1ND | | 12 | 100 | n/a | | NP Intra (NDs) 1 of 3 |
| Boron (mg/L) | MW-6 | 0.2 | n/a | 11/4/2019 | 0.1ND | | 12 | 100 | n/a | | NP Intra (NDs) 1 of 3 |
| Boron (mg/L) | MW-7 | 0.2 | n/a | 11/4/2019 | 0.1ND | No | 12 | 100 | n/a | 0.002173 | NP Intra (NDs) 1 of 3 |
| Boron (mg/L) | MW-8 | 0.2 | n/a | 11/4/2019 | 0.1ND | | 12 | 100 | n/a | 0.002173 | NP Intra (NDs) 1 of 3 |
| Boron (mg/L) | MW-9 | 0.2 | n/a | 11/4/2019 | 0.1ND | No | 12 | 100 | n/a | | NP Intra (NDs) 1 of 3 |
| Calcium (mg/L) | MW-1 | 141.9 | n/a | 11/4/2019 | 132 | No | 13 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Calcium (mg/L) | MW-10 | 154.2 | n/a | 11/4/2019 | 142 | No | 17 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Calcium (mg/L) | MW-2 | 178.2 | n/a | 11/4/2019 | 168 | No | 14 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Calcium (mg/L) | MW-6 | 156.3 | n/a | 11/4/2019 | 134 | No | 14 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Calcium (mg/L) | MW-7 | 193.1 | n/a | 11/4/2019 | 185 | No | 17 | 0 | sqrt(x) | 0.001075 | Param Intra 1 of 3 |
| Calcium (mg/L) | MW-8 | 158.5 | n/a | 11/4/2019 | 141 | No | 15 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Calcium (mg/L) | MW-9 | 122.1 | n/a | 11/4/2019 | 119 | No | 13 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Chloride (mg/L) | MW-1 | 6.697 | n/a | 11/4/2019 | 6.61 | No | 14 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Chloride (mg/L) | MW-10 | 23.19 | n/a | 11/4/2019 | 21.6 | No | 16 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Chloride (mg/L) | MW-2 | 10.03 | n/a | 11/4/2019 | 8.77 | No | 14 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Chloride (mg/L) | MW-6 | 1.945 | n/a | 11/4/2019 | 1.4 | No | 15 | 0 | sqrt(x) | 0.001075 | Param Intra 1 of 3 |
| Chloride (mg/L) | MW-7 | 31.35 | n/a | 11/4/2019 | 29.1 | No | 17 | 0 | sqrt(x) | 0.001075 | Param Intra 1 of 3 |
| Chloride (mg/L) | MW-8 | 8.265 | n/a | 11/4/2019 | 3.99 | No | 15 | 0 | sqrt(x) | 0.001075 | Param Intra 1 of 3 |
| Chloride (mg/L) | MW-9 | 2.881 | n/a | 1/15/2020 | 0.5ND | No | 13 | 30.77 | No | 0.001075 | Param Intra 1 of 3 |
| Dissolved Solids (mg/l) | MW-1 | 511.5 | n/a | 11/4/2019 | 457 | No | 12 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Dissolved Solids (mg/l) | MW-10 | 1760 | n/a | 11/4/2019 | 534 | No | 12 | 0 | n/a | 0.002173 | NP Intra (normality) |
| Dissolved Solids (mg/l) | MW-2 | 720.7 | n/a | 11/4/2019 | 585 | No | 12 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Dissolved Solids (mg/l) | MW-6 | 556.1 | n/a | 11/4/2019 | 437 | No | 12 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Dissolved Solids (mg/l) | MW-7 | 761 | n/a | 11/4/2019 | 682 | No | 16 | 0 | n/a | 0.001026 | NP Intra (normality) |
| Dissolved Solids (mg/l) | MW-8 | 548.8 | n/a | 11/4/2019 | 465 | No | 13 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Dissolved Solids (mg/l) | MW-9 | 478.8 | n/a | 11/4/2019 | 392 | No | 12 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Fluoride (mg/L) | MW-1 | 0.3201 | n/a | 2/4/2020 | 0.329 | Yes | 13 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Fluoride (mg/L) | MW-10 | 0.7252 | n/a | 1/15/2020 | 0.637 | No | 12 | 0 | x^2 | 0.001075 | Param Intra 1 of 3 |
| Fluoride (mg/L) | MW-2 | 0.3818 | n/a | 1/15/2020 | 0.374 | No | 15 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Fluoride (mg/L) | MW-6 | 0.37 | n/a | 11/4/2019 | 0.359 | No | 14 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Fluoride (mg/L) | MW-7 | 0.4235 | n/a | 11/4/2019 | 0.381 | No | 12 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Fluoride (mg/L) | MW-8 | 0.4612 | n/a | 11/4/2019 | 0.431 | No | 12 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Fluoride (mg/L) | MW-9 | 0.4678 | n/a | 1/15/2020 | 0.445 | No | 12 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| pH (S.U.) | MW-1 | 7.54 | 6.74 | 2/4/2020 | 6.91 | No | 15 | 0 | n/a | 0.002625 | NP Intra (normality) |
| pH (S.U.) | MW-10 | 7.438 | 6.876 | 1/15/2020 | 7.18 | No | 17 | 0 | No | 0.000 | Param Intra 1 of 3 |
| pH (S.U.) | MW-2 | 7.379 | 6.717 | 1/15/2020 | 7.02 | No | 16 | 0 | No | 0.000 | Param Intra 1 of 3 |
| pH (S.U.) | MW-6 | 7.586 | 6.899 | 1/15/2020 | 7.26 | No | 16 | 0 | No | 0.000 | Param Intra 1 of 3 |
| pH (S.U.) | MW-7 | 7.666 | 6.822 | 1/15/2020 | 7.15 | No | 17 | 0 | No | 0.000 | Param Intra 1 of 3 |
| pH (S.U.) | MW-8 | 8.24 | 7.1 | 1/15/2020 | 7.31 | No | 15 | 0 | n/a | 0.002625 | NP Intra (normality) |
| pH (S.U.) | MW-9 | 7.487 | 6.883 | 1/15/2020 | 7.24 | No | 13 | 0 | No | 0.000 | Param Intra 1 of 3 |
| Sulfate (mg/L) | MW-1 | 39.1 | n/a | 11/4/2019 | 22.3 | No | 12 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Sulfate (mg/L) | MW-10 | 39.5 | n/a | 11/4/2019 | 33.6 | No | 16 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Sulfate (mg/L) | MW-2 | 181.2 | n/a | 11/4/2019 | 98.8 | No | 13 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Sulfate (mg/L) | MW-6 | 39.39 | n/a | 11/4/2019 | 20.2 | | 13 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Sulfate (mg/L) | MW-7 | 188.2 | n/a | 11/4/2019 | 170 | | 16 | 0 | sqrt(x) | 0.001075 | Param Intra 1 of 3 |
| Sulfate (mg/L) | MW-8 | 69.33 | n/a | 11/4/2019 | 37.6 | | 13 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Sulfate (mg/L) | MW-9 | 27.26 | n/a | 11/4/2019 | 25.4 | | 12 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| | | | | | | | | | | | |

latan Generating Station Determination of Statistically Significant Increases CCR Landfill March 10, 2020

ATTACHMENT 2

Sanitas[™] Configuration Settings

| Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests |
|--------------|--------------|-------------------------------|---------------------------|----------------|---------------|--------------|-------|--------|-------------|
| Exclud | le data flag | s: i | | | | | | | |
| Data | Reading O | ptions | | | | | | | |
| 🔘 In | ndividual Ob | oservations | | | | | | | |
| \bigcirc M | lean of Eac | :h: | Month | | | | | | |
| \bigcirc M | ledian of Ea | ach: | Seasor | n | | | | | |
| Setup | Seasons | ace Handling. Process Resa | | | | | | | |

| Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests |
|---|--|---|--|---|--|---|---|------------------------|----------------------------|
| Bla Fou Fou Fou Fou Tou Constant Constant | ick and Whi ur Plots Per Always Com Include Tick Use Constitu aw Border Au arge/Reduct arge/Reduct de Margins (e CAS# (No uncate File N dude Limit Li ow Deselect | te Output Page Ibine Data Pa & Marks on D uent Name fo round Text Re ce Fonts (Grap ce Fonts (Data (on reports with t Const. Name Vames to 20 nes when fou ted Data on T ted Data on a | iges ata Page r Graph Title eports and Da phs): a/Text Report chout explicit s | ta Pages 100% s): 100% etting) se ighter ✓ | ✓ Proi Rou Use Indi Sho This Zou Output Less No Mo | mpt to Overwrit und Limits to er-Set Scale icate Backgrou ow Exact Dates ck Plot Lines om Factor: 20 Decimal Precision mal Precision ire Precision | te/Append Si 2 Sig. Digits (und Data s 00% ~ | ummary Ta (when not | ables set in data file) |
| Printer | Adobe PD | c . | | ⊻ S | tore Print Jobs in | maluple consu | ituenit mode | Store / | VIPrint Jobs |
| rnnier. | Adobe PDI | | | | | | | | · Finiters |

| Data Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests | |
|--|--|----------------|----------------|---------------|--------------|-------|--------|-------------|--|
| Use Modified | Alpha (| 0.02 | | | | | | | |
| ✓ Test Residuals For Normality (Parametric test only) using Shapiro-Wilk/Francia ✓ at Alpha = 0.01 ✓ | | | | | | | | | |
| Continue | Parametric if U | Jnable to Norr | nalize | | | | | | |
| Never Tran Use Specifi Use Best W | r of Powers or No Transfo sform ic Transformati | omation | | | | | | | |
| Use Non-Parametric Test (Sen's Slope/Mann-Kendall) when Non-Detects Percent > 75 | | | | | | | | | |
| Include 95. | Include 95. % Confidence Interval around Trend Line | | | | | | | | |
| Automatically | Remove Outli | ers (Parametri | c test only) | | | | | | |
| 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 | |
|--|---|--|--------------------------|-------------------------------------|--|--|---|------------|-------------|--|
| Use Aito | chison's Ad onal Furthe | netric Test wh ljustment ∨ r Refinement: | Use | cts Percent > 5 etects Percent > | at Alpha = 0.01 50 15 then NDs % > | at Alpha = 0.01 Image: Transformation Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Distribution of the second structure Image: Dis | | | | |
| Desea | asonalize (Ir Seasonality Seasonality | ntra- and Inter y Is Detected | Well) Or Insufficient | | 90 □ Plot Transformed Values IntraWell Other □ Stop if Background Trend Detected at Alpha = 0.05 ∨ ♥ Plot Background Data Override Standard Deviation: | | | | | |
| - Facility Statisti Downg - Sampli Comp - 1 | r α tuents Anal gradient (Co ng Plan paring Ind of 1 C | Non-Parametr tions per Year yzed: ompliance) W ividual Obsen) 1 of 2 (ified California | ells: vations | 2 7 7 0 1 of 4 | 2-Tailed Show D Non-Parame Non-Parame O Highes Most R | tically Remove I Test Mode Deselected Dat | a Lighter Highest Bac n 100% Non est Backgro vailable, or | d Outliers | | |

| 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) | C EPA 1989 Outlier Screening (fixed alpha of 0.05) | | | | | | | |
| Dixon's at α= 0.05 v or if n > 22 v Rosner's at α= 0.01 v Use EPA Screening to establish Suspected Outliers | | | | | | | | |
| O Tukey's Outlier Screening, with IQR Multiplier = 3.0 Use | Ladder of Powers to achieve Best W Stat | | | | | | | |
| ✓ Test For Normality using Shapiro-Wilk/Francia ∨ at Alpha = 0.1 | Test For Normality using Shapiro-Wilk/Francia \checkmark at Alpha = 0.1 \checkmark | | | | | | | |
| Stop if Non-Normal | Stop if Non-Normal | | | | | | | |
| O Continue with Parametric Test if Non-Normal | O Continue with Parametric Test if Non-Normal | | | | | | | |
| O Tukey's if Non-Normal, with IQR Multiplier = 3.0 Use | Ladder of Powers to achieve Best W Stat | | | | | | | |
| 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 | ✓ Label Constituents | | | | | | | |
| Combine Dates | ✓ Label Axes | | | | | | | |
| Use Default Constituent Names | Note Cation-Anion Balance (Piper only) | | | | | | | |
| Use Constituent Definition File Edit | | | | | | | | |
| | | | | | | | | |

ATTACHMENT 2-2

Spring 2020 Semiannual Detection Monitoring Statistical Analyses

MEMORANDUM

September 28, 2020

To: latan Generating Station 20250 State Route 45 N Platte County, Missouri Evergy Metro, Inc.



From: SCS Engineers

RE: Determination of Statistically Significant Increases - CCR Landfill Spring 2020 Semiannual Detection Monitoring 40 CFR 257.94

Statistical analysis of monitoring data from the groundwater monitoring system for the CCR Landfill at the latan 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 20, 2020. Review and validation of the results from the May 2020 Detection Monitoring Event was completed on June 29, 2020, which constitutes completion and finalization of detection monitoring laboratory analyses. A statistical analysis was then conducted to determine whether there was a statistically significant increase (SSI) over background values for each constituent listed in Appendix III to Part 257-Constituents for Detection Monitoring. Two rounds of verification sampling were conducted for certain constituents on July 13, 2020 and August 25, 2020.

The completed statistical evaluation identified one Appendix III constituent above the prediction limit established for monitoring well MW-10.

| Constituent/Monitoring Well | *UPL | Observation May 20, 2020 | 1st Verification July 13, 2020 | 2nd Verification August 25, 2020 | |
|-----------------------------|------|-----------------------------|-----------------------------------|-------------------------------------|--|
| Sulfate | | | | | |
| MW-10 | 39.5 | 43.1 | 47.7 | 47.9 | |

*UPL – Upper Prediction Limit

Determination: A statistical evaluation was completed for all Appendix III detection monitoring constituents in accordance with the certified statistical method. The statistical evaluation identified a SSI above the background prediction limit for sulfate in monitoring well MW-10.

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, detection sample results, 1st verification re-sample results (when applicable), 2nd verification re-sample results (when applicable), extra sample results for pH because pH is collected as part of the

Iatan Generating Station Determination of Statistically Significant Increases CCR Landfill September 28, 2020 Page 2 of 2

sampling procedure, 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 SanitasTM configuration settings for the statistical prediction limit analysis. This includes data configuration, output configuration, prediction limit configuration and other tests configuration.

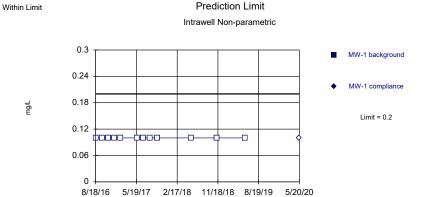
| Revision Number | Revision Date | Attachment Revised | Summary of Revisions |
|--------------------|------------------|-----------------------|----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

latan Generating Station Determination of Statistically Significant Increases CCR Landfill September 28, 2020

ATTACHMENT 1

Sanitas[™] Output

Sanitas™ v.9.6.27 Sanitas software licensed to SCS Engineers. UG Hollow symbols indicate censored values.



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

> Constituent: Boron Analysis Run 9/9/2020 9:14 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Intrawell Non-parametric 0.3 MW-10 background 0.24 MW-10 compliance 0.18 mg/L Limit = 0.20.12 10000-000--0 -0 0.06 0 8/18/16 5/19/17 2/17/18 11/18/18 8/19/19 5/20/20

Prediction Limit

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0.06

Hollow symbols indicate censored values.

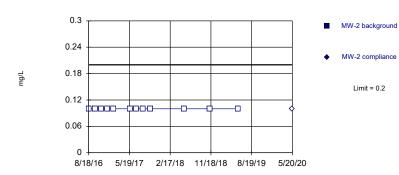
Within Limit

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

> Constituent: Boron Analysis Run 9/9/2020 9:14 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Sanitas™ v.9.6.27 Sanitas 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 = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Sanitas™ v.9.6.27 Sanitas software licensed to SCS Engineers. UG Hollow symbols indicate censored values. Prediction Limit Within Limit Intrawell Non-parametric 0.3 MW-6 background 0.24 0.18 mg/L 0.12 10000-0000---0

> 0 8/18/16 5/19/17 2/17/18 11/18/18 8/19/19 5/20/20

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

MW-6 compliance

Limit = 0.2

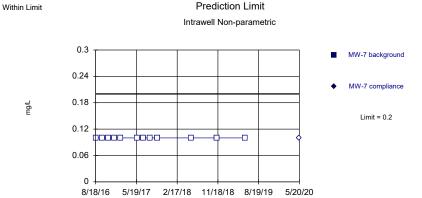
Constituent: Boron Analysis Run 9/9/2020 9:14 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Constituent: Boron Analysis Run 9/9/2020 9:14 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Constituent: Boron Analysis Run 9/9/2020 9:18 AM View: CCR LF III

| | | | | | - | - | | |
|------------|------|------|-------|-------|------|------|------|------|
| | MW-1 | MW-1 | MW-10 | MW-10 | MW-2 | MW-2 | MW-6 | MW-6 |
| 8/18/2016 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 9/29/2016 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 11/9/2016 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 12/21/2016 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 2/3/2017 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 5/24/2017 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 7/5/2017 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 8/17/2017 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 10/5/2017 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 5/21/2018 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 11/12/2018 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 5/20/2019 | <0.2 | | <0.2 | | <0.2 | | <0.2 | |
| 5/20/2020 | | <0.2 | | <0.2 | | <0.2 | | <0.2 |
| | | | | | | | | |

Sanitas $^{\mbox{\tiny W}}$ v.9.6.27 Sanitas software licensed to SCS Engineers. UG Hollow symbols indicate censored values.



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Boron Analysis Run 9/9/2020 9:14 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

 0.3
 Intrawell Non-parametric

 0.24
 MW-8 background

 0.24
 MW-8 compliance

 0.12
 Intravell Non-parametric

 0.13
 Intravell Non-parametric

 0.14
 Intravell Non-parametric

 0.15
 Intravell Non-parametric

 0.16
 Intravell Non-parametric

 0.17
 Intravell Non-parametric

 0.18
 Intravell Non-parametric

 0.19
 Intravell Non-parametric

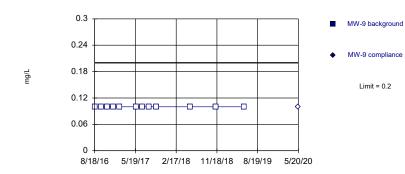
Prediction Limit

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Boron Analysis Run 9/9/2020 9:14 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Sanitas¹⁹ v.9.6.27 Sanitas 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 = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Sanitas™ v.9.6.27 Sanitas software licensed to SCS Engineers. UG

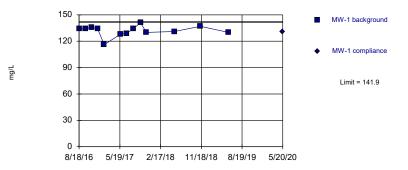
Sanitas™ v.9.6.27 Sanitas software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Within Limit

Within Limit

Prediction Limit

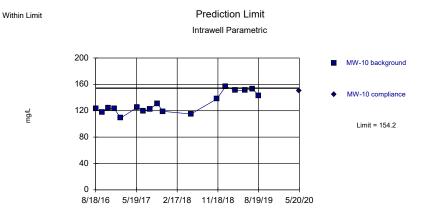


Background Data Summary: Mean=131.8, Std. Dev.=5.97, n=13. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8766, critical = 0.814. Kappa = 1.682 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.

Constituent: Boron, Calcium Analysis Run 9/9/2020 9:18 AM View: CCR LF III

| | MW-7 | MW-7 | MW-8 | MW-8 | MW-9 | MW-9 | MW-1 | MW-1 | | |
|------------|------|------|------|------|------|------|------|------|--|--|
| 8/18/2016 | <0.2 | | <0.2 | | <0.2 | | 134 | | | |
| 9/29/2016 | <0.2 | | <0.2 | | <0.2 | | 134 | | | |
| 11/9/2016 | <0.2 | | <0.2 | | <0.2 | | 136 | | | |
| 12/21/2016 | <0.2 | | <0.2 | | <0.2 | | 134 | | | |
| 2/3/2017 | <0.2 | | <0.2 | | <0.2 | | 116 | | | |
| 5/24/2017 | <0.2 | | <0.2 | | <0.2 | | 128 | | | |
| 7/5/2017 | <0.2 | | <0.2 | | <0.2 | | 129 | | | |
| 8/17/2017 | <0.2 | | <0.2 | | <0.2 | | 134 | | | |
| 10/5/2017 | <0.2 | | <0.2 | | <0.2 | | 141 | | | |
| 11/14/2017 | | | | | | | 130 | | | |
| 5/21/2018 | <0.2 | | <0.2 | | <0.2 | | 131 | | | |
| 11/12/2018 | <0.2 | | <0.2 | | <0.2 | | 137 | | | |
| 5/20/2019 | <0.2 | | <0.2 | | <0.2 | | 130 | | | |
| 5/20/2020 | | <0.2 | | <0.2 | | <0.2 | | 131 | | |
| | | | | | | | | | | |

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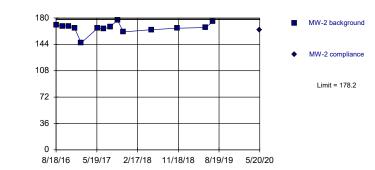


Background Data Summary: Mean=130.7, Std. Dev.=15.04, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8963, critical = 0.851. Kappa = 1.561 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.

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mg/L



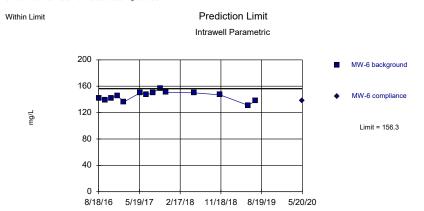
Prediction Limit

Intrawell Parametric

Background Data Summary: Mean=166.4, Std. Dev.=7.175, n=14. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8366, critical = 0.825. Kappa = 1.648 (c=7, we7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.

Constituent: Calcium Analysis Run 9/9/2020 9:14 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr Constituent: Calcium Analysis Run 9/9/2020 9:14 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Sanitas™ v.9.6.27 Sanitas software licensed to SCS Engineers. UG

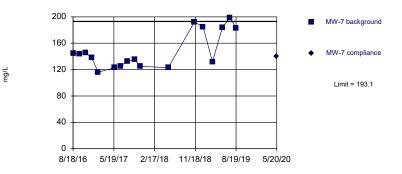


Background Data Summary: Mean=144.7, Std. Dev.=7.032, n=14. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9678, critical = 0.8525. Kappa = 1.648 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.

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Prediction Limit Intrawell Parametric

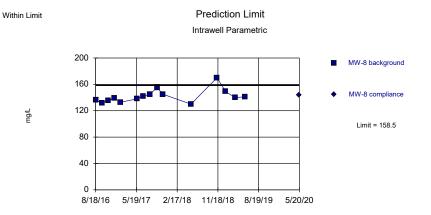


Background Data Summary (based on square root transformation): Mean=12.15, Std. Dev.=1.12, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8573, critical = 0.851. Kappa = 1.561 (c=7, wer7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 9/9/2020 9:19 AM View: CCR LF III

| I | MW-10 | MW-10 | MW-2 | MW-2 | MW-6 | MW-6 | MW-7 | MW-7 | | |
|------------|-------|-------|------|------|------|------|------|------|--|--|
| 8/18/2016 | 123 | | 170 | | 142 | | 145 | | | |
| 9/29/2016 | 118 | | 169 | | 139 | | 144 | | | |
| 11/9/2016 | 124 | | 169 | | 142 | | 146 | | | |
| 12/21/2016 | 123 | | 166 | | 146 | | 138 | | | |
| 2/3/2017 | 109 | | 146 | | 136 | | 116 | | | |
| 5/24/2017 | 125 | | 166 | | 150 | | 123 | | | |
| 7/5/2017 | 120 | | 165 | | 147 | | 125 | | | |
| 8/17/2017 | 122 | | 168 | | 150 | | 133 | | | |
| 10/5/2017 | 131 | | 177 | | 157 | | 135 | | | |
| 11/14/2017 | 119 | | 161 | | 151 | | 125 | | | |
| 5/21/2018 | 115 | | 164 | | 150 | | 123 | | | |
| 11/12/2018 | 138 | | 166 | | 147 | | 192 | | | |
| 1/10/2019 | 157 | | | | | | 185 | | | |
| 3/14/2019 | 151 | | | | | | 132 | | | |
| 5/20/2019 | 151 | | 167 | | 131 | | 184 | | | |
| 7/11/2019 | 153 | | 175 | | 138 | | 199 | | | |
| 8/20/2019 | 143 | | | | | | 183 | | | |
| 5/20/2020 | | 150 | | 164 | | 138 | | 140 | | |
| | | | | | | | | | | |

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Background Data Summary: Mean=142, Std. Dev.=10.21, n=15. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8744, critical = 0.835. Kappa = 1.615 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

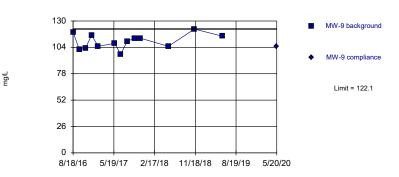
Sanitas™ v.9.6.27 Sanitas software licensed to SCS Engineers. UG



Prediction Limit

Intrawell Parametric





Background Data Summary: Mean=109.9, Std. Dev.=7.272, n=13. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9797, critical = 0.814. Kappa = 1.682 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Calcium Analysis Run 9/9/2020 9:14 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Constituent: Calcium Analysis Run 9/9/2020 9:14 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Sanitas™ v.9.6.27 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit Intrawell Parametric

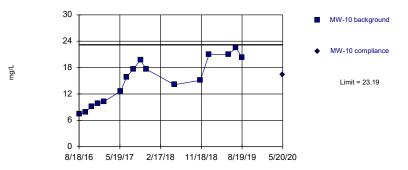


MW-1 compliance

Sanitas™ v.9.6.27 Sanitas software licensed to SCS Engineers. UG



Prediction Limit Intrawell Parametric



Background Data Summary: Mean=15.12, Std. Dev.=5.1, n=16. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9286, critical = 0.844. Kappa = 1.581 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

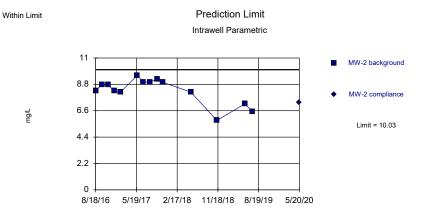
Background Data Summary: Mean=5.966, Std. Dev.=0.4435, n=14. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9436, critical = 0.825. Kappa = 1.648 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 9/9/2020 9:15 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Constituent: Calcium, Chloride Analysis Run 9/9/2020 9:19 AM View: CCR LF III

| MW-8 MW-8 MW-9 MW-9 MW-1 MW-10 MW-10 | | | | | | | | | | | |
|--------------------------------------|-----|-----|------|-----|------|-----|------|------|--|--|--|
| 8/18/2016 | 136 | | 119 | | 5.93 | | 7.47 | | | | |
| 9/29/2016 | 132 | | 102 | | 6.07 | | 7.83 | | | | |
| 11/9/2016 | 135 | | 103 | | 5.95 | | 9.15 | | | | |
| 12/21/2016 | 139 | | 116 | | 5.97 | | 9.84 | | | | |
| 2/3/2017 | 133 | | 105 | | 6 | | 10.3 | | | | |
| 5/24/2017 | 138 | | 108 | | 5.61 | | 12.6 | | | | |
| 7/5/2017 | 142 | | 97.2 | | 5.78 | | 15.9 | | | | |
| 8/17/2017 | 145 | | 110 | | 6.13 | | 17.6 | | | | |
| 10/5/2017 | 155 | | 113 | | 6.75 | | 19.7 | | | | |
| 11/14/2017 | 145 | | 113 | | 6.73 | | 17.6 | | | | |
| 12/29/2017 | | | | | 6.27 | | | | | | |
| 5/21/2018 | 130 | | 105 | | 5.63 | | 14.1 | | | | |
| 11/12/2018 | 170 | | 122 | | 5.04 | | 15.1 | | | | |
| 1/10/2019 | 149 | | | | | | 21 | | | | |
| 3/14/2019 | 140 | | | | | | | | | | |
| 5/20/2019 | 141 | | 115 | | 5.66 | | 21 | | | | |
| 7/11/2019 | | | | | | | 22.5 | | | | |
| 8/20/2019 | | | | | | | 20.3 | | | | |
| 5/20/2020 | | 144 | | 105 | | 5.6 | | 16.4 | | | |
| | | | | | | | | | | | |

Sanitas™ v.9.6.27 Sanitas software licensed to SCS Engineers. UG



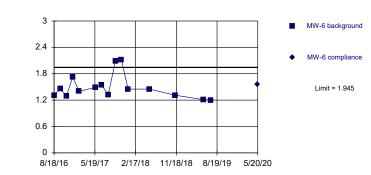
Background Data Summary: Mean=8.253, Std. Dev.=1.076, n=14. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8719, critical = 0.825. Kappa = 1.648 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075. Sanitas™ v.9.6.27 Sanitas software licensed to SCS Engineers. UG



mg/L

Prediction Limit





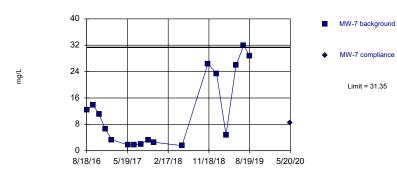
Background Data Summary (based on square root transformation): Mean=1.216, Std. Dev.=0.1104, n=15. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8387, critical = 0.835. Kappa = 1.615 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Chloride Analysis Run 9/9/2020 9:15 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr Constituent: Chloride Analysis Run 9/9/2020 9:15 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Sanitas[™] v.9.6.27 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

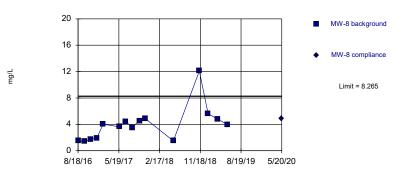


Background Data Summary (based on square root transformation): Mean=3.057, Std. Dev.=1.629, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8683, critical = 0.851. Kappa = 1.551 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Sanitas™ v.9.6.27 Sanitas software licensed to SCS Engineers. UG



Prediction Limit



Background Data Summary (based on square root transformation): Mean=1.907, Std. Dev.=0.5992, n=15. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8695, critical = 0.835. Kappa = 1.615 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

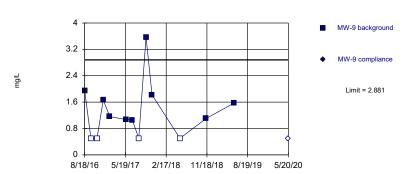
Constituent: Chloride Analysis Run 9/9/2020 9:19 AM View: CCR LF III

| | MW-2 | MW-2 | MW-6 | MW-6 | MW-7 | MW-7 | MW-8 | MW-8 | |
|------------|------|------|------|------|------|------|------|------|--|
| 8/18/2016 | 8.26 | | 1.31 | | 12.3 | | 1.5 | | |
| 9/29/2016 | 8.79 | | 1.46 | | 13.9 | | 1.42 | | |
| 11/9/2016 | 8.76 | | 1.29 | | 11.1 | | 1.76 | | |
| 12/21/2016 | 8.24 | | 1.72 | | 6.64 | | 1.89 | | |
| 2/3/2017 | 8.17 | | 1.4 | | 3.32 | | 4.02 | | |
| 5/24/2017 | 9.54 | | 1.49 | | 1.76 | | 3.63 | | |
| 7/5/2017 | 8.99 | | 1.54 | | 1.81 | | 4.44 | | |
| 8/17/2017 | 8.98 | | 1.32 | | 2 | | 3.53 | | |
| 10/5/2017 | 9.23 | | 2.09 | | 3.32 | | 4.55 | | |
| 11/14/2017 | 8.97 | | 2.12 | | 2.58 | | 4.86 | | |
| 12/29/2017 | | | 1.45 | | | | | | |
| 5/21/2018 | 8.14 | | 1.45 | | 1.54 | | 1.5 | | |
| 11/12/2018 | 5.79 | | 1.31 | | 26.4 | | 12.1 | | |
| 1/10/2019 | | | | | 23.3 | | 5.63 | | |
| 3/14/2019 | | | | | 4.77 | | 4.79 | | |
| 5/20/2019 | 7.18 | | 1.21 | | 26 | | 3.98 | | |
| 7/11/2019 | 6.5 | | 1.2 | | 31.9 | | | | |
| 8/20/2019 | | | | | 28.7 | | | | |
| 5/20/2020 | | 7.28 | | 1.55 | | 8.49 | | 4.89 | |
| | | | | | | | | | |

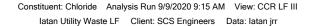
Sanitas^w v.9.6.27 Sanitas software licensed to SCS Engineers. UG Hollow symbols indicate censored values. Within Limit







Background Data Summary (after Aitchison's Adjustment): Mean=1.151, Std. Dev.=1.028, n=13, 30.77% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8333, critical = 0.814. Kappa = 1.682 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

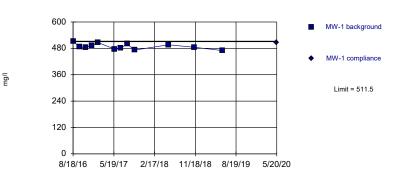












Intrawell Parametric

Background Data Summary: Mean=488.6, Std. Dev.=13.34, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9663, critical = 0.805. Kappa = 1.716 (c=7, we7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.

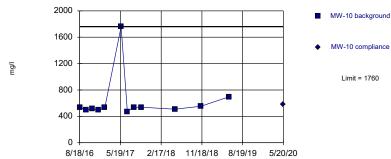
> Constituent: Dissolved Solids Analysis Run 9/9/2020 9:15 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

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Within Limit

deseasonalized.

Prediction Limit

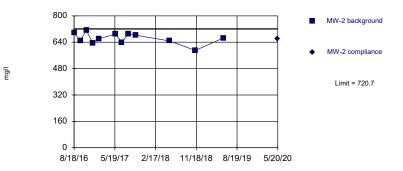


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 12 background values. Well-constituent pair annual alpha = 0.002173 (1 of 3). Insufficient data to test for seasonality: data were not

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Prediction Limit



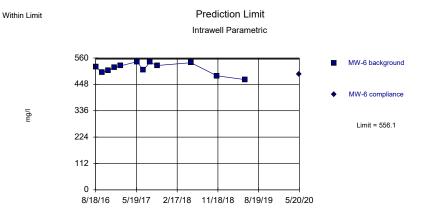
Background Data Summary: Mean=663.3, Std. Dev.=33.46, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9501, critical = 0.805. Kappa = 1.716 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Dissolved Solids Analysis Run 9/9/2020 9:15 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Constituent: Chloride, Dissolved Solids Analysis Run 9/9/2020 9:19 AM View: CCR LF III

| | | | | | - | - | | |
|------------|------|------|------|------|-------|-------|------|------|
| I | MW-9 | MW-9 | MW-1 | MW-1 | MW-10 | MW-10 | MW-2 | MW-2 |
| 8/18/2016 | 1.95 | | 513 | | 532 | | 696 | |
| 9/29/2016 | <1 | | 486 | | 502 | | 651 | |
| 11/9/2016 | <1 | | 484 | | 516 | | 711 | |
| 12/21/2016 | 1.66 | | 493 | | 497 | | 636 | |
| 2/3/2017 | 1.16 | | 506 | | 531 | | 661 | |
| 5/24/2017 | 1.07 | | 477 | | 1760 | | 690 | |
| 7/5/2017 | 1.06 | | 481 | | 474 | | 638 | |
| 8/17/2017 | <1 | | 500 | | 539 | | 690 | |
| 10/5/2017 | 3.57 | | 472 | | 539 | | 683 | |
| 11/14/2017 | 1.82 | | | | | | | |
| 5/21/2018 | <1 | | 496 | | 509 | | 648 | |
| 11/12/2018 | 1.1 | | 485 | | 554 | | 590 | |
| 5/20/2019 | 1.57 | | 470 | | 697 | | 666 | |
| 5/20/2020 | | <1 | | 507 | | 585 | | 659 |
| | | | | | | | | |

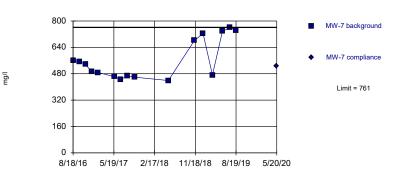
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Background Data Summary: Mean=515.5, Std. Dev.=23.66, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9399, critical = 0.805. Kappa = 1.716 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075. Sanitas™ v.9.6.27 Sanitas software licensed to SCS Engineers. UG

Within Limit

Prediction Limit Intrawell Non-parametric



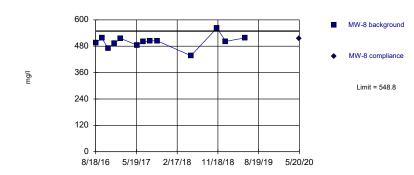
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 16 background values. Well-constituent pair annual alpha = 0.002051. Individual comparison alpha = 0.001026 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Dissolved Solids Analysis Run 9/9/2020 9:15 AM View: CCR LF III Iatan Utility Waste LF Client: SCS Engineers Data: Iatan jrr Constituent: Dissolved Solids Analysis Run 9/9/2020 9:15 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

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Within Limit

Prediction Limit Intrawell Parametric

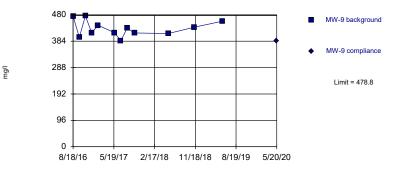


Background Data Summary: Mean=500.3, Std. Dev.=28.83, n=13. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9522, critical = 0.814. Kappa = 1.682 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.

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Prediction Limit

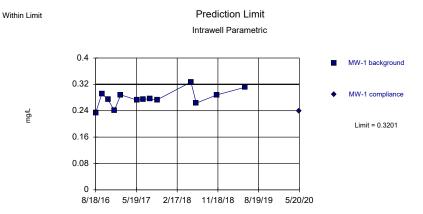


Background Data Summary: Mean=429.7, Std. Dev.=28.65, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9417, critical = 0.805. Kappa = 1.716 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Dissolved Solids Analysis Run 9/9/2020 9:19 AM View: CCR LF III

| | 1 | MW-6 | MW-6 | MW-7 | MW-7 | MW-8 | MW-8 | MW-9 | MW-9 |
|--|------------|------|------|------|------|------|------|------|------|
| | 8/18/2016 | 522 | | 560 | | 494 | | 475 | |
| | 9/29/2016 | 498 | | 554 | | 517 | | 398 | |
| | 11/9/2016 | 506 | | 538 | | 471 | | 476 | |
| | 12/21/2016 | 519 | | 492 | | 493 | | 415 | |
| | 2/3/2017 | 527 | | 487 | | 515 | | 442 | |
| | 5/24/2017 | 544 | | 462 | | 485 | | 415 | |
| | 7/5/2017 | 508 | | 445 | | 500 | | 386 | |
| | 8/17/2017 | 542 | | 466 | | 504 | | 431 | |
| | 10/5/2017 | 528 | | 459 | | 505 | | 414 | |
| | 5/21/2018 | 540 | | 439 | | 437 | | 412 | |
| | 11/12/2018 | 484 | | 681 | | 563 | | 435 | |
| | 1/10/2019 | | | 724 | | 502 | | | |
| | 3/14/2019 | | | 472 | | | | | |
| | 5/20/2019 | 468 | | 737 | | 518 | | 457 | |
| | 7/11/2019 | | | 761 | | | | | |
| | 8/20/2019 | | | 743 | | | | | |
| | 5/20/2020 | | 491 | | 525 | | 516 | | 385 |
| | | | | | | | | | |

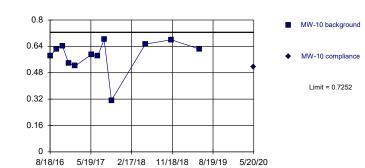
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Background Data Summary: Mean=0.278, Std. Dev.=0.02501, n=13. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9534, critical = 0.814. Kappa = 1.682 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

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Prediction Limit

Intrawell Parametric

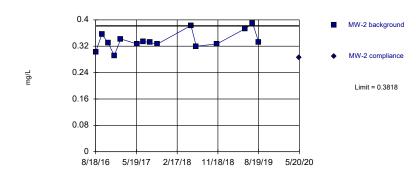
Background Data Summary (based on square transformation): Mean=0.3525, Std. Dev.=0.1011, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8795, critical = 0.805. Kappa = 1.716 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Fluoride Analysis Run 9/9/2020 9:15 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr Constituent: Fluoride Analysis Run 9/9/2020 9:15 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

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Within Limit

Prediction Limit



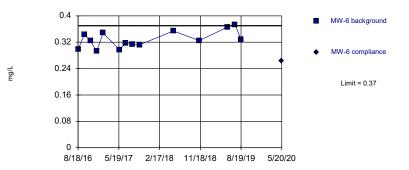
Background Data Summary: Mean=0.3379, Std. Dev.=0.02721, n=15. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9262, critical = 0.835. Kappa = 1.615 (=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

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mg/L

Prediction Limit Intrawell Parametric

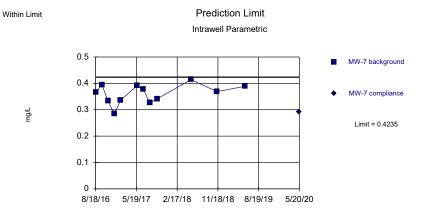


Background Data Summary: Mean=0.3279, Std. Dev.=0.02554, n=14. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9487, critical = 0.825. Kappa = 1.648 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Fluoride Analysis Run 9/9/2020 9:19 AM View: CCR LF III

| | | | 10 | atan otinty waste Er | Client. 000 Eng | ineers Data. latan | .) | | |
|------------|-------|------|-------|----------------------|-----------------|--------------------|-------|-------|------|
| | MW-1 | MW-1 | MW-10 | MW-10 | MW-2 | MW-2 | MW-6 | MW-6 | |
| 8/18/2016 | 0.234 | | 0.584 | | 0.303 | | 0.298 | | |
| 9/29/2016 | 0.292 | | 0.622 | | 0.356 | | 0.343 | | |
| 11/9/2016 | 0.274 | | 0.642 | | 0.331 | | 0.324 | | |
| 12/21/2016 | 0.241 | | 0.538 | | 0.292 | | 0.293 | | |
| 2/3/2017 | 0.288 | | 0.521 | | 0.342 | | 0.348 | | |
| 5/24/2017 | 0.272 | | 0.591 | | 0.327 | | 0.297 | | |
| 7/5/2017 | 0.275 | | 0.582 | | 0.334 | | 0.317 | | |
| 8/17/2017 | 0.276 | | 0.682 | | 0.332 | | 0.313 | | |
| 10/5/2017 | 0.273 | | 0.312 | | 0.326 | | 0.312 | | |
| 5/21/2018 | 0.327 | | 0.654 | | 0.383 | | 0.354 | | |
| 6/26/2018 | 0.263 | | | | 0.32 | | | | |
| 11/12/2018 | 0.288 | | 0.68 | | 0.327 | | 0.325 | | |
| 5/20/2019 | 0.311 | | 0.623 | | 0.373 | | 0.366 | | |
| 7/11/2019 | | | | | 0.389 | | 0.373 | | |
| 8/20/2019 | | | | | 0.333 | | 0.328 | | |
| 5/20/2020 | | 0.24 | | 0.517 | | 0.286 | | 0.264 | |
| | | | | | | | | | |

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Background Data Summary: Mean=0.3603, Std. Dev.=0.03685, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9559, critical = 0.805. Kappa = 1.716 (c=7, w=7, 1 of 3, event alpha = 0.001075.

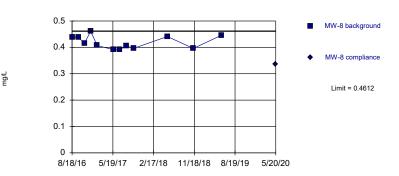
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Prediction Limit

Intrawell Parametric





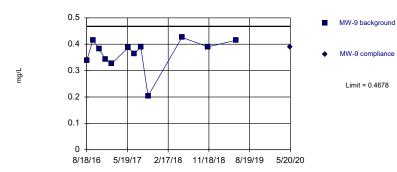
Background Data Summary: Mean=0.4189, Std. Dev.=0.02467, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8902, critical = 0.805. Kappa = 1.716 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Fluoride Analysis Run 9/9/2020 9:15 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr Constituent: Fluoride Analysis Run 9/9/2020 9:15 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

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Within Limit

Prediction Limit

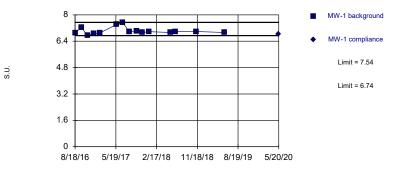


Background Data Summary: Mean=0.3653, Std. Dev.=0.05978, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8122, critical = 0.805. Kappa = 1.716 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

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Prediction Limit Intrawell Non-parametric

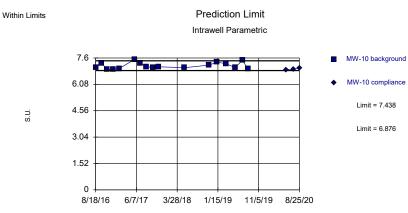


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 15 background values. Well-constituent pair annual alpha = 0.005248. Individual comparison alpha = 0.002625 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

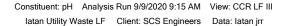
Constituent: Fluoride, pH Analysis Run 9/9/2020 9:19 AM View: CCR LF III

| | | | | | | | Data: latan jn | | |
|----|-----------|-------|-----------|-------|-----------|-------|----------------|------|------|
| | 1 | MW-7 | I MW-7 | MW-8 | I MW-8 | MW-9 | I MW-9 | MW-1 | MW-1 |
| 8/ | 18/2016 | 0.366 | | 0.438 | | 0.338 | | 6.89 | |
| 9/ | 29/2016 | 0.395 | | 0.439 | | 0.415 | | 7.24 | |
| 11 | /9/2016 | 0.333 | | 0.415 | | 0.383 | | 6.74 | |
| 12 | 2/21/2016 | 0.284 | | 0.461 | | 0.344 | | 6.86 | |
| 2/ | 3/2017 | 0.337 | | 0.407 | | 0.327 | | 6.91 | |
| 5/ | 24/2017 | 0.391 | | 0.391 | | 0.387 | | 7.41 | |
| 7/ | 5/2017 | 0.378 | | 0.391 | | 0.364 | | 7.54 | |
| 8/ | 17/2017 | 0.326 | | 0.406 | | 0.39 | | 6.98 | |
| 10 |)/5/2017 | 0.341 | | 0.396 | | 0.204 | | 7.03 | |
| 11 | /14/2017 | | | | | | | 6.93 | |
| 12 | 2/29/2017 | | | | | | | 6.98 | |
| 5/ | 21/2018 | 0.414 | | 0.441 | | 0.426 | | 6.93 | |
| 6/ | 26/2018 | | | | | | | 6.99 | |
| 11 | /12/2018 | 0.369 | | 0.396 | | 0.39 | | 6.99 | |
| 5/ | 20/2019 | 0.389 | | 0.446 | | 0.415 | | 6.93 | |
| 5/ | 20/2020 | | 0.291 | | 0.336 | | 0.389 | | 6.81 |
| | | | | | | | | | |

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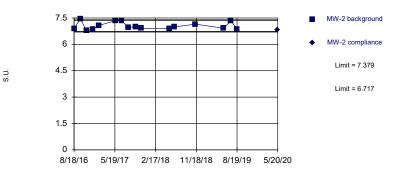
Background Data Summary: Mean=7.157, Std. Dev.=0.18, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.011, calculated = 0.0906, critical = 0.851. Kappa = 1.561 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.



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Within Limits

Prediction Limit



Background Data Summary: Mean=7.048, Std. Dev.=0.2096, n=16. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8784, critical = 0.844. Kappa = 1.581 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.

> Constituent: pH Analysis Run 9/9/2020 9:15 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan irr

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Within Limits

Prediction Limit Intrawell Parametric

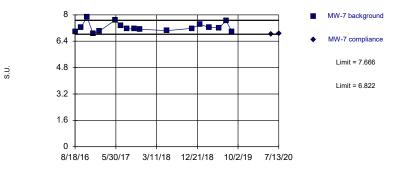


Background Data Summary: Mean=7.243, Std. Dev.=0.2171, n=16. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.011, calculated = 0.9298, critical = 0.844. Kappa = 1.581 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

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Prediction Limit Intrawell Parametric

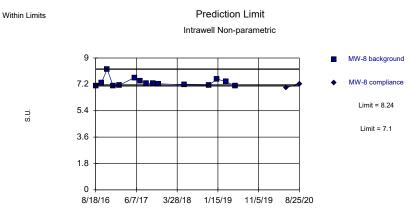


Background Data Summary: Mean=7.244, Std. Dev.=0.2706, n=17. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @aipha = 0.01, calculated = 0.916, critical = 0.851. Kappa = 1.561 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.

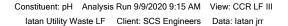
Constituent: pH Analysis Run 9/9/2020 9:19 AM View: CCR LF III

| latan Utility Waste LF Client: SCS Engineers Data: latan jrr | | | | | | | | | | |
|--|-------|-------------------|------|------|------|----------------------|------------|------------------------------|--|--|
| | MW-10 | MW-10 | MW-2 | MW-2 | MW-6 | MW-6 | MW-7 | MW-7 | | |
| 8/18/2016 | 7.06 | | 6.9 | | 7.18 | | 6.97 | | | |
| 9/29/2016 | 7.31 | | 7.45 | | 6.97 | | 7.25 | | | |
| 11/9/2016 | 6.93 | | 6.79 | | 7.72 | | 7.87 | | | |
| 12/21/2016 | 6.96 | | 6.85 | | 6.99 | | 6.88 | | | |
| 2/3/2017 | 6.99 | | 7.08 | | 7.1 | | 7.01 | | | |
| 5/24/2017 | 7.51 | | 7.35 | | 7.49 | | 7.67 | | | |
| 7/5/2017 | 7.31 | | 7.33 | | 7.46 | | 7.36 | | | |
| 8/17/2017 | 7.1 | | 6.97 | | 7.47 | | 7.15 | | | |
| 10/5/2017 | 7.05 | | 7 | | 7.2 | | 7.15 | | | |
| 11/14/2017 | 7.09 | | 6.91 | | 7.14 | | 7.13 | | | |
| 12/29/2017 | | | | | 7.02 | | | | | |
| 5/21/2018 | 7.04 | | 6.9 | | 7.08 | | 7.04 | | | |
| 6/26/2018 | | | 6.99 | | | | | | | |
| 11/12/2018 | 7.19 | | 7.15 | | 7.27 | | 7.18 | | | |
| 1/10/2019 | 7.36 | | | | | | 7.42 | | | |
| 3/14/2019 | 7.27 | | | | | | 7.24 | | | |
| 5/20/2019 | 7.05 | | 6.92 | | 7.43 | | 7.21 | | | |
| 7/11/2019 | 7.46 | | 7.33 | | 7.29 | | 7.63 | | | |
| 8/20/2019 | 6.99 | | 6.85 | | 7.07 | | 6.99 | | | |
| 5/20/2020 | | 6.92 | | 6.81 | | 6.83 | | 6.82 | | |
| 7/13/2020 | | 6.96 Extra Sample | e | | | 6.84 1st Verificatio | | 6.87 1st Verification Sample | | |
| 8/25/2020 | | 7 Extra Sample | 1 | | | 7.15 2nd Verificat | ion Sample | | | |
| | | | | | | | | | | |

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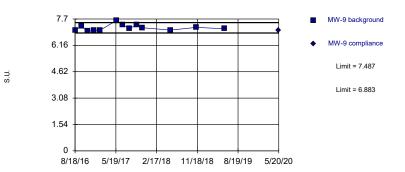
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 15 background values. Well-constituent pair annual alpha = 0.005248. Individual comparison alpha = 0.002625 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.





Within Limits

Prediction Limit Intrawell Parametric



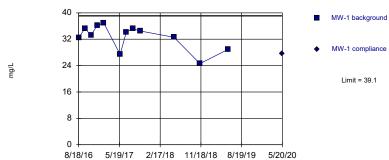
Background Data Summary: Mean=7.185, Std. Dev.=0.1795, n=13. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.895, critical = 0.814. Kappa = 1.682 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

> Constituent: pH Analysis Run 9/9/2020 9:15 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

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Within Limit

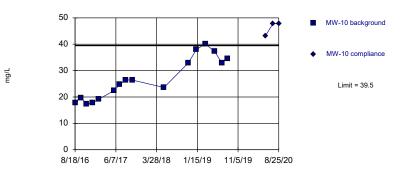
Prediction Limit Intrawell Parametric



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Prediction Limit Intrawell Parametric



Background Data Summary: Mean=26.95, Std. Dev.=7.937, n=16. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9063, critical = 0.844. Kappa = 1.581 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Background Data Summary: Mean=32.62, Std. Dev.=3.775, n=12. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8898, critical = 0.805. Kappa = 1.716 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

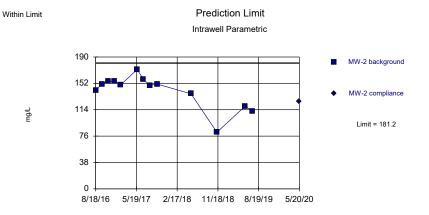
> Constituent: Sulfate Analysis Run 9/9/2020 9:15 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Constituent: Sulfate Analysis Run 9/9/2020 9:15 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Constituent: pH, Sulfate Analysis Run 9/9/2020 9:19 AM View: CCR LF III

| MW-8 MW-9 MW-9 MW-1 MW-10 MW-10 | | | | | | | | | | | | |
|---------------------------------|------|--------------------|------------|------|------|------|------|------|-------------------------|--|--|--|
| 8/18/2016 | 7.1 | | 7.02 | | 32.4 | | 17.8 | | | | | |
| 9/29/2016 | 7.32 | | 7.28 | | 35.3 | | 19.7 | | | | | |
| 11/9/2016 | 8.24 | | 6.99 | | 33.2 | | 17.4 | | | | | |
| 12/21/2016 | 7.1 | | 7.02 | | 36.2 | | 17.7 | | | | | |
| 2/3/2017 | 7.13 | | 7.05 | | 36.9 | | 19.1 | | | | | |
| 5/24/2017 | 7.66 | | 7.61 | | 27.4 | | 22.4 | | | | | |
| 7/5/2017 | 7.44 | | 7.37 | | 34.2 | | 24.7 | | | | | |
| 8/17/2017 | 7.27 | | 7.13 | | 35.2 | | 26.5 | | | | | |
| 10/5/2017 | 7.25 | | 7.35 | | 34.5 | | 26.4 | | | | | |
| 11/14/2017 | 7.24 | | 7.19 | | | | | | | | | |
| 5/21/2018 | 7.17 | | 7.05 | | 32.6 | | 23.6 | | | | | |
| 11/12/2018 | 7.15 | | 7.21 | | 24.6 | | 32.9 | | | | | |
| 1/10/2019 | 7.57 | | | | | | 38 | | | | | |
| 3/14/2019 | 7.38 | | | | | | 40.1 | | | | | |
| 5/20/2019 | 7.11 | | 7.13 | | 28.9 | | 37.3 | | | | | |
| 7/11/2019 | | | | | | | 33 | | | | | |
| 8/20/2019 | | | | | | | 34.6 | | | | | |
| 5/20/2020 | | 6.98 | | 7.02 | | 27.6 | | 43.1 | | | | |
| 7/13/2020 | | | | | | | | 47.7 | 1st Verification Sample | | | |
| 8/25/2020 | | 7.23 1st Verificat | ion Sample | | | | | 47.9 | 2nd Verification Sample | | | |
| | | | | | | | | | | | | |

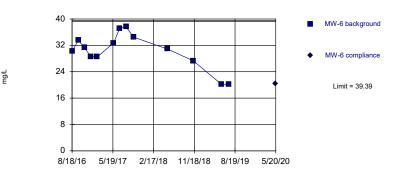
Sanitas™ v.9.6.27 Sanitas software licensed to SCS Engineers. UG



Background Data Summary: Mean=141, Std. Dev.=23.93, n=13. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8552, critical = 0.814. Kappa = 1.682 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.







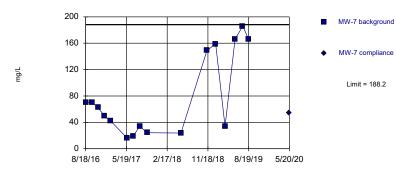
Background Data Summary: Mean=30.21, Std. Dev.=5.456, n=13. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9209, critical = 0.814. Kappa = 1.682 (c=7, we7, 1 of 3, event alpha = 0.05132). Report alpha = 0.00175.

Constituent: Sulfate Analysis Run 9/9/2020 9:15 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr Constituent: Sulfate Analysis Run 9/9/2020 9:15 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

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Within Limit

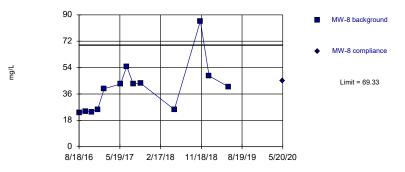
Prediction Limit Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=8.273, Std. Dev.=3.445, n=16. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8729, critical = 0.844. Kappa = 1.581 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075. Sanitas™ v.9.6.27 Sanitas software licensed to SCS Engineers. UG



Prediction Limit

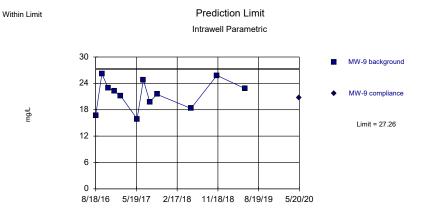


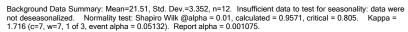
Background Data Summary: Mean=40.07, Std. Dev.=17.39, n=13. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8273, critical = 0.814. Kappa = 1.682 (c=7, w=7, 1 of 3, event alpha = 0.05132). Report alpha = 0.001075.

Constituent: Sulfate Analysis Run 9/9/2020 9:19 AM View: CCR LF III

| 1 | MW-2 | MW-2 | MW-6 | MW-6 | MW-7 | MW-7 | MW-8 | MW-8 | | |
|------------|------|------|------|------|------|------|------|------|--|--|
| 8/18/2016 | 142 | | 30.2 | | 70.2 | | 23.3 | | | |
| 9/29/2016 | 151 | | 33.5 | | 70.6 | | 24.2 | | | |
| 11/9/2016 | 155 | | 31.4 | | 62.6 | | 23.8 | | | |
| 12/21/2016 | 155 | | 28.6 | | 50 | | 25.5 | | | |
| 2/3/2017 | 150 | | 28.5 | | 41.9 | | 39.6 | | | |
| 5/24/2017 | 172 | | 32.7 | | 16.2 | | 42.8 | | | |
| 7/5/2017 | 158 | | 37.2 | | 19.5 | | 54.8 | | | |
| 8/17/2017 | 149 | | 37.6 | | 34.1 | | 43 | | | |
| 10/5/2017 | 151 | | 34.5 | | 24.3 | | 43.4 | | | |
| 5/21/2018 | 137 | | 30.9 | | 23.8 | | 25.4 | | | |
| 11/12/2018 | 81.5 | | 27.3 | | 149 | | 85.8 | | | |
| 1/10/2019 | | | | | 159 | | 48.4 | | | |
| 3/14/2019 | | | | | 33.9 | | | | | |
| 5/20/2019 | 119 | | 20.2 | | 166 | | 40.9 | | | |
| 7/11/2019 | 112 | | 20.1 | | 186 | | | | | |
| 8/20/2019 | | | | | 166 | | | | | |
| 5/20/2020 | | 126 | | 20.4 | | 54.4 | | 45 | | |
| | | | | | | | | | | |

Sanitas™ v.9.6.27 Sanitas software licensed to SCS Engineers. UG





Constituent: Sulfate Analysis Run 9/9/2020 9:15 AM View: CCR LF III latan Utility Waste LF Client: SCS Engineers Data: latan jrr

Constituent: Sulfate Analysis Run 9/9/2020 9:19 AM View: CCR LF III

| | MW-9 | MW-9 |
|------------|------|------|
| 8/18/2016 | 16.7 | |
| 9/29/2016 | 26.2 | |
| 11/9/2016 | 23 | |
| 12/21/2016 | 22.2 | |
| 2/3/2017 | 21.1 | |
| 5/24/2017 | 15.9 | |
| 7/5/2017 | 24.8 | |
| 8/17/2017 | 19.8 | |
| 10/5/2017 | 21.5 | |
| 5/21/2018 | 18.3 | |
| 11/12/2018 | 25.8 | |
| 5/20/2019 | 22.8 | |
| 5/20/2020 | | 20.7 |
| | | |

latan Utility Waste LF Client: SCS Engineers Data: latan jrr Printed 9/9/2020, 9:19 AM

| | | | | _ | | | | 3/3/2020, 9 | | | |
|-------------------------|-------|------------|------------|-------------|---------|-------------|-------------|-------------|-----------|--------------|-----------------------|
| Constituent | Well | Upper Lim. | Lower Lim. | <u>Date</u> | Observ. | <u>Sig.</u> | <u>Bg N</u> | | Transform | <u>Alpha</u> | Method |
| Boron (mg/L) | MW-1 | 0.2 | n/a | 5/20/2020 | 0.1ND | No | 12 | 100 | n/a | | NP Intra (NDs) 1 of 3 |
| Boron (mg/L) | MW-10 | 0.2 | n/a | 5/20/2020 | 0.1ND | No | 12 | 100 | n/a | | NP Intra (NDs) 1 of 3 |
| Boron (mg/L) | MW-2 | 0.2 | n/a | 5/20/2020 | 0.1ND | No | 12 | 100 | n/a | | NP Intra (NDs) 1 of 3 |
| Boron (mg/L) | MW-6 | 0.2 | n/a | 5/20/2020 | 0.1ND | No | 12 | 100 | n/a | | NP Intra (NDs) 1 of 3 |
| Boron (mg/L) | MW-7 | 0.2 | n/a | 5/20/2020 | 0.1ND | No | 12 | 100 | n/a | | NP Intra (NDs) 1 of 3 |
| Boron (mg/L) | MW-8 | 0.2 | n/a | 5/20/2020 | 0.1ND | No | 12 | 100 | n/a | | NP Intra (NDs) 1 of 3 |
| Boron (mg/L) | MW-9 | 0.2 | n/a | 5/20/2020 | 0.1ND | No | 12 | 100 | n/a | | NP Intra (NDs) 1 of 3 |
| Calcium (mg/L) | MW-1 | 141.9 | n/a | 5/20/2020 | 131 | No | 13 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Calcium (mg/L) | MW-10 | 154.2 | n/a | 5/20/2020 | 150 | No | 17 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Calcium (mg/L) | MW-2 | 178.2 | n/a | 5/20/2020 | 164 | No | 14 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Calcium (mg/L) | MW-6 | 156.3 | n/a | 5/20/2020 | 138 | No | 14 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Calcium (mg/L) | MW-7 | 193.1 | n/a | 5/20/2020 | 140 | No | 17 | 0 | sqrt(x) | 0.001075 | Param Intra 1 of 3 |
| Calcium (mg/L) | MW-8 | 158.5 | n/a | 5/20/2020 | 144 | No | 15 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Calcium (mg/L) | MW-9 | 122.1 | n/a | 5/20/2020 | 105 | No | 13 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Chloride (mg/L) | MW-1 | 6.697 | n/a | 5/20/2020 | 5.6 | No | 14 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Chloride (mg/L) | MW-10 | 23.19 | n/a | 5/20/2020 | 16.4 | No | 16 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Chloride (mg/L) | MW-2 | 10.03 | n/a | 5/20/2020 | 7.28 | No | 14 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Chloride (mg/L) | MW-6 | 1.945 | n/a | 5/20/2020 | 1.55 | No | 15 | 0 | sqrt(x) | 0.001075 | Param Intra 1 of 3 |
| Chloride (mg/L) | MW-7 | 31.35 | n/a | 5/20/2020 | 8.49 | No | 17 | 0 | sqrt(x) | 0.001075 | Param Intra 1 of 3 |
| Chloride (mg/L) | MW-8 | 8.265 | n/a | 5/20/2020 | 4.89 | No | 15 | 0 | sqrt(x) | 0.001075 | Param Intra 1 of 3 |
| Chloride (mg/L) | MW-9 | 2.881 | n/a | 5/20/2020 | 0.5ND | No | 13 | 30.77 | No | 0.001075 | Param Intra 1 of 3 |
| Dissolved Solids (mg/l) | MW-1 | 511.5 | n/a | 5/20/2020 | 507 | No | 12 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Dissolved Solids (mg/l) | MW-10 | 1760 | n/a | 5/20/2020 | 585 | No | 12 | 0 | n/a | 0.002173 | NP Intra (normality) |
| Dissolved Solids (mg/l) | MW-2 | 720.7 | n/a | 5/20/2020 | 659 | No | 12 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Dissolved Solids (mg/l) | MW-6 | 556.1 | n/a | 5/20/2020 | 491 | No | 12 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Dissolved Solids (mg/l) | MW-7 | 761 | n/a | 5/20/2020 | 525 | No | 16 | 0 | n/a | 0.001026 | NP Intra (normality) |
| Dissolved Solids (mg/l) | MW-8 | 548.8 | n/a | 5/20/2020 | 516 | No | 13 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Dissolved Solids (mg/l) | MW-9 | 478.8 | n/a | 5/20/2020 | 385 | No | 12 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Fluoride (mg/L) | MW-1 | 0.3201 | n/a | 5/20/2020 | 0.24 | No | 13 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Fluoride (mg/L) | MW-10 | 0.7252 | n/a | 5/20/2020 | 0.517 | No | 12 | 0 | x^2 | 0.001075 | Param Intra 1 of 3 |
| Fluoride (mg/L) | MW-2 | 0.3818 | n/a | 5/20/2020 | 0.286 | No | 15 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Fluoride (mg/L) | MW-6 | 0.37 | n/a | 5/20/2020 | 0.264 | No | 14 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Fluoride (mg/L) | MW-7 | 0.4235 | n/a | 5/20/2020 | 0.291 | No | 12 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Fluoride (mg/L) | MW-8 | 0.4612 | n/a | 5/20/2020 | 0.336 | No | 12 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| Fluoride (mg/L) | MW-9 | 0.4678 | n/a | 5/20/2020 | 0.389 | No | 12 | 0 | No | 0.001075 | Param Intra 1 of 3 |
| pH (S.U.) | MW-1 | 7.54 | 6.74 | 5/20/2020 | 6.81 | No | 15 | 0 | n/a | 0.002625 | NP Intra (normality) |
| pH (S.U.) | MW-10 | 7.438 | 6.876 | 8/25/2020 | 7 | No | 17 | 0 | No | 0.000 | Param Intra 1 of 3 |
| pH (S.U.) | MW-2 | 7.379 | 6.717 | 5/20/2020 | 6.81 | No | 16 | 0 | No | 0.000 | Param Intra 1 of 3 |
| pH (S.U.) | MW-6 | 7.586 | 6.899 | 8/25/2020 | 7.15 | No | 16 | 0 | No | 0.000 | Param Intra 1 of 3 |
| pH (S.U.) | MW-7 | 7.666 | 6.822 | 7/13/2020 | 6.87 | No | 17 | 0 | No | 0.000 | Param Intra 1 of 3 |
| pH (S.U.) | MW-8 | 8.24 | 7.1 | 8/25/2020 | 7.23 | No | 15 | 0 | n/a | 0.002625 | NP Intra (normality) |
| pH (S.U.) | MW-9 | 7.487 | 6.883 | 5/20/2020 | 7.02 | No | 13 | 0 | No | 0.000 | Param Intra 1 of 3 |
| Sulfate (mg/L) | MW-1 | 39.1 | n/a | 5/20/2020 | 27.6 | No | 12 | 0 | No | | Param Intra 1 of 3 |
| Sulfate (mg/L) | MW-10 | 39.5 | n/a | 8/25/2020 | 47.9 | Yes | 16 | 0 | No | | Param Intra 1 of 3 |
| Sulfate (mg/L) | MW-2 | 181.2 | n/a | 5/20/2020 | 126 | No | 13 | 0 | No | | Param Intra 1 of 3 |
| Sulfate (mg/L) | MW-6 | 39.39 | n/a | 5/20/2020 | 20.4 | No | 13 | 0 | No | | Param Intra 1 of 3 |
| Sulfate (mg/L) | MW-7 | 188.2 | n/a | 5/20/2020 | 54.4 | No | 16 | 0 | sqrt(x) | | Param Intra 1 of 3 |
| Sulfate (mg/L) | MW-8 | 69.33 | n/a | 5/20/2020 | 45 | No | 13 | 0 | No | | Param Intra 1 of 3 |
| Sulfate (mg/L) | MW-9 | 27.26 | n/a n/a | 5/20/2020 | 20.7 | No | 12 | 0 | No | | Param Intra 1 of 3 |
| (| | • | | | | | | - | | | |

Iatan Generating Station Determination of Statistically Significant Increases CCR Landfill September 28, 2020

ATTACHMENT 2

Sanitas[™] Configuration Settings

| Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests |
|--------------|--------------|-------------------------------|-------------|----------------|---------------|--------------|-------|--------|-------------|
| Exclud | le data flag | s: i | | | | | | | |
| Data | Reading O | ptions | | | | | | | |
| 🔘 In | ndividual Ob | oservations | | | | | | | |
| \bigcirc M | lean of Eac | :h: | O Month | | | | | | |
| \bigcirc M | ledian of Ea | ach: | Seasor | n | | | | | |
| Setup | Seasons | ace Handling. Process Resa | | | | | | | |

| Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests |
|---|--|---|--|---|--|---|---|------------------------|----------------------------|
| Bla Fou Fou Fou Fou Tou Constant Constant | ick and Whi ur Plots Per Always Com Include Tick Use Constitu aw Border Au arge/Reduct arge/Reduct de Margins (e CAS# (No uncate File N dude Limit Li ow Deselect | te Output Page Ibine Data Pa & Marks on D uent Name fo round Text Re ce Fonts (Grap ce Fonts (Data (on reports with t Const. Name Vames to 20 nes when fou ted Data on T ted Data on a | iges ata Page r Graph Title eports and Da phs): a/Text Report chout explicit s | ta Pages 100% s): 100% etting) se ighter > | ✓ Proi Rou Use Indi Sho This Zou Output Less No Mo | mpt to Overwrit und Limits to er-Set Scale icate Backgrou ow Exact Dates ck Plot Lines om Factor: 20 Decimal Precision mal Precision ire Precision | te/Append Si 2 Sig. Digits (und Data s 00% ~ | ummary Ta (when not | ables set in data file) |
| Printer | Adobe PD | c . | | ⊻ S | tore Print Jobs in | maluple consu | ituenit mode | Store / | VIPrint Jobs |
| rnnier. | Adobe PDI | | | | | | | | · Finiters |

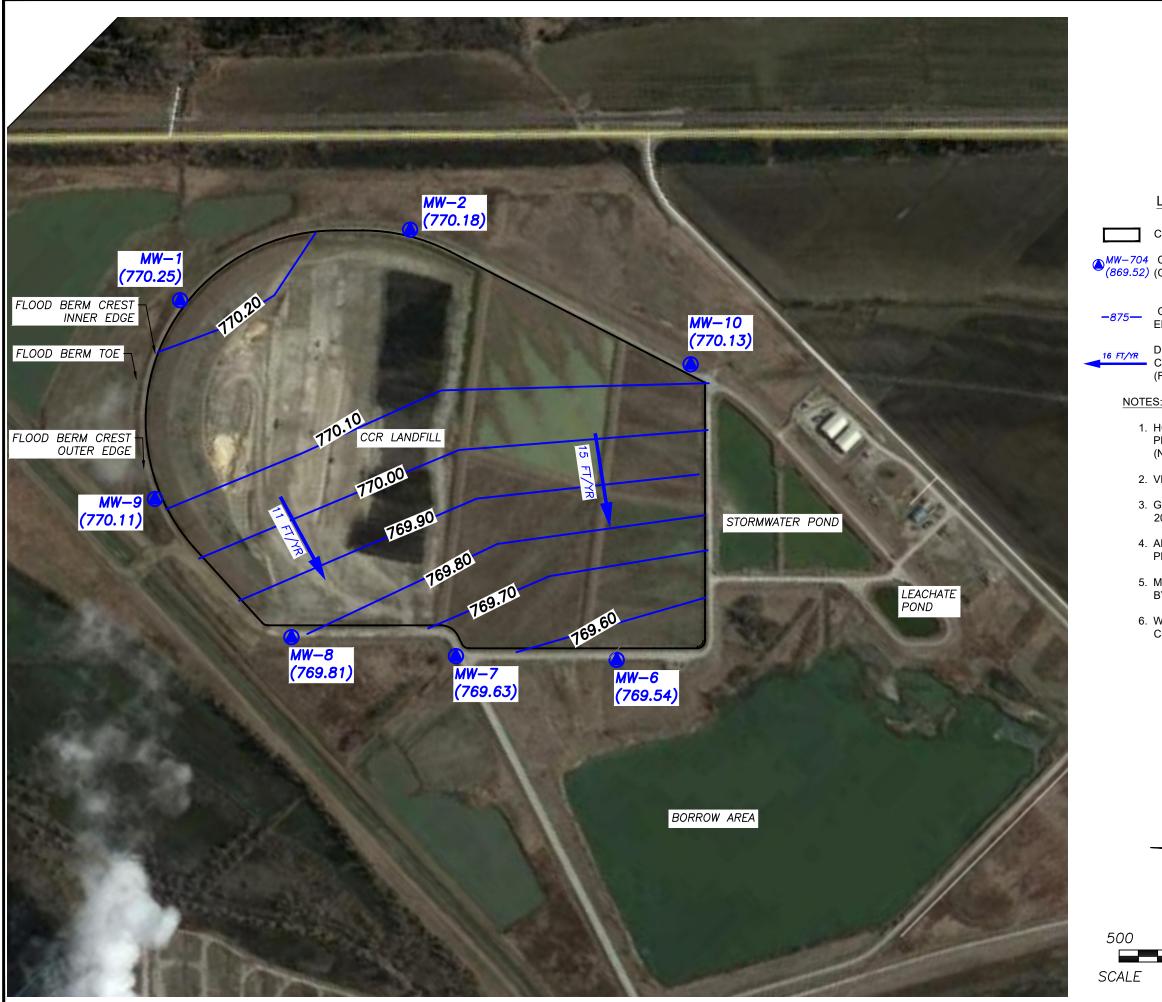
| Data Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests |
|---|--|-----------------|------------------|-------------------|--------------|----------|--------|-------------|
| Use Modified | Alpha (| 0.02 | | | | | | |
| 🗹 Test Residua | ls For Normality | y (Parametric | test only) using |) Shapiro-Wilk/Fr | ancia 🗸 🗸 | at Alpha | = 0.01 | \sim |
| Continue | Parametric if U | Jnable to Norr | nalize | | | | | |
| Never Tran Use Specifi Use Best W | r of Powers 9 or No Transfo sform ic Transformati | omation | | | | | | |
| Use Non-Parame | tric Test (Sen' | s Slope/Manr | -Kendall) when I | Non-Detects Perc | cent > 75 | | | |
| Include 95. | % Confidence | e Interval arou | und Trend Line | | | | | |
| Automatically | Remove Outli | ers (Parametri | c test only) | | | | | |
| Note: there is no "/ Mann-Kendall (the | | | | | | | | 's Slope / |

| 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 Natural Log or No Transformation Never Transform Use Specific Transformation: | | | | | | | | | | | | |
| Desea | asonalize (Ir Seasonality Seasonality | ntra- and Inter y Is Detected | Well) Or Insufficient | | IntraWell Other Stop if Background Trend Detected at Alpha = 0.05 Plot Background Data Override Standard Deviation: | | | | | | | |
| - Facility Statisti Downg - Sampli Comp - 1 | r α tuents Anal gradient (Co ng Plan paring Ind of 1 C | Non-Parametr tions per Year yzed: ompliance) W ividual Obsen) 1 of 2 (ified California | ells: vations | 2 7 7 0 1 of 4 | ☐ 2-Tailed ✓ Show D Non-Parame Non-Parame O Highes ④ Most R | tically Remove I Test Mode Deselected Dat | a Lighter Highest Bac n 100% Non est Backgro vailable, or | d Outliers | | | | |

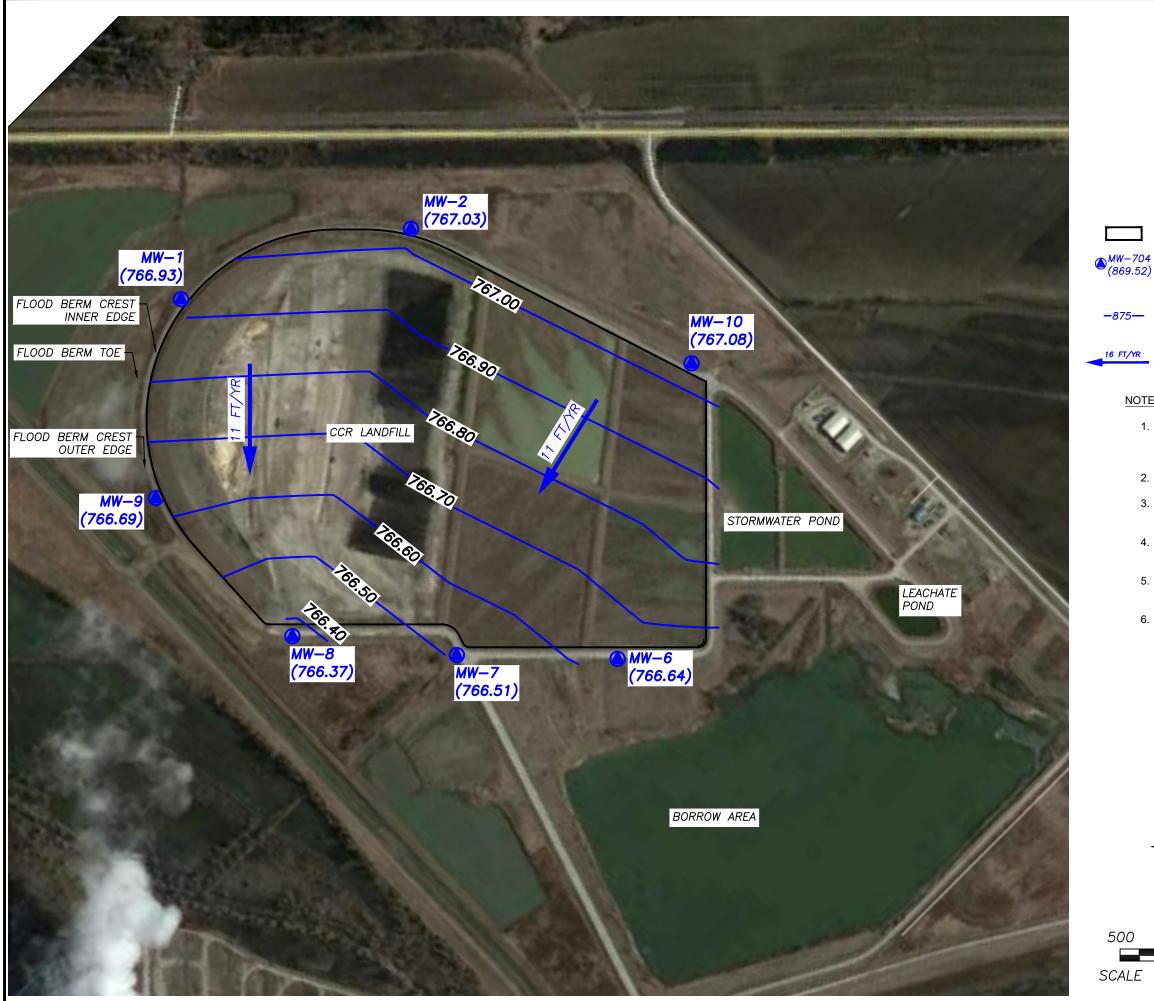
| Data Output Trend Test Control Cht Prediction Lim Tolerance | Lim Conf/Tol Int ANOVA Welchs Other Tests |
|--|---|
| Rank Von Neumann, Wilcoxon Rank Sum / Mann-Whitney | |
| Use Modified Alpha 2-Tailed Test Mode | Combine Background Wells on Mann-Whitney |
| | |
| Outlier Tests | |
| EPA 1989 Outlier Screening (fixed alpha of 0.05) | |
| • Dixon's at $\alpha = 0.05 \lor$ or if n > 22 \lor Rosner's at $\alpha = 0.01 \lor$ | Use EPA Screening to establish Suspected Outliers |
| O Tukey's Outlier Screening, with IQR Multiplier = 3.0 Use | Ladder of Powers to achieve Best W Stat |
| ✓ Test For Normality using Shapiro-Wilk/Francia ∨ at Alpha = 0.1 | ~ |
| Stop if Non-Normal | |
| O Continue with Parametric Test if Non-Normal | |
| O Tukey's if Non-Normal, with IQR Multiplier = 3.0 Use | Ladder of Powers to achieve Best W Stat |
| 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 | ✓ Label Constituents |
| Combine Dates | ✓ Label Axes |
| Use Default Constituent Names | Note Cation-Anion Balance (Piper only) |
| Use Constituent Definition File Edit | |
| | |

Jared Morrison December 16, 2022

ATTACHMENT 3 Groundwater Potentiometric Surface Maps



| | CK. BY | ı | 1 | 1 | ı | • | 1 |
|---|-------------|----------------------------|---------|--------------------------------------|-------------------------------------|--|-------------------|
| LEGEND CCR UNIT BOUNDARY (APPROXIMATE LIMITS) CCR GROUNDWATER MONITORING SYSTEM WELLS (GROUNDWATER ELEVATION) GROUNDWATER POTENTIOMETRIC SURFACE ELEVATIONS DIRECTION OF GROUNDWATER FLOW AND CALCULATED GROUNDWATER FLOW RATE | REV DATE | POLENTIOMETRIC SURFACE MAP | | | 2020 GROUNDWATER MONITORING AND 🔶 - | CORRECTIVE ACTION REPORT ADDENDLIM 🖂 🗧 📔 👘 | |
| (FEET/YEAR) | | | エンン | PROJECT TITLE | GROUN | RECTIVE. | . – |
| HORIZONTAL DATUM: MISSOURI STATE PLANE COORDINATE SYSTEM WEST ZONE (NAD 83) | SHEET TITLE | | | PROJEC | 2020 | CORF | :: ; ; ; |
| VERTICAL DATUM: NAVD 88 | | | | | | | |
| GOOGLE EARTH IMAGE DATED FEBRUARY 20, 2020 | | <u> </u> | | ALION | | | |
| APPROXIMATE BOUNDARY LOCATION PROVIDED BY BURNS & MCDONNELL | | | | יוואפ אוי | ISSOURI | | |
| MONITORING WELL LOCATIONS PROVIDED BY SHAFFER, KLINE, & WARREN WATER LEVEL MEASUREMENTS | | EVERGV MET | | ATAN GENERALING STATION | IATAN, MIS | | |
| COMPLETED ON MAY 20, 2020 | CLIENT | | | | | | |
| Hunt NORTH 0 500 1000 | | FIL cor m | DNR F16 | PH. (913) 681-0030 FAX. (913) 681-00 | Y20 VI | 2/21310/.20 DSN. BY: TO.W. CHK. BY: IDD | |
| FEET | FIGUR | REN | 10. | 2 | | | |



| | I I BK. | |
|--|---|--|
| LEGEND CCR UNIT BOUNDARY (APPROXIMATE LIMITS) CCR GROUNDWATER MONITORING SYSTEM WELLS (GROUNDWATER ELEVATION) GROUNDWATER POTENTIOMETRIC SURFACE ELEVATIONS DIRECTION OF GROUNDWATER FLOW AND CALCULATED GROUNDWATER FLOW RATE (FEET/YEAR) ES: HORIZONTAL DATUM: MISSOURI STATE PLANE COORDINATE SYSTEM WEST ZONE | SHEET IITLE POTENTIOMETRIC SURFACE MAP CCR LANDFILL (NOVEMBER 2020) CCR LANDFILL (NOVEMBER 2020) | PROJECT TILE 2020 GROUNDWATER MONITORING AND Δ - CORRECTIVE ACTION REPORT ADDENDUM Δ - |
| (NAD 83) VERTICAL DATUM: NAVD 88 | | |
| GOOGLE EARTH IMAGE DATED FEBRUARY 20, 2020 | | NOL |
| APPROXIMATE BOUNDARY LOCATION PROVIDED BY BURNS & MCDONNELL | RO, INC. | IATAN GENERATING STATION IATAN, MISSOURI |
| . MONITORING WELL LOCATIONS PROVIDED BY SHAFFER, KLINE, & WARREN | EVERGY MET | GENERATING ST IATAN, MISSOURI |
| . WATER LEVEL MEASUREMENTS COMPLETED ON NOVEMBER 9, 2020 | EVERG | IATAN G IA |
| | CLIENT | |
| PLANT NORTH 0 500 1000 | CADD FILE: | fic 2 nov20 v3.0116 12/22 |
| FEET | FIGURE NO | 3 |