2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

CCR LANDFILL
MONTROSE GENERATING STATION
CLINTON, MISSOURI

Presented To:
Evergy Metro, Inc.

SCS ENGINEERS

27213168.23 | January 2024

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

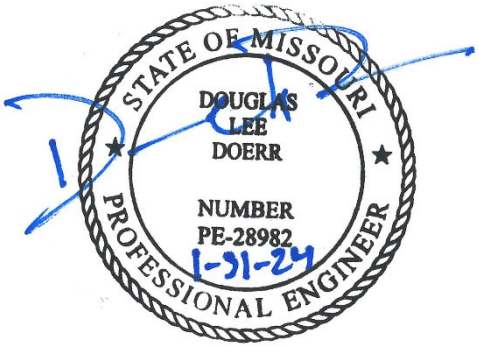
CERTIFICATIONS

I, John R. Rockhold, being a qualified groundwater scientist and Registered Geologist in the State of Missouri, do hereby certify that the 2023 Annual Groundwater Monitoring and Corrective Action Report for the CCR Landfill at the Montrose 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 2023 Annual Groundwater Monitoring and Corrective Action Report for the CCR Landfill at the Montrose 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 31, 2024	NA	Original

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Section **Page**

Appendices

1 INTRODUCTION

This 2023 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 2023 Annual Groundwater Monitoring and Corrective Action Report for the CCR Landfill at the Montrose 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, 2023), 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, 2023), 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	Monitoring Well	Constituent	ASD
Fall 2022	MW-601	Chloride	Successful
Fall 2022	MW-602	Fluoride	Successful
Fall 2022	MW-603	Fluoride	Successful
Fall 2022	MW-604	Fluoride	Successful
Fall 2022	MW-605	Fluoride	Successful

Monitoring Event	Monitoring Well	Constituent	ASD
Spring 2023	MW-601	Chloride	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 § 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 2023.

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 (2023). Samples collected in 2023 were collected and analyzed for Appendix III detection monitoring constituents. Results of the sampling events are provided in **Appendix B**, **Table 1** (Appendix III Detection Monitoring Results), and **Table 2** (Detection Monitoring Field Measurements). These tables include the Fall 2022 semiannual detection monitoring event verification sample data collected and analyzed in 2023; the Spring 2023 semiannual detection monitoring data, and verification sample data; and, the Fall 2023 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 2023. Only detection monitoring was conducted in 2023.

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 2022 verification sampling and analyses per the certified statistical method,

b. completion of the statistical evaluation of the Fall 2022 semiannual detection monitoring sampling and analysis event per the certified statistical method,

c. completion of the 2022 Annual Groundwater Monitoring and Corrective Action Report,

d. completion of a successful alternative source demonstration for the Fall 2022 semiannual detection monitoring sampling and analysis event,

e. completion of the Spring 2023 semiannual detection monitoring sampling and analysis event with subsequent verification sampling per the certified statistical method,

f. completion of the statistical evaluation of the Spring 2023 semiannual detection monitoring sampling and analysis event per the certified statistical method,

g. initiation of the Fall 2023 semiannual detection monitoring sampling and analysis event, and

h. . completion of a successful alternative source demonstration for the Spring 2023 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 (2024).

Completion of verification sampling and data analysis, and the statistical evaluation of Fall 2023 detection monitoring sampling and analysis event, and, if required, alternative source demonstration(s). Semiannual Spring and Fall 2024 groundwater sampling and analysis. Completion of the statistical evaluation of the Spring 2024 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 § 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 Landfill Groundwater Monitoring Alternative Source Demonstration Report November 2022 Groundwater Monitoring Event, CCR Landfill, Montrose Generating Station (June 2023).

C.2 CCR Landfill Groundwater Monitoring Alternative Source Demonstration Report May 2023 Groundwater Monitoring Event, CCR Landfill, Montrose Generating Station (December 2023).

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 SUPPLEMENTAL INFORMATION AND DATA

In addition to the requirements listed in 40 CFR 257.90(e), supplemental information has been included in this section in recognition of comments received by Evergy from the USEPA on January 11, 2022. The USEPA indicated in their comments that the GWMCA Report contains 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 within this GWMCA report. This supplemental information and data are provided as specified below:

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

  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:

  - January 2023 – First verification sampling for the Fall 2022 detection monitoring event.
  - February 2023 – Second verification sampling for the Fall 2022 detection monitoring event.
  - May 2023 – Spring 2023 semiannual detection monitoring sampling event.
  - July 2023 – First verification sampling for the Spring 2023 detection monitoring sampling event.
  - August 2023 - Second verification sampling for Spring 2023 detection monitoring sampling event.
  - November 2023 - Fall 2023 semiannual detection monitoring sampling event.

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

  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 2023 included the following:

  - Fall 2022 semiannual detection monitoring statistical analyses.
  - Spring 2023 semiannual detection monitoring statistical analyses.

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

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

  - **Figure 2** - Spring 2023 semiannual detection monitoring sampling event.
  - **Figure 3** - Fall 2023 semiannual detection monitoring sampling event.

4 GENERAL COMMENTS

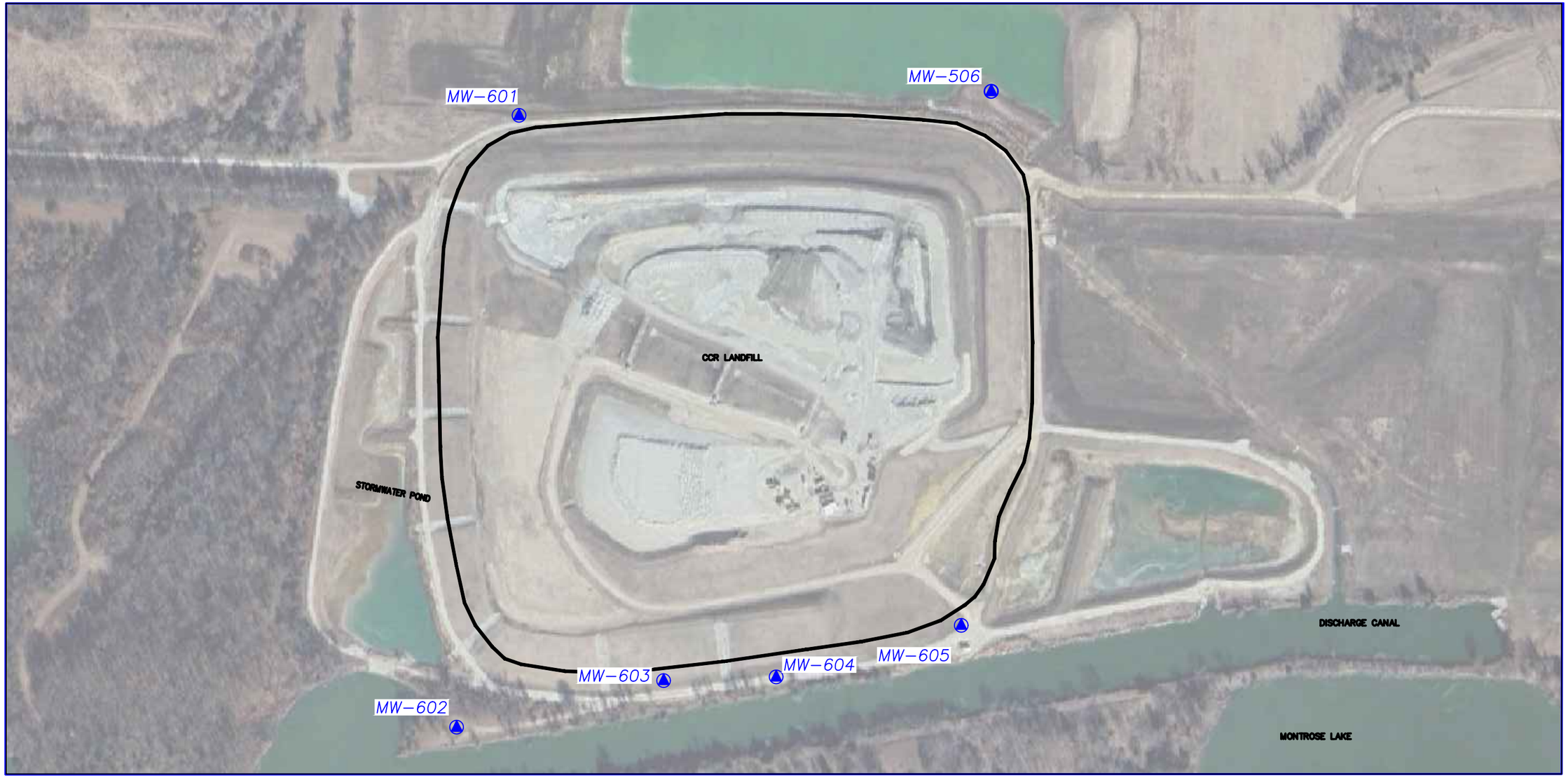
This report has been prepared and reviewed under the direction of a qualified groundwater scientist and qualified professional engineer. The information contained in this report is a reflection of the conditions encountered at the Montrose Generating Station at the time of fieldwork. This report includes 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 Montrose 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 2023)
Figure 3: Potentiometric Surface Map (November 2023)



LEGEND:

CCR LANDFILL UNIT BOUNDARY (APPROXIMATE)

MW-506 CCR GROUNDWATER MONITORING WELL SYSTEM

NOTES:

1. HORIZONTAL DATUM: MISSOURI STATE PLANE COORDINATE SYSTEM, WEST ZONE (NAD 83)
2. VERTICAL DATUM: NAVD 88
3. AERIAL IMAGE FROM GOOGLE EARTH DATED FEBRUARY 2023.
4. APPROXIMATE BOUNDARY LOCATIONS PROVIDED BY AECOM.
5. MONITOR WELL LOCATIONS PROVIDED BY SHAFFER, KLINE, & WARREN SURVEY DATED JULY 21, 2017.

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SHEET TITLE
SITE MAP
CCR LANDFILL
CCR GROUNDWATER MONITORING SYSTEM

PROJECT TITLE
2023 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

CLIENT
EVERGY METRO, INC.
MONTROSE GENERATING STATION
MONTROSE, MISSOURI

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

PROJ. NO.	DWN. BY:	CHK. BY:	DSN. BY:	Q/A RVW BY:	PROJ. MGR
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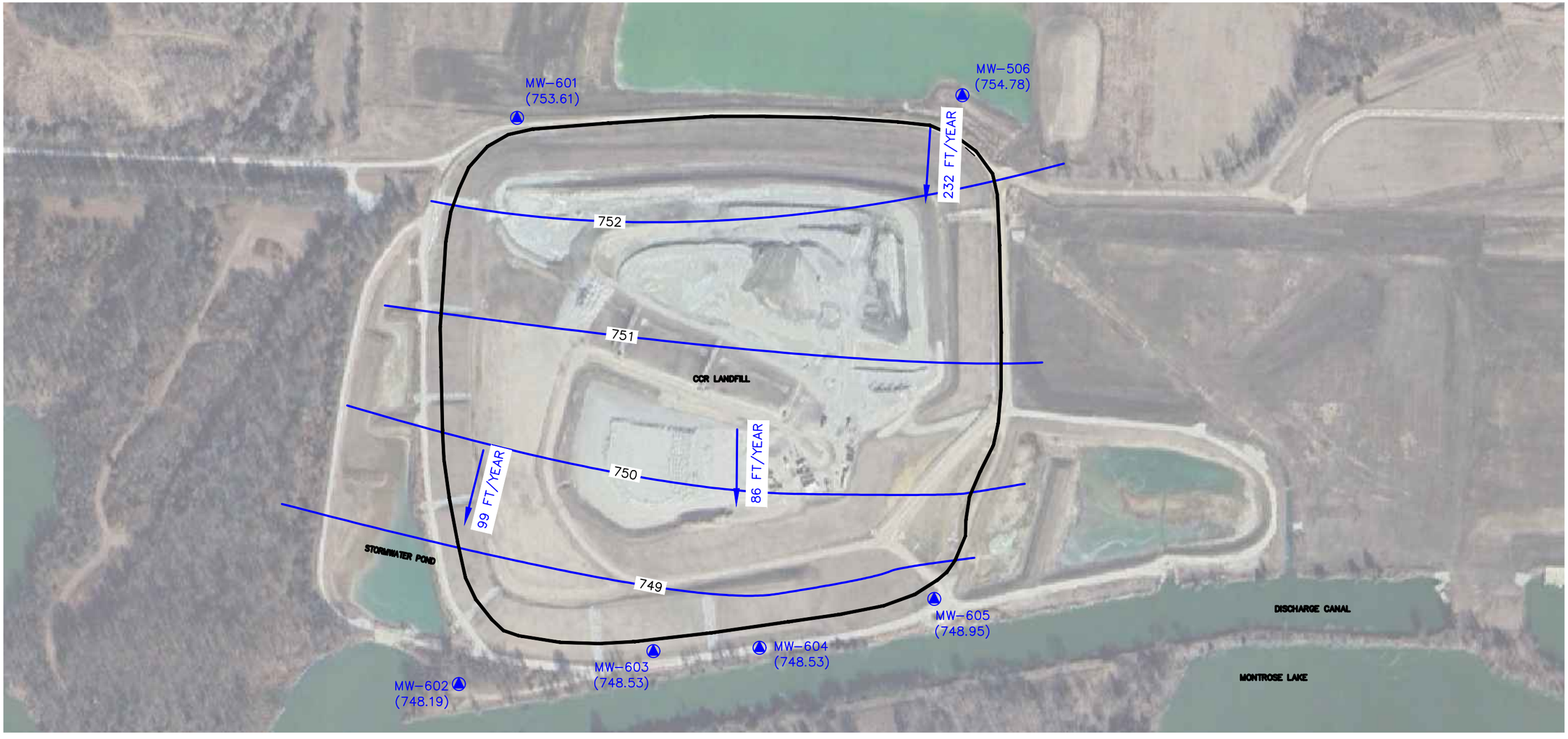

LEGEND:

- CCR LANDFILL UNIT BOUNDARY (APPROXIMATE)
- MW–506 (747.77) — CCR GROUNDWATER MONITORING WELL SYSTEM (GROUNDWATER ELEVATION)
- 65 FT/YR — GROUNDWATER FLOW DIRECTION AND CALCULATED AND CALCULATED GROUNDWATER FLOW RATE (FEET/YEAR)

NOTES:

1. HORIZONTAL DATUM: MISSOURI STATE PLANE COORDINATE SYSTEM, WEST ZONE (NAD 83)
2. VERTICAL DATUM: NAVD 88
3. AERIAL IMAGE FROM GOOGLE EARTH DATED FEBRUARY 2023.
4. APPROXIMATE BOUNDARY LOCATIONS PROVIDED BY AECOM.
5. MONITOR WELL LOCATIONS PROVIDED BY SHAFFER, KLINE, & WARREN SURVEY DATED JULY 21, 2017.
6. WATER LEVEL MEASUREMENTS COMPLETED ON NOVEMBER 14, 2023.

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SHEET TITLE
PIEZOMETRIC SURFACE MAP (MAY 2023) CCR LANDFILL

PROJECT TITLE
2023 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

CLIENT
EVERGY METRO, INC.
MONTROSE GENERATING STATION
MONTROSE, MISSOURI

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

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DSN. BY: TCW | CHK. BY: JRR | PROJ. MGR: JRF

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FIGURE NO. **2**

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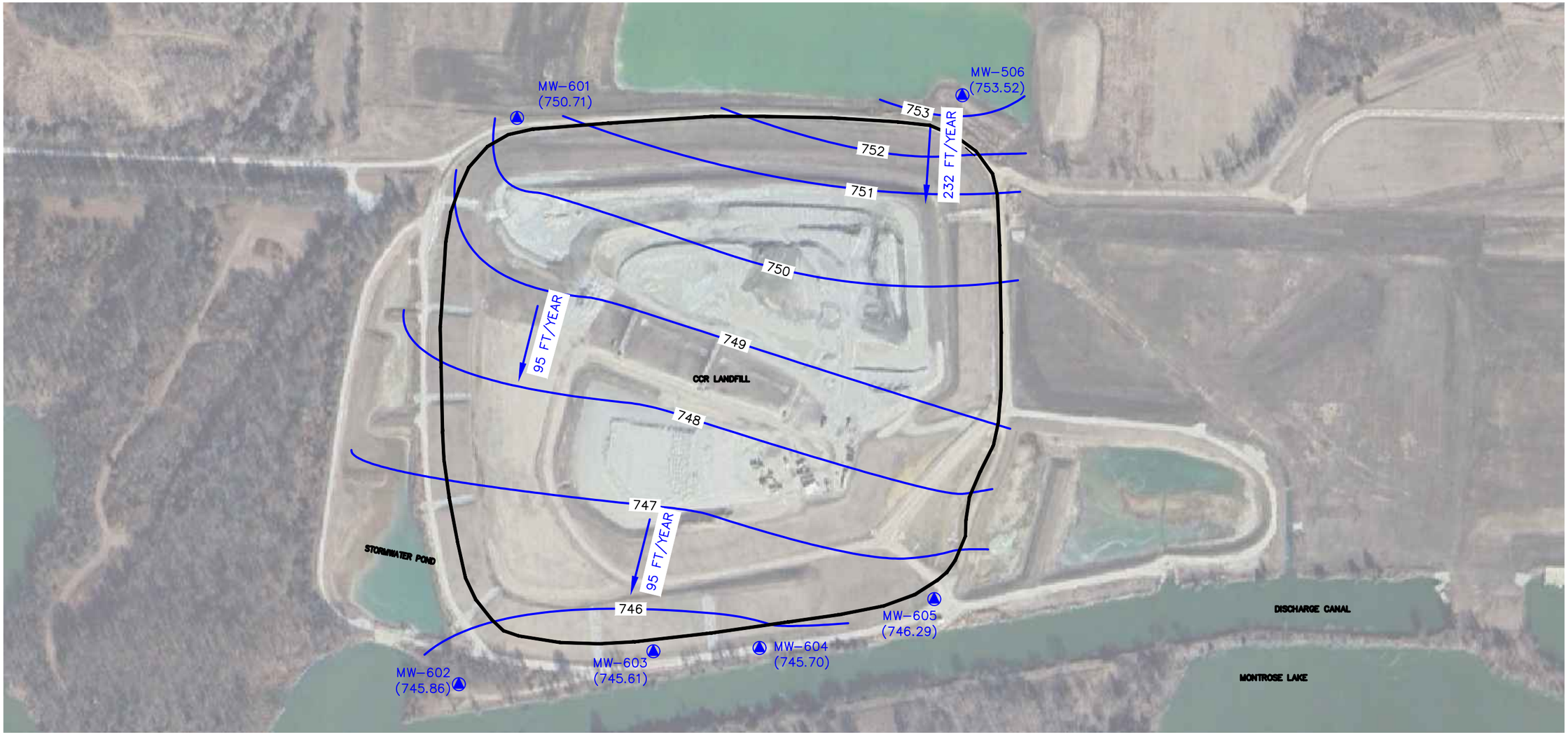

LEGEND:

- CCR LANDFILL UNIT BOUNDARY (APPROXIMATE)
- MW–506 (747.77) — CCR GROUNDWATER MONITORING WELL SYSTEM (GROUNDWATER ELEVATION)
- 65 FT/YR — GROUNDWATER FLOW DIRECTION AND CALCULATED AND CALCULATED GROUNDWATER FLOW RATE (FEET/YEAR)

NOTES:

1. HORIZONTAL DATUM: MISSOURI STATE PLANE COORDINATE SYSTEM, WEST ZONE (NAD 83)
2. VERTICAL DATUM: NAVD 88
3. AERIAL IMAGE FROM GOOGLE EARTH DATED FEBRUARY 2023.
4. APPROXIMATE BOUNDARY LOCATIONS PROVIDED BY AECOM.
5. MONITOR WELL LOCATIONS PROVIDED BY SHAFFER, KLINE, & WARREN SURVEY DATED JULY 21, 2017.
6. WATER LEVEL MEASUREMENTS COMPLETED ON NOVEMBER 14, 2023.

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SHEET TITLE
POTENTIOMETRIC SURFACE MAP (NOVEMBER 2023) CCR LANDFILL

PROJECT TITLE
2023 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

CLIENT
EVERGY METRO, INC.
MONTROSE GENERATING STATION
MONTROSE, MISSOURI

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

PROJ. NO. 27213168.20 | DWN. BY: SO | QA/QC BY: JRR
DSN. BY: TCW | CHK. BY: JRR | PROJ. MGR: JRF

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DATE: 1/16/24

FIGURE NO. **3**

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APPENDIX B

TABLES

Table 1
CCR Landfill
Appendix III Detection Monitoring Results
Evergy Montrose Generating Station

Well Number	Sample Date	Appendix III Constituents						
		Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	pH (S.U.)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)
MW-506	1/10/2023	---	---	---	*<0.640 (M)	**5.46	---	---
MW-506	2/7/2023	---	---	---	*<0.067 (EM)	**5.56	---	---
MW-506	5/16/2023	0.0880 (J)	368	88.8	0.134 (J)	5.63	1920	2530
MW-506	7/10/2023	---	---	---	*0.0918 (J)	**5.83	---	---
MW-506	11/14/2023	0.102 (J)	372	84.9 (J-)	<1.50/0.130 (J)	5.96	1800	3030
MW-601	1/10/2023	---	---	*71.1	*<0.640 (M)	**5.24	---	---
MW-601	2/7/2023	---	---	*76.6	*<0.067 (EM)	**5.75	---	---
MW-601	5/16/2023	0.126 (J)	462	76.1	0.347	5.45	3170	4070
MW-601	7/10/2023	---	---	*64.3	---	**5.79	---	---
MW-601	8/10/2023	---	---	*70.8	---	**5.39	---	---
MW-601	11/14/2023	0.122 (J)	477	56.4	0.396	5.98	2860	5020
MW-602	1/10/2023	---	---	---	*<0.640 (M)	*5.75	---	---
MW-602	2/8/2023	---	---	---	*0.35 (E)	**5.75	---	---
MW-602	5/16/2023	4.20	280	4.29	0.144 (J)	5.91	1170	1700
MW-602	11/14/2023	4.24	291	4.00	0.105 (J)	6.06	836	1640
MW-603	1/10/2023	---	---	*6.08 (J)	*<0.640 (M)	**4.70	---	---
MW-603	2/7/2023	---	---	*6.67 (J)	*1.1 (E)	**5.19	---	---
MW-603	5/16/2023	5.11	389	6.27	0.57	4.82	2200	2660
MW-603	11/14/2023	5.47	398	7.79 (J)	0.671 (J)	4.68	1900	2920
MW-604	1/10/2023	---	---	*15.9	*<0.640 (M)	**5.56	---	---
MW-604	2/7/2023	---	---	*16.5	*0.98 (E)	**6.06	---	---
MW-604	5/16/2023	4.57	483	16.4	0.433	5.95	2060	2830
MW-604	7/10/2023	---	*459	---	---	**6.08	---	---
MW-604	11/14/2023	4.30	494	13.7	0.439	5.90	2090	3380
MW-605	1/10/2023	---	*448	---	*<0.640 (M)	*5.41	---	---
MW-605	2/7/2023	---	*428	---	*<0.69 (E)	**5.78	---	---
MW-605	5/16/2023	1.57	448	28.4	0.226	5.50	2200	2940
MW-605	7/10/2023	---	*426	---	---	**5.59	---	---
MW-605	11/14/2023	1.50	462	30.2	0.220	5.43	1950	3050

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

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

mg/L - miligrams per liter

pCi/L - picocuries per liter

S.U. - Standard Units

--- Not Sampled

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

(M) - Method Detection Limit (MDL)

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

(E) - Eurofins Laboratories data

(J-) – Based on the Stage II data quality review the sample result is potentially biased low.

Table 2
CCR Landfill
Detection Monitoring Field Measurements
Evergy Montrose Generating Station

Well Number	Sample Date	pH (S.U.)	Specific Conductivity (µS)	Temperature (°C)	Turbidity (NTU)	ORP (mV)	DO (mg/L)	Water Level (ft btoc)	Groundwater Elevation (ft NGVD)
MW-506	1/10/2023	**5.46	3560	13.58	24.6	193	1.42	6.85	754.72
MW-506	2/7/2023	**5.56	3120	13.90	21.9	201	1.68	6.75	754.82
MW-506	5/16/2023	5.63	3440	14.09	72.0	234	0.37	6.79	754.78
MW-506	7/10/2023	**5.83	3320	18.41	17.7	214	0.00	7.62	753.95
MW-506	11/14/2023	5.96	3210	17.54	15.7	231	0.00	8.05	753.52
MW-601	1/10/2023	**5.24	4780	15.57	37.9	250	1.58	11.83	753.28
MW-601	2/7/2023	**5.75	4350	14.91	35.0	180	0.52	11.45	753.66
MW-601	5/16/2023	5.45	4270	15.66	122.0	247	0.52	11.50	753.61
MW-601	7/10/2023	**5.79	4600	18.10	8.7	228	7.23	13.24	751.87
MW-601	8/10/2023	**5.39	4580	21.30	13.3	206	0.85	13.81	751.30
MW-601	11/14/2023	5.98	4580	16.51	33.5	240	3.37	14.40	750.71
MW-602	1/10/2023	*5.75	2080	14.08	16.5	113	0.21	5.02	750.84
MW-602	2/8/2023	**5.75	2080	13.98	21.3	105	0.79	4.76	751.10
MW-602	5/16/2023	5.91	1940	15.35	47.0	107	0.13	7.67	748.19
MW-602	11/14/2023	6.06	1780	19.23	44.2	78	7.66	10.00	745.86
MW-603	1/10/2023	**4.70	3230	15.62	16.5	242	0.00	12.81	750.83
MW-603	2/7/2023	**5.19	5020	14.57	6.3	285	0.00	12.30	751.34
MW-603	5/16/2023	4.82	3170	15.14	13.5	319	2.41	15.11	748.53
MW-603	11/14/2023	4.68	3210	16.69	8.8	276	3.19	18.03	745.61
MW-604	1/10/2023	**5.56	3280	15.72	35.2	237	0.00	12.45	750.94
MW-604	2/7/2023	**6.06	5240	15.76	10.0	150	0.00	12.09	751.30
MW-604	5/16/2023	5.95	3220	15.30	7.6	232	0.00	14.86	748.53
MW-604	7/10/2023	**6.08	3220	17.62	10.5	252	0.00	16.52	746.87
MW-604	11/14/2023	5.90	3270	17.95	0.2	245	3.28	17.69	745.70
MW-605	1/10/2023	*5.41	3240	16.09	2.6	186	0.00	13.18	750.93
MW-605	2/7/2023	**5.78	5270	14.00	0.0	273	0.00	12.96	751.15
MW-605	5/16/2023	5.50	3220	15.78	6.4	182	2.05	15.16	748.95
MW-605	7/10/2023	**5.59	3200	18.86	8.2	179	0.00	16.58	747.53
MW-605	11/14/2023	5.43	3230	17.27	4.0	204	3.85	17.82	746.29

* 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 DEMONSTRATIONS

C.1 CCR Landfill Groundwater Monitoring Alternative Source Demonstration Report November 2022 Groundwater Monitoring Event, CCR Landfill, Montrose Generating Station (June 2023)

C.2 CCR Landfill Groundwater Monitoring Alternative Source Demonstration Report May 2023 Groundwater Monitoring Event, CCR Landfill, Montrose Generating Station (December 2023)

APPENDIX C.1

CCR Groundwater Monitoring Alternative Source Demonstration Report November 2022 Groundwater Monitoring Event, CCR Landfill, Montrose Generating Station (June 2023)

CCR GROUNDWATER MONITORING
ALTERNATIVE SOURCE DEMONSTRATION REPORT
NOVEMBER 2022 GROUNDWATER MONITORING EVENT

CCR LANDFILL

Montrose Generating Station
Evergy Metro, Inc.
Clinton, Missouri

SCS ENGINEERS

June 16, 2023
File No. 27213168.23

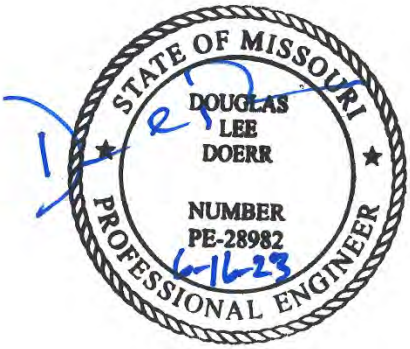
8575 W. 110th Suite 100
Overland Park, KS 66210
913-749-0700

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 Montrose 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 Montrose 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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Appendices

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 an 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 Montrose Generating Station has been completed in substantial compliance with the "Statistical Method Certification by A Qualified Professional Engineer" dated October 12, 2017. Detection monitoring groundwater samples were collected on November 8, 2022. Review and validation of the results from the November 2022 Detection Monitoring Event was completed on December 20, 2022, 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 10, 2023, and February 7, 2023.

The second verification sample for certain analytes was split between three laboratories, Pace National, Pace Laboratories (Lenexa), and Eurofins. This split sampling was completed in an effort to provide undiluted analytical data to meet previous laboratory reporting limits and for the reporting limit to be below the prediction limits. Pace National and Eurofins completed anions analyses by EPA Method 9056A, and Pace Laboratories completed anions analyses by EPA Method 300.1. None of the laboratories were able to meet the previous reporting limit of 0.1 mg/L for fluoride. However, Eurofins came the closest with a reporting limit of 0.2 mg/L and a method detection limit of 0.067 mg/L. Therefore, the Eurofins fluoride data was utilized for the SSI determination.

The completed statistical evaluation identified two Appendix III constituents above their prediction limits.

Monitoring Well Constituents	*UPL	Observation November 8, 2022	1st Verification January 10, 2023	2nd Verification February 7, 2023
MW-601				
Chloride	56.74	62.4	71.1	76.6
MW-602				
Fluoride	0.148	<0.15 (RL), 0.141(J)	<0.640(M)	0.352(E)
MW-603				
Fluoride	0.6847	1.63	<0.640(M)	1.1(E)
MW-604				
Fluoride	0.5483	1.58	<0.640(M)/<0.640(M)**	0.98(E)/0.95(E)**
MW-605				
Fluoride	0.2313	<1.5 (RL), 1.46(J)	<0.640(M)/<0.640(M)**	0.69(E)/0.72(E)**

*UPL – Upper Prediction Limit
** Duplicate Sample
(J) – Estimated Value
(E) – Eurofins Split Laboratory Sample, Lower Reporting Limit than Primary Laboratory Pace National
(M) – Method Detection Limit
((RL) – Reporting 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 an SSI above background prediction limits for chloride at monitoring well MW-601 and SSIs above background prediction limits for fluoride at MW-602, MW-603, MW-604, and MW-605.

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 Montrose Generating Station, there are multiple lines of supporting evidence to indicate the above SSIs were not caused by a release from the CCR Landfill. Select multiple lines of supporting evidence are described as follows.

3.1 LABORATORY DILUTION INTERFERENCE

Data validation was performed on data from the November 2022 Detection Monitoring Event and subsequently the first and second verification sampling events. Although the data validation process did not identify specific issues with the reported data (the laboratory data was validated as acceptable as reported), there were several on-going issues with the fluoride data reported by the primary laboratory (Pace National). Beginning with the May 2020 sampling event, the laboratory reporting limit (RL) for fluoride was increased from 0.10 to 0.15 mg/L, which is above the upper prediction limit (UPL) for MW-506 and MW-602. Then again in May 2022 the laboratory RL increased from 0.15 to 0.30 mg/L, which is above the UPL for MW-506, MW-602 and MW-605. Therefore, these wells were resampled and analyzed in July 2022 to achieve RLs below the UPL.

The November 2022 RL was 0.15 mg/L without sample dilution. However, all but one of the samples (MW-602) were diluted by the laboratory which brought the RL up to 0.75 mg/L for MW-506 (5x dilution) and 1.5 mg/L (10x dilution) for MW-601 and MW-603 through MW-605. Because the RLs and MDLs were above the prediction limit, the first verification sampling event (January 2023) included fluoride for all six network wells. For this event, all the samples were diluted 10x by the laboratory and the RL for fluoride for the first verification event was 1.5 mg/L with a method detection limit (MDL) of

0.64 mg/L. Fluoride was not detected above the RL or MDL in any of the samples from the January 2023 verification sampling event.

The second verification sampling event (February 2023) split fluoride samples between three laboratories: Pace National (historically the primary laboratory), Pace Laboratories (Lenexa), and Eurofins. This split sampling was completed in an effort to provide undiluted analytical data to meet previous laboratory RLs and for the RL to be below the prediction limits. Pace National and Eurofins completed analyses by EPA Method 9056A, and Pace Lenexa completed anions analyses by EPA Method 300.1. None of the laboratories met the RLs of 0.1 or 0.15 mg/L for fluoride. Pace National diluted the samples by 10x and did not detect fluoride above the RL (1.5 mg/L) or the MDL (0.64 mg/L). Pace Lenexa analyzed the samples without dilution with an RL of 0.20 mg/L and an MDL of 0.12 mg/L. However, Pace Lenexa utilized a different analytical method than historical analyses and reported varying concentrations of fluoride which deviated, drastically, from historical fluoride trends and other analyses obtained during the Fall 2022 sampling event.

Results from the third laboratory, Eurofins, indicated that monitoring wells MW-506 and MW-601 were both below the RL (0.20 mg/L). Monitoring wells MW-602 and MW-603 both had fluoride concentrations detected above the RL. However, these exceedances were not observed within other confirmation sampling results.

The results summary from the split sampling effort is provided below:

Split Sample Results for Fluoride			
Well ID	**Pace National** RL (1.5) / MDL (0.64)	**Pace Lenexa** RL (0.20) / MDL (0.12)	**Eurofins** RL (0.20) / MDL (0.067)
MW-506	<1.5 / <0.64	2.7	<0.20 / 0.067
MW-601	<1.5 / <0.64	2.9	<0.20 / 0.067
MW-602	<1.5 / <0.64	<0.20 / <0.12	0.35
MW-603	<1.5 / <0.64	<0.20 / <0.12	1.1
MW-604	<1.5 / <0.64 | <1.5* / <0.64*	2.7 | 2.7*	0.98 | 0.95*
MW-605	<1.5 / <0.64 | <1.5* / <0.64*	2.6 | <0.20* / <0.12*	0.69 | 0.72*

All Units in mg/L
* Duplicate Sample

Based on the inconsistency and significant variation in the reported results, it is our opinion that the SSIs over background levels for fluoride likely resulted from errors or issues associated with the laboratory analysis and were not caused by the CCR landfill.

3.2 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.

An SSI was identified in upgradient well MW-601 for chloride. Therefore, box and whiskers plots for chloride in MW-601 and the other upgradient and downgradient monitoring wells were prepared to allow comparison of the chloride concentrations between wells. This comparison between wells indicates the chloride concentrations in well MW-601 are below the range of chloride in upgradient well MW-506 and similar to the range of monitoring well MW-605. Box and whisker plots are provided in **Appendix A**. Additionally, MW-601 is located upgradient of the landfill as shown on the potentiometric surface map provided in **Appendix B**. This demonstrates that a source other than the CCR Landfill caused the SSI in chloride over background levels, or that the SSIs resulted from error in sampling, analysis, statistical evaluation, or that the SSI resulted from natural variation in groundwater quality.

SSIs were identified for fluoride in monitoring wells MW-602 through MW-605. Therefore, box and whiskers plots for fluoride were prepared for these wells plus upgradient network monitoring wells MW-506 and MW-601 and non-network upgradient monitoring well MW-701. This comparison between wells indicates the fluoride concentrations in well MW-602 through MW-605 are within or below the range of fluoride concentrations in upgradient wells. This demonstrates that a source other than the CCR Landfill likely caused the SSIs over background levels for chloride and fluoride, or that the SSIs resulted from error in sampling, analysis, statistical evaluation, or that the SSI resulted from natural variation in groundwater quality. Box and whisker plots are provided in **Appendix A**.

3.3 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 network monitoring wells MW-506, MW-601 through MW-605, non-network upgradient well MW-701, and landfill leachate is provided in **Appendix C** along with the analytical results. The diagram indicates the groundwater from these wells (both upgradient and downgradient) do not exhibit the same geochemical characteristics as the leachate. The groundwater and the leachate plot in 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 likely caused the SSIs over background levels for chloride and fluoride, or that the SSIs resulted from

error in sampling, analysis, statistical evaluation, or that the SSI resulted from natural variation in groundwater quality.

3.4 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. 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 for chloride in MW-601 and the other upgradient and downgradient monitoring wells were prepared to allow comparison of the chloride concentrations between wells. This comparison between wells indicates the chloride concentrations in well MW-601 are below the range of chloride in upgradient well MW-506 and similar to range of monitoring well MW-605. Time series plots are provided in **Appendix D**. Additionally, MW-601 is located upgradient of the landfill as shown on the potentiometric surface map provided in **Appendix B**. This demonstrates that a source other than the CCR Landfill likely caused the SSI in chloride over background levels, or that the SSIs resulted from error in sampling, analysis, statistical evaluation, or that the SSI resulted from natural variation in groundwater quality.

Time series plots for fluoride were prepared for network monitoring wells MW-602 through MW-605, upgradient network monitoring wells MW-506 and MW-601, and non-network upgradient monitoring well MW-701. This comparison between wells indicates the fluoride concentrations in well MW-602 through MW-605 are within or below the range of fluoride concentrations in upgradient wells. This demonstrates that a source other than the CCR Landfill likely caused the SSIs over background levels for chloride and fluoride, or that the SSIs resulted from error in sampling, analysis, statistical evaluation, or that the SSI resulted from natural variation in groundwater quality. Box and whisker plots are provided in **Appendix D**.

4 CONCLUSIONS

Our opinion is that a sufficient body of evidence is available and presented above to demonstrate that a source other than the CCR Landfill likely caused the SSIs over background levels, or that the SSIs resulted from error in sampling, analysis, statistical evaluation, or that the SSIs resulted from 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

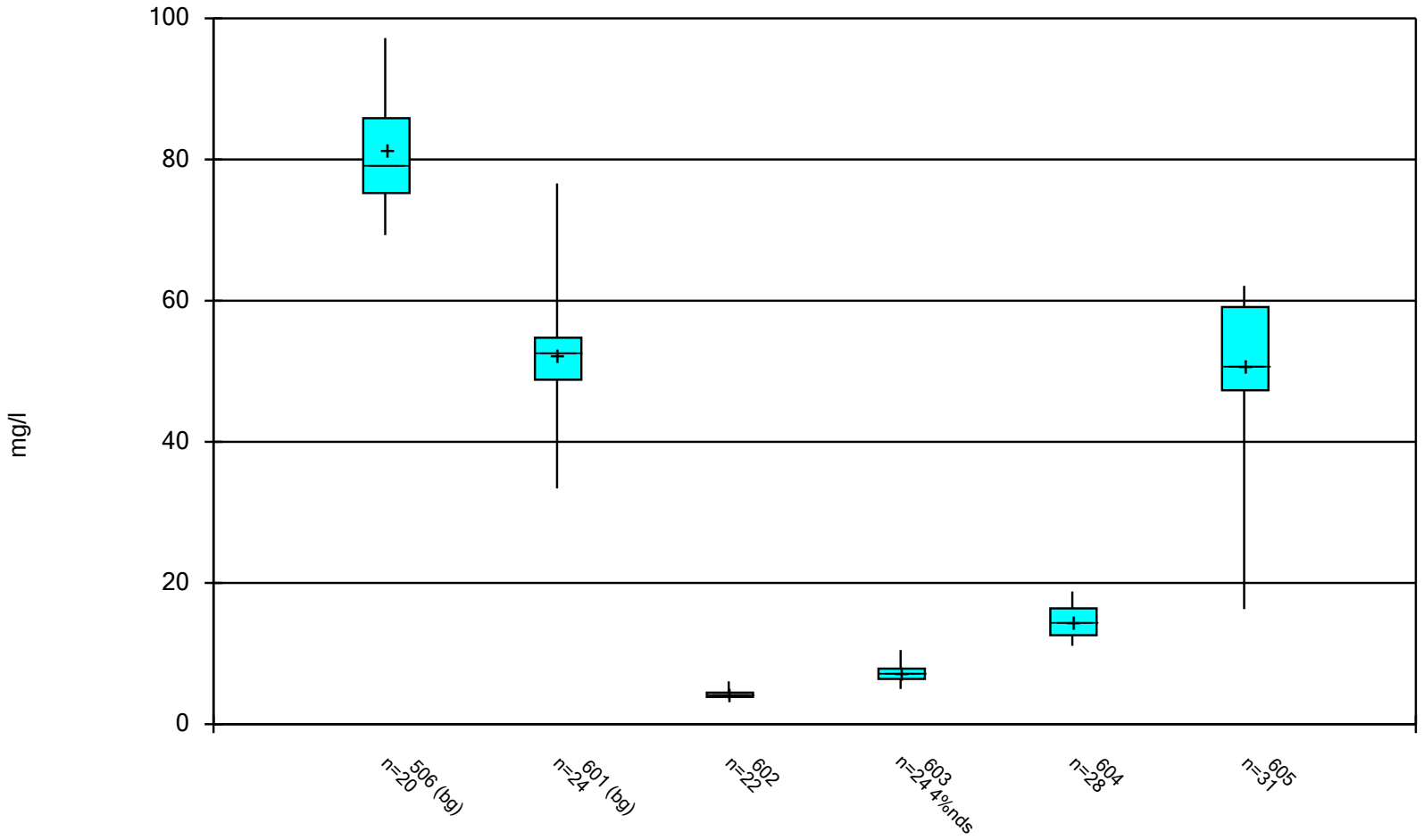
This report has been prepared and reviewed under the direction of a qualified groundwater scientist and qualified professional engineer. Please note that SCS Engineers does not warrant the work of regulatory agencies or other third parties supplying information used in the assimilation of this report.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

The signatures of the certifying registered geologist and professional engineer on this document represent 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: Chloride Analysis Run 4/19/2023 12:31 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Box & Whiskers Plot

Constituent: Chloride (mg/l) Analysis Run 4/19/2023 12:32 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	506 (bg)	601 (bg)	602	603	604	605
12/16/2015	92.4	52.5	4.48	7.33	15.6	
12/17/2015						43.9
2/16/2016	97.2	53	4.38	7.65	15.5	45.7
5/23/2016	84.7	50.6	4.29	7.64	13.3	47.3
8/22/2016	77.5	45.5	4.65	7.9	11.7	46.5
11/7/2016			4.35	7.67	12.5	48.2
11/8/2016	73.1	47.5				
2/7/2017	79	49	4.04	7.35	12.5	48
5/1/2017	79.2					
5/2/2017		51.1	4.69	7.67	13.3	48.7
7/31/2017	71.9	52.7	4.28	8.03	11.1	49.1
10/2/2017	74.4	52.4	6.06	8.37	12.1	48.7
11/15/2017	77.7	54.2	4.93	7.83	12.8	48.8
12/29/2017			4.44			
5/14/2018	79	55	4.14	7.16	12.3	47.8
11/19/2018	83.1	49.6	3.97	6.76	13.3	51.7
1/10/2019			3.71			50.9
3/13/2019						52.4
5/21/2019	76	55.5	4.11	8.24	15.5	55.4
7/15/2019		56.5		8.75	12.7	57.8
8/19/2019		54.5		6.54		57.9
11/5/2019	74.5	52.8	3.69	6.66	12.5	59.1
1/14/2020						60.5
2/3/2020						59.8
5/21/2020	69.3	53.8	3.99	5.93	13.3	60.2
7/14/2020						62.1
8/26/2020						61.6
11/10/2020	84.5	33.4	3.77	6.27	14.5	59.7
2/3/2021						59.3
3/1/2021						58.2
5/17/2021			3.95	6.17	15.6	52.5
5/18/2021	91.3	48.6				
7/19/2021					14.7	
11/16/2021	86.3	36.6	3.65	5.53	16.3	46.6
1/24/2022					18.8	
3/1/2022					17.2	
5/10/2022	88.8	39.8	4.22	<10	16.9	16.3
7/13/2022				6.64	17.4	
8/16/2022					17.5	36.7
11/8/2022	85.4	62.4	3.73	10.5	17.2	29.7
1/10/2023		71.1		6.08	15.9	
2/7/2023		76.6			16.5	
Median	79.1	52.6	4.18	7.34	14.6	50.9
LowerQ.	75.25	48.8	3.86	6.405	12.6	47.3
UpperQ.	85.85	54.75	4.46	7.865	16.4	59.1
Min	69.3	33.4	3.65	5	11.1	16.3
Max	97.2	76.6	6.06	10.5	18.8	62.1
Mean	81.27	52.28	4.251	7.236	14.59	50.68

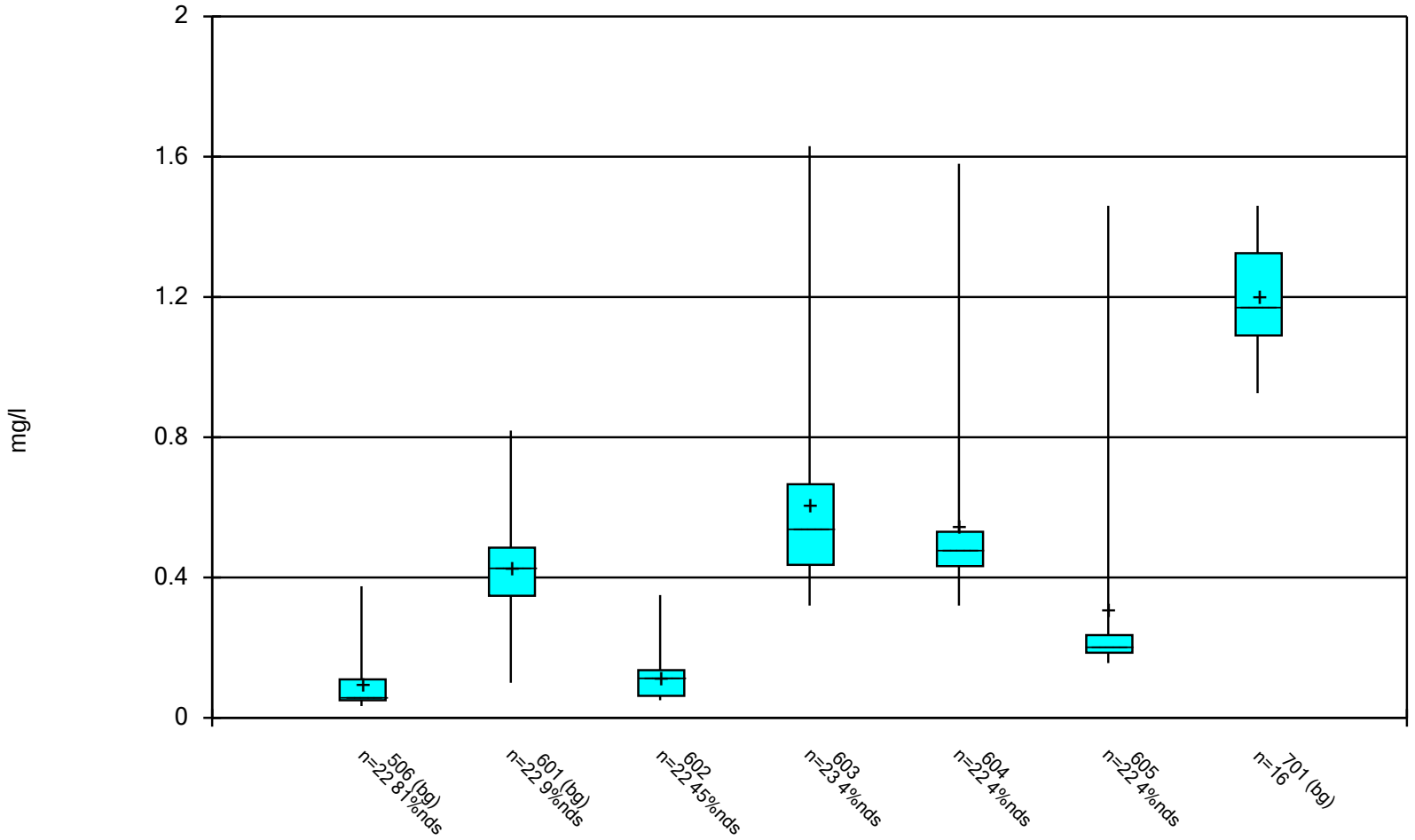
ND substitution: RL/2.

Box & Whiskers Plot

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose Printed 4/19/2023, 12:32 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Chloride (mg/l)	506 (bg)	20	81.27	7.48	1.673	79.1	69.3	97.2	0
Chloride (mg/l)	601 (bg)	24	52.28	9.227	1.883	52.6	33.4	76.6	0
Chloride (mg/l)	602	22	4.251	0.534	0.1139	4.18	3.65	6.06	0
Chloride (mg/l)	603	24	7.236	1.176	0.2401	7.34	5	10.5	4.167
Chloride (mg/l)	604	28	14.59	2.139	0.4043	14.6	11.1	18.8	0
Chloride (mg/l)	605	31	50.68	9.84	1.767	50.9	16.3	62.1	0

Box & Whiskers Plot



Constituent: Fluoride Analysis Run 4/19/2023 12:29 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Box & Whiskers Plot

Constituent: Fluoride (mg/l) Analysis Run 4/19/2023 12:30 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	506 (bg)	601 (bg)	602	603	604	605	701 (bg)
12/16/2015	0.12	0.45	0.148	0.673	0.515		1.4
12/17/2015						0.246	
2/16/2016	<0.1	0.406	<0.1	0.552	0.497	0.156	1.29
5/23/2016	<0.1	0.276	<0.1	0.523	0.437	0.166	
5/24/2016							1.37
8/22/2016	<0.1	0.435	0.114	0.431	0.468	0.191	1.32
11/7/2016			<0.1	0.442	0.468	0.203	
11/8/2016	<0.1	0.446					1.18
2/7/2017	<0.1	0.399	<0.1	0.459	0.467	0.187	1.12
5/1/2017	<0.1						
5/2/2017		0.36	0.122	0.585	0.45	0.197	1.09
7/31/2017	<0.1	0.526	0.116	0.388	0.601	0.2	1.22
10/2/2017	<0.1	0.488	0.108	0.666	0.542	0.184	1.17
5/14/2018	<0.1	0.483	0.113	0.727	0.506	0.226	1.46
6/26/2018				0.568			1.33
11/19/2018	0.111	0.42	<0.1	0.645	0.453	0.187	1.05
5/21/2019	0.108	0.487	0.132	0.365	0.519	0.222	1.17
11/5/2019	<0.1	0.402	0.14	0.436	0.428	0.195	0.926
5/21/2020	<0.15	0.462	<0.15	0.642	0.489	0.219	1.09
7/27/2020							1.02
11/10/2020	<0.15	0.336	<0.15	0.516	0.409	0.182	
5/17/2021			<0.15	0.535	0.491	0.216	
5/18/2021	<0.15	0.439					
11/16/2021	<0.15	0.384	<0.15	0.54	0.425	0.212	
5/10/2022	<0.3	0.779 (j)	0.12 (j)	0.912 (j)	0.691 (j)	0.765 (j)	
7/13/2022	0.0844	0.266	0.118	0.404	0.336	0.16	
11/8/2022	<0.75	0.819 (J)	0.141 (J)	1.63	1.58	1.46 (J)	
1/10/2023	<0.64 (M)	<0.64 (M)	<0.64 (M)	<0.64 (M)	<0.64 (M)	<0.64 (M)	
2/7/2023	<0.067 (ME)	<0.2 (E)	0.35 (E)	1.1 (E)	0.98 (E)	0.69 (E)	
Median	0.0625	0.4275	0.1135	0.54	0.4785	0.2015	1.175
LowerQ.	0.05	0.348	0.0625	0.436	0.4325	0.1855	1.09
UpperQ.	0.1095	0.485	0.136	0.666	0.5305	0.236	1.325
Min	0.0335	0.1	0.05	0.32	0.32	0.156	0.926
Max	0.375	0.819	0.35	1.63	1.58	1.46	1.46
Mean	0.09554	0.431	0.1178	0.6113	0.5487	0.3084	1.2

ND substitution: RL/2.

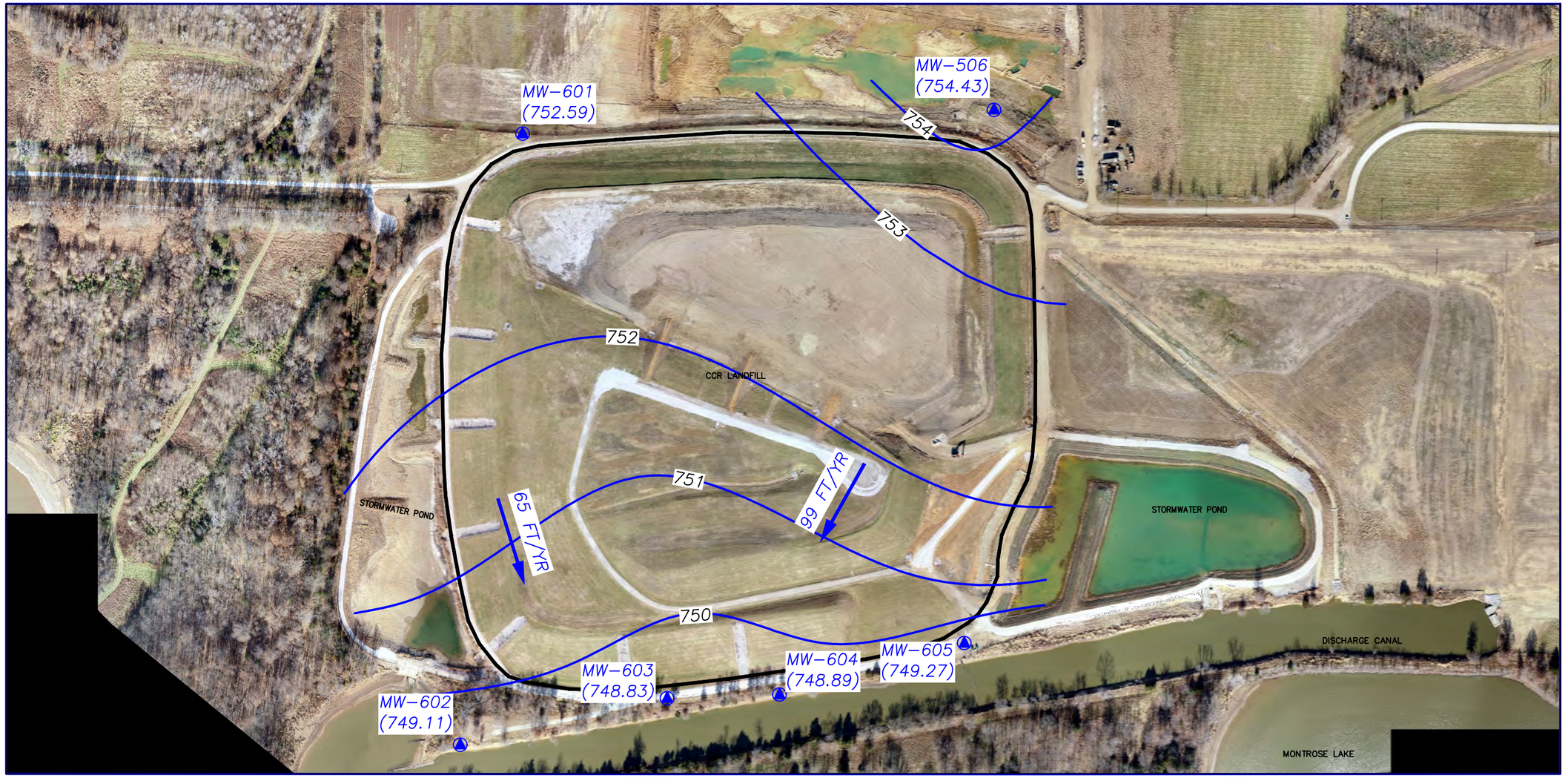
Box & Whiskers Plot

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose Printed 4/19/2023, 12:30 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Fluoride (mg/l)	506 (bg)	22	0.09554	0.08697	0.01854	0.0625	0.0335	0.375	81.82
Fluoride (mg/l)	601 (bg)	22	0.431	0.1517	0.03235	0.4275	0.1	0.819	9.091
Fluoride (mg/l)	602	22	0.1178	0.07789	0.01661	0.1135	0.05	0.35	45.45
Fluoride (mg/l)	603	23	0.6113	0.2842	0.05925	0.54	0.32	1.63	4.348
Fluoride (mg/l)	604	22	0.5487	0.2658	0.05668	0.4785	0.32	1.58	4.545
Fluoride (mg/l)	605	22	0.3084	0.3018	0.06434	0.2015	0.156	1.46	4.545
Fluoride (mg/l)	701 (bg)	16	1.2	0.1503	0.03759	1.175	0.926	1.46	0

Appendix B

Potentiometric Surface Map



LEGEND:

- CCR LANDFILL UNIT BOUNDARY (APPROXIMATE)
- MW–506 (747.77) — CCR GROUNDWATER MONITORING WELL SYSTEM
- 65 FT/YR — GROUNDWATER FLOW DIRECTION AND CALCULATED AND CALCULATED GROUNDWATER FLOW RATE (FEET/YEAR)

NOTES:

1. HORIZONTAL DATUM: MISSOURI STATE PLANE COORDINATE SYSTEM, WEST ZONE (NAD 83)
2. VERTICAL DATUM: NAVD 88
3. DRONE IMAGE BY EVERGY, DATED DECEMBER 3, 2021.
4. APPROXIMATE BOUNDARY LOCATIONS PROVIDED BY AECOM.
5. MONITOR WELL LOCATIONS PROVIDED BY SHAFFER, KLINE, & WARREN SURVEY DATED JULY 21, 2017.
6. WATER LEVEL MEASUREMENTS COMPLETED ON NOVEMBER 8, 2022.

300 0 300 600
SCALE FEET

REV.	DATE	CK. BY
0	-	-
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-

SHEET TITLE
POTENTIOMETRIC SURFACE MAP (NOVEMBER 2022) CCR LANDFILL

PROJECT TITLE
2022 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

CLIENT
EVERGY METRO, INC.
MONTROSE GENERATING STATION
MONTROSE, MISSOURI

SCS ENGINEERS
7311 W. 130th St, Ste. 100
Overland Park, Kansas 66213
PH. (913) 681-0030 FAX: (913) 681-0012

PROJ. NO.	DSN. BY:	DWN. BY:	CHK. BY:	QA/QC BY:	PROJ. MGR.
27213168.22	ALR	ALR	JRR	JRR	JRF

CADD FILE: 27213168.20_MONTROSE FIGURE 2 NOV 2022.DWG
DATE: 1/23/2023
DRAWING NO. **1**

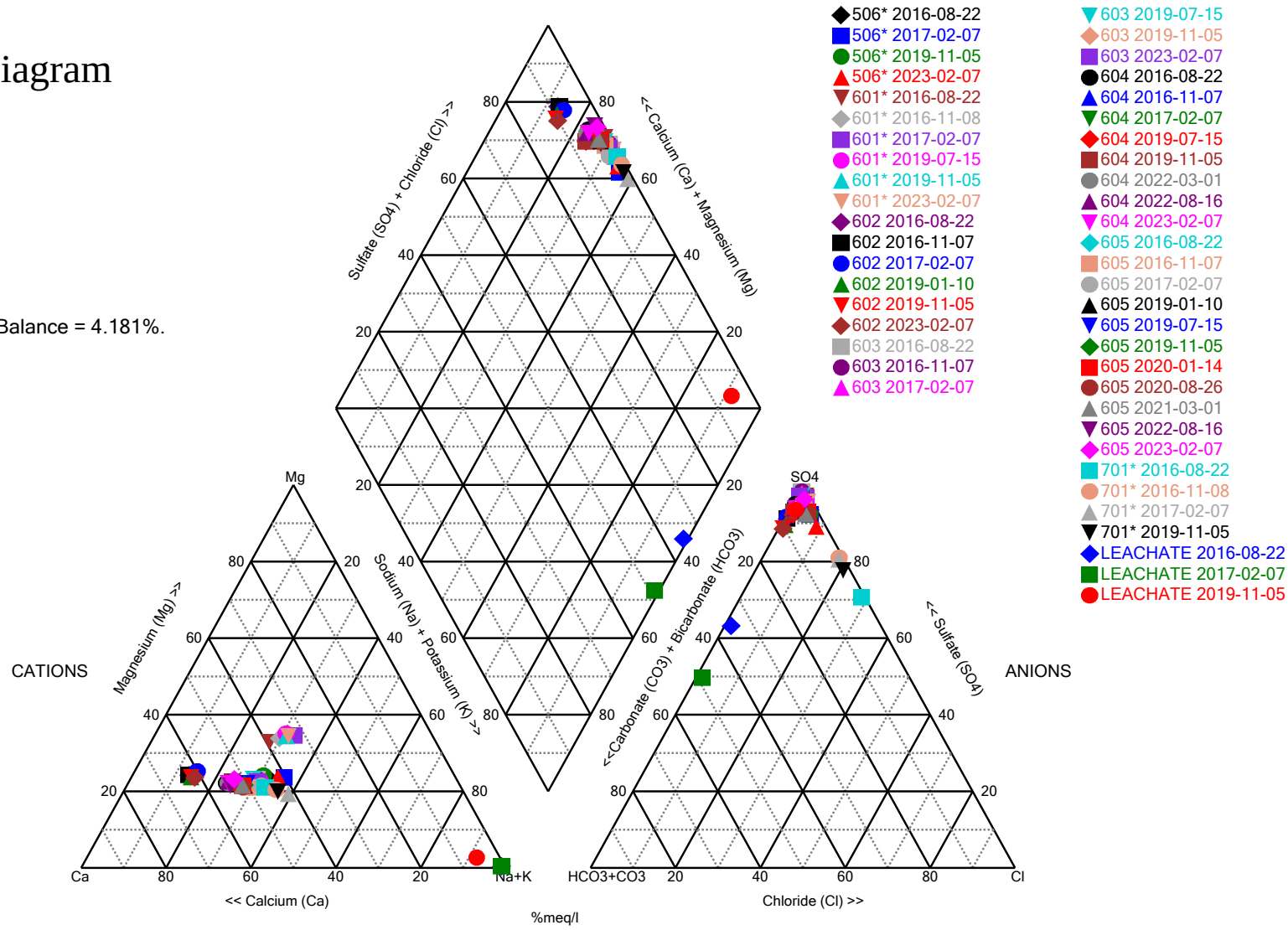
N:\KCPL\Projects\Groundwater\DWG\Montrose\2022\27213168.20_Montrose Figure 2 Nov 2022.dwg Jan 23, 2023 - 2:27pm Layout Name: CCR 1 By: swyly

Appendix C

Piper Diagram Plots and Analytical Results

Piper Diagram

Cation-Anion Balance = 4.181%.



Analysis Run 4/20/2023 12:41 PM View: LF Piper

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Piper Diagram

Analysis Run 4/20/2023 12:42 PM View: LF Piper

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

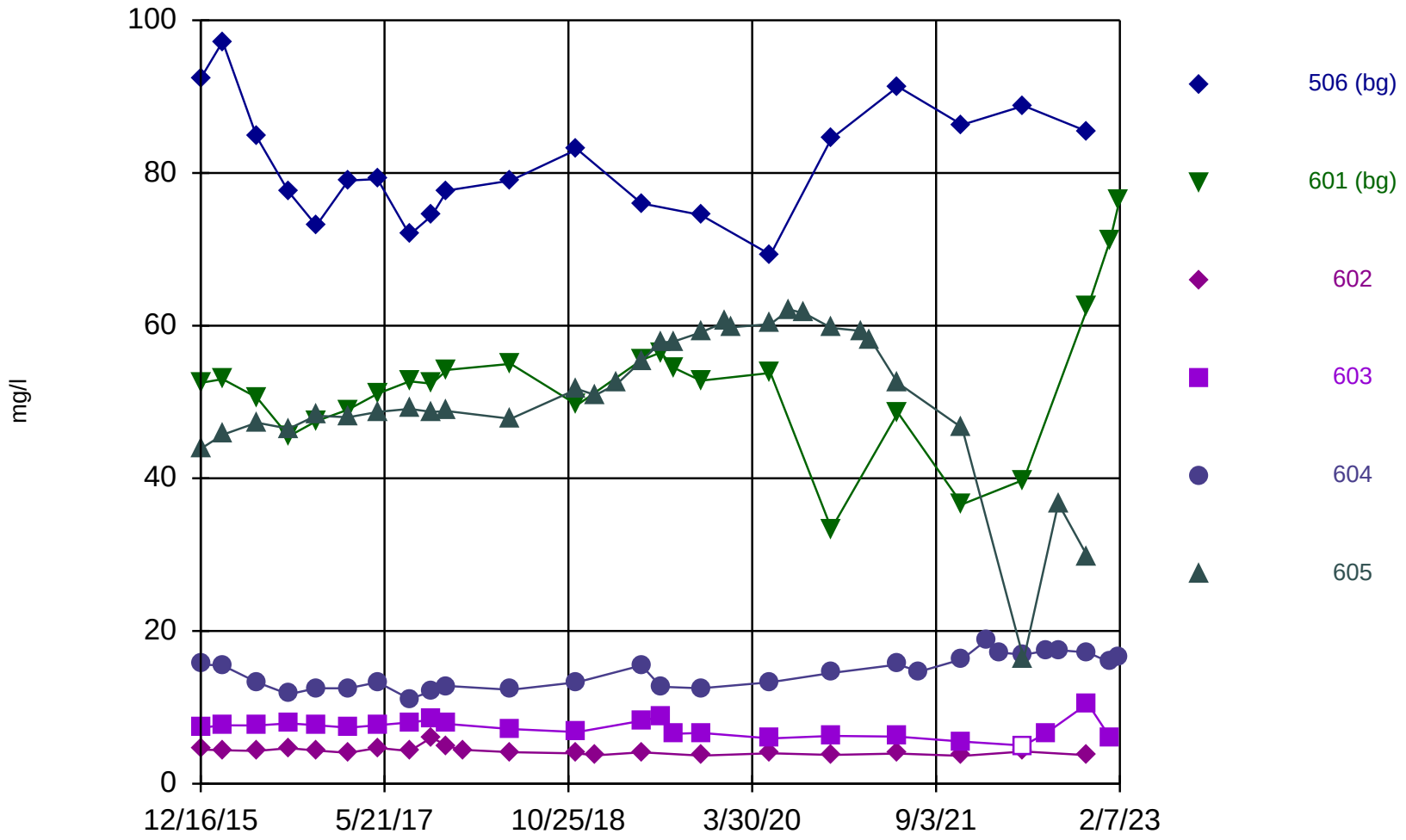
Totals (ppm)	Na	K	Ca	Mg	Cl	SO4	HCO3	CO3
506* 2016-08-22	336	4.71	393	126	77.5	2280	28.7	20
506* 2017-02-07	328	4.78	322	113	79	1920	29.7	20
506* 2019-11-05	266	4.72	341	110	74.5	1760	25.5	20
506* 2023-02-07	315	4.01	335	114	118	1710	26.6	20
601* 2016-08-22	410	7.29	502	255	45.5	3590	32	20
601* 2016-11-08	455	5.83	481	275	47.5	3160	36.1	20
601* 2017-02-07	486	5.36	427	268	49	3180	23.5	20
601* 2019-07-15	482	3.61	472	288	56.5	2900	22.2	20
601* 2019-11-05	464	3.65	457	274	52.8	2950	21.7	20
601* 2023-02-07	464	10.5	445	274	76.6	3000	19.5	20
602 2016-08-22	82.5	3.04	353	82	4.65	1320	121	20
602 2016-11-07	84.5	3.05	353	82	4.35	1370	119	20
602 2017-02-07	86.1	3.23	314	78.9	4.04	1430	124	20
602 2019-01-10	82.9	3.21	335	76.4	3.71	1250	136	20
602 2019-11-05	81.2	3	325	74.8	3.69	1110	134	20
602 2023-02-07	76.7	3.01	282	65.2	4.22	1100	132	20
603 2016-08-22	323	2.85	445	130	7.9	2710	20	20
603 2016-11-07	315	3.04	437	128	7.67	2760	20	20
603 2017-02-07	328	3.06	409	121	7.35	2500	20	20
603 2019-07-15	288	2.78	424	122	8.75	2020	20	20
603 2019-11-05	275	2.62	410	115	6.66	2010	20	20
603 2023-02-07	264	2.7	364	103	6.67	1950	20	20
604 2016-08-22	214	2.63	440	106	11.7	2290	101	20
604 2016-11-07	206	2.79	412	104	12.5	2070	96.5	20
604 2017-02-07	215	2.88	392	98.4	12.5	1810	101	20
604 2019-07-15	203	2.76	386	99	12.7	1510	99.8	20
604 2019-11-05	210	2.68	407	103	12.5	1650	108	20
604 2022-03-01	236	2.9	483	118	17.2	2000	111	20
604 2022-08-16	218	3.17	449	111	17.5	2130	116	20
604 2023-02-07	236	3.36	482	119	16.5	2050	109	20
605 2016-08-22	270	2.51	431	111	46.5	2230	40.9	20
605 2016-11-07	271	2.63	407	104	48.2	2280	44	20
605 2017-02-07	284	2.71	367	101	48	2050	48.1	20
605 2019-01-10	264	2.79	421	107	50.9	1870	42	20
605 2019-07-15	261	2.73	407	108	57.8	1640	41.6	20
605 2019-11-05	248	2.6	399	102	59.1	1730	42.8	20
605 2020-01-14	240	2.48	395	101	60.5	1860	38.1	20
605 2020-08-26	244	2.44	396	97.5	61.6	1690	36.8	20
605 2021-03-01	244	2.55	407	103	58.2	1720	40.1	20
605 2022-08-16	225	3.03	444	105	36.7	2090	32.6	20
605 2023-02-07	228	3.01	428	113	30.9	2110	25.2	20
701* 2016-08-22	427	6.65	522	141	592	2020	20	20
701* 2016-11-08	397	6.06	435	120	367	2270	20	20
701* 2017-02-07	389	5.65	367	102	319	1930	20	20
701* 2019-11-05	351	5.09	366	99.6	319	1650	20	20
LEACHATE 2016-08-22	1010	20.8	5.88	1	18.5	1560	20	549
LEACHATE 2017-02-07	1050	23.9	5.47	1	16.3	1360	20	840
LEACHATE 2019-11-05	970	17	49.2	14.5	20.3	2240	44.1	64.2

Appendix D

Time Series Plots

Hollow symbols indicate censored values.

Time Series

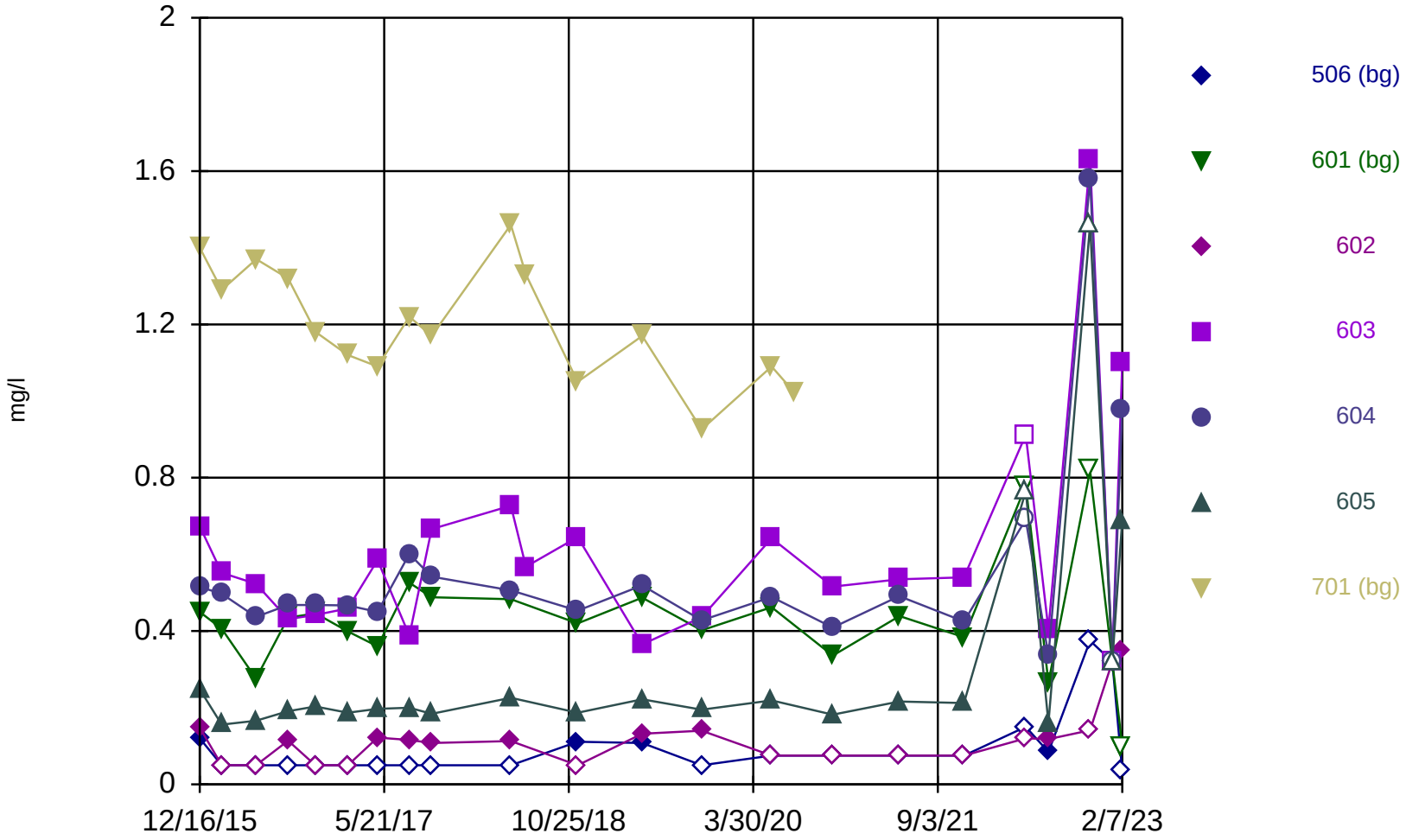


Constituent: Chloride Analysis Run 4/19/2023 12:32 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Fluoride Analysis Run 4/19/2023 12:28 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

APPENDIX C.2

CCR Groundwater Monitoring Alternative Source Demonstration Report May 2023
Groundwater Monitoring Event, CCR Landfill, Montrose Generating Station (December 2023)

CCR GROUNDWATER MONITORING ALTERNATIVE SOURCE DEMONSTRATION REPORT May 2023 GROUNDWATER MONITORING EVENT

CCR LANDFILL

Montrose Generating Station
Evergy Metro, Inc.
Clinton, Missouri

SCS ENGINEERS

December 8, 2023
File No. 27213168.23

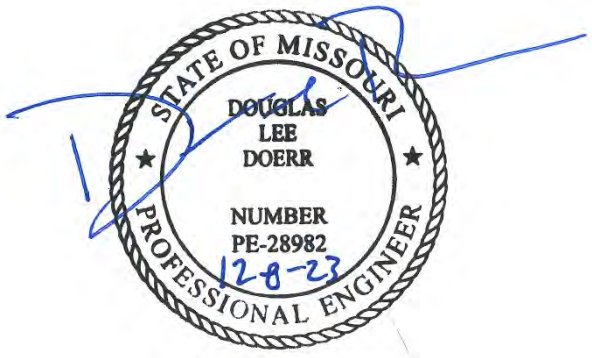
8575 W. 110th Suite 100
Overland Park, KS 66210
913-749-0700

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 Montrose 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 Montrose 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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Section Page

Appendices

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 an 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 Montrose Generating Station has been completed in substantial compliance with the "Statistical Method Certification by A Qualified Professional Engineer" dated October 12, 2017. Detection monitoring groundwater samples were collected on May 16, 2023. Review and validation of the results from the May 2023 Detection Monitoring Event was completed on June 30, 2023, 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 10, 2023, and August 10, 2023.

The completed statistical evaluation identified one Appendix III constituent above its prediction limit.

Monitoring Well Constituents	*UPL	Observation May 16, 2023	1st Verification July 10, 2023	2nd Verification August 10, 2023
MW-601				
Chloride	56.74	76.1	64.3/70.9**	70.8/69.5**

*UPL – Upper Prediction Limit
** Duplicate Sample

Determination: A statistical evaluation was completed for all Appendix III detection monitoring constituents in accordance with the certified statistical method. The statistical evaluation identified an SSI above the background prediction limit for chloride at monitoring well MW-601.

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 Montrose Generating Station, there are multiple lines of supporting evidence to indicate the above SSIs were 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.

An SSI was identified in upgradient well MW-601 for chloride. Therefore, box and whiskers plots for chloride in MW-601 and the other upgradient and downgradient monitoring wells were prepared to allow comparison of the chloride concentrations between wells. This comparison between wells indicates the chloride concentrations in well MW-601 are below the range of chloride in upgradient well MW-506 and similar to the range of monitoring well MW-605. Box and whisker plots are provided in **Appendix A**. Additionally, MW-601 is located upgradient of the landfill as shown on the potentiometric surface map provided in **Appendix B**. This demonstrates that a source other than the CCR Landfill caused the SSI in chloride over background levels, or that the SSIs resulted from error in sampling, analysis, statistical evaluation, or that the SSI resulted from natural variation in groundwater quality.

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 network monitoring well MW-601 and landfill leachate is provided in **Appendix C** along with the analytical results. The diagram indicates the groundwater from MW-601

does not exhibit the same geochemical characteristics as the leachate. The groundwater and the leachate plot in 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 likely caused the SSI over background levels for chloride, or that the SSI resulted from error in sampling, analysis, statistical evaluation, or that the SSI resulted from 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. 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 for chloride in MW-601 and the other upgradient and downgradient monitoring wells were prepared to allow comparison of the chloride concentrations between wells. This comparison between wells indicates the chloride concentrations in well MW-601 are below the range of chloride in upgradient well MW-506 and similar to range of monitoring well MW-605. Time series plots are provided in **Appendix D**. Additionally, MW-601 is located upgradient of the landfill as shown on the potentiometric surface map provided in **Appendix B**. This demonstrates that a source other than the CCR Landfill likely caused the SSI in chloride over background levels, or that the SSI resulted from error in sampling, analysis, statistical evaluation, or that the SSI resulted from natural variation in groundwater quality.

4 CONCLUSIONS

Our opinion is that a sufficient body of evidence is available and presented above to demonstrate that a source other than the CCR Landfill likely caused the SSI over background levels, or that the SSI resulted from error in sampling, analysis, statistical evaluation, or that the SSI resulted from 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 Montrose Generating Station. No warranties, express or implied, are intended or made.

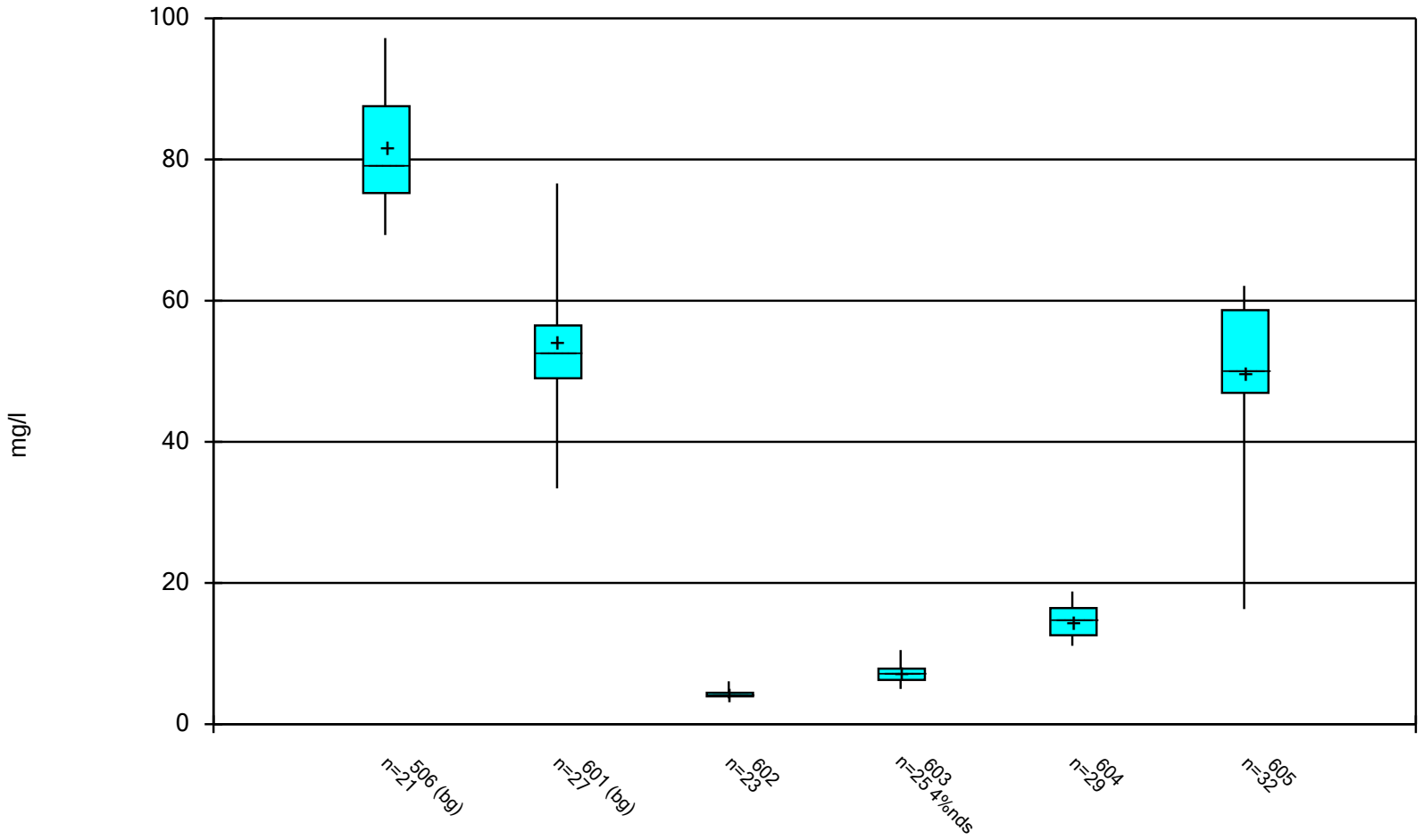
The signatures of the certifying registered geologist and professional engineer on this document represent that to the best of their knowledge, information, and belief in the exercise of their professional judgement in accordance with the standard of practice, it is their professional opinions that the 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: Chloride Analysis Run 11/14/2023 3:20 PM View: LF CCR III

Montrose Generating Station UWL Data: Montrose

Box & Whiskers Plot

Constituent: Chloride (mg/l) Analysis Run 11/14/2023 3:21 PM View: LF CCR III

Montrose Generating Station UWL Data: Montrose

	506 (bg)	601 (bg)	602	603	604	605
12/16/2015	92.4	52.5	4.48	7.33	15.6	
12/17/2015						43.9
2/16/2016	97.2	53	4.38	7.65	15.5	45.7
5/23/2016	84.7	50.6	4.29	7.64	13.3	47.3
8/22/2016	77.5	45.5	4.65	7.9	11.7	46.5
11/7/2016			4.35	7.67	12.5	48.2
11/8/2016	73.1	47.5				
2/7/2017	79	49	4.04	7.35	12.5	48
5/1/2017	79.2					
5/2/2017		51.1	4.69	7.67	13.3	48.7
7/31/2017	71.9	52.7	4.28	8.03	11.1	49.1
10/2/2017	74.4	52.4	6.06	8.37	12.1	48.7
11/15/2017	77.7	54.2	4.93	7.83	12.8	48.8
12/29/2017			4.44			
5/14/2018	79	55	4.14	7.16	12.3	47.8
11/19/2018	83.1	49.6	3.97	6.76	13.3	51.7
1/10/2019			3.71			50.9
3/13/2019						52.4
5/21/2019	76	55.5	4.11	8.24	15.5	55.4
7/15/2019		56.5		8.75	12.7	57.8
8/19/2019		54.5		6.54		57.9
11/5/2019	74.5	52.8	3.69	6.66	12.5	59.1
1/14/2020						60.5
2/3/2020						59.8
5/21/2020	69.3	53.8	3.99	5.93	13.3	60.2
7/14/2020						62.1
8/26/2020						61.6
11/10/2020	84.5	33.4	3.77	6.27	14.5	59.7
2/3/2021						59.3
3/1/2021						58.2
5/17/2021			3.95	6.17	15.6	52.5
5/18/2021	91.3	48.6				
7/19/2021					14.7	
11/16/2021	86.3	36.6	3.65	5.53	16.3	46.6
1/24/2022					18.8	
3/1/2022					17.2	
5/10/2022	88.8	39.8	4.22	<10	16.9	16.3
7/13/2022				6.64	17.4	
8/16/2022					17.5	36.7
11/8/2022	85.4	62.4	3.73	10.5	17.2	29.7
1/10/2023		71.1		6.08	15.9	
2/7/2023		76.6			16.5	
5/16/2023	88.8	76.1	4.29	6.27	16.4	28.4
7/10/2023		64.3				
8/10/2023		70.8				
Median	79.2	52.8	4.22	7.33	14.7	50
LowerQ.	75.25	49	3.95	6.27	12.6	46.95
UpperQ.	87.55	56.5	4.44	7.865	16.45	58.65
Min	69.3	33.4	3.65	5	11.1	16.3
Max	97.2	76.6	6.06	10.5	18.8	62.1
Mean	81.62	54.29	4.253	7.198	14.65	49.98

ND substitution: RL/2.

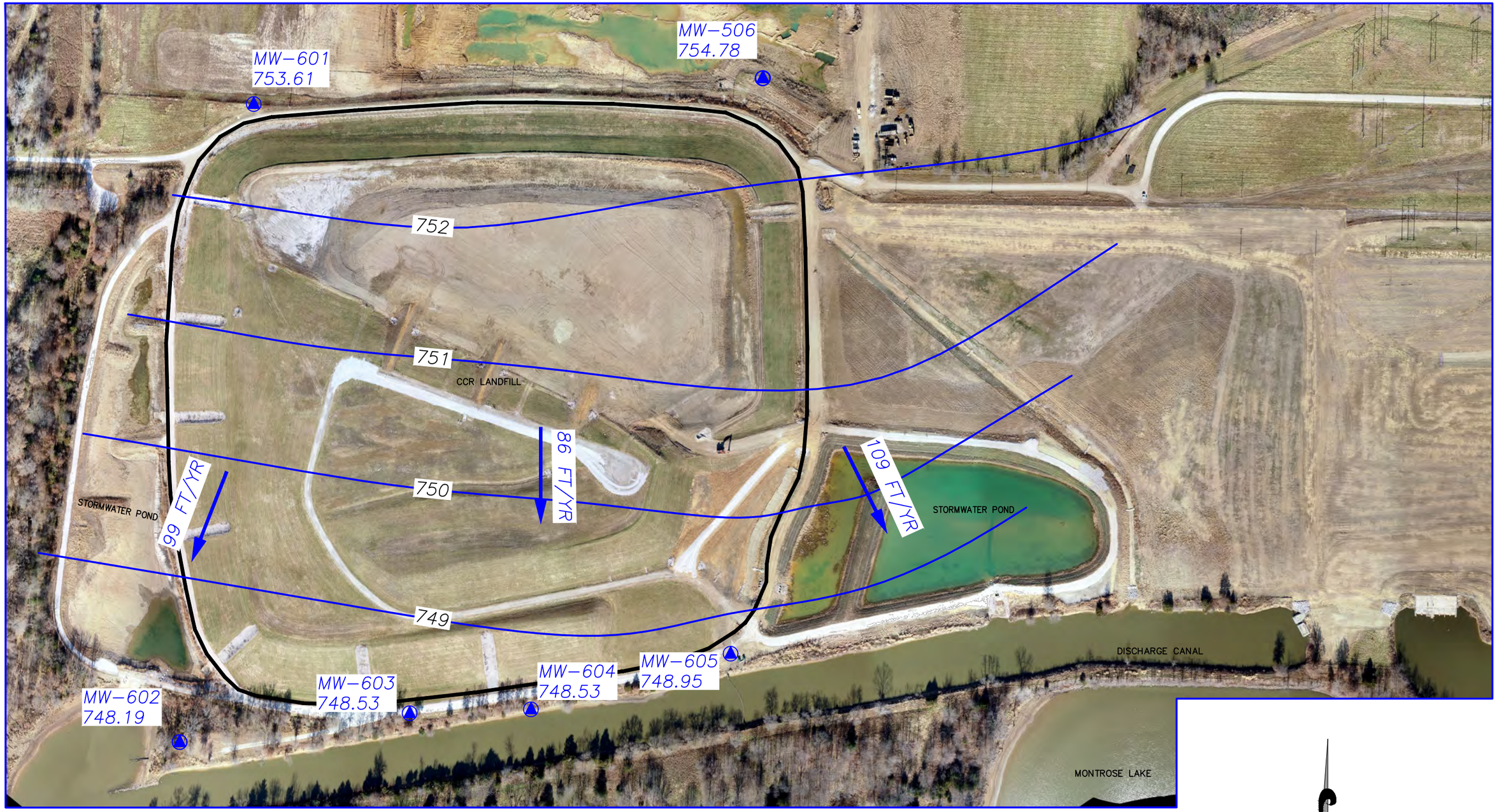
Box & Whiskers Plot

Montrose Generating Station UWL Data: Montrose Printed 11/14/2023, 3:21 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Chloride (mg/l)	506 (bg)	21	81.62	7.474	1.631	79.2	69.3	97.2	0
Chloride (mg/l)	601 (bg)	27	54.29	10.57	2.034	52.8	33.4	76.6	0
Chloride (mg/l)	602	23	4.253	0.5218	0.1088	4.22	3.65	6.06	0
Chloride (mg/l)	603	25	7.198	1.168	0.2335	7.33	5	10.5	4
Chloride (mg/l)	604	29	14.65	2.127	0.3951	14.7	11.1	18.8	0
Chloride (mg/l)	605	32	49.98	10.45	1.847	50	16.3	62.1	0

Appendix B

Groundwater Contour Map



LEGEND:

- CCR LANDFILL UNIT BOUNDARY (APPROXIMATE)
- MW-506 (747.77) — CCR GROUNDWATER MONITORING WELL SYSTEM (GROUNDWATER ELEVATION)
- 65 FT/YR — GROUNDWATER FLOW DIRECTION AND CALCULATED AND CALCULATED GROUNDWATER FLOW RATE (FEET/YEAR)

NOTES:

1. HORIZONTAL DATUM: MISSOURI STATE PLANE COORDINATE SYSTEM, WEST ZONE (NAD 83)
2. VERTICAL DATUM: NAVD 88
3. DRONE IMAGE BY EVERGY, DATED DECEMBER 3, 2021.
4. APPROXIMATE BOUNDARY LOCATIONS PROVIDED BY AECOM.
5. MONITOR WELL LOCATIONS PROVIDED BY SHAFFER, KLINE, & WARREN SURVEY DATED JULY 21, 2017.
6. WATER LEVEL MEASUREMENTS COMPLETED ON MAY 16, 2023.

250 0 250 500

SCALE FEET

REV.	DATE	CK. BY
0	-	-
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-

SHEET TITLE
PIEZOMETRIC SURFACE MAP (MAY 2023)

PROJECT TITLE
MONTROSE GROUNDWATER 2022

CLIENT
EVERGY METRO, INC.
MONTROSE GENERATING STATION
MONTROSE, MISSOURI

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

PROJ. NO.	DWN. BY:	O/A RVW BY:
27213168.20	CAB	JRR
DSN. BY:	CHK. BY:	PROJ. MGR
TGW	JRR	JRF

CADD FILE:
MONTROSE POTENTIOMETRIC MAP MAY 2023 CCR.DWG

DATE:
7/25/23

FIGURE NO.
2 of 2

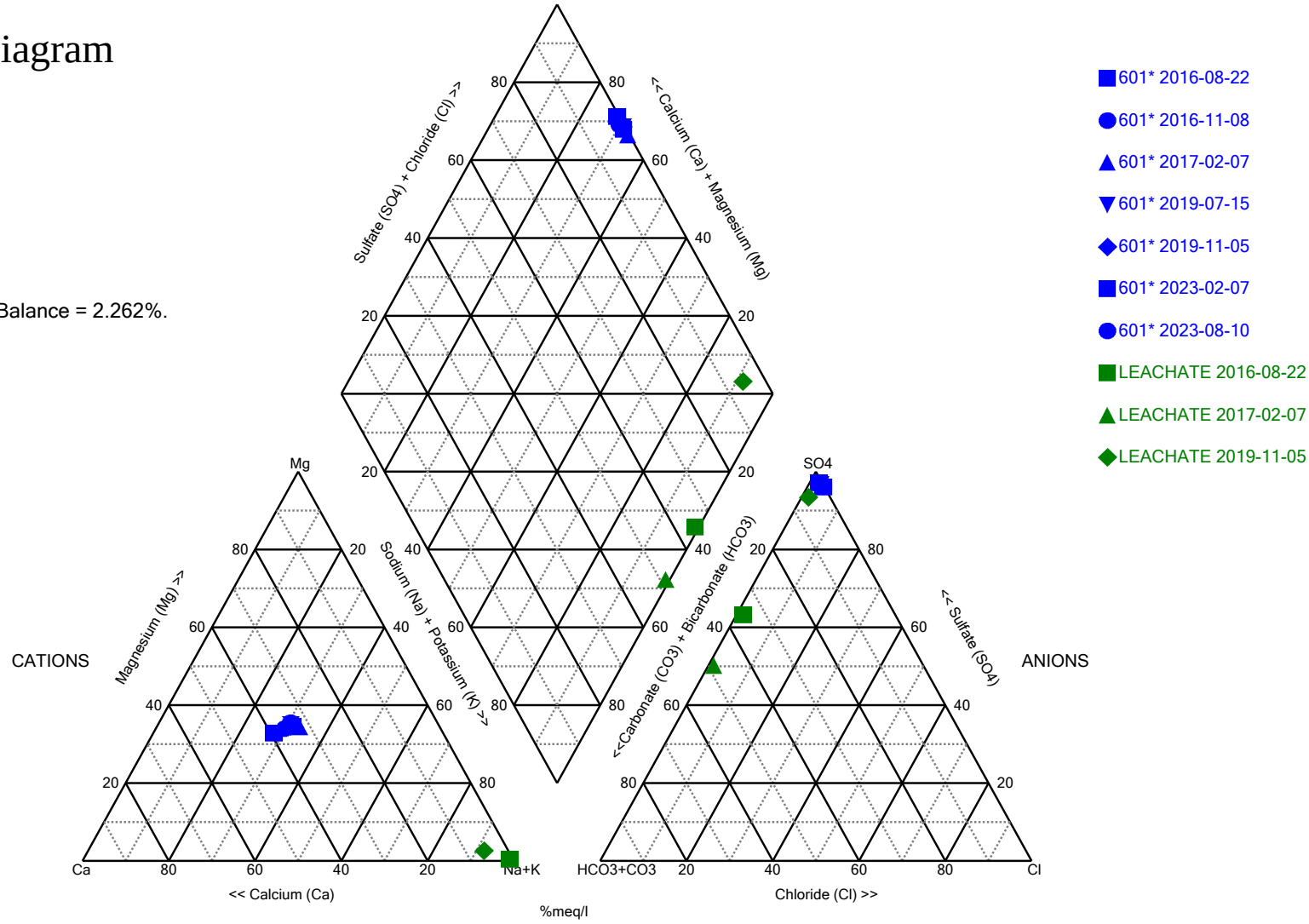
N:\KCPL - EVERGY\PROJECTS\GROUNDWATER\DWG\MONTROSE\2023\MONTROSE POTENTIOMETRIC MAP MAY 2023 CCR.DWG

Appendix C

Piper Diagram Plots and Analytical Results

Piper Diagram

Cation-Anion Balance = 2.262%.



Analysis Run 11/14/2023 3:16 PM View: LF Piper

Montrose Generating Station UWL Data: Montrose

Piper Diagram

Analysis Run 11/14/2023 3:16 PM View: LF Piper

Montrose Generating Station UWL Data: Montrose

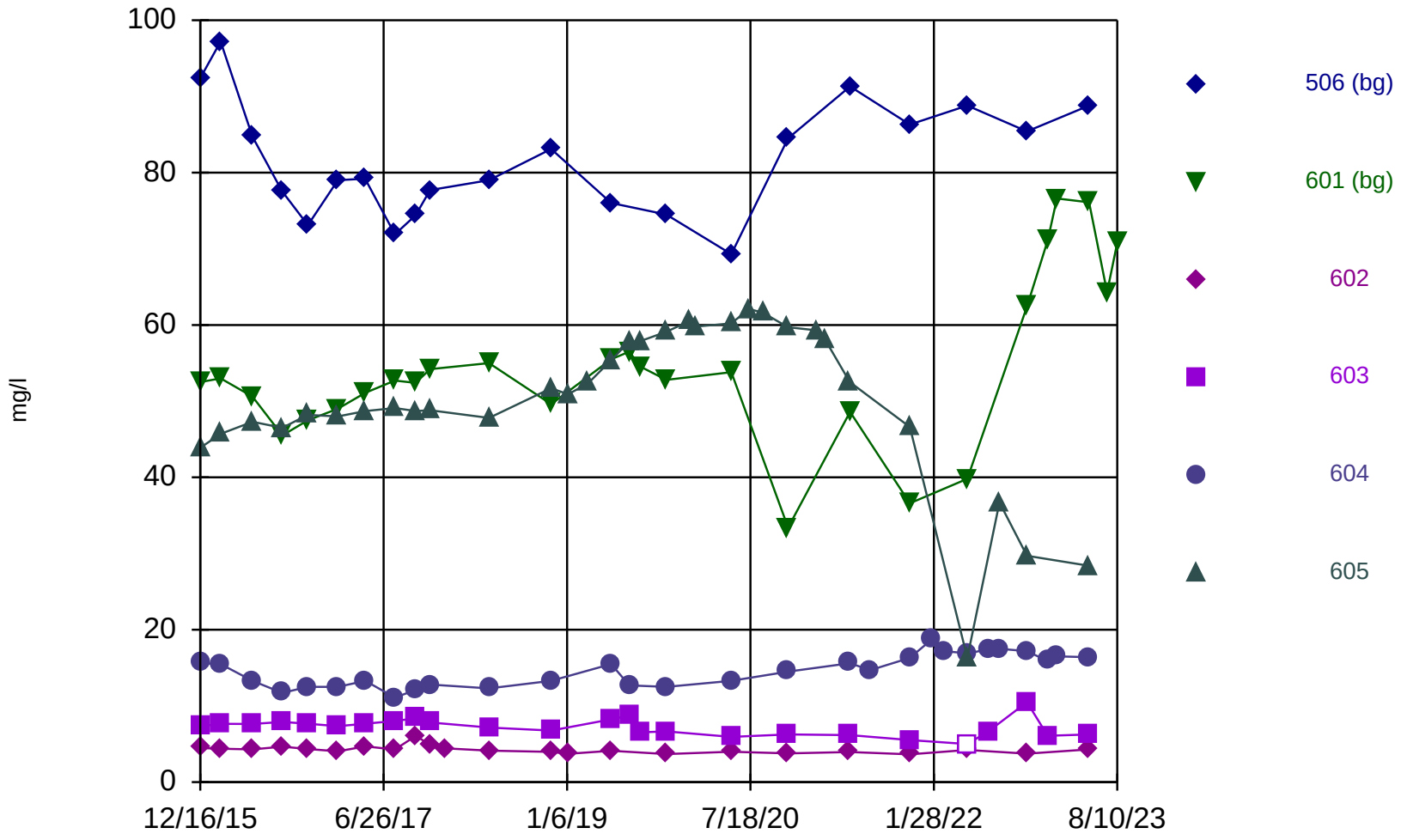
Totals (ppm)	Na	K	Ca	Mg	Cl	SO4	HCO3	CO3
601* 2016-08-22	410	7.29	502	255	45.5	3590	32	10
601* 2016-11-08	455	5.83	481	275	47.5	3160	36.1	10
601* 2017-02-07	486	5.36	427	268	49	3180	23.5	10
601* 2019-07-15	482	3.61	472	288	56.5	2900	22.2	10
601* 2019-11-05	464	3.65	457	274	52.8	2950	21.7	10
601* 2023-02-07	464	10.5	445	274	76.6	3000	19.5	10
601* 2023-08-10	472	3.86	460	292	70.8	2930	20.8	10
LEACHATE 2016-08-22	1010	20.8	5.88	0.5	18.5	1560	10	549
LEACHATE 2017-02-07	1050	23.9	5.47	0.5	16.3	1360	10	840
LEACHATE 2019-11-05	970	17	49.2	14.5	20.3	2240	44.1	64.2

Appendix D

Time Series Plots

Hollow symbols indicate censored values.

Time Series



Constituent: Chloride Analysis Run 11/14/2023 3:20 PM View: LF CCR III

Montrose Generating Station UWL Data: Montrose

APPENDIX D

LABORATORY ANALYTICAL REPORTS

- January 2023 – First verification sampling for the Fall 2022 detection monitoring event.
- February 2023 – Second verification sampling for the Fall 2022 detection monitoring event.
- May 2023 – Spring 2023 semiannual detection monitoring sampling event.
- July 2023 – First verification sampling for the Spring 2023 detection monitoring sampling event.
- August 2023 - Second verification sampling for Spring 2023 detection monitoring sampling event.
- November 2023 - Fall 2023 semiannual detection monitoring sampling event.

ANALYTICAL REPORT

January 17, 2023

Revised Report

SCS Engineers - KS

Sample Delivery Group:	L1575105
Samples Received:	01/11/2023
Project Number:	27213168.22 - F
Description:	Evergy Montrose Gen Station LF GW 2022-23

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

Entire Report Reviewed By:

Jeff Carr
Project Manager

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

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

TABLE OF CONTENTS

MW-506 L1575105-01 GW

Collected by: Matt Vander Putten | Collected date/time: 01/10/23 11:30 | Received date/time: 01/11/23 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1989386	10	01/16/23 13:49	01/16/23 13:49	GEB	Mt. Juliet, TN

MW-601 L1575105-02 GW

Collected by: Matt Vander Putten | Collected date/time: 01/10/23 11:35 | Received date/time: 01/11/23 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1989386	10	01/16/23 14:03	01/16/23 14:03	GEB	Mt. Juliet, TN

MW-602 L1575105-03 GW

Collected by: Matt Vander Putten | Collected date/time: 01/10/23 12:05 | Received date/time: 01/11/23 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1989386	10	01/16/23 14:17	01/16/23 14:17	GEB	Mt. Juliet, TN

MW-603 L1575105-04 GW

Collected by: Matt Vander Putten | Collected date/time: 01/10/23 12:40 | Received date/time: 01/11/23 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1989386	10	01/16/23 14:31	01/16/23 14:31	GEB	Mt. Juliet, TN

MW-604 L1575105-05 GW

Collected by: Matt Vander Putten | Collected date/time: 01/10/23 13:05 | Received date/time: 01/11/23 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1989386	10	01/16/23 14:44	01/16/23 14:44	GEB	Mt. Juliet, TN

DUPLICATE 1 L1575105-06 GW

Collected by: Matt Vander Putten | Collected date/time: 01/10/23 13:05 | Received date/time: 01/11/23 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1989386	10	01/16/23 16:06	01/16/23 16:06	GEB	Mt. Juliet, TN

MW-605 L1575105-07 GW

Collected by: Matt Vander Putten | Collected date/time: 01/10/23 12:15 | Received date/time: 01/11/23 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1989386	10	01/16/23 16:20	01/16/23 16:20	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1987378	1	01/12/23 12:00	01/12/23 17:49	ZSA	Mt. Juliet, TN

DUPLICATE 2 L1575105-08 GW

Collected by: Matt Vander Putten | Collected date/time: 01/10/23 12:15 | Received date/time: 01/11/23 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1989386	10	01/16/23 17:01	01/16/23 17:01	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1987378	1	01/12/23 12:00	01/12/23 17:52	ZSA	Mt. Juliet, TN

CASE NARRATIVE

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

Jeff Carr
Project Manager

Report Revision History

Level II Report - Version 1: 01/13/23 08:39

Project Narrative

Revised. Anions reanalyzed at 10X dilutions.

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Fluoride	U		640	1500	10	01/16/2023 13:49	WG1989386

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	71100		3790	10000	10	01/16/2023 14:03	WG1989386
Fluoride	U		640	1500	10	01/16/2023 14:03	WG1989386

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Fluoride	U		640	1500	10	01/16/2023 14:17	WG1989386

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	6080	J	3790	10000	10	01/16/2023 14:31	WG1989386
Fluoride	U		640	1500	10	01/16/2023 14:31	WG1989386

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	15900		3790	10000	10	01/16/2023 14:44	WG1989386
Fluoride	U		640	1500	10	01/16/2023 14:44	WG1989386

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	16600		3790	10000	10	01/16/2023 16:06	WG1989386
Fluoride	U		640	1500	10	01/16/2023 16:06	WG1989386

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Fluoride	U		640	1500	10	01/16/2023 16:20	WG1989386

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Calcium	448000		79.3	1000	1	01/12/2023 17:49	WG1987378

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Fluoride	U		640	1500	10	01/16/2023 17:01	WG1989386

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Calcium	448000		79.3	1000	1	01/12/2023 17:52	WG1987378

Method Blank (MB)

(MB) R3881625-1 01/16/23 11:19

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

L1575105-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1575105-05 01/16/23 14:44 • (DUP) R3881625-3 01/16/23 14:58

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	15900	16500	10	3.88		15
Fluoride	U	U	10	0.000		15

Laboratory Control Sample (LCS)

(LCS) R3881625-2 01/16/23 11:33

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40200	101	80.0-120	
Fluoride	8000	8140	102	80.0-120	

L1575105-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1575105-05 01/16/23 14:44 • (MS) R3881625-4 01/16/23 15:12 • (MSD) R3881625-5 01/16/23 15:53

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	15900	69100	66100	106	100	10	80.0-120			4.46	15
Fluoride	5000	U	4920	4740	98.3	94.8	10	80.0-120			3.63	15

L1575105-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1575105-07 01/16/23 16:20 • (MS) R3881625-6 01/16/23 16:34 • (MSD) R3881625-7 01/16/23 16:48

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	32800	80900	82000	96.1	98.3	10	80.0-120			1.35	15
Fluoride	5000	U	4520	4960	90.4	99.2	10	80.0-120			9.28	15

Method Blank (MB)

(MB) R3880603-1 01/12/23 17:06

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Calcium	U		79.3	1000

Laboratory Control Sample (LCS)

(LCS) R3880603-2 01/12/23 17:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium	10000	10100	101	80.0-120	

L1574963-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1574963-01 01/12/23 17:12 • (MS) R3880603-4 01/12/23 17:17 • (MSD) R3880603-5 01/12/23 17:20

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Calcium	10000	384000	384000	387000	0.000	30.1	1	75.0-125	V	V	0.802	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

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

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

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace® PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1575105
E118

Acctnum: AQUAOPKS
Template: T212738
Prelogin: P973623
PM: 206 - Jeff Carr
PB:
Shipped Via: FedEX Ground

Report to: Jason Franks
Email To: jfranks@scsengineers.com;jay.martin@evergy.c

Project Description: Evergy Montrose Gen Station LF GW 2022-23
City/State Collected: Montrose MO
Please Circle: PT MT CT ET

Phone: 913-681-0030
Client Project # 27213168.22 - F
Lab Project # AQUAOPKS-MONTROSE

Collected by (print): Matt VanderPutten
Site/Facility ID #
P.O. #

Collected by (signature): [signature]
Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day
Quote #
Date Results Needed: Std

Immediately Packed on Ice N ___ Y X

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Calcium - 6010 250mlHDPE-HNO3	Fluoride 125mlHDPE-NoPres	Fluoride, Chloride 125mlHDPE-NoPres						Remarks	Sample # (lab only)
MW-506	Grab	GW	NA	1/10/23	1130	1		X								-01
MW-601		GW			1135	1			X							-02
MW-602		GW			1205	1		X								-03
MW-603		GW			1240	1			X							-04
MW-604		GW			1305	1			X							-05
MW-604 MS/MSD		GW			1305	1			X							-05
DUPLICATE 1		GW			1305	1			X							-06
MW-605		GW			1215	2	X	X								-07
MW-605 MS/MSD		GW			1215	2	X	X								-07
DUPLICATE 2		GW			1215	2	X	X								-08

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

Remarks:
pH ______ Temp ______
Flow ______ Other ______

Samples returned via: __ UPS __ FedEx __ Courier ________
Tracking # 6094 5455 7431

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

Relinquished by : (Signature) [signature] | Date: 1/10/23 | Time: 1500 | Received by: (Signature) | Trip Blank Received: Yes / (No) HCL / MeoH TBR

Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: BAZ °C 4.1 | Bottles Received: 13 | If preservation required by Login: Date/Time

Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) [signature] | Date: 1-11 | Time: 0830 | Hold: | Condition: NCF / (OK)

ANALYTICAL REPORT

February 14, 2023

SCS Engineers - KS

Sample Delivery Group:	L1584216
Samples Received:	02/09/2023
Project Number:	27213168.22 - F
Description:	Evergy Montrose Gen Station LF GW 2022-23

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

Entire Report Reviewed By:

Jeff Carr
Project Manager

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

TABLE OF CONTENTS

MW-506 L1584216-01 GW

Collected by: Jason R. Franks | Collected date/time: 02/07/23 14:40 | Received date/time: 02/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2003707	10	02/10/23 12:24	02/10/23 12:24	LBR	Mt. Juliet, TN

MW-601 L1584216-02 GW

Collected by: Jason R. Franks | Collected date/time: 02/07/23 13:17 | Received date/time: 02/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2003707	10	02/10/23 12:40	02/10/23 12:40	LBR	Mt. Juliet, TN

MW-602 L1584216-03 GW

Collected by: Jason R. Franks | Collected date/time: 02/08/23 11:35 | Received date/time: 02/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2003707	10	02/10/23 12:56	02/10/23 12:56	LBR	Mt. Juliet, TN

MW-603 L1584216-04 GW

Collected by: Jason R. Franks | Collected date/time: 02/07/23 13:30 | Received date/time: 02/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2003707	10	02/10/23 13:43	02/10/23 13:43	LBR	Mt. Juliet, TN

MW-604 L1584216-05 GW

Collected by: Jason R. Franks | Collected date/time: 02/07/23 12:40 | Received date/time: 02/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2003707	10	02/10/23 13:59	02/10/23 13:59	LBR	Mt. Juliet, TN

DUPLICATE 1 L1584216-06 GW

Collected by: Jason R. Franks | Collected date/time: 02/07/23 12:45 | Received date/time: 02/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2003707	10	02/10/23 14:47	02/10/23 14:47	LBR	Mt. Juliet, TN

MW-605 L1584216-07 GW

Collected by: Jason R. Franks | Collected date/time: 02/07/23 15:20 | Received date/time: 02/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2005365	10	02/13/23 21:51	02/13/23 21:51	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2003820	1	02/10/23 11:14	02/11/23 01:29	ZSA	Mt. Juliet, TN

DUPLICATE 2 L1584216-08 GW

Collected by: Jason R. Franks | Collected date/time: 02/07/23 15:25 | Received date/time: 02/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2003707	10	02/10/23 15:51	02/10/23 15:51	LBR	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2003820	1	02/10/23 11:14	02/11/23 02:32	ZSA	Mt. Juliet, TN

CASE NARRATIVE

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

Jeff Carr
Project Manager

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Fluoride	U		640	1500	10	02/10/2023 12:24	WG2003707

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	76600		3790	10000	10	02/10/2023 12:40	WG2003707
Fluoride	U		640	1500	10	02/10/2023 12:40	WG2003707

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Fluoride	U		640	1500	10	02/10/2023 12:56	WG2003707

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	6670	J	3790	10000	10	02/10/2023 13:43	WG2003707
Fluoride	U		640	1500	10	02/10/2023 13:43	WG2003707

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	16500		3790	10000	10	02/10/2023 13:59	WG2003707
Fluoride	U		640	1500	10	02/10/2023 13:59	WG2003707

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	16200		3790	10000	10	02/10/2023 14:47	WG2003707
Fluoride	U		640	1500	10	02/10/2023 14:47	WG2003707

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Fluoride	U		640	1500	10	02/13/2023 21:51	WG2005365

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Calcium	428000	V	79.3	1000	1	02/11/2023 01:29	WG2003820

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Fluoride	U		640	1500	10	02/10/2023 15:51	WG2003707

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Calcium	432000		79.3	1000	1	02/11/2023 02:32	WG2003820

Method Blank (MB)

(MB) R3889760-1 02/10/23 07:21

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

L1584201-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1584201-03 02/10/23 08:24 • (DUP) R3889760-3 02/10/23 08:40

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	121000	121000	1	0.175		15
Fluoride	757	742	1	1.92		15

L1584216-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1584216-08 02/10/23 15:51 • (DUP) R3889760-8 02/10/23 16:07

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	32100	30800	10	3.98		15
Fluoride	U	U	10	0.000		15

Laboratory Control Sample (LCS)

(LCS) R3889760-2 02/10/23 07:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40700	102	80.0-120	
Fluoride	8000	8390	105	80.0-120	

L1584216-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1584216-05 02/10/23 13:59 • (MS) R3889760-4 02/10/23 14:15 • (MSD) R3889760-5 02/10/23 14:31

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	16500	64600	65600	96.3	98.3	10	80.0-120			1.53	15
Fluoride	5000	U	5490	5670	110	113	10	80.0-120			3.39	15

Method Blank (MB)

(MB) R3890620-1 02/13/23 20:43

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

L1584634-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1584634-04 02/13/23 22:42 • (DUP) R3890620-5 02/13/23 22:55

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	80.4	82.9	1	0.000		15

L1585088-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1585088-01 02/14/23 10:22 • (DUP) R3890620-8 02/14/23 10:35

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	155	165	1	6.26		15

Laboratory Control Sample (LCS)

(LCS) R3890620-2 02/13/23 20:56

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluoride	8000	8220	103	80.0-120	

L1584216-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1584216-07 02/13/23 21:51 • (MS) R3890620-3 02/13/23 22:04 • (MSD) R3890620-4 02/13/23 22:17

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Fluoride	5000	U	4870	4710	97.5	94.3	10	80.0-120			3.33	15

L1584973-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1584973-04 02/14/23 01:03 • (MS) R3890620-6 02/14/23 01:16 • (MSD) R3890620-7 02/14/23 01:29

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Fluoride	5000	323	5490	5430	103	102	1	80.0-120			1.18	15

Method Blank (MB)

(MB) R3889871-1 02/11/23 01:24

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Calcium	U		79.3	1000

Laboratory Control Sample (LCS)

(LCS) R3889871-2 02/11/23 01:26

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Calcium	10000	10000	100	80.0-120	

L1584216-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1584216-07 02/11/23 01:29 • (MS) R3889871-4 02/11/23 01:35 • (MSD) R3889871-5 02/11/23 01:38

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Calcium	10000	428000	435000	432000	79.4	45.2	1	75.0-125		V	0.787	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

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

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

Pres Chk: 2

Report to: **Jason Franks**

Email To: **jfranks@scsengineers.com;jay.martin@evergy.c**

Project Description: **Evergy Montrose Gen Station LF GW 2022-23**

City/State Collected: **CLINTON, MO**

Please Circle: PT MT (CT) ET

Phone: **913-681-0030**

Client Project # **27213168.22 - F**

Lab Project # **AQUAOPKS-MONTROSE**

Collected by (print): **JASON R FRANKS**

Site/Facility ID #

P.O. #

Collected by (signature): Jason R. Franks

Immediately Packed on Ice N ___ Y ___

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Calcium - 6010 250mlHDPE-HNO3	Fluoride 125mlHDPE-NoPres	Fluoride, Chloride 125mlHDPE-NoPres	Remarks	Sample # (lab only)
MW-506	GRAB	GW	—	2/7/23	1440	1		X			-01
MW-601		GW	—	2/7/23	1317	1			X		-02
MW-602		GW	—	2/8/23	1135	1		X			-03
MW-603		GW	—	2/7/23	1330	1			X		-04
MW-604		GW	—	2/7/23	1240	1			X		-05
MW-604 MS/MSD		GW	—	2/7/23	1245	1			X		
DUPLICATE 1		GW	—	2/7/23	1245	1			X		-06
MW-605		GW	—	2/7/23	1520	2	X	X			-07
MW-605 MS/MSD		GW	—	2/7/23	1530	2	X	X			
DUPLICATE 2		GW	—	2/7/23	1525	2	X	X			-08

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Relinquished by : (Signature) Jason R. Franks — Date: 02/08/23 — Time: 1600 — Received by: (Signature)

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

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

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 1.0 °C Bottles Received: 13

Date: 2/9/23 Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

Sample Receipt Checklist

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

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # 584216

H183

Acctnum: **AQUAOPKS**
Template: **T212738**
Prelogin: **P978664**
PM: **206 - Jeff Carr**
PB:
Shipped Via: **FedEX Ground**

ANALYTICAL REPORT

June 06, 2023

SCS Engineers - KS

Sample Delivery Group:	L1617133
Samples Received:	05/17/2023
Project Number:	27213168.23-A
Description:	Evergy Montrose Gen Station LF GW 2022-23

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

Entire Report Reviewed By:

Jeff Carr
Project Manager

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

TABLE OF CONTENTS

SAMPLE SUMMARY

MW-506 L1617133-01 GW

Collected by: B. Coleman
Collected date/time: 05/16/23 14:15
Received date/time: 05/17/23 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2064749	1	05/23/23 07:06	05/23/23 10:03	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2065198	1	05/23/23 21:38	05/23/23 21:38	LBR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2065198	10	05/23/23 21:52	05/23/23 21:52	LBR	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2062596	1	05/23/23 13:10	05/24/23 20:16	SPL	Mt. Juliet, TN

DUPLICATE L1617133-02 GW

Collected by: B. Coleman
Collected date/time: 05/16/23 00:00
Received date/time: 05/17/23 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2064749	1	05/23/23 07:06	05/23/23 10:03	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2065198	1	05/23/23 23:00	05/23/23 23:00	LBR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2071979	20	06/05/23 23:31	06/05/23 23:31	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2062596	1	05/23/23 13:10	05/24/23 20:28	SPL	Mt. Juliet, TN

CASE NARRATIVE

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

Jeff Carr
Project Manager

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	2530000		50000	1	05/23/2023 10:03	WG2064749

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	88800		379	1000	1	05/23/2023 21:38	WG2065198
Fluoride	134	J	64.0	150	1	05/23/2023 21:38	WG2065198
Sulfate	1920000		5940	50000	10	05/23/2023 21:52	WG2065198

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	88.0	J	20.0	200	1	05/24/2023 20:16	WG2062596
Calcium	368000	O1 V	79.3	1000	1	05/24/2023 20:16	WG2062596

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	2890000		50000	1	05/23/2023 10:03	WG2064749

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	90200		379	1000	1	05/23/2023 23:00	WG2065198
Fluoride	140	J	64.0	150	1	05/23/2023 23:00	WG2065198
Sulfate	1890000		11900	100000	20	06/05/2023 23:31	WG2071979

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Boron	81.0	J	20.0	200	1	05/24/2023 20:28	WG2062596
Calcium	361000		79.3	1000	1	05/24/2023 20:28	WG2062596

Method Blank (MB)

(MB) R3929016-1 05/23/23 10:03

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

L1616913-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1616913-01 05/23/23 10:03 • (DUP) R3929016-3 05/23/23 10:03

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	369000	384000	1	3.98		5

L1616945-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1616945-01 05/23/23 10:03 • (DUP) R3929016-4 05/23/23 10:03

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	314000	329000	1	4.67		5

Laboratory Control Sample (LCS)

(LCS) R3929016-2 05/23/23 10:03

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	7530000	85.6	77.3-123	

Method Blank (MB)

(MB) R3932506-1 05/23/23 11:02

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

L1617133-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1617133-01 05/23/23 21:38 • (DUP) R3932506-7 05/23/23 22:06

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	88800	88700	1	0.153		15
Fluoride	134	132	1	1.28	J	15
Sulfate	1830000	1830000	1	0.258	E	15

L1617144-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1617144-04 05/24/23 05:08 • (DUP) R3932506-15 05/24/23 10:25

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	16400	16800	1	2.54		15
Fluoride	433	446	1	2.96		15
Sulfate	2120000	2180000	1	2.74	E	15

L1616887-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1616887-02 05/23/23 18:54 • (DUP) R3932506-3 05/23/23 19:21

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	15700	15600	1	0.640		15
Fluoride	472	466	1	1.15		15
Sulfate	95200	94600	1	0.640		15

L1617133-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1617133-01 05/23/23 21:52 • (DUP) R3932506-8 05/23/23 22:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	1920000	1930000	10	0.185		15

Laboratory Control Sample (LCS)

(LCS) R3932506-2 05/23/23 11:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	38900	97.3	80.0-120	
Fluoride	8000	8040	101	80.0-120	
Sulfate	40000	40800	102	80.0-120	

L1617133-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617133-01 05/23/23 21:38 • (MS) R3932506-9 05/23/23 22:33 • (MSD) R3932506-10 05/23/23 22:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	88800	135000	137000	92.0	97.2	1	80.0-120			1.91	15
Fluoride	5000	134	4310	4400	83.6	85.3	1	80.0-120			1.92	15
Sulfate	50000	1830000	1840000	1880000	12.1	99.8	1	80.0-120	E V	E	2.36	15

L1617144-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617144-04 05/24/23 05:08 • (MS) R3932506-17 05/24/23 10:52 • (MSD) R3932506-18 05/24/23 11:05

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	16400	68000	65000	103	97.2	1	80.0-120			4.50	15
Fluoride	5000	433	4960	4750	90.4	86.3	1	80.0-120			4.28	15
Sulfate	50000	2120000	2160000	2050000	89.2	0.000	1	80.0-120	E	E V	5.18	15

L1616887-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1616887-02 05/23/23 18:54 • (MS) R3932506-5 05/23/23 19:48 • (MSD) R3932506-6 05/23/23 20:02

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	15700	64600	63700	97.7	96.1	1	80.0-120			1.30	15
Fluoride	5000	472	5390	5310	98.3	96.8	1	80.0-120			1.44	15
Sulfate	50000	95200	143000	141000	95.6	91.6	1	80.0-120			1.42	15

Method Blank (MB)

(MB) R3933447-3 06/05/23 20:35

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

L1618658-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1618658-01 06/06/23 02:13 • (DUP) R3933447-7 06/06/23 02:26

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	27700	26400	1	4.89		15

L1621271-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1621271-04 06/06/23 05:20 • (DUP) R3933447-8 06/06/23 05:34

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	51500	49100	1	4.66		15

Laboratory Control Sample (LCS)

(LCS) R3933447-4 06/05/23 20:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfate	40000	40300	101	80.0-120	

L1617144-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617144-04 06/06/23 00:12 • (MS) R3933447-5 06/06/23 00:25 • (MSD) R3933447-6 06/06/23 00:39

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	50000	2060000	2030000	2000000	0.000	0.000	20	80.0-120	V	V	1.38	15

L1621271-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1621271-04 06/06/23 05:20 • (MS) R3933447-9 06/06/23 05:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Sulfate	50000	51500	99900	96.8	1	80.0-120	

Method Blank (MB)

(MB) R3929101-1 05/24/23 20:10

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Boron	U		20.0	200
Calcium	U		79.3	1000

Laboratory Control Sample (LCS)

(LCS) R3929101-2 05/24/23 20:13

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Boron	1000	1040	104	80.0-120	
Calcium	10000	10500	105	80.0-120	

L1617133-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617133-01 05/24/23 20:16 • (MS) R3929101-4 05/24/23 20:22 • (MSD) R3929101-5 05/24/23 20:25

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Boron	1000	88.0	1100	1100	101	101	1	75.0-125			0.108	20
Calcium	10000	368000	363000	360000	0.000	0.000	1	75.0-125	V	V	0.654	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

Company Name/Address:
SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

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

Pres Chk

Report to:
Jason Franks

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

Project Description:
Evergy Montrose Gen Station LF GW 2022-23

City/State Collected: Montrose, MO

Please Circle: PT MT CT ET

Phone: **913-681-0030**

Client Project #
27213168.23-A

Lab Project #
AQUAOPKS-MONTROSE

Collected by (print):
B. Coleman

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y ___

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

Quote #

Date Results Needed: STD

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Anions (Cld, F, SO4) 125mlHDPE-NoPres	B, Ca - 6010 250mlHDPE-HNO3	TDS 250mlHDPE-NoPres	Remarks	Sample # (lab only)
MW-506	G	GW	-	5/16/23	1415	3	X	X	X		-01
MW-506 MS/MSD	↓	GW	↓	↓	-	3	X	X	X		-01
DUPLICATE	↓	GW	↓	↓	-	3	X	X	X		-02

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1617133
D047

Acctnum: **AQUAOPKS**
Template: **T166717**
Prelogin: **P999235**
PM: **206 - Jeff Carr**
PB:

Shipped Via: **FedEx Ground**

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	5/16/23	1800		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 9
				If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5/17/23 Time: 930
			Kayla (9)	Hold: Condition: NCF / OK

4617133

Tracking Numbers	Temperature
5671 5374 6376	NSA7 2.2+0=2.2
5882 7565 0901	NSA7 3.4+0=3.4
5882 7565 0897	NSA7 3.5+0=3.5

ANALYTICAL REPORT

June 06, 2023

SCS Engineers - KS

Sample Delivery Group:	L1617144
Samples Received:	05/17/2023
Project Number:	27213168.23-A
Description:	Evergy Montrose Gen Station LF GW 2022-23

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

Entire Report Reviewed By:

Jeff Carr
Project Manager

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

TABLE OF CONTENTS

MW-601 L1617144-01 GW

Collected by: B. Coleman | Collected date/time: 05/16/23 14:10 | Received date/time: 05/17/23 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2064750	1	05/23/23 07:07	05/23/23 10:36	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2065198	1	05/23/23 23:54	05/23/23 23:54	LBR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2071979	20	06/05/23 23:45	06/05/23 23:45	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2062601	1	05/23/23 09:35	05/23/23 15:35	ZSA	Mt. Juliet, TN

MW-602 L1617144-02 GW

Collected by: B. Coleman | Collected date/time: 05/16/23 13:30 | Received date/time: 05/17/23 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2064750	1	05/23/23 07:07	05/23/23 10:36	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2065198	1	05/24/23 00:21	05/24/23 00:21	LBR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2065198	10	05/24/23 00:34	05/24/23 00:34	LBR	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2062601	1	05/23/23 09:35	05/23/23 15:38	ZSA	Mt. Juliet, TN

MW-603 L1617144-03 GW

Collected by: B. Coleman | Collected date/time: 05/16/23 11:50 | Received date/time: 05/17/23 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2064750	1	05/23/23 07:07	05/23/23 10:36	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2065198	1	05/24/23 00:48	05/24/23 00:48	LBR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2071979	20	06/05/23 23:58	06/05/23 23:58	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2062601	1	05/23/23 09:35	05/23/23 15:41	ZSA	Mt. Juliet, TN

MW-604 L1617144-04 GW

Collected by: B. Coleman | Collected date/time: 05/16/23 12:15 | Received date/time: 05/17/23 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2064750	1	05/23/23 07:07	05/23/23 10:36	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2065198	1	05/24/23 05:08	05/24/23 05:08	LBR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2071979	20	06/06/23 00:12	06/06/23 00:12	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2062601	1	05/23/23 09:35	05/23/23 15:23	ZSA	Mt. Juliet, TN

MW-605 L1617144-05 GW

Collected by: B. Coleman | Collected date/time: 05/16/23 12:45 | Received date/time: 05/17/23 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2064750	1	05/23/23 07:07	05/23/23 10:36	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2065198	1	05/24/23 01:14	05/24/23 01:14	LBR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2071979	20	06/06/23 01:19	06/06/23 01:19	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2062601	1	05/23/23 09:35	05/23/23 15:44	ZSA	Mt. Juliet, TN

DUPLICATE L1617144-06 GW

Collected by: B. Coleman | Collected date/time: 05/16/23 00:00 | Received date/time: 05/17/23 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2064750	1	05/23/23 07:07	05/23/23 10:36	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2065198	1	05/24/23 01:42	05/24/23 01:42	LBR	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2071979	20	06/06/23 01:32	06/06/23 01:32	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2062601	1	05/23/23 09:35	05/23/23 15:53	ZSA	Mt. Juliet, TN

CASE NARRATIVE

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

Jeff Carr
Project Manager

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	4070000		50000	1	05/23/2023 10:36	WG2064750

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	76100		379	1000	1	05/23/2023 23:54	WG2065198
Fluoride	347		64.0	150	1	05/23/2023 23:54	WG2065198
Sulfate	3170000		11900	100000	20	06/05/2023 23:45	WG2071979

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Boron	126	J	20.0	200	1	05/23/2023 15:35	WG2062601
Calcium	462000		79.3	1000	1	05/23/2023 15:35	WG2062601

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	1700000		20000	1	05/23/2023 10:36	WG2064750

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	4290		379	1000	1	05/24/2023 00:21	WG2065198
Fluoride	144	J	64.0	150	1	05/24/2023 00:21	WG2065198
Sulfate	1170000		5940	50000	10	05/24/2023 00:34	WG2065198

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Boron	4200		20.0	200	1	05/23/2023 15:38	WG2062601
Calcium	280000		79.3	1000	1	05/23/2023 15:38	WG2062601

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	2660000		50000	1	05/23/2023 10:36	WG2064750

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	6270		379	1000	1	05/24/2023 00:48	WG2065198
Fluoride	571		64.0	150	1	05/24/2023 00:48	WG2065198
Sulfate	2200000		11900	100000	20	06/05/2023 23:58	WG2071979

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Boron	5110		20.0	200	1	05/23/2023 15:41	WG2062601
Calcium	389000		79.3	1000	1	05/23/2023 15:41	WG2062601

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	2830000		50000	1	05/23/2023 10:36	WG2064750

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	16400		379	1000	1	05/24/2023 05:08	WG2065198
Fluoride	433		64.0	150	1	05/24/2023 05:08	WG2065198
Sulfate	2060000	V	11900	100000	20	06/06/2023 00:12	WG2071979

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Boron	4570		20.0	200	1	05/23/2023 15:23	WG2062601
Calcium	483000	V	79.3	1000	1	05/23/2023 15:23	WG2062601

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	2940000		50000	1	05/23/2023 10:36	WG2064750

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	28400		379	1000	1	05/24/2023 01:14	WG2065198
Fluoride	226		64.0	150	1	05/24/2023 01:14	WG2065198
Sulfate	2200000		11900	100000	20	06/06/2023 01:19	WG2071979

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Boron	1570		20.0	200	1	05/23/2023 15:44	WG2062601
Calcium	448000		79.3	1000	1	05/23/2023 15:44	WG2062601

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	3030000		50000	1	05/23/2023 10:36	WG2064750

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	16200		379	1000	1	05/24/2023 01:42	WG2065198
Fluoride	430		64.0	150	1	05/24/2023 01:42	WG2065198
Sulfate	2190000		11900	100000	20	06/06/2023 01:32	WG2071979

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Boron	4550		20.0	200	1	05/23/2023 15:53	WG2062601
Calcium	481000		79.3	1000	1	05/23/2023 15:53	WG2062601

Method Blank (MB)

(MB) R3929013-1 05/23/23 10:36

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

L1617129-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1617129-05 05/23/23 10:36 • (DUP) R3929013-3 05/23/23 10:36

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1050000	1080000	1	2.81		5

L1617144-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1617144-02 05/23/23 10:36 • (DUP) R3929013-4 05/23/23 10:36

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1700000	1700000	1	0.235		5

Laboratory Control Sample (LCS)

(LCS) R3929013-2 05/23/23 10:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	7750000	88.1	77.3-123	

Method Blank (MB)

(MB) R3932506-1 05/23/23 11:02

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

L1617133-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1617133-01 05/23/23 21:38 • (DUP) R3932506-7 05/23/23 22:06

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	88800	88700	1	0.153		15
Fluoride	134	132	1	1.28	J	15
Sulfate	1830000	1830000	1	0.258	E	15

L1617144-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1617144-04 05/24/23 05:08 • (DUP) R3932506-15 05/24/23 10:25

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	16400	16800	1	2.54		15
Fluoride	433	446	1	2.96		15
Sulfate	2120000	2180000	1	2.74	E	15

L1616887-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1616887-02 05/23/23 18:54 • (DUP) R3932506-3 05/23/23 19:21

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	15700	15600	1	0.640		15
Fluoride	472	466	1	1.15		15
Sulfate	95200	94600	1	0.640		15

L1617133-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1617133-01 05/23/23 21:52 • (DUP) R3932506-8 05/23/23 22:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	1920000	1930000	10	0.185		15

Laboratory Control Sample (LCS)

(LCS) R3932506-2 05/23/23 11:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	38900	97.3	80.0-120	
Fluoride	8000	8040	101	80.0-120	
Sulfate	40000	40800	102	80.0-120	

L1617133-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617133-01 05/23/23 21:38 • (MS) R3932506-9 05/23/23 22:33 • (MSD) R3932506-10 05/23/23 22:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	88800	135000	137000	92.0	97.2	1	80.0-120			1.91	15
Fluoride	5000	134	4310	4400	83.6	85.3	1	80.0-120			1.92	15
Sulfate	50000	1830000	1840000	1880000	12.1	99.8	1	80.0-120	E V	E	2.36	15

L1617144-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617144-04 05/24/23 05:08 • (MS) R3932506-17 05/24/23 10:52 • (MSD) R3932506-18 05/24/23 11:05

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	16400	68000	65000	103	97.2	1	80.0-120			4.50	15
Fluoride	5000	433	4960	4750	90.4	86.3	1	80.0-120			4.28	15
Sulfate	50000	2120000	2160000	2050000	89.2	0.000	1	80.0-120	E	E V	5.18	15

L1616887-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1616887-02 05/23/23 18:54 • (MS) R3932506-5 05/23/23 19:48 • (MSD) R3932506-6 05/23/23 20:02

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	15700	64600	63700	97.7	96.1	1	80.0-120			1.30	15
Fluoride	5000	472	5390	5310	98.3	96.8	1	80.0-120			1.44	15
Sulfate	50000	95200	143000	141000	95.6	91.6	1	80.0-120			1.42	15

Method Blank (MB)

(MB) R3933447-3 06/05/23 20:35

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

L1618658-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1618658-01 06/06/23 02:13 • (DUP) R3933447-7 06/06/23 02:26

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	27700	26400	1	4.89		15

L1621271-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1621271-04 06/06/23 05:20 • (DUP) R3933447-8 06/06/23 05:34

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	51500	49100	1	4.66		15

Laboratory Control Sample (LCS)

(LCS) R3933447-4 06/05/23 20:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfate	40000	40300	101	80.0-120	

L1617144-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617144-04 06/06/23 00:12 • (MS) R3933447-5 06/06/23 00:25 • (MSD) R3933447-6 06/06/23 00:39

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	50000	2060000	2030000	2000000	0.000	0.000	20	80.0-120	V	V	1.38	15

L1621271-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1621271-04 06/06/23 05:20 • (MS) R3933447-9 06/06/23 05:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Sulfate	50000	51500	99900	96.8	1	80.0-120	

QUALITY CONTROL SUMMARY

L1617144-01,02,03,04,05,06

Method Blank (MB)

(MB) R3928476-1 05/23/23 15:18

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Boron	U		20.0	200
Calcium	U		79.3	1000

Laboratory Control Sample (LCS)

(LCS) R3928476-2 05/23/23 15:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron	1000	996	99.6	80.0-120	
Calcium	10000	9750	97.5	80.0-120	

L1617144-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1617144-04 05/23/23 15:23 • (MS) R3928476-4 05/23/23 15:29 • (MSD) R3928476-5 05/23/23 15:32

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron	1000	4570	5500	5480	93.1	91.1	1	75.0-125			0.367	20
Calcium	10000	483000	483000	481000	1.02	0.000	1	75.0-125	V	V	0.430	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
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.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

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

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

Pres Chk

Report to: **Jason Franks**

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

Project Description: **Evergy Montrose Gen Station LF GW 2022-23**

City/State Collected: Montrose, MO

Please Circle: PT MT CT ET

Phone: **913-681-0030**

Client Project # **27213168.23-A**

Lab Project # **AQUAOPKS-MONTROSE**

Collected by (print): B. Colman

Site/Facility ID #

P.O. #

Collected by (signature): Immediately Packed on Ice N ____ Y ____

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

Quote #

Date Results Needed: SRD

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Anions (Cld, F, SO4) 125mlHDPE-NoPres	B, Ca - 6010 250mlHDPE-HNO3	TDS 250mlHDPE-NoPres	Remarks	Sample # (lab only)
MW-601	G	GW	-	5/16/23	1410	3	X	X	X		-01
MW-602		GW			1330	3	X	X	X		-02
MW-603		GW			1150	3	X	X	X		-03
MW-604		GW			1215	3	X	X	X		-04
MW-605		GW			1245	3	X	X	X		-05
MW-604 MS / MSD		GW			-	3	X	X	X		-04 -05 TD
DUPLICATE		GW			-	3	X	X	X		-06

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1617144
D048

Acctnum: **AQUAOPKS**
Template: **T135966**
Prelogin: **P999237**
PM: **206 - Jeff Carr**
PB:

Shipped Via: **FedEX Ground**

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking #

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes (No) HCL / MeoH TBR
	5/16/23	1800		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 21
				If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5/17/23 Time: 930
			Thayer @	Hold: Condition: NCF / OK

L167144

Tracking Numbers	Temperature
5671 5374 6376	NSA7 2.2+0=2.2
5882 7565 0901	NSA7 3.4+0=3.4
5882 7565 0897	NSA7 3.5+0=3.5

ANALYTICAL REPORT

July 28, 2023

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

SCS Engineers - KS

Sample Delivery Group:	L1634137
Samples Received:	07/11/2023
Project Number:	27213168.23 - F
Description:	Evergy Montrose Gen Station LF GW 2023-24

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

Entire Report Reviewed By:

Jeff Carr
Project Manager

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

TABLE OF CONTENTS

MW-506 L1634137-01 GW

Collected by: Whit Martain | Collected date/time: 07/10/23 17:10 | Received date/time: 07/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2097563	1	07/19/23 12:23	07/19/23 12:23	KMC	Mt. Juliet, TN

DUPLICATE 1 L1634137-02 GW

Collected by: Whit Martain | Collected date/time: 07/10/23 17:10 | Received date/time: 07/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2103178	1	07/27/23 22:59	07/27/23 22:59	GEB	Mt. Juliet, TN

MW-601 L1634137-03 GW

Collected by: Whit Martain | Collected date/time: 07/10/23 15:10 | Received date/time: 07/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2097589	10	07/19/23 16:30	07/19/23 16:30	KMC	Mt. Juliet, TN

DUPLICATE 2 L1634137-04 GW

Collected by: Whit Martain | Collected date/time: 07/10/23 15:10 | Received date/time: 07/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2097589	10	07/19/23 15:50	07/19/23 15:50	KMC	Mt. Juliet, TN

MW-604 L1634137-05 GW

Collected by: Whit Martain | Collected date/time: 07/10/23 15:50 | Received date/time: 07/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2093730	1	07/13/23 11:52	07/19/23 16:35	ZSA	Mt. Juliet, TN

DUPLICATE 3 L1634137-06 GW

Collected by: Whit Martain | Collected date/time: 07/10/23 15:50 | Received date/time: 07/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2093730	1	07/13/23 11:52	07/19/23 16:47	ZSA	Mt. Juliet, TN

MW-605 L1634137-07 GW

Collected by: Whit Martain | Collected date/time: 07/10/23 16:25 | Received date/time: 07/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2093730	1	07/13/23 11:52	07/19/23 16:50	ZSA	Mt. Juliet, TN

CASE NARRATIVE

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

Jeff Carr
Project Manager

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Fluoride	91.8	J P1	64.0	150	1	07/19/2023 12:23	WG2097563

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Fluoride	U		64.0	150	1	07/27/2023 22:59	WG2103178

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	64300		3790	10000	10	07/19/2023 16:30	WG2097589

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	70900		3790	10000	10	07/19/2023 15:50	WG2097589

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Calcium	459000	V	79.3	1000	1	07/19/2023 16:35	WG2093730

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Calcium	458000		79.3	1000	1	07/19/2023 16:47	WG2093730

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Calcium	426000		79.3	1000	1	07/19/2023 16:50	WG2093730

Method Blank (MB)

(MB) R3950797-1 07/19/23 10:52

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

L1634137-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1634137-01 07/19/23 12:23 • (DUP) R3950797-5 07/19/23 13:15

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	91.8	117	1	24.1	J P1	15

L1634640-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1634640-07 07/19/23 19:09 • (DUP) R3950797-6 07/19/23 19:26

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	78.0	80.1	1	2.66	J	15

Laboratory Control Sample (LCS)

(LCS) R3950797-2 07/19/23 11:08

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluoride	8000	8080	101	80.0-120	

L1634137-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1634137-01 07/19/23 12:23 • (MS) R3950797-3 07/19/23 12:40 • (MSD) R3950797-4 07/19/23 12:57

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Fluoride	5000	91.8	4350	4350	85.2	85.1	1	80.0-120			0.0667	15

L1634640-07 Original Sample (OS) • Matrix Spike (MS)

(OS) L1634640-07 07/19/23 19:09 • (MS) R3950797-7 07/19/23 19:43

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Fluoride	5000	78.0	4910	96.6	1	80.0-120	

Method Blank (MB)

(MB) R3950473-1 07/19/23 09:27

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000

L1634675-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1634675-03 07/19/23 12:30 • (DUP) R3950473-3 07/19/23 12:40

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	14900	14600	1	2.21		15

L1634137-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1634137-03 07/19/23 16:30 • (DUP) R3950473-7 07/19/23 18:18

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	64300	64800	10	0.745		15

Laboratory Control Sample (LCS)

(LCS) R3950473-2 07/19/23 09:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40200	101	80.0-120	

L1634675-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1634675-03 07/19/23 12:30 • (MS) R3950473-4 07/19/23 12:50

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	14900	63800	97.7	1	80.0-120	

L1634137-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1634137-03 07/19/23 16:30 • (MS) R3950473-5 07/19/23 16:40 • (MSD) R3950473-6 07/19/23 16:50

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	64300	106000	115000	82.7	102	10	80.0-120			8.62	15

Method Blank (MB)

(MB) R3953892-1 07/27/23 22:32

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

L1639620-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1639620-01 07/27/23 23:26 • (DUP) R3953892-3 07/28/23 03:14

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	78.7	97.4	1	21.2	J P1	15

L1639624-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1639624-05 07/28/23 01:15 • (DUP) R3953892-6 07/28/23 04:18

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	U	116	1	200	J P1	15

Laboratory Control Sample (LCS)

(LCS) R3953892-2 07/27/23 22:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluoride	8000	8380	105	80.0-120	

L1639620-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1639620-01 07/27/23 23:26 • (MS) R3953892-4 07/28/23 03:52 • (MSD) R3953892-5 07/28/23 04:05

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Fluoride	5000	78.7	5220	5370	103	106	1	80.0-120			2.91	15

L1639624-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1639624-05 07/28/23 01:15 • (MS) R3953892-7 07/28/23 04:31

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Fluoride	5000	U	5230	105	1	80.0-120	

Method Blank (MB)

(MB) R3950535-1 07/19/23 16:30

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Calcium	U		79.3	1000

Laboratory Control Sample (LCS)

(LCS) R3950535-2 07/19/23 16:32

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium	10000	9640	96.4	80.0-120	

L1634137-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1634137-05 07/19/23 16:35 • (MS) R3950535-4 07/19/23 16:41 • (MSD) R3950535-5 07/19/23 16:44

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Calcium	10000	459000	459000	459000	5.22	0.469	1	75.0-125	V	V	0.104	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

Company Name/Address:
SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

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

Pres Chk

Report to:
Jason Franks

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

Project Description:
Evergy Montrose Gen Station LF GW 2023-24

City/State Collected:

Please Circle: PT MT CT ET

Phone: **913-681-0030**

Client Project #
27213168.23 - F

Lab Project #
AQUAOPKS-MONTROSE

Collected by (print):
Whit Martin

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed
Std

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Calcium - 6010 250mlHDPE-HNO3	Chloride 125mlHDPE-NoPres	Fluoride 125mlHDPE-NoPres								Remarks	Sample # (lab only)
MW-506	Grab	GW		7/10/23	1710	1			X									-01 01
MW-506 MS/MSD	Grab	GW		7/10/23	1710	1			X									-02 01
DUPLICATE 1	Grab	GW		7/10/23	1710	1			X									-03 02
MW-601	Grab	GW		7/10/23	1510	1		X										-04 03
MW-601 MS/MSD	Grab	GW		7/10/23	1510	1		X										-05 03
DUPLICATE 2	Grab	GW		7/10/23	1510	1		X										-06 04
MW-604	Grab	GW		7/10/23	1550	1	X											-07 05
MW-604 MS/MSD	Grab	GW		7/10/23	1550	1	X											-08 05
DUPLICATE 3	Grab	GW		7/10/23	1550	1	X											-09 06
MW-605	Grab	GW		7/10/23	1625	1	X											-10 07

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

L1634137
E057

Acctnum: **AQUAOPKS**
Template: **T212738**
Prelogin: **P1010468**
PM: **206 - Jeff Carr**
PB:

Shipped Via: **FedEX Ground**

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

Remarks:
Report flouride to the MDL.

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 6481 5470 3631

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	7/10/23	1845		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
				3.0
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
				7/11/23 9:00

If preservation required by Login: Date/Time
PH-1DBDH4321 TRC-231312
CR6-20221V

Hold: Condition: NCF / OK

ANALYTICAL REPORT

August 17, 2023

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

SCS Engineers - KS

Sample Delivery Group:	L1645308
Samples Received:	08/11/2023
Project Number:	27213168.23 - F
Description:	Evergy Montrose Gen Station LF GW 2023-24

Report To:

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

Entire Report Reviewed By:

Jeff Carr
Project Manager

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

TABLE OF CONTENTS

SAMPLE SUMMARY

MW-601 L1645308-01 GW

Collected by: Matt Vander Putten
Collected date/time: 08/10/23 14:10
Received date/time: 08/11/23 11:35

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2113984	10	08/15/23 03:53	08/15/23 03:53	MDM	Mt. Juliet, TN

DUPLICATE 1 L1645308-02 GW

Collected by: Matt Vander Putten
Collected date/time: 08/10/23 14:10
Received date/time: 08/11/23 11:35

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2113984	10	08/15/23 04:38	08/15/23 04:38	MDM	Mt. Juliet, TN

CASE NARRATIVE

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

Jeff Carr
Project Manager

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	70800		3790	10000	10	08/15/2023 03:53	WG2113984

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	69500		3790	10000	10	08/15/2023 04:38	WG2113984

QUALITY CONTROL SUMMARY

L1645308-01,02

Method Blank (MB)

(MB) R3961654-1 08/14/23 22:47

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		379	1000

L1645019-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1645019-01 08/15/23 00:40 • (DUP) R3961654-3 08/15/23 00:54

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	954000	963000	100	0.986		15

L1645346-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1645346-04 08/15/23 08:37 • (DUP) R3961654-12 08/15/23 08:52

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	6600	6580	1	0.202		15

Laboratory Control Sample (LCS)

(LCS) R3961654-2 08/14/23 23:02

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	41500	104	80.0-120	

L1645308-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1645308-01 08/15/23 03:53 • (MS) R3961654-8 08/15/23 04:08 • (MSD) R3961654-9 08/15/23 04:23

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	50000	70800	116000	116000	89.9	89.9	10	80.0-120			0.00700	15

L1645322-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1645322-02 08/15/23 04:53 • (MS) R3961654-10 08/15/23 05:38 • (MSD) R3961654-11 08/15/23 05:53

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	50000	6610000	6300000	6300000	0.000	0.000	1	80.0-120	E V	E V	0.0293	15

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
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.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

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

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

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace® PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Report to: **Jason Franks**

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

Project Description: Evergy Montrose Gen Station LF GW 2023-24

City/State Collected: Montrose MO

Please Circle: PT MT (CT) ET

Phone: 913-681-0030

Client Project # 27213168.23 - F

Lab Project # AQUAOPKS-MONTROSE

SDG # 1645308

D015

Collected by (print): Matt Vanderpatten

Site/Facility ID #

P.O. #

Acctnum: AQUAOPKS
Template: T212738
Prelogin: P1015811
PM: 206 - Jeff Carr
PB:
Shipped Via: FedEX Ground

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed: Std

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Chloride 125mlHDPE-NoPres										Remarks	Sample # (lab only)
MW-601	Grab	GW	NA	8/10/23	1410	1	X											
MW-601 MS/MSD	|	GW	|	|	1410	1	X											-01
DUPLICATE 1	|	GW	|	|	1410	1	X											-02

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

Remarks:

pH ______ Temp ______

Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking # 6481 5470 3274

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeOH TBR
[signature]	8/10/23	1700		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.3+0=1.3 °C Bottles Received: 3
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature] 17	Date: 8-11-23 Time: 1135

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

ANALYTICAL REPORT

November 29, 2023

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

SCS Engineers - KS

Sample Delivery Group:	L1678507
Samples Received:	11/16/2023
Project Number:	27213168.23-A
Description:	Evergy Montrose Gen Station LF GW 2023-24

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

Entire Report Reviewed By:

Jeff Carr
Project Manager

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

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MW-506 L1678507-01 GW

Collected by: TM
Collected date/time: 11/14/23 11:20
Received date/time: 11/16/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2174563	1	11/20/23 13:07	11/20/23 17:54	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2178932	10	11/29/23 09:43	11/29/23 09:43	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2174833	1	11/27/23 01:53	11/27/23 16:30	ZSA	Mt. Juliet, TN

DUPLICATE L1678507-03 GW

Collected by: TM
Collected date/time: 11/14/23 11:20
Received date/time: 11/16/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2174586	1	11/20/23 18:17	11/21/23 00:46	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2178935	10	11/28/23 23:22	11/28/23 23:22	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2174833	1	11/27/23 01:53	11/27/23 17:27	ZSA	Mt. Juliet, TN

CASE NARRATIVE

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

Jeff Carr
Project Manager

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	3030000		50000	1	11/20/2023 17:54	WG2174563

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	84900	J6	3790	10000	10	11/29/2023 09:43	WG2178932
Fluoride	U		640	1500	10	11/29/2023 09:43	WG2178932
Sulfate	1800000	V	5940	50000	10	11/29/2023 09:43	WG2178932

Sample Narrative:

L1678507-01 WG2178932: Dilution due to matrix.

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	102	J	20.0	200	1	11/27/2023 16:30	WG2174833
Calcium	372000	V	79.3	1000	1	11/27/2023 16:30	WG2174833

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	2830000		50000	1	11/21/2023 00:46	WG2174586

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	89600		3790	10000	10	11/28/2023 23:22	WG2178935
Fluoride	U		640	1500	10	11/28/2023 23:22	WG2178935
Sulfate	1640000		5940	50000	10	11/28/2023 23:22	WG2178935

Sample Narrative:

L1678507-03 WG2178935: Dilution due to matrix.

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Boron	106	J	20.0	200	1	11/27/2023 17:27	WG2174833
Calcium	369000		79.3	1000	1	11/27/2023 17:27	WG2174833

Method Blank (MB)

(MB) R4003147-1 11/20/23 17:54

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

L1677929-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1677929-02 11/20/23 17:54 • (DUP) R4003147-3 11/20/23 17:54

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Dissolved Solids	668000	697000	1	4.25		5

L1678027-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1678027-05 11/20/23 17:54 • (DUP) R4003147-4 11/20/23 17:54

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Dissolved Solids	1020000	1050000	1	2.71		5

Laboratory Control Sample (LCS)

(LCS) R4003147-2 11/20/23 17:54

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Dissolved Solids	8800000	8430000	95.8	85.0-115	

Method Blank (MB)

(MB) R4003107-1 11/21/23 00:46

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

L1678027-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1678027-07 11/21/23 00:46 • (DUP) R4003107-3 11/21/23 00:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Dissolved Solids	2120000	2220000	1	4.61		5

L1678508-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1678508-02 11/21/23 00:46 • (DUP) R4003107-4 11/21/23 00:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Dissolved Solids	1640000	1710000	1	3.70		5

Laboratory Control Sample (LCS)

(LCS) R4003107-2 11/21/23 00:46

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Dissolved Solids	8800000	8320000	94.5	85.0-115	

Method Blank (MB)

(MB) R4005834-1 11/29/23 00:27

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

L1677672-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1677672-05 11/29/23 05:36 • (DUP) R4005834-3 11/29/23 05:50

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	8910	9590	1	7.30		15
Fluoride	162	176	1	8.37		15
Sulfate	39200	42700	1	8.56		15

L1678505-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1678505-01 11/29/23 08:21 • (DUP) R4005834-5 11/29/23 08:35

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	13500	13300	1	1.50		15
Fluoride	65.0	67.4	1	3.63	J	15
Sulfate	35300	35000	1	0.961		15

Laboratory Control Sample (LCS)

(LCS) R4005834-2 11/29/23 00:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40300	101	80.0-120	
Fluoride	8000	8350	104	80.0-120	
Sulfate	40000	40100	100	80.0-120	

L1677672-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1677672-05 11/29/23 05:36 • (MS) R4005834-4 11/29/23 06:04

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	8910	48700	99.4	1	80.0-120	
Fluoride	8000	162	8610	106	1	80.0-120	
Sulfate	40000	39200	71500	80.6	1	80.0-120	

L1678507-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1678507-01 11/29/23 09:43 • (MS) R4005834-6 11/29/23 10:25 • (MSD) R4005834-7 11/29/23 10:39

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	84900	107000	106000	54.3	53.7	10	80.0-120	J6	J6	0.207	15
Fluoride	8000	U	7210	7290	90.2	91.1	10	80.0-120			1.08	15
Sulfate	40000	1800000	1460000	1460000	0.000	0.000	10	80.0-120	V	V	0.00679	15

Sample Narrative:

OS: Dilution due to matrix.

QUALITY CONTROL SUMMARY

L1678507-03

Method Blank (MB)

(MB) R4005794-1 11/28/23 21:59

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

L1678714-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1678714-01 11/29/23 03:04 • (DUP) R4005794-3 11/29/23 03:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	25200	25200	1	0.0460		15
Fluoride	568	571	1	0.667		15
Sulfate	201000	201000	1	0.00462	E	15

L1681211-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1681211-03 11/29/23 07:18 • (DUP) R4005794-5 11/29/23 08:06

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	22900	22900	1	0.100		15
Fluoride	296	296	1	0.169		15
Sulfate	28800	28800	1	0.0226		15

Laboratory Control Sample (LCS)

(LCS) R4005794-2 11/28/23 22:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40500	101	80.0-120	
Fluoride	8000	8310	104	80.0-120	
Sulfate	40000	38500	96.3	80.0-120	

L1678714-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1678714-01 11/29/23 03:04 • (MS) R4005794-4 11/29/23 03:36

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	25200	61100	89.8	1	80.0-120	
Fluoride	8000	568	8690	102	1	80.0-120	
Sulfate	40000	201000	204000	7.07	1	80.0-120	E V

L1681211-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1681211-03 11/29/23 07:18 • (MS) R4005794-6 11/29/23 08:22 • (MSD) R4005794-7 11/29/23 08:38

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	22900	58800	59000	89.9	90.3	1	80.0-120			0.268	15
Fluoride	8000	296	8530	8540	103	103	1	80.0-120			0.0539	15
Sulfate	40000	28800	62100	62000	83.3	83.2	1	80.0-120			0.0846	15

Method Blank (MB)

(MB) R4004835-1 11/27/23 16:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Boron	U		20.0	200
Calcium	U		79.3	1000

Laboratory Control Sample (LCS)

(LCS) R4004835-2 11/27/23 16:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron	1000	962	96.2	80.0-120	
Calcium	10000	9690	96.9	80.0-120	

L1678507-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1678507-01 11/27/23 16:30 • (MS) R4004835-4 11/27/23 16:36 • (MSD) R4004835-5 11/27/23 16:39

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron	1000	102	1090	1070	98.6	97.1	1	75.0-125			1.36	20
Calcium	10000	372000	377000	375000	53.8	28.0	1	75.0-125	V	V	0.686	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

Company Name/Address:
SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

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

Report to:
Jason Franks

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

Project Description:
Evergy Montrose Gen Station LF GW 2023-24

City/State Collected: Montrose, MO

Please Circle: PT MT (CT) ET

Phone: **913-681-0030**

Client Project #
27213168.23-A

Lab Project #
AQUAOPKS-MONTROSE

Collected by (print):
Todd Mitchell

Site/Facility ID #

P.O. #

Collected by (signature):
Todd Mitchell

Immediately
Packed on Ice N ___ Y X

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

Quote #

Date Results Needed
STD

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Anions (Cld, F, SO4) 125mlHDPE-NoPres	B, Ca - 6010 250mlHDPE-HNO3	TDS 250mlHDPE-NoPres	Pres Chk	Remarks	Sample # (lab only)
MW-506	G	GW		11/14/23	1120	3	X	X	X			-01
MW-506 MS/MSD	"	GW		"	1120	3	X	X	X			
DUPLICATE	"	GW		"	1120	3	X	X	X			-03

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at:
https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1678507

J113

Acctnum: AQUAOPKS
Template: **T166717**
Prelogin: **P1033067**
PM: **206 - Jeff Carr**
PB:

Shipped Via: **FedEX Ground**

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 6841 8343 9775

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Todd Mitchell	11/14/23	1700			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: DPA8 1.5+0=1.5 9	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/15/23 Time: 0900	Hold: / Condition: NCF / OK

ANALYTICAL REPORT

December 11, 2023

Revised Report

SCS Engineers - KS

Sample Delivery Group:	L1678508
Samples Received:	11/16/2023
Project Number:	27213168.23-A
Description:	Evergy Montrose Gen Station LF GW 2023-24

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

Entire Report Reviewed By:

Jeff Carr
Project Manager

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

TABLE OF CONTENTS

MW-601 L1678508-01 GW

Collected by: Todd Mitchell | Collected date/time: 11/14/23 10:40 | Received date/time: 11/16/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2174565	1	11/20/23 14:12	11/20/23 21:12	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2178935	10	11/28/23 23:53	11/28/23 23:53	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2178935	100	11/29/23 00:09	11/29/23 00:09	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2185395	1	12/08/23 16:36	12/08/23 16:36	MDM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2174837	1	11/27/23 09:07	11/27/23 15:03	ZSA	Mt. Juliet, TN

MW-602 L1678508-02 GW

Collected by: Todd Mitchell | Collected date/time: 11/14/23 12:55 | Received date/time: 11/16/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2174586	1	11/20/23 18:17	11/21/23 00:46	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2178935	1	11/29/23 00:25	11/29/23 00:25	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2178935	20	11/29/23 00:41	11/29/23 00:41	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2174837	1	11/27/23 09:07	11/27/23 15:06	ZSA	Mt. Juliet, TN

MW-603 L1678508-03 GW

Collected by: Todd Mitchell | Collected date/time: 11/14/23 11:00 | Received date/time: 11/16/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2174565	1	11/20/23 14:12	11/20/23 21:12	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2178935	10	11/29/23 00:56	11/29/23 00:56	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2174837	1	11/27/23 09:07	11/27/23 15:10	ZSA	Mt. Juliet, TN

MW-604 L1678508-04 GW

Collected by: Todd Mitchell | Collected date/time: 11/14/23 12:15 | Received date/time: 11/16/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2174565	1	11/20/23 14:12	11/20/23 21:12	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2177339	10	11/26/23 01:10	11/26/23 01:10	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2177339	100	11/26/23 01:58	11/26/23 01:58	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2185395	1	12/08/23 17:26	12/08/23 17:26	MDM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2174837	1	11/27/23 09:07	11/27/23 14:51	ZSA	Mt. Juliet, TN

MW-605 L1678508-05 GW

Collected by: Todd Mitchell | Collected date/time: 11/14/23 10:30 | Received date/time: 11/16/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2174586	1	11/20/23 18:17	11/21/23 00:46	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2178935	10	11/29/23 02:00	11/29/23 02:00	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2185395	1	12/08/23 18:14	12/08/23 18:14	MDM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2174837	1	11/27/23 09:07	11/27/23 15:13	ZSA	Mt. Juliet, TN

DUPLICATE L1678508-06 GW

Collected by: Todd Mitchell | Collected date/time: 11/14/23 12:15 | Received date/time: 11/16/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2174586	1	11/20/23 18:17	11/21/23 00:46	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2178935	10	11/29/23 02:32	11/29/23 02:32	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2185395	1	12/08/23 18:30	12/08/23 18:30	MDM	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2174837	1	11/27/23 09:07	11/27/23 15:22	ZSA	Mt. Juliet, TN

CASE NARRATIVE

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

Jeff Carr
Project Manager

Report Revision History

Level II Report - Version 1: 12/04/23 09:21

Project Narrative

Samples L1678508-01, -04, -05 and -06 were re-analyzed for Fluoride at no dilutions.

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	5020000		50000	1	11/20/2023 21:12	WG2174565

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	56400		3790	10000	10	11/28/2023 23:53	WG2178935
Fluoride	396		64.0	150	1	12/08/2023 16:36	WG2185395
Sulfate	2860000		59400	500000	100	11/29/2023 00:09	WG2178935

Sample Narrative:

L1678508-01 WG2178935, WG2185395: Dilution due to matrix.

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	122	J	20.0	200	1	11/27/2023 15:03	WG2174837
Calcium	477000		79.3	1000	1	11/27/2023 15:03	WG2174837

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1640000		20000	1	11/21/2023 00:46	WG2174586

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	4000		379	1000	1	11/29/2023 00:25	WG2178935
Fluoride	105	J	64.0	150	1	11/29/2023 00:25	WG2178935
Sulfate	836000		11900	100000	20	11/29/2023 00:41	WG2178935

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Boron	4240		20.0	200	1	11/27/2023 15:06	WG2174837
Calcium	291000		79.3	1000	1	11/27/2023 15:06	WG2174837

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	2920000		50000	1	11/20/2023 21:12	WG2174565

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	7790	J	3790	10000	10	11/29/2023 00:56	WG2178935
Fluoride	671	J	640	1500	10	11/29/2023 00:56	WG2178935
Sulfate	1900000		5940	50000	10	11/29/2023 00:56	WG2178935

Sample Narrative:

L1678508-03 WG2178935: Dilution due to matrix.

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Boron	5470		20.0	200	1	11/27/2023 15:10	WG2174837
Calcium	398000		79.3	1000	1	11/27/2023 15:10	WG2174837

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	3380000		50000	1	11/20/2023 21:12	WG2174565

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	13700		3790	10000	10	11/26/2023 01:10	WG2177339
Fluoride	439		64.0	150	1	12/08/2023 17:26	WG2185395
Sulfate	2090000		59400	500000	100	11/26/2023 01:58	WG2177339

Sample Narrative:

L1678508-04 WG2177339: Dilution due to matrix.

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Boron	4300		20.0	200	1	11/27/2023 14:51	WG2174837
Calcium	494000	V	79.3	1000	1	11/27/2023 14:51	WG2174837

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	3050000		50000	1	11/21/2023 00:46	WG2174586

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	30200		3790	10000	10	11/29/2023 02:00	WG2178935
Fluoride	220		64.0	150	1	12/08/2023 18:14	WG2185395
Sulfate	1950000		5940	50000	10	11/29/2023 02:00	WG2178935

Sample Narrative:

L1678508-05 WG2178935: Dilution due to matrix.

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Boron	1500		20.0	200	1	11/27/2023 15:13	WG2174837
Calcium	462000		79.3	1000	1	11/27/2023 15:13	WG2174837

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	3430000		50000	1	11/21/2023 00:46	WG2174586

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	13800		3790	10000	10	11/29/2023 02:32	WG2178935
Fluoride	451		64.0	150	1	12/08/2023 18:30	WG2185395
Sulfate	1980000		5940	50000	10	11/29/2023 02:32	WG2178935

Sample Narrative:

L1678508-06 WG2178935: Dilution due to matrix.

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Boron	4540		20.0	200	1	11/27/2023 15:22	WG2174837
Calcium	523000		79.3	1000	1	11/27/2023 15:22	WG2174837

Method Blank (MB)

(MB) R4003150-1 11/20/23 21:12

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

L1679725-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1679725-07 11/20/23 21:12 • (DUP) R4003150-3 11/20/23 21:12

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	333000	329000	1	1.21		5

L1679725-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1679725-08 11/20/23 21:12 • (DUP) R4003150-4 11/20/23 21:12

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	332000	338000	1	1.79		5

Laboratory Control Sample (LCS)

(LCS) R4003150-2 11/20/23 21:12

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	8420000	95.7	85.0-115	

QUALITY CONTROL SUMMARY

L1678508-02,05,06

Method Blank (MB)

(MB) R4003107-1 11/21/23 00:46

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

L1678027-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1678027-07 11/21/23 00:46 • (DUP) R4003107-3 11/21/23 00:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Dissolved Solids	2120000	2220000	1	4.61		5

L1678508-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1678508-02 11/21/23 00:46 • (DUP) R4003107-4 11/21/23 00:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Dissolved Solids	1640000	1710000	1	3.70		5

Laboratory Control Sample (LCS)

(LCS) R4003107-2 11/21/23 00:46

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Dissolved Solids	8800000	8320000	94.5	85.0-115	

Method Blank (MB)

(MB) R4005256-1 11/26/23 00:39

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

L1678548-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1678548-03 11/26/23 03:01 • (DUP) R4005256-5 11/26/23 03:49

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	3140	2990	1	5.00		15
Sulfate	741	U	1	200	P1	15

L1678699-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1678699-01 11/26/23 07:16 • (DUP) R4005256-6 11/26/23 07:32

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	8560	8580	1	0.305		15
Sulfate	37800	37700	1	0.288		15

Laboratory Control Sample (LCS)

(LCS) R4005256-2 11/26/23 00:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39500	98.8	80.0-120	
Sulfate	40000	40500	101	80.0-120	

L1678508-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1678508-04 11/26/23 01:10 • (MS) R4005256-3 11/26/23 01:26 • (MSD) R4005256-4 11/26/23 01:42

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	13700	49700	49100	90.1	88.6	10	80.0-120			1.19	15
Sulfate	40000	2150000	1750000	1740000	0.000	0.000	10	80.0-120	V	V	0.304	15

Sample Narrative:

OS: Dilution due to matrix.

L1678699-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1678699-01 11/26/23 07:16 • (MS) R4005256-7 11/26/23 07:48

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	8560	47100	96.3	1	80.0-120	
Sulfate	40000	37800	71400	84.0	1	80.0-120	

QUALITY CONTROL SUMMARY

L1678508-01,02,03,05,06

Method Blank (MB)

(MB) R4005794-1 11/28/23 21:59

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

L1678714-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1678714-01 11/29/23 03:04 • (DUP) R4005794-3 11/29/23 03:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	25200	25200	1	0.0460		15
Fluoride	568	571	1	0.667		15
Sulfate	201000	201000	1	0.00462	E	15

L1681211-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1681211-03 11/29/23 07:18 • (DUP) R4005794-5 11/29/23 08:06

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	22900	22900	1	0.100		15
Fluoride	296	296	1	0.169		15
Sulfate	28800	28800	1	0.0226		15

Laboratory Control Sample (LCS)

(LCS) R4005794-2 11/28/23 22:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40500	101	80.0-120	
Fluoride	8000	8310	104	80.0-120	
Sulfate	40000	38500	96.3	80.0-120	

L1678714-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1678714-01 11/29/23 03:04 • (MS) R4005794-4 11/29/23 03:36

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	25200	61100	89.8	1	80.0-120	
Fluoride	8000	568	8690	102	1	80.0-120	
Sulfate	40000	201000	204000	7.07	1	80.0-120	E V

L1681211-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1681211-03 11/29/23 07:18 • (MS) R4005794-6 11/29/23 08:22 • (MSD) R4005794-7 11/29/23 08:38

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	22900	58800	59000	89.9	90.3	1	80.0-120			0.268	15
Fluoride	8000	296	8530	8540	103	103	1	80.0-120			0.0539	15
Sulfate	40000	28800	62100	62000	83.3	83.2	1	80.0-120			0.0846	15

Method Blank (MB)

(MB) R4010115-1 12/08/23 09:07

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

L1684034-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1684034-07 12/08/23 14:25 • (DUP) R4010115-6 12/08/23 15:13

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

L1682898-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1682898-03 12/08/23 09:55 • (DUP) R4010115-3 12/08/23 10:11

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	457	445	5	2.62	J	15

Laboratory Control Sample (LCS)

(LCS) R4010115-2 12/08/23 09:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluoride	8000	8040	100	80.0-120	

L1684034-07 Original Sample (OS) • Matrix Spike (MS)

(OS) L1684034-07 12/08/23 14:25 • (MS) R4010115-7 12/08/23 15:29

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Fluoride	8000	U	8090	101	1	80.0-120	

L1682898-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1682898-03 12/08/23 09:55 • (MS) R4010115-4 12/08/23 10:27 • (MSD) R4010115-5 12/08/23 10:42

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Fluoride	8000	457	8510	8530	101	101	5	80.0-120			0.244	15

L1678508-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1678508-04 12/08/23 17:26 • (MS) R4010115-10 12/08/23 17:42 • (MSD) R4010115-11 12/08/23 17:58

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Fluoride	8000	439	7780	7610	91.7	89.7	1	80.0-120			2.12	15

Method Blank (MB)

(MB) R4004833-1 11/27/23 14:45

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Boron	U		20.0	200
Calcium	259	J	79.3	1000

Laboratory Control Sample (LCS)

(LCS) R4004833-2 11/27/23 14:47

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron	1000	937	93.7	80.0-120	
Calcium	10000	9730	97.3	80.0-120	

L1678508-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1678508-04 11/27/23 14:51 • (MS) R4004833-4 11/27/23 14:57 • (MSD) R4004833-5 11/27/23 15:00

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron	1000	4300	5330	5370	103	107	1	75.0-125			0.874	20
Calcium	10000	494000	517000	522000	227	281	1	75.0-125	V	V	1.03	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
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.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

Company Name/Address:
SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

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

Pres Chk

Report to:
Jason Franks

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

Project Description:
Evergy Montrose Gen Station LF GW 2023-24

City/State Collected: Montrose, Mo

Please Circle: PT MT (CT) ET

Phone: **913-681-0030**

Client Project #
27213168.23-A

Lab Project #
AQUAOPKS-MONTROSE

Collected by (print):
Todd Mitchell

Site/Facility ID #

P.O. #

Collected by (signature):
Todd Mitchell

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed
STD

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Anions (Cld, F, SO4) 125mlHDPE-NoPres	B, Ca - 6010 250mlHDPE-HNO3	TDS 250mlHDPE-NoPres							Remarks	Sample # (lab only)
MW-601	G	GW		11/14/23	1040	3	X	X	X								-01
MW-602		GW			1255	3	X	X	X								-02
MW-603		GW			1100	3	X	X	X								-03
MW-604		GW			1215	3	X	X	X								-04
MW-605		GW			1030	3	X	X	X								-05
MS / MSD		GW			1215	3	X	X	X								
DUPLICATE		GW			1215	3	X	X	X								-06

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1478508

J112

Acctnum: **AQUAOPKS**
Template: **T135966**
Prelogin: **P1033068**
PM: **206 - Jeff Carr**
PB:

Shipped Via: **FedEX Ground**

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 6841 8343 9775

Sample Receipt Checklist

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Todd Mitchell	11/14/23	1700			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: DPAS 1.5+0=1.5 21	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/15/23 Time: 0900	Hold: Condition: NCF / OK

ANALYTICAL REPORT

January 02, 2024

SCS Engineers - KS

Sample Delivery Group:	L1691835
Samples Received:	11/15/2023
Project Number:	27213168.23-A
Description:	Evergy Montrose Gen Station LF GW 2023-24

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

Entire Report Reviewed By:

John Hawkins
Project Manager

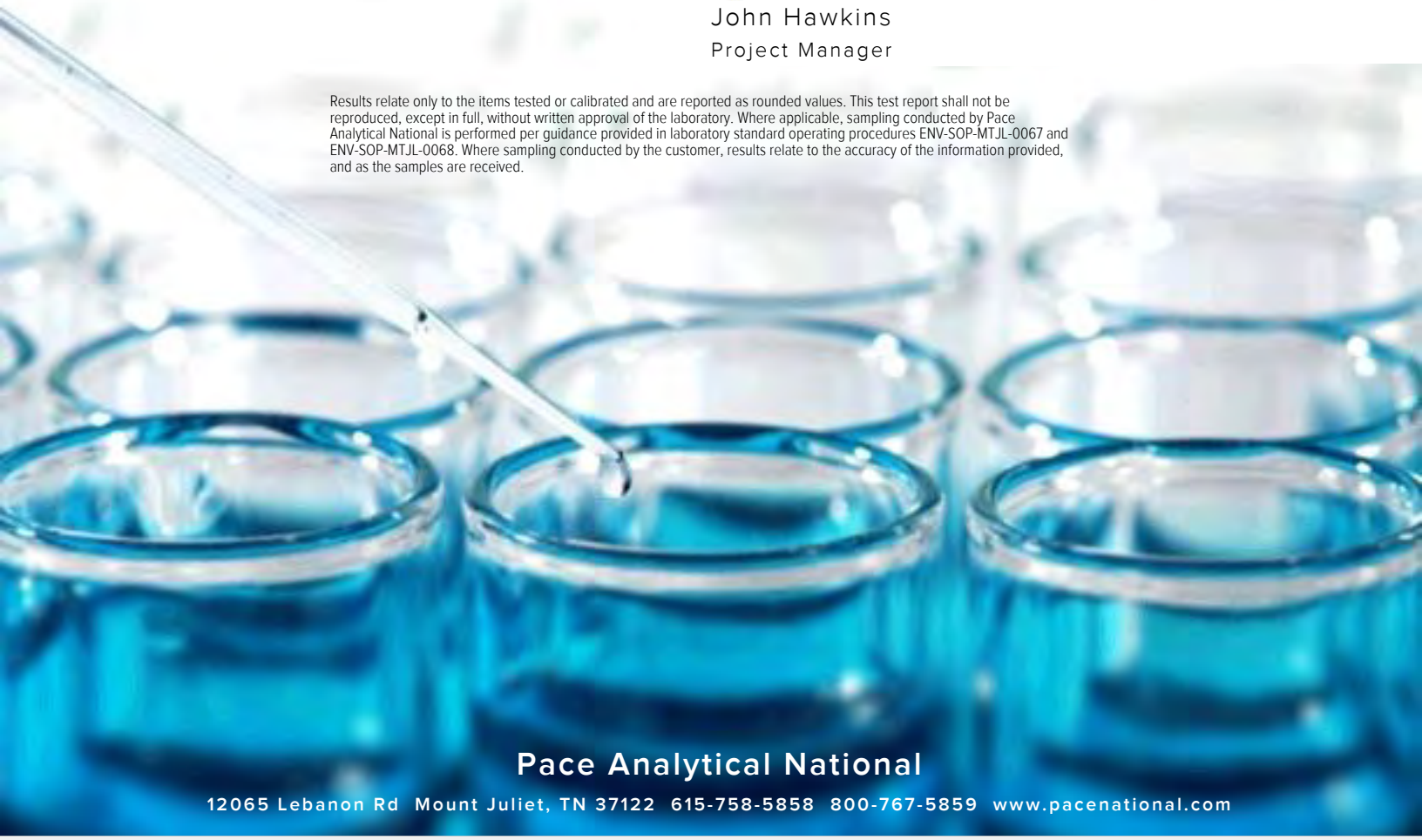


TABLE OF CONTENTS

MW-506 L1691835-01 GW

Collected by: TM
Collected date/time: 11/14/23 11:20
Received date/time: 11/15/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2198224	1	12/30/23 09:37	12/30/23 09:37	ASM	Mt. Juliet, TN

DUPLICATE L1691835-02 GW

Collected by: TM
Collected date/time: 11/14/23 11:20
Received date/time: 11/15/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG2198224	1	12/30/23 09:49	12/30/23 09:49	ASM	Mt. Juliet, TN

CASE NARRATIVE

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

John Hawkins
Project Manager

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Fluoride	130	J T8	64.0	150	1	12/30/2023 09:37	WG2198224

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Fluoride	122	J T8	64.0	150	1	12/30/2023 09:49	WG2198224

Method Blank (MB)

(MB) R4018535-1 12/30/23 03:27

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

L1690980-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1690980-05 12/30/23 06:13 • (DUP) R4018535-3 12/30/23 06:26

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	159	175	1	10.1		15

L1691835-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1691835-02 12/30/23 09:49 • (DUP) R4018535-8 12/30/23 10:02

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	122	125	1	2.18	J	15

Laboratory Control Sample (LCS)

(LCS) R4018535-2 12/30/23 03:40

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluoride	8000	7960	99.5	80.0-120	

L1690980-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1690980-05 12/30/23 06:13 • (MS) R4018535-4 12/30/23 06:38 • (MSD) R4018535-5 12/30/23 06:51

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Fluoride	8000	159	8490	8580	104	105	1	80.0-120			1.12	15

L1691835-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1691835-02 12/30/23 09:49 • (MS) R4018535-9 12/30/23 10:15

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Fluoride	8000	122	6880	84.5	1	80.0-120	

L1691835-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1691835-02 12/30/23 09:49 • (MS) R4018535-9 12/30/23 10:15

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier

Sample Narrative:

MS: Cl/Br spike failed due to matrix

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
T8	Sample(s) received past/too close to holding time expiration.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

Company Name/Address:
SCS Engineers - KS

8575 W. 110th Street
Overland Park, KS 66210

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

Pres Chk

Report to: **Jason Franks**

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

Project Description: **Evergy Montrose Gen Station LF GW 2023-24**

City/State Collected: Montrose, Mo

Please Circle: PT MT (CT) ET

Phone: **913-681-0030**

Client Project # **27213168.23-A**

Lab Project # **AQUAOPKS-MONTROSE**

Collected by (print): Todd Mitchell

Site/Facility ID #

P.O. #

Collected by (signature): Todd Mitchell

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed: STD

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Anions (Cld, F, SO4) 125mlHDPE-NoPres	B, Ca - 6010 250mlHDPE-HNO3	TDS 250mlHDPE-NoPres							Remarks	Sample # (lab only)
MW-506	G	GW		11/14/23	1120	3	X	X	X								-01
MW-506 MS/MSD		GW			1120	3	X	X	X								
DUPLICATE		GW			1120	3	X	X	X								-03 02

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1691835 (11/16/23)

J113 L1691835

Acctnum: AQUAOPKS

Template: T166717

Prelogin: P1033067

PM: 206 - Jeff Carr

PB:

Shipped Via: FedEX Ground

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: ___ UPS ___ FedEx ___ Courier _____

Tracking # 6841 8343 9775

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR	If preservation required by Login: Date/Time
Todd Mitchell	11/14/23	1700			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: DPA8 1.5+0=1.5 9	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/15/23 Time: 0900	Hold: / Condition: NCF / (OK)

L1678507

R5

Client wishes to relog to new SDG for Fluoride by 9056A

****

Go ahead and run them undiluted and add to report flagging the data as past hold. We have agreement in place that we would get Evergy anion data undiluted with additional charge for high concentrations that may affect equipment. Unfortunately I missed this report when I asked Jeff about other Energy reports.

Franks, Jason <JFranks@scsengineers.com>

Time estimate: oh **Time spent:** oh

Members

JVH John V Hawkins (responsible) JC Jeff Carr

APPENDIX E

STATISTICAL ANALYSES

E.1 Fall 2022 Semiannual Detection Monitoring Statistical Analyses

E.2 Spring 2023 Semiannual Detection Monitoring Statistical Analyses

Appendix E.1

Fall 2022 Semiannual Detection Monitoring Statistical Analyses

SCS ENGINEERS

Environmental Consulting & Contracting

MEMORANDUM

March 20, 2023

To: Montrose Generating Station
400 SW Highway P
Clinton, MO 64735
Evergy Metro, Inc.

From: SCS Engineers
John Rockhold, P.G.
Douglas Doerr, P.E.

RE: Determination of Statistically Significant Increases - CCR Landfill
Fall 2022 Semiannual Detection Monitoring 40 CFR 257.94

Statistical analysis of monitoring data from the groundwater monitoring system for the CCR Landfill at the Montrose Generating Station has been completed in substantial compliance with the "Statistical Method Certification by A Qualified Professional Engineer" dated October 12, 2017. Detection monitoring groundwater samples were collected on November 8, 2022. Review and validation of the results from the November 2022 Detection Monitoring Event was completed on December 20, 2022, 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 10, 2023 and February 7, 2023.

The second verification sample for certain analytes was split between three laboratories, Pace National, Pace Laboratories (Lenexa), and Eurofins. This split sampling was completed in an effort to provide useful or undiluted analytical data to meet previous laboratory reporting limits and for the reporting limit to be below the prediction limits. Pace National and Eurofins completed anions analyses by EPA Method 9056A, and Pace Laboratories completed anions analyses by EPA Method 300.1. None of the laboratories were able to meet the previous reporting limit of 0.1 mg/L for fluoride. However, Eurofins came the closest with a reporting limit of 0.2 mg/L and a method detection limit of 0.067 mg/L. Therefore, the Eurofins fluoride data was utilized for the SSI determination.

The completed statistical evaluation identified two Appendix III constituents above their prediction limits.

Monitoring Well Constituents	*UPL	Observation November 8, 2022	1st Verification January 10, 2023	2nd Verification February 7, 2023
MW-601				
Chloride	56.74	62.4	71.1	76.6
MW-602				
Fluoride	0.148	<0.15 (RL), 0.141(J)	<0.640(M)	0.352(E)

Monitoring Well Constituents	*UPL	Observation November 8, 2022	1st Verification January 10, 2023	2nd Verification February 7, 2023
MW-603				
Fluoride	0.6847	1.63	<0.640(M)	1.1(E)
MW-604				
Fluoride	0.5483	1.58	<0.640(M)/<0.640(M)**	0.98(E)/0.95(E)**
MW-605				
Fluoride	0.2313	<1.5 (RL), 1.46(J)	<0.640(M)/<0.640(M)**	0.69(E)/0.72(E)**

*UPL – Upper Prediction Limit
** Duplicate Sample
(J) – Estimated Value
(E) – Eurofins Split Laboratory Sample, Lower Reporting Limit than Primary Laboratory Pace National
(M) – Method Detection Limit
((RL) – Reporting 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 an SSI above background prediction limits for chloride at monitoring well MW-601 and an SSI above background prediction limits for fluoride at MW-602, MW-603, MW-604, and MW-605.

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

Montrose Generating Station
Determination of Statistically Significant Increases
CCR Landfill
March 20, 2023

ATTACHMENT 1

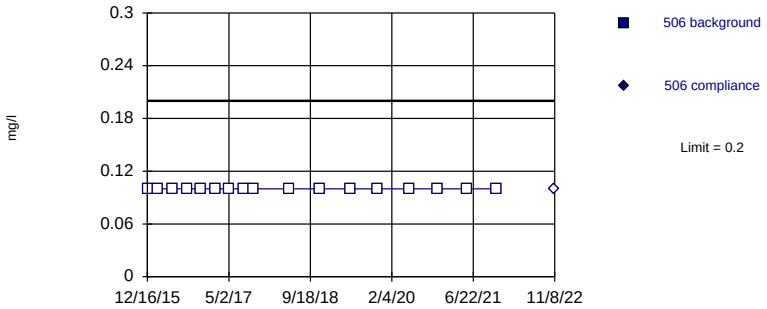
Sanitas™ Output

Sanitas™ v.9.6.36 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 = 17) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.00182. Individual comparison alpha = 0.0009102 (1 of 3).

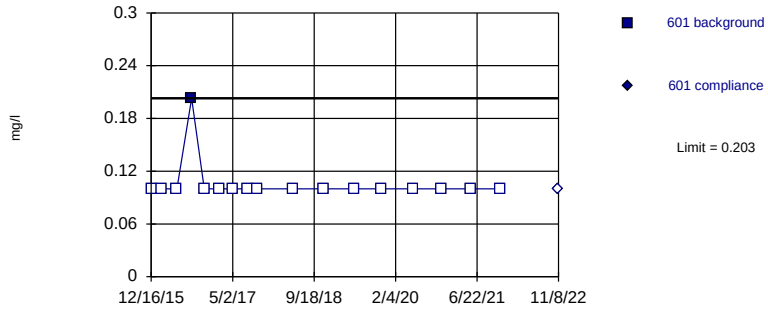
Constituent: Boron Analysis Run 3/15/2023 9:57 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.9.6.36 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.00182. Individual comparison alpha = 0.0009102 (1 of 3).

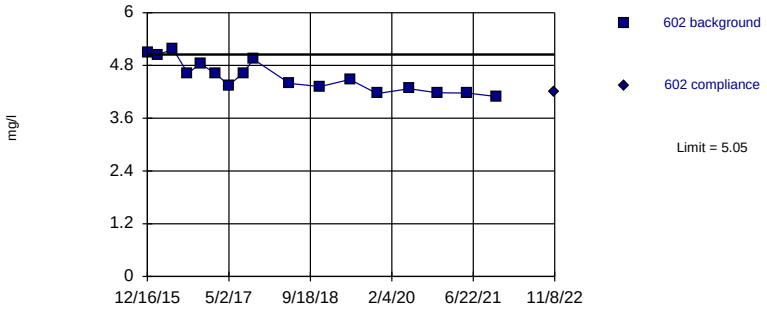
Constituent: Boron Analysis Run 3/15/2023 9:57 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.9.6.36 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4.55, Std. Dev.=0.354, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9211, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

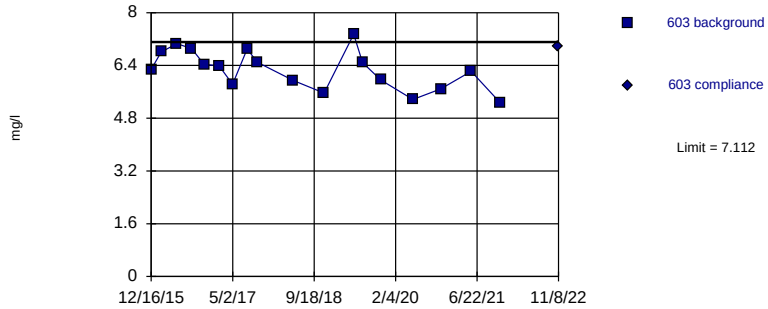
Constituent: Boron Analysis Run 3/15/2023 9:57 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.9.6.36 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.274, Std. Dev.=0.6001, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9764, critical = 0.858. Kappa = 1.396 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Boron Analysis Run 3/15/2023 9:57 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Boron (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	506	506
12/16/2015	<0.2	
2/16/2016	<0.2	
5/23/2016	<0.2	
8/22/2016	<0.2	
11/8/2016	<0.2	
2/7/2017	<0.2	
5/1/2017	<0.2	
7/31/2017	<0.2	
10/2/2017	<0.2	
5/14/2018	<0.2	
11/19/2018	<0.2	
5/21/2019	<0.2	
11/5/2019	<0.2	
5/21/2020	<0.2	
11/10/2020	<0.2	
5/18/2021	<0.2	
11/16/2021	<0.2	
11/8/2022		<0.2

ND substitution: RL/2.

Prediction Limit

Constituent: Boron (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	601	601
12/16/2015	<0.2	
2/16/2016	<0.2	
5/23/2016	<0.2	
8/22/2016	0.203	
11/8/2016	<0.2	
2/7/2017	<0.2	
5/2/2017	<0.2	
7/31/2017	<0.2	
10/2/2017	<0.2	
5/14/2018	<0.2	
11/19/2018	<0.2	
5/21/2019	<0.2	
11/5/2019	<0.2	
5/21/2020	<0.2	
11/10/2020	<0.2	
5/18/2021	<0.2	
11/16/2021	<0.2	
11/8/2022		<0.2

ND substitution: RL/2.

Prediction Limit

Constituent: Boron (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	602	602
12/16/2015	5.08	
2/16/2016	5.04	
5/23/2016	5.17	
8/22/2016	4.62	
11/7/2016	4.84	
2/7/2017	4.62	
5/2/2017	4.35	
7/31/2017	4.63	
10/2/2017	4.94	
5/14/2018	4.39	
11/19/2018	4.32	
5/21/2019	4.48	
11/5/2019	4.16	
5/21/2020	4.27	
11/10/2020	4.18	
5/17/2021	4.17	
11/16/2021	4.09	
11/8/2022		4.2

Prediction Limit

Constituent: Boron (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

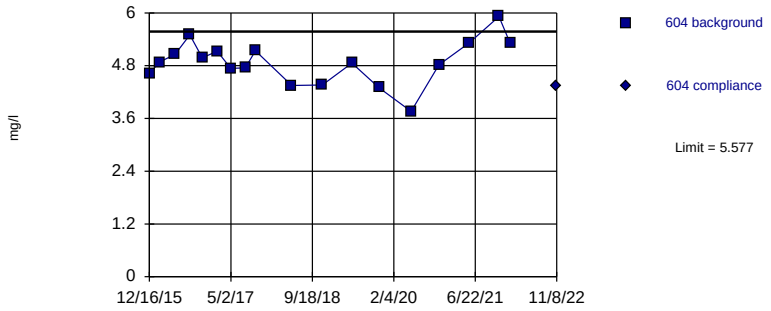
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	603	603
12/16/2015	6.28	
2/16/2016	6.81	
5/23/2016	7.06	
8/22/2016	6.91	
11/7/2016	6.43	
2/7/2017	6.39	
5/2/2017	5.83	
7/31/2017	6.9	
10/2/2017	6.5	
5/14/2018	5.94	
11/19/2018	5.56	
5/21/2019	7.35	
7/15/2019	6.49	
11/5/2019	5.96	
5/21/2020	5.37	
11/10/2020	5.69	
5/17/2021	6.22	
11/16/2021	5.25	
11/8/2022		6.96

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4.878, Std. Dev.=0.501, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9842, critical = 0.858. Kappa = 1.396 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

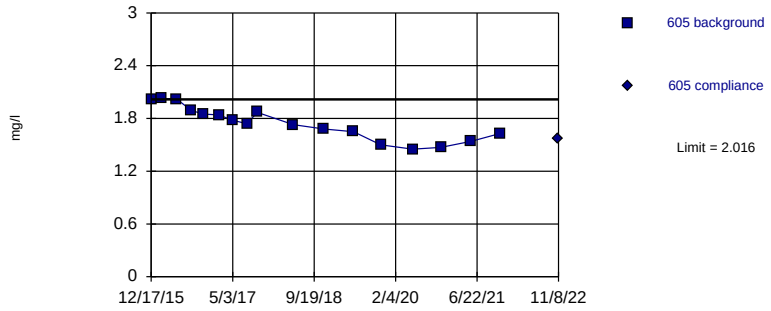
Constituent: Boron Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.746, Std. Dev.=0.1907, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9463, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

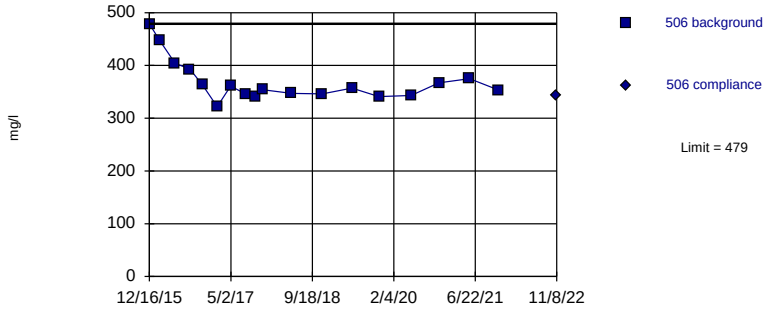
Constituent: Boron Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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 18 background values. Well-constituent pair annual alpha = 0.001588. Individual comparison alpha = 0.0007943 (1 of 3).

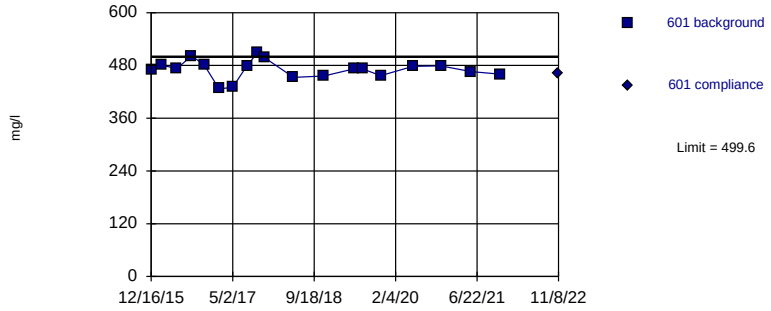
Constituent: Calcium Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=470.6, Std. Dev.=21.04, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9534, critical = 0.863. Kappa = 1.379 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Boron (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	604	604
12/16/2015	4.62	
2/16/2016	4.88	
5/23/2016	5.06	
8/22/2016	5.5	
11/7/2016	4.98	
2/7/2017	5.13	
5/2/2017	4.74	
7/31/2017	4.75	
10/2/2017	5.14	
5/14/2018	4.35	
11/19/2018	4.36	
5/21/2019	4.86	
11/5/2019	4.3	
5/21/2020	3.76	
11/10/2020	4.82	
5/17/2021	5.32	
11/16/2021	5.92	
1/24/2022	5.31	
11/8/2022		4.34

Prediction Limit

Constituent: Boron (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	605	605
12/17/2015	2.02	
2/16/2016	2.03	
5/23/2016	2.02	
8/22/2016	1.89	
11/7/2016	1.85	
2/7/2017	1.84	
5/2/2017	1.78	
7/31/2017	1.74	
10/2/2017	1.87	
5/14/2018	1.73	
11/19/2018	1.68	
5/21/2019	1.65	
11/5/2019	1.5	
5/21/2020	1.45	
11/10/2020	1.47	
5/17/2021	1.54	
11/16/2021	1.63	
11/8/2022		1.57

Prediction Limit

Constituent: Calcium (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	506	506
12/16/2015	479	
2/16/2016	448	
5/23/2016	404	
8/22/2016	393	
11/8/2016	363	
2/7/2017	322	
5/1/2017	361	
7/31/2017	346	
10/2/2017	341	
11/15/2017	354	
5/14/2018	347	
11/19/2018	346	
5/21/2019	357	
11/5/2019	341	
5/21/2020	343	
11/10/2020	367	
5/18/2021	375	
11/16/2021	353	
11/8/2022		343

Prediction Limit

Constituent: Calcium (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

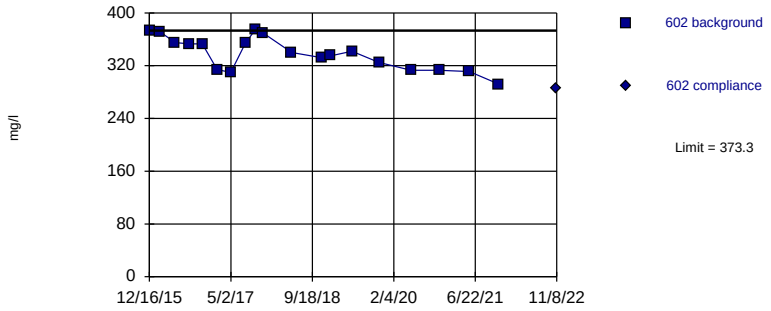
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	601	601
12/16/2015	469	
2/16/2016	481	
5/23/2016	473	
8/22/2016	502	
11/8/2016	481	
2/7/2017	427	
5/2/2017	430	
7/31/2017	480	
10/2/2017	508	
11/15/2017	498	
5/14/2018	453	
11/19/2018	456	
5/21/2019	472	
7/15/2019	472	
11/5/2019	457	
5/21/2020	478	
11/10/2020	479	
5/18/2021	466	
11/16/2021	460	
11/8/2022		463

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=338.5, Std. Dev.=25.22, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9391, critical = 0.863. Kappa = 1.379 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

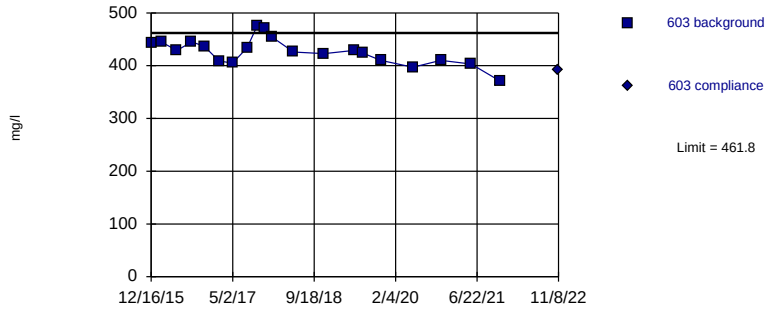
Constituent: Calcium Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=427.1, Std. Dev.=25.5, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9795, critical = 0.868. Kappa = 1.362 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

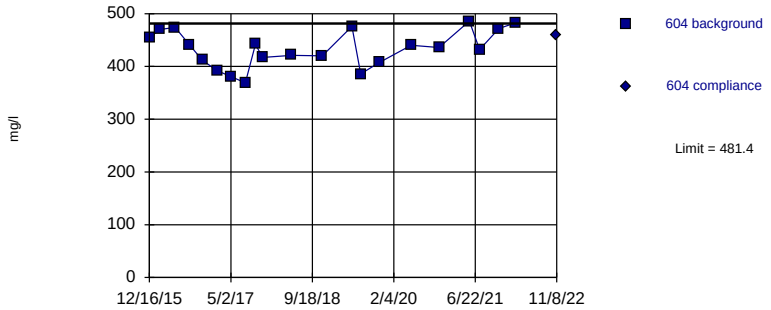
Constituent: Calcium Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=433.8, Std. Dev.=35.16, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.957, critical = 0.873. Kappa = 1.353 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

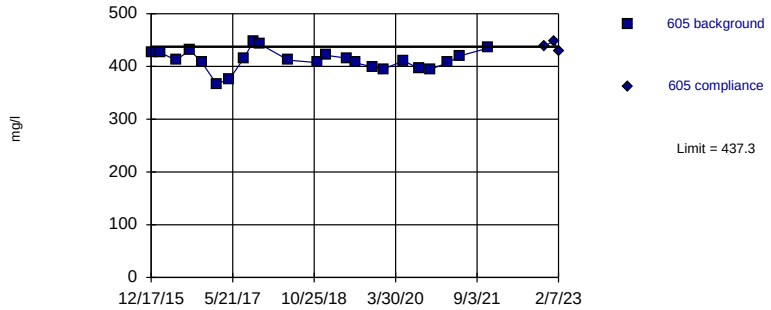
Constituent: Calcium Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=411.8, Std. Dev.=19.1, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9727, critical = 0.881. Kappa = 1.336 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Calcium (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	602	602
12/16/2015	373	
2/16/2016	372	
5/23/2016	355	
8/22/2016	353	
11/7/2016	353	
2/7/2017	314	
5/2/2017	310	
7/31/2017	354	
10/2/2017	375	
11/15/2017	370	
5/14/2018	340	
11/19/2018	332	
1/10/2019	335	
5/21/2019	342	
11/5/2019	325	
5/21/2020	313	
11/10/2020	313	
5/17/2021	311	
11/16/2021	292	
11/8/2022		285

Prediction Limit

Constituent: Calcium (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	603	603
12/16/2015	444	
2/16/2016	445	
5/23/2016	429	
8/22/2016	445	
11/7/2016	437	
2/7/2017	409	
5/2/2017	405	
7/31/2017	434	
10/2/2017	476	
11/15/2017	471	
12/29/2017	455	
5/14/2018	426	
11/19/2018	423	
5/21/2019	429	
7/15/2019	424	
11/5/2019	410	
5/21/2020	397	
11/10/2020	410	
5/17/2021	403	
11/16/2021	370	
11/8/2022		393

Prediction Limit

Constituent: Calcium (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	604	604
12/16/2015	454	
2/16/2016	470	
5/23/2016	474	
8/22/2016	440	
11/7/2016	412	
2/7/2017	392	
5/2/2017	381	
7/31/2017	369	
10/2/2017	442	
11/15/2017	417	
5/14/2018	421	
11/19/2018	420	
5/21/2019	476	
7/15/2019	386	
11/5/2019	407	
5/21/2020	440	
11/10/2020	436	
5/17/2021	486	
7/19/2021	432	
11/16/2021	472	
3/1/2022	483	
11/8/2022		459

Prediction Limit

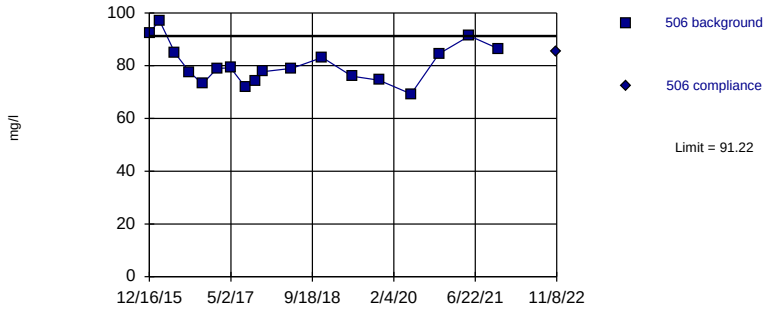
Constituent: Calcium (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	605	605	
12/17/2015	427		
2/16/2016	426		
5/23/2016	412		
8/22/2016	431		
11/7/2016	407		
2/7/2017	367		
5/2/2017	376		
7/31/2017	415		
10/2/2017	447		
11/15/2017	442		
5/14/2018	412		
11/19/2018	407		
1/10/2019	421		
5/21/2019	416		
7/15/2019	407		
11/5/2019	399		
1/14/2020	395		
5/21/2020	411		
8/26/2020	396		
11/10/2020	395		
3/1/2021	407		
5/17/2021	420		
11/16/2021	435		
11/8/2022		439	
1/10/2023		448	1st verification
2/7/2023		428	2nd verification

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=80.62, Std. Dev.=7.599, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9501, critical = 0.858. Kappa = 1.396 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

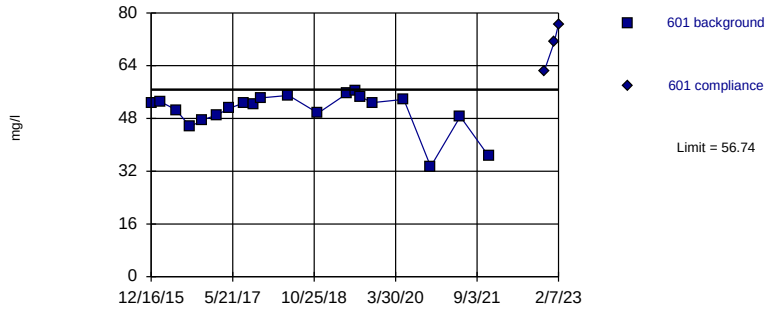
Constituent: Chloride Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube transformation): Mean=131532, Std. Dev.=37536, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.885, critical = 0.868. Kappa = 1.362 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

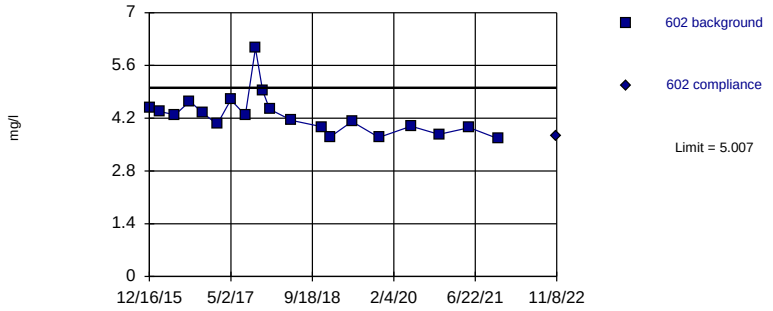
Constituent: Chloride Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=2.065, Std. Dev.=0.1269, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.876, critical = 0.868. Kappa = 1.362 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

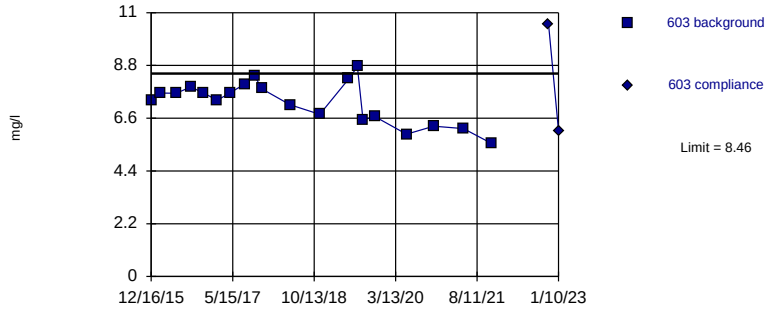
Constituent: Chloride Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.273, Std. Dev.=0.8721, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9664, critical = 0.868. Kappa = 1.362 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Chloride (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	506	506
12/16/2015	92.4	
2/16/2016	97.2	
5/23/2016	84.7	
8/22/2016	77.5	
11/8/2016	73.1	
2/7/2017	79	
5/1/2017	79.2	
7/31/2017	71.9	
10/2/2017	74.4	
11/15/2017	77.7	
5/14/2018	79	
11/19/2018	83.1	
5/21/2019	76	
11/5/2019	74.5	
5/21/2020	69.3	
11/10/2020	84.5	
5/18/2021	91.3	
11/16/2021	86.3	
11/8/2022		85.4

Prediction Limit

Constituent: Chloride (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	601	601	
12/16/2015	52.5		
2/16/2016	53		
5/23/2016	50.6		
8/22/2016	45.5		
11/8/2016	47.5		
2/7/2017	49		
5/2/2017	51.1		
7/31/2017	52.7		
10/2/2017	52.4		
11/15/2017	54.2		
5/14/2018	55		
11/19/2018	49.6		
5/21/2019	55.5		
7/15/2019	56.5		
8/19/2019	54.5		
11/5/2019	52.8		
5/21/2020	53.8		
11/10/2020	33.4		
5/18/2021	48.6		
11/16/2021	36.6		
11/8/2022		62.4	
1/10/2023		71.1	1st verification
2/7/2023		76.6	2nd verification

Prediction Limit

Constituent: Chloride (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	602	602
12/16/2015	4.48	
2/16/2016	4.38	
5/23/2016	4.29	
8/22/2016	4.65	
11/7/2016	4.35	
2/7/2017	4.04	
5/2/2017	4.69	
7/31/2017	4.28	
10/2/2017	6.06	
11/15/2017	4.93	
12/29/2017	4.44	
5/14/2018	4.14	
11/19/2018	3.97	
1/10/2019	3.71	
5/21/2019	4.11	
11/5/2019	3.69	
5/21/2020	3.99	
11/10/2020	3.77	
5/17/2021	3.95	
11/16/2021	3.65	
11/8/2022		3.73

Prediction Limit

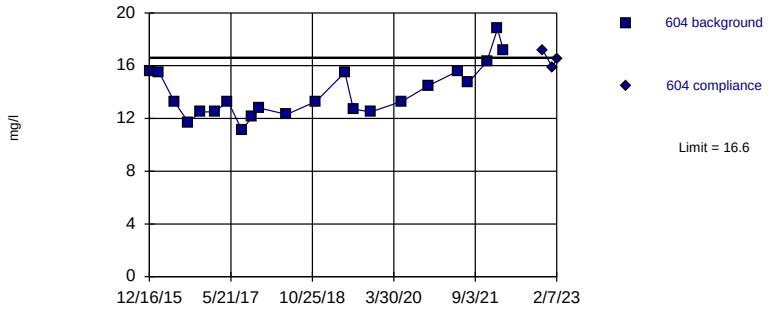
Constituent: Chloride (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	603	603	
12/16/2015	7.33		
2/16/2016	7.65		
5/23/2016	7.64		
8/22/2016	7.9		
11/7/2016	7.67		
2/7/2017	7.35		
5/2/2017	7.67		
7/31/2017	8.03		
10/2/2017	8.37		
11/15/2017	7.83		
5/14/2018	7.16		
11/19/2018	6.76		
5/21/2019	8.24		
7/15/2019	8.75		
8/19/2019	6.54		
11/5/2019	6.66		
5/21/2020	5.93		
11/10/2020	6.27		
5/17/2021	6.17		
11/16/2021	5.53		
11/8/2022		10.5	
1/10/2023		6.08	1st verification

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=13.96, Std. Dev.=1.963, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9263, critical = 0.878. Kappa = 1.344 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride Analysis Run 3/15/2023 9:57 AM View: LF CCR III

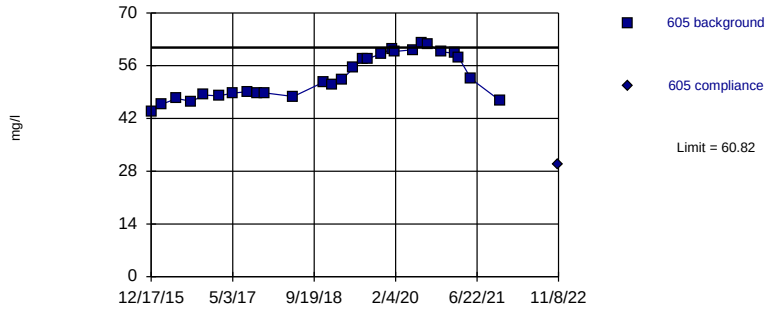
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.9.6.36 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=7.28, Std. Dev.=0.3988, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8962, critical = 0.896. Kappa = 1.3 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride Analysis Run 3/15/2023 9:57 AM View: LF CCR III

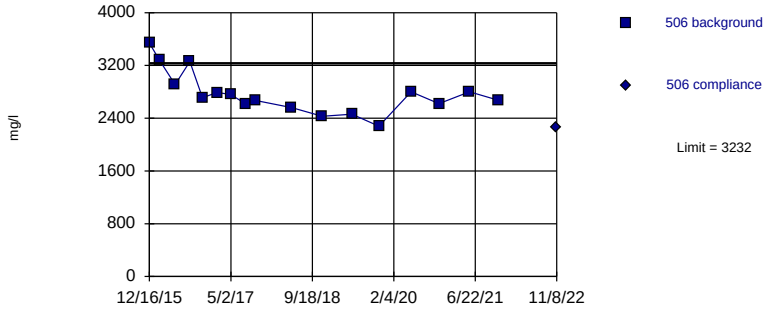
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.9.6.36 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2774, Std. Dev.=324, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9102, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Dissolved Solids Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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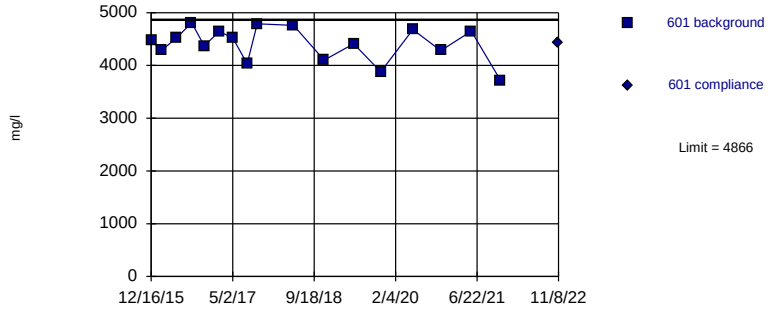
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4407, Std. Dev.=324.9, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9357, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Dissolved Solids Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Chloride (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	604	604	
12/16/2015	15.6		
2/16/2016	15.5		
5/23/2016	13.3		
8/22/2016	11.7		
11/7/2016	12.5		
2/7/2017	12.5		
5/2/2017	13.3		
7/31/2017	11.1		
10/2/2017	12.1		
11/15/2017	12.8		
5/14/2018	12.3		
11/19/2018	13.3		
5/21/2019	15.5		
7/15/2019	12.7		
11/5/2019	12.5		
5/21/2020	13.3		
11/10/2020	14.5		
5/17/2021	15.6		
7/19/2021	14.7		
11/16/2021	16.3		
1/24/2022	18.8		
3/1/2022	17.2		
11/8/2022		17.2	
1/10/2023		15.9	1st verification
2/7/2023		16.5	2nd verification

Prediction Limit

Constituent: Chloride (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	605	605
12/17/2015	43.9	
2/16/2016	45.7	
5/23/2016	47.3	
8/22/2016	46.5	
11/7/2016	48.2	
2/7/2017	48	
5/2/2017	48.7	
7/31/2017	49.1	
10/2/2017	48.7	
11/15/2017	48.8	
5/14/2018	47.8	
11/19/2018	51.7	
1/10/2019	50.9	
3/13/2019	52.4	
5/21/2019	55.4	
7/15/2019	57.8	
8/19/2019	57.9	
11/5/2019	59.1	
1/14/2020	60.5	
2/3/2020	59.8	
5/21/2020	60.2	
7/14/2020	62.1	
8/26/2020	61.6	
11/10/2020	59.7	
2/3/2021	59.3	
3/1/2021	58.2	
5/17/2021	52.5	
11/16/2021	46.6	
11/8/2022		29.7

Prediction Limit

Constituent: Dissolved Solids (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	506	506
12/16/2015	3540	
2/16/2016	3280	
5/23/2016	2910	
8/22/2016	3260	
11/8/2016	2710	
2/7/2017	2790	
5/1/2017	2760	
7/31/2017	2620	
10/2/2017	2670	
5/14/2018	2560	
11/19/2018	2430	
5/21/2019	2460	
11/5/2019	2280	
5/21/2020	2800	
11/10/2020	2620	
5/18/2021	2800	
11/16/2021	2670	
11/8/2022		2260

Prediction Limit

Constituent: Dissolved Solids (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

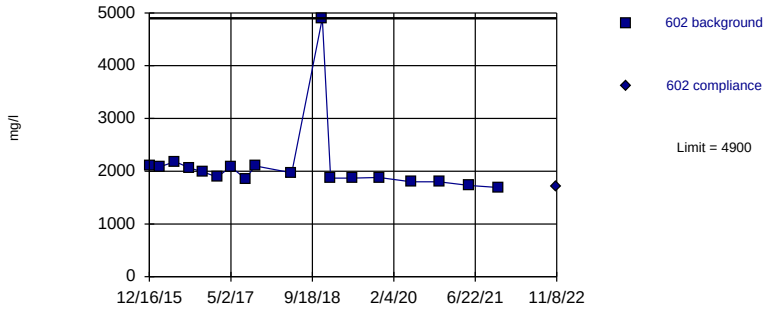
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	601	601
12/16/2015	4470	
2/16/2016	4280	
5/23/2016	4530	
8/22/2016	4810	
11/8/2016	4370	
2/7/2017	4640	
5/2/2017	4530	
7/31/2017	4030	
10/2/2017	4790	
5/14/2018	4760	
11/19/2018	4100	
5/21/2019	4410	
11/5/2019	3880	
5/21/2020	4680	
11/10/2020	4280	
5/18/2021	4650	
11/16/2021	3710	
11/8/2022		4440

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 18 background values. Well-constituent pair annual alpha = 0.001588. Individual comparison alpha = 0.0007943 (1 of 3).

Constituent: Dissolved Solids Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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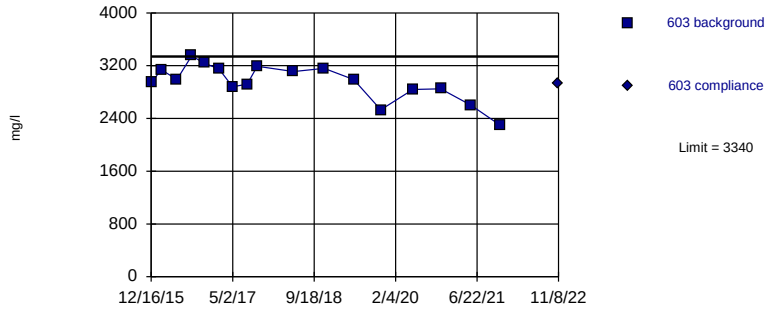
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2951, Std. Dev.=275.4, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9307, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Dissolved Solids Analysis Run 3/15/2023 9:57 AM View: LF CCR III

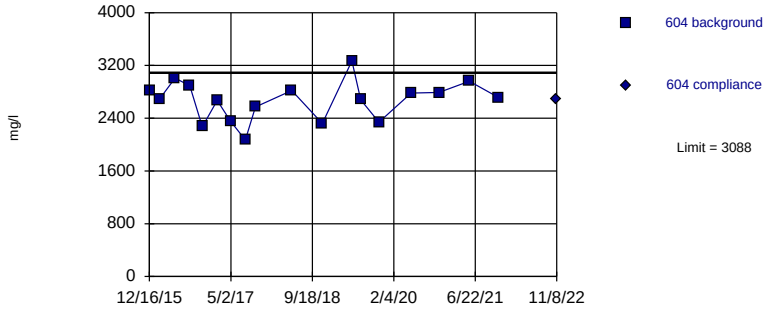
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.9.6.36 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2667, Std. Dev.=301.5, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9659, critical = 0.858. Kappa = 1.396 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Dissolved Solids Analysis Run 3/15/2023 9:57 AM View: LF CCR III

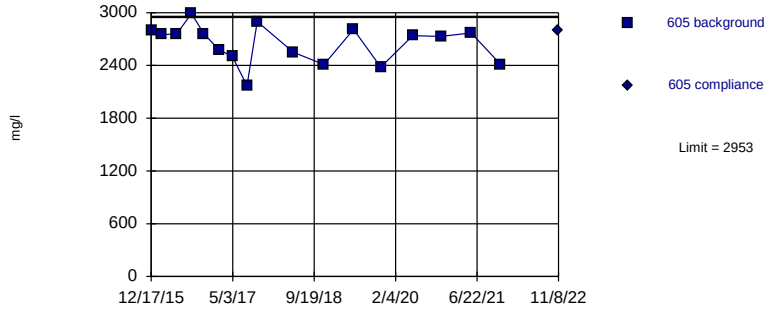
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.9.6.36 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2648, Std. Dev.=215.8, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9355, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Dissolved Solids Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Dissolved Solids (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	602	602
12/16/2015	2100	
2/16/2016	2080	
5/23/2016	2180	
8/22/2016	2060	
11/7/2016	1990	
2/7/2017	1890	
5/2/2017	2080	
7/31/2017	1860	
10/2/2017	2100	
5/14/2018	1970	
11/19/2018	4900	
1/10/2019	1870	
5/21/2019	1870	
11/5/2019	1880	
5/21/2020	1800	
11/10/2020	1800	
5/17/2021	1730	
11/16/2021	1690	
11/8/2022		1710

Prediction Limit

Constituent: Dissolved Solids (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	603	603
12/16/2015	2940	
2/16/2016	3140	
5/23/2016	2990	
8/22/2016	3350	
11/7/2016	3240	
2/7/2017	3150	
5/2/2017	2880	
7/31/2017	2920	
10/2/2017	3190	
5/14/2018	3110	
11/19/2018	3160	
5/21/2019	2990	
11/5/2019	2530	
5/21/2020	2840	
11/10/2020	2850	
5/17/2021	2600	
11/16/2021	2290	
11/8/2022		2930

Prediction Limit

Constituent: Dissolved Solids (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	604	604
12/16/2015	2820	
2/16/2016	2690	
5/23/2016	3010	
8/22/2016	2890	
11/7/2016	2270	
2/7/2017	2670	
5/2/2017	2350	
7/31/2017	2070	
10/2/2017	2570	
5/14/2018	2820	
11/19/2018	2320	
5/21/2019	3270	
7/15/2019	2680	
11/5/2019	2340	
5/21/2020	2780	
11/10/2020	2790	
5/17/2021	2960	
11/16/2021	2710	
11/8/2022		2690

Prediction Limit

Constituent: Dissolved Solids (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	605	605
12/17/2015	2800	
2/16/2016	2750	
5/23/2016	2760	
8/22/2016	2990	
11/7/2016	2760	
2/7/2017	2580	
5/2/2017	2500	
7/31/2017	2170	
10/2/2017	2900	
5/14/2018	2550	
11/19/2018	2410	
5/21/2019	2810	
11/5/2019	2380	
5/21/2020	2740	
11/10/2020	2730	
5/17/2021	2770	
11/16/2021	2410	
11/8/2022		2800

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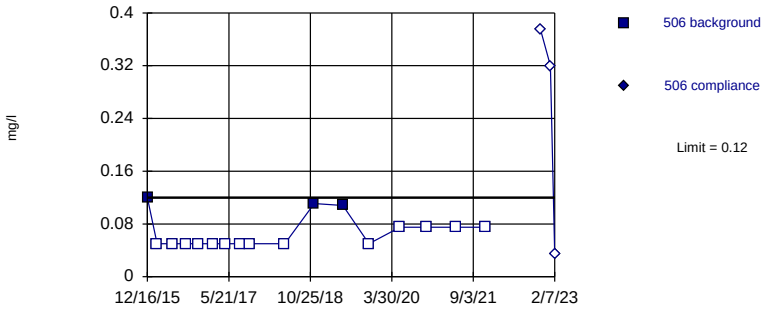
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 82.35% NDs. Well-constituent pair annual alpha = 0.00182. Individual comparison alpha = 0.0009102 (1 of 3).

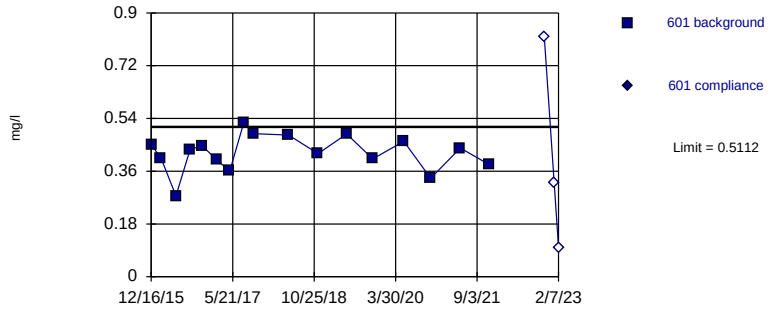
Constituent: Fluoride Analysis Run 3/15/2023 9:57 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.9.6.36 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.4235, Std. Dev.=0.06209, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9682, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

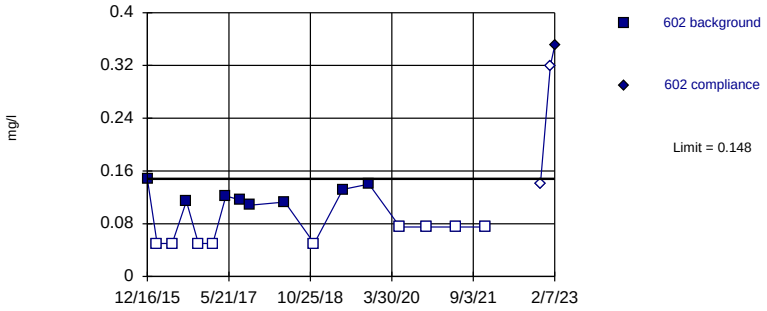
Constituent: Fluoride Analysis Run 3/15/2023 9:57 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.9.6.36 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 52.94% NDs. Well-constituent pair annual alpha = 0.00182. Individual comparison alpha = 0.0009102 (1 of 3).

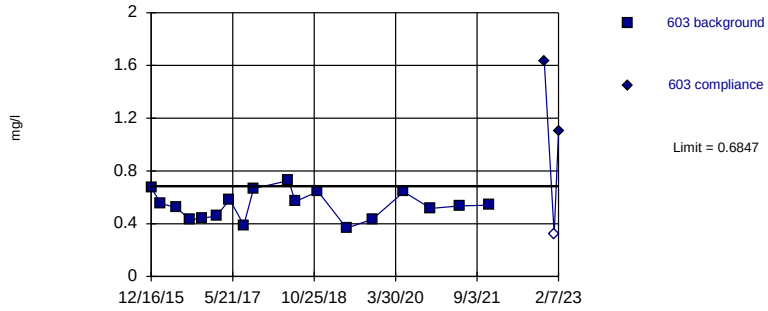
Constituent: Fluoride Analysis Run 3/15/2023 9:57 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.9.6.36 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.5385, Std. Dev.=0.1047, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9676, critical = 0.858. Kappa = 1.396 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Fluoride Analysis Run 3/15/2023 9:57 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Fluoride (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	506	506	
12/16/2015	0.12		
2/16/2016	<0.1		
5/23/2016	<0.1		
8/22/2016	<0.1		
11/8/2016	<0.1		
2/7/2017	<0.1		
5/1/2017	<0.1		
7/31/2017	<0.1		
10/2/2017	<0.1		
5/14/2018	<0.1		
11/19/2018	0.111		
5/21/2019	0.108		
11/5/2019	<0.1		
5/21/2020	<0.15		
11/10/2020	<0.15		
5/18/2021	<0.15		
11/16/2021	<0.15		
11/8/2022		<0.75	
1/10/2023		<0.64 (M)	1st verification MDL
2/7/2023		<0.067 (ME)	2nd verification MDL Eurofins

ND substitution: RL/2.

Prediction Limit

Constituent: Fluoride (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	601	601	
12/16/2015	0.45		
2/16/2016	0.406		
5/23/2016	0.276		
8/22/2016	0.435		
11/8/2016	0.446		
2/7/2017	0.399		
5/2/2017	0.36		
7/31/2017	0.526		
10/2/2017	0.488		
5/14/2018	0.483		
11/19/2018	0.42		
5/21/2019	0.487		
11/5/2019	0.402		
5/21/2020	0.462		
11/10/2020	0.336		
5/18/2021	0.439		
11/16/2021	0.384		
11/8/2022		0.819 (J)	
1/10/2023		<0.64 (M)	1st verification MDL
2/7/2023		<0.2 (E)	2nd verification Eurofins

ND substitution: RL/2.

Prediction Limit

Constituent: Fluoride (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	602	602	
12/16/2015	0.148		
2/16/2016	<0.1		
5/23/2016	<0.1		
8/22/2016	0.114		
11/7/2016	<0.1		
2/7/2017	<0.1		
5/2/2017	0.122		
7/31/2017	0.116		
10/2/2017	0.108		
5/14/2018	0.113		
11/19/2018	<0.1		
5/21/2019	0.132		
11/5/2019	0.14		
5/21/2020	<0.15		
11/10/2020	<0.15		
5/17/2021	<0.15		
11/16/2021	<0.15		
11/8/2022		0.141 (J)	
1/10/2023		<0.64 (M)	1st verification MDL
2/7/2023		0.35 (E)	2nd verification Eurofins

ND substitution: RL/2.

Prediction Limit

Constituent: Fluoride (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	603	603	
12/16/2015	0.673		
2/16/2016	0.552		
5/23/2016	0.523		
8/22/2016	0.431		
11/7/2016	0.442		
2/7/2017	0.459		
5/2/2017	0.585		
7/31/2017	0.388		
10/2/2017	0.666		
5/14/2018	0.727		
6/26/2018	0.568		
11/19/2018	0.645		
5/21/2019	0.365		
11/5/2019	0.436		
5/21/2020	0.642		
11/10/2020	0.516		
5/17/2021	0.535		
11/16/2021	0.54		
11/8/2022		1.63	
1/10/2023		<0.64 (M)	1st verification MDL
2/7/2023		1.1 (E)	2nd verification Eurofins

ND substitution: RL/2.

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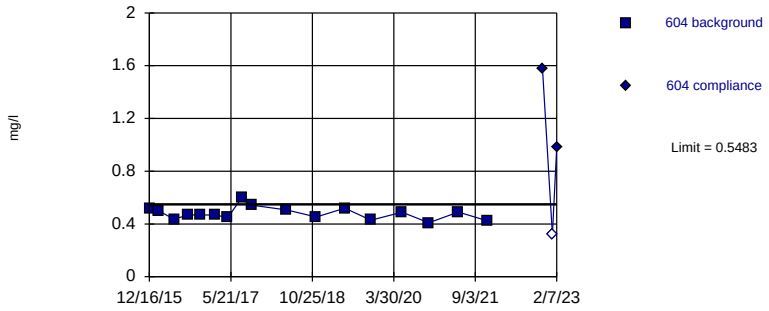
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.4803, Std. Dev.=0.04815, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9547, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Fluoride Analysis Run 3/15/2023 9:57 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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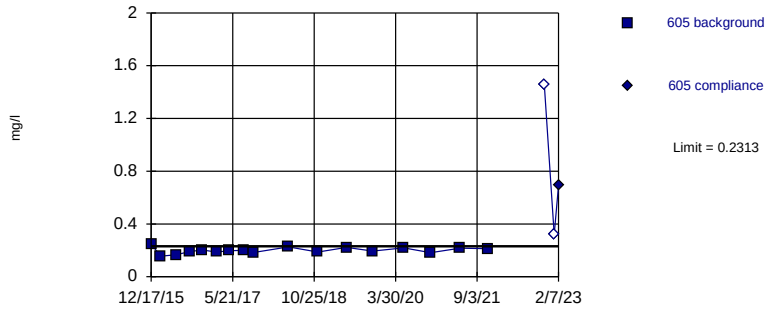
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1994, Std. Dev.=0.02259, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9858, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

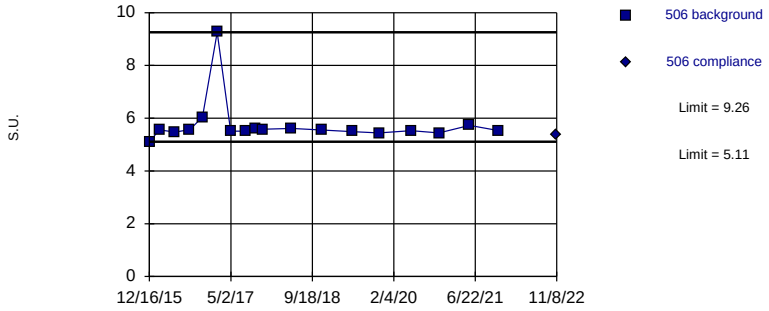
Constituent: Fluoride Analysis Run 3/15/2023 9:57 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.9.6.36 Software licensed to SCS Engineers. UG

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 18 background values. Well-constituent pair annual alpha = 0.003176. Individual comparison alpha = 0.001589 (1 of 3).

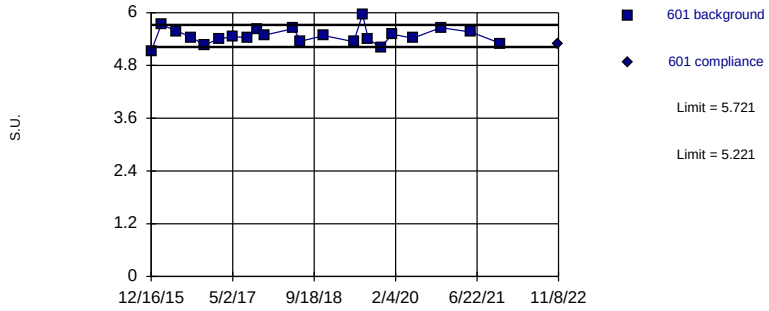
Constituent: pH Analysis Run 3/15/2023 9:57 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.9.6.36 Software licensed to SCS Engineers. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.471, Std. Dev.=0.186, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9737, critical = 0.878. Kappa = 1.344 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH Analysis Run 3/15/2023 9:57 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Fluoride (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	604	604	
12/16/2015	0.515		
2/16/2016	0.497		
5/23/2016	0.437		
8/22/2016	0.468		
11/7/2016	0.468		
2/7/2017	0.467		
5/2/2017	0.45		
7/31/2017	0.601		
10/2/2017	0.542		
5/14/2018	0.506		
11/19/2018	0.453		
5/21/2019	0.519		
11/5/2019	0.428		
5/21/2020	0.489		
11/10/2020	0.409		
5/17/2021	0.491		
11/16/2021	0.425		
11/8/2022		1.58	
1/10/2023		<0.64 (M)	1st verification MDL
2/7/2023		0.98 (E)	2nd verification Eurofins

ND substitution: RL/2.

Prediction Limit

Constituent: Fluoride (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	605	605	
12/17/2015	0.246		
2/16/2016	0.156		
5/23/2016	0.166		
8/22/2016	0.191		
11/7/2016	0.203		
2/7/2017	0.187		
5/2/2017	0.197		
7/31/2017	0.2		
10/2/2017	0.184		
5/14/2018	0.226		
11/19/2018	0.187		
5/21/2019	0.222		
11/5/2019	0.195		
5/21/2020	0.219		
11/10/2020	0.182		
5/17/2021	0.216		
11/16/2021	0.212		
11/8/2022		1.46 (J)	
1/10/2023		<0.64 (M)	1st verification MDL
2/7/2023		0.69 (E)	2nd verification Eurofins

ND substitution: RL/2.

Prediction Limit

Constituent: pH (S.U.) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	506	506
12/16/2015	5.11	
2/16/2016	5.56	
5/23/2016	5.47	
8/22/2016	5.57	
11/8/2016	6.04	
2/7/2017	9.26	
5/1/2017	5.51	
7/31/2017	5.51	
10/2/2017	5.59	
11/15/2017	5.58	
5/14/2018	5.61	
11/19/2018	5.55	
5/21/2019	5.49	
11/5/2019	5.44	
5/21/2020	5.53	
11/10/2020	5.44	
5/18/2021	5.73	
11/16/2021	5.53	
11/8/2022		5.37

Prediction Limit

Constituent: pH (S.U.) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

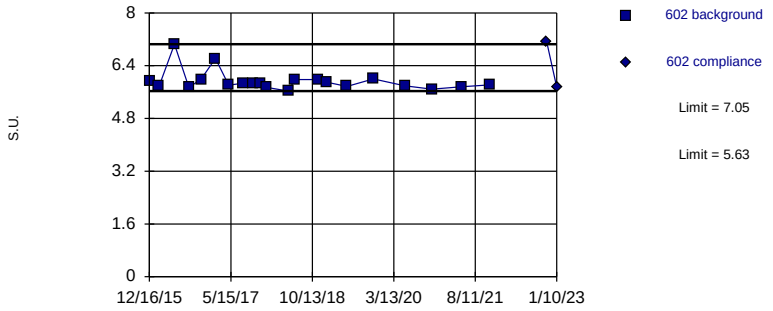
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	601	601
12/16/2015	5.12	
2/16/2016	5.73	
5/23/2016	5.58	
8/22/2016	5.44	
11/8/2016	5.26	
2/7/2017	5.41	
5/2/2017	5.45	
7/31/2017	5.44	
10/2/2017	5.61	
11/15/2017	5.49	
5/14/2018	5.64	
6/26/2018	5.35	
11/19/2018	5.48	
5/21/2019	5.34	
7/15/2019	5.96	
8/19/2019	5.41	
11/5/2019	5.2	
1/14/2020	5.51	
5/21/2020	5.42	
11/10/2020	5.66	
5/17/2021	5.56	
11/16/2021	5.3	
11/8/2022		5.3

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 21 background values. Well-constituent pair annual alpha = 0.002044. Individual comparison alpha = 0.001022 (1 of 3).

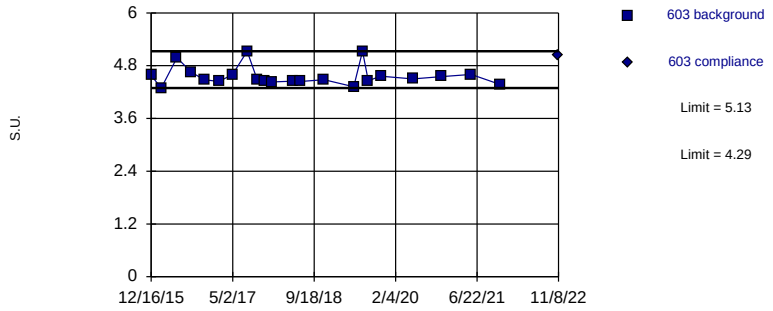
Constituent: pH Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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 22 background values. Well-constituent pair annual alpha = 0.001837. Individual comparison alpha = 0.0009189 (1 of 3).

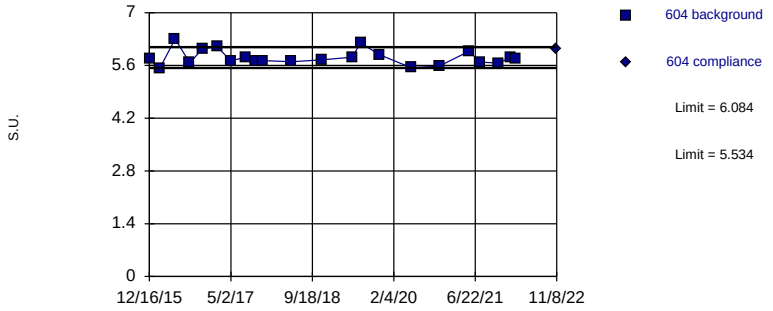
Constituent: pH Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.809, Std. Dev.=0.2044, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9239, critical = 0.878. Kappa = 1.344 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

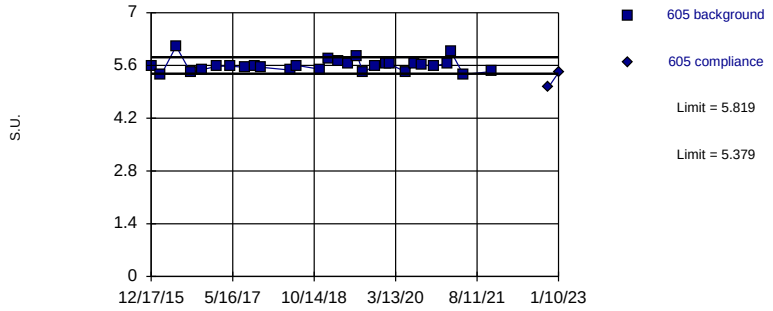
Constituent: pH Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.599, Std. Dev.=0.1703, n=29. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9153, critical = 0.898. Kappa = 1.294 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: pH (S.U.) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	602	602	
12/16/2015	5.93		
2/16/2016	5.78		
5/23/2016	7.05		
8/22/2016	5.74		
11/7/2016	5.99		
2/7/2017	6.62		
5/2/2017	5.81		
7/31/2017	5.87		
10/2/2017	5.86		
11/15/2017	5.87		
12/29/2017	5.74		
5/14/2018	5.63		
6/26/2018	5.98		
11/19/2018	5.98		
1/10/2019	5.9		
5/21/2019	5.77		
11/5/2019	6		
5/21/2020	5.79		
11/10/2020	5.69		
5/17/2021	5.76		
11/16/2021	5.82		
11/8/2022		7.11	
1/10/2023		5.75	1st verification

Prediction Limit

Constituent: pH (S.U.) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	603	603
12/16/2015	4.58	
2/16/2016	4.29	
5/23/2016	4.98	
8/22/2016	4.65	
11/7/2016	4.48	
2/7/2017	4.44	
5/2/2017	4.6	
7/31/2017	5.13	
10/2/2017	4.48	
11/15/2017	4.44	
12/29/2017	4.43	
5/14/2018	4.45	
6/26/2018	4.44	
11/19/2018	4.48	
5/21/2019	4.32	
7/15/2019	5.13	
8/19/2019	4.46	
11/5/2019	4.56	
5/21/2020	4.5	
11/10/2020	4.55	
5/17/2021	4.6	
11/16/2021	4.37	
11/8/2022		5.04

Prediction Limit

Constituent: pH (S.U.) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	604	604
12/16/2015	5.79	
2/16/2016	5.51	
5/23/2016	6.3	
8/22/2016	5.67	
11/7/2016	6.04	
2/7/2017	6.1	
5/2/2017	5.72	
7/31/2017	5.82	
10/2/2017	5.72	
11/15/2017	5.73	
5/14/2018	5.7	
11/19/2018	5.75	
5/21/2019	5.82	
7/15/2019	6.2	
11/5/2019	5.89	
5/21/2020	5.54	
11/10/2020	5.58	
5/17/2021	5.98	
7/19/2021	5.69	
11/16/2021	5.66	
1/24/2022	5.82	
3/1/2022	5.77	
11/8/2022		6.04

Prediction Limit

Constituent: pH (S.U.) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

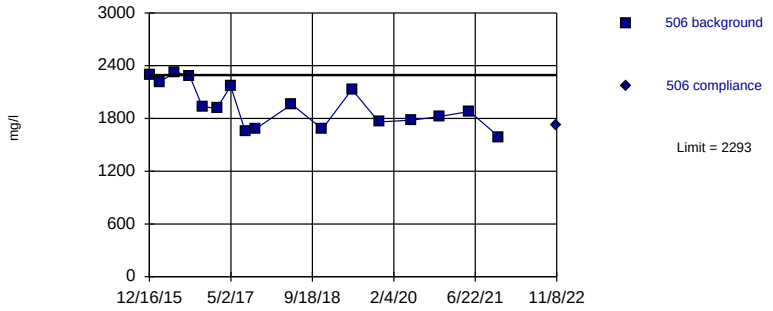
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	605	605	
12/17/2015	5.57		
2/16/2016	5.34		
5/23/2016	6.11		
8/22/2016	5.42		
11/7/2016	5.49		
2/7/2017	5.58		
5/2/2017	5.58		
7/31/2017	5.55		
10/2/2017	5.58		
11/15/2017	5.55		
5/14/2018	5.48		
6/26/2018	5.6		
11/19/2018	5.5		
1/10/2019	5.79		
3/13/2019	5.73		
5/21/2019	5.64		
7/15/2019	5.85		
8/19/2019	5.42		
11/5/2019	5.59		
1/14/2020	5.66		
2/3/2020	5.64		
5/21/2020	5.42		
7/14/2020	5.66		
8/26/2020	5.62		
11/10/2020	5.58		
2/3/2021	5.66		
3/1/2021	5.96		
5/17/2021	5.36		
11/16/2021	5.44		
11/8/2022		5.03	
1/10/2023		5.41	1st verification

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1945, Std. Dev.=246.3, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9263, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate Analysis Run 3/15/2023 9:57 AM View: LF CCR III

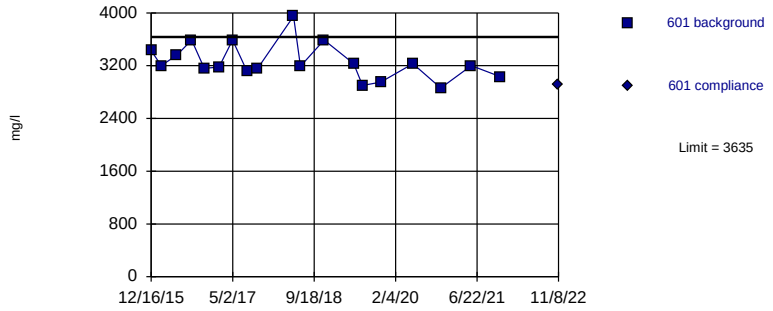
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.9.6.36 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=3258, Std. Dev.=273.4, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9249, critical = 0.863. Kappa = 1.379 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate Analysis Run 3/15/2023 9:57 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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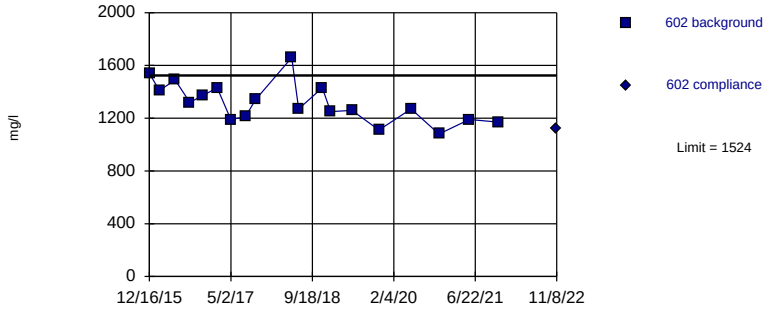
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1315, Std. Dev.=151.2, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.97, critical = 0.863. Kappa = 1.379 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate Analysis Run 3/15/2023 9:58 AM View: LF CCR III

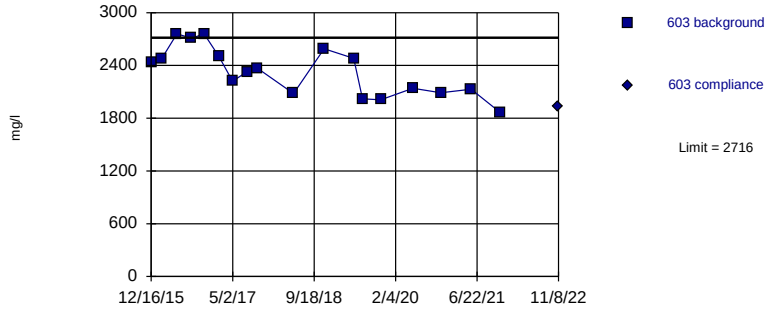
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.9.6.36 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2331, Std. Dev.=275.9, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.951, critical = 0.858. Kappa = 1.396 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate Analysis Run 3/15/2023 9:58 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Sulfate (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	506	506
12/16/2015	2290	
2/16/2016	2210	
5/23/2016	2330	
8/22/2016	2280	
11/8/2016	1930	
2/7/2017	1920	
5/1/2017	2170	
7/31/2017	1650	
10/2/2017	1680	
5/14/2018	1960	
11/19/2018	1680	
5/21/2019	2130	
11/5/2019	1760	
5/21/2020	1780	
11/10/2020	1820	
5/18/2021	1880	
11/16/2021	1590	
11/8/2022		1730

Prediction Limit

Constituent: Sulfate (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	601	601
12/16/2015	3430	
2/16/2016	3200	
5/23/2016	3360	
8/22/2016	3590	
11/8/2016	3160	
2/7/2017	3180	
5/2/2017	3590	
7/31/2017	3110	
10/2/2017	3150	
5/14/2018	3950	
6/26/2018	3190	
11/19/2018	3590	
5/21/2019	3230	
7/15/2019	2900	
11/5/2019	2950	
5/21/2020	3230	
11/10/2020	2860	
5/18/2021	3200	
11/16/2021	3030	
11/8/2022		2910

Prediction Limit

Constituent: Sulfate (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	602	602
12/16/2015	1540	
2/16/2016	1410	
5/23/2016	1490	
8/22/2016	1320	
11/7/2016	1370	
2/7/2017	1430	
5/2/2017	1190	
7/31/2017	1210	
10/2/2017	1340	
5/14/2018	1660	
6/26/2018	1270	
11/19/2018	1430	
1/10/2019	1250	
5/21/2019	1260	
11/5/2019	1110	
5/21/2020	1270	
11/10/2020	1080	
5/17/2021	1190	
11/16/2021	1170	
11/8/2022		1120

Prediction Limit

Constituent: Sulfate (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III

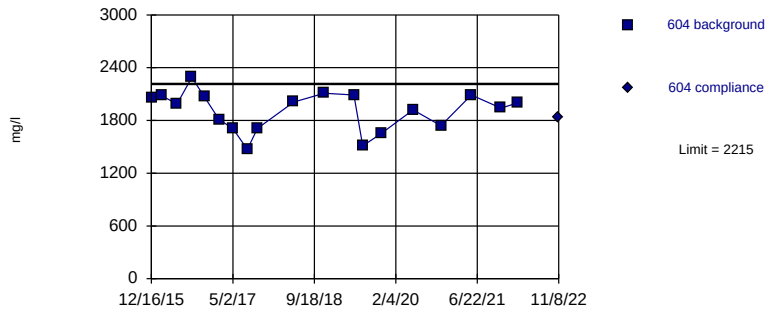
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	603	603
12/16/2015	2440	
2/16/2016	2470	
5/23/2016	2760	
8/22/2016	2710	
11/7/2016	2760	
2/7/2017	2500	
5/2/2017	2220	
7/31/2017	2330	
10/2/2017	2370	
5/14/2018	2080	
11/19/2018	2590	
5/21/2019	2480	
7/15/2019	2020	
11/5/2019	2010	
5/21/2020	2140	
11/10/2020	2090	
5/17/2021	2130	
11/16/2021	1860	
11/8/2022		1930

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1908, Std. Dev.=222.6, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9335, critical = 0.863. Kappa = 1.379 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate Analysis Run 3/15/2023 9:58 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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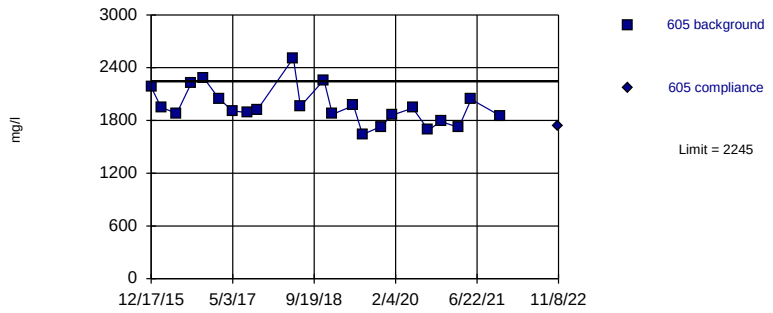
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1962, Std. Dev.=212.3, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9378, critical = 0.881. Kappa = 1.336 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate Analysis Run 3/15/2023 9:58 AM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Sulfate (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	604	604
12/16/2015	2060	
2/16/2016	2080	
5/23/2016	1990	
8/22/2016	2290	
11/7/2016	2070	
2/7/2017	1810	
5/2/2017	1710	
7/31/2017	1470	
10/2/2017	1710	
5/14/2018	2010	
11/19/2018	2110	
5/21/2019	2090	
7/15/2019	1510	
11/5/2019	1650	
5/21/2020	1920	
11/10/2020	1740	
5/17/2021	2090	
11/16/2021	1940	
3/1/2022	2000	
11/8/2022		1840

Prediction Limit

Constituent: Sulfate (mg/l) Analysis Run 3/15/2023 9:59 AM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	605	605
12/17/2015	2180	
2/16/2016	1950	
5/23/2016	1880	
8/22/2016	2230	
11/7/2016	2280	
2/7/2017	2050	
5/2/2017	1910	
7/31/2017	1890	
10/2/2017	1920	
5/14/2018	2510	
6/26/2018	1960	
11/19/2018	2260	
1/10/2019	1870	
5/21/2019	1970	
7/15/2019	1640	
11/5/2019	1730	
1/14/2020	1860	
5/21/2020	1940	
8/26/2020	1690	
11/10/2020	1790	
3/1/2021	1720	
5/17/2021	2040	
11/16/2021	1850	
11/8/2022		1740

Prediction Limit

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose Printed 3/15/2023, 9:59 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron (mg/l)	506	0.2	n/a	11/8/2022	0.1ND	No	17	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Boron (mg/l)	601	0.203	n/a	11/8/2022	0.1ND	No	17	94.12	n/a	0.000...	NP Intra (NDs) 1 of 3
Boron (mg/l)	602	5.05	n/a	11/8/2022	4.2	No	17	0	No	0.00188	Param Intra 1 of 3
Boron (mg/l)	603	7.112	n/a	11/8/2022	6.96	No	18	0	No	0.00188	Param Intra 1 of 3
Boron (mg/l)	604	5.577	n/a	11/8/2022	4.34	No	18	0	No	0.00188	Param Intra 1 of 3
Boron (mg/l)	605	2.016	n/a	11/8/2022	1.57	No	17	0	No	0.00188	Param Intra 1 of 3
Calcium (mg/l)	506	479	n/a	11/8/2022	343	No	18	0	n/a	0.000...	NP Intra (normality) ...
Calcium (mg/l)	601	499.6	n/a	11/8/2022	463	No	19	0	No	0.00188	Param Intra 1 of 3
Calcium (mg/l)	602	373.3	n/a	11/8/2022	285	No	19	0	No	0.00188	Param Intra 1 of 3
Calcium (mg/l)	603	461.8	n/a	11/8/2022	393	No	20	0	No	0.00188	Param Intra 1 of 3
Calcium (mg/l)	604	481.4	n/a	11/8/2022	459	No	21	0	No	0.00188	Param Intra 1 of 3
Calcium (mg/l)	605	437.3	n/a	2/7/2023	428	No	23	0	No	0.00188	Param Intra 1 of 3
Chloride (mg/l)	506	91.22	n/a	11/8/2022	85.4	No	18	0	No	0.00188	Param Intra 1 of 3
Chloride (mg/l)	**601**	**56.74**	**n/a**	**2/7/2023**	**76.6**	**Yes**	**20**	**0**	**x^3**	**0.00188**	**Param Intra 1 of 3**
Chloride (mg/l)	602	5.007	n/a	11/8/2022	3.73	No	20	0	sqrt(x)	0.00188	Param Intra 1 of 3
Chloride (mg/l)	603	8.46	n/a	1/10/2023	6.08	No	20	0	No	0.00188	Param Intra 1 of 3
Chloride (mg/l)	604	16.6	n/a	2/7/2023	16.5	No	22	0	No	0.00188	Param Intra 1 of 3
Chloride (mg/l)	605	60.82	n/a	11/8/2022	29.7	No	28	0	sqrt(x)	0.00188	Param Intra 1 of 3
Dissolved Solids (mg/l)	506	3232	n/a	11/8/2022	2260	No	17	0	No	0.00188	Param Intra 1 of 3
Dissolved Solids (mg/l)	601	4866	n/a	11/8/2022	4440	No	17	0	No	0.00188	Param Intra 1 of 3
Dissolved Solids (mg/l)	602	4900	n/a	11/8/2022	1710	No	18	0	n/a	0.000...	NP Intra (normality) ...
Dissolved Solids (mg/l)	603	3340	n/a	11/8/2022	2930	No	17	0	No	0.00188	Param Intra 1 of 3
Dissolved Solids (mg/l)	604	3088	n/a	11/8/2022	2690	No	18	0	No	0.00188	Param Intra 1 of 3
Dissolved Solids (mg/l)	605	2953	n/a	11/8/2022	2800	No	17	0	No	0.00188	Param Intra 1 of 3
Fluoride (mg/l)	506	0.12	n/a	2/7/2023	0.0335ND	No	17	82.35	n/a	0.000...	NP Intra (NDs) 1 of 3
Fluoride (mg/l)	601	0.5112	n/a	2/7/2023	0.1ND	No	17	0	No	0.00188	Param Intra 1 of 3
Fluoride (mg/l)	**602**	**0.148**	**n/a**	**2/7/2023**	**0.35**	**Yes**	**17**	**52.94**	**n/a**	**0.000...**	**NP Intra (NDs) 1 of 3**
Fluoride (mg/l)	**603**	**0.6847**	**n/a**	**2/7/2023**	**1.1**	**Yes**	**18**	**0**	**No**	**0.00188**	**Param Intra 1 of 3**
Fluoride (mg/l)	**604**	**0.5483**	**n/a**	**2/7/2023**	**0.98**	**Yes**	**17**	**0**	**No**	**0.00188**	**Param Intra 1 of 3**
Fluoride (mg/l)	**605**	**0.2313**	**n/a**	**2/7/2023**	**0.69**	**Yes**	**17**	**0**	**No**	**0.00188**	**Param Intra 1 of 3**
pH (S.U.)	506	9.26	5.11	11/8/2022	5.37	No	18	0	n/a	0.001589	NP Intra (normality) ...
pH (S.U.)	601	5.721	5.221	11/8/2022	5.3	No	22	0	No	0.000...	Param Intra 1 of 3
pH (S.U.)	602	7.05	5.63	1/10/2023	5.75	No	21	0	n/a	0.001022	NP Intra (normality) ...
pH (S.U.)	603	5.13	4.29	11/8/2022	5.04	No	22	0	n/a	0.000...	NP Intra (normality) ...
pH (S.U.)	604	6.084	5.534	11/8/2022	6.04	No	22	0	No	0.000...	Param Intra 1 of 3
pH (S.U.)	605	5.819	5.379	1/10/2023	5.41	No	29	0	No	0.000...	Param Intra 1 of 3
Sulfate (mg/l)	506	2293	n/a	11/8/2022	1730	No	17	0	No	0.00188	Param Intra 1 of 3
Sulfate (mg/l)	601	3635	n/a	11/8/2022	2910	No	19	0	No	0.00188	Param Intra 1 of 3
Sulfate (mg/l)	602	1524	n/a	11/8/2022	1120	No	19	0	No	0.00188	Param Intra 1 of 3
Sulfate (mg/l)	603	2716	n/a	11/8/2022	1930	No	18	0	No	0.00188	Param Intra 1 of 3
Sulfate (mg/l)	604	2215	n/a	11/8/2022	1840	No	19	0	No	0.00188	Param Intra 1 of 3
Sulfate (mg/l)	605	2245	n/a	11/8/2022	1740	No	23	0	No	0.00188	Param Intra 1 of 3

ATTACHMENT 2

Sanitas™ Configuration Settings

Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

Exclude data flags: i

Data Reading Options

- (•) Individual Observations
- ( ) Mean of Each: ( ) Month
- ( ) Median of Each: ( ) Season

Non-Detect / Trace Handling...

Setup Seasons...

[ ] Automatically Process Resamples...

Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

- [ ] Black and White Output
- [x] Four Plots Per Page
  - [x] Always Combine Data Pages...
  - [x] Include Tick Marks on Data Page
- [ ] Use Constituent Name for Graph Title
- [ ] Draw Border Around Text Reports and Data Pages
- [x] Enlarge/Reduce Fonts (Graphs): 100%
- [x] Enlarge/Reduce Fonts (Data/Text Reports): 100%
- [x] Wide Margins (on reports without explicit setting)
- [ ] Use CAS# (Not Const. Name)
- [ ] Truncate File Names to 20 Characters
- [ ] Include Limit Lines when found in Database...
- [x] Show Deselected Data on Time Series Lighter
- [ ] Show Deselected Data on all Data Pages Light

Setup Symbols and Colors...

- [x] Prompt to Overwrite/Append Summary Tables
- [ ] Round Limits to 2 Sig. Digits (when not set in data file)
- [ ] User-Set Scale
- [x] Indicate Background Data
- [ ] Show Exact Dates
- [ ] Thick Plot Lines

Zoom Factor: 200%

Output Decimal Precision

- ( ) Less Precision
- (•) Normal Precision
- ( ) More Precision

- [x] Store Print Jobs in Multiple Constituent Mode

Store All Print Jobs...

Printer: Adobe PDF

Printers...

Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

☐ Use Modified Alpha...

☑ Test Residuals For Normality (Parametric test only) using Shapiro-Wilk/Francia at Alpha = 0.01

☐ Continue Parametric if Unable to Normalize

Transformation (Parametric test only)

- ◉ Use Ladder of Powers
- ○ Natural Log or No Transformation
- ○ Never Transform
- ○ Use Specific Transformation:

☐ Use Best W Statistic

☐ Plot Transformed Values

Use Non-Parametric Test (Sen's Slope/Mann-Kendall) when Non-Detects Percent > 75

☐ Include 95. % Confidence Interval around Trend Line

☐ Automatically Remove Outliers (Parametric 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

☑ Test for Normality using Shapiro-Wilk/Francia at Alpha = 0.01

☑ Use Non-Parametric Test when Non-Detects Percent > 50

Use Aitchison's Adjustment when Non-Detects Percent > 15

☐ Optional Further Refinement: Use Aitchison's when NDs % > 50

☐ Use Poisson Prediction Limit when Non-Detects Percent > 90

Transformation

- ◉ Use Ladder of Powers
- ○ Natural Log or No Transformation
- ○ Never Transform
- ○ Use Specific Transformation: Natural Log

☐ Use Best W Statistic

☐ Plot Transformed Values

Deseasonalize (Intra- and InterWell)

- ○ If Seasonality Is Detected
- ○ If Seasonality Is Detected Or Insufficient to Test
- ○ Always (When Sufficient Data)
- ◉ Never

☐ Always Use Non-Parametric

Facility α

Statistical Evaluations per Year: 2

Constituents Analyzed: 7

Downgradient (Compliance) Wells: 4

Sampling Plan

Comparing Individual Observations

○ 1 of 1 ○ 1 of 2 ◉ 1 of 3 ○ 1 of 4

○ 2 of 4 ("Modified California")

IntraWell Other

☐ Stop if Background Trend Detected at Alpha = 0.05

☑ Plot Background Data

Override Standard Deviation:

Override DF: Override Kappa:

☐ Automatically Remove Background Outliers

☐ 2-Tailed Test Mode...

☑ Show Deselected Data Lighter

Non-Parametric Limit = Highest Background Value

Non-Parametric Limit when 100% Non-Detects:

- ○ Highest/Second Highest Background Value
- ◉ Most Recent PQL if available, or MDL
- ○ Most Recent Background Value (subst. method)

Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

Rank Von Neumann, Wilcoxon Rank Sum / Mann-Whitney

- [ ] Use Modified Alpha...
- [ ] 2-Tailed Test Mode...
- [ ] Combine Background Wells on Mann-Whitney...

Outlier Tests

- ( ) EPA 1989 Outlier Screening (fixed alpha of 0.05)
- (•) Dixon's at α= 0.05 or if n > 22 Rosner's at α= 0.01 [x] Use EPA Screening to establish Suspected Outliers
- ( ) Tukey's Outlier Screening, with IQR Multiplier = 3.0 [ ] Use Ladder of Powers to achieve Best W Stat
- [x] Test For Normality using Shapiro-Wilk/Francia at Alpha = 0.1
  - (•) Stop if Non-Normal
  - ( ) Continue with Parametric Test if Non-Normal
  - ( ) Tukey's if Non-Normal, with IQR Multiplier = 3.0 [x] Use Ladder of Powers to achieve Best W Stat
- [x] No Outlier If Less Than 3.0 Times Median
- [ ] Apply Rules found in Ohio Guidance Document 0715
- [ ] Combine Background Wells on the Outlier Report...

Piper, Stiff Diagram

- [ ] Combine Wells
- [ ] Combine Dates
- (•) Use Default Constituent Names
- ( ) Use Constituent Definition File Edit
- [x] Label Constituents
- [x] Label Axes
- [x] Note Cation-Anion Balance (Piper only)

APPENDIX E.2

Spring 2023 Semiannual Detection Monitoring Statistical Analyses

SCS ENGINEERS

Environmental Consulting & Contracting

MEMORANDUM

September 28, 2023

To: Montrose Generating Station
400 SW Highway P
Clinton, MO 64735
Evergy Metro, Inc.

From: SCS Engineers
John Rockhold, P.G.
Douglas Doerr, P.E.

RE: Determination of Statistically Significant Increases - CCR Landfill
Spring 2023 Semiannual Detection Monitoring 40 CFR 257.94

Statistical analysis of monitoring data from the groundwater monitoring system for the CCR Landfill at the Montrose Generating Station has been completed in substantial compliance with the "Statistical Method Certification by A Qualified Professional Engineer" dated October 12, 2017. Detection monitoring groundwater samples were collected on May 16, 2023. Review and validation of the results from the May 2023 Detection Monitoring Event was completed on June 30, 2023, 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 10, 2023, and August 10, 2023.

The completed statistical evaluation identified one Appendix III constituent above its prediction limit.

Monitoring Well Constituents	*UPL	Observation May 16, 2023	1st Verification July 10, 2023	2nd Verification August 10, 2023
MW-601				
Chloride	56.74	76.1	64.3/70.9**	70.8/69.5**

*UPL – Upper Prediction Limit
** Duplicate Sample

Determination: A statistical evaluation was completed for all Appendix III detection monitoring constituents in accordance with the certified statistical method. The statistical evaluation identified an SSI above the background prediction limit for chloride at monitoring well MW-601.

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

Montrose Generating Station
Determination of Statistically Significant Increases
CCR Landfill
September 28, 2023

ATTACHMENT 1

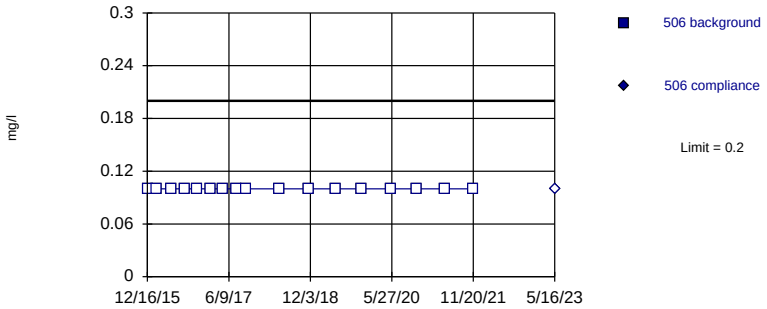
Sanitas™ Output

Sanitas™ v.10.0.06 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 = 17) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.00182. Individual comparison alpha = 0.0009102 (1 of 3).

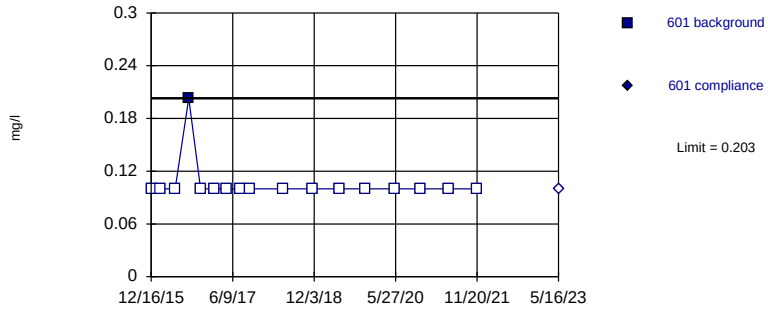
Constituent: Boron Analysis Run 9/6/2023 3:22 PM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.10.0.06 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 94.12% NDs. Well-constituent pair annual alpha = 0.00182. Individual comparison alpha = 0.0009102 (1 of 3).

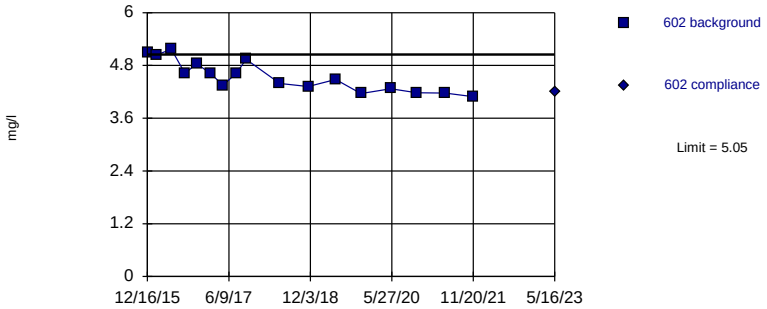
Constituent: Boron Analysis Run 9/6/2023 3:22 PM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.10.0.06 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4.55, Std. Dev.=0.354, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9211, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

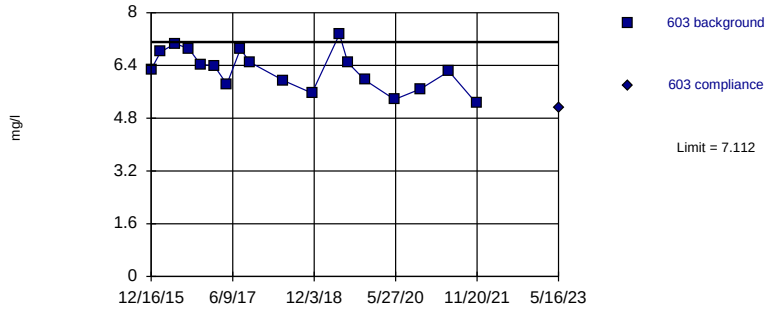
Constituent: Boron Analysis Run 9/6/2023 3:22 PM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.10.0.06 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.274, Std. Dev.=0.6001, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9764, critical = 0.858. Kappa = 1.396 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Boron Analysis Run 9/6/2023 3:22 PM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Boron Analysis Run 9/6/2023 3:24 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

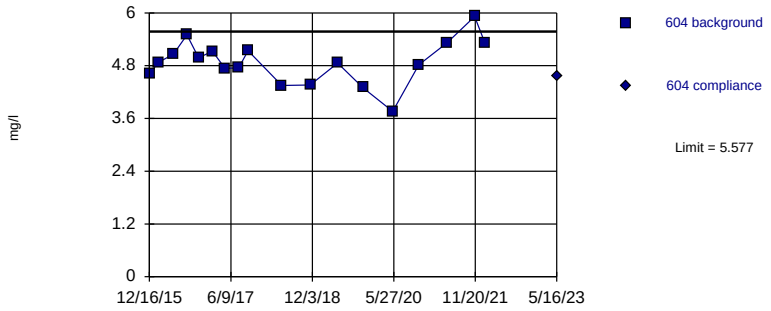
	506	506	601	601	602	602	603	603
12/16/2015	<0.2		<0.2		5.08		6.28	
2/16/2016	<0.2		<0.2		5.04		6.81	
5/23/2016	<0.2		<0.2		5.17		7.06	
8/22/2016	<0.2		0.203		4.62		6.91	
11/7/2016					4.84		6.43	
11/8/2016	<0.2		<0.2					
2/7/2017	<0.2		<0.2		4.62		6.39	
5/1/2017	<0.2							
5/2/2017			<0.2		4.35		5.83	
7/31/2017	<0.2		<0.2		4.63		6.9	
10/2/2017	<0.2		<0.2		4.94		6.5	
5/14/2018	<0.2		<0.2		4.39		5.94	
11/19/2018	<0.2		<0.2		4.32		5.56	
5/21/2019	<0.2		<0.2		4.48		7.35	
7/15/2019							6.49	
11/5/2019	<0.2		<0.2		4.16		5.96	
5/21/2020	<0.2		<0.2		4.27		5.37	
11/10/2020	<0.2		<0.2		4.18		5.69	
5/17/2021					4.17		6.22	
5/18/2021	<0.2		<0.2					
11/16/2021	<0.2		<0.2		4.09		5.25	
5/16/2023		<0.2		<0.2		4.2		5.11

ND substitution: RL/2.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4.878, Std. Dev.=0.501, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9842, critical = 0.858. Kappa = 1.396 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

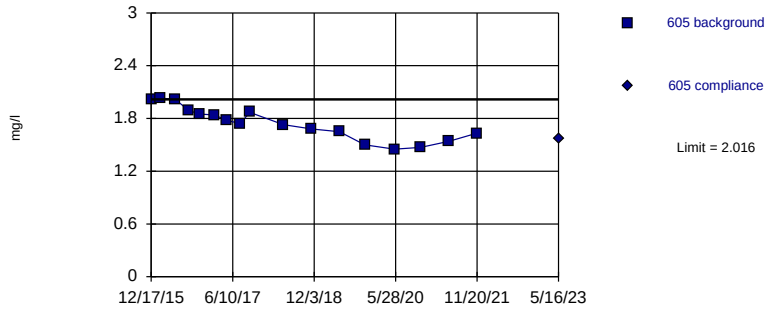
Constituent: Boron Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.746, Std. Dev.=0.1907, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9463, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

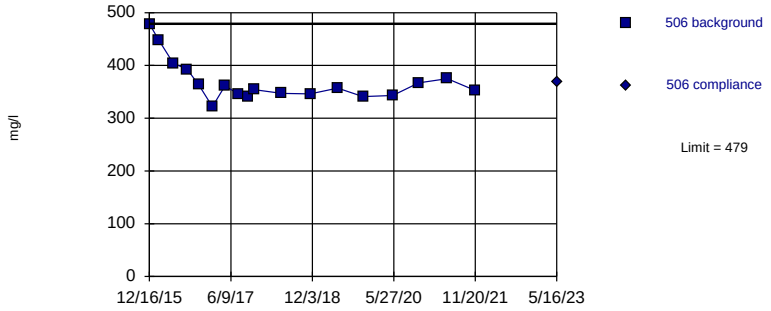
Constituent: Boron Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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 18 background values. Well-constituent pair annual alpha = 0.001588. Individual comparison alpha = 0.0007943 (1 of 3).

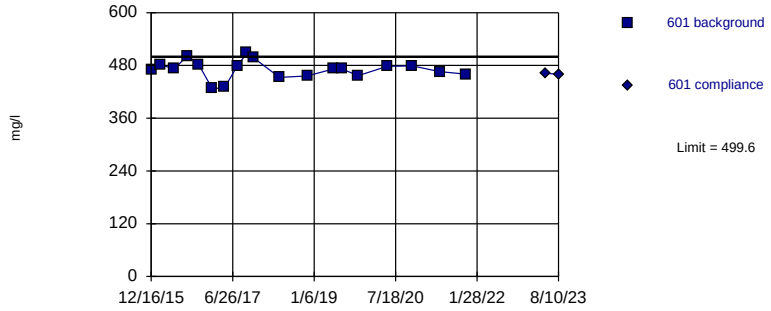
Constituent: Calcium Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=470.6, Std. Dev.=21.04, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9534, critical = 0.863. Kappa = 1.379 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Boron, Calcium Analysis Run 9/6/2023 3:24 PM View: LF CCR III

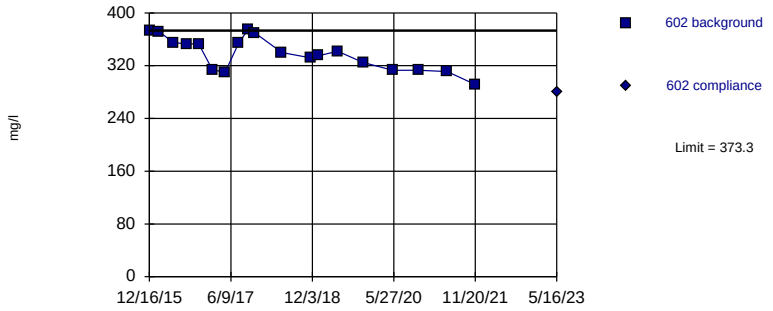
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	604	604	605	605	506	506	601	601	
12/16/2015	4.62				479		469		
12/17/2015			2.02						
2/16/2016	4.88		2.03		448		481		
5/23/2016	5.06		2.02		404		473		
8/22/2016	5.5		1.89		393		502		
11/7/2016	4.98		1.85						
11/8/2016					363		481		
2/7/2017	5.13		1.84		322		427		
5/1/2017					361				
5/2/2017	4.74		1.78				430		
7/31/2017	4.75		1.74		346		480		
10/2/2017	5.14		1.87		341		508		
11/15/2017					354		498		
5/14/2018	4.35		1.73		347		453		
11/19/2018	4.36		1.68		346		456		
5/21/2019	4.86		1.65		357		472		
7/15/2019							472		
11/5/2019	4.3		1.5		341		457		
5/21/2020	3.76		1.45		343		478		
11/10/2020	4.82		1.47		367		479		
5/17/2021	5.32		1.54						
5/18/2021					375		466		
11/16/2021	5.92		1.63		353		460		
1/24/2022	5.31								
5/16/2023		4.57		1.57		368		462	
8/10/2023								460	Extra

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=338.5, Std. Dev.=25.22, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9391, critical = 0.863. Kappa = 1.379 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 9/6/2023 3:22 PM View: LF CCR III

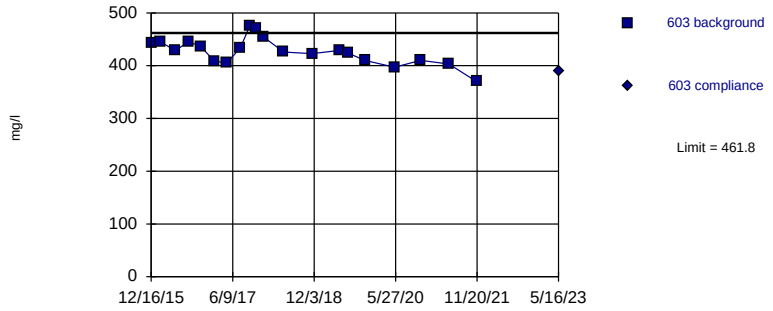
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.10.0.06 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=427.1, Std. Dev.=25.5, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9795, critical = 0.868. Kappa = 1.362 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 9/6/2023 3:22 PM View: LF CCR III

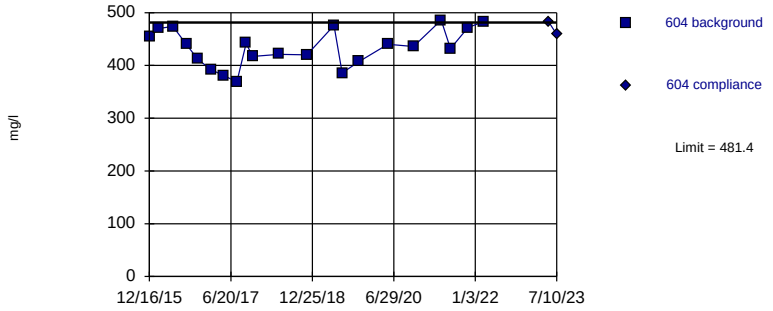
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.10.0.06 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=433.8, Std. Dev.=35.16, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.957, critical = 0.873. Kappa = 1.353 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 9/6/2023 3:22 PM View: LF CCR III

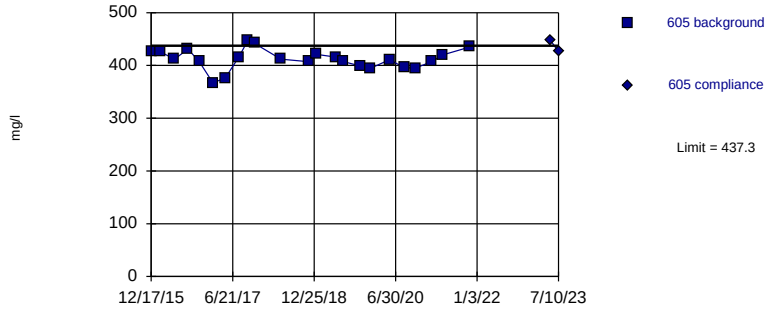
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.10.0.06 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=411.8, Std. Dev.=19.1, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9727, critical = 0.881. Kappa = 1.336 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Calcium Analysis Run 9/6/2023 3:24 PM View: LF CCR III

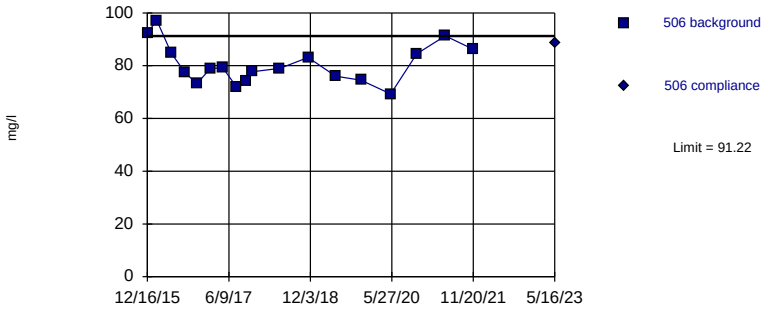
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	602	602	603	603	604	604	605	605
12/16/2015	373		444		454			
12/17/2015							427	
2/16/2016	372		445		470		426	
5/23/2016	355		429		474		412	
8/22/2016	353		445		440		431	
11/7/2016	353		437		412		407	
2/7/2017	314		409		392		367	
5/2/2017	310		405		381		376	
7/31/2017	354		434		369		415	
10/2/2017	375		476		442		447	
11/15/2017	370		471		417		442	
12/29/2017			455					
5/14/2018	340		426		421		412	
11/19/2018	332		423		420		407	
1/10/2019	335						421	
5/21/2019	342		429		476		416	
7/15/2019			424		386		407	
11/5/2019	325		410		407		399	
1/14/2020							395	
5/21/2020	313		397		440		411	
8/26/2020							396	
11/10/2020	313		410		436		395	
3/1/2021							407	
5/17/2021	311		403		486		420	
7/19/2021					432			
11/16/2021	292		370		472		435	
3/1/2022					483			
5/16/2023		280		389		483		448
7/10/2023						459	1st verification	426 1st verification

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=80.62, Std. Dev.=7.599, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9501, critical = 0.858. Kappa = 1.396 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

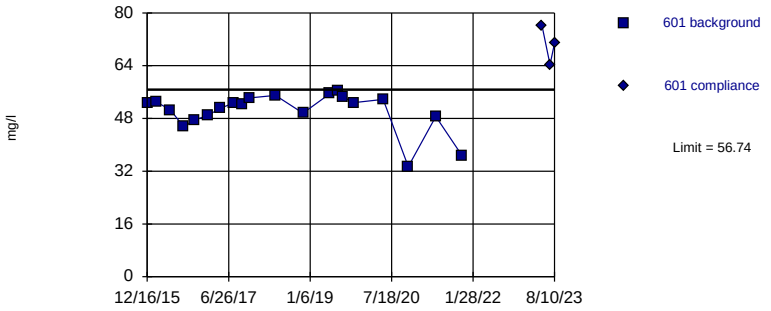
Constituent: Chloride Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube transformation): Mean=131532, Std. Dev.=37536, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.885, critical = 0.868. Kappa = 1.362 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

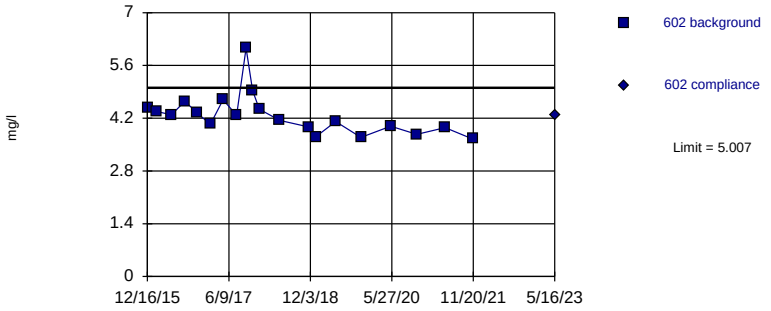
Constituent: Chloride Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=2.065, Std. Dev.=0.1269, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.876, critical = 0.868. Kappa = 1.362 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

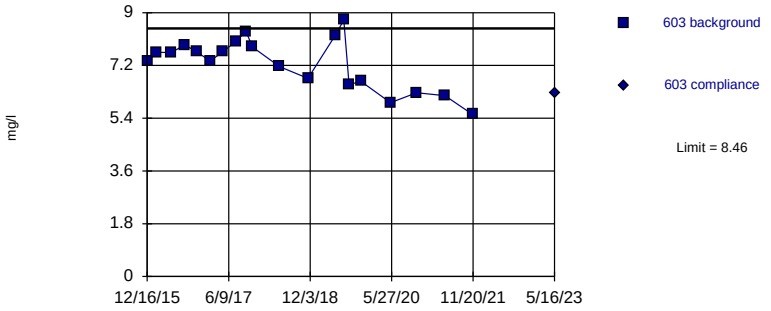
Constituent: Chloride Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.273, Std. Dev.=0.8721, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9664, critical = 0.868. Kappa = 1.362 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Chloride Analysis Run 9/6/2023 3:24 PM View: LF CCR III

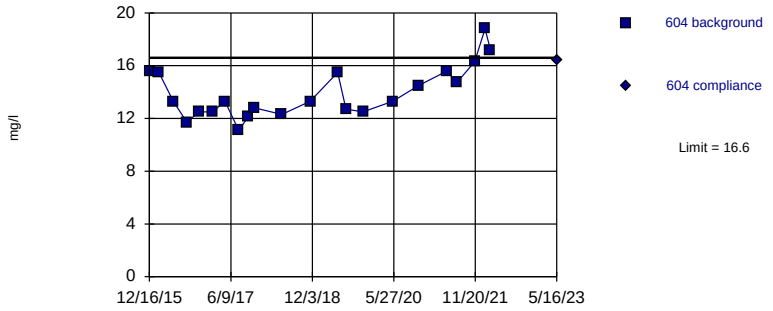
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	506	506	601	601	602	602	603	603
12/16/2015	92.4		52.5		4.48		7.33	
2/16/2016	97.2		53		4.38		7.65	
5/23/2016	84.7		50.6		4.29		7.64	
8/22/2016	77.5		45.5		4.65		7.9	
11/7/2016					4.35		7.67	
11/8/2016	73.1		47.5					
2/7/2017	79		49		4.04		7.35	
5/1/2017	79.2							
5/2/2017			51.1		4.69		7.67	
7/31/2017	71.9		52.7		4.28		8.03	
10/2/2017	74.4		52.4		6.06		8.37	
11/15/2017	77.7		54.2		4.93		7.83	
12/29/2017					4.44			
5/14/2018	79		55		4.14		7.16	
11/19/2018	83.1		49.6		3.97		6.76	
1/10/2019					3.71			
5/21/2019	76		55.5		4.11		8.24	
7/15/2019			56.5				8.75	
8/19/2019			54.5				6.54	
11/5/2019	74.5		52.8		3.69		6.66	
5/21/2020	69.3		53.8		3.99		5.93	
11/10/2020	84.5		33.4		3.77		6.27	
5/17/2021					3.95		6.17	
5/18/2021	91.3		48.6					
11/16/2021	86.3		36.6		3.65		5.53	
5/16/2023		88.8		76.1		4.29		6.27
7/10/2023				64.3	1st verification			
8/10/2023				70.8	2nd verification			

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=13.96, Std. Dev.=1.963, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9263, critical = 0.878. Kappa = 1.344 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

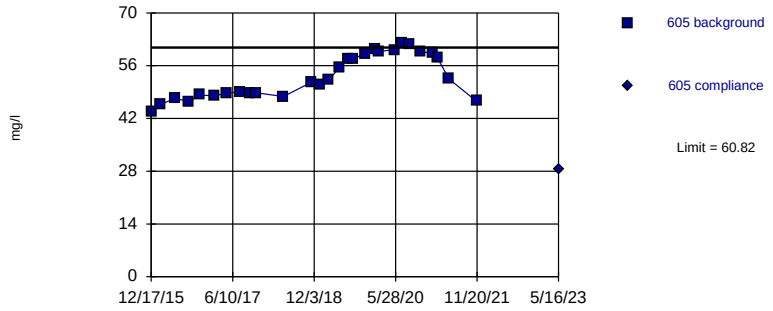
Constituent: Chloride Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=7.28, Std. Dev.=0.3988, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8962, critical = 0.896. Kappa = 1.3 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

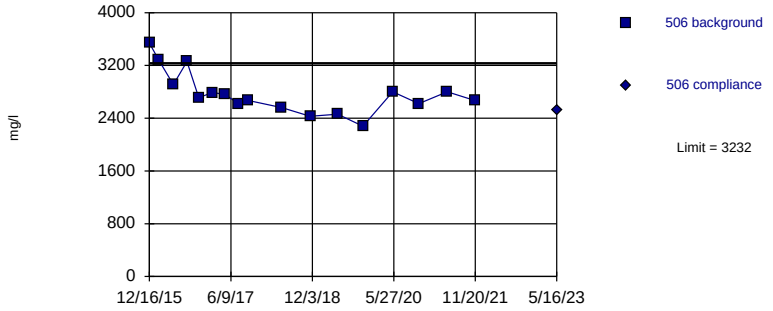
Constituent: Chloride Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2774, Std. Dev.=324, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9102, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

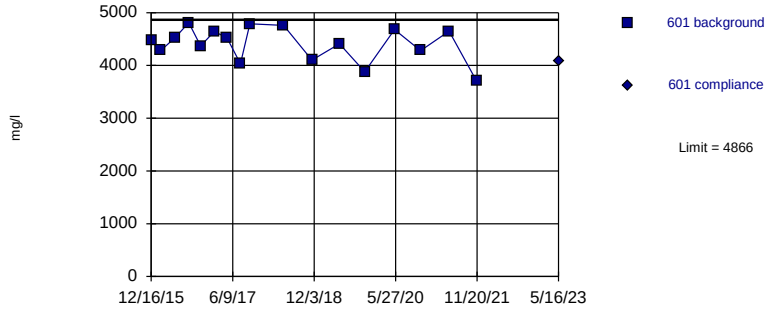
Constituent: Dissolved Solids Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4407, Std. Dev.=324.9, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9357, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Dissolved Solids Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Chloride, Dissolved Solids Analysis Run 9/6/2023 3:24 PM View: LF CCR III

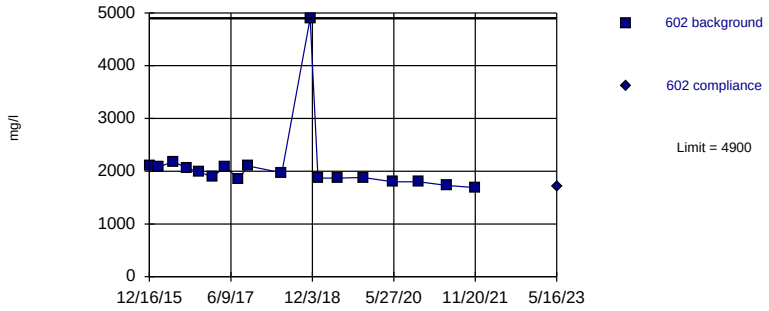
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	604	604	605	605	506	506	601	601
12/16/2015	15.6				3540		4470	
12/17/2015			43.9					
2/16/2016	15.5		45.7		3280		4280	
5/23/2016	13.3		47.3		2910		4530	
8/22/2016	11.7		46.5		3260		4810	
11/7/2016	12.5		48.2					
11/8/2016					2710		4370	
2/7/2017	12.5		48		2790		4640	
5/1/2017					2760			
5/2/2017	13.3		48.7				4530	
7/31/2017	11.1		49.1		2620		4030	
10/2/2017	12.1		48.7		2670		4790	
11/15/2017	12.8		48.8					
5/14/2018	12.3		47.8		2560		4760	
11/19/2018	13.3		51.7		2430		4100	
1/10/2019			50.9					
3/13/2019			52.4					
5/21/2019	15.5		55.4		2460		4410	
7/15/2019	12.7		57.8					
8/19/2019			57.9					
11/5/2019	12.5		59.1		2280		3880	
1/14/2020			60.5					
2/3/2020			59.8					
5/21/2020	13.3		60.2		2800		4680	
7/14/2020			62.1					
8/26/2020			61.6					
11/10/2020	14.5		59.7		2620		4280	
2/3/2021			59.3					
3/1/2021			58.2					
5/17/2021	15.6		52.5					
5/18/2021					2800		4650	
7/19/2021	14.7							
11/16/2021	16.3		46.6		2670		3710	
1/24/2022	18.8							
3/1/2022	17.2							
5/16/2023		16.4		28.4		2530		4070

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 18 background values. Well-constituent pair annual alpha = 0.001588. Individual comparison alpha = 0.0007943 (1 of 3).

Constituent: Dissolved Solids Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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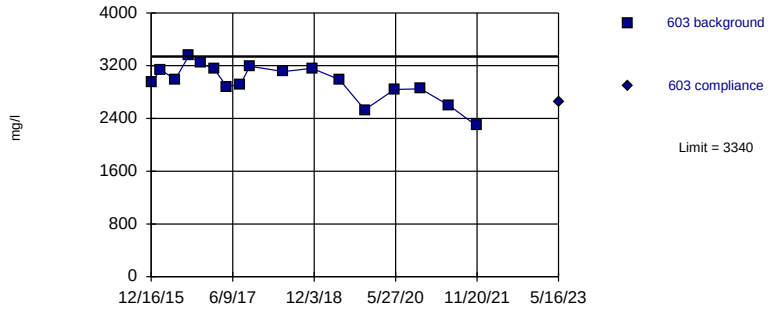
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2951, Std. Dev.=275.4, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9307, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Dissolved Solids Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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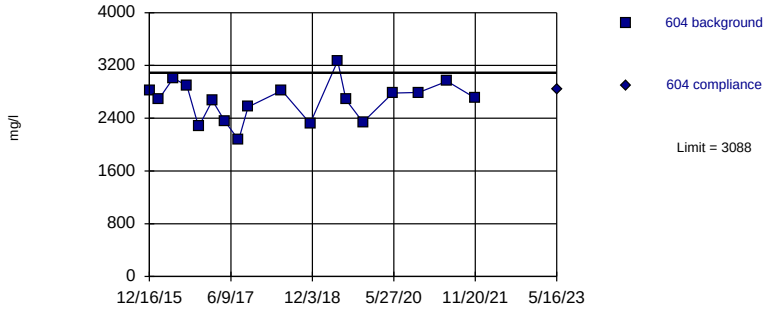
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2667, Std. Dev.=301.5, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9659, critical = 0.858. Kappa = 1.396 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Dissolved Solids Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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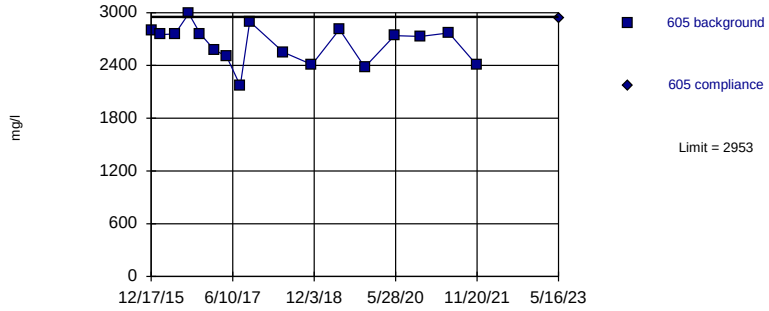
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2648, Std. Dev.=215.8, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9355, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Dissolved Solids Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Dissolved Solids Analysis Run 9/6/2023 3:24 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	602	602	603	603	604	604	605	605
12/16/2015	2100		2940		2820			
12/17/2015							2800	
2/16/2016	2080		3140		2690		2750	
5/23/2016	2180		2990		3010		2760	
8/22/2016	2060		3350		2890		2990	
11/7/2016	1990		3240		2270		2760	
2/7/2017	1890		3150		2670		2580	
5/2/2017	2080		2880		2350		2500	
7/31/2017	1860		2920		2070		2170	
10/2/2017	2100		3190		2570		2900	
5/14/2018	1970		3110		2820		2550	
11/19/2018	4900		3160		2320		2410	
1/10/2019	1870							
5/21/2019	1870		2990		3270		2810	
7/15/2019					2680			
11/5/2019	1880		2530		2340		2380	
5/21/2020	1800		2840		2780		2740	
11/10/2020	1800		2850		2790		2730	
5/17/2021	1730		2600		2960		2770	
11/16/2021	1690		2290		2710		2410	
5/16/2023		1700		2660		2830		2940

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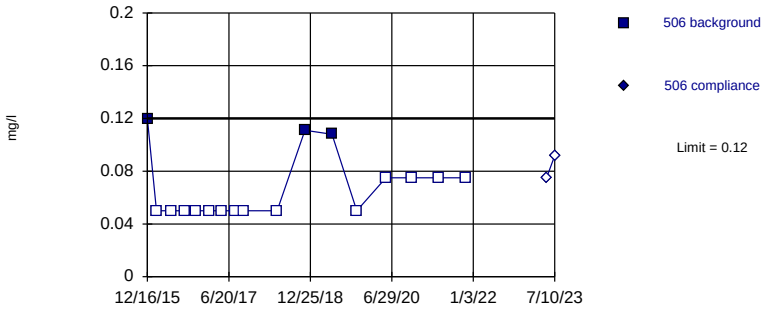
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 82.35% NDs. Well-constituent pair annual alpha = 0.00182. Individual comparison alpha = 0.0009102 (1 of 3).

Constituent: Fluoride Analysis Run 9/6/2023 3:22 PM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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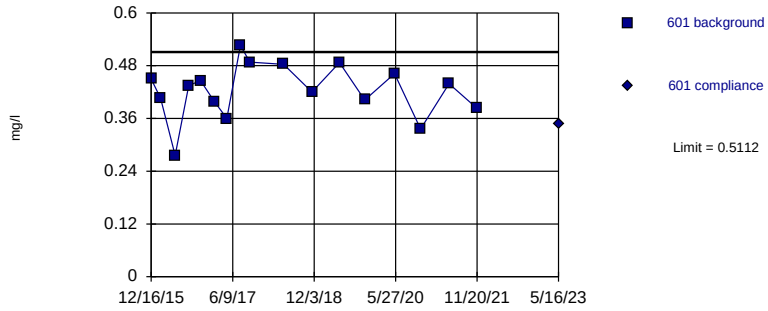
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.4235, Std. Dev.=0.06209, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9682, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Fluoride Analysis Run 9/6/2023 3:22 PM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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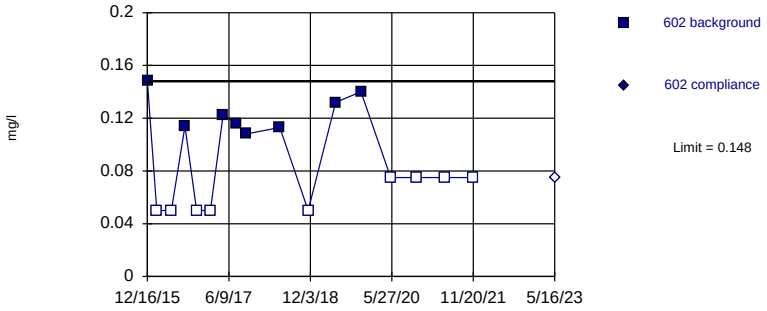
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 52.94% NDs. Well-constituent pair annual alpha = 0.00182. Individual comparison alpha = 0.0009102 (1 of 3).

Constituent: Fluoride Analysis Run 9/6/2023 3:22 PM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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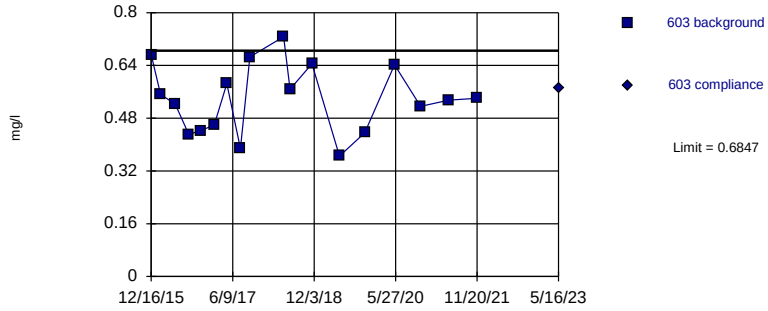
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.5385, Std. Dev.=0.1047, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9676, critical = 0.858. Kappa = 1.396 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Fluoride Analysis Run 9/6/2023 3:22 PM View: LF CCR III
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Fluoride Analysis Run 9/6/2023 3:24 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

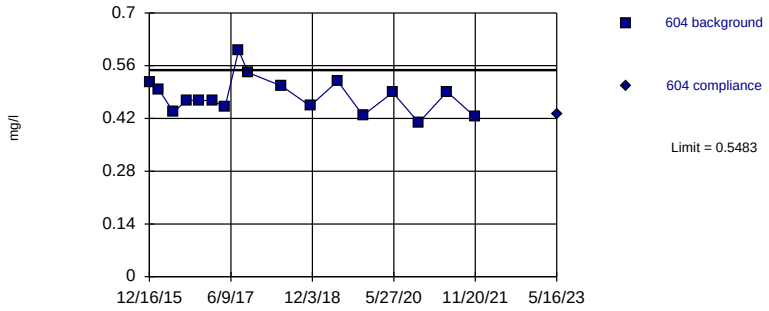
	506	506	601	601	602	602	603	603
12/16/2015	0.12		0.45		0.148		0.673	
2/16/2016	<0.1		0.406		<0.1		0.552	
5/23/2016	<0.1		0.276		<0.1		0.523	
8/22/2016	<0.1		0.435		0.114		0.431	
11/7/2016					<0.1		0.442	
11/8/2016	<0.1		0.446					
2/7/2017	<0.1		0.399		<0.1		0.459	
5/1/2017	<0.1							
5/2/2017			0.36		0.122		0.585	
7/31/2017	<0.1		0.526		0.116		0.388	
10/2/2017	<0.1		0.488		0.108		0.666	
5/14/2018	<0.1		0.483		0.113		0.727	
6/26/2018							0.568	
11/19/2018	0.111		0.42		<0.1		0.645	
5/21/2019	0.108		0.487		0.132		0.365	
11/5/2019	<0.1		0.402		0.14		0.436	
5/21/2020	<0.15		0.462		<0.15		0.642	
11/10/2020	<0.15		0.336		<0.15		0.516	
5/17/2021					<0.15		0.535	
5/18/2021	<0.15		0.439					
11/16/2021	<0.15		0.384		<0.15		0.54	
5/16/2023		<0.15		0.347		<0.15		0.571
7/10/2023		0.0918 (J)	1st verification					

ND substitution: RL/2.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.4803, Std. Dev.=0.04815, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9547, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Fluoride Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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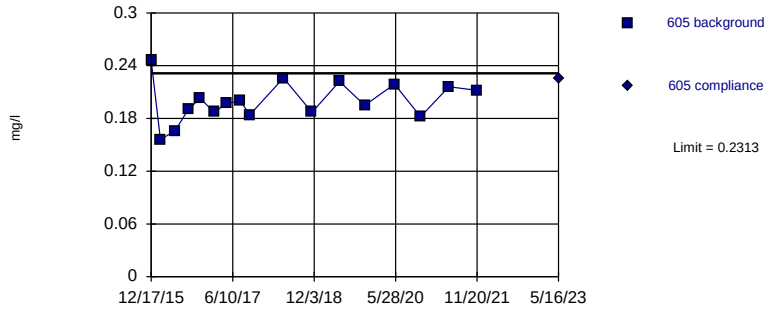
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1994, Std. Dev.=0.02259, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9858, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Fluoride Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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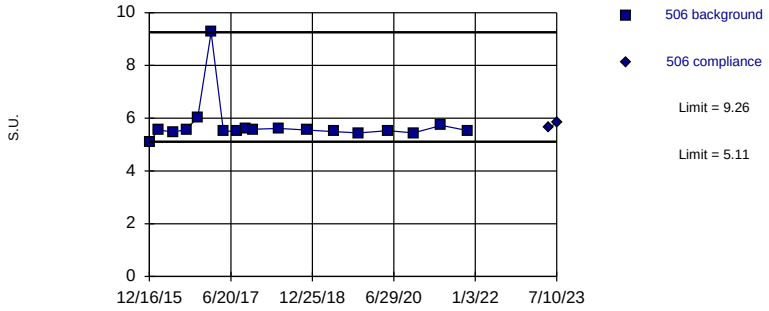
Within Limits

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 18 background values. Well-constituent pair annual alpha = 0.003176. Individual comparison alpha = 0.001589 (1 of 3).

Constituent: pH Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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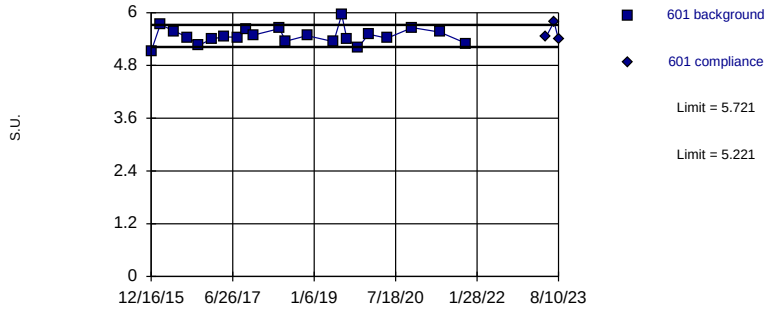
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.471, Std. Dev.=0.186, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9737, critical = 0.878. Kappa = 1.344 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Fluoride, pH Analysis Run 9/6/2023 3:24 PM View: LF CCR III

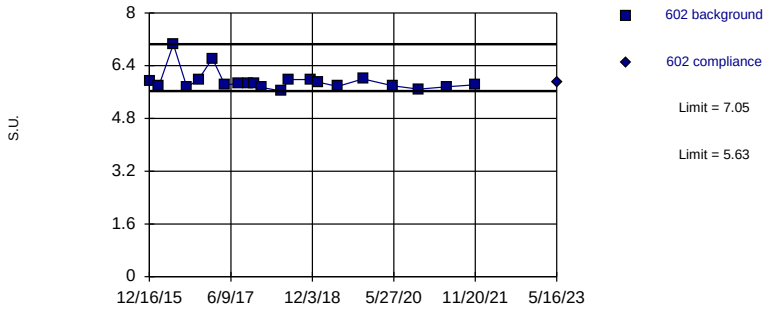
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	604	604	605	605	506	506		601	601	
12/16/2015	0.515				5.11			5.12		
12/17/2015			0.246							
2/16/2016	0.497		0.156		5.56			5.73		
5/23/2016	0.437		0.166		5.47			5.58		
8/22/2016	0.468		0.191		5.57			5.44		
11/7/2016	0.468		0.203							
11/8/2016					6.04			5.26		
2/7/2017	0.467		0.187		9.26			5.41		
5/1/2017					5.51					
5/2/2017	0.45		0.197					5.45		
7/31/2017	0.601		0.2		5.51			5.44		
10/2/2017	0.542		0.184		5.59			5.61		
11/15/2017					5.58			5.49		
5/14/2018	0.506		0.226		5.61			5.64		
6/26/2018								5.35		
11/19/2018	0.453		0.187		5.55			5.48		
5/21/2019	0.519		0.222		5.49			5.34		
7/15/2019								5.96		
8/19/2019								5.41		
11/5/2019	0.428		0.195		5.44			5.2		
1/14/2020								5.51		
5/21/2020	0.489		0.219		5.53			5.42		
11/10/2020	0.409		0.182		5.44			5.66		
5/17/2021	0.491		0.216					5.56		
5/18/2021					5.73					
11/16/2021	0.425		0.212		5.53			5.3		
5/16/2023		0.433		0.226		5.63			5.45	
7/10/2023						5.83	Extra		5.79	Extra
8/10/2023									5.39	Extra

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 21 background values. Well-constituent pair annual alpha = 0.002044. Individual comparison alpha = 0.001022 (1 of 3).

Constituent: pH Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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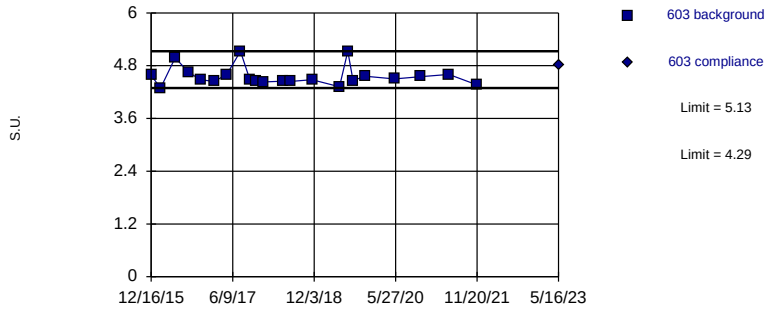
Within Limits

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 22 background values. Well-constituent pair annual alpha = 0.001837. Individual comparison alpha = 0.0009189 (1 of 3).

Constituent: pH Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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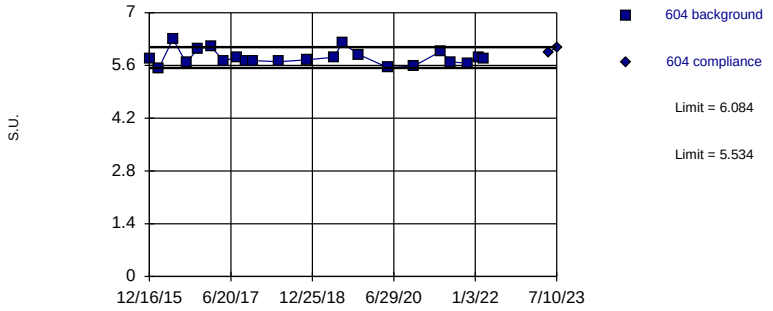
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.809, Std. Dev.=0.2044, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9239, critical = 0.878. Kappa = 1.344 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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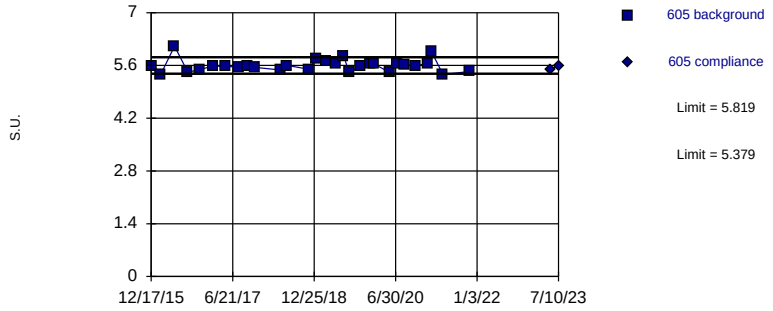
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.599, Std. Dev.=0.1703, n=29. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9153, critical = 0.898. Kappa = 1.294 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: pH Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: pH Analysis Run 9/6/2023 3:24 PM View: LF CCR III

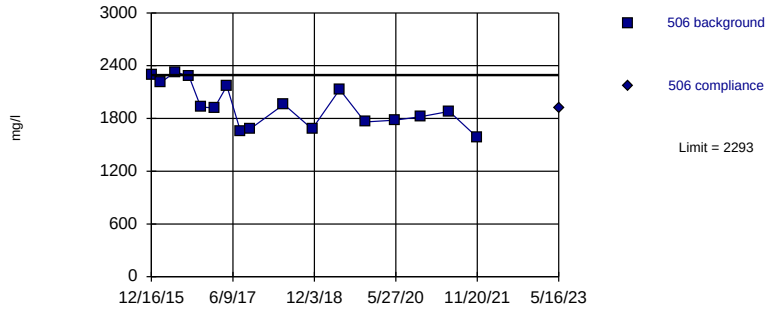
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	602	602	603	603	604	604	605	605	
12/16/2015	5.93		4.58		5.79				
12/17/2015							5.57		
2/16/2016	5.78		4.29		5.51		5.34		
5/23/2016	7.05		4.98		6.3		6.11		
8/22/2016	5.74		4.65		5.67		5.42		
11/7/2016	5.99		4.48		6.04		5.49		
2/7/2017	6.62		4.44		6.1		5.58		
5/2/2017	5.81		4.6		5.72		5.58		
7/31/2017	5.87		5.13		5.82		5.55		
10/2/2017	5.86		4.48		5.72		5.58		
11/15/2017	5.87		4.44		5.73		5.55		
12/29/2017	5.74		4.43						
5/14/2018	5.63		4.45		5.7		5.48		
6/26/2018	5.98		4.44				5.6		
11/19/2018	5.98		4.48		5.75		5.5		
1/10/2019	5.9						5.79		
3/13/2019							5.73		
5/21/2019	5.77		4.32		5.82		5.64		
7/15/2019			5.13		6.2		5.85		
8/19/2019			4.46				5.42		
11/5/2019	6		4.56		5.89		5.59		
1/14/2020							5.66		
2/3/2020							5.64		
5/21/2020	5.79		4.5		5.54		5.42		
7/14/2020							5.66		
8/26/2020							5.62		
11/10/2020	5.69		4.55		5.58		5.58		
2/3/2021							5.66		
3/1/2021							5.96		
5/17/2021	5.76		4.6		5.98		5.36		
7/19/2021					5.69				
11/16/2021	5.82		4.37		5.66		5.44		
1/24/2022					5.82				
3/1/2022					5.77				
5/16/2023		5.91		4.82		5.95		5.5	
7/10/2023						6.08	1st verification	5.59	1st verification

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1945, Std. Dev.=246.3, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9263, critical = 0.851. Kappa = 1.413 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate Analysis Run 9/6/2023 3:22 PM View: LF CCR III

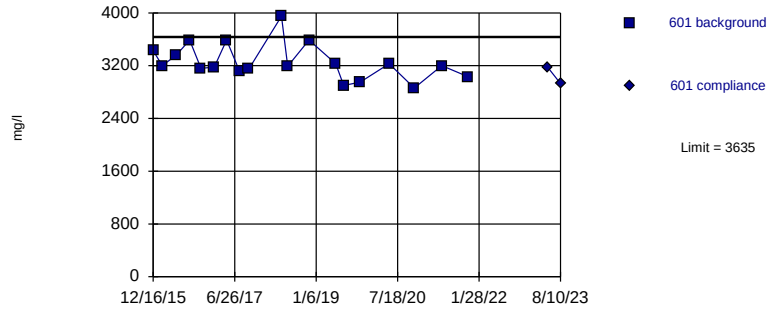
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Sanitas™ v.10.0.06 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=3258, Std. Dev.=273.4, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9249, critical = 0.863. Kappa = 1.379 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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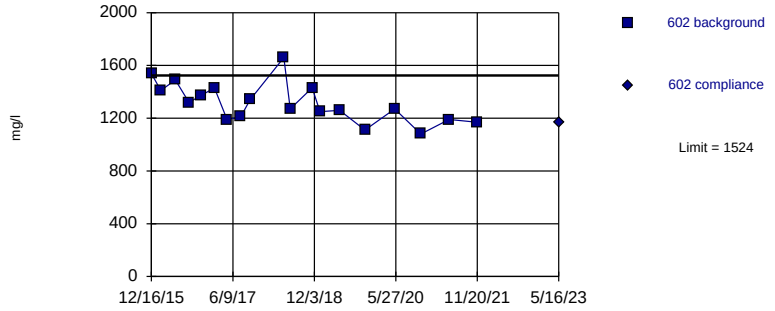
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1315, Std. Dev.=151.2, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.97, critical = 0.863. Kappa = 1.379 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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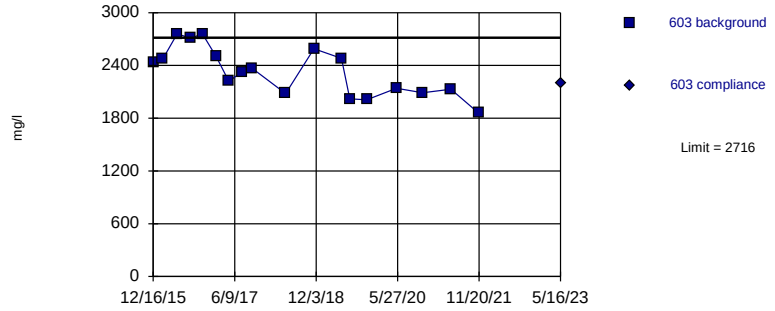
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2331, Std. Dev.=275.9, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.951, critical = 0.858. Kappa = 1.396 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate Analysis Run 9/6/2023 3:22 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Sulfate Analysis Run 9/6/2023 3:24 PM View: LF CCR III

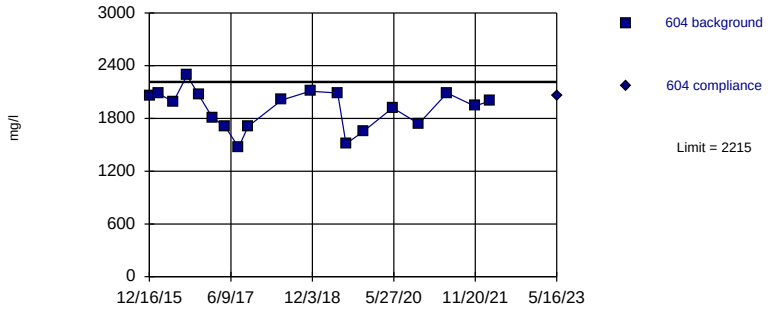
Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	506	506	601	601		602	602	603	603
12/16/2015	2290		3430			1540		2440	
2/16/2016	2210		3200			1410		2470	
5/23/2016	2330		3360			1490		2760	
8/22/2016	2280		3590			1320		2710	
11/7/2016						1370		2760	
11/8/2016	1930		3160						
2/7/2017	1920		3180			1430		2500	
5/1/2017	2170								
5/2/2017			3590			1190		2220	
7/31/2017	1650		3110			1210		2330	
10/2/2017	1680		3150			1340		2370	
5/14/2018	1960		3950			1660		2080	
6/26/2018			3190			1270			
11/19/2018	1680		3590			1430		2590	
1/10/2019						1250			
5/21/2019	2130		3230			1260		2480	
7/15/2019			2900					2020	
11/5/2019	1760		2950			1110		2010	
5/21/2020	1780		3230			1270		2140	
11/10/2020	1820		2860			1080		2090	
5/17/2021						1190		2130	
5/18/2021	1880		3200						
11/16/2021	1590		3030			1170		1860	
5/16/2023		1920		3170			1170		2200
8/10/2023				2930	Extra				

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1908, Std. Dev.=222.6, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9335, critical = 0.863. Kappa = 1.379 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate Analysis Run 9/6/2023 3:23 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

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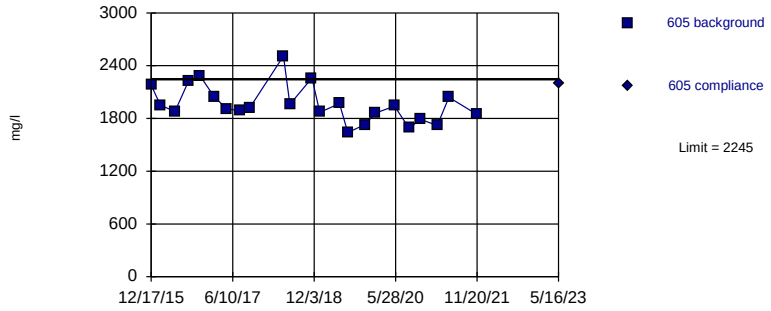
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1962, Std. Dev.=212.3, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9378, critical = 0.881. Kappa = 1.336 (c=7, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate Analysis Run 9/6/2023 3:23 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

Prediction Limit

Constituent: Sulfate Analysis Run 9/6/2023 3:24 PM View: LF CCR III

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose

	604	604	605	605
12/16/2015	2060			
12/17/2015			2180	
2/16/2016	2080		1950	
5/23/2016	1990		1880	
8/22/2016	2290		2230	
11/7/2016	2070		2280	
2/7/2017	1810		2050	
5/2/2017	1710		1910	
7/31/2017	1470		1890	
10/2/2017	1710		1920	
5/14/2018	2010		2510	
6/26/2018			1960	
11/19/2018	2110		2260	
1/10/2019			1870	
5/21/2019	2090		1970	
7/15/2019	1510		1640	
11/5/2019	1650		1730	
1/14/2020			1860	
5/21/2020	1920		1940	
8/26/2020			1690	
11/10/2020	1740		1790	
3/1/2021			1720	
5/17/2021	2090		2040	
11/16/2021	1940		1850	
3/1/2022	2000			
5/16/2023		2060		2200

Prediction Limit

Montrose Generating Station UWL Client: SCS Engineers Data: Montrose Printed 9/6/2023, 3:24 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron (mg/l)	506	0.2	n/a	5/16/2023	0.1ND	No	17	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Boron (mg/l)	601	0.203	n/a	5/16/2023	0.1ND	No	17	94.12	n/a	0.000...	NP Intra (NDs) 1 of 3
Boron (mg/l)	602	5.05	n/a	5/16/2023	4.2	No	17	0	No	0.00188	Param Intra 1 of 3
Boron (mg/l)	603	7.112	n/a	5/16/2023	5.11	No	18	0	No	0.00188	Param Intra 1 of 3
Boron (mg/l)	604	5.577	n/a	5/16/2023	4.57	No	18	0	No	0.00188	Param Intra 1 of 3
Boron (mg/l)	605	2.016	n/a	5/16/2023	1.57	No	17	0	No	0.00188	Param Intra 1 of 3
Calcium (mg/l)	506	479	n/a	5/16/2023	368	No	18	0	n/a	0.000...	NP Intra (normality) ...
Calcium (mg/l)	601	499.6	n/a	8/10/2023	460	No	19	0	No	0.00188	Param Intra 1 of 3
Calcium (mg/l)	602	373.3	n/a	5/16/2023	280	No	19	0	No	0.00188	Param Intra 1 of 3
Calcium (mg/l)	603	461.8	n/a	5/16/2023	389	No	20	0	No	0.00188	Param Intra 1 of 3
Calcium (mg/l)	604	481.4	n/a	7/10/2023	459	No	21	0	No	0.00188	Param Intra 1 of 3
Calcium (mg/l)	605	437.3	n/a	7/10/2023	426	No	23	0	No	0.00188	Param Intra 1 of 3
Chloride (mg/l)	506	91.22	n/a	5/16/2023	88.8	No	18	0	No	0.00188	Param Intra 1 of 3
Chloride (mg/l)	**601**	**56.74**	**n/a**	**8/10/2023**	**70.8**	**Yes**	**20**	**0**	**x^3**	**0.00188**	**Param Intra 1 of 3**
Chloride (mg/l)	602	5.007	n/a	5/16/2023	4.29	No	20	0	sqrt(x)	0.00188	Param Intra 1 of 3
Chloride (mg/l)	603	8.46	n/a	5/16/2023	6.27	No	20	0	No	0.00188	Param Intra 1 of 3
Chloride (mg/l)	604	16.6	n/a	5/16/2023	16.4	No	22	0	No	0.00188	Param Intra 1 of 3
Chloride (mg/l)	605	60.82	n/a	5/16/2023	28.4	No	28	0	sqrt(x)	0.00188	Param Intra 1 of 3
Dissolved Solids (mg/l)	506	3232	n/a	5/16/2023	2530	No	17	0	No	0.00188	Param Intra 1 of 3
Dissolved Solids (mg/l)	601	4866	n/a	5/16/2023	4070	No	17	0	No	0.00188	Param Intra 1 of 3
Dissolved Solids (mg/l)	602	4900	n/a	5/16/2023	1700	No	18	0	n/a	0.000...	NP Intra (normality) ...
Dissolved Solids (mg/l)	603	3340	n/a	5/16/2023	2660	No	17	0	No	0.00188	Param Intra 1 of 3
Dissolved Solids (mg/l)	604	3088	n/a	5/16/2023	2830	No	18	0	No	0.00188	Param Intra 1 of 3
Dissolved Solids (mg/l)	605	2953	n/a	5/16/2023	2940	No	17	0	No	0.00188	Param Intra 1 of 3
Fluoride (mg/l)	506	0.12	n/a	7/10/2023	0.0918J	No	17	82.35	n/a	0.000...	NP Intra (NDs) 1 of 3
Fluoride (mg/l)	601	0.5112	n/a	5/16/2023	0.347	No	17	0	No	0.00188	Param Intra 1 of 3
Fluoride (mg/l)	602	0.148	n/a	5/16/2023	0.075ND	No	17	52.94	n/a	0.000...	NP Intra (NDs) 1 of 3
Fluoride (mg/l)	603	0.6847	n/a	5/16/2023	0.571	No	18	0	No	0.00188	Param Intra 1 of 3
Fluoride (mg/l)	604	0.5483	n/a	5/16/2023	0.433	No	17	0	No	0.00188	Param Intra 1 of 3
Fluoride (mg/l)	605	0.2313	n/a	5/16/2023	0.226	No	17	0	No	0.00188	Param Intra 1 of 3
pH (S.U.)	506	9.26	5.11	7/10/2023	5.83	No	18	0	n/a	0.001589	NP Intra (normality) ...
pH (S.U.)	601	5.721	5.221	8/10/2023	5.39	No	22	0	No	0.000...	Param Intra 1 of 3
pH (S.U.)	602	7.05	5.63	5/16/2023	5.91	No	21	0	n/a	0.001022	NP Intra (normality) ...
pH (S.U.)	603	5.13	4.29	5/16/2023	4.82	No	22	0	n/a	0.000...	NP Intra (normality) ...
pH (S.U.)	604	6.084	5.534	7/10/2023	6.08	No	22	0	No	0.000...	Param Intra 1 of 3
pH (S.U.)	605	5.819	5.379	7/10/2023	5.59	No	29	0	No	0.000...	Param Intra 1 of 3
Sulfate (mg/l)	506	2293	n/a	5/16/2023	1920	No	17	0	No	0.00188	Param Intra 1 of 3
Sulfate (mg/l)	601	3635	n/a	8/10/2023	2930	No	19	0	No	0.00188	Param Intra 1 of 3
Sulfate (mg/l)	602	1524	n/a	5/16/2023	1170	No	19	0	No	0.00188	Param Intra 1 of 3
Sulfate (mg/l)	603	2716	n/a	5/16/2023	2200	No	18	0	No	0.00188	Param Intra 1 of 3
Sulfate (mg/l)	604	2215	n/a	5/16/2023	2060	No	19	0	No	0.00188	Param Intra 1 of 3
Sulfate (mg/l)	605	2245	n/a	5/16/2023	2200	No	23	0	No	0.00188	Param Intra 1 of 3

ATTACHMENT 2

Sanitas™ Configuration Settings

Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

Exclude data flags: i

Data Reading Options

- (•) Individual Observations
- ( ) Mean of Each: ( ) Month
- ( ) Median of Each: ( ) Season

Non-Detect / Trace Handling...

Setup Seasons...

[ ] Automatically Process Resamples...

Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

- [ ] Black and White Output
- [x] Four Plots Per Page
  - [x] Always Combine Data Pages...
  - [x] Include Tick Marks on Data Page
- [ ] Use Constituent Name for Graph Title
- [ ] Draw Border Around Text Reports and Data Pages
- [x] Enlarge/Reduce Fonts (Graphs): 100%
- [x] Enlarge/Reduce Fonts (Data/Text Reports): 100%
- [x] Wide Margins (on reports without explicit setting)
- [ ] Use CAS# (Not Const. Name)
- [ ] Truncate File Names to 20 Characters
- [ ] Include Limit Lines when found in Database...
- [x] Show Deselected Data on Time Series Lighter
- [ ] Show Deselected Data on all Data Pages Light

Setup Symbols and Colors...

- [x] Prompt to Overwrite/Append Summary Tables
- [ ] Round Limits to 2 Sig. Digits (when not set in data file)
- [ ] User-Set Scale
- [x] Indicate Background Data
- [ ] Show Exact Dates
- [ ] Thick Plot Lines

Zoom Factor: 200%

Output Decimal Precision

- ( ) Less Precision
- (•) Normal Precision
- ( ) More Precision

- [x] Store Print Jobs in Multiple Constituent Mode

Store All Print Jobs...

Printer: Adobe PDF

Printers...

Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

☐ Use Modified Alpha...

☑ Test Residuals For Normality (Parametric test only) using Shapiro-Wilk/Francia at Alpha = 0.01

☐ Continue Parametric if Unable to Normalize

Transformation (Parametric test only)

- ◉ Use Ladder of Powers
- ○ Natural Log or No Transformation
- ○ Never Transform
- ○ Use Specific Transformation:

☐ Use Best W Statistic

☐ Plot Transformed Values

Use Non-Parametric Test (Sen's Slope/Mann-Kendall) when Non-Detects Percent > 75

☐ Include 95. % Confidence Interval around Trend Line

☐ Automatically Remove Outliers (Parametric 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

☑ Test for Normality using Shapiro-Wilk/Francia at Alpha = 0.01

☑ Use Non-Parametric Test when Non-Detects Percent > 50

Use Aitchison's Adjustment when Non-Detects Percent > 15

☐ Optional Further Refinement: Use Aitchison's when NDs % > 50

☐ Use Poisson Prediction Limit when Non-Detects Percent > 90

Transformation

- ◉ Use Ladder of Powers
- ○ Natural Log or No Transformation
- ○ Never Transform
- ○ Use Specific Transformation: Natural Log

☐ Use Best W Statistic

☐ Plot Transformed Values

Deseasonalize (Intra- and InterWell)

- ○ If Seasonality Is Detected
- ○ If Seasonality Is Detected Or Insufficient to Test
- ○ Always (When Sufficient Data)
- ◉ Never

☐ Always Use Non-Parametric

Facility α

Statistical Evaluations per Year: 2

Constituents Analyzed: 7

Downgradient (Compliance) Wells: 4

Sampling Plan

Comparing Individual Observations

○ 1 of 1 ○ 1 of 2 ◉ 1 of 3 ○ 1 of 4

○ 2 of 4 ("Modified California")

IntraWell Other

☐ Stop if Background Trend Detected at Alpha = 0.05

☑ Plot Background Data

Override Standard Deviation:

Override DF: Override Kappa:

☐ Automatically Remove Background Outliers

☐ 2-Tailed Test Mode...

☑ Show Deselected Data Lighter

Non-Parametric Limit = Highest Background Value

Non-Parametric Limit when 100% Non-Detects:

- ○ Highest/Second Highest Background Value
- ◉ Most Recent PQL if available, or MDL
- ○ Most Recent Background Value (subst. method)

Data | Output | Trend Test | Control Cht | Prediction Lim | Tolerance Lim | Conf/Tol Int | ANOVA | Welchs | Other Tests

Rank Von Neumann, Wilcoxon Rank Sum / Mann-Whitney

- [ ] Use Modified Alpha...
- [ ] 2-Tailed Test Mode...
- [ ] Combine Background Wells on Mann-Whitney...

Outlier Tests

- ( ) EPA 1989 Outlier Screening (fixed alpha of 0.05)
- (•) Dixon's at α= 0.05 or if n > 22 Rosner's at α= 0.01 [x] Use EPA Screening to establish Suspected Outliers
- ( ) Tukey's Outlier Screening, with IQR Multiplier = 3.0 [ ] Use Ladder of Powers to achieve Best W Stat
- [x] Test For Normality using Shapiro-Wilk/Francia at Alpha = 0.1
  - (•) Stop if Non-Normal
  - ( ) Continue with Parametric Test if Non-Normal
  - ( ) Tukey's if Non-Normal, with IQR Multiplier = 3.0 [x] Use Ladder of Powers to achieve Best W Stat
- [x] No Outlier If Less Than 3.0 Times Median
- [ ] Apply Rules found in Ohio Guidance Document 0715
- [ ] Combine Background Wells on the Outlier Report...

Piper, Stiff Diagram

- [ ] Combine Wells
- [ ] Combine Dates
- (•) Use Default Constituent Names
- ( ) Use Constituent Definition File Edit
- [x] Label Constituents
- [x] Label Axes
- [x] Note Cation-Anion Balance (Piper only)