REPORT

2025 Annual Groundwater Monitoring and Corrective Action Report

RCPA Surface Impoundment, Rush Island Energy Center, Jefferson County, Missouri, USA

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Project Number: 23008-25

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EXECUTIVE SUMMARY AND STATUS OF THE RCPA GROUNDWATER MONITORING PROGRAM

This annual report was developed to meet the requirements of United States Environmental Protection Agency (USEPA) 40 CFR Part 257 “Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Final Rule” (the CCR Rule). The CCR Rule requires owners or operators of existing CCR units to produce an Annual Groundwater Monitoring and Corrective Action Report (Annual Report) each year (§ 257.90(e)). Ameren Missouri (Ameren) has determined that the Coal Combustion Residuals (CCR) surface impoundments at the Rush Island Energy Center (RIEC) are subject to the requirements of the CCR Rule. This Annual Report for the RIEC Surface Impoundments describes CCR Rule groundwater monitoring activities from January 1, 2025, through December 31, 2025 including verification results related to late 2024 sampling.

Throughout 2025, the RCPA has been in Corrective Action Monitoring with Detection and Assessment Monitoring continuing concurrently. Semi-annual groundwater sampling associated with Detection Monitoring has been ongoing since it was initiated on October 17, 2017 as required by the CCR Rule. As a part of Detection Monitoring, statistical evaluations are completed after each sampling event to determine if there are any values at a Statistically Significant Increase (SSI) over background. SSIs have been determined for each sampling event and a summary of the SSIs for the past year is provided in **Table 1**.

The Assessment Monitoring program was established at the RCPA on April 15, 2018. Since that time, groundwater sampling and statistical evaluations have been completed semi-annually to determine if there are any values at a Statistically Significant Level (SSL) over the site-specific Groundwater Protection Standard (GWPS). On October 11, 2018, it was determined that arsenic and molybdenum were present at SSLs. A summary of SSLs for the past year is provided in **Table 1**.

Table 1 - Summary of 2025 RCPA Sampling Events, Previous Year Verification, and Statistical Evaluations for Detection and Assessment Monitoring

Event Name	Type of Event and Sampling Dates	Laboratory Analytical Data Receipt	Parameters Collected	Verified SSIs	SSLs	SSI & SSL Determination Date
November 2024 Sampling Event	Detection & Assessment Monitoring, November 8-13, 2024	December 13, 2024	Appendix III, Detected Appendix IV (See Note 1), & Major Cations and Anions	**pH:** MW-1, MW-2, MW-3 **Boron:** MW-1, MW-2, MW-3, MW-4, MW-6, MW-7(R) **Fluoride:** MW-2, MW-3, MW-4, MW-6 **Sulfate:** MW-1, MW-2, MW-3, MW-7(R) **TDS:** MW-2	**Arsenic:** MW-2, MW-3, MW-7/MW-7(R) **Molybdenum:** MW-2, MW-3	March 12, 2025
	Verification Sampling, February 5, 2025	February 21, 2025	Detected Appendix III parameters (See Note 2)			
May 2025 Sampling Event	Detection & Assessment Monitoring, May 1-6, 2025	June 5, 2025	Appendix III, Appendix IV, Major Cations and Anions, & selected MNA parameters	**pH:** MW-1, MW-2, MW-3 **Boron:** MW-1, MW-2, MW-3, MW-4, MW-6, MW-7(R) **Fluoride:** MW-2, MW-3, MW-4, MW-6 **Sulfate:** MW-1, MW-2, MW-3, MW-7(R) **TDS:** MW-2	**Arsenic:** MW-2, MW-3, MW-7/MW-7(R) **Molybdenum:** MW-2, MW-3	September 3, 2025
	Verification Sampling, July 11, 2025	August 7, 2025	Detected Appendix III parameters (See Note 2)			

Event Name	Type of Event and Sampling Dates	Laboratory Analytical Data Receipt	Parameters Collected	Verified SSIs	SSLs	SSI & SSL Determination Date
October 2025 Sampling Event	Detection & Assessment Monitoring, October 14-16, 2025	November 6, 2025	Appendix III, Detected Appendix IV (See Note 3), & Major Cations and Anions	**pH:** MW-1, MW-2, MW-3 **Boron:** MW-1, MW-2, MW-3, MW-4, MW-6, MW-7(R) **Chloride:** MW-2 **Fluoride:** MW-2, MW-3, MW-4 **Sulfate:** MW-1, MW-2, MW-3, MW-7(R) **TDS:** MW-1, MW-2	**Arsenic:** MW-2, MW-3, MW-7/MW-7(R) **Molybdenum:** MW-3	January 31, 2026 (See Note 4)
	Verification Sampling, December 1, 2025	December 17, 2025	Detected Appendix III parameters (See Note 2)			

Notes:
1) Testing was completed for Appendix IV analytes that were detected above the Practical Quantitation Limit (PQL) during the June 2024 sampling event.
2) Only analytes/wells that were detected above the prediction limit and that had not already been verified as SSIs were tested during Verification Sampling.
3) Testing was completed for Appendix IV analytes that were detected above the PQL during the May 2025 sampling event.
4) Statistical evaluations for the October 2025 sampling event were not completed until 2026. However, because the evaluations were completed prior to the date of this report, Ameren has elected to include the results in this Annual Report.
5) SSI – Statistically Significant Increase.
6) SSL – Statistically Significant Level.
7) TDS – Total Dissolved Solids.
8) MNA – Monitored Natural Attenuation.

On January 9, 2019, Ameren initiated its Corrective Measures Assessment (CMA) and posted its CMA report on May 20, 2019. A public meeting was held on May 28, 2019 and responses to public comments are posted on Ameren's CCR website. On August 30, 2019, Ameren published its "Remedy Selection Report – 40 CFR § 257.97 Rush Island, Labadie, Sioux and Meramec CCR Basins" (Remedy Selection Report) that identified source control through installation of a low permeability cover system, use of Monitored Natural Attenuation (MNA), and installation of Supplemental Corrective Measures as its chosen corrective action remedial plan. The Remedy Selection Report remedial plan consists of two initial phases as follows:

1) Source control, stabilization and containment of CCR by installation of a low permeability geomembrane cap (a minimum 1 x 10^{-7} centimeters per second (cm/sec) versus 1 x 10^{-5} cm/sec required by the CCR Rule).

2) Once source control is achieved, monitor the natural attenuation of groundwater concentrations to address limited and localized CCR-related impacts. Ongoing monitoring and modelling evaluations will document that concentrations are decreasing as modelled. MNA occurs due to naturally occurring processes within the aquifer.

Ameren commenced Phase 1 of the corrective action remedial plan in August 2019 by initiating closure at the RCPA. Closure of the RCPA was completed on December 15, 2020, thereby transitioning the RCPA into the post-closure care requirements of the CCR Rule. As outlined in §257.104 (Post-closure Care Requirements) of the CCR Rule, the monitoring system and programs must be maintained for at least 30 years. After 30 years, if the unit is in Detection Monitoring, the unit may cease groundwater sampling activities, otherwise post-closure care must continue until the unit can return to Detection Monitoring in accordance with section §257.95 (Assessment Monitoring Program).

Phase 2 of the corrective measures remedial plan as outlined in the Remedy Selection Report began with the April 2021 Corrective Action Sampling event on April 22, 2021. Since that time, groundwater sampling and statistical evaluations have been completed semi-annually to determine if constituents are statistically in exceedance of the GWPS. A summary of the Corrective Action Monitoring and associated statistical results for this year is provided in **Table 2**.

Table 2 - Summary of 2025 RCPA Sampling Events and Statistical Evaluations for Corrective Action Monitoring

Event Name	Type of Event and Sampling Dates	Laboratory Analytical Data Receipt Date	Parameters Collected	Constituents Statistically Exceeding the GWPS as a Part of Corrective Action Statistical Evaluations	Date Exceedance of GWPS was determined
November 2024 Sampling Event	Phase 2 – Corrective Action Sampling November 8-13, 2024	December 12, 2024	Appendix III, Detected Appendix IV (See Note 1), & Major Cations and Anions	**Arsenic:** P05S, P17I, P17S, P19I, P21S **Lithium:** P19I, P21D **Molybdenum:** P17D, P17I, P19D, P19I, P21D, P21I, P22D	March 12, 2025
May 2025 Sampling Event	Phase 2 – Corrective Action Sampling May 1-6, 2025	June 17, 2025	Appendix III, Appendix IV, Major Cations and Anions, & selected MNA parameters	**Arsenic:** P05S, P17I, P17S, P19I, P21S **Lithium:** P19I, P21D **Molybdenum:** P17D, P17I, P19D, P19I, P21D, P21I, P22D	September 15, 2025
October-November 2025 Sampling Event	Phase 2 – Corrective Action Sampling October 14-16 & November 12, 2025	December 19, 2025	Appendix III, Detected Appendix IV (See Note 2), & Major Cations and Anions	To be determined after statistical analysis is completed in 2026.	

Notes:
1) Testing was completed for Appendix IV analytes that were detected above the PQL during the June 2024 sampling event.
2) Testing was completed for Appendix IV analytes that were detected above the PQL during the May 2025 sampling event.
3) MNA – Monitored Natural Attenuation.
4) GWPS – Groundwater Protection Standard.

Corrective Measures

In 2024, Rocksmith Geoengineering, LLC (Rocksmith) and WSP USA Inc. (WSP) prepared an evaluation of monitored natural attenuation (MNA) for arsenic and molybdenum in groundwater at the Rush Island Energy Center. This report is available on Ameren's publicly available CCR website and the investigation demonstrated that natural processes, including adsorption and mineral precipitation, are effectively reducing arsenic and molybdenum concentrations in groundwater at the Site. Supplemental corrective measures, such as a groundwater treatment system implemented in 2022, have further supported these reductions.

In addition to MNA as a Corrective Action Remedy at Rush Island, Ameren began operating a groundwater treatment system in February 2022 and approximately 44 million gallons of water have been treated by the system through 2025. In May 2024, Haley & Aldrich produced a Supplemental Remedy Selection Report for the RIEC, documenting that these corrective measures are effectively contributing to constituent mass reductions in groundwater near the RCPA. These corrective measures are ongoing.

Overall, Corrective Action taken by Ameren has reduced concentrations of key CCR constituents in groundwater by means of closure of the RCPA with an engineered geomembrane cover system, installation and operation of a groundwater treatment system, and MNA of impacts. In monitoring wells downgradient of the RCPA, average arsenic concentrations have decreased approximately 52%, average boron concentrations have decreased approximately 32%, and average molybdenum concentrations have decreased approximately 31% since 2018. Monitoring and further evaluation of groundwater testing results will continue, and progress will be tracked in future Annual Reports and statistical evaluations.

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1.0 INSTALLATION OR DECOMISSIONING OF MONITORING WELLS

There are currently two different networks used for monitoring the RCPA. These include the monitoring network established under §257.91 for Detection and Assessment Monitoring and the network established under §257.98 for Corrective Action Monitoring, as displayed in **Figure 1**. No new wells were installed or decommissioned in 2025. A summary of the construction details for monitoring wells in both networks is provided in **Table 3**. Further monitoring network details, including well construction diagrams, are provided in previous annual reports for the RCPA.

2.0 GROUNDWATER SAMPLING RESULTS AND DISCUSSION

The following sections discuss the sampling events completed for the RCPA CCR Unit in 2025. **Tables 4** and **5** provide a summary of the groundwater samples collected in 2025 including the number of samples, the date of the sample collection, and the monitoring program for which the samples were collected. **Appendix A** provides laboratory analytical data for CCR Rule sampling events.

2.1 Detection Monitoring Program

A Detection Monitoring groundwater sampling event was completed November 8-13, 2024. Verification sampling and the statistical analysis to evaluate for SSIs for the November 2024 event were not completed until 2025 and are therefore included in this report. New initial exceedances of Appendix III analytes triggered a verification sampling event, which was completed on February 5, 2025. Verification sampling confirmed two new exceedances as SSIs. **Table 6** summarizes the results and the statistical analysis of the November 2024 Detection Monitoring event.

Detection Monitoring samples were collected May 1-6, 2025, and testing was completed for all Appendix III analytes, as well as major cations and anions. As outlined in the Statistical Analysis Plan for the Site, updates to the statistical limits should be completed once four to eight new sample results are available. During the statistical analysis of the May 2025 sampling event, the statistical limits used to determine an SSI were updated according to the Statistical Analysis Plan. New initial exceedances of Appendix III analytes triggered a verification sampling event, which was completed July 11, 2025, and neither initial exceedance was confirmed as an SSI. **Table 7** summarizes the results and the statistical analysis of the May 2025 Detection Monitoring event.

A Detection Monitoring sampling event was completed October 14-16, 2025, and testing was performed for all Appendix III analytes, as well as major cations and anions. Two new initial exceedances of Appendix III analytes triggered a verification sampling event, which was completed on December 1, 2025, and both new initial exceedances were confirmed as SSIs. **Table 8** summarizes the results and statistical analysis of the October 2025 Detection Monitoring event.

2.2 Assessment Monitoring Program

An Assessment Monitoring groundwater sampling event was completed November 8-13, 2024, and testing was completed for Appendix IV analytes that were detected above the Practical Quantitation Limit (PQL) during the previous sampling event from either Assessment or Corrective Action Monitoring, as well as major cations and anions. **Table 9** summarizes the results of the November 2024 Assessment Monitoring event. The statistical evaluation for this event was completed in 2025 and is included in this report. The results from this analysis and a table that displays the site-specific GWPS for each Appendix IV constituent are provided in **Appendix B.** The statistical evaluation determined there were no new SSLs. The SSLs for the RPCA CCR Unit as of the November 2024 sampling event were:

- Arsenic at MW-2, MW-3, and MW-7/MW-7(R)
- Molybdenum at MW-2 and MW-3

An Assessment Monitoring sampling event was completed May 1-6, 2025 and testing was completed for all Appendix IV analytes, major cations and anions, and other selected MNA parameters. **Table 10** summarizes the results of the May 2025 Assessment Monitoring event. Concurrent with prediction limit updates for Detection Monitoring, site-specific GWPSs used to determine SSLs and corrective action exceedances were updated according to the Statistical Analysis Plan. The statistical evaluation for this event was completed and updated site GWPSs are included in this report. The results from this analysis and a table that displays the site-specific GWPS are provided in **Appendix C**. The statistical evaluation determined that the SSLs as of May 2025 remain the same as those listed above from the November 2024 statistical evaluation.

An Assessment Monitoring sampling event was completed October 14-16, 2025, and testing was completed for Appendix IV analytes that were detected above the PQL during the May 2025 sampling event from either Assessment or Corrective Action Monitoring as well as major cations and anions. **Table 11** summarizes the results of the October 2025 Assessment Monitoring event. The statistical evaluation associated with this event was completed prior to this report and is provided in **Appendix D**. It was determined that molybdenum at MW-2 is no longer present at an SSL, and the other SSLs identified above remain. As of the October 2025 sampling event, SSLs for the RCPA CCR Unit are as follows:

- Arsenic at MW-2, MW-3, and MW-7/MW-7(R)
- Molybdenum at MW-3

2.3 Corrective Action Monitoring

A Corrective Action groundwater sampling event was completed November 8-13, 2024, and testing was completed for all Appendix III analytes, Appendix IV analytes that were detected above the PQL during the previous sampling event from either Assessment or Corrective Action Monitoring, and major cations and anions. A summary of the November 2024 Corrective Action sampling event results is provided in **Table 12**. The statistical evaluation for this event was completed in 2025 and is included in this report. The results from this statistical evaluation are provided in **Appendix E**. As of the November 2024 sampling event, constituents displaying statistical exceedances of the GWPS using Corrective Action statistical methods[1] at corresponding wells are as follows:

- Arsenic at R-P-05S, R-P-17I, R-P-17S, R-P-19I, and R-P-21S
- Lithium at R-P-19I and R-P-21D
- Molybdenum at, R-P-17D, R-P-17I, R-P-19D, R-P-19I, R-P-21D, R-P-21I, and R-P-22D

A Corrective Action sampling event was completed May 1-6, 2025, and testing was completed for Appendix III and IV analytes, major cations and anions, and other selected MNA parameters. A summary of the May 2025 Corrective Action sampling event results is provided in **Table 13**. Results of the statistical evaluation for this event and the updated site GWPSs discussed previously are provided in **Appendix F**. The statistical exceedances within the Corrective Action Monitoring remained the same for this event as those reported for the November 2024 event.

A Corrective Action sampling event was completed October 14-16, 2025, and November 12, 2025, and testing was completed for Appendix III analytes, Appendix IV analytes that were detected above the PQL during the May 2025 sampling event from either Assessment or Corrective Action Monitoring, as well as major cations and anions. **Table 14** summarizes the results of the October-November 2025 Corrective Action event; however, analysis to evaluate statistical exceedances of the GWPS was not completed in 2025 or prior to this report. Results of the statistical evaluation will be included in the 2026 Annual Report.

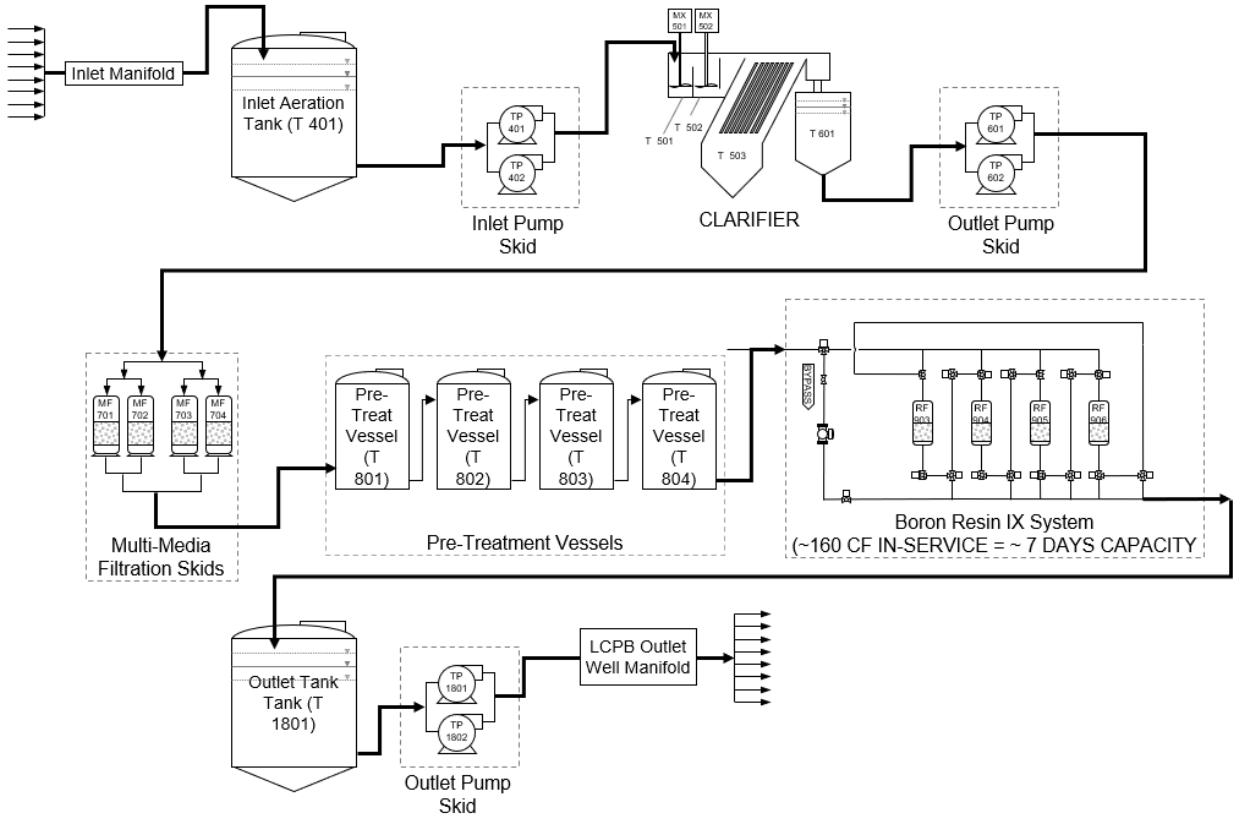
[1] The statistical testing method used to evaluate the Corrective Action monitoring results is the confidence interval method, which is the same method used during Assessment Monitoring, except the null hypothesis for the confidence intervals is reversed. For Corrective Action, the Unified Guidance states that the appropriate null hypothesis is that the groundwater population (mean) exceeds the Groundwater Protection Standard (GWPS) for those constituents that exceed the GWPS under Assessment Monitoring program. Therefore, in Corrective Action the Upper Confidence Limit (UCL) is compared to the GWPS instead of the Lower Confidence Limit (LCL) [as used during Assessment Monitoring].

2.4 Supplemental Corrective Measures

As outlined in Ameren's Remedy Selection Report, once source control was achieved, Ameren began to monitor natural attenuation of groundwater and initiated supplemental corrective measures using groundwater treatment. In 2021, Ameren began implementing the supplemental corrective measure for CCR groundwater compliance using ex-situ treatment technologies of chemical precipitation and selective-ion exchange by completing a groundwater treatment pilot study at the site. The results of this study displayed significant reductions in key CCR indicator concentrations. Due to the success, Ameren expanded this technology to the downgradient side (eastern side) of the RCPA and the full-scale treatment system began operation in February 2022.

The groundwater treatment system was developed to successfully capture CCR impacted groundwater downgradient of the RCPA, treat the water by removing contaminants, and return treated water to the same hydrogeologic horizon. The process used for this treatment is illustrated in **Figure 2** below.

Figure 2: CCR Impacted Groundwater Treatment Process

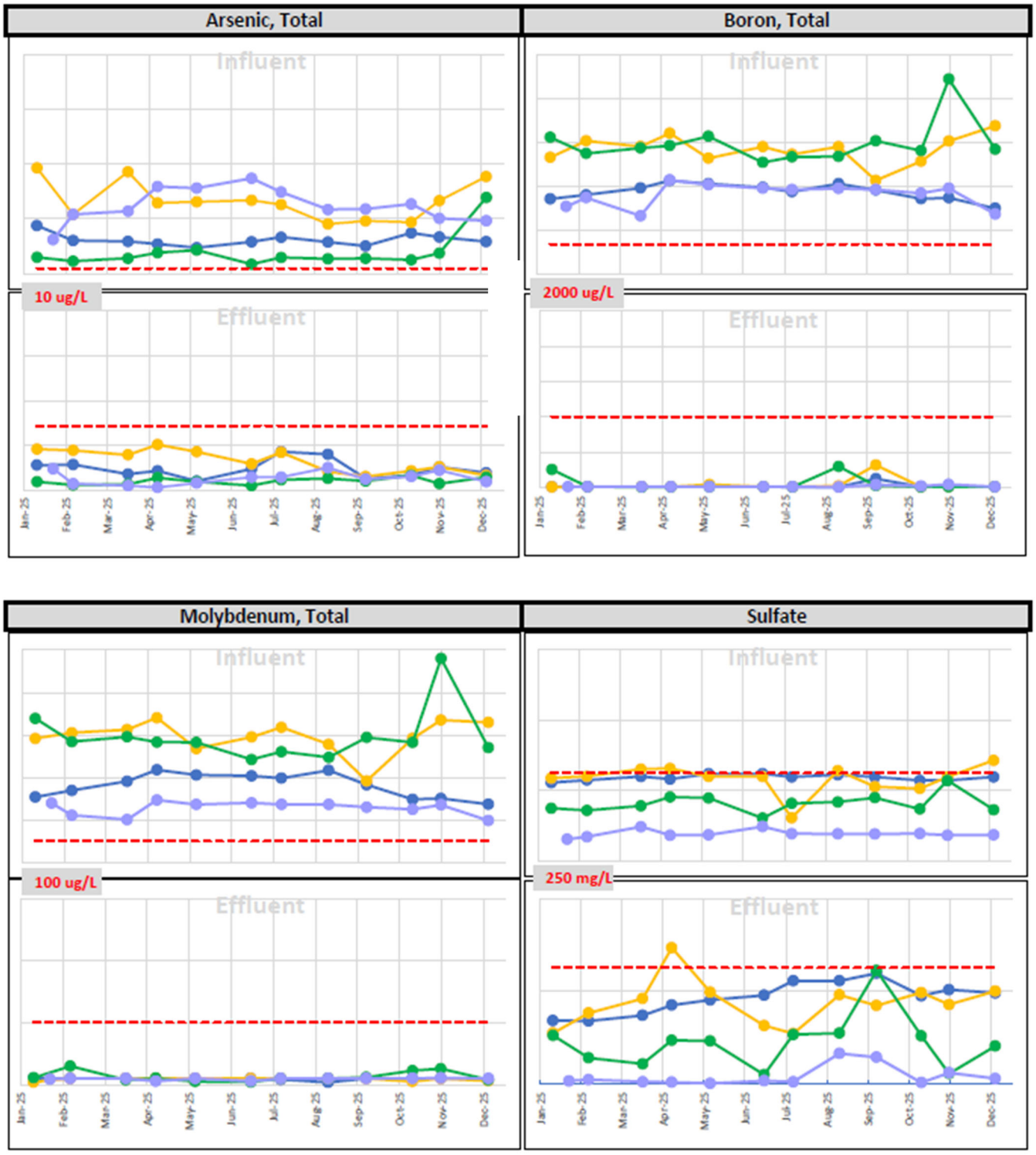


The process is constructed to minimize waste generation and operate independently of other facilities onsite.

Figure 3 below shows the RCPA groundwater treatment system influent and effluent data collected throughout 2025 for key CCR constituents in groundwater downgradient of the impoundment. The figure illustrates that effluent concentrations for each individual treatment building have generally been below the combined treatment system discharge standards to groundwater throughout 2025.[2] These discharge standards meet drinking water action levels for the applicable constituents.

[2] Compliance with the groundwater treatment system permitted discharge limits is determined based on a flow-weighted average of the four individual treatment building effluents. All groundwater treatment system discharges in 2025 were in compliance with permit limits.

Figure 3: RCPA Groundwater Treatment System Influent and Effluent Concentrations – 2025



Note: The colors data points represent flows for each of the four treatment system buildings. Figures produced by Ameren.

2.5 Evaluation of Corrective Measures

Ameren commenced Phase 1 of the corrective action remedial plan in August 2019 by initiating closure of the RCPA, which was completed on December 15, 2020. The October 2025 groundwater sampling event represents the tenth semiannual event since closure of the RCPA was completed, and eighth sampling event since the full-scale implementation of the groundwater treatment system.

In order to document the effectiveness of the Corrective Action Remedies (corrective measures), an evaluation of the key site CCR indicators was completed. **Figures 4 - 6** (right), display the site average concentrations of arsenic, molybdenum, and boron in the downgradient monitoring wells onsite at the RIEC. While there is variability in individual well results, the average annual concentrations at the site are decreasing for arsenic, boron, and molybdenum as follows:

- Arsenic – Average concentrations in the monitoring wells downgradient of the RCPA have decreased approximately 52% since 2018.
- Boron – Average concentrations in the monitoring wells downgradient of the RCPA have decreased approximately 32% since 2018.
- Molybdenum – Average concentrations in the monitoring wells downgradient of the RCPA have decreased approximately 31% since 2018.

As displayed by these figures, corrective measures taken by Ameren, including the closure of the RCPA with an engineered geomembrane cover system, installation and operation of a groundwater treatment system, and MNA have been effective in reducing concentrations of these constituents. Monitoring and further evaluation of results will continue, and progress will be tracked in future Annual Reports and statistical evaluations.

Figure 4 - Average Arsenic Concentrations

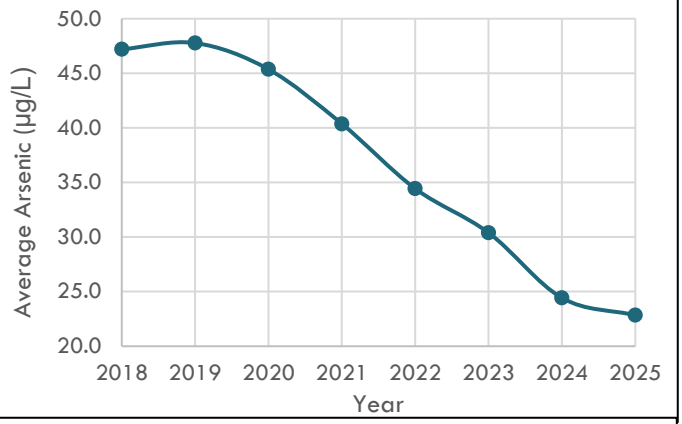


Figure 5 - Average Boron Concentrations

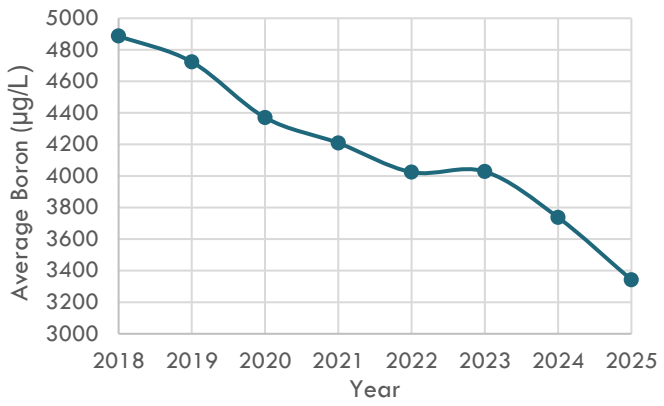
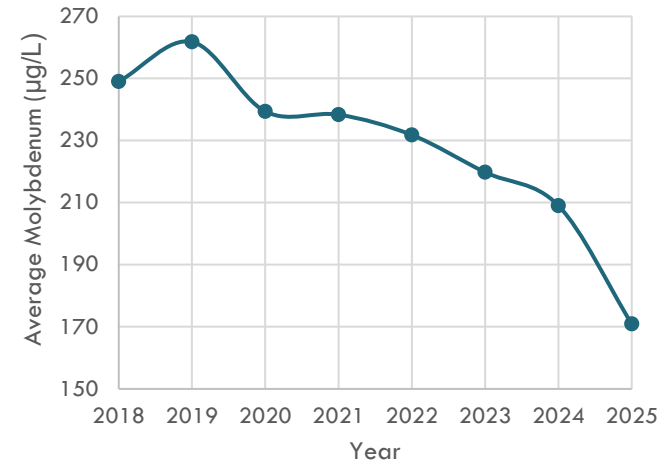


Figure 6 - Average Molybdenum Concentrations



2.6 Groundwater Elevation, Flow Rate and Direction

To meet the requirements of §257.93(c), water level measurements were taken at all monitoring wells prior to the start of groundwater purging and sampling. Static water levels were measured within a 24-hour period in each monitoring well using an electronic water level indicator.

Groundwater elevations were used to generate potentiometric surface maps included in **Appendix G**. As shown on the potentiometric surface maps, groundwater flow direction within the uppermost aquifer is dynamic and influenced by seasonal changes in water level of the adjacent Mississippi River. Water flows into and out of the alluvial aquifer as a result of fluctuating river water levels that produce “bank recharge” and “bank discharge” conditions. Overall, based on the potentiometric surface maps, a general flow direction from the west (bluffs area) to the east (Mississippi River) is observed under normal river conditions. However, during periods of high river levels, groundwater flow directions can vary. During these times of high river stage and temporary flow direction changes, horizontal groundwater gradients generally decrease, and little net movement of groundwater occurs.

Groundwater flow direction and hydraulic gradient were estimated for the monitoring wells at the RIEC using commercially available software. Results from this assessment indicate that while groundwater flow direction is variable and gradients are relatively low, the overall net groundwater flow at the RCPA was toward the Mississippi River. Horizontal gradients calculated by the program range from 0.00002 to 0.0018 feet/foot with an estimated net annual groundwater movement of approximately 33 feet in the prevailing downgradient direction.

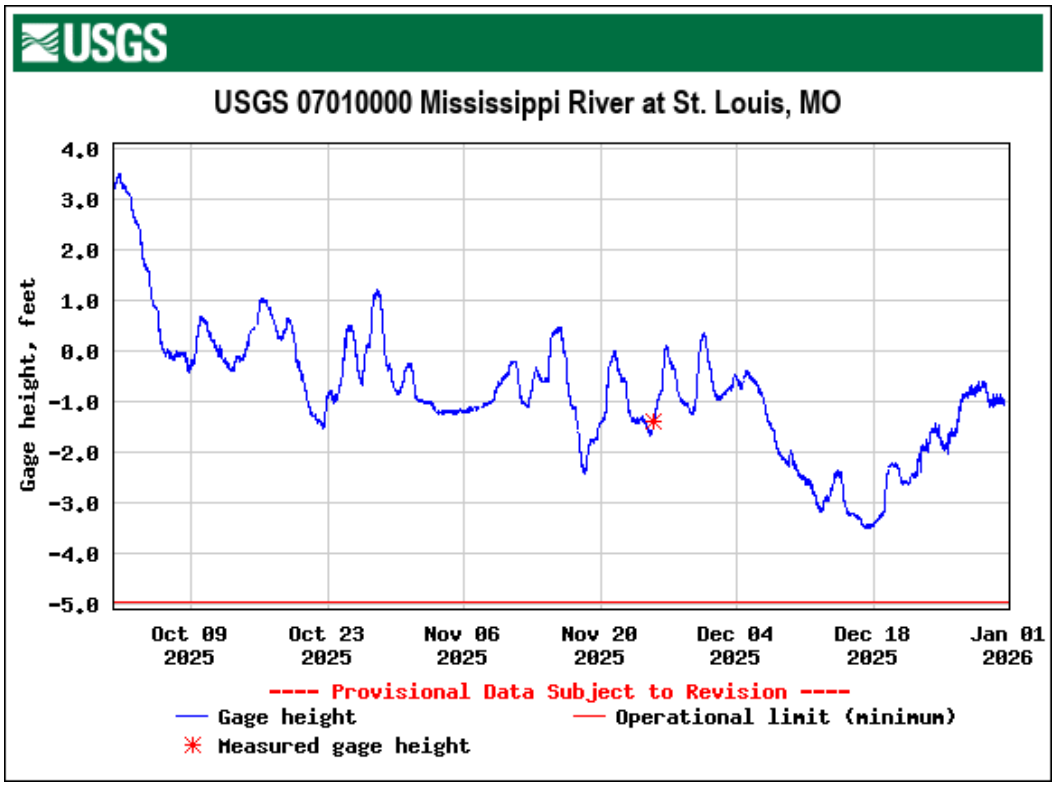
2.7 Sampling Issues

During the October 2025 sampling event, low Mississippi River levels prevented the sampling of monitoring well P31S and delayed the sampling of P22D. As discussed in Section 2.5, groundwater elevations vary at the RIEC based on changes in water level in the adjacent Mississippi River. As displayed on **Figure 7**, the river gauge height at the upstream Mississippi gauge in St. Louis (United State Geological Survey (USGS) gauge # 07010000) was 0.0 feet on October 14 and the Mississippi River level has remained low for the remainder of 2025.

Monitoring well P31S is typically sampled using a positive displacement method (i.e. a peristaltic pump), however, due to low groundwater conditions, this method could not be used as this method is only effective up to the suction lift limit, which can be as much as approximately 30 feet. Due to low river levels throughout October and November, there was insufficient water in the well to purge and sample. Previous attempts to sample this well using a bladder pump have resulted in the pump being lodged in the well, therefore, peristaltic methods are used to sample the well.

Additionally, the water level in P22D, which is typically sampled with a peristaltic pump, was too low to sample with a peristaltic pump during the October sampling event. Water levels in the well remained low throughout October and mid-November. Rocksmith attempted to install a permanent bladder pump in the well on October 14, 2025, and again on November 11, 2025. However, the bladder pump was defective from the factory and would not purge water. As a result, P22D was sampled using a portable bladder pump on November 12, 2025. A new bladder pump will be installed in P22D in the first semiannual sampling event in 2026.

Figure 7 – Mississippi River Level at St. Louis, Missouri (October – December)



3.0 ACTIVITIES PLANNED FOR 2026

Detection and Assessment Monitoring are scheduled to continue on a semi-annual basis in the second and fourth quarters of 2026. Statistical analysis of the October 2025 Detection and Assessment Monitoring data will be completed in 2026 and will be included in the 2026 Annual Report.

As part of the Phase 2 of the Remedy Selection Report's corrective measures remedial plan, Corrective Action sampling is scheduled to continue on a semi-annual basis in the second and fourth quarters of 2026. Statistical analysis of the November 2025 Corrective Action Monitoring data will be completed in 2026 and will be included in the 2026 Annual Report. Monitoring and statistical evaluation of the Corrective Action will be completed in accordance with the corrective measures remedial plan discussed in the Remedy Selection Report. Evaluation of the effectiveness of Corrective Action and Corrective Measures on CCR constituent concentrations in groundwater will continue in 2026 and be included in the 2026 Annual Report.

As mentioned in Section 2.7, there have been sampling issues at monitoring well P31S. Many of these issues are believed to be the result of obstructions in the well. In 2026, options for replacement of well P31S near its current location will be evaluated. A new, permanent bladder pump is planned to be installed in P22D in 2026.

Tables

Table 3
Summary of Well Construction Details
RCPA Surface Impoundment
Rush Island Energy Center, Jefferson County, MO

Monitoring Well ID	Installation Date	Location		Top of Casing Elevation	Ground Surface Elevation	Top of Screen Elevation	Base of Well	Total Depth
		Northing[1]	Easting[1]	(FT MSL)[2]	(FT MSL)[2]	(FT MSL)[2]	(FT MSL)[2]	(FT BGS)[3]
CCR RULE COMPLIANCE NETWORK								
MW-1	10/31/2015	835384.2	889832.5	395.52	393.5	320.7	310.5	83.0
MW-2	11/1/2015	834261.5	890364.1	393.87	391.7	319.5	309.3	82.4
MW-3	10/31/2015	833178.4	890892.7	391.38	389.2	319.1	308.9	80.3
MW-4	10/30/2015	831647.5	890830.5	392.78	390.8	310.9	300.7	90.1
MW-5	10/29/2015	831994.9	889984.5	390.36	388.0	333.0	327.8	60.2
MW-6	10/28/2015	833111.0	888977.0	402.71	401.1	346.4	341.2	59.8
MW-7(R)	9/11/2019	834501.4	888496.4	408.22	406.0	318.7	308.6	97.4
MW-B1	10/28/2015	837602.1	887903.9	411.61	409.6	319.8	309.6	100.0
MW-B2	10/27/2015	837801.7	885337.2	397.85	395.9	318.3	308.1	87.9
CORRECTIVE ACTION MONITORING WELL NETWORK								
P05S	12/5/2012	832317.6	889749.7	392.50	390.1	365.6	345.6	44.5
P10S	12/4/2012	834545.1	888099.0	407.23	404.8	375.8	355.8	49.0
P16S	12/6/2012	835092.8	889998.3	393.39	390.9	370.9	350.9	40.0
P17D	9/6/2013	834718.8	890158.3	395.56	392.6	267.3	262.3	130.3
P17I	12/10/2013	834744.2	890148.9	394.86	392.5	333.6	328.6	63.9
P17S	11/27/2012	834736.7	890152.8	394.65	392.5	373.5	355.5	37.0
P19D	12/10/2013	833915.6	890552.2	392.08	390.3	270.3	265.3	125.0
P19I	12/10/2013	833911.3	890550.6	392.75	390.2	330.7	325.7	64.5
P19S	11/27/2012	833919.0	890546.4	393.31	390.6	368.6	348.6	42.0
P21D	12/9/2013	832902.9	891031.2	393.39	391.0	271.8	266.8	124.2
P21I	12/9/2013	832904.2	891027.0	393.53	391.2	333.4	328.4	62.8
P21S	11/28/2012	832898.0	891024.7	393.87	391.5	371.5	351.5	40.0
P22D[5]	12/7/2013	832278.2	891018.7	395.05	391.6	286.6	281.6	110.0
P22S	11/29/2012	832277.0	891007.6	394.30	392.2	373.2	353.2	39.0
P29D	12/11/2013	837804.9	885389.1	398.27	396.2	300.9	295.9	100.3
P29S	1/17/2013	837797.9	885383.8	399.11	397.0	367.0	347.0	50.0
P30S	1/16/2013	836606.9	889007.8	407.75	408.0	368.0	348.0	60.0
P31S	12/10/2012	835629.4	887488.1	408.68	406.1	374.1	354.1	52.0

Notes:
1) Horizontal Datum: State Plane Coordinates NAD83 (2000) Missouri East Zone 2401 (feet).
2) FT MSL- Feet above mean sea level.
3) FT BGS - Feet below ground surface.
4) Vertical Datum: NAVD88 (feet).
5) Monitoring well P22D repaired and modified on February 9, 2021.

Prepared by: JSI
Checked by: GTM
Reviewed by: MNH

Table 4
Summary of Detection and Assessment Monitoring Sampling Dates
RCPA Surface Impoundment
Rush Island Energy Center, Jefferson County, MO

Groundwater Monitoring Wells	Date of Sample Collection					
	February 2025 Verification Sampling	May 2025 Sampling Event	July 2025 Verification Sampling	October 2025 Sampling Event	December 2025 Verification Sampling	Total Number of Samples
CCR Rule Compliance Monitoring Well Network						
MW-B1	-	5/5/2025	-	10/16/2025	-	2
MW-B2	-	5/1/2025	-	10/15/2025	-	2
MW-1	2/5/2025	5/2/2025	-	10/15/2025	12/1/2025	4
MW-2	2/5/2025	5/2/2025	7/11/2025	10/14/2025	12/1/2025	5
MW-3	-	5/5/2025	-	10/14/2025	-	2
MW-4	-	5/5/2025	-	10/15/2025	-	2
MW-5	-	5/6/2025	-	10/15/2025	-	2
MW-6	2/5/2025	5/1/2025	-	10/16/2025	-	3
MW-7(R)	-	5/1/2025	7/11/2025	10/14/2025	-	3
Assessment or Detection Monitoring	Detection	Assessment/ Detection	Detection	Assessment/ Detection	Detection	NA

Notes:
1.) Detection Monitoring results provided in Tables 6-8.
2.) Verification Sampling results provided in Tables 6-8.
3.) Assessment Monitoring results provided in Tables 9-11.
4.) "-" No sample collected.
5.) NA - Not Applicable.

Prepared by: JTR
Checked by: JDQ
Reviewed by: JSI

Table 5
Summary of Corrective Action Monitoring Sampling Dates
RCPA Surface Impoundment
Rush Island Energy Center, Jefferson County, MO

Groundwater Monitoring Wells	Date of Sample Collection		
	May 2025 Sampling Event	October-November 2025 Sampling Event	Total Number of Samples
Corrective Action Monitoring Well Network			
P05S	5/6/2025	10/15/2025	2
P10S	5/1/2025	10/16/2025	2
P16S	5/2/2025	10/15/2025	2
P17D	5/2/2025	10/15/2025	2
P17I	5/2/2025	10/15/2025	2
P17S	5/2/2025	10/15/2025	2
P19D	5/2/2025	10/14/2025	2
P19I	5/2/2025	10/14/2025	2
P19S	5/2/2025	10/14/2025	2
P21D	5/5/2025	10/14/2025	2
P21I	5/5/2025	10/14/2025	2
P21S	5/5/2025	10/14/2025	2
P22D	5/5/2025	11/12/2025	2
P22S	5/5/2025	10/14/2025	2
P29D	5/1/2025	10/15/2025	2
P29S	5/1/2025	10/15/2025	2
P30S	5/5/2025	10/16/2025	2
P31S	5/1/2025	-	1
Event Type	Corrective Action	Corrective Action	NA

Notes:
1.) Corrective Action sampling results provided in Tables 12-14.

Prepared by: JTR
Checked by: JDQ
Reviewed by: JSI

Table 6
November 2024 Detection Monitoring Results
RCPA Surface Impoundment
Rush Island Energy Center, Jefferson County, MO

			BACKGROUND		GROUNDWATER MONITORING WELLS						
ANALYTE	UNITS	PREDICTION LIMITS	MW-B1	MW-B2	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7(R)
November 2024 Detection Monitoring Event											
DATE	NA	NA	11/11/2024	11/13/2024	11/12/2024	11/11/2024	11/13/2024	11/13/2024	11/8/2024	11/11/2024	11/11/2024
pH	SU	6.55 - 7.39	6.87	7.11	7.80	10.15	8.81	7.18	7.25	7.03	6.95
BORON, TOTAL	µg/L	125	105	40.8 J	2,790	3,350	11,200	1,720	47.9 J	1,720 J	1,880
CALCIUM, TOTAL	µg/L	166,000	142,000	108,000	45,800	15,300	18,400	114,000	115,000	88,900	83,700
CHLORIDE, TOTAL	mg/L	69.98	65.5	43.9	31.0	189	26.4	9.5	2.7	9.7	20.2
FLUORIDE, TOTAL	mg/L	0.2777	0.15 J	0.19 J	0.34	0.72	1.0	0.45	ND	0.30	0.22
SULFATE, TOTAL	mg/L	46.9	36.1	16.3	198	249	160	0.90 J	19.9	13.9	97.2
TOTAL DISSOLVED SOLIDS	mg/L	757	660	428	596	950	681	461	417	363	418
Febuary 2025 Verification Sampling Event											
DATE	NA	NA			2/5/2025	2/5/2025				2/5/2025	
pH	SU	6.55 - 7.39									
BORON, TOTAL	µg/L	125									
CALCIUM, TOTAL	µg/L	166,000									
CHLORIDE, TOTAL	mg/L	69.98				63.6					
FLUORIDE, TOTAL	mg/L	0.2777			0.13 J					0.34	
SULFATE, TOTAL	mg/L	46.9									
TOTAL DISSOLVED SOLIDS	mg/L	757				898					

NOTES:
1. Unit Abbreviations: µg/L - micrograms per liter, mg/L - milligrams per liter, SU - standard units.
2. J - Result is an estimated value.
3. NA - Not applicable.
4. ND - Constituent was analyzed but was not detected above the Method Detection Limit (MDL) or the adjusted Practical Quantitation Limit (PQL) based on data validation and is considered a non-detect. Values displayed as ND.
5. Prediction Limits calculated using Sanitas Software.
6. Values highlighted in yellow indicate a Statistically Significant Increase (SSI).
7. Values highlighted in green indicate an initial exceedance above the prediction limit that was not confirmed by Verification Sampling (not an SSI).
8. Only analytes/wells that were detected above the prediction limit and that had not already been verified were tested during Verification Sampling.

Prepared By: GTM
Checked By: JDQ
Reviewed By: JSI

Table 7
May 2025 Detection Monitoring Results
RCPA Surface Impoundment
Rush Island Energy Center, Jefferson County, MO

			BACKGROUND		GROUNDWATER MONITORING WELLS						
ANALYTE	UNITS	PREDICTION LIMITS	MW-B1	MW-B2	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7(R)
May 2025 Detection Monitoring Event											
DATE	NA	NA	5/5/2025	5/1/2025	5/2/2025	5/2/2025	5/5/2025	5/5/2025	5/6/2025	5/1/2025	5/1/2025
pH	SU	6.57 - 7.423	6.90	7.40	7.90	10.91	8.16	7.10	7.27	7.31	7.24
BORON, TOTAL	µg/L	125	88.8 J	48.8 J	2,800	3,530	11,300	1,340	53.6 J	793	5,110
CALCIUM, TOTAL	µg/L	171,000	139,000	105,000	52,600	15,300	17,100	109,000	117,000	85,000	85,200
CHLORIDE, TOTAL	mg/L	71.08	101	32.0	51.0	141	32.7	7.3	2.4 J	4.2	20.8
FLUORIDE, TOTAL	mg/L	0.2412	0.17 J	0.24	ND	0.58	0.94	0.48	ND	0.35	0.26 J
SULFATE, TOTAL	mg/L	46.9	41.2	10.9	223	250	178	1.7	25.3	19.7	115
TOTAL DISSOLVED SOLIDS	mg/L	757	719	425	701	980	695	480	424	353	454
July 2025 Verification Sampling Event											
DATE	NA	NA				7/11/2025					7/11/2025
pH	SU	6.57 - 7.423									
BORON, TOTAL	µg/L	125									
CALCIUM, TOTAL	µg/L	171,000									
CHLORIDE, TOTAL	mg/L	71.08				62.9					
FLUORIDE, TOTAL	mg/L	0.2412									0.14 J
SULFATE, TOTAL	mg/L	46.9									
TOTAL DISSOLVED SOLIDS	mg/L	757									

NOTES:
1. Unit Abbreviations: µg/L - micrograms per liter, mg/L - milligrams per liter, SU - standard units.
2. J - Result is an estimated value.
3. NA - Not applicable.
4. ND - Constituent was analyzed but was not detected above the Method Detection Limit (MDL) or the adjusted Practical Quantitation Limit (PQL) based on data validation and is considered a non-detect. Values displayed as ND.
5. Prediction Limits calculated using Sanitas Software.
6. Values highlighted in yellow indicate a Statistically Significant Increase (SSI).
7. Values highlighted in green indicate an initial exceedance above the prediction limit that was not confirmed by Verification Sampling (not an SSI).
8. Only analytes/wells that were detected above the prediction limit and that had not already been verified were tested during Verification Sampling.

Prepared By: JTR
Checked By: JDQ
Reviewed By: JSI

Table 8
October 2025 Detection Monitoring Results
RCPA Surface Impoundment
Rush Island Energy Center, Jefferson County, MO

			BACKGROUND		GROUNDWATER MONITORING WELLS						
ANALYTE	UNITS	PREDICTION LIMITS	MW-B1	MW-B2	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7(R)
October 2025 Detection Monitoring Event											
DATE	NA	NA	10/16/2025	10/15/2025	10/15/2025	10/14/2025	10/14/2025	10/15/2025	10/15/2025	10/16/2025	10/14/2025
pH	SU	6.57 - 7.423	6.97	7.11	8.31	10.93	8.96	7.13	7.31	7.30	7.25
BORON, TOTAL	µg/L	125	90.5 J	40.3 J	2,820	3,160	10,400	1,200	54.7 J	373	7,220
CALCIUM, TOTAL	µg/L	171,000	144,000	107,000	83,800	15,500	15,100	108,000	116,000	88,600	83,700
CHLORIDE, TOTAL	mg/L	71.08	67.9	35.4	23.3	173	24.1	8.1	1.8	2.3	19.8
FLUORIDE, TOTAL	mg/L	0.2412	0.13	0.16	0.20	0.70	1.2	0.49	0.12	0.20	0.24
SULFATE, TOTAL	mg/L	46.9	40.1	16.6	233	236	168	0.15 J	27.3	20.3	110
TOTAL DISSOLVED SOLIDS	mg/L	757	639	425	781	900	675	473	399	316	445
December 2025 Verification Sampling Event											
DATE	NA	NA			12/1/2025	12/1/2025					
pH	SU	6.57 - 7.423									
BORON, TOTAL	µg/L	125									
CALCIUM, TOTAL	µg/L	171,000									
CHLORIDE, TOTAL	mg/L	71.08				172					
FLUORIDE, TOTAL	mg/L	0.2412									
SULFATE, TOTAL	mg/L	46.9									
TOTAL DISSOLVED SOLIDS	mg/L	757			769						

NOTES:
1. Unit Abbreviations: µg/L - micrograms per liter, mg/L - milligrams per liter, SU - standard units.
2. J - Result is an estimated value.
3. NA - Not applicable.
4. ND - Constituent was analyzed but was not detected above the Method Detection Limit (MDL) or the adjusted Practical Quantitation Limit (PQL) based on data validation and is considered a non-detect. Values displayed as ND.
5. Prediction Limits calculated using Sanitas Software.
6. Values highlighted in yellow indicate a Statistically Significant Increase (SSI).
7. Only analytes/wells that were detected above the prediction limit and that had not already been verified were tested during Verification Sampling.

Prepared By: GTM
Checked By: JDQ
Reviewed By: JSI

Table 9
November 2024 Assessment Monitoring Results
RCPA Surface Impoundment
Rush Island Energy Center, Jefferson County, MO

		BACKGROUND		GROUNDWATER MONITORING WELLS						
ANALYTE	UNITS	MW-B1	MW-B2	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7(R)
FIELD PARAMETERS										
DATE	NA	11/11/2024	11/13/2024	11/12/2024	11/11/2024	11/13/2024	11/13/2024	11/8/2024	11/11/2024	11/11/2024
DISSOLVED OXYGEN	mg/L	1.65	0.33	0.11	0.06	0.19	0.08	0.18	0.83	0.38
pH	SU	6.87	7.11	7.80	10.15	8.81	7.18	7.25	7.03	6.95
REDOX POTENTIAL	mV	-133.4	-109.1	95.8	48.5	24.2	38.1	-44.8	-93.4	-141.5
SPECIFIC CONDUCTIVITY	mS/cm	1.149	0.834	0.936	1.396	1.067	0.786	0.637	0.626	0.745
TURBIDITY	NTU	2.45	4.66	1.38	1.27	3.56	3.78	9.39	1.35	3.15
APPENDIX IV PARAMETERS										
ANTIMONY, TOTAL	µg/L	ND	ND	0.13 J	1.7	ND	ND	ND	ND	ND
ARSENIC, TOTAL	µg/L	16.5	3.1	3.4	179	36.5	7.2	1.5	0.81 J	109
BARIUM, TOTAL	µg/L	445	392	36.8	15.4	56.8	390	341	189	297
BERYLLIUM, TOTAL	µg/L	ND	0.12 J	ND	ND	0.15 J	0.17 J	ND	ND	ND
CHROMIUM, TOTAL	µg/L	0.36 J	0.36 J	0.35 J	0.31 J	0.58 J	0.35 J	0.44 J	0.33 J	ND
FLUORIDE, TOTAL	mg/L	0.15 J	0.19 J	0.34	0.72	1.0	0.45	ND	0.30	0.22
LITHIUM, TOTAL	µg/L	57.1	10.7	ND	4.8 J	17.5	36.3	4.6 J	6.0 J	28.8
MOLYBDENUM, TOTAL	µg/L	ND	ND	121	65.1	519	34.0	ND	1.7 J	35.7
RADIUM [226 + 228]	pCi/L	1.842 J	ND	ND	ND	ND	ND	ND	ND	ND
SELENIUM, TOTAL	µg/L	ND	ND	0.20 J	0.44 J	0.37 J	ND	ND	0.21 J	ND

NOTES
1. Unit Abbreviations: µg/L - micrograms per liter, mg/L - milligrams per liter, SU - standard units, and pCi/L - picocuries per liter, mV - millivolts, mS/cm - millisiemens per centimeter, and NTU - nephelometric turbidity units.
2. J - Result is an estimated value.
3. NA - Not Applicable.
4. ND - Constituent was analyzed for but was not detected above the Method Detection Limit (MDL) or the adjusted Practical Quantitation Limit (PQL) based on data validation and is considered a non-detect. Values displayed as ND.
5. Radium [226 + 228] is reported as the sum of the Radium 226 and the Radium 228 activity concentrations unless the sum of the Radium 226 and Radium 228 Minimum Detectable Concentrations (MDC) is higher in which case it is displayed as ND.

Prepared By: GTM
Checked By: VAH
Reviewed By: MNH

Table 10
May 2025 Assessment Monitoring Results
RCPA Surface Impoundment
Rush Island Energy Center, Jefferson County, MO

		BACKGROUND		GROUNDWATER MONITORING WELLS						
ANALYTE	UNITS	MW-B1	MW-B2	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7(R)
FIELD PARAMETERS										
DATE	NA	5/5/2025	5/1/2025	5/2/2025	5/2/2025	5/5/2025	5/5/2025	5/6/2025	5/1/2025	5/1/2025
DISSOLVED OXYGEN	mg/L	0.22	0.25	0.36	0.56	0.69	0.35	0.21	0.81	0.32
pH	SU	6.90	7.40	7.90	10.91	8.16	7.10	7.27	7.31	7.24
REDOX POTENTIAL	mV	-0.1	-22.9	-50.3	-41.3	-23.1	-3.9	-1.5	10.3	-11.5
SPECIFIC CONDUCTIVITY	mS/cm	1.213	0.698	1.086	1.475	0.983	0.772	0.680	0.544	0.662
TURBIDITY	NTU	2.10	4.95	2.23	2.21	1.31	1.31	4.53	2.43	0.34
APPENDIX IV PARAMETERS										
ANTIMONY, TOTAL	µg/L	ND	ND	0.13 J	1.9	ND	ND	0.14 J	ND	ND
ARSENIC, TOTAL	µg/L	16.6	2.1	4.0	187	35.8	8.3	1.6	0.66 J	115
BARIUM, TOTAL	µg/L	406	385	48.5	15.1	53.8	378	339	177	308
BERYLLIUM, TOTAL	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
CADMIUM, TOTAL	µg/L	ND	ND	ND	0.13 J	0.24 J	ND	ND	ND	ND
CHROMIUM, TOTAL	µg/L	0.38 J	0.48 J	0.45 J	0.47 J	0.62 J	ND	0.44 J	1.2 J	ND
COBALT, TOTAL	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORIDE, TOTAL	mg/L	0.17 J	0.24	ND	0.58	0.94	0.48	ND	0.35	0.26 J
LEAD, TOTAL	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
LITHIUM, TOTAL	µg/L	52.5	13.0	4.3 J	5.4 J	19.7	31.4	7.1 J	7.9 J	26.3
MERCURY, TOTAL	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
MOLYBDENUM, TOTAL	µg/L	ND	2.9 J	90.2	91.8	702	28.8	ND	2.3 J	32.2
RADIUM [226 + 228]	pCi/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
SELENIUM, TOTAL	µg/L	ND	ND	ND	0.66 J	0.41 J	ND	ND	0.29 J	ND
THALLIUM, TOTAL	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND

NOTES
1. Unit Abbreviations: µg/L - micrograms per liter, mg/L - milligrams per liter, SU - standard units, and pCi/L - picocuries per liter, mV - millivolts, mS/cm - millisiemens per centimeter, and NTU - nephelometric turbidity units.
2. J - Result is an estimated value.
3. NA - Not Applicable.
4. ND - Constituent was analyzed for but was not detected above the Method Detection Limit (MDL) or the adjusted Practical Quantitation Limit (PQL) based on data validation and is considered a non-detect. Values displayed as ND.
5. Radium [226 + 228] is reported as the sum of the Radium 226 and the Radium 228 activity concentrations unless the sum of the Radium 226 and Radium 228 Minimum Detectable Concentrations (MDC) is higher in which case it is displayed as ND.

Prepared By: GTM
Checked By: LES
Reviewed By: JSI

Table 11
October 2025 Assessment Monitoring Results
RCPA Surface Impoundment
Rush Island Energy Center, Jefferson County, MO

		BACKGROUND		GROUNDWATER MONITORING WELLS						
ANALYTE	UNITS	MW-B1	MW-B2	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7(R)
FIELD PARAMETERS										
DATE	NA	10/16/2025	10/15/2025	10/15/2025	10/14/2025	10/14/2025	10/15/2025	10/15/2025	10/16/2025	10/14/2025
DISSOLVED OXYGEN	mg/L	0.03	2.43	0.05	0.98	1.30	0.30	0.47	3.66	0.01
pH	SU	6.97	7.11	8.31	10.93	8.96	7.13	7.31	7.30	7.25
REDOX POTENTIAL	mV	-22.6	12.1	145.1	-18.1	-20.3	-129.8	-137.7	118.3	-96.3
SPECIFIC CONDUCTIVITY	mS/cm	1.130	0.647	1.107	1.283	0.886	0.684	0.563	0.512	0.653
TURBIDITY	NTU	2.16	1.07	1.76	0.95	1.96	1.48	2.74	1.59	2.03
APPENDIX IV PARAMETERS										
ANTIMONY, TOTAL	µg/L	ND	ND	ND	1.3	ND	ND	ND	ND	ND
ARSENIC, TOTAL	µg/L	25.8	2.4	3.3	128	32.9	9.1	1.4	0.53 J	112
BARIUM, TOTAL	µg/L	460	393	71.0	15.2	48.1	376	347	117	316
FLUORIDE, TOTAL	mg/L	0.13	0.16	0.20	0.70	1.2	0.49	0.12	0.20	0.24
LITHIUM, TOTAL	µg/L	55.6	10.8	3.4 J	5.3 J	15.3	29.8	5.0 J	5.2 J	27.2
MOLYBDENUM, TOTAL	µg/L	ND	ND	65.8	86.0	511	29.1	ND	1.5 J	43.2
RADIUM [226 + 228]	pCi/L	1.380	1.348	ND	ND	ND	1.489	1.608	ND	1.226
SELENIUM, TOTAL	µg/L	ND	ND	ND	0.39 J	0.41 J	ND	ND	0.30 J	ND

NOTES
1. Unit Abbreviations: µg/L - micrograms per liter, mg/L - milligrams per liter, SU - standard units, and pCi/L - picocuries per liter, mV - millivolts, mS/cm - millisiemens per centimeter, and NTU - nephelometric turbidity units.
2. J - Result is an estimated value.
3. NA - Not Applicable.
4. ND - Constituent was analyzed for but was not detected above the Method Detection Limit (MDL) or the adjusted Practical Quantitation Limit (PQL) based on data validation and is considered a non-detect. Values displayed as ND.
5. Radium [226 + 228] is reported as the sum of the Radium 226 and the Radium 228 activity concentrations unless the sum of the Radium 226 and Radium 228 Minimum Detectable Concentrations (MDC) is higher in which case it is displayed as ND.

Prepared By: GTM
Checked By: JDQ
Reviewed By: JSI

Table 12
November 2024 Corrective Action Monitoring Results
RCPA Surface Impoundment
Rush Island Energy Center, Jefferson County, MO

ANALYTE	UNITS	P05S	P10S	P16S	P17D	P17I	P17S	P19D	P19I	P19S	P21D	P21I	P21S	P22D	P22S	P29D	P29S	P30S	P31S
FIELD PARAMETERS																			
DATE	NA	11/13/2024	11/8/2024	11/8/2024	11/11/2024	11/12/2024	11/12/2024	11/11/2024	11/11/2024	11/11/2024	11/12/2024	11/13/2024	11/13/2024	11/12/2024	11/12/2024	11/13/2024	11/13/2024	11/13/2024	11/11/2024
DISSOLVED OXYGEN	mg/L	0.15	1.54	0.47	0.21	0.70	0.56	0.08	0.04	0.46	0.09	1.85	0.18	0.26	0.13	0.11	0.05	5.54	4.03
REDOX POTENTIAL	mV	-13.4	118.8	-145.9	1.6	92.6	124.3	-9.4	69.7	20.1	50.0	-36.1	20.6	-180.1	-49.2	68.5	52.2	162.4	11.9
SPECIFIC CONDUCTIVITY	mS/cm	0.647	0.979	0.838	0.960	1.327	1.214	0.916	0.916	0.631	3.928	0.826	0.884	0.945	1.270	1.256	0.809	1.190	0.407
TURBIDITY	NTU	9.05	2.72	2.69	1.31	1.74	4.39	1.31	2.07	2.66	1.38	2.89	10.3	2.77	12.6	0.83	6.31	2.98	77.1
APPENDIX III PARAMETERS																			
BORON, TOTAL	µg/L	4,090	1,220	368	6,960	2,120	2,430	9,200	4,540	168	2,980	5,840	126	8,780	678	113	70.1 J	828	255
CALCIUM, TOTAL	µg/L	66,900	138,000	116,000 J	44,400	14,800	99,600	32,200	15,700	110,000	156,000	30,500	130,000	22,100	158,000	84,800	120,000 J	170,000	65,700
CHLORIDE, TOTAL	mg/L	23.9	9.9	2.8 J	62.2	141	35.3	30.5	24.2	1.5	1,230	80.0	2.0	44.0	42.2	226	17.3	38.2	20.0
pH	SU	7.18	6.82	6.98	7.57	9.47	7.04	7.58	9.42	6.81	7.02	7.96	6.60	7.56	6.76	7.28	6.97	6.88	7.32
SULFATE, TOTAL	mg/L	13.6	59.6	36.0	243	256	251	196	198	15.1	141	83.6	23.6	104	144	34.4	10.8	128	36.5
TOTAL DISSOLVED SOLIDS	mg/L	399	625	481	656	828	825	667	659	392	2,090	492	489	613	751	647	482	703	311
APPENDIX IV PARAMETERS																			
ANTIMONY, TOTAL	µg/L	ND	ND	ND	ND	0.12 J	0.15 J	ND	0.28 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J
ARSENIC, TOTAL	µg/L	168	2.2	1.4	1.0	28.2	9.8	0.69 J	42.9	6.0	0.72 J	6.3	8.3	12.8	4.2	0.86 J	19.6	1.0	34.6
BARIUM, TOTAL	µg/L	166	206	119	97.9	29.6	98.0	97.0	57.7	242	201	68.8	217	81.1	148	117	320	106	201
BERYLLIUM, TOTAL	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	0.13 J	ND	ND	0.15 J
CHROMIUM, TOTAL	µg/L	18.6	1.2 J	0.32 J	ND	0.52 J	0.32 J	ND	0.54 J	ND	ND	3.2	0.39 J	1.3	0.39 J	0.34 J	0.51 J	0.30 J	2.1
FLUORIDE, TOTAL	mg/L	0.28 J	0.22 J	0.31 J	0.63 J	1.6	1.0	2.0	1.1	0.26	0.25	1.1	0.28	2.3	0.24	0.25	0.26	0.29	ND
LITHIUM, TOTAL	µg/L	16.7	26.4	25.2	36.9	4.8 J	31.1	19.2	73.5	22.3	237	20.3	12.9	24.7	44.1	67.1	18.3	44.9	8.0 J
MOLYBDENUM, TOTAL	µg/L	2.4 J	31.3	12.4 J	564	108	107	753	213	2.6 J	234	414	1.2 J	304	10.6 J	1.1 J	ND	1.2 J	9.8 J
RADIUM [226 + 228]	pCi/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.030	ND	ND	ND	ND	ND	ND	2.530	ND
SELENIUM, TOTAL	µg/L	ND	ND	0.43 J	0.19 J	0.78 J	0.82 J	0.23 J	0.72 J	ND	ND	0.43 J	ND	0.84 J	0.66 J	ND	ND	2.5	0.30 J
ADDITIONAL PARAMETERS																			
ALKALINITY	mg/L	303	479	423	173	162	361	257	268	360	247	203	430	298	502	300	427	447	202
IRON, TOTAL	µg/L	9,470	224	48.8 J	2,310	136	542	1,840	120	4,130	3,810	422	2,340	1,170	3,800	2,620	5,100	153	4,360
MAGNESIUM, TOTAL	µg/L	22,000	17,800	29,500	9,030	1,000	22,700	4,510	274	18,000	53,600	3,680	26,600	2,710	35,400	30,500	25,900	28,500	11,800
MANGANESE, TOTAL	µg/L	246	377	8.9	380	11.1	1,960	265	3.2 J	1,100	1,160	73.3	594	76.4	479	77.8	357	29.2	2,810
POTASSIUM, TOTAL	µg/L	5,930	5,380	2,700	7,060	2,770	4,020	3,480	31,800	4,600	13,100	5,850	3,560	3,860	6,710	6,700	4,870	5,920	3,200
SODIUM, TOTAL	µg/L	24,800	54,400	18,400	145,000	253,000	139,000	177,000	174,000	6,530	502,000	130,000	12,900	178,000	63,800	94,600	13,800	51,800	10,700

NOTES
1. Unit Abbreviations: µg/L - micrograms per liter, mg/L - milligrams per liter, SU - standard units, pCi/L - picocuries per liter, mV - millivolts, mS/cm - millisiemens per centimeter, and NTU - nephelometric turbidity units.
2. J - Result is an estimated value.
3. ND - Constituent was analyzed for but was not detected above the Method Detection Limit (MDL) or the adjusted Practical Quantitation Limit (PQL) based on data validation and is considered a non-detect. Values displayed as ND.
4. Radium [226 + 228] is reported as the sum of the Radium 226 and the Radium 228 activity concentrations unless the sum of the Radium 226 and Radium 228 Minimum Detectable Concentrations (MDC) is higher in which case it is displayed as ND.
5. NA - Not Applicable.

Prepared By: GTM
Checked By: VAH
Reviewed By: MNH

Table 13
May 2025 Corrective Action Monitoring Results
RCPA Surface Impoundment
Rush Island Energy Center, Jefferson County, MO

ANALYTE	UNITS	P05S	P10S	P16S	P17D	P17I	P17S	P19D	P19I	P19S	P21D	P21I	P21S	P22D	P22S	P29D	P29S	P30S	P31S
FIELD PARAMETERS																			
DATE	NA	5/6/2025	5/1/2025	5/2/2025	5/2/2025	5/2/2025	5/2/2025	5/2/2025	5/2/2025	5/2/2025	5/5/2025	5/5/2025	5/5/2025	5/5/2025	5/5/2025	5/1/2025	5/1/2025	5/5/2025	5/1/2025
DISSOLVED OXYGEN	mg/L	0.20	1.45	0.98	0.33	0.24	0.40	0.36	0.43	1.34	0.40	0.36	1.43	0.21	0.17	0.48	0.27	0.32	0.98
REDOX POTENTIAL	mV	-3.0	50.2	27.9	11.1	8.8	13.7	-112.3	-75.3	6.4	-15.4	-78.9	-62.1	23.9	38.5	-5.1	-20.6	66.1	-29.9
SPECIFIC CONDUCTIVITY	mS/cm	0.692	0.884	0.749	1.010	1.306	1.287	1.206	0.962	0.737	3.822	1.422	1.063	1.558	1.269	0.906	0.666	1.110	0.574
TURBIDITY	NTU	2.50	1.65	1.35	0.60	0.98	1.78	2.22	1.56	2.12	0.99	0.41	1.25	3.70	3.86	0.23	6.68	9.88	3.13
APPENDIX III PARAMETERS																			
BORON, TOTAL	µg/L	3,890	652	72.7 J	7,130	2,160	2,640	8,870	3,450	149	3,130	3,550	128	4,440	482	73.7 J	83.0 J	735 J	277
CALCIUM, TOTAL	µg/L	71,900	151,000	117,000	42,000	17,100	123,000	43,800	28,900	124,000	148,000	61,400	161,000	31,500	175,000	87,100	101,000	155,000 J	79,600
CHLORIDE, TOTAL	mg/L	31.3	7.2	1.1	81.9	174	43.1	107	50.8	1.4	976	247	3.4	278	31.5	119	15.3	50.8	37.5
pH	SU	6.91	6.95	6.72	10.00	9.42	6.98	7.67	8.97	6.82	7.60	7.76	6.56	7.74	6.68	7.40	7.31	6.91	7.67
SULFATE, TOTAL	mg/L	23.5	48.4	11.0	262	284	241	233	141	17.2	147	128	37.0	76.4	135	25.2	4.7	189	56.3
TOTAL DISSOLVED SOLIDS	mg/L	438	596	449	680	851	879	796	679	432	2,230	806	608	1,020	857	541	408	751	379
APPENDIX IV PARAMETERS																			
ANTIMONY, TOTAL	µg/L	ND	ND	ND	ND	0.14 J	ND	ND	0.21 J	ND	ND	ND	ND	ND	0.13 J	ND	ND	ND	ND
ARSENIC, TOTAL	µg/L	158	1.4	1.9 J	0.95 J	27.4	19.9	0.48 J	38.1	6.8	0.46 J	6.0	59.4	14.7	1.4	0.98 J	41.1	1.4	19.6
BARIUM, TOTAL	µg/L	177	200	107	97.4	28.7	124	138	101	275	193	143	264	106	124	124	314	109 J	181
BERYLLIUM, TOTAL	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CADMIUM, TOTAL	µg/L	ND	0.098 J	ND	0.21 J	0.14 J	0.062 J	0.19 J	ND	ND	0.064 J	ND	0.054 J	ND	0.088 J	ND	ND	ND	ND
CHROMIUM, TOTAL	µg/L	0.46 J	ND	0.47 J	0.59 J	0.62 J	0.49 J	0.41 J	0.43 J	0.52 J	0.30 J	0.40 J	0.38 J	0.95 J	0.58 J	0.40 J	0.46 J	0.62 J	ND
COBALT, TOTAL	µg/L	ND	ND	ND	ND	ND	1.5 J	ND	ND	2.8 J	ND	ND	1.7 J	ND	ND	ND	ND	ND	ND
FLUORIDE, TOTAL	mg/L	0.31	0.33	0.26	0.63	1.2	0.74	1.2	0.48	0.33	0.58	0.48	0.30	1.4	0.24	0.28	0.26	0.37 J	0.37
LEAD, TOTAL	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
LITHIUM, TOTAL	µg/L	18.9	24.4	24.3	34.5	7.6 J	33.8	20.3	93.1	25.9	206	28.0	12.3	25.8	49.1	42.1	10.4	38.4 J	11.9
MERCURY, TOTAL	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MOLYBDENUM, TOTAL	µg/L	3.6 J	21.0	5.4 J	572	109	88.2	582	121	3.0 J	179	134	1.7 J	104	7.8 J	1.1 J	2.6 J	3.7 J	6.9 J
RADIUM [226 + 228]	pCi/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.140 J	ND	ND	ND	ND	ND	ND	ND	ND
SELENIUM, TOTAL	µg/L	ND	ND	2.5	0.23 J	0.78 J	0.33 J	0.21 J	0.30 J	ND	ND	0.19 J	ND	0.30 J	4.4	ND	ND	0.18 J	ND
THALLIUM, TOTAL	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ADDITIONAL PARAMETERS																			
ALKALINITY	mg/L	314	473	424	158	159	435	234	326	380	240	206	522	285	564	309	356	361	197
IRON, FERRIC, TOTAL	mg/L	ND	ND	0.57 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27	ND	ND	0.47	ND
IRON, FERROUS, TOTAL	mg/L	13.2 J	0.15 J	ND	3.1 J	0.39 J	7.9 J	3.5 J	0.19 J	7.0 J	5.4 J	0.95 J	31.9 J	1.8 J	0.15 J	4.6 J	11.2 J	0.75 J	6.4 J
IRON, TOTAL	µg/L	9,440	130	588 J	2,060	102	5,620	2,390	26.6 J	4,950	3,570	537	23,900	1,030	418	3,120	8,080	1,220 J	4,540
MAGNESIUM, TOTAL	µg/L	23,300	20,200	31,200	8,530	806	29,000	6,340	625	20,000	54,500	7,450	34,900	4,630	39,900	26,100	23,000	25,800 J	14,100
MANGANESE, TOTAL	µg/L	487	485	30.2 J	339	6.7	1,310	319	4.8 J	1,330	1,030	124	2,100	94.5	343	116	415	338 J	1,720
POTASSIUM, TOTAL	µg/L	5,790	5,440	1,790	7,080	3,130	4,940	4,140	38,900	4,730	13,000	9,110	3,760	5,190	6,710	4,700	4,560	6,820 J	4,530
SODIUM, TOTAL	µg/L	27,700	33,600	4,420	158,000	247,000	128,000	202,000	161,000	5,800	492,000	201,000	14,400	283,000	51,100	61,400	12,000	58,800 J	11,800
SULFIDE, TOTAL	mg/L	ND	ND	ND	0.029 J	1.2	ND	ND	0.25	0.025 J	ND	0.034 J	ND	0.045 J	ND	ND	0.019 J	ND	0.018 J

NOTES
1. Unit Abbreviations: µg/L - micrograms per liter, mg/L - milligrams per liter, SU - standard units, pCi/L - picocuries per liter, mV - millivolts, mS/cm - millisiemens per centimeter, and NTU - nephelometric turbidity units.
2. J - Result is an estimated value.
3. ND - Constituent was analyzed for but was not detected above the Method Detection Limit (MDL) or the adjusted Practical Quantitation Limit (PQL) based on data validation and is considered a non-detect. Values displayed as ND.
4. Radium [226 + 228] is reported as the sum of the Radium 226 and the Radium 228 activity concentrations unless the sum of the Radium 226 and Radium 228 Minimum Detectable Concentrations (MDC) is higher in which case it is displayed as ND.
5. NA - Not Applicable.

Prepared By: GTM
Checked By: JDQ
Reviewed By: JSI

Table 14
October-November 2025 Corrective Action Monitoring Results
RCPA Surface Impoundment
Rush Island Energy Center, Jefferson County, MO

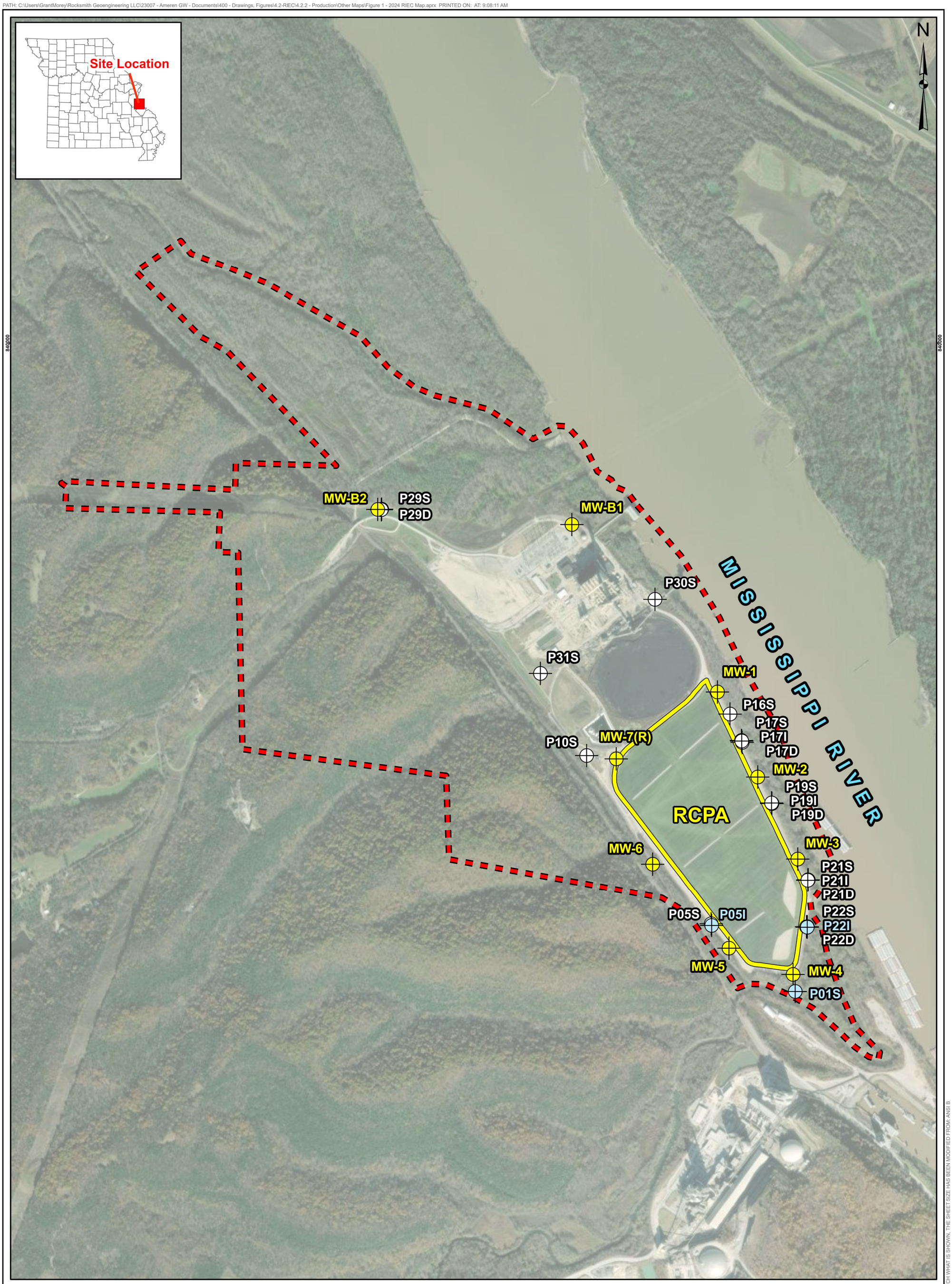
ANALYTE	UNITS	P05S	P10S	P16S	P17D	P17I	P17S	P19D	P19I	P19S	P21D	P21I	P21S	P22D	P22S	P29D	P29S	P30S	P31S
FIELD PARAMETERS																			
DATE	NA	10/15/2025	10/16/2025	10/15/2025	10/15/2025	10/15/2025	10/15/2025	10/14/2025	10/14/2025	10/14/2025	10/14/2025	10/14/2025	10/14/2025	11/12/2025	10/14/2025	10/15/2025	10/15/2025	10/16/2025	NS
DISSOLVED OXYGEN	mg/L	0.67	10.24	1.40	0.20	0.50	0.90	1.58	1.30	1.06	0.01	0.12	1.91	1.15	1.39	2.77	2.24	0.47	NS
REDOX POTENTIAL	mV	-107.9	-128.1	125.0	55.6	18.3	79.2	-51.3	27.9	-20.3	-32.2	-50.7	-27.5	166.7	153.5	-57.6	93.9	154.2	NS
SPECIFIC CONDUCTIVITY	mS/cm	0.552	0.902	0.705	0.874	1.136	1.233	0.965	0.871	0.526	3.432	0.942	0.847	1.064	1.123	0.690	1.110	1.120	NS
TURBIDITY	NTU	4.42	4.86	1.00	1.57	1.48	6.06	1.53	3.75	1.41	0.89	0.88	4.71	4.08	3.07	1.27	4.76	4.25	NS
APPENDIX III PARAMETERS																			
BORON, TOTAL	µg/L	4,090	2,270	163	7,250	1,870	2,280	8,710	3,690	104	3,390	4,900	762	6,760	889	58.1 J	86.2 J	811	NS
CALCIUM, TOTAL	µg/L	63,700	107,000	117,000	40,600	12,900	114,000	37,300	19,500	96,500	147,000	30,000	122,000	24,400	150,000 J	88,500	204,000	166,000	NS
CHLORIDE, TOTAL	mg/L	25.2	13.3	1.0	51.7	116	34.5	44.7	18.2	0.66 J	1,020	17.1	18.1	80.8 J	32.7	61.8	28.5	41.7	NS
pH	SU	7.02	7.83	7.52	7.96	9.96	7.07	7.51	9.50	6.80	7.42	8.03	6.97	7.62	6.77	7.17	6.49	7.00	NS
SULFATE, TOTAL	mg/L	16.9	65.3	19.4	245	269	208	241	163	4.7	152	89.5	15.6	95.0	121	17.1	93.7	158	NS
TOTAL DISSOLVED SOLIDS	mg/L	391	602	460	650	792	932	699	656	335	2,140	607	554	691	709	445	817	728	NS
APPENDIX IV PARAMETERS																			
ANTIMONY, TOTAL	µg/L	ND	ND	ND	ND	0.13 J	0.30 J	ND	0.28 J	ND	ND	ND	ND	0.15 J	ND	0.22 J	ND	ND	NS
ARSENIC, TOTAL	µg/L	120	7.6	0.77 J	0.91 J	25.0	10.3	0.58 J	56.5	7.8	0.45 J	6.9	62.8	14.8	0.88 J	1.1	35.4	0.85 J	NS
BARIUM, TOTAL	µg/L	125	214	127	88.0	25.1	115	112	64.1	209	190	80.9	283	87.3	129	139	844	106	NS
FLUORIDE, TOTAL	mg/L	0.23	0.35	0.17	0.56	1.3	0.62	1.4	0.86	0.28	0.83	1.0	0.25	1.8 J	0.28	0.11	0.13	0.29	NS
LITHIUM, TOTAL	µg/L	14.3	22.4	24.4	36.7	3.5 J	34.0	19.1	52.5	17.3	217	17.3	19.6	23.9	42.5	29.3	47.2	43.6	NS
MOLYBDENUM, TOTAL	µg/L	ND	55.8	5.3 J	552	110	47.0	621	187	2.5 J	233	305	3.8 J	224	6.7 J	ND	ND	2.7 J	NS
RADIUM [226 + 228]	pCi/L	ND	ND	ND	ND	ND	1.737	1.679	ND	1.480	2.815 J	1.739	1.836	ND	ND	ND	3.930	ND	NS
SELENIUM, TOTAL	µg/L	ND	ND	0.59 J	0.23 J	0.75 J	2.5	0.23 J	0.55 J	ND	ND	0.34 J	0.25 J	0.77 J	5.6	ND	ND	3.3	NS
ADDITIONAL PARAMETERS																			
ALKALINITY	mg/L	282	460	428	156	142	526	240	300	308	238	198	476	289	486	322	650	432	NS
IRON, TOTAL	µg/L	5,590	1,500	33.3 J	1,890	175	541	1,980	50.5	3,930	3,580	458	19,900	983	263	3,630	26,400	360	NS
MAGNESIUM, TOTAL	µg/L	23,000	14,600	32,800	8,550	694	27,100	5,340	291	15,100	51,300	3,660	32,500	3,270	33,200	24,000	47,900	28,700	NS
MANGANESE, TOTAL	µg/L	216	1,350	1.2 J	302	11.3	1,950	275	2.9 J	942	1,050	69.6	1,360	78.4	95.5	156	452	168	NS
POTASSIUM, TOTAL	µg/L	5,540	4,880	2,010	7,020	2,820	3,950	3,800	28,500	3,650	13,100	6,770	4,510	4,390	6,660	3,480	6,140	6,710	NS
SODIUM, TOTAL	µg/L	27,300	87,400	8,330	147,000	241,000	178,000	191,000	171,000	3,670	496,000	165,000 J	34,800	219,000	66,400	36,100	19,400	52,300	NS

NOTES
1. Unit Abbreviations: µg/L - micrograms per liter, mg/L - milligrams per liter, SU - standard units, pCi/L - picocuries per liter, mV - millivolts, mS/cm - millisiemens per centimeter, and NTU - nephelometric turbidity units.
2. J - Result is an estimated value.
3. ND - Constituent was analyzed for but was not detected above the Method Detection Limit (MDL) or the adjusted Practical Quantitation Limit (PQL) based on data validation and is considered a non-detect. Values displayed as ND.
4. Radium [226 + 228] is reported as the sum of the Radium 226 and the Radium 228 activity concentrations unless the sum of the Radium 226 and Radium 228 Minimum Detectable Concentrations (MDC) is higher in which case it is displayed as ND.
5. NA - Not Applicable.
6. NS - Not Sampled due to low groundwater elevations preventing sampling from occurring.

Prepared By: GTM
Checked By: JDQ
Reviewed By: JSI

Figures

PATH: C:\Users\GrantMorey\Rocksmith Geoengineering LLC\23007 - Ameren GW - Documents\400 - Drawings, Figures\4.2-RIEC\4.2.2 - Production\Other Maps\Figure 1 - 2024 RIEC Map.aprx PRINTED ON: AT: 9:08:11 AM



LEGEND

- Rush Island Energy Center Property Boundary
- RCPA Surface Impoundment

Monitoring Well Networks

- Corrective Action Monitoring Well
- RCPA Detection and Assessment Monitoring Well
- Monitoring Well Used for Water Levels Only

NOTES

1.) ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.

REFERENCES

1.) AMEREN MISSOURI RUSH ISLAND ENERGY CENTER, RUSH ISLAND PROPERTY CONTROL MAP, JANUARY 2012.
2) COORDINATE SYSTEM: NAD 1983 STATE PLANE MISSOURI EAST FIPS 2401 FEET.

0 1,000 2,000 3,000 4,000
Feet

RUSH ISLAND ENERGY CENTER GROUNDWATER MONITORING PROGRAMS AND WELL LOCATION MAP

PROJECT
CCR GROUNDWATER MONITORING PROGRAM

CLIENT
AMEREN MISSOURI
RUSH ISLAND ENERGY CENTER

ROCKSMITH GEOENGINEERING

DESIGN	GTM	YYYY-MM-DD	2026-01-07
PREPARED	GTM	PROJECT No.	23008-25
REVIEW	JSI		
APPROVED	MNH		

FIGURE 1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B
1 in
0

Appendix A
Laboratory Analytical Data

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

February 21, 2025

Mark Haddock
Rocksmith Geoengineering, LLC.
2320 Creve Coeur Mill Road
Maryland Heights, MO 63043

RE: Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60469036

Dear Mark Haddock:

Enclosed are the analytical results for sample(s) received by the laboratory on February 06, 2025. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Kansas City

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

Sincerely,



Jamie Church
jamie.church@pacelabs.com
314-838-7223
Project Manager

Enclosures

cc: Jeffrey Ingram, Rocksmith Geoengineering, LLC.
Lisa Meyer, Ameren
Grant Morey, Rocksmith Geoengineering, LLC.
Austin Nieman, Ameren

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CERTIFICATIONS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60469036

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Arkansas Certification #: 88-00679
Colorado Division of Oil and Public Safety
Illinois Certification #: 2000302023-6
Iowa Certification #: 118
Kansas Field Laboratory Certification #: E-92587
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Missouri Inorganic Drinking Water Certification
Nevada Certification #: KS000212024-1
Oklahoma Certification #: 2023-073
Texas Certification #: T104704407-23-17
Utah Certification #: KS000212022-13

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SAMPLE SUMMARY

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60469036

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60469036001	**R-MW-1**	Water	02/05/25 11:33	02/06/25 05:45
60469036002	**R-MW-2**	Water	02/05/25 10:36	02/06/25 05:45
60469036003	**R-MW-6**	Water	02/05/25 12:15	02/06/25 05:45
60469036004	**R-DUP-1**	Water	02/05/25 00:00	02/06/25 05:45
60469036005	**R-FB-1**	Water	02/05/25 11:55	02/06/25 05:45

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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60469036

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60469036001	**R-MW-1**	SM 2540C	TML	1	PASI-K
		EPA 300.0	AAA	2	PASI-K
60469036002	**R-MW-2**	SM 2540C	TML	1	PASI-K
		EPA 300.0	AAA	2	PASI-K
60469036003	**R-MW-6**	SM 2540C	TML	1	PASI-K
		EPA 300.0	AAA	2	PASI-K
60469036004	**R-DUP-1**	SM 2540C	TML	1	PASI-K
		EPA 300.0	AAA	2	PASI-K
60469036005	**R-FB-1**	SM 2540C	TML	1	PASI-K
		EPA 300.0	AAA	2	PASI-K

PASI-K = Pace Analytical Services - Kansas City

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ANALYTICAL RESULTS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60469036

Sample: R-MW-1 **Lab ID: 60469036001** Collected: 02/05/25 11:33 Received: 02/06/25 05:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**734**	mg/L	20.0	20.0	1		02/10/25 15:12		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**25.1**	mg/L	20.0	10.5	20		02/12/25 14:45	16887-00-6	
Fluoride	**0.13J**	mg/L	0.20	0.12	1		02/12/25 14:30	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60469036

Sample: R-MW-2 **Lab ID: 60469036002** Collected: 02/05/25 10:36 Received: 02/06/25 05:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**898**	mg/L	20.0	20.0	1		02/10/25 15:12		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**63.6**	mg/L	50.0	26.4	50		02/12/25 12:17	16887-00-6	
Fluoride	**0.79**	mg/L	0.20	0.12	1		02/12/25 12:02	16984-48-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60469036

Sample: R-MW-6 **Lab ID: 60469036003** Collected: 02/05/25 12:15 Received: 02/06/25 05:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**388**	mg/L	10.0	10.0	1		02/10/25 15:13		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**4.0**	mg/L	1.0	0.53	1		02/12/25 13:01	16887-00-6	
Fluoride	**0.34**	mg/L	0.20	0.12	1		02/12/25 13:01	16984-48-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60469036

Sample: R-DUP-1 **Lab ID: 60469036004** Collected: 02/05/25 00:00 Received: 02/06/25 05:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**880**	mg/L	20.0	20.0	1		02/10/25 15:13		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**62.9**	mg/L	50.0	26.4	50		02/12/25 13:31	16887-00-6	
Fluoride	**0.71**	mg/L	0.20	0.12	1		02/12/25 13:16	16984-48-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60469036

Sample: R-FB-1 **Lab ID: 60469036005** Collected: 02/05/25 11:55 Received: 02/06/25 05:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**18.0**	mg/L	5.0	5.0	1		02/14/25 14:42		H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**<0.53**	mg/L	1.0	0.53	1		02/12/25 13:46	16887-00-6	
Fluoride	**<0.12**	mg/L	0.20	0.12	1		02/12/25 13:46	16984-48-8	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60469036

QC Batch: 924571 | Analysis Method: SM 2540C
QC Batch Method: SM 2540C | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60469036001, 60469036002, 60469036003, 60469036004

METHOD BLANK: 3661620 Matrix: Water
Associated Lab Samples: 60469036001, 60469036002, 60469036003, 60469036004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	02/10/25 15:11	

LABORATORY CONTROL SAMPLE: 3661621

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	977	98	80-120	

SAMPLE DUPLICATE: 3661622

Parameter	Units	60469039001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	825	865	5	10	

SAMPLE DUPLICATE: 3661623

Parameter	Units	60469036001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	734	762	4	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60469036

QC Batch: 925074
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60469036005

METHOD BLANK: 3663710 Matrix: Water
Associated Lab Samples: 60469036005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	02/14/25 14:41	

LABORATORY CONTROL SAMPLE: 3663711

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

SAMPLE DUPLICATE: 3663712

Parameter	Units	60469032001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	654	672	3	10	H1

SAMPLE DUPLICATE: 3663713

Parameter	Units	60469213004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	497	503	1	10	H1

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QUALITY CONTROL DATA

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60469036

QC Batch: 924755
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60469036001, 60469036002, 60469036003, 60469036004, 60469036005

METHOD BLANK: 3662198 Matrix: Water
Associated Lab Samples: 60469036001, 60469036002, 60469036003, 60469036004, 60469036005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.53	1.0	0.53	02/12/25 10:01	
Fluoride	mg/L	<0.12	0.20	0.12	02/12/25 10:01	

LABORATORY CONTROL SAMPLE: 3662199

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.6	92	90-110	
Fluoride	mg/L	2.5	2.4	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3662200 3662201

Parameter	Units	60469030001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	48.0	100	100	148	175	100	127	80-120	17	15	M1,R1
Fluoride	mg/L	<2.5	50	50	56.1	71.2	112	142	80-120	24	15	M1,R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3662203 3662204

Parameter	Units	60469036001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	25.1	100	100	113	111	88	86	80-120	2	15	
Fluoride	mg/L	0.13J	2.5	2.5	2.5	2.7	94	103	80-120	9	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3662206 3662207

Parameter	Units	60469039001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	6.8	10	10	15.9	16.0	91	92	80-120	1	15	
Fluoride	mg/L	<0.25	5	5	5.3	5.3	102	103	80-120	1	15	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60469036

SAMPLE DUPLICATE: 3662202

Parameter	Units	60469030001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	48.0	48.2	0	15	
Fluoride	mg/L	<2.5	5.0		15	

SAMPLE DUPLICATE: 3662205

Parameter	Units	60469036001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	25.1	24.9	1	15	
Fluoride	mg/L	0.13J	0.15J		15	

SAMPLE DUPLICATE: 3662208

Parameter	Units	60469039001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	6.8	6.8	0	15	
Fluoride	mg/L	<0.25	0.33J		15	

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QUALIFIERS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60469036

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

H1	Analysis conducted outside the EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60469036

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60469036001	**R-MW-1**	SM 2540C	924571		
60469036002	**R-MW-2**	SM 2540C	924571		
60469036003	**R-MW-6**	SM 2540C	924571		
60469036004	**R-DUP-1**	SM 2540C	924571		
60469036005	**R-FB-1**	SM 2540C	925074		
60469036001	**R-MW-1**	EPA 300.0	924755		
60469036002	**R-MW-2**	EPA 300.0	924755		
60469036003	**R-MW-6**	EPA 300.0	924755		
60469036004	**R-DUP-1**	EPA 300.0	924755		
60469036005	**R-FB-1**	EPA 300.0	924755		

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WO# : 60469036

60469036

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

Client Name: Rocksmith Energy

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

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

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

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

Thermometer Used: T-301 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): As-read 1.6 Corr. Factor +0.1 Corrected 1.7

Date and initials of person examining contents: 2/6/25

Temperature should be above freezing to 6°C

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Qualtrax Document ID: 30468

Page 1 of 1

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:

Company:	Rocksmith Geoengineering, LLC
Address:	5233 Roanoke Drive
	St. Charles, MO 63304
Email To:	mark.haddock@rocksmithgeo.com
Phone: 314-974-5670	Fax:
Requested Due Date/TAT:	Standard

Section B Required Project Information:

Report To:	Mark Haddock
Copy To:	Jeffery Ingram, Grant Morey
Purchase Order No.:	COC #7
Project Name:	Ameren RCPA - Verification Sampling
Project Number:	COC#7

Section C Invoice Information:

Attention:	
Company Name:	Rocksmith
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	15856, line 1

REGULATORY AGENCY

NPDES ☑ GROUND WATER ☐ DRINKING WATER

UST RCRA OTHER

Site Location STATE: MO

Requested Analysis Filtered (Y/N)

Section D Required Client Information

Valid Matrix Codes

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

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Fluoride	Chloride	TDS	Residual Chlorine (Y/N)
1	R-MW-1	WT	G			2-5-25	1133		1	1									X	X	X	
2	R-MW-2	WT	G				1036		1	1									X	X	X	
3	R-MW-6	WT	G				1215		1	1									X	X	X	
4	R-DUP-1	WT	G				—		1	1									X	X	X	
5	R-FB-1	WT	G				1155		1	1									X	X	X	
6	R-MS-1	WT	G				1133		1	1									X	X	X	
7	R-MSD-1	WT	G				1133		1	1									X	X	X	
8		WT	G																			
9		WT	G																			
10		WT	G																			
11		WT	G																			
12		WT	G																			

Residual Chlorine (Y/N): N N N N N N N N N N

604690036
Pace Project No./ Lab I.D.

Collected @ R-MW-1

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	John Rasmussen / Rocksmith	2-5-25	1445		2/6	0545	1.7	Y	Y	Y

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	John Rasmussen				
SIGNATURE of SAMPLER:					
DATE Signed (MM/DD/YY):	02/05/25				

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

F-ALL-Q-020rev.08, 12-Oct-2007

Client: Rocksmith Geoeng Profile/EZ #: 15856-1

Site: Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1	WT																			2		MS/MSD										
2																				1												
3																				1												
4																				1												
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass				Plastic		Misc.	
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar	BP1B	1L NAOH plastic	I	Wipe/Swab
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar	BP1N	1L HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar	BP1S	1L H2SO4 plastic	ZPLC	Ziploc Bag
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide	BP1U	1L unpreserved plastic	AF	Air Filter
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass	BP1Z	1L NaOH, Zn Acetate	C	Air Cassettes
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass	BP2B	500mL NAOH plastic	R	Terracore Kit
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass	BP2N	500mL HNO3 plastic	U	Summa Can
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass	BP2S	500mL H2SO4 plastic		
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass	BP2U	500mL unpreserved plastic		
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass	BP2Z	500mL NaOH, Zn Acetate		
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass	BP3B	250mL NaOH plastic		
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass	BP3F	250mL HNO3 plastic - field filtered	Matrix	
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass	BP3N	250mL HNO3 plastic	WT	Water
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass	BP3U	250mL unpreserved plastic	SL	Solid
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass	BP3S	250mL H2SO4 plastic	NAL	Non-aqueous Liquid
		AG5U	100mL unpres amber glass	BP3Z	250mL NaOH, Zn Acetate	OL	OIL
				BP4U	125mL unpreserved plastic	WP	Wipe
				BP4N	125mL HNO3 plastic	DW	Drinking Water
				BP4S	125mL H2SO4 plastic		
				WPDU	16oz unpresserved plstic		

Work Order Number: 604690 36

Memorandum

February 25, 2025

To:	Project File Rocksmith Geoengineering, LLC	**Project Number:**	23008-24
CC:	Mark Haddock, Jeffrey Ingram		
From:	Grant Morey	**Email:**	grant.morey@rocksmithgeo.com
RE:	**Data Validation Summary, Rush Island Energy Center – RCPA Verification – Data Package 60469036**		

The following is a summary of instances where quality control criteria in the functional guidelines were not met and data qualification was required:

- When a compound was analyzed outside of method hold time control limits, associated sample results were qualified as estimates (J) or non-detects (U).
- When a compound was detected in a sample result between the Method Detection Limit (MDL) and Practical Quantification Limit (PQL), the results were recorded at the detection value and qualified as estimates (J).

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Company Name: Rocksmith Geoengineering
Project Manager: J. Ingram
Project Name: Ameren RCPA Verification
Project Number: 23008-24
Reviewer: G. Morey
Validation Date: 2/25/2025

Laboratory: Pace Analytical
SDG #: 60469036
Analytical Method (type and no.): EPA 300.0 (Chloride/Fluoride); EPA 2540C (TDS)
Matrix: ☐ Air ☐ Soil/Sed. ■ Water ☐ Waste ☐ _____
Sample Names R-MW-1, R-MW-2, R-MW-6, R-DUP-1, R-FB-1

NOTE: Please provide calculation in Comment areas or on the back (if on the back please indicate in comment areas).

Field Information	YES	NO	NA	COMMENTS
a) Sampling dates noted?	x			2/5/2025
b) Sampling team indicated?	x			GTM/JTR
c) Sample location noted?	x			
d) Sample depth indicated (Soils)?			x	
e) Sample type indicated (grab/composite)?	x			Grab
f) Field QC noted?	x			See Notes
g) Field parameters collected (note types)?	x			pH, Spec Cond, Turb, Temp, DO, ORP
h) Field Calibration within control limits?	x			
i) Notations of unacceptable field conditions/performances from field logs or field notes?		x		
j) Does the laboratory narrative indicate deficiencies?			x	No lab narrative.

Note Deficiencies: _____

Chain-of-Custody (COC)	YES	NO	NA	COMMENTS
a) Was the COC properly completed?	x			
b) Was the COC signed by both field and laboratory personnel?	x			
c) Were samples received in good condition?	x			

General (reference QAPP or Method)	YES	NO	NA	COMMENTS
a) Were hold times met for sample pretreatment?	x			
b) Were hold times met for sample analysis?				See Notes
c) Were the correct preservatives used?	x			
d) Was the correct method used?	x			
e) Were appropriate reporting limits achieved?	x			
f) Were any sample dilutions noted?	x			See Notes
g) Were any matrix problems noted?		x		

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Blanks	YES	NO	NA	COMMENTS
a) Were analytes detected in the method blank(s)?	☐	☒	☐	
b) Were analytes detected in the field blank(s)?	☒	☐	☐	See Notes
c) Were analytes detected in the equipment blank(s)?	☐	☐	☒	
d) Were analytes detected in the trip blank(s)?	☐	☐	☒	

Laboratory Control Sample (LCS)	YES	NO	NA	COMMENTS
a) Was a LCS analyzed once per SDG?	☒	☐	☐	
b) Were the proper analytes included in the LCS?	☒	☐	☐	
c) Was the LCS accuracy criteria met?	☒	☐	☐	

Duplicates	YES	NO	NA	COMMENTS
a) Were field duplicates collected (note original and duplicate sample names)?	☒	☐	☐	R-DUP-1 collected @ R-MW-2
b) Were field dup. precision criteria met (note RPD)?	☒	☐	☐	See Notes
c) Were lab duplicates analyzed (note original and duplicate samples)?	☒	☐	☐	See Notes
d) Were lab dup. precision criteria met (note RPD)?	☒	☐	☐	See Notes

Blind Standards	YES	NO	NA	COMMENTS
a) Was a blind standard used (indicate name, analytes included and concentrations)?	☐	☐	☒	
b) Was the %D within control limits?	☐	☐	☒	

Matrix Spike/Matrix Spike Duplicate (MS/MSD)	YES	NO	NA	COMMENTS
a) Was MS accuracy criteria met?	☒	☒	☐	
Recovery could not be calculated since sample contained high concentration of analyte?	☐	☐	☒	
b) Was MSD accuracy criteria met?	☐	☒	☐	See Notes
Recovery could not be calculated since sample contained high concentration of analyte?	☐	☐	☒	
c) Were MS/MSD precision criteria met?	☐	☒	☐	See Notes

Comments/Notes:

General:

One TDS sample analyzed outside of hold time controls, result qualified as estimate.

Several Chloride samples diluted, required reporting limits met.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Comments/Notes:

Field Blank:

R-FB-1 @ R-MW-2: TDS (18.0). Result > RL and 10x blank, no qualification necessary.

Duplicates:

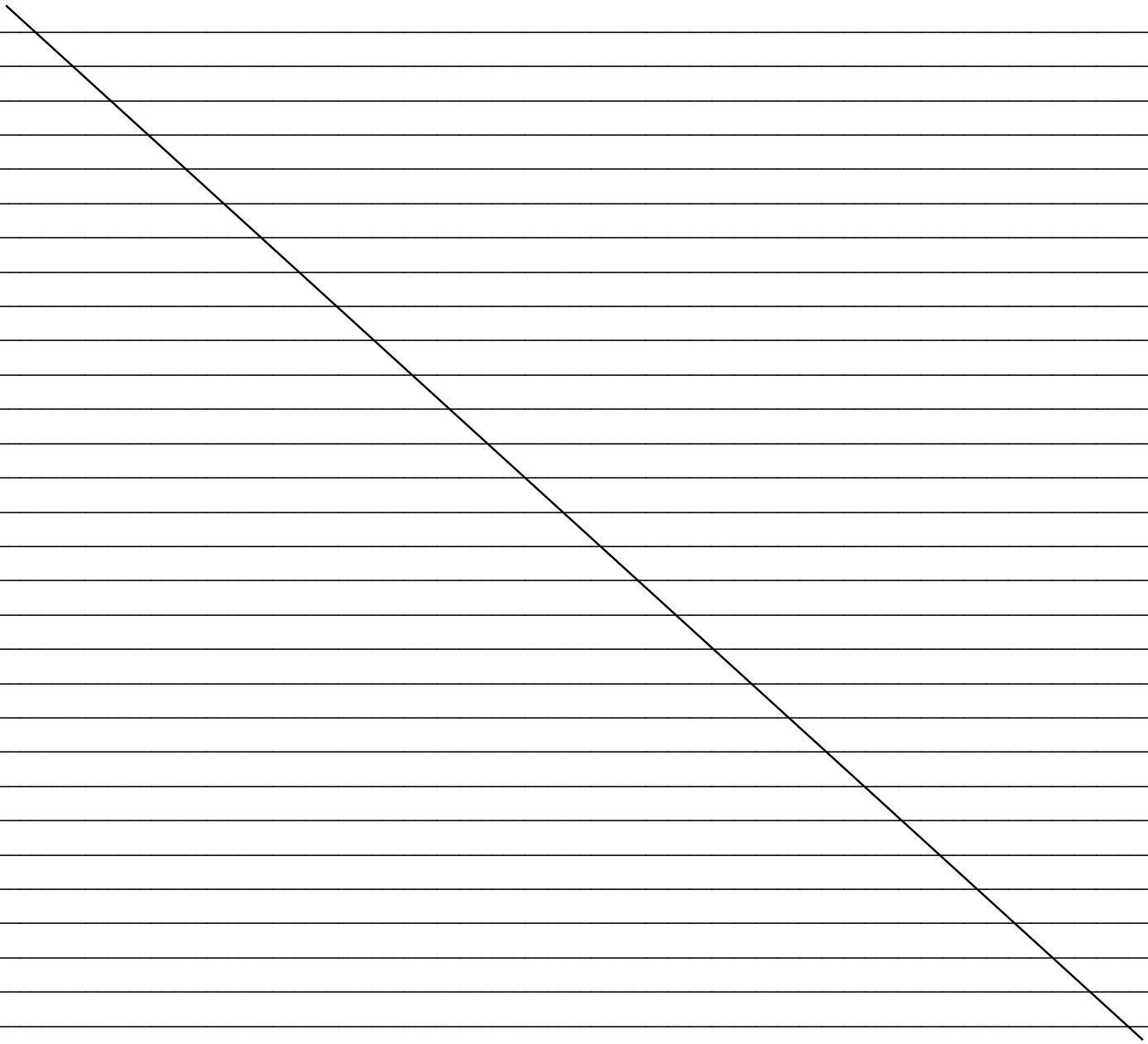
R-DUP-1 @ R-MW-2: Field DUP RPDs within control limits.

Lab duplicate max RPD: 10%: TDS; 15%: Chloride, Fluoride. Lab duplicate RPDs within control limits.

MS/MSD:

36622000/3662201: MSD recovery high, MS recovery within control limits for chloride and fluoride. RPD exceeds control limits.

Associated with unrelated sample, no qualification necessary.



QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Data Qualification:

Sample Name	Constituent(s)	Result	Qualifier	Reason
R-FB-1	TDS	18.0	J	Analyzed outside of hold time controls

Signature: Grant Morey Date: 2/25/2025

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

July 03, 2025

Mark Haddock
Rocksmith Geoengineering, LLC.
2320 Creve Coeur Mill Road
Maryland Heights, MO 63043

RE: Project: AMEREN RCPA
Pace Project No.: 60474363

Dear Mark Haddock:

Enclosed are the analytical results for sample(s) received by the laboratory between May 03, 2025 and May 07, 2025. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Kansas City
- Pace Analytical Services - Greensburg

(Greensburg, PA) - Revision #1 - This report replaces the May 23rd, 2025, report. This project was revised on July 2nd, 2025, to remove an IRWO lab SCUR comment.

REV-1: Report revised to remove comment added by RAD lab regarding sampler's name that was reported in error.

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

Sincerely,



Jamie Church
jamie.church@pacelabs.com
314-838-7223
Project Manager

Enclosures

cc: Jeffrey Ingram, Rocksmith Geoengineering, LLC.
Lisa Meyer, Ameren
Grant Morey, Rocksmith Geoengineering, LLC.
Austin Nieman, Ameren

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

CERTIFICATIONS

Project: AMEREN RCPA
Pace Project No.: 60474363

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219
Arkansas Certification #: 88-00679
Colorado Division of Oil and Public Safety
Illinois Certification #: 2000302023-6
Iowa Certification #: 118
Kansas Field Laboratory Certification #: E-92587
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Missouri Inorganic Drinking Water Certification
Nevada Certification #: KS000212024-1
Oklahoma Certification #: 2023-073
Texas Certification #: T104704407-23-17
Utah Certification #: KS000212022-13

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Lenexa, KS 66219
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SAMPLE SUMMARY

Project: AMEREN RCPA
Pace Project No.: 60474363

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60474363001	**R-MW-1**	Water	05/02/25 13:55	05/03/25 07:37
60474363002	**R-MW-2**	Water	05/02/25 12:30	05/03/25 07:37
60474363003	**R-MW-6**	Water	05/01/25 16:05	05/03/25 07:37
60474363004	**R-MW-7(r)**	Water	05/01/25 14:40	05/03/25 07:37
60474363005	**R-MW-B2**	Water	05/01/25 11:03	05/03/25 07:37
60474363006	**R-DUP-1**	Water	05/01/25 08:00	05/03/25 07:37
60474363007	**R-MS-1**	Water	05/01/25 14:40	05/03/25 07:37
60474363008	**R-MSD-1**	Water	05/01/25 14:40	05/03/25 07:37
60474363009	**R-MW-3**	Water	05/05/25 10:35	05/07/25 06:55
60474363010	**R-MW-4**	Water	05/05/25 15:30	05/07/25 06:55
60474363011	**R-MW-5**	Water	05/06/25 10:37	05/07/25 06:55
60474363012	**R-MW-B1**	Water	05/05/25 14:20	05/07/25 06:55
60474363013	**R-FB-1**	Water	05/05/25 15:20	05/07/25 06:55

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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA
Pace Project No.: 60474363

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60474363001	**R-MW-1**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	MLD	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474363002	**R-MW-2**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	MLD	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474363003	**R-MW-6**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474363004	**R-MW-7(r)**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

SAMPLE ANALYTE COUNT

Project: AMEREN RCPA
Pace Project No.: 60474363

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA, MLD	3	PASI-K
60474363005	**R-MW-B2**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474363006	**R-DUP-1**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474363007	**R-MS-1**	EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
60474363008	**R-MSD-1**	EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
60474363009	**R-MW-3**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA

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Lenexa, KS 66219
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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA
Pace Project No.: 60474363

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474363010	**R-MW-4**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474363011	**R-MW-5**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
60474363012	**R-MW-B1**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA
Pace Project No.: 60474363

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474363013	**R-FB-1**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K

PASI-K = Pace Analytical Services - Kansas City
PASI-PA = Pace Analytical Services - Greensburg

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-1 **Lab ID: 60474363001** Collected: 05/02/25 13:55 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**48.5**	ug/L	5.0	0.64	1	05/06/25 08:42	05/30/25 16:02	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/30/25 16:02	7440-41-7	
Boron	**2800**	ug/L	100	6.4	1	05/06/25 08:42	05/30/25 16:02	7440-42-8	
Calcium	**52600**	ug/L	200	26.9	1	05/06/25 08:42	05/30/25 16:02	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/06/25 08:42	05/30/25 16:02	7440-48-4	
Iron	**29.9J**	ug/L	50.0	9.1	1	05/06/25 08:42	05/30/25 16:02	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/30/25 16:02	7439-92-1	
Lithium	**4.3J**	ug/L	10.0	3.7	1	05/06/25 08:42	05/30/25 16:02	7439-93-2	
Magnesium	**8110**	ug/L	50.0	20.1	1	05/06/25 08:42	05/30/25 16:02	7439-95-4	
Manganese	**51.3**	ug/L	5.0	0.39	1	05/06/25 08:42	05/30/25 16:02	7439-96-5	
Molybdenum	**90.2**	ug/L	20.0	1.0	1	05/06/25 08:42	05/30/25 16:02	7439-98-7	
Potassium	**7730**	ug/L	500	69.7	1	05/06/25 08:42	05/30/25 16:02	7440-09-7	
Sodium	**171000**	ug/L	500	115	1	05/06/25 08:42	05/30/25 16:02	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**0.13J**	ug/L	1.0	0.12	1	05/06/25 08:42	05/27/25 15:54	7440-36-0	
Arsenic	**4.0**	ug/L	1.0	0.13	1	05/06/25 08:42	05/27/25 15:54	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/06/25 08:42	05/27/25 15:54	7440-43-9	
Chromium	**0.45J**	ug/L	1.0	0.30	1	05/06/25 08:42	05/27/25 15:54	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/06/25 08:42	05/27/25 15:54	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/27/25 15:54	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/16/25 14:23	05/19/25 12:31	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**317**	mg/L	20.0	10.5	1		05/15/25 16:38		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**701**	mg/L	13.3	13.3	1		05/08/25 17:15		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:50	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**0.13J**	mg/L	0.20	0.041	1		05/06/25 14:33	15438-31-0	H1,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-1 **Lab ID: 60474363001** Collected: 05/02/25 13:55 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**51.0**	mg/L	50.0	26.4	50		05/27/25 12:09	16887-00-6	
Fluoride	**<0.12**	mg/L	0.20	0.12	1		05/27/25 11:57	16984-48-8	
Sulfate	**223**	mg/L	50.0	27.5	50		05/27/25 12:09	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-2 **Lab ID: 60474363002** Collected: 05/02/25 12:30 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**15.1**	ug/L	5.0	0.64	1	05/06/25 08:42	05/30/25 16:03	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/30/25 16:03	7440-41-7	
Boron	**3530**	ug/L	100	6.4	1	05/06/25 08:42	05/30/25 16:03	7440-42-8	
Calcium	**15300**	ug/L	200	26.9	1	05/06/25 08:42	05/30/25 16:03	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/06/25 08:42	05/30/25 16:03	7440-48-4	
Iron	**46.7J**	ug/L	50.0	9.1	1	05/06/25 08:42	05/30/25 16:03	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/30/25 16:03	7439-92-1	
Lithium	**5.4J**	ug/L	10.0	3.7	1	05/06/25 08:42	05/30/25 16:03	7439-93-2	
Magnesium	**<20.1**	ug/L	50.0	20.1	1	05/06/25 08:42	05/30/25 16:03	7439-95-4	
Manganese	**2.1J**	ug/L	5.0	0.39	1	05/06/25 08:42	05/30/25 16:03	7439-96-5	
Molybdenum	**91.8**	ug/L	20.0	1.0	1	05/06/25 08:42	05/30/25 16:03	7439-98-7	
Potassium	**4050**	ug/L	500	69.7	1	05/06/25 08:42	05/30/25 16:03	7440-09-7	
Sodium	**283000**	ug/L	500	115	1	05/06/25 08:42	05/30/25 16:03	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**1.9**	ug/L	1.0	0.12	1	05/06/25 08:42	05/27/25 15:57	7440-36-0	
Arsenic	**187**	ug/L	1.0	0.13	1	05/06/25 08:42	05/27/25 15:57	7440-38-2	
Cadmium	**0.13J**	ug/L	0.50	0.050	1	05/06/25 08:42	05/27/25 15:57	7440-43-9	
Chromium	**0.47J**	ug/L	1.0	0.30	1	05/06/25 08:42	05/27/25 15:57	7440-47-3	
Selenium	**0.66J**	ug/L	1.0	0.18	1	05/06/25 08:42	05/27/25 15:57	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/27/25 15:57	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/16/25 14:23	05/19/25 12:34	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**248**	mg/L	20.0	10.5	1		05/15/25 16:44		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**980**	mg/L	20.0	20.0	1		05/08/25 17:15		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:50	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**0.28**	mg/L	0.20	0.041	1		05/06/25 14:33	15438-31-0	H1,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-2 **Lab ID: 60474363002** Collected: 05/02/25 12:30 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**5.4**	mg/L	0.50	0.16	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**141**	mg/L	20.0	10.5	20		05/27/25 12:32	16887-00-6	
Fluoride	**0.58**	mg/L	0.20	0.12	1		05/27/25 12:20	16984-48-8	
Sulfate	**250**	mg/L	20.0	11.0	20		05/27/25 12:32	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-6 **Lab ID: 60474363003** Collected: 05/01/25 16:05 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**177**	ug/L	5.0	0.64	1	05/06/25 08:42	05/30/25 16:05	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/30/25 16:05	7440-41-7	
Boron	**793**	ug/L	100	6.4	1	05/06/25 08:42	05/30/25 16:05	7440-42-8	
Calcium	**85000**	ug/L	200	26.9	1	05/06/25 08:42	05/30/25 16:05	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/06/25 08:42	05/30/25 16:05	7440-48-4	
Iron	**431**	ug/L	50.0	9.1	1	05/06/25 08:42	05/30/25 16:05	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/30/25 16:05	7439-92-1	
Lithium	**7.9J**	ug/L	10.0	3.7	1	05/06/25 08:42	05/30/25 16:05	7439-93-2	
Magnesium	**12400**	ug/L	50.0	20.1	1	05/06/25 08:42	05/30/25 16:05	7439-95-4	
Manganese	**155**	ug/L	5.0	0.39	1	05/06/25 08:42	05/30/25 16:05	7439-96-5	
Molybdenum	**2.3J**	ug/L	20.0	1.0	1	05/06/25 08:42	05/30/25 16:05	7439-98-7	
Potassium	**1950**	ug/L	500	69.7	1	05/06/25 08:42	05/30/25 16:05	7440-09-7	
Sodium	**18400**	ug/L	500	115	1	05/06/25 08:42	05/30/25 16:05	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/27/25 15:59	7440-36-0	
Arsenic	**0.66J**	ug/L	1.0	0.13	1	05/06/25 08:42	05/27/25 15:59	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/06/25 08:42	05/27/25 15:59	7440-43-9	
Chromium	**1.2**	ug/L	1.0	0.30	1	05/06/25 08:42	05/27/25 15:59	7440-47-3	
Selenium	**0.29J**	ug/L	1.0	0.18	1	05/06/25 08:42	05/27/25 15:59	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/27/25 15:59	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/16/25 14:23	05/19/25 12:41	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**282**	mg/L	20.0	10.5	1		05/14/25 23:18		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**353**	mg/L	10.0	10.0	1		05/07/25 15:15		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:50	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**0.46**	mg/L	0.20	0.041	1		05/06/25 14:33	15438-31-0	H3,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-6 **Lab ID: 60474363003** Collected: 05/01/25 16:05 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**0.026J**	mg/L	0.050	0.016	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**4.2**	mg/L	1.0	0.53	1		05/27/25 12:56	16887-00-6	
Fluoride	**0.35**	mg/L	0.20	0.12	1		05/27/25 12:56	16984-48-8	
Sulfate	**19.7**	mg/L	1.0	0.55	1		05/27/25 12:56	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-7(r) **Lab ID: 60474363004** Collected: 05/01/25 14:40 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**308**	ug/L	5.0	0.64	1	05/06/25 08:42	05/30/25 16:07	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/30/25 16:07	7440-41-7	
Boron	**5110**	ug/L	100	6.4	1	05/06/25 08:42	05/30/25 16:07	7440-42-8	
Calcium	**85200**	ug/L	200	26.9	1	05/06/25 08:42	05/30/25 16:07	7440-70-2	M1,P6
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/06/25 08:42	05/30/25 16:07	7440-48-4	
Iron	**18900**	ug/L	50.0	9.1	1	05/06/25 08:42	05/30/25 16:07	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/30/25 16:07	7439-92-1	
Lithium	**26.3**	ug/L	10.0	3.7	1	05/06/25 08:42	05/30/25 16:07	7439-93-2	
Magnesium	**24600**	ug/L	50.0	20.1	1	05/06/25 08:42	05/30/25 16:07	7439-95-4	
Manganese	**349**	ug/L	5.0	0.39	1	05/06/25 08:42	05/30/25 16:07	7439-96-5	
Molybdenum	**32.2**	ug/L	20.0	1.0	1	05/06/25 08:42	05/30/25 16:07	7439-98-7	
Potassium	**5580**	ug/L	500	69.7	1	05/06/25 08:42	05/30/25 16:07	7440-09-7	
Sodium	**16400**	ug/L	500	115	1	05/06/25 08:42	05/30/25 16:07	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/27/25 15:42	7440-36-0	
Arsenic	**115**	ug/L	1.0	0.13	1	05/06/25 08:42	05/27/25 15:42	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/06/25 08:42	05/27/25 15:42	7440-43-9	
Chromium	**<0.30**	ug/L	1.0	0.30	1	05/06/25 08:42	05/27/25 15:42	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/06/25 08:42	05/27/25 15:42	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/27/25 15:42	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/16/25 14:23	05/19/25 12:43	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**208**	mg/L	20.0	10.5	1		05/14/25 23:24		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**454**	mg/L	10.0	10.0	1		05/07/25 15:15		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:50	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**26.5**	mg/L	1.0	0.20	1		05/06/25 14:33	15438-31-0	H3,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-7(r) **Lab ID: 60474363004** Collected: 05/01/25 14:40 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**20.8**	mg/L	5.0	2.6	5		05/27/25 13:20	16887-00-6	
Fluoride	**0.26**	mg/L	0.20	0.12	1		05/27/25 13:08	16984-48-8	D6
Sulfate	**115**	mg/L	20.0	11.0	20		05/28/25 18:58	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-B2 **Lab ID: 60474363005** Collected: 05/01/25 11:03 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**385**	ug/L	5.0	0.64	1	05/06/25 08:42	05/30/25 16:13	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/30/25 16:13	7440-41-7	
Boron	**48.8J**	ug/L	100	6.4	1	05/06/25 08:42	05/30/25 16:13	7440-42-8	
Calcium	**105000**	ug/L	200	26.9	1	05/06/25 08:42	05/30/25 16:13	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/06/25 08:42	05/30/25 16:13	7440-48-4	
Iron	**8840**	ug/L	50.0	9.1	1	05/06/25 08:42	05/30/25 16:13	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/30/25 16:13	7439-92-1	
Lithium	**13.0**	ug/L	10.0	3.7	1	05/06/25 08:42	05/30/25 16:13	7439-93-2	
Magnesium	**19100**	ug/L	50.0	20.1	1	05/06/25 08:42	05/30/25 16:13	7439-95-4	
Manganese	**241**	ug/L	5.0	0.39	1	05/06/25 08:42	05/30/25 16:13	7439-96-5	
Molybdenum	**2.9J**	ug/L	20.0	1.0	1	05/06/25 08:42	05/30/25 16:13	7439-98-7	
Potassium	**1960**	ug/L	500	69.7	1	05/06/25 08:42	05/30/25 16:13	7440-09-7	
Sodium	**19900**	ug/L	500	115	1	05/06/25 08:42	05/30/25 16:13	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/27/25 16:06	7440-36-0	
Arsenic	**2.1**	ug/L	1.0	0.13	1	05/06/25 08:42	05/27/25 16:06	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/06/25 08:42	05/27/25 16:06	7440-43-9	
Chromium	**0.48J**	ug/L	1.0	0.30	1	05/06/25 08:42	05/27/25 16:06	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/06/25 08:42	05/27/25 16:06	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/27/25 16:06	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/16/25 14:23	05/19/25 12:50	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**338**	mg/L	20.0	10.5	1		05/14/25 23:37		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**425**	mg/L	10.0	10.0	1		05/07/25 15:16		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:50	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**12.7**	mg/L	0.50	0.10	1		05/06/25 14:33	15438-31-0	H3,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-B2 **Lab ID: 60474363005** Collected: 05/01/25 11:03 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**32.0**	mg/L	10.0	5.3	10		05/27/25 15:18	16887-00-6	
Fluoride	**0.24**	mg/L	0.20	0.12	1		05/27/25 15:06	16984-48-8	
Sulfate	**10.9**	mg/L	1.0	0.55	1		05/27/25 15:06	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-DUP-1 **Lab ID: 60474363006** Collected: 05/01/25 08:00 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**181**	ug/L	5.0	0.64	1	05/06/25 08:42	05/30/25 16:20	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/30/25 16:20	7440-41-7	
Boron	**876**	ug/L	100	6.4	1	05/06/25 08:42	05/30/25 16:20	7440-42-8	
Calcium	**86200**	ug/L	200	26.9	1	05/06/25 08:42	05/30/25 16:20	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/06/25 08:42	05/30/25 16:20	7440-48-4	
Iron	**402**	ug/L	50.0	9.1	1	05/06/25 08:42	05/30/25 16:20	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/30/25 16:20	7439-92-1	
Lithium	**8.0J**	ug/L	10.0	3.7	1	05/06/25 08:42	05/30/25 16:20	7439-93-2	
Magnesium	**12600**	ug/L	50.0	20.1	1	05/06/25 08:42	05/30/25 16:20	7439-95-4	
Manganese	**164**	ug/L	5.0	0.39	1	05/06/25 08:42	05/30/25 16:20	7439-96-5	
Molybdenum	**2.7J**	ug/L	20.0	1.0	1	05/06/25 08:42	05/30/25 16:20	7439-98-7	
Potassium	**2040**	ug/L	500	69.7	1	05/06/25 08:42	05/30/25 16:20	7440-09-7	
Sodium	**19800**	ug/L	500	115	1	05/06/25 08:42	05/30/25 16:20	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/27/25 16:08	7440-36-0	
Arsenic	**0.65J**	ug/L	1.0	0.13	1	05/06/25 08:42	05/27/25 16:08	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/06/25 08:42	05/27/25 16:08	7440-43-9	
Chromium	**0.41J**	ug/L	1.0	0.30	1	05/06/25 08:42	05/27/25 16:08	7440-47-3	
Selenium	**0.32J**	ug/L	1.0	0.18	1	05/06/25 08:42	05/27/25 16:08	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/27/25 16:08	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/16/25 14:23	05/19/25 12:52	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**288**	mg/L	20.0	10.5	1		05/14/25 23:52		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**358**	mg/L	10.0	10.0	1		05/07/25 15:16		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:50	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**0.53**	mg/L	0.20	0.041	1		05/06/25 14:33	15438-31-0	H3,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-DUP-1 **Lab ID: 60474363006** Collected: 05/01/25 08:00 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**0.032J**	mg/L	0.050	0.016	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**4.3**	mg/L	1.0	0.53	1		05/27/25 15:30	16887-00-6	
Fluoride	**0.35**	mg/L	0.20	0.12	1		05/27/25 15:30	16984-48-8	
Sulfate	**19.3**	mg/L	1.0	0.55	1		05/27/25 15:30	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-3 **Lab ID: 60474363009** Collected: 05/05/25 10:35 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**53.8**	ug/L	5.0	0.64	1	05/16/25 07:20	05/30/25 14:45	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/16/25 07:20	05/30/25 14:45	7440-41-7	
Boron	**11300**	ug/L	100	6.4	1	05/16/25 07:20	05/30/25 14:45	7440-42-8	
Calcium	**17100**	ug/L	200	26.9	1	05/16/25 07:20	05/30/25 14:45	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/16/25 07:20	05/30/25 14:45	7440-48-4	
Iron	**97.0**	ug/L	50.0	9.1	1	05/16/25 07:20	05/30/25 14:45	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/16/25 07:20	05/30/25 14:45	7439-92-1	
Lithium	**19.7**	ug/L	10.0	3.7	1	05/16/25 07:20	05/30/25 14:45	7439-93-2	
Magnesium	**1350**	ug/L	50.0	20.1	1	05/16/25 07:20	05/30/25 14:45	7439-95-4	
Manganese	**21.6**	ug/L	5.0	0.39	1	05/16/25 07:20	05/30/25 14:45	7439-96-5	
Molybdenum	**702**	ug/L	20.0	1.0	1	05/16/25 07:20	05/30/25 14:45	7439-98-7	
Potassium	**4350**	ug/L	500	69.7	1	05/16/25 07:20	05/30/25 14:45	7440-09-7	
Sodium	**195000**	ug/L	500	115	1	05/16/25 07:20	05/30/25 14:45	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/15/25 14:40	05/27/25 17:11	7440-36-0	
Arsenic	**35.8**	ug/L	1.0	0.13	1	05/15/25 14:40	05/27/25 17:11	7440-38-2	
Cadmium	**0.24J**	ug/L	0.50	0.050	1	05/15/25 14:40	05/27/25 17:11	7440-43-9	
Chromium	**0.62J**	ug/L	1.0	0.30	1	05/15/25 14:40	05/27/25 17:11	7440-47-3	
Selenium	**0.41J**	ug/L	1.0	0.18	1	05/15/25 14:40	05/27/25 17:11	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/15/25 14:40	05/27/25 17:11	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/21/25 14:51	05/22/25 10:44	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**277**	mg/L	20.0	10.5	1		05/15/25 13:43		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**695**	mg/L	13.3	13.3	1		05/12/25 14:57		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:50	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**0.32**	mg/L	0.20	0.041	1		05/13/25 09:40	15438-31-0	H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-3 **Lab ID: 60474363009** Collected: 05/05/25 10:35 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**0.20**	mg/L	0.050	0.016	1		05/09/25 10:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**32.7**	mg/L	20.0	10.5	20		05/29/25 14:25	16887-00-6	
Fluoride	**0.94**	mg/L	0.20	0.12	1		05/29/25 14:13	16984-48-8	
Sulfate	**178**	mg/L	20.0	11.0	20		05/29/25 14:25	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-4 **Lab ID: 60474363010** Collected: 05/05/25 15:30 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**378**	ug/L	5.0	0.64	1	05/16/25 07:20	05/30/25 14:47	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/16/25 07:20	05/30/25 14:47	7440-41-7	
Boron	**1340**	ug/L	100	6.4	1	05/16/25 07:20	05/30/25 14:47	7440-42-8	
Calcium	**109000**	ug/L	200	26.9	1	05/16/25 07:20	05/30/25 14:47	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/16/25 07:20	05/30/25 14:47	7440-48-4	
Iron	**8430**	ug/L	50.0	9.1	1	05/16/25 07:20	05/30/25 14:47	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/16/25 07:20	05/30/25 14:47	7439-92-1	
Lithium	**31.4**	ug/L	10.0	3.7	1	05/16/25 07:20	05/30/25 14:47	7439-93-2	
Magnesium	**22400**	ug/L	50.0	20.1	1	05/16/25 07:20	05/30/25 14:47	7439-95-4	
Manganese	**481**	ug/L	5.0	0.39	1	05/16/25 07:20	05/30/25 14:47	7439-96-5	
Molybdenum	**28.8**	ug/L	20.0	1.0	1	05/16/25 07:20	05/30/25 14:47	7439-98-7	
Potassium	**5360**	ug/L	500	69.7	1	05/16/25 07:20	05/30/25 14:47	7440-09-7	
Sodium	**26300**	ug/L	500	115	1	05/16/25 07:20	05/30/25 14:47	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/15/25 14:40	05/27/25 17:13	7440-36-0	
Arsenic	**8.3**	ug/L	1.0	0.13	1	05/15/25 14:40	05/27/25 17:13	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/15/25 14:40	05/27/25 17:13	7440-43-9	
Chromium	**<0.30**	ug/L	1.0	0.30	1	05/15/25 14:40	05/27/25 17:13	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/15/25 14:40	05/27/25 17:13	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/15/25 14:40	05/27/25 17:13	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/21/25 14:51	05/22/25 10:46	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**428**	mg/L	20.0	10.5	1		05/15/25 13:50		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**480**	mg/L	10.0	10.0	1		05/12/25 14:57		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:50	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**11.6**	mg/L	0.50	0.10	1		05/13/25 09:40	15438-31-0	H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-4 **Lab ID: 60474363010** Collected: 05/05/25 15:30 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**0.018J**	mg/L	0.050	0.016	1		05/09/25 10:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**7.3**	mg/L	1.0	0.53	1		05/29/25 14:49	16887-00-6	
Fluoride	**0.48**	mg/L	0.20	0.12	1		05/29/25 14:49	16984-48-8	
Sulfate	**1.7**	mg/L	1.0	0.55	1		05/29/25 14:49	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-5 **Lab ID: 60474363011** Collected: 05/06/25 10:37 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**339**	ug/L	5.0	0.64	1	05/16/25 07:20	05/30/25 14:48	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/16/25 07:20	05/30/25 14:48	7440-41-7	
Boron	**53.6J**	ug/L	100	6.4	1	05/16/25 07:20	05/30/25 14:48	7440-42-8	
Calcium	**117000**	ug/L	200	26.9	1	05/16/25 07:20	05/30/25 14:48	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/16/25 07:20	05/30/25 14:48	7440-48-4	
Iron	**8110**	ug/L	50.0	9.1	1	05/16/25 07:20	05/30/25 14:48	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/16/25 07:20	05/30/25 14:48	7439-92-1	
Lithium	**7.1J**	ug/L	10.0	3.7	1	05/16/25 07:20	05/30/25 14:48	7439-93-2	
Magnesium	**15000**	ug/L	50.0	20.1	1	05/16/25 07:20	05/30/25 14:48	7439-95-4	
Manganese	**301**	ug/L	5.0	0.39	1	05/16/25 07:20	05/30/25 14:48	7439-96-5	
Molybdenum	**<1.0**	ug/L	20.0	1.0	1	05/16/25 07:20	05/30/25 14:48	7439-98-7	
Potassium	**2060**	ug/L	500	69.7	1	05/16/25 07:20	05/30/25 14:48	7440-09-7	
Sodium	**4390**	ug/L	500	115	1	05/16/25 07:20	05/30/25 14:48	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**0.14J**	ug/L	1.0	0.12	1	05/15/25 14:40	05/27/25 17:16	7440-36-0	
Arsenic	**1.6**	ug/L	1.0	0.13	1	05/15/25 14:40	05/27/25 17:16	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/15/25 14:40	05/27/25 17:16	7440-43-9	
Chromium	**0.44J**	ug/L	1.0	0.30	1	05/15/25 14:40	05/27/25 17:16	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/15/25 14:40	05/27/25 17:16	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/15/25 14:40	05/27/25 17:16	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/21/25 14:51	05/22/25 10:49	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**346**	mg/L	20.0	10.5	1		05/16/25 03:00		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**424**	mg/L	10.0	10.0	1		05/13/25 15:23		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:50	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**11.2**	mg/L	0.50	0.10	1		05/13/25 09:40	15438-31-0	H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-5 **Lab ID: 60474363011** Collected: 05/06/25 10:37 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**0.018J**	mg/L	0.050	0.016	1		05/09/25 10:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**2.4**	mg/L	1.0	0.53	1		05/30/25 09:30	16887-00-6	B
Fluoride	**<0.12**	mg/L	0.20	0.12	1		05/30/25 09:30	16984-48-8	
Sulfate	**25.3**	mg/L	5.0	2.8	5		05/30/25 09:44	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-B1 **Lab ID: 60474363012** Collected: 05/05/25 14:20 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**406**	ug/L	5.0	0.64	1	05/16/25 07:20	05/30/25 14:50	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/16/25 07:20	05/30/25 14:50	7440-41-7	
Boron	**88.8J**	ug/L	100	6.4	1	05/16/25 07:20	05/30/25 14:50	7440-42-8	
Calcium	**139000**	ug/L	200	26.9	1	05/16/25 07:20	05/30/25 14:50	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/16/25 07:20	05/30/25 14:50	7440-48-4	
Iron	**19600**	ug/L	50.0	9.1	1	05/16/25 07:20	05/30/25 14:50	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/16/25 07:20	05/30/25 14:50	7439-92-1	
Lithium	**52.5**	ug/L	10.0	3.7	1	05/16/25 07:20	05/30/25 14:50	7439-93-2	
Magnesium	**44300**	ug/L	50.0	20.1	1	05/16/25 07:20	05/30/25 14:50	7439-95-4	
Manganese	**948**	ug/L	5.0	0.39	1	05/16/25 07:20	05/30/25 14:50	7439-96-5	
Molybdenum	**<1.0**	ug/L	20.0	1.0	1	05/16/25 07:20	05/30/25 14:50	7439-98-7	
Potassium	**8620**	ug/L	500	69.7	1	05/16/25 07:20	05/30/25 14:50	7440-09-7	
Sodium	**28800**	ug/L	500	115	1	05/16/25 07:20	05/30/25 14:50	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/15/25 14:40	05/27/25 17:23	7440-36-0	
Arsenic	**16.6**	ug/L	1.0	0.13	1	05/15/25 14:40	05/27/25 17:23	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/15/25 14:40	05/27/25 17:23	7440-43-9	
Chromium	**0.38J**	ug/L	1.0	0.30	1	05/15/25 14:40	05/27/25 17:23	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/15/25 14:40	05/27/25 17:23	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/15/25 14:40	05/27/25 17:23	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/21/25 14:51	05/22/25 10:51	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**451**	mg/L	20.0	10.5	1		05/15/25 13:57		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**719**	mg/L	13.3	13.3	1		05/12/25 14:57		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:50	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**28.1**	mg/L	2.5	0.51	1		05/13/25 09:40	15438-31-0	H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-B1 **Lab ID: 60474363012** Collected: 05/05/25 14:20 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/09/25 10:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**101**	mg/L	10.0	5.3	10		05/29/25 16:00	16887-00-6	
Fluoride	**0.17J**	mg/L	0.20	0.12	1		05/29/25 15:48	16984-48-8	
Sulfate	**41.2**	mg/L	10.0	5.5	10		05/29/25 16:00	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-FB-1 **Lab ID: 60474363013** Collected: 05/05/25 15:20 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**<0.64**	ug/L	5.0	0.64	1	05/16/25 07:20	05/30/25 14:52	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/16/25 07:20	05/30/25 14:52	7440-41-7	
Boron	**<6.4**	ug/L	100	6.4	1	05/16/25 07:20	05/30/25 14:52	7440-42-8	
Calcium	**<26.9**	ug/L	200	26.9	1	05/16/25 07:20	05/30/25 14:52	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/16/25 07:20	05/30/25 14:52	7440-48-4	
Iron	**<9.1**	ug/L	50.0	9.1	1	05/16/25 07:20	05/30/25 14:52	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/16/25 07:20	05/30/25 14:52	7439-92-1	
Lithium	**<3.7**	ug/L	10.0	3.7	1	05/16/25 07:20	05/30/25 14:52	7439-93-2	
Magnesium	**<20.1**	ug/L	50.0	20.1	1	05/16/25 07:20	05/30/25 14:52	7439-95-4	
Manganese	**1.8J**	ug/L	5.0	0.39	1	05/16/25 07:20	05/30/25 14:52	7439-96-5	B
Molybdenum	**<1.0**	ug/L	20.0	1.0	1	05/16/25 07:20	05/30/25 14:52	7439-98-7	
Potassium	**72.6J**	ug/L	500	69.7	1	05/16/25 07:20	05/30/25 14:52	7440-09-7	
Sodium	**<115**	ug/L	500	115	1	05/16/25 07:20	05/30/25 14:52	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/15/25 14:40	05/27/25 17:25	7440-36-0	
Arsenic	**<0.13**	ug/L	1.0	0.13	1	05/15/25 14:40	05/27/25 17:25	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/15/25 14:40	05/27/25 17:25	7440-43-9	
Chromium	**0.45J**	ug/L	1.0	0.30	1	05/15/25 14:40	05/27/25 17:25	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/15/25 14:40	05/27/25 17:25	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/15/25 14:40	05/27/25 17:25	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/21/25 14:51	05/22/25 10:53	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**<10.5**	mg/L	20.0	10.5	1		05/15/25 14:00		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**<5.0**	mg/L	5.0	5.0	1		05/12/25 14:57		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:50	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**<0.041**	mg/L	0.20	0.041	1		05/13/25 09:40	15438-31-0	H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-FB-1 **Lab ID: 60474363013** Collected: 05/05/25 15:20 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/09/25 10:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**<0.53**	mg/L	1.0	0.53	1		05/29/25 15:24	16887-00-6	
Fluoride	**<0.12**	mg/L	0.20	0.12	1		05/29/25 15:24	16984-48-8	
Sulfate	**<0.55**	mg/L	1.0	0.55	1		05/29/25 15:24	14808-79-8	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 935431
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363001, 60474363002, 60474363003, 60474363004, 60474363005, 60474363006

METHOD BLANK: 3707835 Matrix: Water
Associated Lab Samples: 60474363001, 60474363002, 60474363003, 60474363004, 60474363005, 60474363006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	<0.096	0.20	0.096	05/19/25 11:50	

LABORATORY CONTROL SAMPLE: 3707836

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.1	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3707837 3707838

Parameter	Units	60473870005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	<0.096	5	5	5.0	4.9	99	98	75-125	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3707839 3707840

Parameter	Units	60474363004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	<0.096	5	5	5.0	5.0	99	100	75-125	1	20	

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

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 935965
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363009, 60474363010, 60474363011, 60474363012, 60474363013

METHOD BLANK: 3710062 Matrix: Water
Associated Lab Samples: 60474363009, 60474363010, 60474363011, 60474363012, 60474363013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	<0.096	0.20	0.096	05/22/25 10:28	

LABORATORY CONTROL SAMPLE: 3710063

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.1	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3710064 3710065

Parameter	Units	60474364021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	<0.096	5	5	4.9	4.9	97	99	75-125	1	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 934060
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363001, 60474363002, 60474363003, 60474363004, 60474363005, 60474363006

METHOD BLANK: 3700759 Matrix: Water
Associated Lab Samples: 60474363001, 60474363002, 60474363003, 60474363004, 60474363005, 60474363006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	<0.64	5.0	0.64	05/30/25 15:58	
Beryllium	ug/L	<0.12	1.0	0.12	05/30/25 15:58	
Boron	ug/L	<6.4	100	6.4	05/30/25 15:58	
Calcium	ug/L	<26.9	200	26.9	05/30/25 15:58	
Cobalt	ug/L	<1.2	5.0	1.2	05/30/25 15:58	
Iron	ug/L	<9.1	50.0	9.1	05/30/25 15:58	
Lead	ug/L	<3.8	10.0	3.8	05/30/25 15:58	
Lithium	ug/L	<3.7	10.0	3.7	05/30/25 15:58	
Magnesium	ug/L	<20.1	50.0	20.1	05/30/25 15:58	
Manganese	ug/L	<0.39	5.0	0.39	05/30/25 15:58	
Molybdenum	ug/L	<1.0	20.0	1.0	05/30/25 15:58	
Potassium	ug/L	<69.7	500	69.7	05/30/25 15:58	
Sodium	ug/L	<115	500	115	05/30/25 15:58	

LABORATORY CONTROL SAMPLE: 3700760

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	1000	1010	101	85-115	
Beryllium	ug/L	1000	1020	102	85-115	
Boron	ug/L	1000	965	97	85-115	
Calcium	ug/L	10000	10400	104	85-115	
Cobalt	ug/L	1000	1030	103	85-115	
Iron	ug/L	10000	10400	104	85-115	
Lead	ug/L	1000	1030	103	85-115	
Lithium	ug/L	1000	1000	100	85-115	
Magnesium	ug/L	10000	10300	103	85-115	
Manganese	ug/L	1000	1020	102	85-115	
Molybdenum	ug/L	1000	1020	102	85-115	
Potassium	ug/L	10000	10100	101	85-115	
Sodium	ug/L	10000	10400	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3700761 3700762

Parameter	Units	60474363004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	ug/L	308	1000	1000	1270	1290	96	99	70-130	2	20	
Beryllium	ug/L	<0.12	1000	1000	999	1000	100	100	70-130	0	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3700761 3700762

Parameter	Units	60474363004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	ug/L	5110	1000	1000	5850	5980	74	87	70-130	2	20	
Calcium	ug/L	85200	10000	10000	90800	93300	57	81	70-130	3	20	M1
Cobalt	ug/L	<1.2	1000	1000	971	972	97	97	70-130	0	20	
Iron	ug/L	18900	10000	10000	27600	28400	86	95	70-130	3	20	
Lead	ug/L	<3.8	1000	1000	964	975	96	98	70-130	1	20	
Lithium	ug/L	26.3	1000	1000	992	1010	97	98	70-130	2	20	
Magnesium	ug/L	24600	10000	10000	33300	34000	87	94	70-130	2	20	
Manganese	ug/L	349	1000	1000	1310	1310	96	97	70-130	0	20	
Molybdenum	ug/L	32.2	1000	1000	1020	1030	99	99	70-130	1	20	
Potassium	ug/L	5580	10000	10000	15300	15400	97	98	70-130	1	20	
Sodium	ug/L	16400	10000	10000	25500	25900	91	95	70-130	2	20	

MATRIX SPIKE SAMPLE: 3700763

Parameter	Units	60474364006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	275	1000	1280	100	70-130	
Beryllium	ug/L	<0.12	1000	1030	103	70-130	
Boron	ug/L	149	1000	1110	96	70-130	
Calcium	ug/L	124000	10000	131000	77	70-130	
Cobalt	ug/L	2.8J	1000	991	99	70-130	
Iron	ug/L	4950	10000	15100	101	70-130	
Lead	ug/L	<3.8	1000	996	100	70-130	
Lithium	ug/L	25.9	1000	1030	100	70-130	
Magnesium	ug/L	20000	10000	29700	97	70-130	
Manganese	ug/L	1330	1000	2250	92	70-130	
Molybdenum	ug/L	3.0J	1000	1010	101	70-130	
Potassium	ug/L	4730	10000	14800	100	70-130	
Sodium	ug/L	5800	10000	15900	101	70-130	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 935319
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363009, 60474363010, 60474363011, 60474363012, 60474363013

METHOD BLANK: 3707156 Matrix: Water
Associated Lab Samples: 60474363009, 60474363010, 60474363011, 60474363012, 60474363013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	<0.64	5.0	0.64	05/30/25 14:41	
Beryllium	ug/L	<0.12	1.0	0.12	05/30/25 14:41	
Boron	ug/L	<6.4	100	6.4	05/30/25 14:41	
Calcium	ug/L	<26.9	200	26.9	05/30/25 14:41	
Cobalt	ug/L	<1.2	5.0	1.2	05/30/25 14:41	
Iron	ug/L	<9.1	50.0	9.1	05/30/25 14:41	
Lead	ug/L	<3.8	10.0	3.8	05/30/25 14:41	
Lithium	ug/L	<3.7	10.0	3.7	05/30/25 14:41	
Magnesium	ug/L	<20.1	50.0	20.1	05/30/25 14:41	
Manganese	ug/L	1.8J	5.0	0.39	05/30/25 14:41	
Molybdenum	ug/L	<1.0	20.0	1.0	05/30/25 14:41	
Potassium	ug/L	<69.7	500	69.7	05/30/25 14:41	
Sodium	ug/L	<115	500	115	05/30/25 14:41	

LABORATORY CONTROL SAMPLE: 3707157

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	1000	980	98	85-115	
Beryllium	ug/L	1000	984	98	85-115	
Boron	ug/L	1000	929	93	85-115	
Calcium	ug/L	10000	10000	100	85-115	
Cobalt	ug/L	1000	984	98	85-115	
Iron	ug/L	10000	9880	99	85-115	
Lead	ug/L	1000	980	98	85-115	
Lithium	ug/L	1000	976	98	85-115	
Magnesium	ug/L	10000	9920	99	85-115	
Manganese	ug/L	1000	980	98	85-115	
Molybdenum	ug/L	1000	977	98	85-115	
Potassium	ug/L	10000	9770	98	85-115	
Sodium	ug/L	10000	10100	101	85-115	

MATRIX SPIKE SAMPLE: 3707158

Parameter	Units	60474364019 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	124	1000	1060	94	70-130	
Beryllium	ug/L	<0.12	1000	942	94	70-130	
Boron	ug/L	482	1000	1380	89	70-130	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

MATRIX SPIKE SAMPLE: 3707158

Parameter	Units	60474364019 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Calcium	ug/L	175000	10000	183000	76	70-130	
Cobalt	ug/L	<1.2	1000	905	90	70-130	
Iron	ug/L	418	10000	9860	94	70-130	
Lead	ug/L	<3.8	1000	904	90	70-130	
Lithium	ug/L	49.1	1000	973	92	70-130	
Magnesium	ug/L	39900	10000	48900	90	70-130	
Manganese	ug/L	343	1000	1240	90	70-130	
Molybdenum	ug/L	7.8J	1000	945	94	70-130	
Potassium	ug/L	6710	10000	16000	93	70-130	
Sodium	ug/L	51100	10000	59700	87	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3707159 3707160

Parameter	Units	60474364021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	ug/L	109	1000	2000	2000	1040	189	46	70-130	64	20	R1
Beryllium	ug/L	<0.12	1000	2000	1910	948	191	47	70-130	67	20	R1
Boron	ug/L	735	1000	2000	2560	1600	182	43	70-130	46	20	R1
Calcium	ug/L	155000	10000	20000	168000	157000	129	7	70-130	7	20	M1
Cobalt	ug/L	<1.2	1000	2000	1880	919	187	46	70-130	68	20	R1
Iron	ug/L	1220	10000	20000	20400	10600	191	47	70-130	63	20	R1
Lead	ug/L	<3.8	1000	2000	1870	915	187	46	70-130	69	20	R1
Lithium	ug/L	38.4	1000	2000	1930	956	190	46	70-130	68	20	R1
Magnesium	ug/L	25800	10000	20000	43800	34000	180	41	70-130	25	20	R1
Manganese	ug/L	338	1000	2000	2190	1260	185	46	70-130	54	20	R1
Molybdenum	ug/L	3.7J	1000	2000	1940	954	193	48	70-130	68	20	R1
Potassium	ug/L	6820	10000	20000	26100	15900	193	46	70-130	48	20	R1
Sodium	ug/L	58800	10000	20000	76000	64900	173	31	70-130	16	20	M1

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 934061
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363001, 60474363002, 60474363003, 60474363004, 60474363005, 60474363006

METHOD BLANK: 3700765 Matrix: Water
Associated Lab Samples: 60474363001, 60474363002, 60474363003, 60474363004, 60474363005, 60474363006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	<0.12	1.0	0.12	05/27/25 15:37	
Arsenic	ug/L	<0.13	1.0	0.13	05/27/25 15:37	
Cadmium	ug/L	<0.050	0.50	0.050	05/27/25 15:37	
Chromium	ug/L	<0.30	1.0	0.30	05/27/25 15:37	
Selenium	ug/L	<0.18	1.0	0.18	05/27/25 15:37	
Thallium	ug/L	<0.14	1.0	0.14	05/27/25 15:37	

LABORATORY CONTROL SAMPLE: 3700766

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	40	37.9	95	85-115	
Arsenic	ug/L	40	39.2	98	85-115	
Cadmium	ug/L	40	39.2	98	85-115	
Chromium	ug/L	40	39.4	99	85-115	
Selenium	ug/L	40	40.0	100	85-115	
Thallium	ug/L	40	37.4	94	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3700767 3700768

Parameter	Units	60474363004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	<0.12	40	40	40.3	39.0	101	98	70-130	3	20	
Arsenic	ug/L	115	40	40	159	156	109	100	70-130	2	20	
Cadmium	ug/L	<0.050	40	40	40.0	38.7	100	97	70-130	3	20	
Chromium	ug/L	<0.30	40	40	41.7	40.6	104	101	70-130	3	20	
Selenium	ug/L	<0.18	40	40	39.8	39.0	99	97	70-130	2	20	
Thallium	ug/L	<0.14	40	40	40.8	39.8	102	99	70-130	3	20	

MATRIX SPIKE SAMPLE: 3700769

Parameter	Units	60474364005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	<0.12	40	39.4	99	70-130	
Arsenic	ug/L	0.95J	40	41.1	100	70-130	
Cadmium	ug/L	0.21J	40	39.0	97	70-130	
Chromium	ug/L	0.59J	40	38.4	95	70-130	
Selenium	ug/L	0.23J	40	38.1	95	70-130	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

MATRIX SPIKE SAMPLE: 3700769

Parameter	Units	60474364005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Thallium	ug/L	<0.14	40	40.2	101	70-130	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 934996
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363009, 60474363010, 60474363011, 60474363012, 60474363013

METHOD BLANK: 3705537 Matrix: Water
Associated Lab Samples: 60474363009, 60474363010, 60474363011, 60474363012, 60474363013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	<0.12	1.0	0.12	05/27/25 16:54	
Arsenic	ug/L	<0.13	1.0	0.13	05/27/25 16:54	
Cadmium	ug/L	<0.050	0.50	0.050	05/27/25 16:54	
Chromium	ug/L	<0.30	1.0	0.30	05/27/25 16:54	
Selenium	ug/L	<0.18	1.0	0.18	05/27/25 16:54	
Thallium	ug/L	<0.14	1.0	0.14	05/27/25 16:54	

LABORATORY CONTROL SAMPLE: 3705538

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	40	37.9	95	85-115	
Arsenic	ug/L	40	38.5	96	85-115	
Cadmium	ug/L	40	38.9	97	85-115	
Chromium	ug/L	40	38.9	97	85-115	
Selenium	ug/L	40	38.8	97	85-115	
Thallium	ug/L	40	37.4	94	85-115	

MATRIX SPIKE SAMPLE: 3705541

Parameter	Units	60474364020 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	<0.12	40	38.4	96	70-130	
Arsenic	ug/L	14.7	40	53.7	98	70-130	
Cadmium	ug/L	<0.050	40	36.9	92	70-130	
Chromium	ug/L	0.95J	40	37.0	90	70-130	
Selenium	ug/L	0.30J	40	35.5	88	70-130	
Thallium	ug/L	<0.14	40	39.9	100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3705553 3705554

Parameter	Units	60474364021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	<0.12	40	40	38.1	38.2	95	95	70-130	0	20	
Arsenic	ug/L	1.4	40	40	40.6	40.2	98	97	70-130	1	20	
Cadmium	ug/L	<0.050	40	40	37.7	37.5	94	94	70-130	1	20	
Chromium	ug/L	0.62J	40	40	39.9	39.7	98	98	70-130	0	20	
Selenium	ug/L	0.18J	40	40	37.6	36.5	94	91	70-130	3	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3705553 3705554

Parameter	Units	60474364021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Thallium	ug/L	<0.14	40	40	39.9	39.3	100	98	70-130	2	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 935151
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363003, 60474363004, 60474363005, 60474363006

METHOD BLANK: 3706277 Matrix: Water
Associated Lab Samples: 60474363003, 60474363004, 60474363005, 60474363006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	05/14/25 22:09	

LABORATORY CONTROL SAMPLE: 3706278

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	518	104	90-110	

SAMPLE DUPLICATE: 3706279

Parameter	Units	60474277002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	<10.5		10	

SAMPLE DUPLICATE: 3706280

Parameter	Units	60474363004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	208	208	0	10	

SAMPLE DUPLICATE: 3706281

Parameter	Units	60474363005 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	338	353	4	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 935223
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363001, 60474363002

METHOD BLANK: 3706613 Matrix: Water
Associated Lab Samples: 60474363001, 60474363002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	12.3J	20.0	10.5	05/15/25 15:28	

LABORATORY CONTROL SAMPLE: 3706614

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	535	107	90-110	

SAMPLE DUPLICATE: 3706615

Parameter	Units	60474341004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	605	583	4	10	

SAMPLE DUPLICATE: 3706616

Parameter	Units	60474364005 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	158	158	0	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 935224
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363009, 60474363010, 60474363012, 60474363013

METHOD BLANK: 3706629 Matrix: Water
Associated Lab Samples: 60474363009, 60474363010, 60474363012, 60474363013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	05/15/25 12:21	

LABORATORY CONTROL SAMPLE: 3706630

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	515	103	90-110	

SAMPLE DUPLICATE: 3706631

Parameter	Units	60474430005 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	320	319	0	10	

SAMPLE DUPLICATE: 3706632

Parameter	Units	60474363013 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	<10.5		10	

SAMPLE DUPLICATE: 3706633

Parameter	Units	60474364021 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	361	356	2	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 935327
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60474363011

METHOD BLANK: 3707248 Matrix: Water
Associated Lab Samples: 60474363011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	05/15/25 23:42	

LABORATORY CONTROL SAMPLE: 3707249

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	525	105	90-110	

SAMPLE DUPLICATE: 3707250

Parameter	Units	60474591001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	248	243	2	10	

SAMPLE DUPLICATE: 3707251

Parameter	Units	60474591007 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	377	373	1	10	

SAMPLE DUPLICATE: 3707252

Parameter	Units	60474591012 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	272	269	1	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 934270
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363003, 60474363004, 60474363005, 60474363006

METHOD BLANK: 3701868 Matrix: Water
Associated Lab Samples: 60474363003, 60474363004, 60474363005, 60474363006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	05/07/25 15:14	

LABORATORY CONTROL SAMPLE: 3701869

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

SAMPLE DUPLICATE: 3701870

Parameter	Units	60474314010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	679	687	1	10	

SAMPLE DUPLICATE: 3701871

Parameter	Units	60474363004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	454	452	0	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 934416
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363001, 60474363002

METHOD BLANK: 3702520 Matrix: Water
Associated Lab Samples: 60474363001, 60474363002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	05/08/25 17:15	

LABORATORY CONTROL SAMPLE: 3702521

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	1020	102	80-120	

SAMPLE DUPLICATE: 3702522

Parameter	Units	60474303001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	3250	3180	2	10	

SAMPLE DUPLICATE: 3702523

Parameter	Units	60474364012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	447	442	1	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 934703
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363009, 60474363010, 60474363012, 60474363013

METHOD BLANK: 3704197 Matrix: Water
Associated Lab Samples: 60474363009, 60474363010, 60474363012, 60474363013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	05/12/25 14:54	

LABORATORY CONTROL SAMPLE: 3704198

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	1020	102	80-120	

SAMPLE DUPLICATE: 3704199

Parameter	Units	60474379001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	793	785	1	10	

SAMPLE DUPLICATE: 3704200

Parameter	Units	60474448009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2060	2070	0	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 934869
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363011

METHOD BLANK: 3704937 Matrix: Water
Associated Lab Samples: 60474363011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	05/13/25 15:23	

LABORATORY CONTROL SAMPLE: 3704938

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

SAMPLE DUPLICATE: 3704939

Parameter	Units	60474415002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	7220	7100	2	10	

SAMPLE DUPLICATE: 3704940

Parameter	Units	60474705003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	3200	3170	1	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 934114
QC Batch Method: SM 3500-Fe B#4
Analysis Method: SM 3500-Fe B#4
Analysis Description: Iron, Ferrous
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363001, 60474363002, 60474363003, 60474363004, 60474363005, 60474363006

METHOD BLANK: 3700887 Matrix: Water
Associated Lab Samples: 60474363001, 60474363002, 60474363003, 60474363004, 60474363005, 60474363006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron, Ferrous	mg/L	<0.041	0.20	0.041	05/06/25 14:33	H6

LABORATORY CONTROL SAMPLE: 3700888

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Ferrous	mg/L	2	2.0	101	90-110	H6

SAMPLE DUPLICATE: 3700889

Parameter	Units	60474363006 Result	Dup Result	RPD	Max RPD	Qualifiers
Iron, Ferrous	mg/L	0.53	0.55	3	20	H3,H6

SAMPLE DUPLICATE: 3700890

Parameter	Units	60474363004 Result	Dup Result	RPD	Max RPD	Qualifiers
Iron, Ferrous	mg/L	26.5	26.6	1	20	H3,H6

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 934432
QC Batch Method: SM 3500-Fe B#4
Analysis Method: SM 3500-Fe B#4
Analysis Description: Iron, Ferrous
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363009, 60474363010, 60474363011, 60474363012, 60474363013

METHOD BLANK: 3702692 Matrix: Water
Associated Lab Samples: 60474363009, 60474363010, 60474363011, 60474363012, 60474363013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron, Ferrous	mg/L	<0.041	0.20	0.041	05/13/25 09:40	H6

LABORATORY CONTROL SAMPLE: 3702693

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Ferrous	mg/L	2	2.0	102	90-110	H6

SAMPLE DUPLICATE: 3702694

Parameter	Units	60474364022 Result	Dup Result	RPD	Max RPD	Qualifiers
Iron, Ferrous	mg/L	5.4	5.4	0	20	H6

SAMPLE DUPLICATE: 3702695

Parameter	Units	60474364021 Result	Dup Result	RPD	Max RPD	Qualifiers
Iron, Ferrous	mg/L	0.75	0.77	2	20	H6

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 934115
QC Batch Method: SM 4500-S-2 D
Analysis Method: SM 4500-S-2 D
Analysis Description: 4500S2D Sulfide, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363001, 60474363002, 60474363003, 60474363004, 60474363005, 60474363006

METHOD BLANK: 3700891 Matrix: Water
Associated Lab Samples: 60474363001, 60474363002, 60474363003, 60474363004, 60474363005, 60474363006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	<0.016	0.050	0.016	05/06/25 09:28	

LABORATORY CONTROL SAMPLE: 3700892

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.50	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3700894 3700895

Parameter	Units	60474359001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide, Total	mg/L	ND	0.5	0.5	0.49	0.50	98	98	75-125	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3700898 3700899

Parameter	Units	60474363004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide, Total	mg/L	<0.016	0.5	0.5	0.49	0.48	98	96	75-125	2	20	

SAMPLE DUPLICATE: 3700893

Parameter	Units	60474359001 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	<0.016		20	

SAMPLE DUPLICATE: 3700896

Parameter	Units	60474363003 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	0.026J	0.028J		20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

SAMPLE DUPLICATE: 3700897

Parameter	Units	60474363004 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	<0.016	<0.016		20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 934433
QC Batch Method: SM 4500-S-2 D
Analysis Method: SM 4500-S-2 D
Analysis Description: 4500S2D Sulfide, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363009, 60474363010, 60474363012, 60474363013

METHOD BLANK: 3702698 Matrix: Water
Associated Lab Samples: 60474363009, 60474363010, 60474363012, 60474363013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	<0.016	0.050	0.016	05/09/25 10:49	

LABORATORY CONTROL SAMPLE: 3702699

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.51	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3702701 3702702

Parameter	Units	60474430001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide, Total	mg/L	0.13	0.5	0.5	0.50	0.50	74	74	75-125	1	20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3702705 3702706

Parameter	Units	60474364021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide, Total	mg/L	<0.016	0.5	0.5	0.53	0.53	106	106	75-125	0	20	

SAMPLE DUPLICATE: 3702700

Parameter	Units	60474430001 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	0.13	0.13	1	20	

SAMPLE DUPLICATE: 3702703

Parameter	Units	60474430002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	0.060	0.057	5	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

SAMPLE DUPLICATE: 3702704

Parameter	Units	60474364021 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	<0.016	<0.016		20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 934561
QC Batch Method: SM 4500-S-2 D
Analysis Method: SM 4500-S-2 D
Analysis Description: 4500S2D Sulfide, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363011

METHOD BLANK: 3703344 Matrix: Water
Associated Lab Samples: 60474363011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	<0.016	0.050	0.016	05/09/25 10:49	

LABORATORY CONTROL SAMPLE: 3703345

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.51	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3703347 3703348

Parameter	Units	60474770005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide, Total	mg/L	ND	0.5	0.5	0.23	0.24	38	41	75-125	8	20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3703351 3703352

Parameter	Units	60474657014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide, Total	mg/L	0.16	0.5	0.5	0.47	0.46	61	59	75-125	2	20	M1

SAMPLE DUPLICATE: 3703346

Parameter	Units	60474770005 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	0.035J		20	

SAMPLE DUPLICATE: 3703349

Parameter	Units	60474770006 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	0.61	0.62	0	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

SAMPLE DUPLICATE: 3703350

Parameter	Units	60474657014 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	0.16	0.17	5	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 936330
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363001, 60474363002, 60474363003, 60474363004, 60474363005, 60474363006

METHOD BLANK: 3711724 Matrix: Water
Associated Lab Samples: 60474363001, 60474363002, 60474363003, 60474363004, 60474363005, 60474363006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.53	1.0	0.53	05/27/25 11:31	
Fluoride	mg/L	<0.12	0.20	0.12	05/27/25 11:31	
Sulfate	mg/L	<0.55	1.0	0.55	05/27/25 11:31	

LABORATORY CONTROL SAMPLE: 3711725

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.1	102	90-110	
Fluoride	mg/L	2.5	2.4	98	90-110	
Sulfate	mg/L	5	5.2	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3711726 3711727

Parameter	Units	60474363004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	20.8	25	25	45.7	44.8	99	96	80-120	2	15	
Fluoride	mg/L	0.26	2.5	2.5	2.8	2.6	100	95	80-120	4	15	
Sulfate	mg/L	115	100	100	218	226	103	111	80-120	4	15	

SAMPLE DUPLICATE: 3711728

Parameter	Units	60474363004 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	20.8	20.1	3	15	
Fluoride	mg/L	0.26	0.31	17	15	D6
Sulfate	mg/L	115	112	3	15	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 936701
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474363009, 60474363010, 60474363012, 60474363013

METHOD BLANK: 3713313 Matrix: Water
Associated Lab Samples: 60474363009, 60474363010, 60474363012, 60474363013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.53	1.0	0.53	05/29/25 10:40	
Fluoride	mg/L	<0.12	0.20	0.12	05/29/25 10:40	
Sulfate	mg/L	<0.55	1.0	0.55	05/29/25 10:40	

LABORATORY CONTROL SAMPLE: 3713314

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	96	90-110	
Fluoride	mg/L	2.5	2.5	98	90-110	
Sulfate	mg/L	5	5.0	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3713317 3713318

Parameter	Units	60474364021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	50.8	50	50	97.4	96.8	93	92	80-120	1	15	
Fluoride	mg/L	0.37	2.5	2.5	2.8	2.4	95	81	80-120	14	15	
Sulfate	mg/L	189	50	50	235	234	93	91	80-120	0	15	E

MATRIX SPIKE SAMPLE: 3713320

Parameter	Units	60474363013 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	<0.53	5	4.8	96	80-120	
Fluoride	mg/L	<0.12	2.5	2.4	98	80-120	
Sulfate	mg/L	<0.55	5	5.0	95	80-120	

SAMPLE DUPLICATE: 3713319

Parameter	Units	60474364021 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	50.8	49.1	3	15	
Fluoride	mg/L	0.37	0.31	18	15	D6
Sulfate	mg/L	189	182	4	15	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 936862
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60474363011

METHOD BLANK: 3714049 Matrix: Water
Associated Lab Samples: 60474363011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.58J	1.0	0.53	05/30/25 06:44	
Fluoride	mg/L	<0.12	0.20	0.12	05/30/25 06:44	
Sulfate	mg/L	<0.55	1.0	0.55	05/30/25 06:44	

LABORATORY CONTROL SAMPLE: 3714050

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	96	90-110	
Fluoride	mg/L	2.5	2.6	103	90-110	
Sulfate	mg/L	5	4.7	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3714051 3714052

Parameter	Units	60474530001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	119	250	250	417	380	119	104	80-120	9	15	
Fluoride	mg/L	ND	125	125	172	150	138	120	80-120	14	15	M1
Sulfate	mg/L	93.4	250	250	398	350	122	103	80-120	13	15	M1

MATRIX SPIKE SAMPLE: 3714053

Parameter	Units	60474530002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	144	250	358	86	80-120	
Fluoride	mg/L	ND	125	132	106	80-120	
Sulfate	mg/L	72.1	250	291	88	80-120	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-1 **Lab ID: 60474363001** Collected: 05/02/25 13:55 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**0.298 ± 0.929 (1.66) C:NA T:92%**	pCi/L	05/21/25 13:43	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**0.426 ± 0.407 (0.833) C:74% T:85%**	pCi/L	05/19/25 15:06	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-2 **Lab ID: 60474363002** Collected: 05/02/25 12:30 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**0.361 ± 0.728 (1.28) C:NA T:98%**	pCi/L	05/21/25 13:55	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**0.925 ± 0.728 (1.42) C:68% T:71%**	pCi/L	05/19/25 18:57	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-6 **Lab ID: 60474363003** Collected: 05/01/25 16:05 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**0.000 ± 0.461 (0.932) C:NA T:93%**	pCi/L	05/21/25 13:55	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**0.461 ± 0.511 (1.06) C:71% T:91%**	pCi/L	05/19/25 18:57	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-7(r) **Lab ID: 60474363004** Collected: 05/01/25 14:40 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**0.193 ± 0.329 (0.581) C:NA T:92%**	pCi/L	05/21/25 13:55	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**0.491 ± 0.544 (1.13) C:73% T:86%**	pCi/L	05/19/25 18:57	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-B2 **Lab ID: 60474363005** Collected: 05/01/25 11:03 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**0.209 ± 0.709 (1.31) C:NA T:90%**	pCi/L	05/22/25 13:41	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**1.82 ± 0.625 (0.928) C:79% T:87%**	pCi/L	05/21/25 11:47	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-DUP-1 **Lab ID: 60474363006** Collected: 05/01/25 08:00 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**0.000 ± 0.635 (1.24) C:NA T:90%**	pCi/L	05/22/25 13:41	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**0.703 ± 0.458 (0.886) C:76% T:92%**	pCi/L	05/21/25 11:47	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MS-1 **Lab ID: 60474363007** Collected: 05/01/25 14:40 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**71.98 %REC ± NA (NA) C:NA T:NA**	pCi/L	05/21/25 13:55	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**65.29 %REC ± NA (NA) C:NA T:NA**	pCi/L	05/19/25 18:57	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MSD-1 **Lab ID: 60474363008** Collected: 05/01/25 14:40 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**92.00 %REC 24.41RPD ± NA (NA) C:NA T:NA**	pCi/L	05/21/25 13:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**84.67 %REC 25.85RPD ± NA (NA) C:NA T:NA**	pCi/L	05/19/25 18:57	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-3 **Lab ID: 60474363009** Collected: 05/05/25 10:35 Received: 05/07/25 06:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**-0.196 ± 0.463 (1.04) C:NA T:90%**	pCi/L	05/22/25 13:41	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**0.583 ± 0.547 (1.13) C:76% T:72%**	pCi/L	05/21/25 11:47	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-4 **Lab ID: 60474363010** Collected: 05/05/25 15:30 Received: 05/07/25 06:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**0.000 ± 0.676 (1.30) C:NA T:92%**	pCi/L	05/22/25 13:41	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**1.97 ± 0.654 (0.920) C:78% T:86%**	pCi/L	05/21/25 11:47	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-5 **Lab ID: 60474363011** Collected: 05/06/25 10:37 Received: 05/07/25 06:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.493 ± 0.796 (1.37) C:NA T:90%**	pCi/L	05/22/25 13:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.881 ± 0.472 (0.855) C:77% T:86%**	pCi/L	05/21/25 11:47	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-MW-B1 **Lab ID: 60474363012** Collected: 05/05/25 14:20 Received: 05/07/25 06:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**-0.216 ± 0.707 (1.45) C:NA T:88%**	pCi/L	05/22/25 13:41	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**1.37 ± 0.490 (0.720) C:76% T:93%**	pCi/L	05/21/25 11:47	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60474363

Sample: R-FB-1 **Lab ID: 60474363013** Collected: 05/05/25 15:20 Received: 05/07/25 06:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**0.000 ± 0.571 (1.13) C:NA T:91%**	pCi/L	05/22/25 13:41	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**0.894 ± 0.461 (0.827) C:74% T:91%**	pCi/L	05/21/25 11:47	15262-20-1	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 745059
QC Batch Method: EPA 904.0
Analysis Method: EPA 904.0
Analysis Description: 904.0 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 60474363001, 60474363002, 60474363003, 60474363004, 60474363007, 60474363008

METHOD BLANK: 3627338 Matrix: Water
Associated Lab Samples: 60474363001, 60474363002, 60474363003, 60474363004, 60474363007, 60474363008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.473 ± 0.367 (0.711) C:69% T:89%	pCi/L	05/19/25 15:04	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 745801
QC Batch Method: EPA 903.1
Analysis Method: EPA 903.1
Analysis Description: 903.1 Radium-226
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 60474363005, 60474363006, 60474363009, 60474363010, 60474363011, 60474363012, 60474363013

METHOD BLANK: 3631584 Matrix: Water
Associated Lab Samples: 60474363005, 60474363006, 60474363009, 60474363010, 60474363011, 60474363012, 60474363013

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.313 ± 0.356 (0.561) C:NA T:92%	pCi/L	05/22/25 13:41	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 745057
QC Batch Method: EPA 903.1
Analysis Method: EPA 903.1
Analysis Description: 903.1 Radium-226
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 60474363001, 60474363002, 60474363003, 60474363004, 60474363007, 60474363008

METHOD BLANK: 3627337 Matrix: Water
Associated Lab Samples: 60474363001, 60474363002, 60474363003, 60474363004, 60474363007, 60474363008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0389 ± 0.178 (0.361) C:NA T:105%	pCi/L	05/21/25 13:30	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60474363

QC Batch: 745803
QC Batch Method: EPA 904.0
Analysis Method: EPA 904.0
Analysis Description: 904.0 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 60474363005, 60474363006, 60474363009, 60474363010, 60474363011, 60474363012, 60474363013

METHOD BLANK: 3631586 Matrix: Water
Associated Lab Samples: 60474363005, 60474363006, 60474363009, 60474363010, 60474363011, 60474363012, 60474363013

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.332 ± 0.300 (0.605) C:79% T:93%	pCi/L	05/21/25 11:46	

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QUALIFIERS

Project: AMEREN RCPA
Pace Project No.: 60474363

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
H1	Analysis conducted outside the EPA method holding time.
H3	Sample was received or analysis requested beyond the recognized method holding time.
H6	Analysis initiated outside of the 15 minute EPA required holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA
Pace Project No.: 60474363

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60474363001	**R-MW-1**	EPA 200.7	934060	EPA 200.7	934137
60474363002	**R-MW-2**	EPA 200.7	934060	EPA 200.7	934137
60474363003	**R-MW-6**	EPA 200.7	934060	EPA 200.7	934137
60474363004	**R-MW-7(r)**	EPA 200.7	934060	EPA 200.7	934137
60474363005	**R-MW-B2**	EPA 200.7	934060	EPA 200.7	934137
60474363006	**R-DUP-1**	EPA 200.7	934060	EPA 200.7	934137
60474363009	**R-MW-3**	EPA 200.7	935319	EPA 200.7	935342
60474363010	**R-MW-4**	EPA 200.7	935319	EPA 200.7	935342
60474363011	**R-MW-5**	EPA 200.7	935319	EPA 200.7	935342
60474363012	**R-MW-B1**	EPA 200.7	935319	EPA 200.7	935342
60474363013	**R-FB-1**	EPA 200.7	935319	EPA 200.7	935342
60474363001	**R-MW-1**	EPA 200.8	934061	EPA 200.8	934136
60474363002	**R-MW-2**	EPA 200.8	934061	EPA 200.8	934136
60474363003	**R-MW-6**	EPA 200.8	934061	EPA 200.8	934136
60474363004	**R-MW-7(r)**	EPA 200.8	934061	EPA 200.8	934136
60474363005	**R-MW-B2**	EPA 200.8	934061	EPA 200.8	934136
60474363006	**R-DUP-1**	EPA 200.8	934061	EPA 200.8	934136
60474363009	**R-MW-3**	EPA 200.8	934996	EPA 200.8	935288
60474363010	**R-MW-4**	EPA 200.8	934996	EPA 200.8	935288
60474363011	**R-MW-5**	EPA 200.8	934996	EPA 200.8	935288
60474363012	**R-MW-B1**	EPA 200.8	934996	EPA 200.8	935288
60474363013	**R-FB-1**	EPA 200.8	934996	EPA 200.8	935288
60474363001	**R-MW-1**	EPA 7470	935431	EPA 7470	935468
60474363002	**R-MW-2**	EPA 7470	935431	EPA 7470	935468
60474363003	**R-MW-6**	EPA 7470	935431	EPA 7470	935468
60474363004	**R-MW-7(r)**	EPA 7470	935431	EPA 7470	935468
60474363005	**R-MW-B2**	EPA 7470	935431	EPA 7470	935468
60474363006	**R-DUP-1**	EPA 7470	935431	EPA 7470	935468
60474363009	**R-MW-3**	EPA 7470	935965	EPA 7470	935995
60474363010	**R-MW-4**	EPA 7470	935965	EPA 7470	935995
60474363011	**R-MW-5**	EPA 7470	935965	EPA 7470	935995
60474363012	**R-MW-B1**	EPA 7470	935965	EPA 7470	935995
60474363013	**R-FB-1**	EPA 7470	935965	EPA 7470	935995
60474363001	**R-MW-1**	EPA 903.1	745057		
60474363002	**R-MW-2**	EPA 903.1	745057		
60474363003	**R-MW-6**	EPA 903.1	745057		
60474363004	**R-MW-7(r)**	EPA 903.1	745057		
60474363005	**R-MW-B2**	EPA 903.1	745801		
60474363006	**R-DUP-1**	EPA 903.1	745801		
60474363007	**R-MS-1**	EPA 903.1	745057		
60474363008	**R-MSD-1**	EPA 903.1	745057		
60474363009	**R-MW-3**	EPA 903.1	745801		
60474363010	**R-MW-4**	EPA 903.1	745801		
60474363011	**R-MW-5**	EPA 903.1	745801		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA
Pace Project No.: 60474363

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60474363012	**R-MW-B1**	EPA 903.1	745801		
60474363013	**R-FB-1**	EPA 903.1	745801		
60474363001	**R-MW-1**	EPA 904.0	745059		
60474363002	**R-MW-2**	EPA 904.0	745059		
60474363003	**R-MW-6**	EPA 904.0	745059		
60474363004	**R-MW-7(r)**	EPA 904.0	745059		
60474363005	**R-MW-B2**	EPA 904.0	745803		
60474363006	**R-DUP-1**	EPA 904.0	745803		
60474363007	**R-MS-1**	EPA 904.0	745059		
60474363008	**R-MSD-1**	EPA 904.0	745059		
60474363009	**R-MW-3**	EPA 904.0	745803		
60474363010	**R-MW-4**	EPA 904.0	745803		
60474363011	**R-MW-5**	EPA 904.0	745803		
60474363012	**R-MW-B1**	EPA 904.0	745803		
60474363013	**R-FB-1**	EPA 904.0	745803		
60474363001	**R-MW-1**	SM 2320B	935223		
60474363002	**R-MW-2**	SM 2320B	935223		
60474363003	**R-MW-6**	SM 2320B	935151		
60474363004	**R-MW-7(r)**	SM 2320B	935151		
60474363005	**R-MW-B2**	SM 2320B	935151		
60474363006	**R-DUP-1**	SM 2320B	935151		
60474363009	**R-MW-3**	SM 2320B	935224		
60474363010	**R-MW-4**	SM 2320B	935224		
60474363011	**R-MW-5**	SM 2320B	935327		
60474363012	**R-MW-B1**	SM 2320B	935224		
60474363013	**R-FB-1**	SM 2320B	935224		
60474363001	**R-MW-1**	SM 2540C	934416		
60474363002	**R-MW-2**	SM 2540C	934416		
60474363003	**R-MW-6**	SM 2540C	934270		
60474363004	**R-MW-7(r)**	SM 2540C	934270		
60474363005	**R-MW-B2**	SM 2540C	934270		
60474363006	**R-DUP-1**	SM 2540C	934270		
60474363009	**R-MW-3**	SM 2540C	934703		
60474363010	**R-MW-4**	SM 2540C	934703		
60474363011	**R-MW-5**	SM 2540C	934869		
60474363012	**R-MW-B1**	SM 2540C	934703		
60474363013	**R-FB-1**	SM 2540C	934703		
60474363001	**R-MW-1**	SM 3500-Fe B#4	937209		
60474363002	**R-MW-2**	SM 3500-Fe B#4	937209		
60474363003	**R-MW-6**	SM 3500-Fe B#4	937209		
60474363004	**R-MW-7(r)**	SM 3500-Fe B#4	937209		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA
Pace Project No.: 60474363

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60474363005	**R-MW-B2**	SM 3500-Fe B#4	937209		
60474363006	**R-DUP-1**	SM 3500-Fe B#4	937209		
60474363009	**R-MW-3**	SM 3500-Fe B#4	937209		
60474363010	**R-MW-4**	SM 3500-Fe B#4	937209		
60474363011	**R-MW-5**	SM 3500-Fe B#4	937209		
60474363012	**R-MW-B1**	SM 3500-Fe B#4	937209		
60474363013	**R-FB-1**	SM 3500-Fe B#4	937209		
60474363001	**R-MW-1**	SM 3500-Fe B#4	934114		
60474363002	**R-MW-2**	SM 3500-Fe B#4	934114		
60474363003	**R-MW-6**	SM 3500-Fe B#4	934114		
60474363004	**R-MW-7(r)**	SM 3500-Fe B#4	934114		
60474363005	**R-MW-B2**	SM 3500-Fe B#4	934114		
60474363006	**R-DUP-1**	SM 3500-Fe B#4	934114		
60474363009	**R-MW-3**	SM 3500-Fe B#4	934432		
60474363010	**R-MW-4**	SM 3500-Fe B#4	934432		
60474363011	**R-MW-5**	SM 3500-Fe B#4	934432		
60474363012	**R-MW-B1**	SM 3500-Fe B#4	934432		
60474363013	**R-FB-1**	SM 3500-Fe B#4	934432		
60474363001	**R-MW-1**	SM 4500-S-2 D	934115		
60474363002	**R-MW-2**	SM 4500-S-2 D	934115		
60474363003	**R-MW-6**	SM 4500-S-2 D	934115		
60474363004	**R-MW-7(r)**	SM 4500-S-2 D	934115		
60474363005	**R-MW-B2**	SM 4500-S-2 D	934115		
60474363006	**R-DUP-1**	SM 4500-S-2 D	934115		
60474363009	**R-MW-3**	SM 4500-S-2 D	934433		
60474363010	**R-MW-4**	SM 4500-S-2 D	934433		
60474363011	**R-MW-5**	SM 4500-S-2 D	934561		
60474363012	**R-MW-B1**	SM 4500-S-2 D	934433		
60474363013	**R-FB-1**	SM 4500-S-2 D	934433		
60474363001	**R-MW-1**	EPA 300.0	936330		
60474363002	**R-MW-2**	EPA 300.0	936330		
60474363003	**R-MW-6**	EPA 300.0	936330		
60474363004	**R-MW-7(r)**	EPA 300.0	936330		
60474363005	**R-MW-B2**	EPA 300.0	936330		
60474363006	**R-DUP-1**	EPA 300.0	936330		
60474363009	**R-MW-3**	EPA 300.0	936701		
60474363010	**R-MW-4**	EPA 300.0	936701		
60474363011	**R-MW-5**	EPA 300.0	936862		
60474363012	**R-MW-B1**	EPA 300.0	936701		
60474363013	**R-FB-1**	EPA 300.0	936701		

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WO# : 60474363

60474363

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_Sample C	
	Revision: 2	Effective Date: 01/12/2022

Issued By: Lenexa

Client Name: Rocksmith Energy

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

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

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

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

Thermometer Used: T-301 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 0.9/0.4 **Corr. Factor** +0.1 **Corrected** 1.0/0.5

Temperature should be above freezing to 6°C 19.5/18.8 19.6/18.9

Date and initials of person examining contents: AV 5/5/25

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) **LOT#:** 96888/88718	☑Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☑No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

60474363

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road, Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:	COC# 5		
Project Name:	AMEREN RCPA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET

County / State origin of sample(s): Missouri

Data Deliverables:
[ ] Level II [ ] Level III [ ] Level IV
[ ] EQUIS
[ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required):
[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: 1 1 3 3 1 6 3

Identify Container Preservative Type***: 1 1 2 2 2 4 6

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	Chloride/Fluoride/Sulfate	TDS / Alkalinity	App III and Cat/An Metals (200.7)*	Appendix IV Metals (200.7/200.8/7470)*	Radium 226 & Radium 228	Ferrous Iron / Ferric Calc.	Sulfide
R-MW-1	WT	G			5-2-25	1355	7			✓	✓	✓	✓	✓	✓	✓
R-MW-2	WT	G			5-2-25	1230	7			✓	✓	✓	✓	✓	✓	✓
R-MW-3	WT															
R-MW-4	WT															
R-MW-5	WT															
R-MW-6	WT	G	-	-	05101125	1605	7			X	X	X	X	X	X	X
R-MW-7(r)	WT	G	-	-	05101125	1440	7			X	X	X	X	X	X	X
R-MW-B1	WT															
R-MW-B2	WT	G	-	-	05101125	1103	7			X	X	X	X	X	X	X
R-DUP-1	WT	G	-	-	05101125	-	7			X	X	X	X	X	X	X

Lab Use Only
Proj. Mgr: Jamie Church
AcctNum / Client ID:
Table #:
Profile / Template: 15854
Prelog / Bottle Ord. ID: EZ 3244558

Sample Comment

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:
APPEND TO PROJECT
***App III and Cat/An Metals* - EPA 200.7: Fe, Mg, Mn, K, Na, Ca, B**
****App IV Metals - EPA 200.7 -Ba,Be,Co,Pb,Li, Mo & 200.8 Metals - Sb, As, Cd, Cr, Se, Tl & 7470 Hg**

Collected By: (Printed Name) Grant Morey
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
4	T-301	+0.1		1-0/0.5/19.6/18.9	

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
Rocksmith	5-2-25/1600	PASS	5/3/25 0737	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In- Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 2

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ENV-FRM-CORQ-0019_v02_110123 ©

Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

60474363

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road, Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:	COC# 5		
Project Name:	AMEREN RCPA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri

Data Deliverables:
[ ] Level II [ ] Level III [ ] Level IV
[ ] EQUIS
[ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required):
[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: 1 1 3 3 1 6 7

Identify Container Preservative Type***: 1 1 2 2 2 4 6

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	Chloride/Fluoride/Sulfate	TDS / Alkalinity	App III and Cat/An Metals (200.7)*	Appendix IV Metals (200.7/200.8/7470)**	Radium 226 & Radium 228	Ferrous Iron / Ferric Calc.	Sulfide	Sample Comment
R-FB-1	WT																
R-MS-1	WT	G			5-1-25	1440	7			✓	✓	✓	✓	✓	✓	✓	Collected @ M-MW-7(R)
R-MSD-1	WT	G			5-1-25	1440	7			✓	✓	✓	✓	✓	✓	✓	1

Lab Use Only
Proj. Mgr: Jamie Church
AcctNum / Client ID:
Table #:
Profile / Template: 15854
Prelog / Bottle Ord. ID: EZ 3244558

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:
APPEND TO PROJECT
App III and Cat/An Metals - EPA 200.7: Fe, Mg, Mn, K, Na, Ca, B
**App IV Metals - EPA 200.7 -Ba,Be,Co,Pb,Li, Mo & 200.8 Metals - Sb, As, Cd, Cr, Se, Tl & 7470 Hg

Collected By: (Printed Name) Grant Mary
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
4	T-301	+0.1		1.0/0.5/1.9/6.8/9	

Relinquished by/Company: (Signature) Rocksmith	Date/Time: 5-2-25/1600	Received by/Company: (Signature)	Date/Time: 5/3/25 0737	Tracking Number:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In- Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 2 of 2

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1/2

Client: Rocksmith Geoeng Profile/EZ #: 3244558

Site: Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1	WT		3																1			2	1				1					
2	↓		3																1			2	1				1					
3																																
4																																
5																			1													
6	↓		2								(MS/MSD)								1			2	1				1					
7	↓		6																3			2	3				3					
8																																
9	↓		2																1			2	1				1					
10	↓		2																1			2	1				1					
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60474363

2/2

Client: Rocksmith Geoeng Profile/EZ #: 3244558

Site: Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1																																
2	WT																					2		(Only Log RAD)								
3																						2										
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 604774363

WO# : 60474363

60474363

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

Client Name: Rocksmith Geoeng

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

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

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

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

Thermometer Used: T-301 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): As-read 14.1/14.8/13.7 Corr. Factor +0.1 Corrected 14.2/14.9/13.8

Date and initials of person examining contents: AS 7/7/25

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	Did not receive Sample
Samples arrived within holding time:	☑Yes ☐No ☐N/A	R-DUP-1.
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#: 96889/88728	☑Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☐No ☑N/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

60474363

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road, Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:	COC# 5		
Project Name:	AMEREN RCPA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET

County / State origin of sample(s): Missouri

Data Deliverables:
[ ] Level II [ ] Level III [ ] Level IV
[ ] EQUIS
[ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required):
[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [ ] No
Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: 1 1 3 3 1 6 3

Identify Container Preservative Type***: 1 1 2 2 2 4 6

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	Chloride/Fluoride/Sulfate	TDS / Alkalinity	App III and Cat/An Metals (200.7)*	Appendix IV Metals (200.7/200.8/7470)*	Radium 226 & Radium 228	Ferrous Iron / Ferric Calc.	Sulfide	Sample Comment
R-MW-1	WT																
R-MW-2	WT																
R-MW-3	WT	G			5-5-25	1035	7			✓	✓	✓	✓	✓	✓	✓	
R-MW-4	WT	G			5-5-25	1530	7			✓	✓	✓	✓	✓	✓	✓	
R-MW-5	WT	G			5-6-25	1037	7			✓	✓	✓	✓	✓	✓	✓	
R-MW-6	WT																
R-MW-7(r)	WT																
R-MW-B1	WT				5-5-25	1420	7			✓	✓	✓	✓	✓	✓	✓	
R-MW-B2	WT																
R-DUP-1	WT	G			5-5-25	—	7			✓	✓	✓	✓	✓	✓	✓	

Lab Use Only
Proj. Mgr: Jamie Church
AcctNum / Client ID:
Table #:
Profile / Template: 15854
Prelog / Bottle Ord. ID: EZ 3244558

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:
APPEND TO PROJECT
***App III and Cat/An Metals* - EPA 200.7: Fe, Mg, Mn, K, Na, Ca, B**
****App IV Metals - EPA 200.7 -Ba,Be,Co,Pb,Li, Mo & 200.8 Metals - Sb, As, Cd, Cr, Se, Tl & 7470 Hg**

Collected By: (Printed Name) Grant Morey
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
4	T-301	+0.1		1-5/1-1	

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
[signature] / Rocksmith	5-6-25/1500	[signature] ASC	5/7/25 0655
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

Tracking Number: 14.9/13-6

Delivered by: [ ] In- Person [ ] Courier
[ ] FedEx [ ] UPS [ ] Other

Page: 1 of 2

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

L1474363

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road, Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:	COC# 5		
Project Name:	AMEREN RCPA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri

Data Deliverables:
[ ] Level II [ ] Level III [ ] Level IV
[ ] EQUIS
[ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required):
[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [ ] No
Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: 1 1 3 3 1 6 3
Identify Container Preservative Type***: 1 1 2 2 2 4 6

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	Chloride/Fluoride/Sulfate	TDS / Alkalinity	App III and Cat/An Metals (200.7)*	Appendix IV Metals (200.7/200.8/7470)**	Radium 226 & Radium 228	Ferrous Iron / Ferric Calc.	Sulfide	Sample Comment	Preservation non-conformance identified for sample.
R-FB-1	WT	G			5-5-25	1520	7			✓	✓	✓	✓	✓	✓	✓		
R-MS-1	WT																	
R-MSD-1	WT																	

Lab Use Only
Proj. Mgr: Jamie Church
AcctNum / Client ID:
Table #:
Profile / Template: 15854
Prelog / Bottle Ord. ID: EZ 3244558

Additional Instructions from Pace®:
APPEND TO PROJECT
App III and Cat/An Metals - EPA 200.7: Fe, Mg, Mn, K, Na, Ca, B
**App IV Metals - EPA 200.7 -Ba,Be,Co,Pb,Li, Mo & 200.8 Metals - Sb, As, Cd, Cr, Se, Tl & 7470 Hg

Collected By:
(Printed Name) Grant Morey
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
4	T-301	+0.1		1-5/1.1	

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
Rocksmith	5-6-25/1500		5/7/25 0655	14-9/138
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In-Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEx [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 2 of 2

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

1/2

Client: Rocksmith Geoeng

Profile/EZ # only print what you log.

Site:

Notes Append to 60474363

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1																																
2																																
3	WT		3																1			2	1				1					
4	↓		2																1			2	1				1					
5	↓		3																1			2	1				1					
6																																
7																																
8	↓		2																1			2	1				1					
9																																
10										DO not log. Did not receive sample																						
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60474363

DC#_Title: ENV-FRM-LENE-0001 v07_Sample Container Count
Effective Date: 7/12/2024

2/2

Client: Rocksmith Geo eng Profile/EZ #

Site: Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1	WT		2																1			2	1				1					
2																																
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60474363

Internal Transfer Chain of Custody

☐ Rush Multiplier____X
☐ Samples Pre-Logged into eCOC

State Of Origin: MO
Cert. Needed: ☐ Yes ☒ No

Workorder: 60474363 **Workorder Name:** AMEREN RCPA

Owner Received Date: 5/3/2025 **Results Requested By:** 5/27/2025

Report To	Subcontract To
Jamie Church Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 314-838-7223	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3						Requested Analysis Radium 226	Radium 228										LAB USE ONLY
1	R-MW-1	PS	5/2/2025 13:55	60474363001	Water	2						X	X										001
2	R-MW-2	PS	5/2/2025 12:30	60474363002	Water	2						X	X										002
3	R-MW-6	PS	5/1/2025 16:05	60474363003	Water	2						X	X										003
4	R-MW-7(r)	RQS	5/1/2025 14:40	60474363004	Water	2						X	X										004
5	R-MW-B2	PS	5/1/2025 11:03	60474363005	Water	2						X	X										005
6	R-DUP-1	PS	5/1/2025 08:00	60474363006	Water	2						X	X										006
7	R-MS-1	PS	5/1/2025 14:40	60474363007	Water	2						X	X										007
8	R-MSD-1	PS	5/1/2025 14:40	60474363008	Water	2						X	X										008

Transfers	Released By	Date/Time	Received By	Date/Time
1	Carmen Sure Pace	5/8 1800	[signature]	5.9.25 1010
2				
3				

Comments

Note: Parent sample for MS/MSD samples 007/008 is 004.

Location: RECEIVING

Cooler Temperature on Receipt ___ °C | **Custody Seal** Y or (N) | **Received on Ice** Y or (N) | **Samples Intact** (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

WO# : 30777961

30777961

Internal Transfer Chain of Custody

WO# : 30777961

PM: CMC Due Date: 06/02/25

CLIENT: PACE_60_LEKS

☐ Rush Multiplier____X

☐ Samples Pre-Logged into eCOC

State Of Origin: MO

Cert. Needed: ☐ Yes ☒

Workorder: 60474363 Workorder Name: AMEREN RCPA

Owner Received Date: 5/3/2025 Results Requested By: 5/28/2025

Report To	Subcontract To
Jamie Church Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 314-838-7223	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3						Requested Analysis Radium 226	Radium 228											LAB USE ONLY
1	R-MW-3	PS	5/5/2025 10:35	60474363009	Water	2						X	X											009
2	R-MW-4	PS	5/5/2025 15:30	60474363010	Water	2						X	X											010
3	R-MW-5	PS	5/6/2025 10:37	60474363011	Water	2						X	X											011
4	R-MW-B1	PS	5/5/2025 14:20	60474363012	Water	2						X	X											012
5	R-FB-1	PS	5/5/2025 15:20	60474363013	Water	2						X	X											013
6					Water																			
7					Water																			
8					Water																			
9					Water																			
10					Water																			
11					Water																			
12					Water																			
13					Water																			

Transfers	Released By	Date/Time	Received By	Date/Time
1	Carmen Jure Pace	5/8 1800	[signature]	5.9.25 1010
2				
3				

Comments

Cooler Temperature on Receipt ___ °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*

This chain of custody is considered complete as is since this information is available in the owner laboratory.

	DC#_Title: ENV-FRM-GBUR-0088 v07_Sam Greensburg	**WO# : 30777961**
Pace ANALYTICAL SERVICES	Effective Date: 01/04/2024	PM: CMC Due Date: 06/02/25
		CLIENT: PACE_GO_LEKS

Client Name: Pace-KS **Project #:**

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking Number: 4453 8931 3898

Initial / Date

Examined By: VB 5-9-25

Labeled By: VB 5-9-25

Temped By: —

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No **Seals Intact:** ☐ Yes ☒ No

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

Cooler Temperature: Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 1003241 / D.P.D. Residual Chlorine Lot #
Chain of Custody Present	X			1.
Chain of Custody Filled Out:	X			2.
-Were client corrections present on COC		X		
Chain of Custody Relinquished	X			3.
Sampler Name & Signature on COC:		X		4.
Sample Labels match COC:	X			5.
-Includes date/time/ID				
Matrix: WT				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used	X			
Containers Intact:	X			11.
Orthophosphate field filtered:			X	12.
Hex Cr Aqueous samples field filtered:			X	13.
Organic Samples checked for dichlorination			X	14:
Filtered volume received for dissolved tests:			X	15:
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	X			16. pH<2
All containers meet method preservation requirements:	X			Initial when completed VB / Date/Time of Preservation / Lot# of added Preservative
8260C/D: Headspace in VOA Vials (> 6mm)			X	17.
624.1: Headspace in VOA Vials (0mm)			X	18.
Radon: Headspace in RAD Vials (0mm)			X	19.
Trip Blank Present:			X	Trip blank custody seal present? YES or NO
Rad Samples Screened <.05 mrem/hr.	X			Initial when completed VB / Date: 5-9-25 / Survey Meter SN: 2501438

Comments: Project listed on two CoCs, logged and received together.
007 and 008 logged as PS and 004 as RQS per CoC.

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Qualtrax ID: 55680

Memorandum

July 15, 2025

To:	Project File Rocksmith Geoengineering, LLC	**Project Number:**	23008-25
CC:	Mark Haddock, Jeffrey Ingram		
From:	Jack Rasmussen	**Email:**	Jack.Rasmussen@rocksmithgeo.com
RE:	**Data Validation Summary, Rush Island Energy Center – RCPA – Data Package 60474363**		

The following is a summary of instances where quality control criteria in the functional guidelines were not met and data qualification was required:

- When a compound was detected in a blank (i.e. method, field), and the blank comparison criterion was not met, associated sample results were qualified as estimates (J) or non-detects (U).
- When a compound was detected in a sample result between the Method Detection Limit (MDL) and Practical Quantification Limit (PQL), the results were recorded at the detection value and qualified as estimates (J).
- When a duplicate criterion was not met, the associated sample result was qualified as an estimate (J for detects, UJ for non-detects).

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Company Name: Rocksmith Geoengineering
Project Manager: J. Ingram
Project Name: Ameren RCPA
Project Number: 23008-25
Reviewer: J. Rasmussen
Validation Date: 07/15/2025

Laboratory: Pace Analytical
SDG #: 60474363
Analytical Method (type and no.): EPA 200.7/200.8 (Total Metals); EPA 7470 (Mercury);SM 2320B (Alkalinity); SM 2540C (TDS); EPA 300.0 (Anions);
Matrix: ☐ Air ☐ Soil/Sed. ■ Water ☐ Waste ☐ EPA 903.1/904.0 (Radium 226+228); SM 3500-FeB#4; Sm 4500-S-2 D (Sulfide)
Sample Names R-MW-1, R-MW-2, R-MW-6, R-MW-7(r), R-MW-B2, R-DUP-1, R-MS-1, R-MSD-1, R-MW-3, R-MW-4,R-MW-5, R-MW-B1, R-FB-1

NOTE: Please provide calculation in Comment areas or on the back (if on the back please indicate in comment areas).

Field Information	YES	NO	NA	COMMENTS
a) Sampling dates noted?	x			05/01/2025-05/06/2025
b) Sampling team indicated?	x			GTM & VAH
c) Sample location noted?	x			
d) Sample depth indicated (Soils)?			x	
e) Sample type indicated (grab/composite)?	x			Grab
f) Field QC noted?	x			See Notes
g) Field parameters collected (note types)?	x			pH, Spec Cond, Turb, Temp, DO, ORP
h) Field Calibration within control limits?	x			
i) Notations of unacceptable field conditions/performances from field logs or field notes?		x		
j) Does the laboratory narrative indicate deficiencies?			x	No lab narrative.

Note Deficiencies:

Chain-of-Custody (COC)	YES	NO	NA	COMMENTS
a) Was the COC properly completed?	x			
b) Was the COC signed by both field and laboratory personnel?	x			
c) Were samples received in good condition?	x			

General (reference QAPP or Method)	YES	NO	NA	COMMENTS
a) Were hold times met for sample pretreatment?	x			
b) Were hold times met for sample analysis?		x		See Notes
c) Were the correct preservatives used?	x			
d) Was the correct method used?	x			
e) Were appropriate reporting limits achieved?	x			
f) Were any sample dilutions noted?	x			See Notes
g) Were any matrix problems noted?		x		

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Blanks	YES	NO	NA	COMMENTS
a) Were analytes detected in the method blank(s)?	x			See Notes
b) Were analytes detected in the field blank(s)?	x			See Notes
c) Were analytes detected in the equipment blank(s)?			x	
d) Were analytes detected in the trip blank(s)?			x	

Laboratory Control Sample (LCS)	YES	NO	NA	COMMENTS
a) Was a LCS analyzed once per SDG?	x			
b) Were the proper analytes included in the LCS?	x			
c) Was the LCS accuracy criteria met?	x			

Duplicates	YES	NO	NA	COMMENTS
a) Were field duplicates collected (note original and duplicate sample names)?	x			See Notes
b) Were field dup. precision criteria met (note RPD)?		x		See Notes
c) Were lab duplicates analyzed (note original and duplicate samples)?	x			
d) Were lab dup. precision criteria met (note RPD)?		x		See Notes

Blind Standards	YES	NO	NA	COMMENTS
a) Was a blind standard used (indicate name, analytes included and concentrations)?			x	
b) Was the %D within control limits?			x	

Matrix Spike/Matrix Spike Duplicate (MS/MSD)	YES	NO	NA	COMMENTS
a) Was MS accuracy criteria met?		x		See Notes
Recovery could not be calculated since sample contained high concentration of analyte?			x	
b) Was MSD accuracy criteria met?		x		See Notes
Recovery could not be calculated since sample contained high concentration of analyte?			x	
c) Were MS/MSD precision criteria met?		x		See Notes

Comments/Notes:

General:

Ferrous iron samples were all analyzed outside of hold time, results qualified as estimates.

Chloride and/or sulfate were diluted in several samples, no qualification necessary.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Comments/Notes:

Method Blanks:

3706613: Alkalinity (12.3J), associated with sample -001 and -002. Sample -001 alkalinity result > RL and 10x blank, no qualification necessary.

Sample -002 alkalinity result > RL and 10x blank, no qualification necessary.

3714049: Chloride (0.58J), associated with sample -011. Sample -011 result > RL and < 10x blank, result qualified as estimate.

3707156: Manganese (1.8J), associated with samples -009, -010, -011, -012, -013. Samples -009, -010, -011, -012 > RL and 10x blank.

Sample -013 < RL, reported at reporting limit and qualified as non-detect (U).

Field Blanks:

R-FB-1 @ R-MW-4: Manganese (1.8J), potassium (72.6J), chromium (0.45J).

Manganese and potassium > RL and 10x blank, no qualification necessary. Chromium result is non-detect, no qualification necessary.

Duplicates:

R-DUP-1 @ R-MW-6: field duplicate RPD exceeds control limit (20%) for chromium (78.2%), results qualified as estimates.

Lab duplicate: 10% alkalinity, 15% chloride, fluoride, sulfate; 20% ferrous iron, sulfide.

3711728: Lab duplicate exceeds max RPD for fluoride, associated with sample -004, result qualified as estimate.

MS/MSD:

3700761/3700762: MS recovery low calcium, associated with sample -004. MSD recovery and RPD within control limits, no qualification necessary.

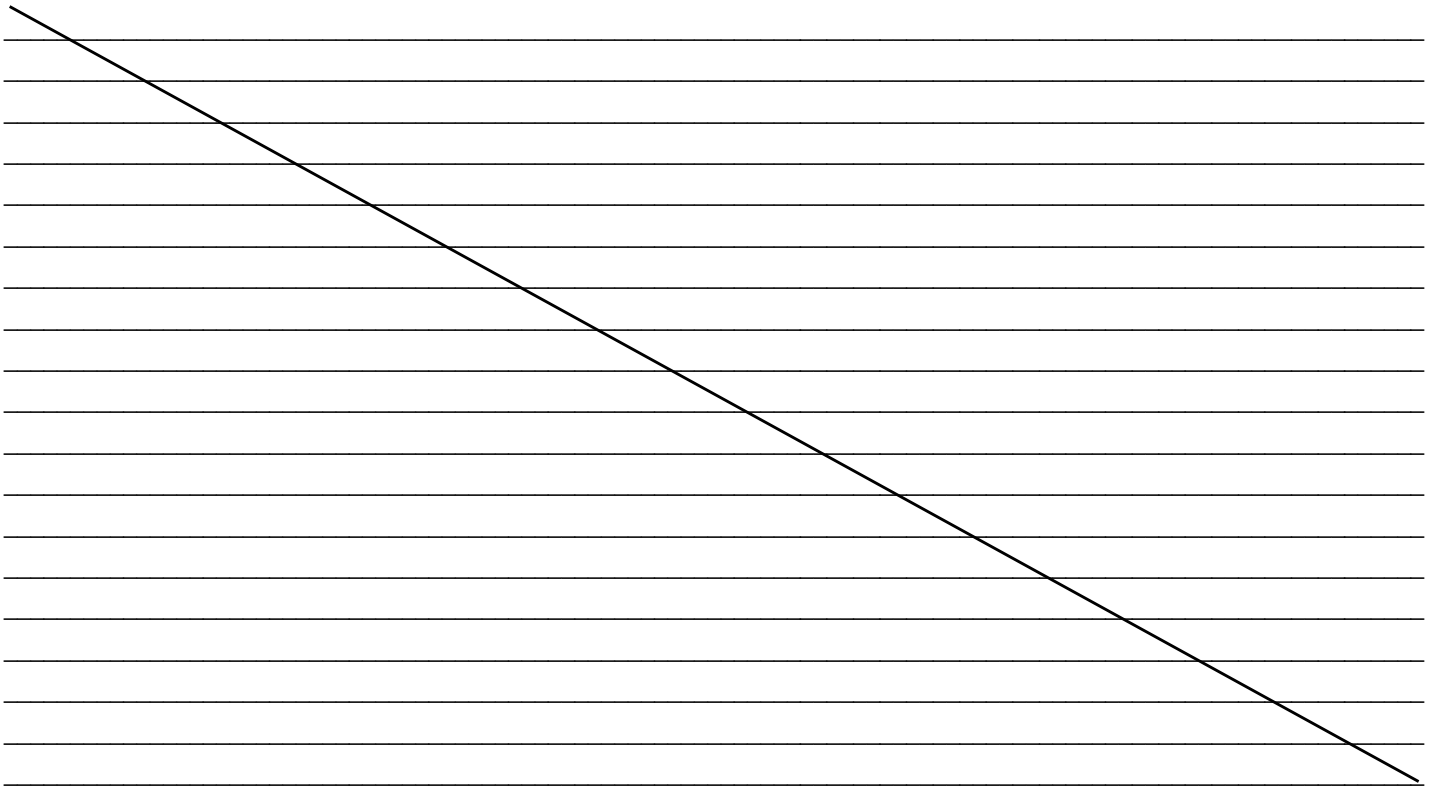
3707159/3707160: MSD recovery low, MS recovery high for all constiuents. RPD exceeds control limts.Associated with unrelated sample, no qualification necessary.

3702701/3702702: MS/MSD recovery low for sulfide, associated with unrelated sample.

3703347/3703348: MS/MSD recovery low for sulfide, associated with unrelated sample.

3703351/3703352: MS/MSD recovery low for sulfide, associated with unrelated sample.

3714051/3714052: MS recovery high for fluoride and sulfate, associated with unrelated sample.



QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Data Qualification:

Sample Name	Constituent(s)	Result	Qualifier	Reason
R-MW-1	Iron, Ferrous	0.13	J	Analyzed outside of hold time
R-MW-2	"	0.28	J	"
R-MW-6	"	0.46	J	"
R-MW-7(R)	"	26.5	J	"
R-MW-B2	"	12.7	J	"
R-DUP-1	"	0.53	J	"
R-MW-3	"	0.32	J	"
R-MW-4	"	11.6	J	"
R-MW-5	"	11.2	J	"
R-MW-B1	"	28.1	J	"
R-FB-1	"	0.041	UJ	"
R-MW-5	Chloride	2.4	J	Detected in method blank, result >RL and < 10x blank
R-MW-6	Chromium	1.2	J	Field duplicate RPD exceeds control limits
R-DUP-1	"	0.41	J	"
R-MW-7(R)	Fluoride	0.26	J	Lab DUP RPD exceeds control limits
R-FB-1	Manganese	5.0	U	Detected in method blank < RL

Signature: _____ Date: **07/15/2025**

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

July 07, 2025

Mark Haddock
Rocksmith Geoengineering, LLC.
2320 Creve Coeur Mill Road
Maryland Heights, MO 63043

RE: Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Dear Mark Haddock:

Enclosed are the analytical results for sample(s) received by the laboratory between May 03, 2025 and May 07, 2025. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Kansas City
- Pace Analytical Services - Greensburg

REV-1: Report revised to remove comment added by RAD lab regarding sampler's name that was reported in error.

(Greensburg, PA) - Revision #1 - This report replaces the May 28th, 2025, report. This project was revised on July 3rd, 2025, to remove an IRWO lab SCUR comment.

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

Sincerely,



Jamie Church
jamie.church@pacelabs.com
314-838-7223
Project Manager

Enclosures

cc: Jeffrey Ingram, Rocksmith Geoengineering, LLC.
Lisa Meyer, Ameren
Grant Morey, Rocksmith Geoengineering, LLC.
Austin Nieman, Ameren

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219
Arkansas Certification #: 88-00679
Colorado Division of Oil and Public Safety
Illinois Certification #: 2000302023-6
Iowa Certification #: 118
Kansas Field Laboratory Certification #: E-92587
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Missouri Inorganic Drinking Water Certification
Nevada Certification #: KS000212024-1
Oklahoma Certification #: 2023-073
Texas Certification #: T104704407-23-17
Utah Certification #: KS000212022-13

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SAMPLE SUMMARY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60474364001	**R-P-10S**	Water	05/01/25 16:23	05/03/25 07:37
60474364002	**R-P-16S**	Water	05/02/25 13:30	05/03/25 07:37
60474364003	**R-P-17S**	Water	05/02/25 10:53	05/03/25 07:37
60474364004	**R-P-17I**	Water	05/02/25 09:50	05/03/25 07:37
60474364005	**R-P-17D**	Water	05/02/25 11:50	05/03/25 07:37
60474364006	**R-P-19S**	Water	05/02/25 09:59	05/03/25 07:37
60474364007	**R-P-19I**	Water	05/02/25 10:39	05/03/25 07:37
60474364008	**R-P-19D**	Water	05/02/25 11:36	05/03/25 07:37
60474364009	**R-P-29S**	Water	05/01/25 12:20	05/03/25 07:37
60474364010	**R-P-29D**	Water	05/01/25 13:12	05/03/25 07:37
60474364011	**R-P-31S**	Water	05/01/25 15:10	05/03/25 07:37
60474364012	**R-CA-DUP-1**	Water	05/02/25 08:00	05/03/25 07:37
60474364013	**R-CA-FB-1**	Water	05/01/25 16:45	05/03/25 07:37
60474364014	**R-P-055**	Water	05/06/25 11:50	05/07/25 06:55
60474364016	**R-P-21S**	Water	05/05/25 12:22	05/07/25 06:55
60474364017	**R-P-21I**	Water	05/05/25 13:13	05/07/25 06:55
60474364018	**R-P-21D**	Water	05/05/25 14:11	05/07/25 06:55
60474364019	**R-P-22S**	Water	05/05/25 13:25	05/07/25 06:55
60474364020	**R-P-22D**	Water	05/05/25 12:25	05/07/25 06:55
60474364021	**R-P-30S**	Water	05/05/25 10:15	05/07/25 06:55
60474364022	**R-CA-DUP-2**	Water	05/05/25 00:00	05/07/25 06:55
60474364023	**R-CA-FB-2**	Water	05/05/25 12:30	05/07/25 06:55
60474364024	**R-CA-MS-1**	Water	05/05/25 10:15	05/07/25 06:55
60474364025	**R-CA-MSD-1**	Water	05/05/25 10:15	05/07/25 06:55

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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60474364001	**R-P-10S**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474364002	**R-P-16S**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	MLD	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474364003	**R-P-17S**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	MLD	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474364004	**R-P-17I**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	MLD	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474364005	**R-P-17D**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	MLD	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474364006	**R-P-19S**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	MLD	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474364007	**R-P-19I**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	MLD	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474364008	**R-P-19D**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	MLD	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474364009	**R-P-29S**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474364010	**R-P-29D**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	MLD	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474364011	**R-P-31S**	EPA 200.7	ARMN	13	PASI-K

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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 200.8	MLD	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA, MLD	3	PASI-K
60474364012	**R-CA-DUP-1**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	MLD	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	MLD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474364013	**R-CA-FB-1**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	MLD	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474364014	**R-P-055**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
60474364016	**R-P-21S**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474364017	**R-P-21I**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474364018	**R-P-21D**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA, MLD	3	PASI-K
60474364019	**R-P-22S**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474364020	**R-P-22D**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA, MLD	3	PASI-K
60474364021	**R-P-30S**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474364022	**R-CA-DUP-2**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K

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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA, MLD	3	PASI-K
60474364023	**R-CA-FB-2**	EPA 200.7	ARMN	13	PASI-K
		EPA 200.8	JGP	6	PASI-K
		EPA 7470	MNG	1	PASI-K
		EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		SM 3500-Fe B#4	JXD	1	PASI-K
		SM 3500-Fe B#4	DLJ	1	PASI-K
		SM 4500-S-2 D	DLJ	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474364024	**R-CA-MS-1**	EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
60474364025	**R-CA-MSD-1**	EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA

PASI-K = Pace Analytical Services - Kansas City
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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-10S **Lab ID: 60474364001** Collected: 05/01/25 16:23 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**200**	ug/L	5.0	0.64	1	05/06/25 08:42	05/30/25 16:22	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/30/25 16:22	7440-41-7	
Boron	**652**	ug/L	100	6.4	1	05/06/25 08:42	05/30/25 16:22	7440-42-8	
Calcium	**151000**	ug/L	200	26.9	1	05/06/25 08:42	05/30/25 16:22	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/06/25 08:42	05/30/25 16:22	7440-48-4	
Iron	**130**	ug/L	50.0	9.1	1	05/06/25 08:42	05/30/25 16:22	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/30/25 16:22	7439-92-1	
Lithium	**24.4**	ug/L	10.0	3.7	1	05/06/25 08:42	05/30/25 16:22	7439-93-2	
Magnesium	**20200**	ug/L	50.0	20.1	1	05/06/25 08:42	05/30/25 16:22	7439-95-4	
Manganese	**485**	ug/L	5.0	0.39	1	05/06/25 08:42	05/30/25 16:22	7439-96-5	
Molybdenum	**21.0**	ug/L	20.0	1.0	1	05/06/25 08:42	05/30/25 16:22	7439-98-7	
Potassium	**5440**	ug/L	500	69.7	1	05/06/25 08:42	05/30/25 16:22	7440-09-7	
Sodium	**33600**	ug/L	500	115	1	05/06/25 08:42	05/30/25 16:22	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/27/25 16:11	7440-36-0	
Arsenic	**1.4**	ug/L	1.0	0.13	1	05/06/25 08:42	05/27/25 16:11	7440-38-2	
Cadmium	**0.098J**	ug/L	0.50	0.050	1	05/06/25 08:42	05/27/25 16:11	7440-43-9	
Chromium	**0.89J**	ug/L	1.0	0.30	1	05/06/25 08:42	05/27/25 16:11	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/06/25 08:42	05/27/25 16:11	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/27/25 16:11	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/19/25 14:23	05/20/25 11:56	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**473**	mg/L	20.0	10.5	1		05/15/25 00:12		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**596**	mg/L	13.3	13.3	1		05/07/25 15:16		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**0.15J**	mg/L	0.20	0.041	1		05/06/25 14:33	15438-31-0	H3,H6

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-10S **Lab ID: 60474364001** Collected: 05/01/25 16:23 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**7.2**	mg/L	1.0	0.53	1		05/27/25 16:17	16887-00-6	
Fluoride	**0.33**	mg/L	0.20	0.12	1		05/27/25 16:17	16984-48-8	
Sulfate	**48.4**	mg/L	20.0	11.0	20		05/27/25 16:29	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-16S **Lab ID: 60474364002** Collected: 05/02/25 13:30 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**107**	ug/L	5.0	0.64	1	05/06/25 08:42	05/30/25 16:24	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/30/25 16:24	7440-41-7	
Boron	**72.7J**	ug/L	100	6.4	1	05/06/25 08:42	05/30/25 16:24	7440-42-8	
Calcium	**117000**	ug/L	200	26.9	1	05/06/25 08:42	05/30/25 16:24	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/06/25 08:42	05/30/25 16:24	7440-48-4	
Iron	**588**	ug/L	50.0	9.1	1	05/06/25 08:42	05/30/25 16:24	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/30/25 16:24	7439-92-1	
Lithium	**24.3**	ug/L	10.0	3.7	1	05/06/25 08:42	05/30/25 16:24	7439-93-2	
Magnesium	**31200**	ug/L	50.0	20.1	1	05/06/25 08:42	05/30/25 16:24	7439-95-4	
Manganese	**30.2**	ug/L	5.0	0.39	1	05/06/25 08:42	05/30/25 16:24	7439-96-5	
Molybdenum	**5.4J**	ug/L	20.0	1.0	1	05/06/25 08:42	05/30/25 16:24	7439-98-7	
Potassium	**1790**	ug/L	500	69.7	1	05/06/25 08:42	05/30/25 16:24	7440-09-7	
Sodium	**4420**	ug/L	500	115	1	05/06/25 08:42	05/30/25 16:24	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/27/25 16:18	7440-36-0	
Arsenic	**1.9**	ug/L	1.0	0.13	1	05/06/25 08:42	05/27/25 16:18	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/06/25 08:42	05/27/25 16:18	7440-43-9	
Chromium	**0.47J**	ug/L	1.0	0.30	1	05/06/25 08:42	05/27/25 16:18	7440-47-3	
Selenium	**2.5**	ug/L	1.0	0.18	1	05/06/25 08:42	05/27/25 16:18	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/27/25 16:18	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/19/25 14:23	05/20/25 12:03	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**424**	mg/L	20.0	10.5	1		05/15/25 16:52		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**449**	mg/L	10.0	10.0	1		05/08/25 17:15		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**0.57**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**<0.041**	mg/L	0.20	0.041	1		05/06/25 14:33	15438-31-0	H1,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-16S **Lab ID: 60474364002** Collected: 05/02/25 13:30 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**1.1**	mg/L	1.0	0.53	1		05/27/25 16:41	16887-00-6	
Fluoride	**0.26**	mg/L	0.20	0.12	1		05/27/25 16:41	16984-48-8	
Sulfate	**11.0**	mg/L	1.0	0.55	1		05/27/25 16:41	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-17S **Lab ID: 60474364003** Collected: 05/02/25 10:53 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**124**	ug/L	5.0	0.64	1	05/06/25 08:42	05/30/25 16:26	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/30/25 16:26	7440-41-7	
Boron	**2640**	ug/L	100	6.4	1	05/06/25 08:42	05/30/25 16:26	7440-42-8	
Calcium	**123000**	ug/L	200	26.9	1	05/06/25 08:42	05/30/25 16:26	7440-70-2	
Cobalt	**1.5J**	ug/L	5.0	1.2	1	05/06/25 08:42	05/30/25 16:26	7440-48-4	
Iron	**5620**	ug/L	50.0	9.1	1	05/06/25 08:42	05/30/25 16:26	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/30/25 16:26	7439-92-1	
Lithium	**33.8**	ug/L	10.0	3.7	1	05/06/25 08:42	05/30/25 16:26	7439-93-2	
Magnesium	**29000**	ug/L	50.0	20.1	1	05/06/25 08:42	05/30/25 16:26	7439-95-4	
Manganese	**1310**	ug/L	5.0	0.39	1	05/06/25 08:42	05/30/25 16:26	7439-96-5	
Molybdenum	**88.2**	ug/L	20.0	1.0	1	05/06/25 08:42	05/30/25 16:26	7439-98-7	
Potassium	**4940**	ug/L	500	69.7	1	05/06/25 08:42	05/30/25 16:26	7440-09-7	
Sodium	**128000**	ug/L	500	115	1	05/06/25 08:42	05/30/25 16:26	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/27/25 16:20	7440-36-0	
Arsenic	**19.9**	ug/L	1.0	0.13	1	05/06/25 08:42	05/27/25 16:20	7440-38-2	
Cadmium	**0.062J**	ug/L	0.50	0.050	1	05/06/25 08:42	05/27/25 16:20	7440-43-9	
Chromium	**0.49J**	ug/L	1.0	0.30	1	05/06/25 08:42	05/27/25 16:20	7440-47-3	
Selenium	**0.33J**	ug/L	1.0	0.18	1	05/06/25 08:42	05/27/25 16:20	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/27/25 16:20	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/19/25 14:23	05/20/25 12:05	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**435**	mg/L	20.0	10.5	1		05/15/25 17:00		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**879**	mg/L	13.3	13.3	1		05/08/25 17:15		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**7.9**	mg/L	0.40	0.082	1		05/06/25 14:33	15438-31-0	H1,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-17S **Lab ID: 60474364003** Collected: 05/02/25 10:53 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**43.1**	mg/L	20.0	10.5	20		05/27/25 17:17	16887-00-6	
Fluoride	**0.74**	mg/L	0.20	0.12	1		05/27/25 17:05	16984-48-8	
Sulfate	**241**	mg/L	20.0	11.0	20		05/27/25 17:17	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-17I **Lab ID: 60474364004** Collected: 05/02/25 09:50 Received: 05/03/25 07:37 Matrix: Water

Comments: • Upon receipt at the laboratory, 2.5 mls of nitric acid were added to sample 004 BP1N 2/3, to meet the sample preservation requirement of pH <2 for radiochemistry analysis, where the method requires preservation, in wastewater. The samples were not preserved pH < 2 within 15 minutes of collection (40CFR136).

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**28.7**	ug/L	5.0	0.64	1	05/06/25 08:42	05/30/25 16:28	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/30/25 16:28	7440-41-7	
Boron	**2160**	ug/L	100	6.4	1	05/06/25 08:42	05/30/25 16:28	7440-42-8	
Calcium	**17100**	ug/L	200	26.9	1	05/06/25 08:42	05/30/25 16:28	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/06/25 08:42	05/30/25 16:28	7440-48-4	
Iron	**102**	ug/L	50.0	9.1	1	05/06/25 08:42	05/30/25 16:28	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/30/25 16:28	7439-92-1	
Lithium	**7.6J**	ug/L	10.0	3.7	1	05/06/25 08:42	05/30/25 16:28	7439-93-2	
Magnesium	**806**	ug/L	50.0	20.1	1	05/06/25 08:42	05/30/25 16:28	7439-95-4	
Manganese	**6.7**	ug/L	5.0	0.39	1	05/06/25 08:42	05/30/25 16:28	7439-96-5	
Molybdenum	**109**	ug/L	20.0	1.0	1	05/06/25 08:42	05/30/25 16:28	7439-98-7	
Potassium	**3130**	ug/L	500	69.7	1	05/06/25 08:42	05/30/25 16:28	7440-09-7	
Sodium	**247000**	ug/L	500	115	1	05/06/25 08:42	05/30/25 16:28	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**0.14J**	ug/L	1.0	0.12	1	05/06/25 08:42	05/27/25 16:23	7440-36-0	
Arsenic	**27.4**	ug/L	1.0	0.13	1	05/06/25 08:42	05/27/25 16:23	7440-38-2	
Cadmium	**0.14J**	ug/L	0.50	0.050	1	05/06/25 08:42	05/27/25 16:23	7440-43-9	
Chromium	**0.62J**	ug/L	1.0	0.30	1	05/06/25 08:42	05/27/25 16:23	7440-47-3	
Selenium	**0.78J**	ug/L	1.0	0.18	1	05/06/25 08:42	05/27/25 16:23	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/27/25 16:23	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/19/25 14:23	05/20/25 12:07	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**159**	mg/L	20.0	10.5	1		05/15/25 17:05		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**851**	mg/L	13.3	13.3	1		05/08/25 17:15		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**0.39**	mg/L	0.20	0.041	1		05/06/25 14:33	15438-31-0	H1,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-17I **Lab ID: 60474364004** Collected: 05/02/25 09:50 Received: 05/03/25 07:37 Matrix: Water

Comments: • Upon receipt at the laboratory, 2.5 mls of nitric acid were added to sample 004 BP1N 2/3, to meet the sample preservation requirement of pH <2 for radiochemistry analysis, where the method requires preservation, in wastewater. The samples were not preserved pH < 2 within 15 minutes of collection (40CFR136).

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**1.2**	mg/L	0.10	0.031	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**174**	mg/L	50.0	26.4	50		05/27/25 17:52	16887-00-6	
Fluoride	**1.2**	mg/L	0.20	0.12	1		05/27/25 17:40	16984-48-8	
Sulfate	**284**	mg/L	50.0	27.5	50		05/27/25 17:52	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-17D **Lab ID: 60474364005** Collected: 05/02/25 11:50 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**97.4**	ug/L	5.0	0.64	1	05/06/25 08:42	05/30/25 16:29	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/30/25 16:29	7440-41-7	
Boron	**7130**	ug/L	100	6.4	1	05/06/25 08:42	05/30/25 16:29	7440-42-8	
Calcium	**42000**	ug/L	200	26.9	1	05/06/25 08:42	05/30/25 16:29	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/06/25 08:42	05/30/25 16:29	7440-48-4	
Iron	**2060**	ug/L	50.0	9.1	1	05/06/25 08:42	05/30/25 16:29	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/30/25 16:29	7439-92-1	
Lithium	**34.5**	ug/L	10.0	3.7	1	05/06/25 08:42	05/30/25 16:29	7439-93-2	
Magnesium	**8530**	ug/L	50.0	20.1	1	05/06/25 08:42	05/30/25 16:29	7439-95-4	
Manganese	**339**	ug/L	5.0	0.39	1	05/06/25 08:42	05/30/25 16:29	7439-96-5	
Molybdenum	**572**	ug/L	20.0	1.0	1	05/06/25 08:42	05/30/25 16:29	7439-98-7	
Potassium	**7080**	ug/L	500	69.7	1	05/06/25 08:42	05/30/25 16:29	7440-09-7	
Sodium	**158000**	ug/L	500	115	1	05/06/25 08:42	05/30/25 16:29	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/27/25 16:30	7440-36-0	
Arsenic	**0.95J**	ug/L	1.0	0.13	1	05/06/25 08:42	05/27/25 16:30	7440-38-2	
Cadmium	**0.21J**	ug/L	0.50	0.050	1	05/06/25 08:42	05/27/25 16:30	7440-43-9	
Chromium	**0.59J**	ug/L	1.0	0.30	1	05/06/25 08:42	05/27/25 16:30	7440-47-3	
Selenium	**0.23J**	ug/L	1.0	0.18	1	05/06/25 08:42	05/27/25 16:30	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/27/25 16:30	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/19/25 14:23	05/20/25 12:10	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**158**	mg/L	20.0	10.5	1		05/15/25 17:11		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**680**	mg/L	13.3	13.3	1		05/08/25 17:15		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**3.1**	mg/L	0.20	0.041	1		05/06/25 14:33	15438-31-0	H1,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-17D **Lab ID: 60474364005** Collected: 05/02/25 11:50 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**0.029J**	mg/L	0.050	0.016	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**81.9**	mg/L	50.0	26.4	50		05/27/25 18:39	16887-00-6	
Fluoride	**0.63**	mg/L	0.20	0.12	1		05/27/25 18:04	16984-48-8	
Sulfate	**262**	mg/L	50.0	27.5	50		05/27/25 18:39	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-19S **Lab ID: 60474364006** Collected: 05/02/25 09:59 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**275**	ug/L	5.0	0.64	1	05/06/25 08:42	05/30/25 16:31	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/30/25 16:31	7440-41-7	
Boron	**149**	ug/L	100	6.4	1	05/06/25 08:42	05/30/25 16:31	7440-42-8	
Calcium	**124000**	ug/L	200	26.9	1	05/06/25 08:42	05/30/25 16:31	7440-70-2	
Cobalt	**2.8J**	ug/L	5.0	1.2	1	05/06/25 08:42	05/30/25 16:31	7440-48-4	
Iron	**4950**	ug/L	50.0	9.1	1	05/06/25 08:42	05/30/25 16:31	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/30/25 16:31	7439-92-1	
Lithium	**25.9**	ug/L	10.0	3.7	1	05/06/25 08:42	05/30/25 16:31	7439-93-2	
Magnesium	**20000**	ug/L	50.0	20.1	1	05/06/25 08:42	05/30/25 16:31	7439-95-4	
Manganese	**1330**	ug/L	5.0	0.39	1	05/06/25 08:42	05/30/25 16:31	7439-96-5	
Molybdenum	**3.0J**	ug/L	20.0	1.0	1	05/06/25 08:42	05/30/25 16:31	7439-98-7	
Potassium	**4730**	ug/L	500	69.7	1	05/06/25 08:42	05/30/25 16:31	7440-09-7	
Sodium	**5800**	ug/L	500	115	1	05/06/25 08:42	05/30/25 16:31	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/27/25 16:35	7440-36-0	
Arsenic	**6.8**	ug/L	1.0	0.13	1	05/06/25 08:42	05/27/25 16:35	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/06/25 08:42	05/27/25 16:35	7440-43-9	
Chromium	**0.52J**	ug/L	1.0	0.30	1	05/06/25 08:42	05/27/25 16:35	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/06/25 08:42	05/27/25 16:35	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/27/25 16:35	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/19/25 14:23	05/20/25 12:12	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**380**	mg/L	20.0	10.5	1		05/15/25 17:36		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**432**	mg/L	10.0	10.0	1		05/08/25 17:15		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**7.0**	mg/L	0.40	0.082	1		05/06/25 14:33	15438-31-0	H1,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-19S **Lab ID: 60474364006** Collected: 05/02/25 09:59 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**0.025J**	mg/L	0.050	0.016	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**1.4**	mg/L	1.0	0.53	1		05/27/25 18:51	16887-00-6	
Fluoride	**0.33**	mg/L	0.20	0.12	1		05/27/25 18:51	16984-48-8	
Sulfate	**17.2**	mg/L	1.0	0.55	1		05/27/25 18:51	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-19I **Lab ID: 60474364007** Collected: 05/02/25 10:39 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**101**	ug/L	5.0	0.64	1	05/06/25 08:42	05/30/25 16:35	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/30/25 16:35	7440-41-7	
Boron	**3450**	ug/L	100	6.4	1	05/06/25 08:42	05/30/25 16:35	7440-42-8	
Calcium	**28900**	ug/L	200	26.9	1	05/06/25 08:42	05/30/25 16:35	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/06/25 08:42	05/30/25 16:35	7440-48-4	
Iron	**26.6J**	ug/L	50.0	9.1	1	05/06/25 08:42	05/30/25 16:35	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/30/25 16:35	7439-92-1	
Lithium	**93.1**	ug/L	10.0	3.7	1	05/06/25 08:42	05/30/25 16:35	7439-93-2	
Magnesium	**625**	ug/L	50.0	20.1	1	05/06/25 08:42	05/30/25 16:35	7439-95-4	
Manganese	**4.8J**	ug/L	5.0	0.39	1	05/06/25 08:42	05/30/25 16:35	7439-96-5	
Molybdenum	**121**	ug/L	20.0	1.0	1	05/06/25 08:42	05/30/25 16:35	7439-98-7	
Potassium	**38900**	ug/L	500	69.7	1	05/06/25 08:42	05/30/25 16:35	7440-09-7	
Sodium	**161000**	ug/L	500	115	1	05/06/25 08:42	05/30/25 16:35	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**0.21J**	ug/L	1.0	0.12	1	05/06/25 08:42	05/27/25 16:42	7440-36-0	
Arsenic	**38.1**	ug/L	1.0	0.13	1	05/06/25 08:42	05/27/25 16:42	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/06/25 08:42	05/27/25 16:42	7440-43-9	
Chromium	**0.43J**	ug/L	1.0	0.30	1	05/06/25 08:42	05/27/25 16:42	7440-47-3	
Selenium	**0.30J**	ug/L	1.0	0.18	1	05/06/25 08:42	05/27/25 16:42	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/27/25 16:42	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/19/25 14:23	05/20/25 12:14	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**326**	mg/L	20.0	10.5	1		05/15/25 17:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**679**	mg/L	13.3	13.3	1		05/08/25 17:15		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**0.19J**	mg/L	0.20	0.041	1		05/06/25 14:33	15438-31-0	H1,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-19I **Lab ID: 60474364007** Collected: 05/02/25 10:39 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**0.25**	mg/L	0.050	0.016	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**50.8**	mg/L	50.0	26.4	50		05/27/25 19:27	16887-00-6	
Fluoride	**0.48**	mg/L	0.20	0.12	1		05/27/25 19:15	16984-48-8	
Sulfate	**141**	mg/L	50.0	27.5	50		05/27/25 19:27	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-19D **Lab ID: 60474364008** Collected: 05/02/25 11:36 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**138**	ug/L	5.0	0.64	1	05/06/25 08:42	05/30/25 15:35	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/30/25 15:35	7440-41-7	
Boron	**8870**	ug/L	100	6.4	1	05/06/25 08:42	05/30/25 15:35	7440-42-8	
Calcium	**43800**	ug/L	200	26.9	1	05/06/25 08:42	05/30/25 15:35	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/06/25 08:42	05/30/25 15:35	7440-48-4	
Iron	**2390**	ug/L	50.0	9.1	1	05/06/25 08:42	05/30/25 15:35	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/30/25 15:35	7439-92-1	
Lithium	**20.3**	ug/L	10.0	3.7	1	05/06/25 08:42	05/30/25 15:35	7439-93-2	
Magnesium	**6340**	ug/L	50.0	20.1	1	05/06/25 08:42	05/30/25 15:35	7439-95-4	
Manganese	**319**	ug/L	5.0	0.39	1	05/06/25 08:42	05/30/25 15:35	7439-96-5	
Molybdenum	**582**	ug/L	20.0	1.0	1	05/06/25 08:42	05/30/25 15:35	7439-98-7	
Potassium	**4140**	ug/L	500	69.7	1	05/06/25 08:42	05/30/25 15:35	7440-09-7	
Sodium	**202000**	ug/L	500	115	1	05/06/25 08:42	05/30/25 15:35	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/27/25 16:44	7440-36-0	
Arsenic	**0.48J**	ug/L	1.0	0.13	1	05/06/25 08:42	05/27/25 16:44	7440-38-2	
Cadmium	**0.19J**	ug/L	0.50	0.050	1	05/06/25 08:42	05/27/25 16:44	7440-43-9	
Chromium	**0.41J**	ug/L	1.0	0.30	1	05/06/25 08:42	05/27/25 16:44	7440-47-3	
Selenium	**0.21J**	ug/L	1.0	0.18	1	05/06/25 08:42	05/27/25 16:44	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/27/25 16:44	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/19/25 14:23	05/20/25 12:17	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**234**	mg/L	20.0	10.5	1		05/15/25 17:48		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**796**	mg/L	13.3	13.3	1		05/08/25 17:15		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**3.5**	mg/L	0.20	0.041	1		05/06/25 14:33	15438-31-0	H1,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-19D **Lab ID: 60474364008** Collected: 05/02/25 11:36 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**107**	mg/L	50.0	26.4	50		05/27/25 19:50	16887-00-6	
Fluoride	**1.2**	mg/L	0.20	0.12	1		05/27/25 19:38	16984-48-8	
Sulfate	**233**	mg/L	50.0	27.5	50		05/27/25 19:50	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-29S **Lab ID: 60474364009** Collected: 05/01/25 12:20 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**314**	ug/L	5.0	0.64	1	05/06/25 08:42	05/30/25 15:37	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/30/25 15:37	7440-41-7	
Boron	**83.0J**	ug/L	100	6.4	1	05/06/25 08:42	05/30/25 15:37	7440-42-8	
Calcium	**101000**	ug/L	200	26.9	1	05/06/25 08:42	05/30/25 15:37	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/06/25 08:42	05/30/25 15:37	7440-48-4	
Iron	**8080**	ug/L	50.0	9.1	1	05/06/25 08:42	05/30/25 15:37	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/30/25 15:37	7439-92-1	
Lithium	**10.4**	ug/L	10.0	3.7	1	05/06/25 08:42	05/30/25 15:37	7439-93-2	
Magnesium	**23000**	ug/L	50.0	20.1	1	05/06/25 08:42	05/30/25 15:37	7439-95-4	
Manganese	**415**	ug/L	5.0	0.39	1	05/06/25 08:42	05/30/25 15:37	7439-96-5	
Molybdenum	**2.6J**	ug/L	20.0	1.0	1	05/06/25 08:42	05/30/25 15:37	7439-98-7	
Potassium	**4560**	ug/L	500	69.7	1	05/06/25 08:42	05/30/25 15:37	7440-09-7	
Sodium	**12000**	ug/L	500	115	1	05/06/25 08:42	05/30/25 15:37	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/27/25 16:47	7440-36-0	
Arsenic	**41.1**	ug/L	1.0	0.13	1	05/06/25 08:42	05/27/25 16:47	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/06/25 08:42	05/27/25 16:47	7440-43-9	
Chromium	**0.46J**	ug/L	1.0	0.30	1	05/06/25 08:42	05/27/25 16:47	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/06/25 08:42	05/27/25 16:47	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/27/25 16:47	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/19/25 14:23	05/20/25 12:23	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**356**	mg/L	20.0	10.5	1		05/15/25 00:19		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**408**	mg/L	10.0	10.0	1		05/07/25 15:16		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**11.2**	mg/L	0.40	0.082	1		05/06/25 14:33	15438-31-0	H3,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-29S **Lab ID: 60474364009** Collected: 05/01/25 12:20 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**0.019J**	mg/L	0.050	0.016	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**15.3**	mg/L	1.0	0.53	1		05/27/25 20:02	16887-00-6	
Fluoride	**0.26**	mg/L	0.20	0.12	1		05/27/25 20:02	16984-48-8	
Sulfate	**4.7**	mg/L	1.0	0.55	1		05/27/25 20:02	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-29D **Lab ID: 60474364010** Collected: 05/01/25 13:12 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**124**	ug/L	5.0	0.64	1	05/06/25 08:42	05/22/25 19:54	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/22/25 19:54	7440-41-7	
Boron	**73.7J**	ug/L	100	6.4	1	05/06/25 08:42	05/22/25 19:54	7440-42-8	
Calcium	**87100**	ug/L	200	26.9	1	05/06/25 08:42	05/22/25 19:54	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/06/25 08:42	05/22/25 19:54	7440-48-4	
Iron	**3120**	ug/L	50.0	9.1	1	05/06/25 08:42	05/22/25 19:54	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/22/25 19:54	7439-92-1	
Lithium	**42.1**	ug/L	10.0	3.7	1	05/06/25 08:42	05/22/25 19:54	7439-93-2	
Magnesium	**26100**	ug/L	50.0	20.1	1	05/06/25 08:42	05/22/25 19:54	7439-95-4	
Manganese	**116**	ug/L	5.0	0.39	1	05/06/25 08:42	05/22/25 19:54	7439-96-5	
Molybdenum	**1.1J**	ug/L	20.0	1.0	1	05/06/25 08:42	05/22/25 19:54	7439-98-7	
Potassium	**4700**	ug/L	500	69.7	1	05/06/25 08:42	05/22/25 19:54	7440-09-7	
Sodium	**61400**	ug/L	500	115	1	05/06/25 08:42	05/22/25 19:54	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/16/25 16:45	7440-36-0	
Arsenic	**0.98J**	ug/L	1.0	0.13	1	05/06/25 08:42	05/16/25 16:45	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/06/25 08:42	05/16/25 16:45	7440-43-9	
Chromium	**0.40J**	ug/L	1.0	0.30	1	05/06/25 08:42	05/16/25 16:45	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/06/25 08:42	05/16/25 16:45	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/16/25 16:45	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/19/25 14:23	05/20/25 12:26	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**309**	mg/L	20.0	10.5	1		05/15/25 00:26		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**541**	mg/L	13.3	13.3	1		05/07/25 15:16		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		05/29/25 11:23	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**4.6**	mg/L	0.20	0.041	1		05/06/25 14:33	15438-31-0	H3,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-29D **Lab ID: 60474364010** Collected: 05/01/25 13:12 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**119**	mg/L	10.0	5.3	10		05/27/25 21:01	16887-00-6	
Fluoride	**0.28**	mg/L	0.20	0.12	1		05/27/25 20:26	16984-48-8	
Sulfate	**25.2**	mg/L	10.0	5.5	10		05/27/25 21:01	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-31S **Lab ID: 60474364011** Collected: 05/01/25 15:10 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**181**	ug/L	5.0	0.64	1	05/06/25 08:42	05/22/25 19:56	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/22/25 19:56	7440-41-7	
Boron	**277**	ug/L	100	6.4	1	05/06/25 08:42	05/22/25 19:56	7440-42-8	
Calcium	**79600**	ug/L	200	26.9	1	05/06/25 08:42	05/22/25 19:56	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/06/25 08:42	05/22/25 19:56	7440-48-4	
Iron	**4540**	ug/L	50.0	9.1	1	05/06/25 08:42	05/22/25 19:56	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/22/25 19:56	7439-92-1	
Lithium	**11.9**	ug/L	10.0	3.7	1	05/06/25 08:42	05/22/25 19:56	7439-93-2	
Magnesium	**14100**	ug/L	50.0	20.1	1	05/06/25 08:42	05/22/25 19:56	7439-95-4	
Manganese	**1720**	ug/L	5.0	0.39	1	05/06/25 08:42	05/22/25 19:56	7439-96-5	
Molybdenum	**6.9J**	ug/L	20.0	1.0	1	05/06/25 08:42	05/22/25 19:56	7439-98-7	
Potassium	**4530**	ug/L	500	69.7	1	05/06/25 08:42	05/22/25 19:56	7440-09-7	
Sodium	**11800**	ug/L	500	115	1	05/06/25 08:42	05/22/25 19:56	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/16/25 16:47	7440-36-0	
Arsenic	**19.6**	ug/L	1.0	0.13	1	05/06/25 08:42	05/16/25 16:47	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/06/25 08:42	05/16/25 16:47	7440-43-9	
Chromium	**<0.30**	ug/L	1.0	0.30	1	05/06/25 08:42	05/16/25 16:47	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/06/25 08:42	05/16/25 16:47	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/16/25 16:47	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/21/25 14:51	05/22/25 10:33	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**197**	mg/L	20.0	10.5	1		05/15/25 00:31		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**379**	mg/L	10.0	10.0	1		05/07/25 15:16		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		05/29/25 11:23	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**6.4**	mg/L	0.40	0.082	1		05/06/25 14:33	15438-31-0	H3,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-31S **Lab ID: 60474364011** Collected: 05/01/25 15:10 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**0.018J**	mg/L	0.050	0.016	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**37.5**	mg/L	2.0	1.1	2		05/27/25 21:25	16887-00-6	
Fluoride	**0.37**	mg/L	0.20	0.12	1		05/27/25 21:13	16984-48-8	
Sulfate	**56.3**	mg/L	10.0	5.5	10		05/28/25 19:46	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-CA-DUP-1 **Lab ID: 60474364012** Collected: 05/02/25 08:00 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**105**	ug/L	5.0	0.64	1	05/06/25 08:42	05/22/25 19:58	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/22/25 19:58	7440-41-7	
Boron	**61.9J**	ug/L	100	6.4	1	05/06/25 08:42	05/22/25 19:58	7440-42-8	
Calcium	**116000**	ug/L	200	26.9	1	05/06/25 08:42	05/22/25 19:58	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/06/25 08:42	05/22/25 19:58	7440-48-4	
Iron	**344**	ug/L	50.0	9.1	1	05/06/25 08:42	05/22/25 19:58	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/22/25 19:58	7439-92-1	
Lithium	**21.7**	ug/L	10.0	3.7	1	05/06/25 08:42	05/22/25 19:58	7439-93-2	
Magnesium	**30600**	ug/L	50.0	20.1	1	05/06/25 08:42	05/22/25 19:58	7439-95-4	
Manganese	**6.8**	ug/L	5.0	0.39	1	05/06/25 08:42	05/22/25 19:58	7439-96-5	B
Molybdenum	**4.8J**	ug/L	20.0	1.0	1	05/06/25 08:42	05/22/25 19:58	7439-98-7	
Potassium	**1600**	ug/L	500	69.7	1	05/06/25 08:42	05/22/25 19:58	7440-09-7	
Sodium	**4310**	ug/L	500	115	1	05/06/25 08:42	05/22/25 19:58	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/16/25 16:50	7440-36-0	
Arsenic	**1.4**	ug/L	1.0	0.13	1	05/06/25 08:42	05/16/25 16:50	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/06/25 08:42	05/16/25 16:50	7440-43-9	
Chromium	**0.43J**	ug/L	1.0	0.30	1	05/06/25 08:42	05/16/25 16:50	7440-47-3	
Selenium	**2.5**	ug/L	1.0	0.18	1	05/06/25 08:42	05/16/25 16:50	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/16/25 16:50	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/21/25 14:51	05/22/25 10:35	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**422**	mg/L	20.0	10.5	1		05/15/25 17:55		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**447**	mg/L	10.0	10.0	1		05/08/25 17:16		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**0.31**	mg/L	0.050	0.041	1		05/29/25 11:23	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**<0.041**	mg/L	0.20	0.041	1		05/06/25 14:33	15438-31-0	H1,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-CA-DUP-1 **Lab ID: 60474364012** Collected: 05/02/25 08:00 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**1.2**	mg/L	1.0	0.53	1		05/27/25 21:37	16887-00-6	
Fluoride	**0.26**	mg/L	0.20	0.12	1		05/27/25 21:37	16984-48-8	
Sulfate	**11.0**	mg/L	1.0	0.55	1		05/27/25 21:37	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-CA-FB-1 **Lab ID: 60474364013** Collected: 05/01/25 16:45 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**<0.64**	ug/L	5.0	0.64	1	05/06/25 08:42	05/22/25 20:00	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/22/25 20:00	7440-41-7	
Boron	**<6.4**	ug/L	100	6.4	1	05/06/25 08:42	05/22/25 20:00	7440-42-8	
Calcium	**<26.9**	ug/L	200	26.9	1	05/06/25 08:42	05/22/25 20:00	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/06/25 08:42	05/22/25 20:00	7440-48-4	
Iron	**<9.1**	ug/L	50.0	9.1	1	05/06/25 08:42	05/22/25 20:00	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/06/25 08:42	05/22/25 20:00	7439-92-1	
Lithium	**<3.7**	ug/L	10.0	3.7	1	05/06/25 08:42	05/22/25 20:00	7439-93-2	
Magnesium	**<20.1**	ug/L	50.0	20.1	1	05/06/25 08:42	05/22/25 20:00	7439-95-4	
Manganese	**1.9J**	ug/L	5.0	0.39	1	05/06/25 08:42	05/22/25 20:00	7439-96-5	B
Molybdenum	**<1.0**	ug/L	20.0	1.0	1	05/06/25 08:42	05/22/25 20:00	7439-98-7	
Potassium	**<69.7**	ug/L	500	69.7	1	05/06/25 08:42	05/22/25 20:00	7440-09-7	
Sodium	**<115**	ug/L	500	115	1	05/06/25 08:42	05/22/25 20:00	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/06/25 08:42	05/16/25 16:56	7440-36-0	
Arsenic	**<0.13**	ug/L	1.0	0.13	1	05/06/25 08:42	05/16/25 16:56	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/06/25 08:42	05/16/25 16:56	7440-43-9	
Chromium	**0.39J**	ug/L	1.0	0.30	1	05/06/25 08:42	05/16/25 16:56	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/06/25 08:42	05/16/25 16:56	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/06/25 08:42	05/16/25 16:56	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/21/25 14:51	05/22/25 10:37	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**<10.5**	mg/L	20.0	10.5	1		05/15/25 00:34		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**<5.0**	mg/L	5.0	5.0	1		05/07/25 15:16		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		05/29/25 11:23	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**<0.041**	mg/L	0.20	0.041	1		05/06/25 14:33	15438-31-0	H3,H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-CA-FB-1 **Lab ID: 60474364013** Collected: 05/01/25 16:45 Received: 05/03/25 07:37 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/06/25 09:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**<0.53**	mg/L	1.0	0.53	1		05/27/25 22:01	16887-00-6	
Fluoride	**<0.12**	mg/L	0.20	0.12	1		05/27/25 22:01	16984-48-8	
Sulfate	**<0.55**	mg/L	1.0	0.55	1		05/27/25 22:01	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-055 **Lab ID: 60474364014** Collected: 05/06/25 11:50 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**177**	ug/L	5.0	0.64	1	05/16/25 07:20	05/30/25 14:54	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/16/25 07:20	05/30/25 14:54	7440-41-7	
Boron	**3890**	ug/L	100	6.4	1	05/16/25 07:20	05/30/25 14:54	7440-42-8	
Calcium	**71900**	ug/L	200	26.9	1	05/16/25 07:20	05/30/25 14:54	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/16/25 07:20	05/30/25 14:54	7440-48-4	
Iron	**9440**	ug/L	50.0	9.1	1	05/16/25 07:20	05/30/25 14:54	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/16/25 07:20	05/30/25 14:54	7439-92-1	
Lithium	**18.9**	ug/L	10.0	3.7	1	05/16/25 07:20	05/30/25 14:54	7439-93-2	
Magnesium	**23300**	ug/L	50.0	20.1	1	05/16/25 07:20	05/30/25 14:54	7439-95-4	
Manganese	**487**	ug/L	5.0	0.39	1	05/16/25 07:20	05/30/25 14:54	7439-96-5	
Molybdenum	**3.6J**	ug/L	20.0	1.0	1	05/16/25 07:20	05/30/25 14:54	7439-98-7	
Potassium	**5790**	ug/L	500	69.7	1	05/16/25 07:20	05/30/25 14:54	7440-09-7	
Sodium	**27700**	ug/L	500	115	1	05/16/25 07:20	05/30/25 14:54	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/15/25 14:40	05/27/25 17:28	7440-36-0	
Arsenic	**158**	ug/L	1.0	0.13	1	05/15/25 14:40	05/27/25 17:28	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/15/25 14:40	05/27/25 17:28	7440-43-9	
Chromium	**0.46J**	ug/L	1.0	0.30	1	05/15/25 14:40	05/27/25 17:28	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/15/25 14:40	05/27/25 17:28	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/15/25 14:40	05/27/25 17:28	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/21/25 14:51	05/22/25 10:55	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**314**	mg/L	20.0	10.5	1		05/16/25 12:01		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**438**	mg/L	10.0	10.0	1		05/13/25 15:24		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**13.2**	mg/L	0.50	0.10	1		05/13/25 09:40	15438-31-0	H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-055 **Lab ID: 60474364014** Collected: 05/06/25 11:50 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/09/25 10:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**31.3**	mg/L	20.0	10.5	20		05/30/25 10:12	16887-00-6	B
Fluoride	**0.31**	mg/L	0.20	0.12	1		05/30/25 09:58	16984-48-8	
Sulfate	**23.5**	mg/L	20.0	11.0	20		05/30/25 10:12	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-21S **Lab ID: 60474364016** Collected: 05/05/25 12:22 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**264**	ug/L	5.0	0.64	1	05/16/25 07:20	05/30/25 15:38	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/16/25 07:20	05/30/25 15:38	7440-41-7	
Boron	**128**	ug/L	100	6.4	1	05/16/25 07:20	05/30/25 15:38	7440-42-8	
Calcium	**161000**	ug/L	200	26.9	1	05/16/25 07:20	05/30/25 15:38	7440-70-2	
Cobalt	**1.7J**	ug/L	5.0	1.2	1	05/16/25 07:20	05/30/25 15:38	7440-48-4	
Iron	**23900**	ug/L	50.0	9.1	1	05/16/25 07:20	05/30/25 15:38	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/16/25 07:20	05/30/25 15:38	7439-92-1	
Lithium	**12.3**	ug/L	10.0	3.7	1	05/16/25 07:20	05/30/25 15:38	7439-93-2	
Magnesium	**34900**	ug/L	50.0	20.1	1	05/16/25 07:20	05/30/25 15:38	7439-95-4	
Manganese	**2100**	ug/L	5.0	0.39	1	05/16/25 07:20	05/30/25 15:38	7439-96-5	
Molybdenum	**1.7J**	ug/L	20.0	1.0	1	05/16/25 07:20	05/30/25 15:38	7439-98-7	
Potassium	**3760**	ug/L	500	69.7	1	05/16/25 07:20	05/30/25 15:38	7440-09-7	
Sodium	**14400**	ug/L	500	115	1	05/16/25 07:20	05/30/25 15:38	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/15/25 14:40	05/27/25 17:35	7440-36-0	
Arsenic	**59.4**	ug/L	1.0	0.13	1	05/15/25 14:40	05/27/25 17:35	7440-38-2	
Cadmium	**0.054J**	ug/L	0.50	0.050	1	05/15/25 14:40	05/27/25 17:35	7440-43-9	
Chromium	**0.38J**	ug/L	1.0	0.30	1	05/15/25 14:40	05/27/25 17:35	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/15/25 14:40	05/27/25 17:35	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/15/25 14:40	05/27/25 17:35	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/21/25 14:51	05/22/25 10:58	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**522**	mg/L	20.0	10.5	1		05/15/25 14:10		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**608**	mg/L	13.3	13.3	1		05/12/25 14:57		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**31.9**	mg/L	2.5	0.51	1		05/13/25 09:40	15438-31-0	H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-21S **Lab ID: 60474364016** Collected: 05/05/25 12:22 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/09/25 10:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**3.4**	mg/L	1.0	0.53	1		05/29/25 16:12	16887-00-6	
Fluoride	**0.30**	mg/L	0.20	0.12	1		05/29/25 16:12	16984-48-8	
Sulfate	**37.0**	mg/L	5.0	2.8	5		05/29/25 16:24	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-21I **Lab ID: 60474364017** Collected: 05/05/25 13:13 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**143**	ug/L	5.0	0.64	1	05/16/25 07:20	05/30/25 15:03	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/16/25 07:20	05/30/25 15:03	7440-41-7	
Boron	**3550**	ug/L	100	6.4	1	05/16/25 07:20	05/30/25 15:03	7440-42-8	
Calcium	**61400**	ug/L	200	26.9	1	05/16/25 07:20	05/30/25 15:03	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/16/25 07:20	05/30/25 15:03	7440-48-4	
Iron	**537**	ug/L	50.0	9.1	1	05/16/25 07:20	05/30/25 15:03	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/16/25 07:20	05/30/25 15:03	7439-92-1	
Lithium	**28.0**	ug/L	10.0	3.7	1	05/16/25 07:20	05/30/25 15:03	7439-93-2	
Magnesium	**7450**	ug/L	50.0	20.1	1	05/16/25 07:20	05/30/25 15:03	7439-95-4	
Manganese	**124**	ug/L	5.0	0.39	1	05/16/25 07:20	05/30/25 15:03	7439-96-5	
Molybdenum	**134**	ug/L	20.0	1.0	1	05/16/25 07:20	05/30/25 15:03	7439-98-7	
Potassium	**9110**	ug/L	500	69.7	1	05/16/25 07:20	05/30/25 15:03	7440-09-7	
Sodium	**201000**	ug/L	500	115	1	05/16/25 07:20	05/30/25 15:03	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/15/25 14:40	05/27/25 17:37	7440-36-0	
Arsenic	**6.0**	ug/L	1.0	0.13	1	05/15/25 14:40	05/27/25 17:37	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/15/25 14:40	05/27/25 17:37	7440-43-9	
Chromium	**0.40J**	ug/L	1.0	0.30	1	05/15/25 14:40	05/27/25 17:37	7440-47-3	
Selenium	**0.19J**	ug/L	1.0	0.18	1	05/15/25 14:40	05/27/25 17:37	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/15/25 14:40	05/27/25 17:37	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/21/25 14:51	05/22/25 11:00	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**206**	mg/L	20.0	10.5	1		05/15/25 14:16		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**806**	mg/L	20.0	20.0	1		05/12/25 14:58		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**0.95**	mg/L	0.20	0.041	1		05/13/25 09:40	15438-31-0	H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-21I **Lab ID: 60474364017** Collected: 05/05/25 13:13 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**0.034J**	mg/L	0.050	0.016	1		05/09/25 10:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**247**	mg/L	20.0	10.5	20		05/29/25 16:47	16887-00-6	
Fluoride	**0.48**	mg/L	0.20	0.12	1		05/29/25 16:36	16984-48-8	
Sulfate	**128**	mg/L	20.0	11.0	20		05/29/25 16:47	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-21D **Lab ID: 60474364018** Collected: 05/05/25 14:11 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**193**	ug/L	5.0	0.64	1	05/16/25 07:20	05/30/25 15:05	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/16/25 07:20	05/30/25 15:05	7440-41-7	
Boron	**3130**	ug/L	100	6.4	1	05/16/25 07:20	05/30/25 15:05	7440-42-8	
Calcium	**148000**	ug/L	200	26.9	1	05/16/25 07:20	05/30/25 15:05	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/16/25 07:20	05/30/25 15:05	7440-48-4	
Iron	**3570**	ug/L	50.0	9.1	1	05/16/25 07:20	05/30/25 15:05	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/16/25 07:20	05/30/25 15:05	7439-92-1	
Lithium	**206**	ug/L	10.0	3.7	1	05/16/25 07:20	05/30/25 15:05	7439-93-2	
Magnesium	**54500**	ug/L	50.0	20.1	1	05/16/25 07:20	05/30/25 15:05	7439-95-4	
Manganese	**1030**	ug/L	5.0	0.39	1	05/16/25 07:20	05/30/25 15:05	7439-96-5	
Molybdenum	**179**	ug/L	20.0	1.0	1	05/16/25 07:20	05/30/25 15:05	7439-98-7	
Potassium	**13000**	ug/L	500	69.7	1	05/16/25 07:20	05/30/25 15:05	7440-09-7	
Sodium	**492000**	ug/L	500	115	1	05/16/25 07:20	05/30/25 15:05	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/15/25 14:40	05/27/25 17:40	7440-36-0	
Arsenic	**0.46J**	ug/L	1.0	0.13	1	05/15/25 14:40	05/27/25 17:40	7440-38-2	
Cadmium	**0.064J**	ug/L	0.50	0.050	1	05/15/25 14:40	05/27/25 17:40	7440-43-9	
Chromium	**0.30J**	ug/L	1.0	0.30	1	05/15/25 14:40	05/27/25 17:40	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/15/25 14:40	05/27/25 17:40	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/15/25 14:40	05/27/25 17:40	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/21/25 14:51	05/22/25 11:02	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**240**	mg/L	20.0	10.5	1		05/15/25 14:22		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**2230**	mg/L	100	100	1		05/12/25 14:58		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**5.4**	mg/L	0.20	0.041	1		05/13/25 09:40	15438-31-0	H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-21D **Lab ID: 60474364018** Collected: 05/05/25 14:11 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/09/25 10:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**976**	mg/L	100	52.7	100		05/30/25 20:07	16887-00-6	
Fluoride	**0.58**	mg/L	0.20	0.12	1		05/29/25 16:59	16984-48-8	
Sulfate	**147**	mg/L	50.0	27.5	50		05/29/25 17:11	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-22S **Lab ID: 60474364019** Collected: 05/05/25 13:25 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**124**	ug/L	5.0	0.64	1	05/16/25 07:20	05/30/25 15:07	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/16/25 07:20	05/30/25 15:07	7440-41-7	
Boron	**482**	ug/L	100	6.4	1	05/16/25 07:20	05/30/25 15:07	7440-42-8	
Calcium	**175000**	ug/L	200	26.9	1	05/16/25 07:20	05/30/25 15:07	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/16/25 07:20	05/30/25 15:07	7440-48-4	
Iron	**418**	ug/L	50.0	9.1	1	05/16/25 07:20	05/30/25 15:07	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/16/25 07:20	05/30/25 15:07	7439-92-1	
Lithium	**49.1**	ug/L	10.0	3.7	1	05/16/25 07:20	05/30/25 15:07	7439-93-2	
Magnesium	**39900**	ug/L	50.0	20.1	1	05/16/25 07:20	05/30/25 15:07	7439-95-4	
Manganese	**343**	ug/L	5.0	0.39	1	05/16/25 07:20	05/30/25 15:07	7439-96-5	
Molybdenum	**7.8J**	ug/L	20.0	1.0	1	05/16/25 07:20	05/30/25 15:07	7439-98-7	
Potassium	**6710**	ug/L	500	69.7	1	05/16/25 07:20	05/30/25 15:07	7440-09-7	
Sodium	**51100**	ug/L	500	115	1	05/16/25 07:20	05/30/25 15:07	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**0.13J**	ug/L	1.0	0.12	1	05/15/25 14:40	05/27/25 17:47	7440-36-0	
Arsenic	**1.4**	ug/L	1.0	0.13	1	05/15/25 14:40	05/27/25 17:47	7440-38-2	
Cadmium	**0.088J**	ug/L	0.50	0.050	1	05/15/25 14:40	05/27/25 17:47	7440-43-9	
Chromium	**0.58J**	ug/L	1.0	0.30	1	05/15/25 14:40	05/27/25 17:47	7440-47-3	
Selenium	**4.4**	ug/L	1.0	0.18	1	05/15/25 14:40	05/27/25 17:47	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/15/25 14:40	05/27/25 17:47	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/21/25 14:51	05/22/25 11:05	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**564**	mg/L	20.0	10.5	1		05/15/25 14:30		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**857**	mg/L	13.3	13.3	1		05/12/25 14:58		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**0.27**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**0.15J**	mg/L	0.20	0.041	1		05/13/25 09:40	15438-31-0	H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-22S **Lab ID: 60474364019** Collected: 05/05/25 13:25 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/09/25 10:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**31.5**	mg/L	20.0	10.5	20		05/29/25 17:59	16887-00-6	
Fluoride	**0.24**	mg/L	0.20	0.12	1		05/29/25 17:47	16984-48-8	
Sulfate	**135**	mg/L	20.0	11.0	20		05/29/25 17:59	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-22D **Lab ID: 60474364020** Collected: 05/05/25 12:25 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**106**	ug/L	5.0	0.64	1	05/16/25 07:20	05/30/25 15:11	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/16/25 07:20	05/30/25 15:11	7440-41-7	
Boron	**4440**	ug/L	100	6.4	1	05/16/25 07:20	05/30/25 15:11	7440-42-8	
Calcium	**31500**	ug/L	200	26.9	1	05/16/25 07:20	05/30/25 15:11	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/16/25 07:20	05/30/25 15:11	7440-48-4	
Iron	**1030**	ug/L	50.0	9.1	1	05/16/25 07:20	05/30/25 15:11	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/16/25 07:20	05/30/25 15:11	7439-92-1	
Lithium	**25.8**	ug/L	10.0	3.7	1	05/16/25 07:20	05/30/25 15:11	7439-93-2	
Magnesium	**4630**	ug/L	50.0	20.1	1	05/16/25 07:20	05/30/25 15:11	7439-95-4	
Manganese	**94.5**	ug/L	5.0	0.39	1	05/16/25 07:20	05/30/25 15:11	7439-96-5	
Molybdenum	**104**	ug/L	20.0	1.0	1	05/16/25 07:20	05/30/25 15:11	7439-98-7	
Potassium	**5190**	ug/L	500	69.7	1	05/16/25 07:20	05/30/25 15:11	7440-09-7	
Sodium	**283000**	ug/L	500	115	1	05/16/25 07:20	05/30/25 15:11	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/15/25 14:40	05/27/25 17:49	7440-36-0	
Arsenic	**14.7**	ug/L	1.0	0.13	1	05/15/25 14:40	05/27/25 17:49	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/15/25 14:40	05/27/25 17:49	7440-43-9	
Chromium	**0.95J**	ug/L	1.0	0.30	1	05/15/25 14:40	05/27/25 17:49	7440-47-3	
Selenium	**0.30J**	ug/L	1.0	0.18	1	05/15/25 14:40	05/27/25 17:49	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/15/25 14:40	05/27/25 17:49	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/21/25 14:51	05/22/25 11:12	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**285**	mg/L	20.0	10.5	1		05/15/25 14:36		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**1020**	mg/L	20.0	20.0	1		05/12/25 14:58		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**1.8**	mg/L	0.20	0.041	1		05/13/25 09:40	15438-31-0	H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-22D **Lab ID: 60474364020** Collected: 05/05/25 12:25 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**0.045J**	mg/L	0.050	0.016	1		05/09/25 10:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**278**	mg/L	20.0	10.5	20		05/30/25 20:21	16887-00-6	
Fluoride	**1.4**	mg/L	0.20	0.12	1		05/29/25 18:10	16984-48-8	
Sulfate	**76.4**	mg/L	10.0	5.5	10		05/29/25 18:22	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-30S **Lab ID: 60474364021** Collected: 05/05/25 10:15 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**109**	ug/L	5.0	0.64	1	05/16/25 07:20	05/30/25 15:12	7440-39-3	R1
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/16/25 07:20	05/30/25 15:12	7440-41-7	R1
Boron	**735**	ug/L	100	6.4	1	05/16/25 07:20	05/30/25 15:12	7440-42-8	R1
Calcium	**155000**	ug/L	200	26.9	1	05/16/25 07:20	05/30/25 15:12	7440-70-2	M1
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/16/25 07:20	05/30/25 15:12	7440-48-4	R1
Iron	**1220**	ug/L	50.0	9.1	1	05/16/25 07:20	05/30/25 15:12	7439-89-6	R1
Lead	**<3.8**	ug/L	10.0	3.8	1	05/16/25 07:20	05/30/25 15:12	7439-92-1	R1
Lithium	**38.4**	ug/L	10.0	3.7	1	05/16/25 07:20	05/30/25 15:12	7439-93-2	R1
Magnesium	**25800**	ug/L	50.0	20.1	1	05/16/25 07:20	05/30/25 15:12	7439-95-4	R1
Manganese	**338**	ug/L	5.0	0.39	1	05/16/25 07:20	05/30/25 15:12	7439-96-5	R1
Molybdenum	**3.7J**	ug/L	20.0	1.0	1	05/16/25 07:20	05/30/25 15:12	7439-98-7	R1
Potassium	**6820**	ug/L	500	69.7	1	05/16/25 07:20	05/30/25 15:12	7440-09-7	R1
Sodium	**58800**	ug/L	500	115	1	05/16/25 07:20	05/30/25 15:12	7440-23-5	M1
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/15/25 14:40	05/27/25 16:59	7440-36-0	
Arsenic	**1.4**	ug/L	1.0	0.13	1	05/15/25 14:40	05/27/25 16:59	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/15/25 14:40	05/27/25 16:59	7440-43-9	
Chromium	**0.62J**	ug/L	1.0	0.30	1	05/15/25 14:40	05/27/25 16:59	7440-47-3	
Selenium	**0.18J**	ug/L	1.0	0.18	1	05/15/25 14:40	05/27/25 16:59	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/15/25 14:40	05/27/25 16:59	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/21/25 14:51	05/22/25 11:14	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**361**	mg/L	20.0	10.5	1		05/15/25 14:55		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**751**	mg/L	13.3	13.3	1		05/12/25 14:58		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**0.47**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**0.75**	mg/L	0.20	0.041	1		05/13/25 09:40	15438-31-0	H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-30S **Lab ID: 60474364021** Collected: 05/05/25 10:15 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/09/25 10:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**50.8**	mg/L	10.0	5.3	10		05/29/25 11:16	16887-00-6	
Fluoride	**0.37**	mg/L	0.20	0.12	1		05/29/25 11:04	16984-48-8	D6
Sulfate	**189**	mg/L	10.0	5.5	10		05/29/25 11:16	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-CA-DUP-2 **Lab ID: 60474364022** Collected: 05/05/25 00:00 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**198**	ug/L	5.0	0.64	1	05/16/25 07:20	05/30/25 15:18	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/16/25 07:20	05/30/25 15:18	7440-41-7	
Boron	**3150**	ug/L	100	6.4	1	05/16/25 07:20	05/30/25 15:18	7440-42-8	
Calcium	**151000**	ug/L	200	26.9	1	05/16/25 07:20	05/30/25 15:18	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/16/25 07:20	05/30/25 15:18	7440-48-4	
Iron	**3620**	ug/L	50.0	9.1	1	05/16/25 07:20	05/30/25 15:18	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/16/25 07:20	05/30/25 15:18	7439-92-1	
Lithium	**212**	ug/L	10.0	3.7	1	05/16/25 07:20	05/30/25 15:18	7439-93-2	
Magnesium	**55200**	ug/L	50.0	20.1	1	05/16/25 07:20	05/30/25 15:18	7439-95-4	
Manganese	**1050**	ug/L	5.0	0.39	1	05/16/25 07:20	05/30/25 15:18	7439-96-5	
Molybdenum	**183**	ug/L	20.0	1.0	1	05/16/25 07:20	05/30/25 15:18	7439-98-7	
Potassium	**13300**	ug/L	500	69.7	1	05/16/25 07:20	05/30/25 15:18	7440-09-7	
Sodium	**500000**	ug/L	500	115	1	05/16/25 07:20	05/30/25 15:18	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/15/25 14:40	05/27/25 17:59	7440-36-0	
Arsenic	**0.45J**	ug/L	1.0	0.13	1	05/15/25 14:40	05/27/25 17:59	7440-38-2	
Cadmium	**0.068J**	ug/L	0.50	0.050	1	05/15/25 14:40	05/27/25 17:59	7440-43-9	
Chromium	**<0.30**	ug/L	1.0	0.30	1	05/15/25 14:40	05/27/25 17:59	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/15/25 14:40	05/27/25 17:59	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/15/25 14:40	05/27/25 17:59	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/21/25 14:51	05/22/25 11:21	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**242**	mg/L	20.0	10.5	1		05/15/25 15:07		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**2460**	mg/L	100	100	1		05/12/25 14:59		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**5.4**	mg/L	0.20	0.041	1		05/13/25 09:40	15438-31-0	H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-CA-DUP-2 **Lab ID: 60474364022** Collected: 05/05/25 00:00 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/09/25 10:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**951**	mg/L	100	52.7	100		05/30/25 20:35	16887-00-6	
Fluoride	**0.56**	mg/L	0.20	0.12	1		05/29/25 18:34	16984-48-8	
Sulfate	**143**	mg/L	20.0	11.0	20		05/29/25 18:57	14808-79-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-CA-FB-2 **Lab ID: 60474364023** Collected: 05/05/25 12:30 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**<0.64**	ug/L	5.0	0.64	1	05/16/25 07:20	05/30/25 15:25	7440-39-3	
Beryllium	**<0.12**	ug/L	1.0	0.12	1	05/16/25 07:20	05/30/25 15:25	7440-41-7	
Boron	**<6.4**	ug/L	100	6.4	1	05/16/25 07:20	05/30/25 15:25	7440-42-8	
Calcium	**<26.9**	ug/L	200	26.9	1	05/16/25 07:20	05/30/25 15:25	7440-70-2	
Cobalt	**<1.2**	ug/L	5.0	1.2	1	05/16/25 07:20	05/30/25 15:25	7440-48-4	
Iron	**<9.1**	ug/L	50.0	9.1	1	05/16/25 07:20	05/30/25 15:25	7439-89-6	
Lead	**<3.8**	ug/L	10.0	3.8	1	05/16/25 07:20	05/30/25 15:25	7439-92-1	
Lithium	**<3.7**	ug/L	10.0	3.7	1	05/16/25 07:20	05/30/25 15:25	7439-93-2	
Magnesium	**<20.1**	ug/L	50.0	20.1	1	05/16/25 07:20	05/30/25 15:25	7439-95-4	
Manganese	**0.70J**	ug/L	5.0	0.39	1	05/16/25 07:20	05/30/25 15:25	7439-96-5	B
Molybdenum	**<1.0**	ug/L	20.0	1.0	1	05/16/25 07:20	05/30/25 15:25	7439-98-7	
Potassium	**<69.7**	ug/L	500	69.7	1	05/16/25 07:20	05/30/25 15:25	7440-09-7	
Sodium	**<115**	ug/L	500	115	1	05/16/25 07:20	05/30/25 15:25	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	05/15/25 14:40	05/27/25 18:01	7440-36-0	
Arsenic	**<0.13**	ug/L	1.0	0.13	1	05/15/25 14:40	05/27/25 18:01	7440-38-2	
Cadmium	**<0.050**	ug/L	0.50	0.050	1	05/15/25 14:40	05/27/25 18:01	7440-43-9	
Chromium	**<0.30**	ug/L	1.0	0.30	1	05/15/25 14:40	05/27/25 18:01	7440-47-3	
Selenium	**<0.18**	ug/L	1.0	0.18	1	05/15/25 14:40	05/27/25 18:01	7782-49-2	
Thallium	**<0.14**	ug/L	1.0	0.14	1	05/15/25 14:40	05/27/25 18:01	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Kansas City								
Mercury	**<0.096**	ug/L	0.20	0.096	1	05/21/25 14:51	05/22/25 11:23	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**<10.5**	mg/L	20.0	10.5	1		05/15/25 15:10		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**5.5**	mg/L	5.0	5.0	1		05/12/25 14:59		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferric	**<0.041**	mg/L	0.050	0.041	1		06/03/25 11:57	20074-52-6	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4 Pace Analytical Services - Kansas City								
Iron, Ferrous	**<0.041**	mg/L	0.20	0.041	1		05/13/25 09:40	15438-31-0	H6

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-CA-FB-2 **Lab ID: 60474364023** Collected: 05/05/25 12:30 Received: 05/07/25 06:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D Pace Analytical Services - Kansas City								
Sulfide, Total	**<0.016**	mg/L	0.050	0.016	1		05/09/25 10:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**<0.53**	mg/L	1.0	0.53	1		05/29/25 19:09	16887-00-6	
Fluoride	**<0.12**	mg/L	0.20	0.12	1		05/29/25 19:09	16984-48-8	
Sulfate	**<0.55**	mg/L	1.0	0.55	1		05/29/25 19:09	14808-79-8	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 935609
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364001, 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364009, 60474364010

METHOD BLANK: 3708673 Matrix: Water
Associated Lab Samples: 60474364001, 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364009, 60474364010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	<0.096	0.20	0.096	05/20/25 11:47	

LABORATORY CONTROL SAMPLE: 3708674

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.1	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3708675 3708676

Parameter	Units	60474364001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	<0.096	5	5	4.8	4.8	94	94	75-125	1	20	

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

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 935965
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364011, 60474364012, 60474364013, 60474364014, 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023

METHOD BLANK: 3710062 Matrix: Water
Associated Lab Samples: 60474364011, 60474364012, 60474364013, 60474364014, 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	<0.096	0.20	0.096	05/22/25 10:28	

LABORATORY CONTROL SAMPLE: 3710063

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.1	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3710064 3710065

Parameter	Units	60474364021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	<0.096	5	5	4.9	4.9	97	99	75-125	1	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 934060
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364001, 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364009

METHOD BLANK: 3700759 Matrix: Water
Associated Lab Samples: 60474364001, 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	<0.64	5.0	0.64	05/30/25 15:58	
Beryllium	ug/L	<0.12	1.0	0.12	05/30/25 15:58	
Boron	ug/L	<6.4	100	6.4	05/30/25 15:58	
Calcium	ug/L	<26.9	200	26.9	05/30/25 15:58	
Cobalt	ug/L	<1.2	5.0	1.2	05/30/25 15:58	
Iron	ug/L	<9.1	50.0	9.1	05/30/25 15:58	
Lead	ug/L	<3.8	10.0	3.8	05/30/25 15:58	
Lithium	ug/L	<3.7	10.0	3.7	05/30/25 15:58	
Magnesium	ug/L	<20.1	50.0	20.1	05/30/25 15:58	
Manganese	ug/L	<0.39	5.0	0.39	05/30/25 15:58	
Molybdenum	ug/L	<1.0	20.0	1.0	05/30/25 15:58	
Potassium	ug/L	<69.7	500	69.7	05/30/25 15:58	
Sodium	ug/L	<115	500	115	05/30/25 15:58	

LABORATORY CONTROL SAMPLE: 3700760

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	1000	1010	101	85-115	
Beryllium	ug/L	1000	1020	102	85-115	
Boron	ug/L	1000	965	97	85-115	
Calcium	ug/L	10000	10400	104	85-115	
Cobalt	ug/L	1000	1030	103	85-115	
Iron	ug/L	10000	10400	104	85-115	
Lead	ug/L	1000	1030	103	85-115	
Lithium	ug/L	1000	1000	100	85-115	
Magnesium	ug/L	10000	10300	103	85-115	
Manganese	ug/L	1000	1020	102	85-115	
Molybdenum	ug/L	1000	1020	102	85-115	
Potassium	ug/L	10000	10100	101	85-115	
Sodium	ug/L	10000	10400	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3700761 3700762

Parameter	Units	60474363004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	ug/L	308	1000	1000	1270	1290	96	99	70-130	2	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3700761 3700762

Parameter	Units	60474363004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Beryllium	ug/L	<0.12	1000	1000	999	1000	100	100	70-130	0	20	
Boron	ug/L	5110	1000	1000	5850	5980	74	87	70-130	2	20	
Calcium	ug/L	85200	10000	10000	90800	93300	57	81	70-130	3	20	M1
Cobalt	ug/L	<1.2	1000	1000	971	972	97	97	70-130	0	20	
Iron	ug/L	18900	10000	10000	27600	28400	86	95	70-130	3	20	
Lead	ug/L	<3.8	1000	1000	964	975	96	98	70-130	1	20	
Lithium	ug/L	26.3	1000	1000	992	1010	97	98	70-130	2	20	
Magnesium	ug/L	24600	10000	10000	33300	34000	87	94	70-130	2	20	
Manganese	ug/L	349	1000	1000	1310	1310	96	97	70-130	0	20	
Molybdenum	ug/L	32.2	1000	1000	1020	1030	99	99	70-130	1	20	
Potassium	ug/L	5580	10000	10000	15300	15400	97	98	70-130	1	20	
Sodium	ug/L	16400	10000	10000	25500	25900	91	95	70-130	2	20	

MATRIX SPIKE SAMPLE: 3700763

Parameter	Units	60474364006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	275	1000	1280	100	70-130	
Beryllium	ug/L	<0.12	1000	1030	103	70-130	
Boron	ug/L	149	1000	1110	96	70-130	
Calcium	ug/L	124000	10000	131000	77	70-130	
Cobalt	ug/L	2.8J	1000	991	99	70-130	
Iron	ug/L	4950	10000	15100	101	70-130	
Lead	ug/L	<3.8	1000	996	100	70-130	
Lithium	ug/L	25.9	1000	1030	100	70-130	
Magnesium	ug/L	20000	10000	29700	97	70-130	
Manganese	ug/L	1330	1000	2250	92	70-130	
Molybdenum	ug/L	3.0J	1000	1010	101	70-130	
Potassium	ug/L	4730	10000	14800	100	70-130	
Sodium	ug/L	5800	10000	15900	101	70-130	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 934063
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364010, 60474364011, 60474364012, 60474364013

METHOD BLANK: 3700770 Matrix: Water
Associated Lab Samples: 60474364010, 60474364011, 60474364012, 60474364013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	<0.64	5.0	0.64	05/22/25 19:50	
Beryllium	ug/L	<0.12	1.0	0.12	05/22/25 19:50	
Boron	ug/L	<6.4	100	6.4	05/22/25 19:50	
Calcium	ug/L	34.5J	200	26.9	05/22/25 19:50	
Cobalt	ug/L	<1.2	5.0	1.2	05/22/25 19:50	
Iron	ug/L	20.1J	50.0	9.1	05/22/25 19:50	
Lead	ug/L	<3.8	10.0	3.8	05/22/25 19:50	
Lithium	ug/L	<3.7	10.0	3.7	05/22/25 19:50	
Magnesium	ug/L	<20.1	50.0	20.1	05/22/25 19:50	
Manganese	ug/L	1.0J	5.0	0.39	05/22/25 19:50	
Molybdenum	ug/L	<1.0	20.0	1.0	05/22/25 19:50	
Potassium	ug/L	<69.7	500	69.7	05/22/25 19:50	
Sodium	ug/L	<115	500	115	05/22/25 19:50	

LABORATORY CONTROL SAMPLE: 3700771

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	1000	954	95	85-115	
Beryllium	ug/L	1000	982	98	85-115	
Boron	ug/L	1000	883	88	85-115	
Calcium	ug/L	10000	9850	98	85-115	
Cobalt	ug/L	1000	1010	101	85-115	
Iron	ug/L	10000	9810	98	85-115	
Lead	ug/L	1000	974	97	85-115	
Lithium	ug/L	1000	952	95	85-115	
Magnesium	ug/L	10000	9580	96	85-115	
Manganese	ug/L	1000	994	99	85-115	
Molybdenum	ug/L	1000	973	97	85-115	
Potassium	ug/L	10000	9470	95	85-115	
Sodium	ug/L	10000	9630	96	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3700773 3700774

Parameter	Units	60473870005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	ug/L	193	1000	1000	1160	1160	97	97	70-130	0	20	
Beryllium	ug/L	<0.12	1000	1000	990	1020	99	102	70-130	3	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3700773 3700774

Parameter	Units	60473870005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	ug/L	299	1000	1000	1200	1200	90	90	70-130	0	20	
Calcium	ug/L	95200	10000	10000	105000	103000	99	83	70-130	2	20	
Cobalt	ug/L	<1.2	1000	1000	985	1010	99	101	70-130	3	20	
Iron	ug/L	13900	10000	10000	23900	24000	100	101	70-130	0	20	
Lead	ug/L	<3.8	1000	1000	964	980	96	98	70-130	2	20	
Lithium	ug/L	24.3	1000	1000	983	1000	96	98	70-130	2	20	
Magnesium	ug/L	17600	10000	10000	27100	26700	96	92	70-130	1	20	
Manganese	ug/L	1070	1000	1000	2010	2040	94	97	70-130	2	20	
Molybdenum	ug/L	17.3J	1000	1000	996	1030	98	101	70-130	3	20	
Potassium	ug/L	4170	10000	10000	13700	14000	96	98	70-130	2	20	
Sodium	ug/L	5790	10000	10000	15500	15500	97	97	70-130	0	20	

MATRIX SPIKE SAMPLE: 3700775

Parameter	Units	60473874028 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	214	1000	1150	94	70-130	
Beryllium	ug/L	<0.12	1000	1000	100	70-130	
Boron	ug/L	76.6J	1000	964	89	70-130	
Calcium	ug/L	136000	10000	143000	62	70-130	M1
Cobalt	ug/L	<1.2	1000	988	99	70-130	
Iron	ug/L	34.3J	10000	9780	97	70-130	
Lead	ug/L	<3.8	1000	961	96	70-130	
Lithium	ug/L	29.1	1000	986	96	70-130	
Magnesium	ug/L	24900	10000	33700	89	70-130	
Manganese	ug/L	151	1000	1130	98	70-130	
Molybdenum	ug/L	<1.0	1000	988	99	70-130	
Potassium	ug/L	4740	10000	14400	97	70-130	
Sodium	ug/L	10900	10000	20200	93	70-130	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 935319
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364014, 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023

METHOD BLANK: 3707156 Matrix: Water
Associated Lab Samples: 60474364014, 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	<0.64	5.0	0.64	05/30/25 14:41	
Beryllium	ug/L	<0.12	1.0	0.12	05/30/25 14:41	
Boron	ug/L	<6.4	100	6.4	05/30/25 14:41	
Calcium	ug/L	<26.9	200	26.9	05/30/25 14:41	
Cobalt	ug/L	<1.2	5.0	1.2	05/30/25 14:41	
Iron	ug/L	<9.1	50.0	9.1	05/30/25 14:41	
Lead	ug/L	<3.8	10.0	3.8	05/30/25 14:41	
Lithium	ug/L	<3.7	10.0	3.7	05/30/25 14:41	
Magnesium	ug/L	<20.1	50.0	20.1	05/30/25 14:41	
Manganese	ug/L	1.8J	5.0	0.39	05/30/25 14:41	
Molybdenum	ug/L	<1.0	20.0	1.0	05/30/25 14:41	
Potassium	ug/L	<69.7	500	69.7	05/30/25 14:41	
Sodium	ug/L	<115	500	115	05/30/25 14:41	

LABORATORY CONTROL SAMPLE: 3707157

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	1000	980	98	85-115	
Beryllium	ug/L	1000	984	98	85-115	
Boron	ug/L	1000	929	93	85-115	
Calcium	ug/L	10000	10000	100	85-115	
Cobalt	ug/L	1000	984	98	85-115	
Iron	ug/L	10000	9880	99	85-115	
Lead	ug/L	1000	980	98	85-115	
Lithium	ug/L	1000	976	98	85-115	
Magnesium	ug/L	10000	9920	99	85-115	
Manganese	ug/L	1000	980	98	85-115	
Molybdenum	ug/L	1000	977	98	85-115	
Potassium	ug/L	10000	9770	98	85-115	
Sodium	ug/L	10000	10100	101	85-115	

MATRIX SPIKE SAMPLE: 3707158

Parameter	Units	60474364019 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	124	1000	1060	94	70-130	
Beryllium	ug/L	<0.12	1000	942	94	70-130	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

MATRIX SPIKE SAMPLE: 3707158

Parameter	Units	60474364019 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	482	1000	1380	89	70-130	
Calcium	ug/L	175000	10000	183000	76	70-130	
Cobalt	ug/L	<1.2	1000	905	90	70-130	
Iron	ug/L	418	10000	9860	94	70-130	
Lead	ug/L	<3.8	1000	904	90	70-130	
Lithium	ug/L	49.1	1000	973	92	70-130	
Magnesium	ug/L	39900	10000	48900	90	70-130	
Manganese	ug/L	343	1000	1240	90	70-130	
Molybdenum	ug/L	7.8J	1000	945	94	70-130	
Potassium	ug/L	6710	10000	16000	93	70-130	
Sodium	ug/L	51100	10000	59700	87	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3707159 3707160

Parameter	Units	60474364021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	ug/L	109	1000	2000	2000	1040	189	46	70-130	64	20	R1
Beryllium	ug/L	<0.12	1000	2000	1910	948	191	47	70-130	67	20	R1
Boron	ug/L	735	1000	2000	2560	1600	182	43	70-130	46	20	R1
Calcium	ug/L	155000	10000	20000	168000	157000	129	7	70-130	7	20	M1
Cobalt	ug/L	<1.2	1000	2000	1880	919	187	46	70-130	68	20	R1
Iron	ug/L	1220	10000	20000	20400	10600	191	47	70-130	63	20	R1
Lead	ug/L	<3.8	1000	2000	1870	915	187	46	70-130	69	20	R1
Lithium	ug/L	38.4	1000	2000	1930	956	190	46	70-130	68	20	R1
Magnesium	ug/L	25800	10000	20000	43800	34000	180	41	70-130	25	20	R1
Manganese	ug/L	338	1000	2000	2190	1260	185	46	70-130	54	20	R1
Molybdenum	ug/L	3.7J	1000	2000	1940	954	193	48	70-130	68	20	R1
Potassium	ug/L	6820	10000	20000	26100	15900	193	46	70-130	48	20	R1
Sodium	ug/L	58800	10000	20000	76000	64900	173	31	70-130	16	20	M1

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 934061
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364001, 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364009

METHOD BLANK: 3700765 Matrix: Water
Associated Lab Samples: 60474364001, 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	<0.12	1.0	0.12	05/27/25 15:37	
Arsenic	ug/L	<0.13	1.0	0.13	05/27/25 15:37	
Cadmium	ug/L	<0.050	0.50	0.050	05/27/25 15:37	
Chromium	ug/L	<0.30	1.0	0.30	05/27/25 15:37	
Selenium	ug/L	<0.18	1.0	0.18	05/27/25 15:37	
Thallium	ug/L	<0.14	1.0	0.14	05/27/25 15:37	

LABORATORY CONTROL SAMPLE: 3700766

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	40	37.9	95	85-115	
Arsenic	ug/L	40	39.2	98	85-115	
Cadmium	ug/L	40	39.2	98	85-115	
Chromium	ug/L	40	39.4	99	85-115	
Selenium	ug/L	40	40.0	100	85-115	
Thallium	ug/L	40	37.4	94	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3700767 3700768

Parameter	Units	60474363004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	<0.12	40	40	40.3	39.0	101	98	70-130	3	20	
Arsenic	ug/L	115	40	40	159	156	109	100	70-130	2	20	
Cadmium	ug/L	<0.050	40	40	40.0	38.7	100	97	70-130	3	20	
Chromium	ug/L	<0.30	40	40	41.7	40.6	104	101	70-130	3	20	
Selenium	ug/L	<0.18	40	40	39.8	39.0	99	97	70-130	2	20	
Thallium	ug/L	<0.14	40	40	40.8	39.8	102	99	70-130	3	20	

MATRIX SPIKE SAMPLE: 3700769

Parameter	Units	60474364005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	<0.12	40	39.4	99	70-130	
Arsenic	ug/L	0.95J	40	41.1	100	70-130	
Cadmium	ug/L	0.21J	40	39.0	97	70-130	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

MATRIX SPIKE SAMPLE: 3700769

Parameter	Units	60474364005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	0.59J	40	38.4	95	70-130	
Selenium	ug/L	0.23J	40	38.1	95	70-130	
Thallium	ug/L	<0.14	40	40.2	101	70-130	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 934064
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364010, 60474364011, 60474364012, 60474364013

METHOD BLANK: 3700776 Matrix: Water
Associated Lab Samples: 60474364010, 60474364011, 60474364012, 60474364013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	<0.12	1.0	0.12	05/16/25 16:40	
Arsenic	ug/L	<0.13	1.0	0.13	05/16/25 16:40	
Cadmium	ug/L	<0.050	0.50	0.050	05/16/25 16:40	
Chromium	ug/L	<0.30	1.0	0.30	05/16/25 16:40	
Selenium	ug/L	<0.18	1.0	0.18	05/16/25 16:40	
Thallium	ug/L	<0.14	1.0	0.14	05/16/25 16:40	

LABORATORY CONTROL SAMPLE: 3700777

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	40	39.6	99	85-115	
Arsenic	ug/L	40	40.4	101	85-115	
Cadmium	ug/L	40	40.5	101	85-115	
Chromium	ug/L	40	39.5	99	85-115	
Selenium	ug/L	40	41.7	104	85-115	
Thallium	ug/L	40	38.3	96	85-115	

MATRIX SPIKE SAMPLE: 3700778

Parameter	Units	60473874029 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	<0.12	40	38.8	97	70-130	
Arsenic	ug/L	0.46J	40	39.7	98	70-130	
Cadmium	ug/L	0.12J	40	38.6	96	70-130	
Chromium	ug/L	0.31J	40	38.7	96	70-130	
Selenium	ug/L	0.82J	40	39.6	97	70-130	
Thallium	ug/L	<0.14	40	39.4	98	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3700779 3700780

Parameter	Units	60473870005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	<0.12	40	40	39.6	39.1	99	98	70-130	1	20	
Arsenic	ug/L	16.8	40	40	55.8	56.5	98	99	70-130	1	20	
Cadmium	ug/L	<0.050	40	40	39.0	38.8	97	97	70-130	0	20	
Chromium	ug/L	0.31J	40	40	39.8	39.6	99	98	70-130	0	20	
Selenium	ug/L	<0.18	40	40	40.3	40.3	101	101	70-130	0	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3700779 3700780

Parameter	Units	60473870005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Thallium	ug/L	<0.14	40	40	39.5	39.2	99	98	70-130	1	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 934996
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364014, 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023

METHOD BLANK: 3705537 Matrix: Water
Associated Lab Samples: 60474364014, 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	<0.12	1.0	0.12	05/27/25 16:54	
Arsenic	ug/L	<0.13	1.0	0.13	05/27/25 16:54	
Cadmium	ug/L	<0.050	0.50	0.050	05/27/25 16:54	
Chromium	ug/L	<0.30	1.0	0.30	05/27/25 16:54	
Selenium	ug/L	<0.18	1.0	0.18	05/27/25 16:54	
Thallium	ug/L	<0.14	1.0	0.14	05/27/25 16:54	

LABORATORY CONTROL SAMPLE: 3705538

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	40	37.9	95	85-115	
Arsenic	ug/L	40	38.5	96	85-115	
Cadmium	ug/L	40	38.9	97	85-115	
Chromium	ug/L	40	38.9	97	85-115	
Selenium	ug/L	40	38.8	97	85-115	
Thallium	ug/L	40	37.4	94	85-115	

MATRIX SPIKE SAMPLE: 3705541

Parameter	Units	60474364020 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	<0.12	40	38.4	96	70-130	
Arsenic	ug/L	14.7	40	53.7	98	70-130	
Cadmium	ug/L	<0.050	40	36.9	92	70-130	
Chromium	ug/L	0.95J	40	37.0	90	70-130	
Selenium	ug/L	0.30J	40	35.5	88	70-130	
Thallium	ug/L	<0.14	40	39.9	100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3705553 3705554

Parameter	Units	60474364021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	<0.12	40	40	38.1	38.2	95	95	70-130	0	20	
Arsenic	ug/L	1.4	40	40	40.6	40.2	98	97	70-130	1	20	
Cadmium	ug/L	<0.050	40	40	37.7	37.5	94	94	70-130	1	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3705553 3705554

Parameter	Units	60474364021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	ug/L	0.62J	40	40	39.9	39.7	98	98	70-130	0	20	
Selenium	ug/L	0.18J	40	40	37.6	36.5	94	91	70-130	3	20	
Thallium	ug/L	<0.14	40	40	39.9	39.3	100	98	70-130	2	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 935151
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364001, 60474364009, 60474364010, 60474364011, 60474364013

METHOD BLANK: 3706277 Matrix: Water
Associated Lab Samples: 60474364001, 60474364009, 60474364010, 60474364011, 60474364013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	05/14/25 22:09	

LABORATORY CONTROL SAMPLE: 3706278

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	518	104	90-110	

SAMPLE DUPLICATE: 3706279

Parameter	Units	60474277002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	<10.5		10	

SAMPLE DUPLICATE: 3706280

Parameter	Units	60474363004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	208	208	0	10	

SAMPLE DUPLICATE: 3706281

Parameter	Units	60474363005 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	338	353	4	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 935223
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364012

METHOD BLANK: 3706613 Matrix: Water
Associated Lab Samples: 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	12.3J	20.0	10.5	05/15/25 15:28	

LABORATORY CONTROL SAMPLE: 3706614

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	535	107	90-110	

SAMPLE DUPLICATE: 3706615

Parameter	Units	60474341004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	605	583	4	10	

SAMPLE DUPLICATE: 3706616

Parameter	Units	60474364005 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	158	158	0	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 935224
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023

METHOD BLANK: 3706629 Matrix: Water
Associated Lab Samples: 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	05/15/25 12:21	

LABORATORY CONTROL SAMPLE: 3706630

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	515	103	90-110	

SAMPLE DUPLICATE: 3706631

Parameter	Units	60474430005 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	320	319	0	10	

SAMPLE DUPLICATE: 3706632

Parameter	Units	60474363013 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	<10.5		10	

SAMPLE DUPLICATE: 3706633

Parameter	Units	60474364021 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	361	356	2	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 935395
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60474364014

METHOD BLANK: 3707599 Matrix: Water
Associated Lab Samples: 60474364014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	05/16/25 11:47	

LABORATORY CONTROL SAMPLE: 3707600

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	525	105	90-110	

SAMPLE DUPLICATE: 3707601

Parameter	Units	60474364014 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	314	322	2	10	

SAMPLE DUPLICATE: 3707602

Parameter	Units	60474656001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	396	400	1	10	

SAMPLE DUPLICATE: 3707603

Parameter	Units	60474656004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	371	369	1	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 934270
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364001, 60474364009, 60474364010, 60474364011, 60474364013

METHOD BLANK: 3701868 Matrix: Water
Associated Lab Samples: 60474364001, 60474364009, 60474364010, 60474364011, 60474364013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	05/07/25 15:14	

LABORATORY CONTROL SAMPLE: 3701869

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

SAMPLE DUPLICATE: 3701870

Parameter	Units	60474314010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	679	687	1	10	

SAMPLE DUPLICATE: 3701871

Parameter	Units	60474363004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	454	452	0	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 934416
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364012

METHOD BLANK: 3702520 Matrix: Water
Associated Lab Samples: 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	05/08/25 17:15	

LABORATORY CONTROL SAMPLE: 3702521

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	1020	102	80-120	

SAMPLE DUPLICATE: 3702522

Parameter	Units	60474303001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	3250	3180	2	10	

SAMPLE DUPLICATE: 3702523

Parameter	Units	60474364012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	447	442	1	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 934703
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364016, 60474364017, 60474364018, 60474364019

METHOD BLANK: 3704197 Matrix: Water
Associated Lab Samples: 60474364016, 60474364017, 60474364018, 60474364019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	05/12/25 14:54	

LABORATORY CONTROL SAMPLE: 3704198

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	1020	102	80-120	

SAMPLE DUPLICATE: 3704199

Parameter	Units	60474379001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	793	785	1	10	

SAMPLE DUPLICATE: 3704200

Parameter	Units	60474448009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2060	2070	0	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 934705
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364020, 60474364021, 60474364022, 60474364023

METHOD BLANK: 3704206 Matrix: Water
Associated Lab Samples: 60474364020, 60474364021, 60474364022, 60474364023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	05/12/25 14:58	

LABORATORY CONTROL SAMPLE: 3704207

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	1020	102	80-120	

SAMPLE DUPLICATE: 3704208

Parameter	Units	60474364021 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	751	768	2	10	

SAMPLE DUPLICATE: 3704209

Parameter	Units	60474669005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	4240	4060	4	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 934869
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364014

METHOD BLANK: 3704937 Matrix: Water
Associated Lab Samples: 60474364014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	05/13/25 15:23	

LABORATORY CONTROL SAMPLE: 3704938

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

SAMPLE DUPLICATE: 3704939

Parameter	Units	60474415002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	7220	7100	2	10	

SAMPLE DUPLICATE: 3704940

Parameter	Units	60474705003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	3200	3170	1	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 934114
QC Batch Method: SM 3500-Fe B#4
Analysis Method: SM 3500-Fe B#4
Analysis Description: Iron, Ferrous
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364001, 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364009, 60474364010, 60474364011, 60474364012, 60474364013

METHOD BLANK: 3700887 Matrix: Water
Associated Lab Samples: 60474364001, 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364009, 60474364010, 60474364011, 60474364012, 60474364013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron, Ferrous	mg/L	<0.041	0.20	0.041	05/06/25 14:33	H6

LABORATORY CONTROL SAMPLE: 3700888

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Ferrous	mg/L	2	2.0	101	90-110	H6

SAMPLE DUPLICATE: 3700889

Parameter	Units	60474363006 Result	Dup Result	RPD	Max RPD	Qualifiers
Iron, Ferrous	mg/L	0.53	0.55	3	20	H3,H6

SAMPLE DUPLICATE: 3700890

Parameter	Units	60474363004 Result	Dup Result	RPD	Max RPD	Qualifiers
Iron, Ferrous	mg/L	26.5	26.6	1	20	H3,H6

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 934432
QC Batch Method: SM 3500-Fe B#4
Analysis Method: SM 3500-Fe B#4
Analysis Description: Iron, Ferrous
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364014, 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023

METHOD BLANK: 3702692 Matrix: Water
Associated Lab Samples: 60474364014, 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron, Ferrous	mg/L	<0.041	0.20	0.041	05/13/25 09:40	H6

LABORATORY CONTROL SAMPLE: 3702693

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Ferrous	mg/L	2	2.0	102	90-110	H6

SAMPLE DUPLICATE: 3702694

Parameter	Units	60474364022 Result	Dup Result	RPD	Max RPD	Qualifiers
Iron, Ferrous	mg/L	5.4	5.4	0	20	H6

SAMPLE DUPLICATE: 3702695

Parameter	Units	60474364021 Result	Dup Result	RPD	Max RPD	Qualifiers
Iron, Ferrous	mg/L	0.75	0.77	2	20	H6

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 934115
QC Batch Method: SM 4500-S-2 D
Analysis Method: SM 4500-S-2 D
Analysis Description: 4500S2D Sulfide, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364001, 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364009, 60474364010, 60474364011, 60474364012, 60474364013

METHOD BLANK: 3700891 Matrix: Water
Associated Lab Samples: 60474364001, 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364009, 60474364010, 60474364011, 60474364012, 60474364013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	<0.016	0.050	0.016	05/06/25 09:28	

LABORATORY CONTROL SAMPLE: 3700892

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.50	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3700894 3700895

Parameter	Units	60474359001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide, Total	mg/L	ND	0.5	0.5	0.49	0.50	98	98	75-125	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3700898 3700899

Parameter	Units	60474363004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide, Total	mg/L	<0.016	0.5	0.5	0.49	0.48	98	96	75-125	2	20	

SAMPLE DUPLICATE: 3700893

Parameter	Units	60474359001 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	<0.016		20	

SAMPLE DUPLICATE: 3700896

Parameter	Units	60474363003 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	0.026J	0.028J		20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

SAMPLE DUPLICATE: 3700897

Parameter	Units	60474363004 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	<0.016	<0.016		20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 934433
QC Batch Method: SM 4500-S-2 D
Analysis Method: SM 4500-S-2 D
Analysis Description: 4500S2D Sulfide, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023

METHOD BLANK: 3702698 Matrix: Water
Associated Lab Samples: 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	<0.016	0.050	0.016	05/09/25 10:49	

LABORATORY CONTROL SAMPLE: 3702699

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.51	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3702701 3702702

Parameter	Units	60474430001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide, Total	mg/L	0.13	0.5	0.5	0.50	0.50	74	74	75-125	1	20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3702705 3702706

Parameter	Units	60474364021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide, Total	mg/L	<0.016	0.5	0.5	0.53	0.53	106	106	75-125	0	20	

SAMPLE DUPLICATE: 3702700

Parameter	Units	60474430001 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	0.13	0.13	1	20	

SAMPLE DUPLICATE: 3702703

Parameter	Units	60474430002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	0.060	0.057	5	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

SAMPLE DUPLICATE: 3702704

Parameter	Units	60474364021 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	<0.016	<0.016		20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 934561
QC Batch Method: SM 4500-S-2 D
Analysis Method: SM 4500-S-2 D
Analysis Description: 4500S2D Sulfide, Total
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60474364014

METHOD BLANK: 3703344 Matrix: Water
Associated Lab Samples: 60474364014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	<0.016	0.050	0.016	05/09/25 10:49	

LABORATORY CONTROL SAMPLE: 3703345

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.51	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3703347 3703348

Parameter	Units	60474770005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide, Total	mg/L	ND	0.5	0.5	0.23	0.24	38	41	75-125	8	20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3703351 3703352

Parameter	Units	60474657014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide, Total	mg/L	0.16	0.5	0.5	0.47	0.46	61	59	75-125	2	20	M1

SAMPLE DUPLICATE: 3703346

Parameter	Units	60474770005 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	0.035J		20	

SAMPLE DUPLICATE: 3703349

Parameter	Units	60474770006 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	0.61	0.62	0	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

SAMPLE DUPLICATE: 3703350

Parameter	Units	60474657014 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	0.16	0.17	5	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 936330
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364001, 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364009, 60474364010, 60474364011, 60474364012, 60474364013

METHOD BLANK: 3711724 Matrix: Water
Associated Lab Samples: 60474364001, 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364009, 60474364010, 60474364011, 60474364012, 60474364013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.53	1.0	0.53	05/27/25 11:31	
Fluoride	mg/L	<0.12	0.20	0.12	05/27/25 11:31	
Sulfate	mg/L	<0.55	1.0	0.55	05/27/25 11:31	

LABORATORY CONTROL SAMPLE: 3711725

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.1	102	90-110	
Fluoride	mg/L	2.5	2.4	98	90-110	
Sulfate	mg/L	5	5.2	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3711726 3711727

Parameter	Units	60474363004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	20.8	25	25	45.7	44.8	99	96	80-120	2	15	
Fluoride	mg/L	0.26	2.5	2.5	2.8	2.6	100	95	80-120	4	15	
Sulfate	mg/L	115	100	100	218	226	103	111	80-120	4	15	

SAMPLE DUPLICATE: 3711728

Parameter	Units	60474363004 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	20.8	20.1	3	15	
Fluoride	mg/L	0.26	0.31	17	15	D6
Sulfate	mg/L	115	112	3	15	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 936701
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023

METHOD BLANK: 3713313 Matrix: Water
Associated Lab Samples: 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.53	1.0	0.53	05/29/25 10:40	
Fluoride	mg/L	<0.12	0.20	0.12	05/29/25 10:40	
Sulfate	mg/L	<0.55	1.0	0.55	05/29/25 10:40	

LABORATORY CONTROL SAMPLE: 3713314

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	96	90-110	
Fluoride	mg/L	2.5	2.5	98	90-110	
Sulfate	mg/L	5	5.0	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3713317 3713318

Parameter	Units	60474364021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	50.8	50	50	97.4	96.8	93	92	80-120	1	15	
Fluoride	mg/L	0.37	2.5	2.5	2.8	2.4	95	81	80-120	14	15	
Sulfate	mg/L	189	50	50	235	234	93	91	80-120	0	15	E

MATRIX SPIKE SAMPLE: 3713320

Parameter	Units	60474363013 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	<0.53	5	4.8	96	80-120	
Fluoride	mg/L	<0.12	2.5	2.4	98	80-120	
Sulfate	mg/L	<0.55	5	5.0	95	80-120	

SAMPLE DUPLICATE: 3713319

Parameter	Units	60474364021 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	50.8	49.1	3	15	
Fluoride	mg/L	0.37	0.31	18	15	D6
Sulfate	mg/L	189	182	4	15	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 936862
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60474364014

METHOD BLANK: 3714049 Matrix: Water
Associated Lab Samples: 60474364014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.58J	1.0	0.53	05/30/25 06:44	
Fluoride	mg/L	<0.12	0.20	0.12	05/30/25 06:44	
Sulfate	mg/L	<0.55	1.0	0.55	05/30/25 06:44	

LABORATORY CONTROL SAMPLE: 3714050

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	96	90-110	
Fluoride	mg/L	2.5	2.6	103	90-110	
Sulfate	mg/L	5	4.7	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3714051 3714052

Parameter	Units	60474530001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	119	250	250	417	380	119	104	80-120	9	15	
Fluoride	mg/L	ND	125	125	172	150	138	120	80-120	14	15	M1
Sulfate	mg/L	93.4	250	250	398	350	122	103	80-120	13	15	M1

MATRIX SPIKE SAMPLE: 3714053

Parameter	Units	60474530002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	144	250	358	86	80-120	
Fluoride	mg/L	ND	125	132	106	80-120	
Sulfate	mg/L	72.1	250	291	88	80-120	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-10S **Lab ID: 60474364001** Collected: 05/01/25 16:23 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**-0.430 ± 0.745 (1.57) C:NA T:88%**	pCi/L	05/22/25 14:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.607 ± 0.348 (0.617) C:73% T:90%**	pCi/L	05/20/25 11:27	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-16S **Lab ID: 60474364002** Collected: 05/02/25 13:30 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**-0.131 ± 0.515 (1.09) C:NA T:93%**	pCi/L	05/22/25 14:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.371 ± 0.354 (0.720) C:74% T:84%**	pCi/L	05/20/25 14:52	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-17S **Lab ID: 60474364003** Collected: 05/02/25 10:53 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.0696 ± 0.852 (1.60) C:NA T:86%**	pCi/L	05/22/25 14:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.604 ± 0.414 (0.783) C:74% T:77%**	pCi/L	05/20/25 14:52	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-17I **Lab ID: 60474364004** Collected: 05/02/25 09:50 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Upon receipt at the laboratory, 2.5 mls of nitric acid were added to sample 004 BP1N 2/3, to meet the sample preservation requirement of pH <2 for radiochemistry analysis, where the method requires preservation, in wastewater. The samples were not preserved pH < 2 within 15 minutes of collection (40CFR136).

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**1.68 ± 2.52 (4.29) C:NA T:87%**	pCi/L	05/22/25 14:42	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**1.90 ± 0.934 (1.58) C:74% T:78%**	pCi/L	05/20/25 14:52	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-17D **Lab ID: 60474364005** Collected: 05/02/25 11:50 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**-0.133 ± 0.937 (1.78) C:NA T:89%**	pCi/L	05/22/25 14:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**1.09 ± 0.498 (0.826) C:69% T:86%**	pCi/L	05/20/25 14:52	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-19S **Lab ID: 60474364006** Collected: 05/02/25 09:59 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**-0.507 ± 0.808 (1.65) C:NA T:90%**	pCi/L	05/22/25 14:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.777 ± 0.571 (1.14) C:77% T:78%**	pCi/L	05/20/25 14:52	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-19I **Lab ID: 60474364007** Collected: 05/02/25 10:39 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.000 ± 1.98 (3.79) C:NA T:84%**	pCi/L	05/22/25 14:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.873 ± 0.923 (1.92) C:76% T:73%**	pCi/L	05/20/25 14:52	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-19D **Lab ID: 60474364008** Collected: 05/02/25 11:36 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.605 ± 0.943 (1.61) C:NA T:86%**	pCi/L	05/22/25 14:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.880 ± 0.438 (0.733) C:75% T:79%**	pCi/L	05/20/25 14:53	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-29S **Lab ID: 60474364009** Collected: 05/01/25 12:20 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**-0.850 ± 0.906 (1.90) C:NA T:94%**	pCi/L	05/22/25 14:53	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**0.711 ± 0.384 (0.665) C:73% T:89%**	pCi/L	05/20/25 14:53	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-29D **Lab ID: 60474364010** Collected: 05/01/25 13:12 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**-0.325 ± 0.733 (1.49) C:NA T:90%**	pCi/L	05/22/25 14:53	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.349 ± 0.394 (0.824) C:74% T:81%**	pCi/L	05/20/25 14:53	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-31S **Lab ID: 60474364011** Collected: 05/01/25 15:10 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**0.000 ± 0.501 (1.03) C:NA T:92%**	pCi/L	05/22/25 14:53	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**0.189 ± 0.375 (0.828) C:80% T:71%**	pCi/L	05/27/25 12:54	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-CA-DUP-1 **Lab ID: 60474364012** Collected: 05/02/25 08:00 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**-0.0697 ± 0.853 (1.64) C:NA T:91%**	pCi/L	05/22/25 14:53	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.195 ± 0.441 (0.978) C:79% T:85%**	pCi/L	05/20/25 14:54	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-CA-FB-1 **Lab ID: 60474364013** Collected: 05/01/25 16:45 Received: 05/03/25 07:37 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**-0.390 ± 0.824 (1.71) C:NA T:91%**	pCi/L	05/22/25 14:53	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.473 ± 0.513 (1.08) C:74% T:85%**	pCi/L	05/20/25 14:53	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-055 **Lab ID: 60474364014** Collected: 05/06/25 11:50 Received: 05/07/25 06:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**-0.399 ± 0.768 (1.53) C:NA T:92%**	pCi/L	06/12/25 16:43	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**0.915 ± 0.567 (1.08) C:69% T:87%**	pCi/L	06/12/25 14:43	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-21S **Lab ID: 60474364016** Collected: 05/05/25 12:22 Received: 05/07/25 06:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**0.184 ± 0.750 (1.37) C:NA T:89%**	pCi/L	06/12/25 16:43	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**0.701 ± 0.549 (1.10) C:73% T:85%**	pCi/L	06/12/25 14:44	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-21I **Lab ID: 60474364017** Collected: 05/05/25 13:13 Received: 05/07/25 06:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.000 ± 0.891 (1.68) C:NA T:92%**	pCi/L	06/12/25 16:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.618 ± 0.491 (0.980) C:73% T:81%**	pCi/L	06/12/25 14:45	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-21D **Lab ID: 60474364018** Collected: 05/05/25 14:11 Received: 05/07/25 06:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**1.65 ± 0.985 (1.42) C:NA T:92%**	pCi/L	06/12/25 16:43	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**1.49 ± 0.569 (0.886) C:77% T:86%**	pCi/L	06/12/25 14:45	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-22S **Lab ID: 60474364019** Collected: 05/05/25 13:25 Received: 05/07/25 06:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**-0.0587 ± 0.640 (1.25) C:NA T:86%**	pCi/L	06/12/25 16:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.514 ± 0.464 (0.950) C:78% T:85%**	pCi/L	06/12/25 14:45	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-22D **Lab ID: 60474364020** Collected: 05/05/25 12:25 Received: 05/07/25 06:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.000 ± 0.709 (1.34) C:NA T:89%**	pCi/L	06/12/25 16:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.735 ± 0.491 (0.941) C:74% T:81%**	pCi/L	06/12/25 14:46	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-P-30S **Lab ID: 60474364021** Collected: 05/05/25 10:15 Received: 05/07/25 06:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**-0.0503 ± 0.296 (0.659) C:NA T:85%**	pCi/L	06/12/25 16:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.449 ± 0.492 (1.03) C:74% T:81%**	pCi/L	06/12/25 14:46	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-CA-DUP-2 **Lab ID: 60474364022** Collected: 05/05/25 00:00 Received: 05/07/25 06:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**0.180 ± 0.890 (1.62) C:NA T:91%**	pCi/L	06/12/25 16:55	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**1.39 ± 0.600 (0.993) C:70% T:83%**	pCi/L	06/12/25 14:46	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-CA-FB-2 **Lab ID: 60474364023** Collected: 05/05/25 12:30 Received: 05/07/25 06:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**0.121 ± 0.734 (1.36) C:NA T:92%**	pCi/L	06/12/25 17:06	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**0.717 ± 0.522 (1.03) C:74% T:87%**	pCi/L	06/12/25 14:46	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-CA-MS-1 **Lab ID: 60474364024** Collected: 05/05/25 10:15 Received: 05/07/25 06:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**82.05 %REC ± NA (NA) C:NA T:NA**	pCi/L	06/12/25 16:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**97.44 %REC ± NA (NA) C:NA T:NA**	pCi/L	06/12/25 14:46	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Sample: R-CA-MSD-1 **Lab ID: 60474364025** Collected: 05/05/25 10:15 Received: 05/07/25 06:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**114.90 %REC 33.36RPD ± NA (NA) C:NA T:NA**	pCi/L	06/12/25 16:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**102.66 %REC 5.21RPD ± NA (NA) C:NA T:NA**	pCi/L	06/12/25 14:46	15262-20-1	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 747644
QC Batch Method: EPA 903.1
Analysis Method: EPA 903.1
Analysis Description: 903.1 Radium-226
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 60474364014, 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023, 60474364024, 60474364025

METHOD BLANK: 3641379 Matrix: Water
Associated Lab Samples: 60474364014, 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023, 60474364024, 60474364025

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.153 ± 0.265 (0.473) C:NA T:87%	pCi/L	06/12/25 16:43	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 744974
QC Batch Method: EPA 903.1
Analysis Method: EPA 903.1
Analysis Description: 903.1 Radium-226
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 60474364001, 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364009, 60474364010, 60474364011, 60474364012, 60474364013

METHOD BLANK: 3626923
Matrix: Water
Associated Lab Samples: 60474364001, 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364009, 60474364010, 60474364011, 60474364012, 60474364013

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.164 ± 0.241 (0.411) C:NA T:89%	pCi/L	05/22/25 14:20	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 744975
QC Batch Method: EPA 904.0
Analysis Method: EPA 904.0
Analysis Description: 904.0 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 60474364001, 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364009, 60474364010, 60474364011, 60474364012, 60474364013

METHOD BLANK: 3626924 Matrix: Water
Associated Lab Samples: 60474364001, 60474364002, 60474364003, 60474364004, 60474364005, 60474364006, 60474364007, 60474364008, 60474364009, 60474364010, 60474364011, 60474364012, 60474364013

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.727 ± 0.416 (0.745) C:75% T:75%	pCi/L	05/20/25 11:26	

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

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

QC Batch: 747645
QC Batch Method: EPA 904.0
Analysis Method: EPA 904.0
Analysis Description: 904.0 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 60474364014, 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023, 60474364024, 60474364025

METHOD BLANK: 3641380 Matrix: Water
Associated Lab Samples: 60474364014, 60474364016, 60474364017, 60474364018, 60474364019, 60474364020, 60474364021, 60474364022, 60474364023, 60474364024, 60474364025

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.406 ± 0.368 (0.741) C:77% T:83%	pCi/L	06/12/25 14:43	

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QUALIFIERS

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
H1	Analysis conducted outside the EPA method holding time.
H3	Sample was received or analysis requested beyond the recognized method holding time.
H6	Analysis initiated outside of the 15 minute EPA required holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60474364001	**R-P-10S**	EPA 200.7	934060	EPA 200.7	934137
60474364002	**R-P-16S**	EPA 200.7	934060	EPA 200.7	934137
60474364003	**R-P-17S**	EPA 200.7	934060	EPA 200.7	934137
60474364004	**R-P-17I**	EPA 200.7	934060	EPA 200.7	934137
60474364005	**R-P-17D**	EPA 200.7	934060	EPA 200.7	934137
60474364006	**R-P-19S**	EPA 200.7	934060	EPA 200.7	934137
60474364007	**R-P-19I**	EPA 200.7	934060	EPA 200.7	934137
60474364008	**R-P-19D**	EPA 200.7	934060	EPA 200.7	934137
60474364009	**R-P-29S**	EPA 200.7	934060	EPA 200.7	934137
60474364010	**R-P-29D**	EPA 200.7	934063	EPA 200.7	934134
60474364011	**R-P-31S**	EPA 200.7	934063	EPA 200.7	934134
60474364012	**R-CA-DUP-1**	EPA 200.7	934063	EPA 200.7	934134
60474364013	**R-CA-FB-1**	EPA 200.7	934063	EPA 200.7	934134
60474364014	**R-P-055**	EPA 200.7	935319	EPA 200.7	935342
60474364016	**R-P-21S**	EPA 200.7	935319	EPA 200.7	935342
60474364017	**R-P-21I**	EPA 200.7	935319	EPA 200.7	935342
60474364018	**R-P-21D**	EPA 200.7	935319	EPA 200.7	935342
60474364019	**R-P-22S**	EPA 200.7	935319	EPA 200.7	935342
60474364020	**R-P-22D**	EPA 200.7	935319	EPA 200.7	935342
60474364021	**R-P-30S**	EPA 200.7	935319	EPA 200.7	935342
60474364022	**R-CA-DUP-2**	EPA 200.7	935319	EPA 200.7	935342
60474364023	**R-CA-FB-2**	EPA 200.7	935319	EPA 200.7	935342
60474364001	**R-P-10S**	EPA 200.8	934061	EPA 200.8	934136
60474364002	**R-P-16S**	EPA 200.8	934061	EPA 200.8	934136
60474364003	**R-P-17S**	EPA 200.8	934061	EPA 200.8	934136
60474364004	**R-P-17I**	EPA 200.8	934061	EPA 200.8	934136
60474364005	**R-P-17D**	EPA 200.8	934061	EPA 200.8	934136
60474364006	**R-P-19S**	EPA 200.8	934061	EPA 200.8	934136
60474364007	**R-P-19I**	EPA 200.8	934061	EPA 200.8	934136
60474364008	**R-P-19D**	EPA 200.8	934061	EPA 200.8	934136
60474364009	**R-P-29S**	EPA 200.8	934061	EPA 200.8	934136
60474364010	**R-P-29D**	EPA 200.8	934064	EPA 200.8	934133
60474364011	**R-P-31S**	EPA 200.8	934064	EPA 200.8	934133
60474364012	**R-CA-DUP-1**	EPA 200.8	934064	EPA 200.8	934133
60474364013	**R-CA-FB-1**	EPA 200.8	934064	EPA 200.8	934133
60474364014	**R-P-055**	EPA 200.8	934996	EPA 200.8	935288
60474364016	**R-P-21S**	EPA 200.8	934996	EPA 200.8	935288
60474364017	**R-P-21I**	EPA 200.8	934996	EPA 200.8	935288
60474364018	**R-P-21D**	EPA 200.8	934996	EPA 200.8	935288
60474364019	**R-P-22S**	EPA 200.8	934996	EPA 200.8	935288
60474364020	**R-P-22D**	EPA 200.8	934996	EPA 200.8	935288
60474364021	**R-P-30S**	EPA 200.8	934996	EPA 200.8	935288
60474364022	**R-CA-DUP-2**	EPA 200.8	934996	EPA 200.8	935288
60474364023	**R-CA-FB-2**	EPA 200.8	934996	EPA 200.8	935288
60474364001	**R-P-10S**	EPA 7470	935609	EPA 7470	935641
60474364002	**R-P-16S**	EPA 7470	935609	EPA 7470	935641

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60474364003	**R-P-17S**	EPA 7470	935609	EPA 7470	935641
60474364004	**R-P-17I**	EPA 7470	935609	EPA 7470	935641
60474364005	**R-P-17D**	EPA 7470	935609	EPA 7470	935641
60474364006	**R-P-19S**	EPA 7470	935609	EPA 7470	935641
60474364007	**R-P-19I**	EPA 7470	935609	EPA 7470	935641
60474364008	**R-P-19D**	EPA 7470	935609	EPA 7470	935641
60474364009	**R-P-29S**	EPA 7470	935609	EPA 7470	935641
60474364010	**R-P-29D**	EPA 7470	935609	EPA 7470	935641
60474364011	**R-P-31S**	EPA 7470	935965	EPA 7470	935995
60474364012	**R-CA-DUP-1**	EPA 7470	935965	EPA 7470	935995
60474364013	**R-CA-FB-1**	EPA 7470	935965	EPA 7470	935995
60474364014	**R-P-055**	EPA 7470	935965	EPA 7470	935995
60474364016	**R-P-21S**	EPA 7470	935965	EPA 7470	935995
60474364017	**R-P-21I**	EPA 7470	935965	EPA 7470	935995
60474364018	**R-P-21D**	EPA 7470	935965	EPA 7470	935995
60474364019	**R-P-22S**	EPA 7470	935965	EPA 7470	935995
60474364020	**R-P-22D**	EPA 7470	935965	EPA 7470	935995
60474364021	**R-P-30S**	EPA 7470	935965	EPA 7470	935995
60474364022	**R-CA-DUP-2**	EPA 7470	935965	EPA 7470	935995
60474364023	**R-CA-FB-2**	EPA 7470	935965	EPA 7470	935995
60474364001	**R-P-10S**	EPA 903.1	744974		
60474364002	**R-P-16S**	EPA 903.1	744974		
60474364003	**R-P-17S**	EPA 903.1	744974		
60474364004	**R-P-17I**	EPA 903.1	744974		
60474364005	**R-P-17D**	EPA 903.1	744974		
60474364006	**R-P-19S**	EPA 903.1	744974		
60474364007	**R-P-19I**	EPA 903.1	744974		
60474364008	**R-P-19D**	EPA 903.1	744974		
60474364009	**R-P-29S**	EPA 903.1	744974		
60474364010	**R-P-29D**	EPA 903.1	744974		
60474364011	**R-P-31S**	EPA 903.1	744974		
60474364012	**R-CA-DUP-1**	EPA 903.1	744974		
60474364013	**R-CA-FB-1**	EPA 903.1	744974		
60474364014	**R-P-055**	EPA 903.1	747644		
60474364016	**R-P-21S**	EPA 903.1	747644		
60474364017	**R-P-21I**	EPA 903.1	747644		
60474364018	**R-P-21D**	EPA 903.1	747644		
60474364019	**R-P-22S**	EPA 903.1	747644		
60474364020	**R-P-22D**	EPA 903.1	747644		
60474364021	**R-P-30S**	EPA 903.1	747644		
60474364022	**R-CA-DUP-2**	EPA 903.1	747644		
60474364023	**R-CA-FB-2**	EPA 903.1	747644		
60474364024	**R-CA-MS-1**	EPA 903.1	747644		
60474364025	**R-CA-MSD-1**	EPA 903.1	747644		
60474364001	**R-P-10S**	EPA 904.0	744975		
60474364002	**R-P-16S**	EPA 904.0	744975		
60474364003	**R-P-17S**	EPA 904.0	744975		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60474364004	**R-P-17I**	EPA 904.0	744975		
60474364005	**R-P-17D**	EPA 904.0	744975		
60474364006	**R-P-19S**	EPA 904.0	744975		
60474364007	**R-P-19I**	EPA 904.0	744975		
60474364008	**R-P-19D**	EPA 904.0	744975		
60474364009	**R-P-29S**	EPA 904.0	744975		
60474364010	**R-P-29D**	EPA 904.0	744975		
60474364011	**R-P-31S**	EPA 904.0	744975		
60474364012	**R-CA-DUP-1**	EPA 904.0	744975		
60474364013	**R-CA-FB-1**	EPA 904.0	744975		
60474364014	**R-P-055**	EPA 904.0	747645		
60474364016	**R-P-21S**	EPA 904.0	747645		
60474364017	**R-P-21I**	EPA 904.0	747645		
60474364018	**R-P-21D**	EPA 904.0	747645		
60474364019	**R-P-22S**	EPA 904.0	747645		
60474364020	**R-P-22D**	EPA 904.0	747645		
60474364021	**R-P-30S**	EPA 904.0	747645		
60474364022	**R-CA-DUP-2**	EPA 904.0	747645		
60474364023	**R-CA-FB-2**	EPA 904.0	747645		
60474364024	**R-CA-MS-1**	EPA 904.0	747645		
60474364025	**R-CA-MSD-1**	EPA 904.0	747645		
60474364001	**R-P-10S**	SM 2320B	935151		
60474364002	**R-P-16S**	SM 2320B	935223		
60474364003	**R-P-17S**	SM 2320B	935223		
60474364004	**R-P-17I**	SM 2320B	935223		
60474364005	**R-P-17D**	SM 2320B	935223		
60474364006	**R-P-19S**	SM 2320B	935223		
60474364007	**R-P-19I**	SM 2320B	935223		
60474364008	**R-P-19D**	SM 2320B	935223		
60474364009	**R-P-29S**	SM 2320B	935151		
60474364010	**R-P-29D**	SM 2320B	935151		
60474364011	**R-P-31S**	SM 2320B	935151		
60474364012	**R-CA-DUP-1**	SM 2320B	935223		
60474364013	**R-CA-FB-1**	SM 2320B	935151		
60474364014	**R-P-055**	SM 2320B	935395		
60474364016	**R-P-21S**	SM 2320B	935224		
60474364017	**R-P-21I**	SM 2320B	935224		
60474364018	**R-P-21D**	SM 2320B	935224		
60474364019	**R-P-22S**	SM 2320B	935224		
60474364020	**R-P-22D**	SM 2320B	935224		
60474364021	**R-P-30S**	SM 2320B	935224		
60474364022	**R-CA-DUP-2**	SM 2320B	935224		
60474364023	**R-CA-FB-2**	SM 2320B	935224		
60474364001	**R-P-10S**	SM 2540C	934270		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60474364002	**R-P-16S**	SM 2540C	934416		
60474364003	**R-P-17S**	SM 2540C	934416		
60474364004	**R-P-17I**	SM 2540C	934416		
60474364005	**R-P-17D**	SM 2540C	934416		
60474364006	**R-P-19S**	SM 2540C	934416		
60474364007	**R-P-19I**	SM 2540C	934416		
60474364008	**R-P-19D**	SM 2540C	934416		
60474364009	**R-P-29S**	SM 2540C	934270		
60474364010	**R-P-29D**	SM 2540C	934270		
60474364011	**R-P-31S**	SM 2540C	934270		
60474364012	**R-CA-DUP-1**	SM 2540C	934416		
60474364013	**R-CA-FB-1**	SM 2540C	934270		
60474364014	**R-P-055**	SM 2540C	934869		
60474364016	**R-P-21S**	SM 2540C	934703		
60474364017	**R-P-21I**	SM 2540C	934703		
60474364018	**R-P-21D**	SM 2540C	934703		
60474364019	**R-P-22S**	SM 2540C	934703		
60474364020	**R-P-22D**	SM 2540C	934705		
60474364021	**R-P-30S**	SM 2540C	934705		
60474364022	**R-CA-DUP-2**	SM 2540C	934705		
60474364023	**R-CA-FB-2**	SM 2540C	934705		
60474364001	**R-P-10S**	SM 3500-Fe B#4	937293		
60474364002	**R-P-16S**	SM 3500-Fe B#4	937293		
60474364003	**R-P-17S**	SM 3500-Fe B#4	937293		
60474364004	**R-P-17I**	SM 3500-Fe B#4	937293		
60474364005	**R-P-17D**	SM 3500-Fe B#4	937293		
60474364006	**R-P-19S**	SM 3500-Fe B#4	937293		
60474364007	**R-P-19I**	SM 3500-Fe B#4	937293		
60474364008	**R-P-19D**	SM 3500-Fe B#4	937293		
60474364009	**R-P-29S**	SM 3500-Fe B#4	937293		
60474364010	**R-P-29D**	SM 3500-Fe B#4	936788		
60474364011	**R-P-31S**	SM 3500-Fe B#4	936788		
60474364012	**R-CA-DUP-1**	SM 3500-Fe B#4	936788		
60474364013	**R-CA-FB-1**	SM 3500-Fe B#4	936788		
60474364014	**R-P-055**	SM 3500-Fe B#4	937293		
60474364016	**R-P-21S**	SM 3500-Fe B#4	937293		
60474364017	**R-P-21I**	SM 3500-Fe B#4	937293		
60474364018	**R-P-21D**	SM 3500-Fe B#4	937293		
60474364019	**R-P-22S**	SM 3500-Fe B#4	937293		
60474364020	**R-P-22D**	SM 3500-Fe B#4	937293		
60474364021	**R-P-30S**	SM 3500-Fe B#4	937293		
60474364022	**R-CA-DUP-2**	SM 3500-Fe B#4	937293		
60474364023	**R-CA-FB-2**	SM 3500-Fe B#4	937293		
60474364001	**R-P-10S**	SM 3500-Fe B#4	934114		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60474364002	**R-P-16S**	SM 3500-Fe B#4	934114		
60474364003	**R-P-17S**	SM 3500-Fe B#4	934114		
60474364004	**R-P-17I**	SM 3500-Fe B#4	934114		
60474364005	**R-P-17D**	SM 3500-Fe B#4	934114		
60474364006	**R-P-19S**	SM 3500-Fe B#4	934114		
60474364007	**R-P-19I**	SM 3500-Fe B#4	934114		
60474364008	**R-P-19D**	SM 3500-Fe B#4	934114		
60474364009	**R-P-29S**	SM 3500-Fe B#4	934114		
60474364010	**R-P-29D**	SM 3500-Fe B#4	934114		
60474364011	**R-P-31S**	SM 3500-Fe B#4	934114		
60474364012	**R-CA-DUP-1**	SM 3500-Fe B#4	934114		
60474364013	**R-CA-FB-1**	SM 3500-Fe B#4	934114		
60474364014	**R-P-055**	SM 3500-Fe B#4	934432		
60474364016	**R-P-21S**	SM 3500-Fe B#4	934432		
60474364017	**R-P-21I**	SM 3500-Fe B#4	934432		
60474364018	**R-P-21D**	SM 3500-Fe B#4	934432		
60474364019	**R-P-22S**	SM 3500-Fe B#4	934432		
60474364020	**R-P-22D**	SM 3500-Fe B#4	934432		
60474364021	**R-P-30S**	SM 3500-Fe B#4	934432		
60474364022	**R-CA-DUP-2**	SM 3500-Fe B#4	934432		
60474364023	**R-CA-FB-2**	SM 3500-Fe B#4	934432		
60474364001	**R-P-10S**	SM 4500-S-2 D	934115		
60474364002	**R-P-16S**	SM 4500-S-2 D	934115		
60474364003	**R-P-17S**	SM 4500-S-2 D	934115		
60474364004	**R-P-17I**	SM 4500-S-2 D	934115		
60474364005	**R-P-17D**	SM 4500-S-2 D	934115		
60474364006	**R-P-19S**	SM 4500-S-2 D	934115		
60474364007	**R-P-19I**	SM 4500-S-2 D	934115		
60474364008	**R-P-19D**	SM 4500-S-2 D	934115		
60474364009	**R-P-29S**	SM 4500-S-2 D	934115		
60474364010	**R-P-29D**	SM 4500-S-2 D	934115		
60474364011	**R-P-31S**	SM 4500-S-2 D	934115		
60474364012	**R-CA-DUP-1**	SM 4500-S-2 D	934115		
60474364013	**R-CA-FB-1**	SM 4500-S-2 D	934115		
60474364014	**R-P-055**	SM 4500-S-2 D	934561		
60474364016	**R-P-21S**	SM 4500-S-2 D	934433		
60474364017	**R-P-21I**	SM 4500-S-2 D	934433		
60474364018	**R-P-21D**	SM 4500-S-2 D	934433		
60474364019	**R-P-22S**	SM 4500-S-2 D	934433		
60474364020	**R-P-22D**	SM 4500-S-2 D	934433		
60474364021	**R-P-30S**	SM 4500-S-2 D	934433		
60474364022	**R-CA-DUP-2**	SM 4500-S-2 D	934433		
60474364023	**R-CA-FB-2**	SM 4500-S-2 D	934433		
60474364001	**R-P-10S**	EPA 300.0	936330		
60474364002	**R-P-16S**	EPA 300.0	936330		
60474364003	**R-P-17S**	EPA 300.0	936330		

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA-CA
Pace Project No.: 60474364

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60474364004	**R-P-17I**	EPA 300.0	936330		
60474364005	**R-P-17D**	EPA 300.0	936330		
60474364006	**R-P-19S**	EPA 300.0	936330		
60474364007	**R-P-19I**	EPA 300.0	936330		
60474364008	**R-P-19D**	EPA 300.0	936330		
60474364009	**R-P-29S**	EPA 300.0	936330		
60474364010	**R-P-29D**	EPA 300.0	936330		
60474364011	**R-P-31S**	EPA 300.0	936330		
60474364012	**R-CA-DUP-1**	EPA 300.0	936330		
60474364013	**R-CA-FB-1**	EPA 300.0	936330		
60474364014	**R-P-055**	EPA 300.0	936862		
60474364016	**R-P-21S**	EPA 300.0	936701		
60474364017	**R-P-21I**	EPA 300.0	936701		
60474364018	**R-P-21D**	EPA 300.0	936701		
60474364019	**R-P-22S**	EPA 300.0	936701		
60474364020	**R-P-22D**	EPA 300.0	936701		
60474364021	**R-P-30S**	EPA 300.0	936701		
60474364022	**R-CA-DUP-2**	EPA 300.0	936701		
60474364023	**R-CA-FB-2**	EPA 300.0	936701		

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WO# : 60474364

60474364

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

Client Name: Rocksmith Geoeng

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

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

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

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

Thermometer Used: T-301 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): As-read 18.8/19.5/0.9 Corr. Factor +0.1 Corrected 18.9/19.6/1.0 0.5/0.7/2.0

Temperature should be above freezing to 6°C 0.4/0.6/1.9

Date and initials of person examining contents: PV 5/5/25

Chain of Custody present:	☑Yes ☐No ☐N/A	Samples R-P-29S and R-P-29D
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	were received.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	Date and Time
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	R-P-29S - 5/1/25 12:20
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	R-P-29D - ↓ 13:12
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#: 96888/88728	☑Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☑No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

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60474364

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road, Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:	COC# 6		
Project Name:	AMEREN RCPA-CA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri

Data Deliverables:
[ ] Level II [ ] Level III [ ] Level IV
[ ] EQUIS
[ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required):
[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [ ] No
Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: 1 1 3 3 1 6 3

Identify Container Preservative Type***: 1 1 2 2 2 4 6

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	Chloride/Fluoride/Sulfate	TDS / Alkalinity	App III and Cat/An Metals (200.7)*	Appendix IV Metals (200.7/200.8/7470)*	Radium 226 & Radium 228	Ferrous Iron / Ferric Iron Calc.	Sulfide				Sample Comment	Preservation non-conformance identified for sample.
R-P-05S	WT																				
R-P-10S	WT	G			5-1-25	1623	7			✓	✓	✓	✓	✓	✓	✓					
R-P-16S	WT	G			5-2-25	1330	7			✓	✓	✓	✓	✓	✓	✓					
R-P-17S	WT	G			5/2/25	1053	7			✓	✓	✓	✓	✓	✓	✓					
R-P-17I	WT	G			05/02/25	0950	7			✓	✓	✓	✓	✓	✓	✓					
R-P-17D	WT	G			05/02/25	1150	7			✓	✓	✓	✓	✓	✓	✓					
R-P-19S	WT	G			05.02.25	0959	7			✓	✓	✓	✓	✓	✓	✓	pH				
R-P-19I	WT				05/02/25	1039	7			✓	✓	✓	✓	✓	✓	✓					
R-P-19D	WT				05/02/25	1136	7			✓	✓	✓	✓	✓	✓	✓					
R-P-21S	WT																				

Lab Use Only
Proj. Mgr: Jamie Church
AcctNum / Client ID:
Table #:
Profile / Template: 15854
Prelog / Bottle Ord. ID: EZ 3244559

Additional Instructions from Pace®:
APPEND TO PROJECT:
App III and Cat/An Metals* - EPA 200.7: Fe, Mg, Mn, K, Na, Ca, B
****App IV Metals-EPA 200.7 -Ba,Be,Co,Pb,Li,Mo and 200.8 Metals-Sb, As, Cd, Cr, Se, Tl & 7470 Hg**

Collected By: (Printed Name) Grant Morey
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

18-9/19.6/1.0

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
6	T-301	+0.1		0.5/0.7/2.0	

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
Rocksmith	5-2-25/1600		5/3/25 0737	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In- Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 3

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Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

CHAIN-OF-CUSTODY Analytical Request Document

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Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road, Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:	COC# 6		
Project Name:	AMEREN RCPA-CA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other		Regulatory Program (DW, RCRA, etc.) as applicable:	Reportable [ ] Yes [ ] No
		Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____	DW PWSID # or WW Permit # as applicable:
		Date Results Requested:	Field Filtered (if applicable): [ ] Yes [ ] No Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: 1 1 3 3 1 6 3

Identify Container Preservative Type***: 1 1 2 2 2 4 6

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	Chloride/Fluoride/Sulfate	TDS / Alkalinity	App III and Cat/An Metals (200.7)*	Appendix IV Metals (200.7/200.8/7470)*	Radium 226 & Radium 228	Ferrous Iron / Ferric Iron Calc.	Sulfide	Sample Comment
R-P-21I	WT																
R-P-21D	WT																
R-P-22S	WT																
R-P-22D	WT																
R-P-29S	WT																
R-P-29D	WT																
R-P-30S	WT																
R-P-31S	WT	G			5-1-25	1510	7			✓	✓	✓	✓	✓	✓	✓	
R-CA-DUP-1	WT	G			5-2-25	-	7			/	/	/	/	/	/	/	
R-CA-DUP-2	WT																

Lab Use Only: Proj. Mgr: Jamie Church; AcctNum / Client ID:; Table #:; Profile / Template: 15854; Prelog / Bottle Ord. ID: EZ 3244559

Preservation non-conformance identified for sample:

Additional Instructions from Pace®:
APPEND TO PROJECT:
App III and Cat/An Metals* - EPA 200.7: Fe, Mg, Mn, K, Na, Ca, B
****App IV Metals-EPA 200.7 -Ba,Be,Co,Pb,Li,Mo and 200.8 Metals-Sb, As, Cd, Cr, Se, Tl & 7470 Hg**

Collected By: (Printed Name) Grant Moore
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

18-9/19-6/1-0

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
6	T-30'	+0.1	0-5/0-7/2-0		

Relinquished by/Company: (Signature) Rocksmith	Date/Time: 5-2-25/1600	Received by/Company: (Signature)	Date/Time: 5/3/25 0737	Tracking Number:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In-Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEx [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 2 of 3

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Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

CHAIN-OF-CUSTODY Analytical Request Document

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6a174364

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road, Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:	COC# 6		
Project Name:	AMEREN RCPA-CA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri

Data Deliverables:
[ ] Level II [ ] Level III [ ] Level IV
[ ] EQUIS
[ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required):
[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [ ] No
Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: 1 1 3 3 1 6 3

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

Identify Container Preservative Type***: 1 1 2 2 2 4 6

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	Chloride/Fluoride/Sulfate	TDS / Alkalinity	App III and Cat/An Metals (200.7)*	Appendix IV Metals (200.7/200.8/7470)*	Radium 226 & Radium 228	Ferrous Iron / Ferric Iron Calc.	Sulfide	Sample Comment	Preservation non-conformance identified for sample:
R-CA-FB-1	WT	G			5-1-25	1645	7			✓	✓	✓	✓	✓	✓	✓		
R-CA-FB-2	WT																	
R-CA-MS-1	WT																	
R-CA-MSD-1	WT																	

Lab Use Only
Proj. Mgr: Jamie Church
AcctNum / Client ID:
Table #:
Profile / Template: 15854
Prelog / Bottle Ord. ID: EZ 3244559

Additional Instructions from Pace®:
APPEND TO PROJECT:
App III and Cat/An Metals* - EPA 200.7: Fe, Mg, Mn, K, Na, Ca, B
****App IV Metals-EPA 200.7 -Ba,Be,Co,Pb,Li,Mo and 200.8 Metals-Sb, As, Cd, Cr, Se, Tl & 7470 Hg**

Collected By: (Printed Name) Grant Morey
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
6	T-307	+0.1	18.9/19.6/1.0	0.5/0.7/2.0	

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Rocksmith	5-2-25/1600		5/3/25 0737
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

Tracking Number:

Delivered by: [ ] In- Person [ ] Courier
[ ] FedEx [ ] UPS [ ] Other

Page: 3 of 3

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1/3

Client: Rocksmith Geoeng Profile/EZ #: 3244559

Site: Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1																																
2	WT		3																1			2	1				1					
3			2																			1										
4			2																			3										
5			2																			2										
6			2																													
7			3																													
8			3																													
9			3																													
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 6cm74364

2/3

Client: Rocksmith Geoenv Profile/EZ #: 324455-9

Site: Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1																																
2																																
3																																
4																																
5	WT		2		(R-P-29S				(5/1/25			12:20)							1			2	1				1					
6	↓		2		(R-P-29D)				(5/1/25			13:12)							1			2	1				1					
7																																
8	↓		3																1			2	1				1					
9	↓		2																1			2	1				1					
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60474864

3/3

Client: Rocksmith Brewing Profile/EZ #: 3144559

Site: Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1	WT		3																1			2	1				1					
2																																
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60474364

WO# : 60474364

60474364

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

Client Name: Rocksmith Geoeng

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

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

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

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

Thermometer Used: T-301 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): As-read 1-4/1.1/0.5 Corr. Factor +0.1 Corrected 1.5/1.1/0.5 14.9/17.8

Date and initials of person examining contents: PW 5/7/25

Temperature should be above freezing to 6°C 14.9/17.8

Chain of Custody present:	☐Yes ☐No ☐N/A	
Chain of Custody relinquished:	☐Yes ☐No ☐N/A	
Samples arrived within holding time:	☐Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☐No ☐N/A	Receive one BPIN for R-P-16S. 05/02/25 13:30
Rush Turn Around Time requested:	☐Yes ☐No ☐N/A	
Sufficient volume:	☐Yes ☐No ☐N/A	
Correct containers used:	☐Yes ☐No ☐N/A	
Pace containers used:	☐Yes ☐No ☐N/A	
Containers intact:	☐Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☐N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☐N/A	
Sample labels match COC: Date / time / ID / analyses	☐Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☐No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#: 96988/98728	☐Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☐N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☐N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

60474364

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road, Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:	COC# 6		
Project Name:	AMEREN RCPA-CA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri

Specify Container Size **: i 1 3 3 1 6 3

Identify Container Preservative Type***: 1 1 2 2 2 4 6

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Data Deliverables:
[ ] Level II [ ] Level III [ ] Level IV
[ ] EQUIS
[ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required):
[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [ ] No
Analysis:

Lab Use Only
Proj. Mgr: Jamie Church
AcctNum / Client ID:
Table #:
Profile / Template: 15854
Prelog / Bottle Ord. ID: EZ 3244559

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	Chloride/Fluoride/Sulfate	TDS / Alkalinity	App III and Cat/An Metals (200.7)*	Appendix IV Metals (200.7/200.8/7470)*	Radium 226 & Radium 228	Ferrous Iron / Ferric Iron Calc.	Sulfide	Sample Comment	Preservation non-conformance identified for sample.
R-P-05S	WT	G			5-6-25	1150	7			✓	✓	✓	✓	✓	✓	✓		
R-P-10S	WT																	
R-P-16S	WT																	
R-P-17S	WT																	
R-P-17I	WT																	
R-P-17D	WT																	
R-P-19S	WT																	
R-P-19I	WT																	
R-P-19D	WT																	
R-P-21S	WT	G			5-5-25	1222	7			✓	✓	✓	✓	✓	✓	✓		

Additional Instructions from Pace®:
APPEND TO PROJECT:
App III and Cat/An Metals* - EPA 200.7: Fe, Mg, Mn, K, Na, Ca, B
****App IV Metals-EPA 200.7 -Ba,Be,Co,Pb,Li,Mo and 200.8 Metals-Sb, As, Cd, Cr, Se, Tl & 7470 Hg**

Collected By:
(Printed Name): Grant Morey
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp (°C)	On Ice:
5	T-301	+0.1		1.5/1.1/0.5	

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Rocksmith	5-6-25/1500		5/7 0655

Tracking Number: 14.9/13.8

Delivered by: [ ] In- Person [ ] Courier
[ ] FedEx [ ] UPS [ ] Other

Page: 1 of 3

Page 132 of 143

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Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

60474364

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road, Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:	COC# 6		
Project Name:	AMEREN RCPA-CA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other	Regulatory Program (DW, RCRA, etc.) as applicable:	Reportable [ ] Yes [ ] No	
	Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____	DW PWSID # or WW Permit # as applicable:	
	Date Results Requested:	Field Filtered (if applicable): [ ] Yes [ ] No	
		Analysis:	

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: 1 1 3 3 1 6 3

Identify Container Preservative Type***: 1 1 2 2 2 4 6

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	Chloride/Fluoride/Sulfate	TDS / Alkalinity	App III and Cat/An Metals (200.7)*	Appendix IV Metals (200.7/200.8/7470)*	Radium 226 & Radium 228	Ferrous Iron / Ferric Iron Calc.	Sulfide	Sample Comment	Preservation non-conformance identified for sample.
R-P-21I	WT	G			5-5-25	1313	7			✓	✓	✓	✓	✓	—	✓		
R-P-21D	WT	G			5-5-25	1411	7			✓	✓	✓	✓	✓	✓	✓		
R-P-22S	WT	G			5-5-25	1325	7			✓	✓	✓	✓	✓	✓	✓		
R-P-22D	WT	G			5-5-25	1225	7			✓	✓	✓	✓	✓	✓	✓		
R-P-29S	WT																	
R-P-29D	WT																	
R-P-30S	WT	G			5-5-25	1015	7			✓	✓	✓	✓	✓	✓	✓		
R-P-31S	WT																	
R-CA-DUP-1	WT																	
R-CA-DUP-2	WT	G			5-5-25	—	7			✓	✓	✓	✓	✓	✓	✓		

Lab Use Only
Proj. Mgr: Jamie Church
AcctNum / Client ID:
Table #:
Profile / Template: 15854
Prelog / Bottle Ord. ID: EZ 3244559

Additional Instructions from Pace®:
APPEND TO PROJECT:
App III and Cat/An Metals* - EPA 200.7: Fe, Mg, Mn, K, Na, Ca, B
****App IV Metals-EPA 200.7 -Ba,Be,Co,Pb,Li,Mo and 200.8 Metals-Sb, As, Cd, Cr, Se, Tl & 7470 Hg**

Collected By: (Printed Name) Grant Morey
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
5	T-301	+0.1	1-5/1-1/0-5		

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
Rocksmith	5-6-25/1500		5/7 0655	14-9/12-13-8 (2-5/7)
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In-Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEx [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 2 of 3

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

6041743C4

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road, Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:	COC# 6		
Project Name:	AMEREN RCPA-CA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri

Data Deliverables:
[ ] Level II [ ] Level III [ ] Level IV
[ ] EQUIS
[ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required):
[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: [1] 3 3 1 6 3

Identify Container Preservative Type***: 1 1 2 2 2 4 6

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	Chloride/Fluoride/Sulfate	TDS / Alkalinity	App III and Cat/An Metals (200.7)*	Appendix IV Metals (200.7/200.8/7470)*	Radium 226 & Radium 228	Ferrous Iron / Ferric Iron Calc.	Sulfide	Sample Comment	Preservation non-conformance identified for sample.
R-CA-FB-1	WT																	
R-CA-FB-2	WT	G			5-5-25	1230	7			✓	✓	✓	✓	✓	✓	✓		
R-CA-MS-1	WT	G			5-5-25	1015	7			✓	✓	✓	✓	✓	✓	✓	Collected @ R-P-305	
R-CA-MSD-1	WT	G			"	1015	7			✓	✓	✓	✓	✓	✓	✓	"	

Lab Use Only
Proj. Mgr: Jamie Church
AcctNum / Client ID:
Table #:
Profile / Template: 15854
Prelog / Bottle Ord. ID: EZ 3244559

Additional Instructions from Pace®:
APPEND TO PROJECT:
App III and Cat/An Metals* - EPA 200.7: Fe, Mg, Mn, K, Na, Ca, B
****App IV Metals-EPA 200.7 -Ba,Be,Co,Pb,Li,Mo and 200.8 Metals-Sb, As, Cd, Cr, Se, Tl & 7470 Hg**

Collected By:
(Printed Name) Grant Morey
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
5	T-301	+0.1	1.5/1.1/0.5		

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
[signature]	5-6-25/1500	[signature]	5/7 0655
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

Tracking Number: 14-9/130

Delivered by: [ ] In- Person [ ] Courier
[ ] FedEX [ ] UPS [ ] Other

Page: 3 of 3

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1/3

Client: Rocksmith Geoeng

Profile/EZ # Only print what you log.

Site:

Notes Append to 60474364

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1	WT		3																1			2	1				1					
2																																
3	WT													05/02/25				13:30				1		(Log for Hold)								
4																																
5																																
6																																
7																																
8																																
9																																
10	WT		2																1			2	1				1					
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60474364

2/3

Client: Rocksmith Geoeng

Profile/EZ #

Site:

Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1	WT		3																1			2	1								
2	↓		3																1			2	1								
3			2																1			2	1								
4			2																1			2	1								
5																																
6																																
7	WT		6							(MS/MSD)									3			2	3								
8																																
9																																
10	WT		3																1			2	1								
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60474364

DC#_Title: ENV-FRM-LENE-0001 v07_Sample Container Count
Effective Date: 7/12/2024

3/3

Client: Rocksmith Geoeng Profile/EZ #

Site: Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1																																
2	WT		2																1			2	1				1					
3	↓																					2										
4																						2										
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

(Only Log RAD)

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60474364

Internal Transfer Chain of Custody

☐ Rush Multiplier____X

☒ Samples Pre-Logged into eCOC

State Of Origin: MO

Cert. Needed: ☐ Yes ☒ No

Workorder: 60474364 **Workorder Name:** AMEREN RCPA-CA

Owner Received Date: 5/3/2025 **Results Requested By:** 5/27/2025

Report To	Subcontract To
Jamie Church Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 314-838-7223	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3						Requested Analysis Radium 226	Radium 228											LAB USE ONLY
1	R-P-10S	PS	5/1/2025 16:32	60474364001	Water	2						X	X											001
2	R-P-16S	PS	5/2/2025 13:30	60474364002	Water	2						X	X											002
3	R-P-17S	PS	5/2/2025 10:53	60474364003	Water	2						X	X											003
4	R-P-17I	PS	5/2/2025 09:50	60474364004	Water	2						X	X											004
5	R-P-17D	PS	5/2/2025 11:50	60474364005	Water	2						X	X											005
6	R-P-19S	PS	5/2/2025 09:59	60474364006	Water	2						X	X											006
7	R-P-19I	PS	5/2/2025 10:39	60474364007	Water	2						X	X											007
8	R-P-19D	PS	5/2/2025 11:36	60474364008	Water	2						X	X											008
9	R-P-29S	PS	5/1/2025 12:20	60474364009	Water	2						X	X											009
10	R-P-29D	PS	5/1/2025 13:12	60474364010	Water	2						X	X											010
11	R-P-31S	PS	5/1/2025 15:10	60474364011	Water	2						X	X											011
12	R-CA-DUP-1	PS	5/2/2025 08:00	60474364012	Water	2						X	X											012
13	R-CA-FB-1	PS	5/1/2025 16:45	60474364013	Water	2						X	X											013

WO# : 30778236

30778236

					Comments
Transfers	Released By	Date/Time	Received By	Date/Time	
1	Courtney Joyce, Pace	5/8 1800	[signature]	5.9.25 1010	
2					
3					

Cooler Temperature on Receipt ~ °C	Custody Seal Y or (N)	Received on Ice Y or (N)	Samples Intact (Y) or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

WO#: 30778236

PM: CMC Due Date: 06/02/25

CLIENT: PACE_GO_LEKS

DC#_Title: ENV-FRM-GBUR-0088 v07_Sample Condition Upon Receipt-Greensburg

Effective Date: 01/04/2024

WO# : 30778236

PM: CMC Due Date: 06/02/25

CLIENT: PACE_60_LEKS

Client Name: Pace-KS

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking Number: 4453 8931 3898

Initial / Date

Examined By: VB 5.9.25

Labeled By: VB 5.9.25

Temped By: —

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No Seals Intact: ☐ Yes ☒ No

Thermometer Used: — Type of Ice: Wet Blue None

Cooler Temperature: Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

pH paper Lot# 100324 | D.P.D. Residual Chlorine Lot #

Comments:	Yes	No	NA	
Chain of Custody Present	X			1.
Chain of Custody Filled Out:	X			2.
-Were client corrections present on COC		X		
Chain of Custody Relinquished	X			3.
Sampler Name & Signature on COC:		X		4.
Sample Labels match COC:	X			5.
-Includes date/time/ID				
Matrix: WT				
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used:	X			10.
-Pace Containers Used	X			
Containers Intact:	X			11.
Orthophosphate field filtered:			X	12.
Hex Cr Aqueous samples field filtered:			X	13.
Organic Samples checked for dichlorination			X	14:
Filtered volume received for dissolved tests:			X	15:
All containers checked for preservation:	X			16. 2.5 ml HNO3 added to 004 BPLN 2/3
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				
All containers meet method preservation requirements:		X		Initial when completed: LB Date/Time of Preservation: 5.9.25 27:50
				Lot# of added Preservative: 3021485
8260C/D: Headspace in VOA Vials (> 6mm)			X	17.
624.1: Headspace in VOA Vials (0mm)			X	18.
Radon: Headspace in RAD Vials (0mm)			X	19.
Trip Blank Present:			X	Trip blank custody seal present? YES or NO
Rad Samples Screened <.05 mrem/hr.	✓			Initial when completed: BK Date: 5.9.25 Survey Meter SN: 2501430

Comments: x3 BPLNs received for 004, x2 listed on CoC

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Qualtrax ID: 55680

Internal Transfer Chain of Custody

Page 141 of 142

☐ Rush Multiplier_____X
☒ Samples Pre-Logged into eCOC

State Of Origin: MO
Cert. Needed: ☐ Yes ☒ No

Workorder: 60474364 **Workorder Name:** AMEREN RCPA-CA

Owner Received Date: 5/3/2025 **Results Requested By:** 5/29/2025

Report To	Subcontract To
Jamie Church Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 314-838-7223	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3						Requested Analysis Radium 226	Radium 228											LAB USE ONLY
1	R-P-055	PS	5/6/2025 11:50	60474364014	Water	2						X	X											014
2	R-P-21S	PS	5/5/2025 12:22	60474364016	Water	2						X	X											016
3	R-P-21I	PS	5/5/2025 13:13	60474364017	Water	2						X	X											017
4	R-P-21D	PS	5/5/2025 14:11	60474364018	Water	2						X	X											018
5	R-P-22S	PS	5/5/2025 13:25	60474364019	Water	2						X	X											019
6	R-P-22D	PS	5/5/2025 12:25	60474364020	Water	2						X	X											020
7	R-P-30S	RQS	5/5/2025 10:15	60474364021	Water	2						X	X											021
8	R-CA-DUP-2	PS	5/5/2025 00:00	60474364022	Water	2						X	X											022
9	R-CA-FB-2	PS	5/5/2025 12:30	60474364023	Water	2						X	X											023
10	R-CA-MS-1	PS	5/5/2025 10:15	60474364024	Water	2						X	X											024
11	R-CA-MSD-1	PS	5/5/2025 10:15	60474364025	Water	2						X	X											025
12																								
13																								

Transfers	Released By	Date/Time	Received By	Date/Time
1	JAPace	5/13/25 1100	[signature]	5.15.25 0950
2				
3				

Comments

***Note: Parent sample for MS/MSD 024/025 is sample 021.

Cooler Temperature on Receipt — °C | **Custody Seal** Y or (N) | **Received on Ice** Y or (N) | **Samples Intact** (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*

This chain of custody is considered complete as is since this information is available in the owner laboratory.

WO# : 30779589

30779589

DC#_Title: ENV-FRM-GBUR-0088 v07_Sample Condition Upon Receipt-Greensburg

Effective Date: 01/04/2024

WO# : 30779589

PM: CMC Due Date: 06/13/25

CLIENT: PACE_60_LEKS

Client Name: Pace Analytical Kansas Proj

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking Number: 4453 8931 5787

	Initial / Date
Examined By:	MS 5/17/25
Labeled By:	MS 5/17/25
Temped By:	—

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

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

Cooler Temperature: Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC		✓		
Chain of Custody Relinquished	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID				
Matrix:	WT			
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:		✓		12.
Hex Cr Aqueous samples field filtered:		✓		13.
Organic Samples checked for dichlorination		✓		14:
Filtered volume received for dissolved tests:		✓		15:
All containers checked for preservation:	✓			16.
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				pH <2
All containers meet method preservation requirements:	✓			Initial when completed: MS Date/Time of Preservation:
				Lot# of added Preservative:
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.
624.1: Headspace in VOA Vials (0mm)			✓	18.
Radon: Headspace in RAD Vials (0mm)			✓	19.
Trip Blank Present:			✓	Trip blank custody seal present? YES or NO
Rad Samples Screened <.05 mrem/hr.	✓			Initial when completed: BK Date: 5.15.25 Survey Meter SN: 35CH380

pH paper Lot# 10D43241

D.P.D. Residual Chlorine Lot # —

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Qualtrax ID: 55680

Memorandum

August 4, 2025

To:	Project File Rocksmith Geoengineering, LLC	**Project Number:**	23008-25
CC:	Mark Haddock, Jeffrey Ingram		
From:	Jack Rasmussen	**Email:**	Jack.Rasmussen@Rocksmithgeo.com
RE:	**Data Validation Summary, Rush Island Energy Center – RCPA-CA – Data Package 60474364**		

The following is a summary of instances where quality control criteria in the functional guidelines were not met and data qualification was required:

- When a compound was analyzed outside of hold time, the sample result was qualified as an estimate (J for detects, UJ for non-detects).
- When a compound was detected in a blank (i.e. method, field), and the blank comparison criterion was not met, associated sample results were qualified as estimates (J) or non-detects (U).
- When a compound was detected in a sample result between the Method Detection Limit (MDL) and Practical Quantification Limit (PQL), the results were recorded at the detection value and qualified as estimates (J).
- When a duplicate criterion was not met, the associated sample result was qualified as an estimate (J for detects, UJ for non-detects).
- When a matrix spike/matrix spike duplicate (MS/MSD) criterion was not met, the associated sample result was qualified as an estimate (J, J+ for estimates based high, and J- for estimates based low).

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Company Name: Rocksmith Geoengineering
Project Manager: J. Ingram
Project Name: Ameren RCPA-CA
Project Number: 23008-25
Reviewer: J. Rasmussen
Validation Date: 8/4/2025

Laboratory: Pace Analytical
SDG #: 60474364
Analytical Method (type and no.): EPA 200.7/200.8 (Total Metals); EPA 7470 (Mercury); SM 2320B (Alkalinity); SM 2540C (TDS); EPA 300.0 (Anions); SM 3500-Fe B#4
Matrix: ☐ Air ☐ Soil/Sed. ■ Water ☐ Waste ☐ EPA 903.1/904.0 (Radium 226+228); SM 3500-Fe B#4 (Ferrous+Ferric Iron)
Sample Names R-P-10S, R-P-16S, R-P-17D, R-P-17S, R-P-17I, R-P-29S, R-P-17D, R-P-19S, R-P-19I, R-P-19D, R-P-31S, R-CA-DUP-1, R-CA-FB-1, R-P-05S, R-P-21S, R-P-21I, R-P-21D, R-P-22S, R-P-22D, R-P-30S, R-CA-DUP-2, R-CA-FB-2, R-CA-MS-1, R-MSD-1

NOTE: Please provide calculation in Comment areas or on the back (if on the back please indicate in comment areas).

Field Information	YES	NO	NA	COMMENTS
a) Sampling dates noted?	x			05/01/2025 - 05/06/2025
b) Sampling team indicated?	x			VAH, GTM
c) Sample location noted?	x			
d) Sample depth indicated (Soils)?			x	
e) Sample type indicated (grab/composite)?	x			Grab
f) Field QC noted?	x			See Notes
g) Field parameters collected (note types)?	x			pH, Spec Cond, Turb, Temp, DO, ORP
h) Field Calibration within control limits?	x			
i) Notations of unacceptable field conditions/performances from field logs or field notes?		x		
j) Does the laboratory narrative indicate deficiencies?		x		

Note Deficiencies:

Chain-of-Custody (COC)	YES	NO	NA	COMMENTS
a) Was the COC properly completed?	x			
b) Was the COC signed by both field and laboratory personnel?	x			
c) Were samples received in good condition?	x			

General (reference QAPP or Method)	YES	NO	NA	COMMENTS
a) Were hold times met for sample pretreatment?		x		See Notes
b) Were hold times met for sample analysis?		x		See Notes
c) Were the correct preservatives used?	x			
d) Was the correct method used?	x			
e) Were appropriate reporting limits achieved?	x			
f) Were any sample dilutions noted?	x			See Notes
g) Were any matrix problems noted?		x		

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Blanks	YES	NO	NA	COMMENTS
a) Were analytes detected in the method blank(s)?	x			See Notes
b) Were analytes detected in the field blank(s)?	x			See Notes
c) Were analytes detected in the equipment blank(s)?			x	
d) Were analytes detected in the trip blank(s)?			x	

Laboratory Control Sample (LCS)	YES	NO	NA	COMMENTS
a) Was a LCS analyzed once per SDG?	x			
b) Were the proper analytes included in the LCS?	x			
c) Was the LCS accuracy criteria met?	x			

Duplicates	YES	NO	NA	COMMENTS
a) Were field duplicates collected (note original and duplicate sample names)?	x			
b) Were field dup. precision criteria met (note RPD)?		x		See Notes
c) Were lab duplicates analyzed (note original and duplicate samples)?	x			See Notes
d) Were lab dup. precision criteria met (note RPD)?		x		See Notes

Blind Standards	YES	NO	NA	COMMENTS
a) Was a blind standard used (indicate name, analytes included and concentrations)?			x	
b) Was the %D within control limits?			x	

Matrix Spike/Matrix Spike Duplicate (MS/MSD)	YES	NO	NA	COMMENTS
a) Was MS accuracy criteria met?		x		See Notes
Recovery could not be calculated since sample contained high concentration of analyte?			x	
b) Was MSD accuracy criteria met?		x		See Notes
Recovery could not be calculated since sample contained high concentration of analyte?			x	
c) Were MS/MSD precision criteria met?		x		See Notes

Comments/Notes:

General:

Ferrous iron samples were all analyzed outside of hold time controls. Results qualified as estimates.

Chloride and/or sulfate were diluted in several samples, no qualification necessary.

Sample -004 radium was not preserved with 2.5 mls of nitric acid, results qualified as estimates.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Comments/Notes:

Method Blanks:

3700770: Calcium (34.5J), iron (20.1J), manganese (1.0J), associated with samples -010, -011, -012, -013. Sample -012 manganese result > RL and < 10x blank, result qualified as an estimate. Sample -013 manganese result < RL, report at reporting limit and qualify as non-detect (U). Sample -013 iron and calcium are non-detect, no qualifications necessary. Sample -010 results > RL and 10x blank. No qualification necessary.

3707156: Manganese (1.8J), associated with samples -014, -016, -017, -018, -019, -020, -021, -022, -023. Sample -023 result< Rl, report at reporting limit and qualify as non-detect (U). All other sample results > RL and 10x blank, no qualification necessary.

3706613: Alkalinity (12.3J), associated with samples -002, -003, -004, -005, -006, -007, -008, -012. All results > RL and 10x blank, no qualification necessary.

3714049: Chloride (0.58J), associated with sample -014. Result > RL and 10x blank, no qualification necessary.

Field Blank:

R-CA-FB-1 @ R-P-10S: Manganese (1.9J), chromium (0.39J), manganese result > RL and 10x blank. No qualification necessary. Chromium result < RL, report at reporting limit and qualify as non-detect (U).

R-CA-FB-2 @ P-22D: Manganese (0.70J), total dissolved solids (5.5). Manganese result > RL and 10x blank, no qualification necessary. Total dissolved solids result > RL and 10x blank, no qualification necessary.

Duplicates:

R-CA-DUP-1 @ P-16S: RPD exceeds control limit (20%) for arsenic (30%), ferric iron (30%), iron (26%) and manganese (63%). Results qualified as results.

R-CA-DUP-2 @ R-P-21D: Chromium detected in parent sample and not detected in field duplicate. Results qualified as estimates. Radium-226 detected in parent sample and not detected in the field duplicate, results qualified as estimates.

Lab duplicate max RPD: 10%: alkalinity, TDS; 15%: chloride, fluoride, sulfate; 20%: ferrous iron, sulfide.

3711728: Lab DUP RPD exceeds control limits for fluoride, associated with unrelated sample. No qualification necessary.

3713319: Lab DUP RPD exceeds control limits for fluoride, associated with sample -021. Result qualified as estimate.

MS/MSD:

3700761/3700762: MS recovery low for calcium, MSD recovery and RPD within control limits. No qualification necessary.

3700775: MS recovery low for calcium, associated with unrelated sample. No qualification necessary.

3707159/3707160: MS recovery high, MSD recovery low and RPD outside of control limits for barium, beryllium, boron, cobalt, iron, lead, lithium, magnesium, manganese, molybdenum, potassium, sodium. Results qualified as estimates. MSD recovery less than 10% for calcium. MS and RPD are within control limits. Result qualified as estimate.

3702701/3702702: MS and MSD recovery low for sulfide, associated with unrelated sample. No qualification necessary.

3703347/3703348: MS and MSD recovery low for sulfide, associated with unrelated sample. No qualification necessary.

3703351/3703352: MS and MSD recovery low for sulfide, associated with unrelated sample. No qualification necessary.

3714051/3714052: MS recovery high for fluoride and sulfate, MSD and RPD within control limits. No qualification necessary.

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Data Qualification:

Sample Name	Constituent(s)	Result	Qualifier	Reason
R-P-10S	Ferrous Iron	0.15	J	Analyzed outside of hold time
R-P-16S	"	0.041	UJ	"
R-P-17S	"	7.9	J	"
R-P-17I	"	0.39	J	"
R-P-17D	"	3.1	J	"
R-P-19S	"	7.0	J	"
R-P-19I	"	0.19	J	"
R-P-19D	"	3.5	J	"
R-P-29S	"	11.2	J	"
R-P-29D	"	4.6	J	"
R-P-31S	"	6.4	J	"
R-CA-DUP-1	"	0.041	UJ	"
R-CA-FB-1	"	0.041	UJ	"
R-P-05S	"	13.2	J	"
R-P-21S	"	31.9	J	"
R-P-21I	"	0.95	J	"
R-P-21D	"	5.4	J	"
R-P-22S	"	0.15	J	"
R-P-22D	"	1.8	J	"
R-P-30S	"	0.75	J	"
R-CA-DUP-2	"	5.4	J	"
R-CA-FB-2	"	0.041	J	"
R-P-17I	Radium-226	4.29	UJ	Hold time not met for sample pretreatment
"	Radium-228	1.90	J	"
R-CA-DUP-1	Manganese	6.8	J	Detected in method blank, result > RL and < 10x blank
R-CA-FB-1	"	5.0	J	Detected in method blank, result < RL
R-CA-FB-2	"	5.0	U	"
R-P-10S	Chromium	1.0	U	Detected in field blank, result < RL
R-CA-DUP-1	Iron, Ferric	0.31	J	Field DUP RPD exceeds control limits
R-P-16S	"	0.57	J	"
R-CA-DUP-1	Iron	344	J	"
R-P-16S	"	588	J	"
R-CA-DUP-1	Manganese	6.8	J	"
R-P-16S	"	30.2	J	"

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Data Qualification:

Sample Name	Constituent(s)	Result	Qualifier	Reason
R-CA-DUP-2	Chromium	0.30	UJ	Detected in parent sample, not detected in field duplicate
R-P-21D	"	0.3	J	"
R-CA-DUP-2	Radium-226	1.62	UJ	"
R-P-21D	"	1.65	J	"
R-P-30S	Fluoride	0.37	J	Lab DUP RPD exceeds control limits
"	Barium	109	J	MS recovery high and MSD recovery low
"	Beryllium	0.12	UJ	"
"	Boron	735	J	"
"	Cobalt	1.2	UJ	"
"	Iron	1220	J	"
"	Lead	3.8	UJ	"
"	Lithium	38.4	J	"
"	Magnesium	25,800	J	"
"	Manganese	338	J	"
"	Molybdenum	3.7	J	"
"	Potassium	6,820	J	"
"	Sodium	58,800	J	"
"	Calcium	155,000	J-	MSD recovery below 10%
R-CA-DUP-1	Arsenic	1.4	J	Field DUP RPD exceeds control limits
R-P-16S	"	1.9	J	"

Signature: _____ Date: 08/04/2025

Pace Analytical Services, LLC
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August 07, 2025

Mark Haddock
Rocksmith Geoengineering, LLC.
2320 Creve Coeur Mill Road
Maryland Heights, MO 63043

RE: Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60478879

Dear Mark Haddock:

Enclosed are the analytical results for sample(s) received by the laboratory on July 12, 2025. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Kansas City

REV-1: Report revised to add Fluoride per client request.

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

Sincerely,



Jamie Church
jamie.church@pacelabs.com
314-838-7223
Project Manager

Enclosures

cc: Jeffrey Ingram, Rocksmith Geoengineering, LLC.
Lisa Meyer, Ameren
Grant Morey, Rocksmith Geoengineering, LLC.
Austin Nieman, Ameren

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CERTIFICATIONS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60478879

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Arkansas Certification #: 88-00679
Illinois Certification #: 200030
Colorado Division of Oil and Public Safety
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Oklahoma Certification #: 9205
Texas Certification #: T104704407
Utah Certification #: KS0002125-15

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SAMPLE SUMMARY

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60478879

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60478879001	**R-MW-2**	Water	07/11/25 11:25	07/12/25 07:00
60478879002	**R-MW-7(R)**	Water	07/11/25 11:20	07/12/25 07:00
60478879003	**R-DUP-1**	Water	07/11/25 00:00	07/12/25 07:00
60478879004	**R-FB-1**	Water	07/11/25 11:09	07/12/25 07:00

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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60478879

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60478879001	**R-MW-2**	EPA 300.0	MLD	2	PASI-K
60478879002	**R-MW-7(R)**	EPA 300.0	MLD	2	PASI-K
60478879003	**R-DUP-1**	EPA 300.0	MLD	2	PASI-K
60478879004	**R-FB-1**	EPA 300.0	MLD	2	PASI-K

PASI-K = Pace Analytical Services - Kansas City

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ANALYTICAL RESULTS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60478879

Sample: R-MW-2 **Lab ID: 60478879001** Collected: 07/11/25 11:25 Received: 07/12/25 07:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**62.9**	mg/L	20.0	15.3	20		07/20/25 00:46	16887-00-6	
Fluoride	**0.53**	mg/L	0.20	0.12	1		08/06/25 08:00	16984-48-8	D6,M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60478879

Sample: R-MW-7(R) **Lab ID: 60478879002** Collected: 07/11/25 11:20 Received: 07/12/25 07:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**20.5**	mg/L	5.0	2.6	5		07/22/25 04:17	16887-00-6	
Fluoride	**0.14J**	mg/L	0.20	0.12	1		08/06/25 08:48	16984-48-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60478879

Sample: R-DUP-1 **Lab ID: 60478879003** Collected: 07/11/25 00:00 Received: 07/12/25 07:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**22.1**	mg/L	20.0	15.3	20		07/20/25 01:56	16887-00-6	
Fluoride	**0.14J**	mg/L	0.20	0.12	1		08/06/25 08:59	16984-48-8	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60478879

Sample: R-FB-1 **Lab ID: 60478879004** Collected: 07/11/25 11:09 Received: 07/12/25 07:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**<0.77**	mg/L	1.0	0.77	1		07/20/25 02:09	16887-00-6	
Fluoride	**<0.12**	mg/L	0.20	0.12	1		08/06/25 09:32	16984-48-8	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60478879

QC Batch: 942250
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60478879001, 60478879003, 60478879004

METHOD BLANK: 3735317 Matrix: Water
Associated Lab Samples: 60478879001, 60478879003, 60478879004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.77	1.0	0.77	07/19/25 16:14	

LABORATORY CONTROL SAMPLE: 3735318

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3735329 3735330

Parameter	Units	60478879001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	62.9	100	100	152	151	89	88	80-120	1	15	

SAMPLE DUPLICATE: 3735331

Parameter	Units	60478879001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	62.9	60.2	4	15	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60478879

QC Batch: 942433
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60478879002

METHOD BLANK: 3735893 Matrix: Water
Associated Lab Samples: 60478879002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.53	1.0	0.53	07/21/25 19:08	

LABORATORY CONTROL SAMPLE: 3735894

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.5	90	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3735895 3735896

Parameter	Units	60478806001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	8.6	5	5	12.4	12.3	75	73	80-120	1	15	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3735898 3735899

Parameter	Units	60478810001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.5	5	5	5.6	5.7	83	84	80-120	1	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3735904 3735905

Parameter	Units	60478826001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	11.8	5	5	15.5	15.5	74	73	80-120	0	15	M1

SAMPLE DUPLICATE: 3735897

Parameter	Units	60478806001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	8.6	8.6	0	15	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60478879

SAMPLE DUPLICATE: 3735906

Parameter	Units	60478826001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	11.8	11.8	0	15	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60478879

QC Batch: 943888
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60478879001, 60478879002, 60478879003, 60478879004

METHOD BLANK: 3740996 Matrix: Water
Associated Lab Samples: 60478879001, 60478879002, 60478879003, 60478879004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	<0.12	0.20	0.12	08/06/25 07:38	

LABORATORY CONTROL SAMPLE: 3740997

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.5	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3740998 3740999

Parameter	Units	60478879001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.53	2.5	2.5	3.8	3.8	132	132	80-120	1	15	M1

SAMPLE DUPLICATE: 3741000

Parameter	Units	60478879001 Result	Dup Result	RPD	Max RPD	Qualifiers
Fluoride	mg/L	0.53	1.2	79	15	D6

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QUALIFIERS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60478879

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60478879

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60478879001	**R-MW-2**	EPA 300.0	942250		
60478879001	**R-MW-2**	EPA 300.0	943888		
60478879002	**R-MW-7(R)**	EPA 300.0	942433		
60478879002	**R-MW-7(R)**	EPA 300.0	943888		
60478879003	**R-DUP-1**	EPA 300.0	942250		
60478879003	**R-DUP-1**	EPA 300.0	943888		
60478879004	**R-FB-1**	EPA 300.0	942250		
60478879004	**R-FB-1**	EPA 300.0	943888		

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WO#: 60478879

60478879

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

Client Name: ROCKSmith

Courier: FedEx ☐ UPS ☐ VIA ☒ XDF 7in Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☒ Client ☐ Other ☐

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

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

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

Thermometer Used: T301 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 2.5 **Corr. Factor** — **Corrected** 2.5

Date and initials of person examining contents: DF 7/12

Temperature should be above freezing to 6°C

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

60478879

Page: 1 of 1

Section A Required Client Information:

Company:	Rocksmith Geoengineering, LLC
Address:	5233 Roanoke Drive
	St. Charles, MO 63304
Email To:	mark.haddock@rocksmithgeo.com
Phone: 314-974-5678	Fax:
Requested Due Date/TAT:	Standard

Section B Required Project Information:

Report To:	Mark Haddock
Copy To:	Jeffery Ingram, Grant Morey
Purchase Order No.:	COC #6
Project Name:	Ameren RCPA - Verification Sampling
Project Number:	COC#6

Section C Invoice Information:

Attention:	
Company Name:	Rocksmith
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	15856, line 1

REGULATORY AGENCY

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

Site Location STATE: MO

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COLLECTED: COMPOSITE START TIME	COLLECTED: COMPOSITE END/GRAB DATE	COLLECTED: COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Analysis Test: Chloride	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	R-MW-2	WT	G			7-11-25	1125		1	X								N	X		
2	R-MW-7(R)	WT	G				1125		1	X								N	X		
3	R-DUP-1	WT	G															N	X		
4	R-FB-1	WT	G				1125		1	X								N	X		
5	R-MS-1	WT	G				1125		1	X								N	X		MS/MSD taken @ MW-2
6	R-MSD-1	WT	G				1125		1	X								N	X		
7		WT	G																		
8		WT	G																		
9		WT	G																		
10		WT	G																		
11		WT	G																		
12		WT	G																		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Daniel Quick / Rocksmith	7-11-25	1311	JABACE	7/12/25	0700	2.5	Y	Y	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Daniel Quick

SIGNATURE of SAMPLER: Daniel Quick

DATE Signed (MM/DD/YY): 07/11/2025

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

Client: Rocksmith

Profile/EZ # 15856 line 1

Site: Ameren RCPA

Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1	WT																			3	(MS/MSD)											
2																																
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: WO#: 60478879

PM: JLS Due Date: 07/28/25

CLIENT: Rocksmith

Memorandum

September 3, 2025

To:	Project File Rocksmith Geoengineering, LLC	**Project Number:**	23008-25
CC:	Mark Haddock, Jeffrey Ingram		
From:	Grant Morey	**Email:**	jack.rasmussen@rocksmithgeo.com
RE:	**Data Validation Summary, Rush Island Energy Center – RCPA Verification – Data Package 60478879**		

The following is a summary of instances where quality control criteria in the functional guidelines were not met and data qualification was required:

- None

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Company Name: Rocksmith Geoengineering
Project Manager: J. Ingram
Project Name: Ameren RCPA Verification
Project Number: 23008-25
Reviewer: G. Morey
Validation Date: 9/3/2025

Laboratory: Pace Analytical
SDG #: 60478879
Analytical Method (type and no.): EPA 300.0 (Chloride)
Matrix: ☐ Air ☐ Soil/Sed. ■ Water ☐ Waste ☐ _____
Sample Names R-MW-2, R-MW-7(R), R-DUP-1, R-FB-1

NOTE: Please provide calculation in Comment areas or on the back (if on the back please indicate in comment areas).

Field Information	YES	NO	NA	COMMENTS
a) Sampling dates noted?	x			7/11/2025
b) Sampling team indicated?	x			JDQ/JTR/VAH
c) Sample location noted?	x			
d) Sample depth indicated (Soils)?			x	
e) Sample type indicated (grab/composite)?	x			Grab
f) Field QC noted?	x			See Notes
g) Field parameters collected (note types)?	x			pH, Spec Cond, Turb, Temp, DO, ORP
h) Field Calibration within control limits?	x			
i) Notations of unacceptable field conditions/performances from field logs or field notes?		x		
j) Does the laboratory narrative indicate deficiencies?			x	No lab narrative.

Note Deficiencies: _____

Chain-of-Custody (COC)	YES	NO	NA	COMMENTS
a) Was the COC properly completed?	x			
b) Was the COC signed by both field and laboratory personnel?	x			
c) Were samples received in good condition?	x			

General (reference QAPP or Method)	YES	NO	NA	COMMENTS
a) Were hold times met for sample pretreatment?	x			
b) Were hold times met for sample analysis?	x			See Notes
c) Were the correct preservatives used?	x			
d) Was the correct method used?	x			
e) Were appropriate reporting limits achieved?	x			
f) Were any sample dilutions noted?	x			See Notes
g) Were any matrix problems noted?		x		

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Blanks	YES	NO	NA	COMMENTS
a) Were analytes detected in the method blank(s)?	☐	☒	☐	
b) Were analytes detected in the field blank(s)?	☐	☒	☐	R-FB-1 @ R-MW-7
c) Were analytes detected in the equipment blank(s)?	☐	☐	☒	
d) Were analytes detected in the trip blank(s)?	☐	☐	☒	

Laboratory Control Sample (LCS)	YES	NO	NA	COMMENTS
a) Was a LCS analyzed once per SDG?	☒	☐	☐	
b) Were the proper analytes included in the LCS?	☒	☐	☐	
c) Was the LCS accuracy criteria met?	☒	☐	☐	

Duplicates	YES	NO	NA	COMMENTS
a) Were field duplicates collected (note original and duplicate sample names)?	☒	☐	☐	R-DUP-1 collected @ R-MW-7
b) Were field dup. precision criteria met (note RPD)?	☒	☐	☐	See Notes
c) Were lab duplicates analyzed (note original and duplicate samples)?	☒	☐	☐	See Notes
d) Were lab dup. precision criteria met (note RPD)?	☒	☐	☐	See Notes

Blind Standards	YES	NO	NA	COMMENTS
a) Was a blind standard used (indicate name, analytes included and concentrations)?	☐	☐	☒	
b) Was the %D within control limits?	☐	☐	☒	

Matrix Spike/Matrix Spike Duplicate (MS/MSD)	YES	NO	NA	COMMENTS
a) Was MS accuracy criteria met?	☐	☒	☐	See Notes
Recovery could not be calculated since sample contained high concentration of analyte?	☐	☐	☒	
b) Was MSD accuracy criteria met?	☐	☒	☐	See Notes
Recovery could not be calculated since sample contained high concentration of analyte?	☐	☐	☒	
c) Were MS/MSD precision criteria met?	☐	☒	☐	See Notes

Comments/Notes:

General:

Several Chloride samples diluted, required reporting limits met.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Comments/Notes:

MS/MSD:

3735895/3735896: MSD recovery low for chloride, MS and RPD within control limits. No qualification necessary.

3735904/3735905: MS and MSD recovery low for chloride, RPD within control limits. Associated with unrelated sample, no qualification necessary.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Data Qualification:

Sample Name	Constituent(s)	Result	Qualifier	Reason

Signature: Grant Morey Date: 9/3/2025

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

November 06, 2025

Mark Haddock
Rocksmith Geoengineering, LLC.
2320 Creve Coeur Mill Road
Maryland Heights, MO 63043

RE: Project: AMEREN RCPA
Pace Project No.: 60484250

Dear Mark Haddock:

Enclosed are the analytical results for sample(s) received by the laboratory between October 16, 2025 and October 17, 2025. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Kansas City
- Pace Analytical Services - Greensburg
- Pace Analytical Services - Salina

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

Sincerely,



Jamie Church
jamie.church@pacelabs.com
314-838-7223
Project Manager

Enclosures

cc: Jeffrey Ingram, Rocksmith Geoengineering, LLC.
Lisa Meyer, Ameren
Grant Morey, Rocksmith Geoengineering, LLC.
Austin Nieman, Ameren

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Lenexa, KS 66219
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CERTIFICATIONS

Project: AMEREN RCPA
Pace Project No.: 60484250

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
EPA Lab Code: KS00021
Arkansas Certification #: 88-00679
Illinois Certification #: 200030
Colorado Division of Oil and Public Safety
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Oklahoma Certification #: 9205
Texas Certification #: T104704407
Utah Certification #: KS0002125-15
UDSA_CA : #KS-SC-DOM-25-01

Pace Analytical Services Salina
528 N 9th Street, Salina, KS 67401
EPA Lab Code: KS00013
Kansas/NELAP Certification: # E-10146
Oklahoma Certification: #2405
Texas Certification: T104704246-23-15

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: AMEREN RCPA
Pace Project No.: 60484250

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60484250001	**R-MW-1**	Water	10/15/25 14:13	10/16/25 07:05
60484250002	**R-MW-2**	Water	10/14/25 14:46	10/16/25 07:05
60484250003	**R-MW-3**	Water	10/14/25 09:59	10/16/25 07:05
60484250004	**R-MW-4**	Water	10/15/25 11:25	10/16/25 07:05
60484250005	**R-MW-5**	Water	10/15/25 12:10	10/16/25 07:05
60484250006	**R-MW-7(r)**	Water	10/14/25 15:05	10/16/25 07:05
60484250007	**R-MW-B2**	Water	10/15/25 09:27	10/16/25 07:05
60484250008	**R-DUP-1**	Water	10/14/25 08:00	10/16/25 07:05
60484250009	**R-FB-1**	Water	10/15/25 11:11	10/16/25 07:05
60484250010	**R-MS-1**	Water	10/14/25 15:05	10/16/25 07:05
60484250011	**R-MSD-1**	Water	10/14/25 15:05	10/16/25 07:05
60484250012	**R-MW-6**	Water	10/16/25 10:50	10/17/25 07:05
60484250013	**R-MW-B1**	Water	10/16/25 12:46	10/17/25 07:05

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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA
Pace Project No.: 60484250

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60484250001	**R-MW-1**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	TMY	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484250002	**R-MW-2**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	TMY	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484250003	**R-MW-3**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	TMY	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484250004	**R-MW-4**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	TMY	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484250005	**R-MW-5**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	TMY	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484250006	**R-MW-7(r)**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K

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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA
Pace Project No.: 60484250

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 903.1	TMY	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484250007	**R-MW-B2**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	TMY	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484250008	**R-DUP-1**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	TMY	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484250009	**R-FB-1**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	TMY	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484250010	**R-MS-1**	EPA 903.1	TMY	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
60484250011	**R-MSD-1**	EPA 903.1	TMY	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
60484250012	**R-MW-6**	EPA 200.7	ARMN	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	TMY	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	DLJ	1	PASI-K

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: AMEREN RCPA
Pace Project No.: 60484250

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60484250013	**R-MW-B1**	EPA 200.7	ARMN	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	TMY	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	DLJ	1	PASI-K

PASI-K = Pace Analytical Services - Kansas City
PASI-PA = Pace Analytical Services - Greensburg
PASI-SA = Pace Analytical Services - Salina

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-1 **Lab ID: 60484250001** Collected: 10/15/25 14:13 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**71.0**	ug/L	5.0	0.64	1	10/20/25 09:05	10/22/25 16:55	7440-39-3	
Boron	**2820**	ug/L	100	7.3	1	10/20/25 09:05	10/22/25 16:55	7440-42-8	
Calcium	**83800**	ug/L	200	12.1	1	10/20/25 09:05	10/22/25 16:55	7440-70-2	
Iron	**37.5J**	ug/L	50.0	8.7	1	10/20/25 09:05	10/22/25 16:55	7439-89-6	
Lithium	**3.4J**	ug/L	10.0	2.8	1	10/20/25 09:05	10/22/25 16:55	7439-93-2	
Magnesium	**12800**	ug/L	50.0	16.0	1	10/20/25 09:05	10/22/25 16:55	7439-95-4	
Manganese	**86.6**	ug/L	5.0	0.52	1	10/20/25 09:05	10/22/25 16:55	7439-96-5	
Molybdenum	**65.8**	ug/L	20.0	2.1	1	10/20/25 09:05	10/22/25 16:55	7439-98-7	
Potassium	**13200**	ug/L	500	66.6	1	10/20/25 09:05	10/22/25 16:55	7440-09-7	
Sodium	**174000**	ug/L	500	46.9	1	10/20/25 09:05	10/22/25 16:55	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/21/25 13:18	10/26/25 13:07	7440-36-0	
Arsenic	**3.3**	ug/L	1.0	0.13	1	10/21/25 13:18	10/26/25 13:07	7440-38-2	
Selenium	**<0.19**	ug/L	1.0	0.19	1	10/21/25 13:18	10/26/25 13:07	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**23.3**	mg/L	2.0	0.36	2		10/30/25 20:10	16887-00-6	
Fluoride	**0.20**	mg/L	0.10	0.040	1		10/30/25 12:35	16984-48-8	
Sulfate	**233**	mg/L	20.0	1.9	20		10/30/25 20:22	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**408**	mg/L	20.0	10.5	1		10/25/25 16:00		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**781**	mg/L	13.3	13.3	1		10/22/25 13:31		

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-2 **Lab ID: 60484250002** Collected: 10/14/25 14:46 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**15.2**	ug/L	5.0	0.64	1	10/20/25 09:05	10/22/25 16:57	7440-39-3	
Boron	**3160**	ug/L	100	7.3	1	10/20/25 09:05	10/22/25 16:57	7440-42-8	
Calcium	**15500**	ug/L	200	12.1	1	10/20/25 09:05	10/22/25 16:57	7440-70-2	
Iron	**25.2J**	ug/L	50.0	8.7	1	10/20/25 09:05	10/22/25 16:57	7439-89-6	
Lithium	**5.3J**	ug/L	10.0	2.8	1	10/20/25 09:05	10/22/25 16:57	7439-93-2	
Magnesium	**<16.0**	ug/L	50.0	16.0	1	10/20/25 09:05	10/22/25 16:57	7439-95-4	
Manganese	**0.74J**	ug/L	5.0	0.52	1	10/20/25 09:05	10/22/25 16:57	7439-96-5	
Molybdenum	**86.0**	ug/L	20.0	2.1	1	10/20/25 09:05	10/22/25 16:57	7439-98-7	
Potassium	**4090**	ug/L	500	66.6	1	10/20/25 09:05	10/22/25 16:57	7440-09-7	
Sodium	**286000**	ug/L	500	46.9	1	10/20/25 09:05	10/22/25 16:57	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**1.3**	ug/L	1.0	0.12	1	10/21/25 13:18	10/26/25 13:10	7440-36-0	
Arsenic	**128**	ug/L	1.0	0.13	1	10/21/25 13:18	10/26/25 13:10	7440-38-2	
Selenium	**0.39J**	ug/L	1.0	0.19	1	10/21/25 13:18	10/26/25 13:10	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**173**	mg/L	20.0	3.6	20		10/30/25 20:35	16887-00-6	
Fluoride	**0.70**	mg/L	0.10	0.040	1		10/30/25 12:48	16984-48-8	
Sulfate	**236**	mg/L	20.0	1.9	20		10/30/25 20:35	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**206**	mg/L	20.0	10.5	1		10/24/25 03:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**900**	mg/L	13.3	13.3	1		10/21/25 15:46		

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-3 **Lab ID: 60484250003** Collected: 10/14/25 09:59 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**48.1**	ug/L	5.0	0.64	1	10/20/25 09:05	10/22/25 16:59	7440-39-3	
Boron	**10400**	ug/L	100	7.3	1	10/20/25 09:05	10/22/25 16:59	7440-42-8	
Calcium	**15100**	ug/L	200	12.1	1	10/20/25 09:05	10/22/25 16:59	7440-70-2	
Iron	**137**	ug/L	50.0	8.7	1	10/20/25 09:05	10/22/25 16:59	7439-89-6	
Lithium	**15.3**	ug/L	10.0	2.8	1	10/20/25 09:05	10/22/25 16:59	7439-93-2	
Magnesium	**1190**	ug/L	50.0	16.0	1	10/20/25 09:05	10/22/25 16:59	7439-95-4	
Manganese	**19.0**	ug/L	5.0	0.52	1	10/20/25 09:05	10/22/25 16:59	7439-96-5	
Molybdenum	**511**	ug/L	20.0	2.1	1	10/20/25 09:05	10/22/25 16:59	7439-98-7	
Potassium	**3710**	ug/L	500	66.6	1	10/20/25 09:05	10/22/25 16:59	7440-09-7	
Sodium	**203000**	ug/L	500	46.9	1	10/20/25 09:05	10/22/25 16:59	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/21/25 13:18	10/26/25 13:12	7440-36-0	
Arsenic	**32.9**	ug/L	1.0	0.13	1	10/21/25 13:18	10/26/25 13:12	7440-38-2	
Selenium	**0.41J**	ug/L	1.0	0.19	1	10/21/25 13:18	10/26/25 13:12	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**24.1**	mg/L	2.0	0.36	2		10/30/25 21:12	16887-00-6	
Fluoride	**1.2**	mg/L	0.10	0.040	1		10/30/25 13:00	16984-48-8	
Sulfate	**168**	mg/L	20.0	1.9	20		10/30/25 21:24	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**304**	mg/L	20.0	10.5	1		10/24/25 03:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**675**	mg/L	10.0	10.0	1		10/21/25 15:47		

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-4 **Lab ID: 60484250004** Collected: 10/15/25 11:25 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**376**	ug/L	5.0	0.64	1	10/20/25 09:05	10/22/25 17:00	7440-39-3	
Boron	**1200**	ug/L	100	7.3	1	10/20/25 09:05	10/22/25 17:00	7440-42-8	
Calcium	**108000**	ug/L	200	12.1	1	10/20/25 09:05	10/22/25 17:00	7440-70-2	
Iron	**8280**	ug/L	50.0	8.7	1	10/20/25 09:05	10/22/25 17:00	7439-89-6	
Lithium	**29.8**	ug/L	10.0	2.8	1	10/20/25 09:05	10/22/25 17:00	7439-93-2	
Magnesium	**22400**	ug/L	50.0	16.0	1	10/20/25 09:05	10/22/25 17:00	7439-95-4	
Manganese	**454**	ug/L	5.0	0.52	1	10/20/25 09:05	10/22/25 17:00	7439-96-5	
Molybdenum	**29.1**	ug/L	20.0	2.1	1	10/20/25 09:05	10/22/25 17:00	7439-98-7	
Potassium	**5150**	ug/L	500	66.6	1	10/20/25 09:05	10/22/25 17:00	7440-09-7	
Sodium	**25900**	ug/L	500	46.9	1	10/20/25 09:05	10/22/25 17:00	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/21/25 13:18	10/26/25 13:18	7440-36-0	
Arsenic	**9.1**	ug/L	1.0	0.13	1	10/21/25 13:18	10/26/25 13:18	7440-38-2	
Selenium	**<0.19**	ug/L	1.0	0.19	1	10/21/25 13:18	10/26/25 13:18	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**8.1**	mg/L	1.0	0.18	1		10/30/25 13:12	16887-00-6	
Fluoride	**0.49**	mg/L	0.10	0.040	1		10/30/25 13:12	16984-48-8	
Sulfate	**0.15J**	mg/L	1.0	0.096	1		10/30/25 13:12	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**432**	mg/L	20.0	10.5	1		10/25/25 16:00		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**473**	mg/L	10.0	10.0	1		10/22/25 13:32		

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-5 **Lab ID: 60484250005** Collected: 10/15/25 12:10 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**347**	ug/L	5.0	0.64	1	10/20/25 09:05	10/22/25 17:04	7440-39-3	
Boron	**54.7J**	ug/L	100	7.3	1	10/20/25 09:05	10/22/25 17:04	7440-42-8	
Calcium	**116000**	ug/L	200	12.1	1	10/20/25 09:05	10/22/25 17:04	7440-70-2	
Iron	**7860**	ug/L	50.0	8.7	1	10/20/25 09:05	10/22/25 17:04	7439-89-6	
Lithium	**5.0J**	ug/L	10.0	2.8	1	10/20/25 09:05	10/22/25 17:04	7439-93-2	
Magnesium	**14900**	ug/L	50.0	16.0	1	10/20/25 09:05	10/22/25 17:04	7439-95-4	
Manganese	**277**	ug/L	5.0	0.52	1	10/20/25 09:05	10/22/25 17:04	7439-96-5	
Molybdenum	**<2.1**	ug/L	20.0	2.1	1	10/20/25 09:05	10/22/25 17:04	7439-98-7	
Potassium	**1910**	ug/L	500	66.6	1	10/20/25 09:05	10/22/25 17:04	7440-09-7	
Sodium	**4330**	ug/L	500	46.9	1	10/20/25 09:05	10/22/25 17:04	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/21/25 13:18	10/26/25 13:21	7440-36-0	
Arsenic	**1.4**	ug/L	1.0	0.13	1	10/21/25 13:18	10/26/25 13:21	7440-38-2	
Selenium	**<0.19**	ug/L	1.0	0.19	1	10/21/25 13:18	10/26/25 13:21	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**1.8**	mg/L	1.0	0.18	1		10/30/25 13:49	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	0.040	1		10/30/25 13:49	16984-48-8	
Sulfate	**27.3**	mg/L	2.0	0.19	2		10/30/25 21:36	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**336**	mg/L	20.0	10.5	1		10/25/25 16:00		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**399**	mg/L	10.0	10.0	1		10/22/25 13:32		

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-7(r) **Lab ID: 60484250006** Collected: 10/14/25 15:05 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**316**	ug/L	5.0	0.64	1	10/20/25 09:05	10/22/25 16:36	7440-39-3	
Boron	**7220**	ug/L	100	7.3	1	10/20/25 09:05	10/22/25 16:36	7440-42-8	M1
Calcium	**83700**	ug/L	200	12.1	1	10/20/25 09:05	10/22/25 16:36	7440-70-2	M1
Iron	**19000**	ug/L	50.0	8.7	1	10/20/25 09:05	10/22/25 16:36	7439-89-6	
Lithium	**27.2**	ug/L	10.0	2.8	1	10/20/25 09:05	10/22/25 16:36	7439-93-2	
Magnesium	**23600**	ug/L	50.0	16.0	1	10/20/25 09:05	10/22/25 16:36	7439-95-4	
Manganese	**338**	ug/L	5.0	0.52	1	10/20/25 09:05	10/22/25 16:36	7439-96-5	
Molybdenum	**43.2**	ug/L	20.0	2.1	1	10/20/25 09:05	10/22/25 16:36	7439-98-7	
Potassium	**5540**	ug/L	500	66.6	1	10/20/25 09:05	10/22/25 16:36	7440-09-7	
Sodium	**15300**	ug/L	500	46.9	1	10/20/25 09:05	10/22/25 16:36	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/21/25 13:18	10/26/25 12:45	7440-36-0	
Arsenic	**112**	ug/L	1.0	0.13	1	10/21/25 13:18	10/26/25 12:45	7440-38-2	
Selenium	**<0.19**	ug/L	1.0	0.19	1	10/21/25 13:18	10/26/25 12:45	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**19.8**	mg/L	2.0	0.36	2		10/30/25 21:49	16887-00-6	
Fluoride	**0.24**	mg/L	0.10	0.040	1		10/30/25 14:02	16984-48-8	
Sulfate	**110**	mg/L	10.0	0.96	10		10/30/25 22:26	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**162**	mg/L	20.0	10.5	1		10/24/25 03:42		D6
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**445**	mg/L	10.0	10.0	1		10/21/25 15:47		

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-B2 **Lab ID: 60484250007** Collected: 10/15/25 09:27 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**393**	ug/L	5.0	0.64	1	10/20/25 09:05	10/22/25 17:05	7440-39-3	
Boron	**40.3J**	ug/L	100	7.3	1	10/20/25 09:05	10/22/25 17:05	7440-42-8	
Calcium	**107000**	ug/L	200	12.1	1	10/20/25 09:05	10/22/25 17:05	7440-70-2	
Iron	**8700**	ug/L	50.0	8.7	1	10/20/25 09:05	10/22/25 17:05	7439-89-6	
Lithium	**10.8**	ug/L	10.0	2.8	1	10/20/25 09:05	10/22/25 17:05	7439-93-2	
Magnesium	**19100**	ug/L	50.0	16.0	1	10/20/25 09:05	10/22/25 17:05	7439-95-4	
Manganese	**246**	ug/L	5.0	0.52	1	10/20/25 09:05	10/22/25 17:05	7439-96-5	
Molybdenum	**<2.1**	ug/L	20.0	2.1	1	10/20/25 09:05	10/22/25 17:05	7439-98-7	
Potassium	**1960**	ug/L	500	66.6	1	10/20/25 09:05	10/22/25 17:05	7440-09-7	
Sodium	**21500**	ug/L	500	46.9	1	10/20/25 09:05	10/22/25 17:05	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/21/25 13:18	10/26/25 13:32	7440-36-0	
Arsenic	**2.4**	ug/L	1.0	0.13	1	10/21/25 13:18	10/26/25 13:32	7440-38-2	
Selenium	**<0.19**	ug/L	1.0	0.19	1	10/21/25 13:18	10/26/25 13:32	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**35.4**	mg/L	5.0	0.90	5		10/30/25 23:03	16887-00-6	
Fluoride	**0.16**	mg/L	0.10	0.040	1		10/30/25 14:39	16984-48-8	
Sulfate	**16.6**	mg/L	1.0	0.096	1		10/30/25 14:39	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**326**	mg/L	20.0	10.5	1		10/25/25 16:00		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**425**	mg/L	10.0	10.0	1		10/22/25 13:32		

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-DUP-1 **Lab ID: 60484250008** Collected: 10/14/25 08:00 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**49.5**	ug/L	5.0	0.64	1	10/20/25 09:05	10/22/25 17:07	7440-39-3	
Boron	**10800**	ug/L	100	7.3	1	10/20/25 09:05	10/22/25 17:07	7440-42-8	
Calcium	**15600**	ug/L	200	12.1	1	10/20/25 09:05	10/22/25 17:07	7440-70-2	
Iron	**148**	ug/L	50.0	8.7	1	10/20/25 09:05	10/22/25 17:07	7439-89-6	
Lithium	**13.1**	ug/L	10.0	2.8	1	10/20/25 09:05	10/22/25 17:07	7439-93-2	
Magnesium	**1240**	ug/L	50.0	16.0	1	10/20/25 09:05	10/22/25 17:07	7439-95-4	
Manganese	**18.5**	ug/L	5.0	0.52	1	10/20/25 09:05	10/22/25 17:07	7439-96-5	
Molybdenum	**498**	ug/L	20.0	2.1	1	10/20/25 09:05	10/22/25 17:07	7439-98-7	
Potassium	**3760**	ug/L	500	66.6	1	10/20/25 09:05	10/22/25 17:07	7440-09-7	
Sodium	**211000**	ug/L	500	46.9	1	10/20/25 09:05	10/22/25 17:07	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/21/25 13:18	10/26/25 13:23	7440-36-0	
Arsenic	**33.3**	ug/L	1.0	0.13	1	10/21/25 13:18	10/26/25 13:23	7440-38-2	
Selenium	**0.47J**	ug/L	1.0	0.19	1	10/21/25 13:18	10/26/25 13:23	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**23.9**	mg/L	2.0	0.36	2		10/30/25 23:40	16887-00-6	
Fluoride	**1.2**	mg/L	0.10	0.040	1		10/30/25 14:51	16984-48-8	
Sulfate	**158**	mg/L	20.0	1.9	20		10/30/25 23:52	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**308**	mg/L	20.0	10.5	1		10/24/25 03:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**676**	mg/L	10.0	10.0	1		10/21/25 15:47		

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-FB-1 **Lab ID: 60484250009** Collected: 10/15/25 11:11 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**<0.64**	ug/L	5.0	0.64	1	10/20/25 09:05	10/22/25 17:14	7440-39-3	
Boron	**<7.3**	ug/L	100	7.3	1	10/20/25 09:05	10/22/25 17:14	7440-42-8	
Calcium	**13.8J**	ug/L	200	12.1	1	10/20/25 09:05	10/22/25 17:14	7440-70-2	
Iron	**<8.7**	ug/L	50.0	8.7	1	10/20/25 09:05	10/22/25 17:14	7439-89-6	
Lithium	**<2.8**	ug/L	10.0	2.8	1	10/20/25 09:05	10/22/25 17:14	7439-93-2	
Magnesium	**<16.0**	ug/L	50.0	16.0	1	10/20/25 09:05	10/22/25 17:14	7439-95-4	
Manganese	**<0.52**	ug/L	5.0	0.52	1	10/20/25 09:05	10/22/25 17:14	7439-96-5	
Molybdenum	**<2.1**	ug/L	20.0	2.1	1	10/20/25 09:05	10/22/25 17:14	7439-98-7	
Potassium	**<66.6**	ug/L	500	66.6	1	10/20/25 09:05	10/22/25 17:14	7440-09-7	
Sodium	**<46.9**	ug/L	500	46.9	1	10/20/25 09:05	10/22/25 17:14	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/21/25 13:18	10/26/25 13:29	7440-36-0	
Arsenic	**<0.13**	ug/L	1.0	0.13	1	10/21/25 13:18	10/26/25 13:29	7440-38-2	
Selenium	**<0.19**	ug/L	1.0	0.19	1	10/21/25 13:18	10/26/25 13:29	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**<0.18**	mg/L	1.0	0.18	1		10/30/25 15:03	16887-00-6	
Fluoride	**<0.040**	mg/L	0.10	0.040	1		10/30/25 15:03	16984-48-8	
Sulfate	**<0.096**	mg/L	1.0	0.096	1		10/30/25 15:03	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**<10.5**	mg/L	20.0	10.5	1		10/25/25 16:00		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**<5.0**	mg/L	5.0	5.0	1		10/22/25 13:32		

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-6 **Lab ID: 60484250012** Collected: 10/16/25 10:50 Received: 10/17/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**117**	ug/L	5.0	0.75	1	10/21/25 08:28	10/28/25 13:00	7440-39-3	
Boron	**373**	ug/L	100	33.2	1	10/21/25 08:28	10/28/25 13:00	7440-42-8	
Calcium	**88600**	ug/L	200	45.3	1	10/21/25 08:28	10/28/25 13:00	7440-70-2	
Iron	**163**	ug/L	50.0	15.4	1	10/21/25 08:28	10/28/25 13:00	7439-89-6	
Lithium	**5.2J**	ug/L	10.0	1.8	1	10/21/25 08:28	10/28/25 13:00	7439-93-2	
Magnesium	**12400**	ug/L	50.0	21.1	1	10/21/25 08:28	10/28/25 13:00	7439-95-4	
Manganese	**71.4**	ug/L	5.0	0.42	1	10/21/25 08:28	10/28/25 13:00	7439-96-5	
Molybdenum	**1.5J**	ug/L	20.0	0.78	1	10/21/25 08:28	10/28/25 13:00	7439-98-7	
Potassium	**1170**	ug/L	500	45.2	1	10/21/25 08:28	10/28/25 13:00	7440-09-7	
Sodium	**11400**	ug/L	500	31.8	1	10/21/25 08:28	10/28/25 13:00	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/21/25 13:18	10/26/25 13:45	7440-36-0	
Arsenic	**0.53J**	ug/L	1.0	0.13	1	10/21/25 13:18	10/26/25 13:45	7440-38-2	
Selenium	**0.30J**	ug/L	1.0	0.19	1	10/21/25 13:18	10/26/25 13:45	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**2.3**	mg/L	1.0	0.18	1		10/30/25 15:16	16887-00-6	
Fluoride	**0.20**	mg/L	0.10	0.040	1		10/30/25 15:16	16984-48-8	
Sulfate	**20.3**	mg/L	2.0	0.19	2		10/31/25 00:04	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**272**	mg/L	20.0	10.5	1		10/29/25 18:15		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**316**	mg/L	10.0	10.0	1		10/23/25 10:55		

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ANALYTICAL RESULTS

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-B1 **Lab ID: 60484250013** Collected: 10/16/25 12:46 Received: 10/17/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**460**	ug/L	5.0	0.75	1	10/21/25 08:28	10/28/25 13:01	7440-39-3	
Boron	**90.5J**	ug/L	100	33.2	1	10/21/25 08:28	10/28/25 13:01	7440-42-8	
Calcium	**144000**	ug/L	200	45.3	1	10/21/25 08:28	10/28/25 13:01	7440-70-2	
Iron	**24200**	ug/L	50.0	15.4	1	10/21/25 08:28	10/28/25 13:01	7439-89-6	
Lithium	**55.6**	ug/L	10.0	1.8	1	10/21/25 08:28	10/28/25 13:01	7439-93-2	
Magnesium	**46200**	ug/L	50.0	21.1	1	10/21/25 08:28	10/28/25 13:01	7439-95-4	
Manganese	**1140**	ug/L	5.0	0.42	1	10/21/25 08:28	10/28/25 13:01	7439-96-5	
Molybdenum	**<0.78**	ug/L	20.0	0.78	1	10/21/25 08:28	10/28/25 13:01	7439-98-7	
Potassium	**8210**	ug/L	500	45.2	1	10/21/25 08:28	10/28/25 13:01	7440-09-7	
Sodium	**24800**	ug/L	500	31.8	1	10/21/25 08:28	10/28/25 13:01	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/21/25 13:18	10/26/25 13:48	7440-36-0	
Arsenic	**25.8**	ug/L	1.0	0.13	1	10/21/25 13:18	10/26/25 13:48	7440-38-2	
Selenium	**<0.19**	ug/L	1.0	0.19	1	10/21/25 13:18	10/26/25 13:48	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**67.9**	mg/L	5.0	0.90	5		10/31/25 00:17	16887-00-6	
Fluoride	**0.13**	mg/L	0.10	0.040	1		10/30/25 15:28	16984-48-8	
Sulfate	**40.1**	mg/L	5.0	0.48	5		10/31/25 00:17	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**504**	mg/L	20.0	10.5	1		10/29/25 18:15		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**639**	mg/L	13.3	13.3	1		10/23/25 10:55		

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60484250

QC Batch: 952133
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484250001, 60484250002, 60484250003, 60484250004, 60484250005, 60484250006, 60484250007, 60484250008, 60484250009

METHOD BLANK: 3773704 Matrix: Water
Associated Lab Samples: 60484250001, 60484250002, 60484250003, 60484250004, 60484250005, 60484250006, 60484250007, 60484250008, 60484250009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	<0.64	5.0	0.64	10/22/25 16:33	
Boron	ug/L	<7.3	100	7.3	10/22/25 16:33	
Calcium	ug/L	<12.1	200	12.1	10/22/25 16:33	
Iron	ug/L	<8.7	50.0	8.7	10/22/25 16:33	
Lithium	ug/L	<2.8	10.0	2.8	10/22/25 16:33	
Magnesium	ug/L	<16.0	50.0	16.0	10/22/25 16:33	
Manganese	ug/L	<0.52	5.0	0.52	10/22/25 16:33	
Molybdenum	ug/L	<2.1	20.0	2.1	10/22/25 16:33	
Potassium	ug/L	<66.6	500	66.6	10/22/25 16:33	
Sodium	ug/L	<46.9	500	46.9	10/22/25 16:33	

LABORATORY CONTROL SAMPLE: 3773705

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	1000	1010	101	85-115	
Boron	ug/L	1000	963	96	85-115	
Calcium	ug/L	10000	10300	103	85-115	
Iron	ug/L	10000	10300	103	85-115	
Lithium	ug/L	1000	995	100	85-115	
Magnesium	ug/L	10000	10100	101	85-115	
Manganese	ug/L	1000	1010	101	85-115	
Molybdenum	ug/L	1000	1020	102	85-115	
Potassium	ug/L	10000	10000	100	85-115	
Sodium	ug/L	10000	10100	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3773706 3773707

Parameter	Units	60484250006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	ug/L	316	1000	1000	1280	1320	97	100	70-130	3	20	
Boron	ug/L	7220	1000	1000	7870	8130	65	91	70-130	3	20	M1
Calcium	ug/L	83700	10000	10000	89100	92700	54	90	70-130	4	20	M1
Iron	ug/L	19000	10000	10000	28000	28800	89	98	70-130	3	20	
Lithium	ug/L	27.2	1000	1000	1010	1020	98	100	70-130	2	20	
Magnesium	ug/L	23600	10000	10000	32200	33400	86	98	70-130	4	20	
Manganese	ug/L	338	1000	1000	1280	1280	94	95	70-130	0	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60484250

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3773706 3773707

Parameter	Units	60484250006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Molybdenum	ug/L	43.2	1000	1000	1030	1030	99	98	70-130	1	20	
Potassium	ug/L	5540	10000	10000	15300	15600	97	100	70-130	2	20	
Sodium	ug/L	15300	10000	10000	24400	25200	92	99	70-130	3	20	

MATRIX SPIKE SAMPLE: 3773708

Parameter	Units	60484250004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	376	1000	1310	94	70-130	
Boron	ug/L	1200	1000	2120	92	70-130	
Calcium	ug/L	108000	10000	116000	81	70-130	
Iron	ug/L	8280	10000	17800	95	70-130	
Lithium	ug/L	29.8	1000	971	94	70-130	
Magnesium	ug/L	22400	10000	31400	90	70-130	
Manganese	ug/L	454	1000	1380	93	70-130	
Molybdenum	ug/L	29.1	1000	988	96	70-130	
Potassium	ug/L	5150	10000	14800	97	70-130	
Sodium	ug/L	25900	10000	35300	94	70-130	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60484250

QC Batch: 952284
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484250012, 60484250013

METHOD BLANK: 3774255 Matrix: Water
Associated Lab Samples: 60484250012, 60484250013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	<0.75	5.0	0.75	10/28/25 12:49	
Boron	ug/L	<33.2	100	33.2	10/28/25 12:49	
Calcium	ug/L	<45.3	200	45.3	10/28/25 12:49	
Iron	ug/L	<15.4	50.0	15.4	10/28/25 12:49	
Lithium	ug/L	<1.8	10.0	1.8	10/28/25 12:49	
Magnesium	ug/L	<21.1	50.0	21.1	10/28/25 12:49	
Manganese	ug/L	<0.42	5.0	0.42	10/28/25 12:49	
Molybdenum	ug/L	<0.78	20.0	0.78	10/28/25 12:49	
Potassium	ug/L	<45.2	500	45.2	10/28/25 12:49	
Sodium	ug/L	<31.8	500	31.8	10/28/25 12:49	

LABORATORY CONTROL SAMPLE: 3774256

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	1000	990	99	85-115	
Boron	ug/L	1000	957	96	85-115	
Calcium	ug/L	10000	10100	101	85-115	
Iron	ug/L	10000	10100	101	85-115	
Lithium	ug/L	1000	1000	100	85-115	
Magnesium	ug/L	10000	9890	99	85-115	
Manganese	ug/L	1000	981	98	85-115	
Molybdenum	ug/L	1000	986	99	85-115	
Potassium	ug/L	10000	9760	98	85-115	
Sodium	ug/L	10000	9940	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3774257 3774258

Parameter	Units	60484246021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	ug/L	214	1000	1000	1220	1220	101	100	70-130	0	20	
Boron	ug/L	2270	1000	1000	3320	3340	105	107	70-130	0	20	
Calcium	ug/L	107000	10000	10000	119000	119000	121	120	70-130	0	20	
Iron	ug/L	1500	10000	10000	11900	11800	104	103	70-130	1	20	
Lithium	ug/L	22.4	1000	1000	1030	1040	101	102	70-130	1	20	
Magnesium	ug/L	14600	10000	10000	25000	24900	104	103	70-130	0	20	
Manganese	ug/L	1350	1000	1000	2350	2370	100	102	70-130	1	20	
Molybdenum	ug/L	55.8	1000	1000	1080	1080	102	102	70-130	0	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60484250

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3774257 3774258

Parameter	Units	60484246021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Potassium	ug/L	4880	10000	10000	15000	15200	102	103	70-130	1	20	
Sodium	ug/L	87400	10000	10000	98500	98300	111	109	70-130	0	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60484250

QC Batch: 952350
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484250001, 60484250002, 60484250003, 60484250004, 60484250005, 60484250006, 60484250007, 60484250008, 60484250009, 60484250012, 60484250013

METHOD BLANK: 3774441 Matrix: Water
Associated Lab Samples: 60484250001, 60484250002, 60484250003, 60484250004, 60484250005, 60484250006, 60484250007, 60484250008, 60484250009, 60484250012, 60484250013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	<0.12	1.0	0.12	10/26/25 12:40	
Arsenic	ug/L	<0.13	1.0	0.13	10/26/25 12:40	
Selenium	ug/L	<0.19	1.0	0.19	10/26/25 12:40	

LABORATORY CONTROL SAMPLE: 3774442

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	40	39.8	100	85-115	
Arsenic	ug/L	40	40.0	100	85-115	
Selenium	ug/L	40	40.8	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3774443 3774444

Parameter	Units	60484250006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	<0.12	40	40	40.3	40.4	101	101	70-130	0	20	
Arsenic	ug/L	112	40	40	152	155	100	108	70-130	2	20	
Selenium	ug/L	<0.19	40	40	38.9	39.3	97	98	70-130	1	20	

MATRIX SPIKE SAMPLE: 3774445

Parameter	Units	60484250007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	<0.12	40	38.7	97	70-130	
Arsenic	ug/L	2.4	40	41.1	97	70-130	
Selenium	ug/L	<0.19	40	38.7	97	70-130	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60484250

QC Batch: 953363
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Salina
Associated Lab Samples: 60484250001, 60484250002, 60484250003, 60484250004, 60484250005, 60484250006, 60484250007, 60484250008, 60484250009, 60484250012, 60484250013

METHOD BLANK: 3778569 Matrix: Water
Associated Lab Samples: 60484250001, 60484250002, 60484250003, 60484250004, 60484250005, 60484250006, 60484250007, 60484250008, 60484250009, 60484250012, 60484250013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.18	1.0	0.18	10/30/25 10:20	
Fluoride	mg/L	<0.040	0.10	0.040	10/30/25 10:20	
Sulfate	mg/L	<0.096	1.0	0.096	10/30/25 10:20	

LABORATORY CONTROL SAMPLE: 3778570

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	95	90-110	
Fluoride	mg/L	2.5	2.6	105	90-110	
Sulfate	mg/L	5	5.0	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3778571 3778572

Parameter	Units	60483728006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	9.4	5	5	14.4	14.4	101	101	80-120	0	15	
Fluoride	mg/L	0.35	2.5	2.5	2.9	2.9	101	101	80-120	0	15	
Sulfate	mg/L	98.4	50	50	149	151	100	105	80-120	2	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3778573 3778574

Parameter	Units	60484250006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	19.8	10	10	29.7	29.6	99	98	80-120	0	15	
Fluoride	mg/L	0.24	2.5	2.5	2.8	2.8	101	102	80-120	1	15	
Sulfate	mg/L	110	50	50	162	162	104	105	80-120	0	15	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60484250

QC Batch: 952787
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484250002, 60484250003, 60484250006, 60484250008

METHOD BLANK: 3776316 Matrix: Water
Associated Lab Samples: 60484250002, 60484250003, 60484250006, 60484250008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	10/24/25 03:42	

LABORATORY CONTROL SAMPLE: 3776317

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	486	97	90-110	

SAMPLE DUPLICATE: 3776318

Parameter	Units	60483728006 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	482	466	3	10	H1

SAMPLE DUPLICATE: 3776319

Parameter	Units	60484183015 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	396	386	3	10	

SAMPLE DUPLICATE: 3776320

Parameter	Units	60484246012 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	486	494	2	10	

SAMPLE DUPLICATE: 3776321

Parameter	Units	60484250006 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	162	196	19	10	D6

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60484250

QC Batch: 953015
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484250001, 60484250004, 60484250005, 60484250007, 60484250009

METHOD BLANK: 3777234 Matrix: Water
Associated Lab Samples: 60484250001, 60484250004, 60484250005, 60484250007, 60484250009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	10/25/25 15:59	

LABORATORY CONTROL SAMPLE: 3777235

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	490	98	90-110	

SAMPLE DUPLICATE: 3777236

Parameter	Units	60484246001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	282	286	1	10	

SAMPLE DUPLICATE: 3777237

Parameter	Units	60484290010 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	<10.5		10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60484250

QC Batch: 953384
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484250012, 60484250013

METHOD BLANK: 3778644 Matrix: Water
Associated Lab Samples: 60484250012, 60484250013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	10/29/25 18:13	

LABORATORY CONTROL SAMPLE: 3778645

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	494	99	90-110	

SAMPLE DUPLICATE: 3778646

Parameter	Units	60484426006 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	136	138	1	10	

SAMPLE DUPLICATE: 3778647

Parameter	Units	60484426002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	352	350	1	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60484250

QC Batch: 952136
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484250002, 60484250003, 60484250006, 60484250008

METHOD BLANK: 3773716 Matrix: Water
Associated Lab Samples: 60484250002, 60484250003, 60484250006, 60484250008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	10/21/25 15:44	

LABORATORY CONTROL SAMPLE: 3773717

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	969	97	80-120	

SAMPLE DUPLICATE: 3773718

Parameter	Units	60484246012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	709	729	3	10	

SAMPLE DUPLICATE: 3773719

Parameter	Units	60484250006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	445	433	3	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60484250

QC Batch: 952456
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484250001, 60484250004, 60484250005, 60484250007, 60484250009

METHOD BLANK: 3774773 Matrix: Water
Associated Lab Samples: 60484250001, 60484250004, 60484250005, 60484250007, 60484250009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	10/22/25 13:30	

LABORATORY CONTROL SAMPLE: 3774774

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	989	99	80-120	

SAMPLE DUPLICATE: 3774775

Parameter	Units	60484236026 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	653	635	3	10	

SAMPLE DUPLICATE: 3774776

Parameter	Units	60484250004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	473	478	1	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA
Pace Project No.: 60484250

QC Batch: 952615
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484250012, 60484250013

METHOD BLANK: 3775508 Matrix: Water
Associated Lab Samples: 60484250012, 60484250013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	10/23/25 10:53	

LABORATORY CONTROL SAMPLE: 3775509

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

SAMPLE DUPLICATE: 3775510

Parameter	Units	60484344001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	223	246	10	10	

SAMPLE DUPLICATE: 3775511

Parameter	Units	60484426002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1090	1090	0	10	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-1 **Lab ID: 60484250001** Collected: 10/15/25 14:13 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.621 ± 0.529 (0.743) C:NA T:88%**	pCi/L	11/04/25 15:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.238 ± 0.329 (0.703) C:80% T:93%**	pCi/L	10/31/25 14:53	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-2 **Lab ID: 60484250002** Collected: 10/14/25 14:46 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**0.100 ± 0.501 (0.944) C:NA T:103%**	pCi/L	11/04/25 15:17	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**0.996 ± 0.556 (1.04) C:73% T:88%**	pCi/L	10/31/25 14:53	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-3 **Lab ID: 60484250003** Collected: 10/14/25 09:59 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**-0.0534 ± 0.378 (0.802) C:NA T:94%**	pCi/L	11/04/25 15:17	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**1.04 ± 0.500 (0.883) C:82% T:88%**	pCi/L	10/31/25 14:53	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-4 **Lab ID: 60484250004** Collected: 10/15/25 11:25 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.329 ± 0.375 (0.591) C:NA T:93%**	pCi/L	11/04/25 15:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**1.16 ± 0.520 (0.890) C:76% T:95%**	pCi/L	10/31/25 14:53	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-5 **Lab ID: 60484250005** Collected: 10/15/25 12:10 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.228 ± 0.275 (0.419) C:NA T:95%**	pCi/L	11/04/25 15:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**1.38 ± 0.567 (0.925) C:78% T:92%**	pCi/L	10/31/25 14:53	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-7(r) **Lab ID: 60484250006** Collected: 10/14/25 15:05 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.196 ± 0.278 (0.471) C:NA T:97%**	pCi/L	11/04/25 15:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**1.03 ± 0.445 (0.704) C:78% T:86%**	pCi/L	10/31/25 14:50	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-B2 **Lab ID: 60484250007** Collected: 10/15/25 09:27 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**0.409 ± 0.306 (0.158) C:NA T:93%**	pCi/L	11/04/25 15:29	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**0.939 ± 0.406 (0.632) C:82% T:92%**	pCi/L	10/31/25 14:50	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-DUP-1 **Lab ID: 60484250008** Collected: 10/14/25 08:00 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**-0.362 ± 0.377 (0.958) C:NA T:88%**	pCi/L	11/04/25 15:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.584 ± 0.384 (0.725) C:80% T:92%**	pCi/L	10/31/25 14:50	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-FB-1 **Lab ID: 60484250009** Collected: 10/15/25 11:11 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.000 ± 0.263 (0.156) C:NA T:91%**	pCi/L	11/04/25 15:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.601 ± 0.413 (0.799) C:75% T:93%**	pCi/L	10/31/25 14:50	15262-20-1	

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MS-1 **Lab ID: 60484250010** Collected: 10/14/25 15:05 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**84.44 %REC ± NA (NA) C:NA T:NA**	pCi/L	11/04/25 15:29	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**96.95 %REC ± NA (NA) C:NA T:NA**	pCi/L	10/31/25 14:50	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MSD-1 **Lab ID: 60484250011** Collected: 10/14/25 15:05 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**114.06 %REC 29.84RPD ± NA (NA) C:NA T:NA**	pCi/L	11/04/25 15:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**82.09 %REC 16.60RPD ± NA (NA) C:NA T:NA**	pCi/L	10/31/25 14:50	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-6 **Lab ID: 60484250012** Collected: 10/16/25 10:50 Received: 10/17/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**0.102 ± 0.244 (0.472) C:NA T:96%**	pCi/L	11/04/25 15:41	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**0.319 ± 0.398 (0.844) C:71% T:93%**	pCi/L	10/31/25 14:51	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60484250

Sample: R-MW-B1 **Lab ID: 60484250013** Collected: 10/16/25 12:46 Received: 10/17/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.220 ± 0.265 (0.405) C:NA T:92%**	pCi/L	11/04/25 15:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**1.16 ± 0.460 (0.705) C:78% T:88%**	pCi/L	10/31/25 14:50	15262-20-1	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60484250

QC Batch: 778748
QC Batch Method: EPA 903.1
Analysis Method: EPA 903.1
Analysis Description: 903.1 Radium-226
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 60484250001, 60484250002, 60484250003, 60484250004, 60484250005, 60484250006, 60484250007, 60484250008, 60484250009, 60484250010, 60484250011, 60484250012, 60484250013

METHOD BLANK: 3797781 Matrix: Water
Associated Lab Samples: 60484250001, 60484250002, 60484250003, 60484250004, 60484250005, 60484250006, 60484250007, 60484250008, 60484250009, 60484250010, 60484250011, 60484250012, 60484250013

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0417 ± 0.190 (0.307) C:NA T:93%	pCi/L	11/04/25 15:17	

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

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AMEREN RCPA
Pace Project No.: 60484250

QC Batch: 778750 Analysis Method: EPA 904.0
QC Batch Method: EPA 904.0 Analysis Description: 904.0 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 60484250001, 60484250002, 60484250003, 60484250004, 60484250005, 60484250006, 60484250007, 60484250008, 60484250009, 60484250010, 60484250011, 60484250012, 60484250013

METHOD BLANK: 3797783 Matrix: Water
Associated Lab Samples: 60484250001, 60484250002, 60484250003, 60484250004, 60484250005, 60484250006, 60484250007, 60484250008, 60484250009, 60484250010, 60484250011, 60484250012, 60484250013

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.530 ± 0.329 (0.601) C:81% T:90%	pCi/L	10/31/25 14:52	

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

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QUALIFIERS

Project: AMEREN RCPA
Pace Project No.: 60484250

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
H1	Analysis conducted outside the EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA
Pace Project No.: 60484250

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60484250001	**R-MW-1**	EPA 200.7	952133	EPA 200.7	952193
60484250002	**R-MW-2**	EPA 200.7	952133	EPA 200.7	952193
60484250003	**R-MW-3**	EPA 200.7	952133	EPA 200.7	952193
60484250004	**R-MW-4**	EPA 200.7	952133	EPA 200.7	952193
60484250005	**R-MW-5**	EPA 200.7	952133	EPA 200.7	952193
60484250006	**R-MW-7(r)**	EPA 200.7	952133	EPA 200.7	952193
60484250007	**R-MW-B2**	EPA 200.7	952133	EPA 200.7	952193
60484250008	**R-DUP-1**	EPA 200.7	952133	EPA 200.7	952193
60484250009	**R-FB-1**	EPA 200.7	952133	EPA 200.7	952193
60484250012	**R-MW-6**	EPA 200.7	952284	EPA 200.7	952323
60484250013	**R-MW-B1**	EPA 200.7	952284	EPA 200.7	952323
60484250001	**R-MW-1**	EPA 200.8	952350	EPA 200.8	952384
60484250002	**R-MW-2**	EPA 200.8	952350	EPA 200.8	952384
60484250003	**R-MW-3**	EPA 200.8	952350	EPA 200.8	952384
60484250004	**R-MW-4**	EPA 200.8	952350	EPA 200.8	952384
60484250005	**R-MW-5**	EPA 200.8	952350	EPA 200.8	952384
60484250006	**R-MW-7(r)**	EPA 200.8	952350	EPA 200.8	952384
60484250007	**R-MW-B2**	EPA 200.8	952350	EPA 200.8	952384
60484250008	**R-DUP-1**	EPA 200.8	952350	EPA 200.8	952384
60484250009	**R-FB-1**	EPA 200.8	952350	EPA 200.8	952384
60484250012	**R-MW-6**	EPA 200.8	952350	EPA 200.8	952384
60484250013	**R-MW-B1**	EPA 200.8	952350	EPA 200.8	952384
60484250001	**R-MW-1**	EPA 903.1	778748		
60484250002	**R-MW-2**	EPA 903.1	778748		
60484250003	**R-MW-3**	EPA 903.1	778748		
60484250004	**R-MW-4**	EPA 903.1	778748		
60484250005	**R-MW-5**	EPA 903.1	778748		
60484250006	**R-MW-7(r)**	EPA 903.1	778748		
60484250007	**R-MW-B2**	EPA 903.1	778748		
60484250008	**R-DUP-1**	EPA 903.1	778748		
60484250009	**R-FB-1**	EPA 903.1	778748		
60484250010	**R-MS-1**	EPA 903.1	778748		
60484250011	**R-MSD-1**	EPA 903.1	778748		
60484250012	**R-MW-6**	EPA 903.1	778748		
60484250013	**R-MW-B1**	EPA 903.1	778748		
60484250001	**R-MW-1**	EPA 904.0	778750		
60484250002	**R-MW-2**	EPA 904.0	778750		
60484250003	**R-MW-3**	EPA 904.0	778750		
60484250004	**R-MW-4**	EPA 904.0	778750		
60484250005	**R-MW-5**	EPA 904.0	778750		
60484250006	**R-MW-7(r)**	EPA 904.0	778750		
60484250007	**R-MW-B2**	EPA 904.0	778750		
60484250008	**R-DUP-1**	EPA 904.0	778750		
60484250009	**R-FB-1**	EPA 904.0	778750		
60484250010	**R-MS-1**	EPA 904.0	778750		
60484250011	**R-MSD-1**	EPA 904.0	778750		
60484250012	**R-MW-6**	EPA 904.0	778750		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA
Pace Project No.: 60484250

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60484250013	**R-MW-B1**	EPA 904.0	778750		
60484250001	**R-MW-1**	EPA 300.0	953363		
60484250002	**R-MW-2**	EPA 300.0	953363		
60484250003	**R-MW-3**	EPA 300.0	953363		
60484250004	**R-MW-4**	EPA 300.0	953363		
60484250005	**R-MW-5**	EPA 300.0	953363		
60484250006	**R-MW-7(r)**	EPA 300.0	953363		
60484250007	**R-MW-B2**	EPA 300.0	953363		
60484250008	**R-DUP-1**	EPA 300.0	953363		
60484250009	**R-FB-1**	EPA 300.0	953363		
60484250012	**R-MW-6**	EPA 300.0	953363		
60484250013	**R-MW-B1**	EPA 300.0	953363		
60484250001	**R-MW-1**	SM 2320B	953015		
60484250002	**R-MW-2**	SM 2320B	952787		
60484250003	**R-MW-3**	SM 2320B	952787		
60484250004	**R-MW-4**	SM 2320B	953015		
60484250005	**R-MW-5**	SM 2320B	953015		
60484250006	**R-MW-7(r)**	SM 2320B	952787		
60484250007	**R-MW-B2**	SM 2320B	953015		
60484250008	**R-DUP-1**	SM 2320B	952787		
60484250009	**R-FB-1**	SM 2320B	953015		
60484250012	**R-MW-6**	SM 2320B	953384		
60484250013	**R-MW-B1**	SM 2320B	953384		
60484250001	**R-MW-1**	SM 2540C	952456		
60484250002	**R-MW-2**	SM 2540C	952136		
60484250003	**R-MW-3**	SM 2540C	952136		
60484250004	**R-MW-4**	SM 2540C	952456		
60484250005	**R-MW-5**	SM 2540C	952456		
60484250006	**R-MW-7(r)**	SM 2540C	952136		
60484250007	**R-MW-B2**	SM 2540C	952456		
60484250008	**R-DUP-1**	SM 2540C	952136		
60484250009	**R-FB-1**	SM 2540C	952456		
60484250012	**R-MW-6**	SM 2540C	952615		
60484250013	**R-MW-B1**	SM 2540C	952615		

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WO#: 60484250

60484250

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-00(		
	Revision: 3	Effective Date: 09/22/2025	Issued By: Lenexa

Client Name: Rocksmith Grazing

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

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

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐ Cooling process has begun ☐

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

Thermometer Used: T-361 **Type of Ice:** Wet Blue None

Cooler Temperature (°C): As-read 14.2/15.5 Corr. Factor 0.0 Corrected 14.2/15.5 14.7/16.9/19.3 14.7/16.9/19.3

Date and initials of person examining contents: PM 10/16/25

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, Radium) LOT#: 96888	☑Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☐No ☑N/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

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60484250

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:			
Project Name:	AMEREN RCPA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other	Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No	Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other	DW PWSID # or WW Permit # as applicable:
	Date Results Requested:	Field Filtered (if applicable): [ ] Yes [ ] No	Analysis:

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only
- Proj. Mgr: Jamie Church
- AcctNum / Client ID:
- Table #:
- Profile / Template: 15854
- Prelog / Bottle Ord. ID: EZ 3303608

Preservation non-conformance identified for sample.

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	App III and Cat/An Metals*	App IV Metals**	Cl/F/SO4/TDS/Alkalinity	Radium 226/228	Sample Comment
R-MW-1	WT	G			10/15/25	1413	4			✓	✓	✓	✓	
R-MW-2	WT	G			10/14/25	1446	4			✓	✓	✓	✓	
R-MW-3	WT	G			10/14/25	0959	4			✓	✓	✓	✓	
R-MW-4	WT	G			10/15/25	1125	4			✓	✓	✓	✓	
R-MW-5	WT	G			10/15/25	1210	4			✓	✓	✓	✓	
R-MW-6	WT													
R-MW-7(r)	WT	G			10/14/25	1505	4			✓	✓	✓	✓	
R-MW-B1	WT													
R-MW-B2	WT	G			10/15/25	0927	4			✓	✓	✓	✓	
R-DUP-1	WT	G			10/14/25	—	4			✓	✓	✓	✓	

Additional Instructions from Pace®:
***App III and Cat/An Metals* - EPA 200.7: B, Ca, Fe, Mg, Mn, K, Na**
****App IV Metals - EPA 200.7 -Ba, Li, Mo & 200.8 Metals - Sb, As, Se**

Collected By: (Printed Name) John Rasmussen
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
6	T-301	0.0	1.4/2.0/1.5	1.4/2.0/1.5	14.2/16.9/19.3

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
Rocksmith	10/15/25 1600		10/16/25 0705	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In- Person [ ] Courier [ ] FedEx [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 2

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

L0484250

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:			
Project Name:	AMEREN RCPA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other		Regulatory Program (DW, RCRA, etc.) as applicable:	Reportable [ ] Yes [ ] No
		Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____	DW PWSID # or WW Permit # as applicable:
		Date Results Requested:	Field Filtered (if applicable): [ ] Yes [ ] No Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	App III and Cat/An Metals*	App IV Metals**	Cl/F/SO4/TDS/Alkalinity	Radium 226/228	Sample Comment
R-FB-1	WT	G			10/15/25	1111	4			✓	✓	✓	✓	
R-MS-1	WT	G			10/14/25	1505	4			✓	✓	✓	✓	Taken @ MW-7
R-MSD-1	WT	G			10/14/25	1505	4			✓	✓	✓	✓	

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only

Proj. Mgr: Jamie Church

AcctNum / Client ID:

Table #:

Profile / Template: 15854

Prelog / Bottle Ord. ID: EZ 3303608

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:
***App III and Cat/An Metals* - EPA 200.7: B, Ca, Fe, Mg, Mn, K, Na**
****App IV Metals - EPA 200.7 -Ba, Li, Mo & 200.8 Metals - Sb, As, Se**

Collected By: (Printed Name)

Signature:

Customer Remarks / Special Conditions / Possible Hazards:

1.4/2.0/1.5

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
6	T-301	0.0		14.7/16.4/19.3	

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
Rocksmith	10/15/25		10/16/25 0705	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In- Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEx [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 2 of 2

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

1/2

Client: Rocksmith Geoeng Profile/EZ #: 3303648

Site: Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1	WT																		1			2	-								
2	↓																		↓			↓	↓								
3																																
4																																
5	↓																		↓			↓	↓								
6																																
7	↓																		3			2	3								
8																																
9	↓																		1			↓	1								
10	↓																		↓			↓	↓								
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number:

WO#: 60484250

PM: JLS Due Date: 10/30/25

CLIENT: Rocksmith

2/12

Client: Rocksmith Geoeng

Profile/EZ #: 03303608

Site:

Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1	WT																		1			2	1									
2	↓																					↓										
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60484250

WO# : 60484250

60484250

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_Sample Co		
	Revision: 3	Effective Date: 09/22/2025	Issued By: Lenexa

Client Name: Rocksmith Geoeng

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

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

Custody Seal on Cooler/Box Present: Yes ☐ No ☑ Seals intact: Yes ☑ No ☐ Cooling process has begun ☐

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

Thermometer Used: T-301 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): As-read 1.7/13.7 Corr. Factor 0.0 Corrected 1.7/13.7

Date and initials of person examining contents: 9/10/25

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, Radium) **LOT#:** 96888	☑Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☐No ☑N/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

60484250

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:			
Project Name:	AMEREN RCPA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri

Data Deliverables:
[ ] Level II [ ] Level III [ ] Level IV
[ ] EQUIS
[ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required):
[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [ ] No
Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: 3 1 1
Identify Container Preservative Type***: 2 1 2

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	App III and Cat/An Metals*	App IV Metals**	Cl/F/SO4/TDS/Alkalinity	Radium 226/228	Sample Comment
R-MW-1	WT													
R-MW-2	WT													
R-MW-3	WT													
R-MW-4	WT													
R-MW-5	WT													
R-MW-6	WT	G			10-16-25	1050	4			✓	✓	✓	✓	
R-MW-7(r)	WT													
R-MW-B1	WT	G			10-16-25	1246	4			✓	✓	✓	✓	
R-MW-B2	WT													
R-DUP-1	WT													

Lab Use Only:
Proj. Mgr: Jamie Church
AcctNum / Client ID:
Table #:
Profile / Template: 15854
Prelog / Bottle Ord. ID: EZ 3303608

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:
**App III and Cat/An Metals* - EPA 200.7: B, Ca, Fe, Mg, Mn, K, Na
**App IV Metals - EPA 200.7 -Ba, Li, Mo & 200.8 Metals - Sb, As, Se

Collected By: (Printed Name) Daniel Quick
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
2	T-301	0.0	1.7/13.7	1.7/13.7	

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
Rocksmith alice	10-16-25 1415	PASL	10/17/25 0705	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In- Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: of

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

Client: Rocksmith Geoeng

Profile/EZ # only print what you log

Site:

Notes Append to 60484250

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1																																
2																																
3																																
4																																
5																																
6	WT																		1			2	1									
7																																
8	WT																		1			2	1									
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number:

Internal Transfer Chain of Custody

Rush Multiplier_____X

[X] Samples Pre-Logged into eCOC

State Of Origin: MO

Cert. Needed: [ ] Yes [X] No

Workorder: 60484250 **Workorder Name:** AMEREN RCPA

Owner Received Date: 10/16/2025 **Results Requested By:** 10/30/2025

Report To	Subcontract To
Jamie Church Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 314-838-7223	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600

						Preserved Containers						Requested Analysis												
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	HNO3						Radium 226	Radium 228											LAB USE ONLY
1	R-MW-1	PS	10/15/2025 14:13	60484250001	Water	2						X	X											001
2	R-MW-2	PS	10/14/2025 14:46	60484250002	Water	2						X	X											002
3	R-MW-3	PS	10/14/2025 09:59	60484250003	Water	2						X	X											003
4	R-MW-4	PS	10/15/2025 11:25	60484250004	Water	2						X	X											004
5	R-MW-5	PS	10/15/2025 12:10	60484250005	Water	2						X	X											005
6	R-MW-7(r)	RQS	10/14/2025 15:05	60484250006	Water	2						X	X											006
7	R-MW-B2	PS	10/15/2025 09:27	60484250007	Water	2						X	X											007
8	R-DUP-1	PS	10/14/2025 08:00	60484250008	Water	2						X	X											008
9	R-FB-1	PS	10/15/2025 11:11	60484250009	Water	2						X	X											009
10	R-MS-1	PS	10/14/2025 15:05	60484250010	Water	2						X	X											010
11	R-MSD-1	PS	10/14/2025 15:05	60484250011	Water	2						X	X											011
12	R-MW-6	PS	10/16/2025 10:50	60484250012	Water	2						X	X											012
13	R-MW-B1	PS	10/16/2025 12:46	60484250013	Water	2						X	X											013

WO# : 30819410

30819410

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	DF Pace	10/17 1700	[signature]	10/18/25 1000	Note: Parent sample for MS/MSD (010/011) is 006 LOCATION: 60-R01-S3B
2					
3					

Cooler Temperature on Receipt ___ °C	Custody Seal Y or (N)	Received on Ice Y or (N)	Samples Intact (Y) or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

WO#: 30819410

PM: CMC Due Date: 10/30/25

CLIENT: PACE_60_LEKS

Memorandum

November 11, 2025

To:	Project File Rocksmith Geoengineering, LLC	**Project Number:**	23008-25
CC:	Mark Haddock, Jeffrey Ingram		
From:	Jack Rasmussen	**Email:**	Jack.Rasmussen@rocksmithgeo.com
RE:	**Data Validation Summary, Rush Island Energy Center – RCPA – Data Package 60484250**		

The following is a summary of instances where quality control criteria in the functional guidelines were not met and data qualification was required:

- When a duplicate criterion was not met, the associated sample result was qualified as an estimate (J for detects, UJ for non-detects).

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Company Name: Rocksmith Geoengineering
Project Manager: J. Ingram
Project Name: Ameren RCPA
Project Number: 23008-25
Reviewer: J. Rasmussen
Validation Date: 11/11/2025

Laboratory: Pace Analytical
SDG #: 60484250
Analytical Method (type and no.): EPA 200.7/200.8 (Total Metals); EPA 7470 (Mercury);SM 2320B (Alkalinity); SM 2540C (TDS); EPA 300.0 (Anions);
Matrix: ☐ Air ☐ Soil/Sed. ■ Water ☐ Waste ☐ EPA 903.1 & 904.0 (Radium 226 & 228)
Sample Names R-MW-1, R-MW-2, R-MW-6, R-MW-7(r), R-MW-B2, R-DUP-1, R-MS-1, R-MSD-1, R-MW-3, R-MW-4,R-MW-5, R-MW-B1, R-FB-1

NOTE: Please provide calculation in Comment areas or on the back (if on the back please indicate in comment areas).

Field Information	YES	NO	NA	COMMENTS
a) Sampling dates noted?	x			10/11/2025-10/15/2025
b) Sampling team indicated?	x			VAH, JTR, JDQ
c) Sample location noted?	x			
d) Sample depth indicated (Soils)?			x	
e) Sample type indicated (grab/composite)?	x			Grab
f) Field QC noted?	x			See Notes
g) Field parameters collected (note types)?	x			pH, Spec Cond, Turb, Temp, DO, ORP
h) Field Calibration within control limits?	x			
i) Notations of unacceptable field conditions/performances from field logs or field notes?		x		
j) Does the laboratory narrative indicate deficiencies?			x	No lab narrative.

Note Deficiencies:

Chain-of-Custody (COC)	YES	NO	NA	COMMENTS
a) Was the COC properly completed?	x			
b) Was the COC signed by both field and laboratory personnel?	x			
c) Were samples received in good condition?	x			

General (reference QAPP or Method)	YES	NO	NA	COMMENTS
a) Were hold times met for sample pretreatment?	x			
b) Were hold times met for sample analysis?	x			
c) Were the correct preservatives used?	x			
d) Was the correct method used?	x			
e) Were appropriate reporting limits achieved?	x			
f) Were any sample dilutions noted?	x			See Notes
g) Were any matrix problems noted?		x		

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Blanks	YES	NO	NA	COMMENTS
a) Were analytes detected in the method blank(s)?	☐	☒	☐	
b) Were analytes detected in the field blank(s)?	☒	☐	☐	See Notes
c) Were analytes detected in the equipment blank(s)?	☐	☐	☒	
d) Were analytes detected in the trip blank(s)?	☐	☐	☒	

Laboratory Control Sample (LCS)	YES	NO	NA	COMMENTS
a) Was a LCS analyzed once per SDG?	☒	☐	☐	
b) Were the proper analytes included in the LCS?	☒	☐	☐	
c) Was the LCS accuracy criteria met?	☒	☐	☐	

Duplicates	YES	NO	NA	COMMENTS
a) Were field duplicates collected (note original and duplicate sample names)?	☒	☐	☐	See Notes
b) Were field dup. precision criteria met (note RPD)?	☐	☒	☐	See Notes
c) Were lab duplicates analyzed (note original and duplicate samples)?	☒	☐	☐	
d) Were lab dup. precision criteria met (note RPD)?	☐	☒	☐	See Notes

Blind Standards	YES	NO	NA	COMMENTS
a) Was a blind standard used (indicate name, analytes included and concentrations)?	☐	☐	☒	
b) Was the %D within control limits?	☐	☐	☒	

Matrix Spike/Matrix Spike Duplicate (MS/MSD)	YES	NO	NA	COMMENTS
a) Was MS accuracy criteria met?	☐	☒	☐	See Notes
Recovery could not be calculated since sample contained high concentration of analyte?	☐	☐	☒	
b) Was MSD accuracy criteria met?	☐	☒	☐	See Notes
Recovery could not be calculated since sample contained high concentration of analyte?	☐	☐	☒	
c) Were MS/MSD precision criteria met?	☐	☒	☐	See Notes

Comments/Notes:

General:

Chloride and/or sulfate were diluted in several samples, no qualification necessary.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Comments/Notes:

Method Blanks:

No constituents detected in method blanks.

Field Blanks:

R-FB-1 @ R-MW-4: Calcium (13.8J). Calcium result > RL and 10x blank, no qualification necessary.

Duplicates: R-DUP-1 @ R-MW-3: No field duplicates exceed control limit of 20%.

Lab duplicate: 10% alkalinity, 15% chloride, fluoride, sulfate; 20% ferrous iron, sulfide.

3776321: Lab duplicate exceeds max RPD for Alkalinity, associated with sample -006, result qualified as estimate.

MS/MSD:

3773706/3773707: MS recovery low for boron and calcium, MSD and RPD within control limits. No qualification necessary.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Data Qualification:

Sample Name	Constituent(s)	Result	Qualifier	Reason
R-MW-7(r)	Alkalinity	162	J	Lab DUP RPD exceeds control limits.

Signature: _____ Date: 11/11/2025

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

December 19, 2025

Mark Haddock
Rocksmith Geoengineering, LLC.
2320 Creve Coeur Mill Road
Maryland Heights, MO 63043

RE: Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Dear Mark Haddock:

Enclosed are the analytical results for sample(s) received by the laboratory between October 16, 2025 and November 13, 2025. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Kansas City
- Pace Analytical Services - Greensburg
- Pace Analytical Services - Salina

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

Sincerely,



Jamie Church
jamie.church@pacelabs.com
314-838-7223
Project Manager

Enclosures

cc: Jeffrey Ingram, Rocksmith Geoengineering, LLC.
Lisa Meyer, Ameren
Grant Morey, Rocksmith Geoengineering, LLC.
Austin Nieman, Ameren

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CERTIFICATIONS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219
EPA Lab Code: KS00021
Arkansas Certification #: 88-00679
Illinois Certification #: 200030
Colorado Division of Oil and Public Safety
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Oklahoma Certification #: 9205
Texas Certification #: T104704407
Utah Certification #: KS0002125-15
UDSA_CA : #KS-SC-DOM-25-01

Pace Analytical Services Salina

528 N 9th Street, Salina, KS 67401
EPA Lab Code: KS00013
Kansas/NELAP Certification: # E-10146
Oklahoma Certification: #2405
Texas Certification: T104704246-23-15

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SAMPLE SUMMARY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60484246001	**R-P-05S**	Water	10/15/25 13:35	10/16/25 07:05
60484246002	**R-P-16S**	Water	10/15/25 13:16	10/16/25 07:05
60484246003	**R-P-17S**	Water	10/15/25 13:15	10/16/25 07:05
60484246004	**R-P-17I**	Water	10/15/25 12:17	10/16/25 07:05
60484246005	**R-P-17D**	Water	10/15/25 11:40	10/16/25 07:05
60484246006	**R-P-19S**	Water	10/14/25 13:45	10/16/25 07:05
60484246007	**R-P-19I**	Water	10/14/25 12:57	10/16/25 07:05
60484246008	**R-P-19D**	Water	10/14/25 12:20	10/16/25 07:05
60484246009	**R-P-21S**	Water	10/14/25 12:35	10/16/25 07:05
60484246010	**R-P-21I**	Water	10/14/25 13:21	10/16/25 07:05
60484246011	**R-P-21D**	Water	10/14/25 14:00	10/16/25 07:05
60484246012	**R-P-22S**	Water	10/14/25 11:10	10/16/25 07:05
60484246013	**R-P-29S**	Water	10/15/25 10:05	10/16/25 07:05
60484246014	**R-P-29D**	Water	10/15/25 10:50	10/16/25 07:05
60484246015	**R-CA-DUP-1**	Water	10/14/25 08:00	10/16/25 07:05
60484246016	**R-CA-DUP-2**	Water	10/15/25 08:00	10/16/25 07:05
60484246017	**R-CA-FB-1**	Water	10/14/25 12:40	10/16/25 07:05
60484246018	**R-CA-FB-2**	Water	10/14/25 14:11	10/16/25 07:05
60484246019	**R-CA-MS-1**	Water	10/14/25 11:10	10/16/25 07:05
60484246020	**R-CA-MSD-1**	Water	10/14/25 11:10	10/16/25 07:05
60484246021	**R-P-10S**	Water	10/16/25 09:42	10/17/25 07:05
60484246022	**R-P-30S**	Water	10/16/25 11:55	10/17/25 07:05
60484246023	**R-P-22D**	Water	11/12/25 13:00	11/13/25 07:45

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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60484246001	**R-P-05S**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246002	**R-P-16S**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246003	**R-P-17S**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246004	**R-P-17I**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246005	**R-P-17D**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246006	**R-P-19S**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246007	**R-P-19I**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246008	**R-P-19D**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246009	**R-P-21S**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246010	**R-P-21I**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246011	**R-P-21D**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246012	**R-P-22S**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246013	**R-P-29S**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246014	**R-P-29D**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246015	**R-CA-DUP-1**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246016	**R-CA-DUP-2**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 2540C	DLJ	1	PASI-K
60484246017	**R-CA-FB-1**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246018	**R-CA-FB-2**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246019	**R-CA-MS-1**	EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
60484246020	**R-CA-MSD-1**	EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
60484246021	**R-P-10S**	EPA 200.7	ARMN	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246022	**R-P-30S**	EPA 200.7	ARMN	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	DSO	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484246023	**R-P-22D**	EPA 200.7	CJM	10	PASI-K
		EPA 200.8	JGP	3	PASI-K
		EPA 903.1	TMY	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
		EPA 300.0	GTS	3	PASI-K

PASI-K = Pace Analytical Services - Kansas City
PASI-PA = Pace Analytical Services - Greensburg
PASI-SA = Pace Analytical Services - Salina

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-05S **Lab ID: 60484246001** Collected: 10/15/25 13:35 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**125**	ug/L	5.0	0.64	1	10/17/25 12:55	10/24/25 14:23	7440-39-3	
Boron	**4090**	ug/L	100	7.3	1	10/17/25 12:55	10/24/25 14:23	7440-42-8	
Calcium	**63700**	ug/L	200	12.1	1	10/17/25 12:55	10/24/25 14:23	7440-70-2	
Iron	**5590**	ug/L	50.0	8.7	1	10/17/25 12:55	10/24/25 14:23	7439-89-6	
Lithium	**14.3**	ug/L	10.0	2.8	1	10/17/25 12:55	10/24/25 14:23	7439-93-2	
Magnesium	**23000**	ug/L	50.0	16.0	1	10/17/25 12:55	10/24/25 14:23	7439-95-4	
Manganese	**216**	ug/L	5.0	0.52	1	10/17/25 12:55	10/24/25 14:23	7439-96-5	
Molybdenum	**<2.1**	ug/L	20.0	2.1	1	10/17/25 12:55	10/24/25 14:23	7439-98-7	
Potassium	**5540**	ug/L	500	66.6	1	10/17/25 12:55	10/24/25 14:23	7440-09-7	
Sodium	**27300**	ug/L	500	46.9	1	10/17/25 12:55	10/24/25 14:23	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/17/25 12:55	10/20/25 13:56	7440-36-0	
Arsenic	**120**	ug/L	1.0	0.13	1	10/17/25 12:55	10/20/25 13:56	7440-38-2	
Selenium	**<0.19**	ug/L	1.0	0.19	1	10/17/25 12:55	10/20/25 13:56	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**25.2**	mg/L	2.0	0.36	2		10/25/25 17:54	16887-00-6	
Fluoride	**0.23**	mg/L	0.10	0.040	1		10/25/25 11:55	16984-48-8	
Sulfate	**16.9**	mg/L	2.0	0.19	2		10/25/25 17:54	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**282**	mg/L	20.0	10.5	1		10/25/25 15:59		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**391**	mg/L	10.0	10.0	1		10/22/25 13:30		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-16S **Lab ID: 60484246002** Collected: 10/15/25 13:16 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**127**	ug/L	5.0	0.64	1	10/17/25 12:55	10/24/25 14:25	7440-39-3	
Boron	**163**	ug/L	100	7.3	1	10/17/25 12:55	10/24/25 14:25	7440-42-8	
Calcium	**117000**	ug/L	200	12.1	1	10/17/25 12:55	10/24/25 14:25	7440-70-2	
Iron	**33.3J**	ug/L	50.0	8.7	1	10/17/25 12:55	10/24/25 14:25	7439-89-6	
Lithium	**24.4**	ug/L	10.0	2.8	1	10/17/25 12:55	10/24/25 14:25	7439-93-2	
Magnesium	**32800**	ug/L	50.0	16.0	1	10/17/25 12:55	10/24/25 14:25	7439-95-4	
Manganese	**1.2J**	ug/L	5.0	0.52	1	10/17/25 12:55	10/24/25 14:25	7439-96-5	
Molybdenum	**5.3J**	ug/L	20.0	2.1	1	10/17/25 12:55	10/24/25 14:25	7439-98-7	
Potassium	**2010**	ug/L	500	66.6	1	10/17/25 12:55	10/24/25 14:25	7440-09-7	
Sodium	**8330**	ug/L	500	46.9	1	10/17/25 12:55	10/24/25 14:25	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/17/25 12:55	10/20/25 13:58	7440-36-0	
Arsenic	**0.77J**	ug/L	1.0	0.13	1	10/17/25 12:55	10/20/25 13:58	7440-38-2	
Selenium	**0.59J**	ug/L	1.0	0.19	1	10/17/25 12:55	10/20/25 13:58	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**1.0**	mg/L	1.0	0.18	1		10/25/25 12:33	16887-00-6	
Fluoride	**0.17**	mg/L	0.10	0.040	1		10/25/25 12:33	16984-48-8	
Sulfate	**19.4**	mg/L	2.0	0.19	2		10/25/25 18:32	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**428**	mg/L	20.0	10.5	1		10/25/25 15:59		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**460**	mg/L	10.0	10.0	1		10/22/25 13:30		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-17S **Lab ID: 60484246003** Collected: 10/15/25 13:15 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**115**	ug/L	5.0	0.64	1	10/17/25 12:55	10/24/25 14:27	7440-39-3	
Boron	**2280**	ug/L	100	7.3	1	10/17/25 12:55	10/24/25 14:27	7440-42-8	
Calcium	**114000**	ug/L	200	12.1	1	10/17/25 12:55	10/24/25 14:27	7440-70-2	
Iron	**541**	ug/L	50.0	8.7	1	10/17/25 12:55	10/24/25 14:27	7439-89-6	
Lithium	**34.0**	ug/L	10.0	2.8	1	10/17/25 12:55	10/24/25 14:27	7439-93-2	
Magnesium	**27100**	ug/L	50.0	16.0	1	10/17/25 12:55	10/24/25 14:27	7439-95-4	
Manganese	**1950**	ug/L	5.0	0.52	1	10/17/25 12:55	10/24/25 14:27	7439-96-5	
Molybdenum	**47.0**	ug/L	20.0	2.1	1	10/17/25 12:55	10/24/25 14:27	7439-98-7	
Potassium	**3950**	ug/L	500	66.6	1	10/17/25 12:55	10/24/25 14:27	7440-09-7	
Sodium	**178000**	ug/L	500	46.9	1	10/17/25 12:55	10/24/25 14:27	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**0.30J**	ug/L	1.0	0.12	1	10/17/25 12:55	10/20/25 14:00	7440-36-0	
Arsenic	**10.3**	ug/L	1.0	0.13	1	10/17/25 12:55	10/20/25 14:00	7440-38-2	
Selenium	**2.5**	ug/L	1.0	0.19	1	10/17/25 12:55	10/20/25 14:00	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**34.5**	mg/L	5.0	0.90	5		10/25/25 19:11	16887-00-6	
Fluoride	**0.62**	mg/L	0.10	0.040	1		10/25/25 12:46	16984-48-8	
Sulfate	**208**	mg/L	20.0	1.9	20		10/25/25 19:24	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**526**	mg/L	20.0	10.5	1		10/25/25 15:59		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**932**	mg/L	13.3	13.3	1		10/22/25 13:31		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-17I **Lab ID: 60484246004** Collected: 10/15/25 12:17 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**25.1**	ug/L	5.0	0.64	1	10/17/25 12:55	10/24/25 14:28	7440-39-3	
Boron	**1870**	ug/L	100	7.3	1	10/17/25 12:55	10/24/25 14:28	7440-42-8	
Calcium	**12900**	ug/L	200	12.1	1	10/17/25 12:55	10/24/25 14:28	7440-70-2	
Iron	**175**	ug/L	50.0	8.7	1	10/17/25 12:55	10/24/25 14:28	7439-89-6	
Lithium	**3.5J**	ug/L	10.0	2.8	1	10/17/25 12:55	10/24/25 14:28	7439-93-2	
Magnesium	**694**	ug/L	50.0	16.0	1	10/17/25 12:55	10/24/25 14:28	7439-95-4	
Manganese	**11.3**	ug/L	5.0	0.52	1	10/17/25 12:55	10/24/25 14:28	7439-96-5	
Molybdenum	**110**	ug/L	20.0	2.1	1	10/17/25 12:55	10/24/25 14:28	7439-98-7	
Potassium	**2820**	ug/L	500	66.6	1	10/17/25 12:55	10/24/25 14:28	7440-09-7	
Sodium	**241000**	ug/L	500	46.9	1	10/17/25 12:55	10/24/25 14:28	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**0.13J**	ug/L	1.0	0.12	1	10/17/25 12:55	10/20/25 14:06	7440-36-0	
Arsenic	**25.0**	ug/L	1.0	0.13	1	10/17/25 12:55	10/20/25 14:06	7440-38-2	
Selenium	**0.75J**	ug/L	1.0	0.19	1	10/17/25 12:55	10/20/25 14:06	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**116**	mg/L	10.0	1.8	10		10/25/25 19:37	16887-00-6	
Fluoride	**1.3**	mg/L	0.10	0.040	1		10/25/25 12:59	16984-48-8	
Sulfate	**269**	mg/L	20.0	1.9	20		10/25/25 19:49	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**142**	mg/L	20.0	10.5	1		10/24/25 18:17		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**792**	mg/L	13.3	13.3	1		10/22/25 13:31		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-17D **Lab ID: 60484246005** Collected: 10/15/25 11:40 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**88.0**	ug/L	5.0	0.64	1	10/17/25 12:55	10/24/25 15:00	7440-39-3	
Boron	**7250**	ug/L	100	7.3	1	10/17/25 12:55	10/24/25 15:00	7440-42-8	
Calcium	**40600**	ug/L	200	12.1	1	10/17/25 12:55	10/24/25 15:00	7440-70-2	
Iron	**1890**	ug/L	50.0	8.7	1	10/17/25 12:55	10/24/25 15:00	7439-89-6	
Lithium	**36.7**	ug/L	10.0	2.8	1	10/17/25 12:55	10/24/25 15:00	7439-93-2	
Magnesium	**8550**	ug/L	50.0	16.0	1	10/17/25 12:55	10/24/25 15:00	7439-95-4	
Manganese	**302**	ug/L	5.0	0.52	1	10/17/25 12:55	10/24/25 15:00	7439-96-5	
Molybdenum	**552**	ug/L	20.0	2.1	1	10/17/25 12:55	10/24/25 15:00	7439-98-7	
Potassium	**7020**	ug/L	500	66.6	1	10/17/25 12:55	10/24/25 15:00	7440-09-7	
Sodium	**147000**	ug/L	500	46.9	1	10/17/25 12:55	10/24/25 15:00	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/17/25 12:55	10/20/25 14:08	7440-36-0	
Arsenic	**0.91J**	ug/L	1.0	0.13	1	10/17/25 12:55	10/20/25 14:08	7440-38-2	
Selenium	**0.23J**	ug/L	1.0	0.19	1	10/17/25 12:55	10/20/25 14:08	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**51.7**	mg/L	5.0	0.90	5		10/25/25 20:02	16887-00-6	
Fluoride	**0.56**	mg/L	0.10	0.040	1		10/25/25 13:12	16984-48-8	
Sulfate	**245**	mg/L	20.0	1.9	20		10/25/25 20:15	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**156**	mg/L	20.0	10.5	1		10/24/25 18:17		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**650**	mg/L	10.0	10.0	1		10/22/25 13:31		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-19S **Lab ID: 60484246006** Collected: 10/14/25 13:45 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**209**	ug/L	5.0	0.64	1	10/17/25 12:55	10/24/25 15:01	7440-39-3	
Boron	**104**	ug/L	100	7.3	1	10/17/25 12:55	10/24/25 15:01	7440-42-8	
Calcium	**96500**	ug/L	200	12.1	1	10/17/25 12:55	10/24/25 15:01	7440-70-2	
Iron	**3930**	ug/L	50.0	8.7	1	10/17/25 12:55	10/24/25 15:01	7439-89-6	
Lithium	**17.3**	ug/L	10.0	2.8	1	10/17/25 12:55	10/24/25 15:01	7439-93-2	
Magnesium	**15100**	ug/L	50.0	16.0	1	10/17/25 12:55	10/24/25 15:01	7439-95-4	
Manganese	**942**	ug/L	5.0	0.52	1	10/17/25 12:55	10/24/25 15:01	7439-96-5	
Molybdenum	**2.5J**	ug/L	20.0	2.1	1	10/17/25 12:55	10/24/25 15:01	7439-98-7	
Potassium	**3650**	ug/L	500	66.6	1	10/17/25 12:55	10/24/25 15:01	7440-09-7	
Sodium	**3670**	ug/L	500	46.9	1	10/17/25 12:55	10/24/25 15:01	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/17/25 12:55	10/20/25 14:10	7440-36-0	
Arsenic	**7.8**	ug/L	1.0	0.13	1	10/17/25 12:55	10/20/25 14:10	7440-38-2	
Selenium	**<0.19**	ug/L	1.0	0.19	1	10/17/25 12:55	10/20/25 14:10	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**0.66J**	mg/L	1.0	0.18	1		10/25/25 13:25	16887-00-6	
Fluoride	**0.28**	mg/L	0.10	0.040	1		10/25/25 13:25	16984-48-8	
Sulfate	**4.7**	mg/L	1.0	0.096	1		10/25/25 13:25	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**308**	mg/L	20.0	10.5	1		10/24/25 03:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**335**	mg/L	10.0	10.0	1		10/21/25 15:45		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-19I **Lab ID: 60484246007** Collected: 10/14/25 12:57 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**64.1**	ug/L	5.0	0.64	1	10/17/25 12:55	10/24/25 15:03	7440-39-3	
Boron	**3690**	ug/L	100	7.3	1	10/17/25 12:55	10/24/25 15:03	7440-42-8	
Calcium	**19500**	ug/L	200	12.1	1	10/17/25 12:55	10/24/25 15:03	7440-70-2	
Iron	**50.5**	ug/L	50.0	8.7	1	10/17/25 12:55	10/24/25 15:03	7439-89-6	
Lithium	**52.5**	ug/L	10.0	2.8	1	10/17/25 12:55	10/24/25 15:03	7439-93-2	
Magnesium	**291**	ug/L	50.0	16.0	1	10/17/25 12:55	10/24/25 15:03	7439-95-4	
Manganese	**2.9J**	ug/L	5.0	0.52	1	10/17/25 12:55	10/24/25 15:03	7439-96-5	
Molybdenum	**187**	ug/L	20.0	2.1	1	10/17/25 12:55	10/24/25 15:03	7439-98-7	
Potassium	**28500**	ug/L	500	66.6	1	10/17/25 12:55	10/24/25 15:03	7440-09-7	
Sodium	**171000**	ug/L	500	46.9	1	10/17/25 12:55	10/24/25 15:03	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**0.28J**	ug/L	1.0	0.12	1	10/17/25 12:55	10/20/25 14:16	7440-36-0	
Arsenic	**56.5**	ug/L	1.0	0.13	1	10/17/25 12:55	10/20/25 14:16	7440-38-2	
Selenium	**0.55J**	ug/L	1.0	0.19	1	10/17/25 12:55	10/20/25 14:16	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**18.2**	mg/L	1.0	0.18	1		10/25/25 14:03	16887-00-6	
Fluoride	**0.86**	mg/L	0.10	0.040	1		10/25/25 14:03	16984-48-8	
Sulfate	**163**	mg/L	20.0	1.9	20		10/25/25 20:28	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**300**	mg/L	20.0	10.5	1		10/24/25 03:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**656**	mg/L	10.0	10.0	1		10/21/25 15:45		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-19D **Lab ID: 60484246008** Collected: 10/14/25 12:20 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**112**	ug/L	5.0	0.64	1	10/17/25 12:55	10/24/25 15:05	7440-39-3	
Boron	**8710**	ug/L	100	7.3	1	10/17/25 12:55	10/24/25 15:05	7440-42-8	
Calcium	**37300**	ug/L	200	12.1	1	10/17/25 12:55	10/24/25 15:05	7440-70-2	
Iron	**1980**	ug/L	50.0	8.7	1	10/17/25 12:55	10/24/25 15:05	7439-89-6	
Lithium	**19.1**	ug/L	10.0	2.8	1	10/17/25 12:55	10/24/25 15:05	7439-93-2	
Magnesium	**5340**	ug/L	50.0	16.0	1	10/17/25 12:55	10/24/25 15:05	7439-95-4	
Manganese	**275**	ug/L	5.0	0.52	1	10/17/25 12:55	10/24/25 15:05	7439-96-5	
Molybdenum	**621**	ug/L	20.0	2.1	1	10/17/25 12:55	10/24/25 15:05	7439-98-7	
Potassium	**3800**	ug/L	500	66.6	1	10/17/25 12:55	10/24/25 15:05	7440-09-7	
Sodium	**191000**	ug/L	500	46.9	1	10/17/25 12:55	10/24/25 15:05	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/17/25 12:55	10/20/25 14:18	7440-36-0	
Arsenic	**0.58J**	ug/L	1.0	0.13	1	10/17/25 12:55	10/20/25 14:18	7440-38-2	
Selenium	**0.23J**	ug/L	1.0	0.19	1	10/17/25 12:55	10/20/25 14:18	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**44.7**	mg/L	5.0	0.90	5		10/25/25 20:41	16887-00-6	
Fluoride	**1.4**	mg/L	0.10	0.040	1		10/25/25 14:16	16984-48-8	
Sulfate	**241**	mg/L	20.0	1.9	20		10/25/25 20:54	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**240**	mg/L	20.0	10.5	1		10/24/25 03:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**699**	mg/L	13.3	13.3	1		10/21/25 15:45		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-21S **Lab ID: 60484246009** Collected: 10/14/25 12:35 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**283**	ug/L	5.0	0.64	1	10/17/25 12:55	10/24/25 15:07	7440-39-3	
Boron	**762**	ug/L	100	7.3	1	10/17/25 12:55	10/24/25 15:07	7440-42-8	
Calcium	**122000**	ug/L	200	12.1	1	10/17/25 12:55	10/24/25 15:07	7440-70-2	
Iron	**19900**	ug/L	50.0	8.7	1	10/17/25 12:55	10/24/25 15:07	7439-89-6	
Lithium	**19.6**	ug/L	10.0	2.8	1	10/17/25 12:55	10/24/25 15:07	7439-93-2	
Magnesium	**32500**	ug/L	50.0	16.0	1	10/17/25 12:55	10/24/25 15:07	7439-95-4	
Manganese	**1360**	ug/L	5.0	0.52	1	10/17/25 12:55	10/24/25 15:07	7439-96-5	
Molybdenum	**3.8J**	ug/L	20.0	2.1	1	10/17/25 12:55	10/24/25 15:07	7439-98-7	
Potassium	**4510**	ug/L	500	66.6	1	10/17/25 12:55	10/24/25 15:07	7440-09-7	
Sodium	**34800**	ug/L	500	46.9	1	10/17/25 12:55	10/24/25 15:07	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/17/25 12:55	10/20/25 14:20	7440-36-0	
Arsenic	**62.8**	ug/L	1.0	0.13	1	10/17/25 12:55	10/20/25 14:20	7440-38-2	
Selenium	**0.25J**	ug/L	1.0	0.19	1	10/17/25 12:55	10/20/25 14:20	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**18.1**	mg/L	1.0	0.18	1		10/25/25 14:29	16887-00-6	
Fluoride	**0.25**	mg/L	0.10	0.040	1		10/25/25 14:29	16984-48-8	
Sulfate	**15.6**	mg/L	1.0	0.096	1		10/25/25 14:29	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**476**	mg/L	20.0	10.5	1		10/24/25 03:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**554**	mg/L	10.0	10.0	1		10/21/25 15:45		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-21I **Lab ID: 60484246010** Collected: 10/14/25 13:21 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**80.9**	ug/L	5.0	0.64	1	10/17/25 12:55	10/24/25 15:08	7440-39-3	
Boron	**4900**	ug/L	100	7.3	1	10/17/25 12:55	10/24/25 15:08	7440-42-8	
Calcium	**30000**	ug/L	200	12.1	1	10/17/25 12:55	10/24/25 15:08	7440-70-2	
Iron	**458**	ug/L	50.0	8.7	1	10/17/25 12:55	10/24/25 15:08	7439-89-6	
Lithium	**17.3**	ug/L	10.0	2.8	1	10/17/25 12:55	10/24/25 15:08	7439-93-2	
Magnesium	**3660**	ug/L	50.0	16.0	1	10/17/25 12:55	10/24/25 15:08	7439-95-4	
Manganese	**69.6**	ug/L	5.0	0.52	1	10/17/25 12:55	10/24/25 15:08	7439-96-5	
Molybdenum	**305**	ug/L	20.0	2.1	1	10/17/25 12:55	10/24/25 15:08	7439-98-7	
Potassium	**6770**	ug/L	500	66.6	1	10/17/25 12:55	10/24/25 15:08	7440-09-7	
Sodium	**165000**	ug/L	500	46.9	1	10/17/25 12:55	10/24/25 15:08	7440-23-5	M1
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/17/25 12:55	10/20/25 14:25	7440-36-0	
Arsenic	**6.9**	ug/L	1.0	0.13	1	10/17/25 12:55	10/20/25 14:25	7440-38-2	
Selenium	**0.34J**	ug/L	1.0	0.19	1	10/17/25 12:55	10/20/25 14:25	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**17.1**	mg/L	1.0	0.18	1		10/25/25 14:42	16887-00-6	
Fluoride	**1.0**	mg/L	0.10	0.040	1		10/25/25 14:42	16984-48-8	
Sulfate	**89.5**	mg/L	10.0	0.96	10		10/25/25 21:06	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**198**	mg/L	20.0	10.5	1		10/24/25 03:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**607**	mg/L	10.0	10.0	1		10/21/25 15:45		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-21D **Lab ID: 60484246011** Collected: 10/14/25 14:00 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**190**	ug/L	5.0	0.64	1	10/17/25 12:55	10/24/25 15:12	7440-39-3	
Boron	**3390**	ug/L	100	7.3	1	10/17/25 12:55	10/24/25 15:12	7440-42-8	
Calcium	**147000**	ug/L	200	12.1	1	10/17/25 12:55	10/24/25 15:12	7440-70-2	
Iron	**3580**	ug/L	50.0	8.7	1	10/17/25 12:55	10/24/25 15:12	7439-89-6	
Lithium	**217**	ug/L	10.0	2.8	1	10/17/25 12:55	10/24/25 15:12	7439-93-2	
Magnesium	**51300**	ug/L	50.0	16.0	1	10/17/25 12:55	10/24/25 15:12	7439-95-4	
Manganese	**1050**	ug/L	5.0	0.52	1	10/17/25 12:55	10/24/25 15:12	7439-96-5	
Molybdenum	**233**	ug/L	20.0	2.1	1	10/17/25 12:55	10/24/25 15:12	7439-98-7	
Potassium	**13100**	ug/L	500	66.6	1	10/17/25 12:55	10/24/25 15:12	7440-09-7	
Sodium	**496000**	ug/L	500	46.9	1	10/17/25 12:55	10/24/25 15:12	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/17/25 12:55	10/20/25 14:28	7440-36-0	
Arsenic	**0.45J**	ug/L	1.0	0.13	1	10/17/25 12:55	10/20/25 14:28	7440-38-2	
Selenium	**<0.19**	ug/L	1.0	0.19	1	10/17/25 12:55	10/20/25 14:28	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**1020**	mg/L	100	18.0	100		10/28/25 14:49	16887-00-6	
Fluoride	**0.83**	mg/L	0.10	0.040	1		10/28/25 14:24	16984-48-8	
Sulfate	**152**	mg/L	10.0	0.96	10		10/28/25 14:37	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**238**	mg/L	20.0	10.5	1		10/24/25 03:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**2140**	mg/L	100	100	1		10/21/25 15:45		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-22S **Lab ID: 60484246012** Collected: 10/14/25 11:10 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**129**	ug/L	5.0	0.64	1	10/17/25 12:55	10/24/25 14:18	7440-39-3	
Boron	**889**	ug/L	100	7.3	1	10/17/25 12:55	10/24/25 14:18	7440-42-8	
Calcium	**150000**	ug/L	200	12.1	1	10/17/25 12:55	10/24/25 14:18	7440-70-2	M1
Iron	**263**	ug/L	50.0	8.7	1	10/17/25 12:55	10/24/25 14:18	7439-89-6	
Lithium	**42.5**	ug/L	10.0	2.8	1	10/17/25 12:55	10/24/25 14:18	7439-93-2	
Magnesium	**33200**	ug/L	50.0	16.0	1	10/17/25 12:55	10/24/25 14:18	7439-95-4	
Manganese	**95.5**	ug/L	5.0	0.52	1	10/17/25 12:55	10/24/25 14:18	7439-96-5	
Molybdenum	**6.7J**	ug/L	20.0	2.1	1	10/17/25 12:55	10/24/25 14:18	7439-98-7	
Potassium	**6660**	ug/L	500	66.6	1	10/17/25 12:55	10/24/25 14:18	7440-09-7	
Sodium	**66400**	ug/L	500	46.9	1	10/17/25 12:55	10/24/25 14:18	7440-23-5	M1
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/17/25 12:55	10/20/25 13:46	7440-36-0	
Arsenic	**0.88J**	ug/L	1.0	0.13	1	10/17/25 12:55	10/20/25 13:46	7440-38-2	
Selenium	**5.6**	ug/L	1.0	0.19	1	10/17/25 12:55	10/20/25 13:46	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**32.7**	mg/L	5.0	0.90	5		10/25/25 22:11	16887-00-6	
Fluoride	**0.28**	mg/L	0.10	0.040	1		10/25/25 15:07	16984-48-8	
Sulfate	**121**	mg/L	10.0	0.96	10		10/25/25 22:49	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**486**	mg/L	20.0	10.5	1		10/24/25 03:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**709**	mg/L	13.3	13.3	1		10/21/25 15:45		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-29S **Lab ID: 60484246013** Collected: 10/15/25 10:05 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**844**	ug/L	5.0	0.64	1	10/17/25 12:55	10/24/25 15:14	7440-39-3	
Boron	**86.2J**	ug/L	100	7.3	1	10/17/25 12:55	10/24/25 15:14	7440-42-8	
Calcium	**204000**	ug/L	200	12.1	1	10/17/25 12:55	10/24/25 15:14	7440-70-2	
Iron	**26400**	ug/L	50.0	8.7	1	10/17/25 12:55	10/24/25 15:14	7439-89-6	
Lithium	**47.2**	ug/L	10.0	2.8	1	10/17/25 12:55	10/24/25 15:14	7439-93-2	
Magnesium	**47900**	ug/L	50.0	16.0	1	10/17/25 12:55	10/24/25 15:14	7439-95-4	
Manganese	**452**	ug/L	5.0	0.52	1	10/17/25 12:55	10/24/25 15:14	7439-96-5	
Molybdenum	**<2.1**	ug/L	20.0	2.1	1	10/17/25 12:55	10/24/25 15:14	7439-98-7	
Potassium	**6140**	ug/L	500	66.6	1	10/17/25 12:55	10/24/25 15:14	7440-09-7	
Sodium	**19400**	ug/L	500	46.9	1	10/17/25 12:55	10/24/25 15:14	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/17/25 12:55	10/20/25 14:35	7440-36-0	
Arsenic	**35.4**	ug/L	1.0	0.13	1	10/17/25 12:55	10/20/25 14:35	7440-38-2	
Selenium	**<0.19**	ug/L	1.0	0.19	1	10/17/25 12:55	10/20/25 14:35	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**28.5**	mg/L	2.0	0.36	2		10/25/25 23:28	16887-00-6	
Fluoride	**0.13**	mg/L	0.10	0.040	1		10/25/25 15:46	16984-48-8	
Sulfate	**93.7**	mg/L	10.0	0.96	10		10/25/25 23:40	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**650**	mg/L	20.0	10.5	1		10/24/25 18:17		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**817**	mg/L	13.3	13.3	1		10/22/25 13:31		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-29D **Lab ID: 60484246014** Collected: 10/15/25 10:50 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**139**	ug/L	5.0	0.64	1	10/17/25 12:55	10/24/25 15:21	7440-39-3	
Boron	**58.1J**	ug/L	100	7.3	1	10/17/25 12:55	10/24/25 15:21	7440-42-8	
Calcium	**88500**	ug/L	200	12.1	1	10/17/25 12:55	10/24/25 15:21	7440-70-2	
Iron	**3630**	ug/L	50.0	8.7	1	10/17/25 12:55	10/24/25 15:21	7439-89-6	
Lithium	**29.3**	ug/L	10.0	2.8	1	10/17/25 12:55	10/24/25 15:21	7439-93-2	
Magnesium	**24000**	ug/L	50.0	16.0	1	10/17/25 12:55	10/24/25 15:21	7439-95-4	
Manganese	**156**	ug/L	5.0	0.52	1	10/17/25 12:55	10/24/25 15:21	7439-96-5	
Molybdenum	**<2.1**	ug/L	20.0	2.1	1	10/17/25 12:55	10/24/25 15:21	7439-98-7	
Potassium	**3480**	ug/L	500	66.6	1	10/17/25 12:55	10/24/25 15:21	7440-09-7	
Sodium	**36100**	ug/L	500	46.9	1	10/17/25 12:55	10/24/25 15:21	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**0.22J**	ug/L	1.0	0.12	1	10/17/25 12:55	10/20/25 14:38	7440-36-0	
Arsenic	**1.1**	ug/L	1.0	0.13	1	10/17/25 12:55	10/20/25 14:38	7440-38-2	
Selenium	**<0.19**	ug/L	1.0	0.19	1	10/17/25 12:55	10/20/25 14:38	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**61.8**	mg/L	5.0	0.90	5		10/26/25 00:19	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.040	1		10/25/25 15:59	16984-48-8	
Sulfate	**17.1**	mg/L	1.0	0.096	1		10/25/25 15:59	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**322**	mg/L	20.0	10.5	1		10/24/25 18:17		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**445**	mg/L	10.0	10.0	1		10/22/25 13:31		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-CA-DUP-1 **Lab ID: 60484246015** Collected: 10/14/25 08:00 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**210**	ug/L	5.0	0.64	1	10/17/25 12:55	10/24/25 15:22	7440-39-3	
Boron	**91.9J**	ug/L	100	7.3	1	10/17/25 12:55	10/24/25 15:22	7440-42-8	
Calcium	**96400**	ug/L	200	12.1	1	10/17/25 12:55	10/24/25 15:22	7440-70-2	
Iron	**3910**	ug/L	50.0	8.7	1	10/17/25 12:55	10/24/25 15:22	7439-89-6	
Lithium	**16.5**	ug/L	10.0	2.8	1	10/17/25 12:55	10/24/25 15:22	7439-93-2	
Magnesium	**15100**	ug/L	50.0	16.0	1	10/17/25 12:55	10/24/25 15:22	7439-95-4	
Manganese	**931**	ug/L	5.0	0.52	1	10/17/25 12:55	10/24/25 15:22	7439-96-5	
Molybdenum	**2.7J**	ug/L	20.0	2.1	1	10/17/25 12:55	10/24/25 15:22	7439-98-7	
Potassium	**3640**	ug/L	500	66.6	1	10/17/25 12:55	10/24/25 15:22	7440-09-7	
Sodium	**3630**	ug/L	500	46.9	1	10/17/25 12:55	10/24/25 15:22	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/17/25 12:55	10/20/25 14:40	7440-36-0	
Arsenic	**8.2**	ug/L	1.0	0.13	1	10/17/25 12:55	10/20/25 14:40	7440-38-2	
Selenium	**<0.19**	ug/L	1.0	0.19	1	10/17/25 12:55	10/20/25 14:40	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**0.68J**	mg/L	1.0	0.18	1		10/25/25 16:37	16887-00-6	
Fluoride	**0.30**	mg/L	0.10	0.040	1		10/25/25 16:37	16984-48-8	
Sulfate	**4.7**	mg/L	1.0	0.096	1		10/25/25 16:37	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**316**	mg/L	20.0	10.5	1		10/24/25 03:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**334**	mg/L	10.0	10.0	1		10/21/25 15:46		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-CA-DUP-2 **Lab ID: 60484246016** Collected: 10/15/25 08:00 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**26.4**	ug/L	5.0	0.64	1	10/20/25 09:05	10/22/25 16:45	7440-39-3	
Boron	**1950**	ug/L	100	7.3	1	10/20/25 09:05	10/22/25 16:45	7440-42-8	
Calcium	**13700**	ug/L	200	12.1	1	10/20/25 09:05	10/22/25 16:45	7440-70-2	
Iron	**182**	ug/L	50.0	8.7	1	10/20/25 09:05	10/22/25 16:45	7439-89-6	
Lithium	**4.7J**	ug/L	10.0	2.8	1	10/20/25 09:05	10/22/25 16:45	7439-93-2	
Magnesium	**728**	ug/L	50.0	16.0	1	10/20/25 09:05	10/22/25 16:45	7439-95-4	
Manganese	**11.9**	ug/L	5.0	0.52	1	10/20/25 09:05	10/22/25 16:45	7439-96-5	
Molybdenum	**116**	ug/L	20.0	2.1	1	10/20/25 09:05	10/22/25 16:45	7439-98-7	
Potassium	**2980**	ug/L	500	66.6	1	10/20/25 09:05	10/22/25 16:45	7440-09-7	
Sodium	**256000**	ug/L	500	46.9	1	10/20/25 09:05	10/22/25 16:45	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**0.12J**	ug/L	1.0	0.12	1	10/21/25 13:18	10/26/25 12:56	7440-36-0	
Arsenic	**23.5**	ug/L	1.0	0.13	1	10/21/25 13:18	10/26/25 12:56	7440-38-2	
Selenium	**0.74J**	ug/L	1.0	0.19	1	10/21/25 13:18	10/26/25 12:56	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**117**	mg/L	10.0	1.8	10		10/26/25 00:32	16887-00-6	
Fluoride	**1.4**	mg/L	0.10	0.040	1		10/25/25 16:50	16984-48-8	
Sulfate	**263**	mg/L	20.0	1.9	20		10/26/25 00:45	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**146**	mg/L	20.0	10.5	1		10/24/25 18:17		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**779**	mg/L	13.3	13.3	1		10/22/25 13:31		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-CA-FB-1 **Lab ID: 60484246017** Collected: 10/14/25 12:40 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**<0.64**	ug/L	5.0	0.64	1	10/20/25 09:05	10/22/25 16:47	7440-39-3	
Boron	**<7.3**	ug/L	100	7.3	1	10/20/25 09:05	10/22/25 16:47	7440-42-8	
Calcium	**14.9J**	ug/L	200	12.1	1	10/20/25 09:05	10/22/25 16:47	7440-70-2	
Iron	**<8.7**	ug/L	50.0	8.7	1	10/20/25 09:05	10/22/25 16:47	7439-89-6	
Lithium	**<2.8**	ug/L	10.0	2.8	1	10/20/25 09:05	10/22/25 16:47	7439-93-2	
Magnesium	**<16.0**	ug/L	50.0	16.0	1	10/20/25 09:05	10/22/25 16:47	7439-95-4	
Manganese	**<0.52**	ug/L	5.0	0.52	1	10/20/25 09:05	10/22/25 16:47	7439-96-5	
Molybdenum	**<2.1**	ug/L	20.0	2.1	1	10/20/25 09:05	10/22/25 16:47	7439-98-7	
Potassium	**<66.6**	ug/L	500	66.6	1	10/20/25 09:05	10/22/25 16:47	7440-09-7	
Sodium	**77.2J**	ug/L	500	46.9	1	10/20/25 09:05	10/22/25 16:47	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/21/25 13:18	10/26/25 12:59	7440-36-0	
Arsenic	**<0.13**	ug/L	1.0	0.13	1	10/21/25 13:18	10/26/25 12:59	7440-38-2	
Selenium	**<0.19**	ug/L	1.0	0.19	1	10/21/25 13:18	10/26/25 12:59	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**<0.18**	mg/L	1.0	0.18	1		10/25/25 17:03	16887-00-6	
Fluoride	**<0.040**	mg/L	0.10	0.040	1		10/25/25 17:03	16984-48-8	
Sulfate	**<0.096**	mg/L	1.0	0.096	1		10/25/25 17:03	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**<10.5**	mg/L	20.0	10.5	1		10/24/25 03:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**<5.0**	mg/L	5.0	5.0	1		10/21/25 15:46		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-CA-FB-2 **Lab ID: 60484246018** Collected: 10/14/25 14:11 Received: 10/16/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**<0.64**	ug/L	5.0	0.64	1	10/20/25 09:05	10/22/25 16:54	7440-39-3	
Boron	**<7.3**	ug/L	100	7.3	1	10/20/25 09:05	10/22/25 16:54	7440-42-8	
Calcium	**12.7J**	ug/L	200	12.1	1	10/20/25 09:05	10/22/25 16:54	7440-70-2	
Iron	**<8.7**	ug/L	50.0	8.7	1	10/20/25 09:05	10/22/25 16:54	7439-89-6	
Lithium	**<2.8**	ug/L	10.0	2.8	1	10/20/25 09:05	10/22/25 16:54	7439-93-2	
Magnesium	**<16.0**	ug/L	50.0	16.0	1	10/20/25 09:05	10/22/25 16:54	7439-95-4	
Manganese	**<0.52**	ug/L	5.0	0.52	1	10/20/25 09:05	10/22/25 16:54	7439-96-5	
Molybdenum	**<2.1**	ug/L	20.0	2.1	1	10/20/25 09:05	10/22/25 16:54	7439-98-7	
Potassium	**<66.6**	ug/L	500	66.6	1	10/20/25 09:05	10/22/25 16:54	7440-09-7	
Sodium	**<46.9**	ug/L	500	46.9	1	10/20/25 09:05	10/22/25 16:54	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/21/25 13:18	10/26/25 13:01	7440-36-0	
Arsenic	**<0.13**	ug/L	1.0	0.13	1	10/21/25 13:18	10/26/25 13:01	7440-38-2	
Selenium	**<0.19**	ug/L	1.0	0.19	1	10/21/25 13:18	10/26/25 13:01	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**<0.18**	mg/L	1.0	0.18	1		10/25/25 17:15	16887-00-6	
Fluoride	**<0.040**	mg/L	0.10	0.040	1		10/25/25 17:15	16984-48-8	
Sulfate	**<0.096**	mg/L	1.0	0.096	1		10/25/25 17:15	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**<10.5**	mg/L	20.0	10.5	1		10/24/25 03:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**<5.0**	mg/L	5.0	5.0	1		10/21/25 15:46		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-10S **Lab ID: 60484246021** Collected: 10/16/25 09:42 Received: 10/17/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**214**	ug/L	5.0	0.75	1	10/21/25 08:28	10/28/25 12:52	7440-39-3	
Boron	**2270**	ug/L	100	33.2	1	10/21/25 08:28	10/28/25 12:52	7440-42-8	
Calcium	**107000**	ug/L	200	45.3	1	10/21/25 08:28	10/28/25 12:52	7440-70-2	
Iron	**1500**	ug/L	50.0	15.4	1	10/21/25 08:28	10/28/25 12:52	7439-89-6	
Lithium	**22.4**	ug/L	10.0	1.8	1	10/21/25 08:28	10/28/25 12:52	7439-93-2	
Magnesium	**14600**	ug/L	50.0	21.1	1	10/21/25 08:28	10/28/25 12:52	7439-95-4	
Manganese	**1350**	ug/L	5.0	0.42	1	10/21/25 08:28	10/28/25 12:52	7439-96-5	
Molybdenum	**55.8**	ug/L	20.0	0.78	1	10/21/25 08:28	10/28/25 12:52	7439-98-7	
Potassium	**4880**	ug/L	500	45.2	1	10/21/25 08:28	10/28/25 12:52	7440-09-7	
Sodium	**87400**	ug/L	500	31.8	1	10/21/25 08:28	10/28/25 12:52	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/21/25 13:18	10/26/25 13:40	7440-36-0	
Arsenic	**7.6**	ug/L	1.0	0.13	1	10/21/25 13:18	10/26/25 13:40	7440-38-2	
Selenium	**<0.19**	ug/L	1.0	0.19	1	10/21/25 13:18	10/26/25 13:40	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**13.3**	mg/L	1.0	0.18	1		10/25/25 17:28	16887-00-6	
Fluoride	**0.35**	mg/L	0.10	0.040	1		10/25/25 17:28	16984-48-8	
Sulfate	**65.3**	mg/L	5.0	0.48	5		10/26/25 00:58	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**460**	mg/L	20.0	10.5	1		10/30/25 16:52		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**602**	mg/L	10.0	10.0	1		10/23/25 10:55		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-30S **Lab ID: 60484246022** Collected: 10/16/25 11:55 Received: 10/17/25 07:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Kansas City								
Barium	**106**	ug/L	5.0	0.75	1	10/21/25 08:28	10/28/25 12:58	7440-39-3	
Boron	**811**	ug/L	100	33.2	1	10/21/25 08:28	10/28/25 12:58	7440-42-8	
Calcium	**166000**	ug/L	200	45.3	1	10/21/25 08:28	10/28/25 12:58	7440-70-2	
Iron	**360**	ug/L	50.0	15.4	1	10/21/25 08:28	10/28/25 12:58	7439-89-6	
Lithium	**43.6**	ug/L	10.0	1.8	1	10/21/25 08:28	10/28/25 12:58	7439-93-2	
Magnesium	**28700**	ug/L	50.0	21.1	1	10/21/25 08:28	10/28/25 12:58	7439-95-4	
Manganese	**168**	ug/L	5.0	0.42	1	10/21/25 08:28	10/28/25 12:58	7439-96-5	
Molybdenum	**2.7J**	ug/L	20.0	0.78	1	10/21/25 08:28	10/28/25 12:58	7439-98-7	
Potassium	**6710**	ug/L	500	45.2	1	10/21/25 08:28	10/28/25 12:58	7440-09-7	
Sodium	**52300**	ug/L	500	31.8	1	10/21/25 08:28	10/28/25 12:58	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8 Pace Analytical Services - Kansas City								
Antimony	**<0.12**	ug/L	1.0	0.12	1	10/21/25 13:18	10/26/25 13:43	7440-36-0	
Arsenic	**0.85J**	ug/L	1.0	0.13	1	10/21/25 13:18	10/26/25 13:43	7440-38-2	
Selenium	**3.3**	ug/L	1.0	0.19	1	10/21/25 13:18	10/26/25 13:43	7782-49-2	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**41.7**	mg/L	5.0	0.90	5		10/26/25 01:10	16887-00-6	
Fluoride	**0.29**	mg/L	0.10	0.040	1		10/25/25 17:41	16984-48-8	
Sulfate	**158**	mg/L	20.0	1.9	20		10/26/25 01:23	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**432**	mg/L	20.0	10.5	1		10/30/25 16:53		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**728**	mg/L	13.3	13.3	1		10/23/25 10:55		

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ANALYTICAL RESULTS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-22D **Lab ID: 60484246023** Collected: 11/12/25 13:00 Received: 11/13/25 07:45 Matrix: Water

Comments:
- Sample 023 received into Pace-Greensburg on 11/17/2025.
- Only 1 X BP1N received when 3 X BP1N is the recommended volume needed for the requested radiological testing; client notified via SAF.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7								
	Pace Analytical Services - Kansas City								
Barium	**87.3**	ug/L	5.0	0.64	1	11/14/25 13:29	11/25/25 10:06	7440-39-3	
Boron	**6760**	ug/L	100	7.3	1	11/14/25 13:29	11/25/25 10:06	7440-42-8	
Calcium	**24400**	ug/L	200	12.1	1	11/14/25 13:29	11/25/25 10:06	7440-70-2	
Iron	**983**	ug/L	50.0	8.7	1	11/14/25 13:29	11/25/25 10:06	7439-89-6	
Lithium	**23.9**	ug/L	10.0	2.8	1	11/14/25 13:29	11/25/25 10:06	7439-93-2	
Magnesium	**3270**	ug/L	50.0	16.0	1	11/14/25 13:29	11/25/25 10:06	7439-95-4	
Manganese	**78.4**	ug/L	5.0	0.52	1	11/14/25 13:29	11/25/25 10:06	7439-96-5	
Molybdenum	**224**	ug/L	20.0	2.1	1	11/14/25 13:29	11/25/25 10:06	7439-98-7	
Potassium	**4390**	ug/L	500	66.6	1	11/14/25 13:29	11/25/25 10:06	7440-09-7	
Sodium	**219000**	ug/L	500	46.9	1	11/14/25 13:29	11/25/25 10:06	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
	Pace Analytical Services - Kansas City								
Antimony	**0.15J**	ug/L	1.0	0.12	1	11/14/25 13:29	11/16/25 16:42	7440-36-0	
Arsenic	**14.8**	ug/L	1.0	0.13	1	11/14/25 13:29	11/16/25 16:42	7440-38-2	
Selenium	**0.77J**	ug/L	1.0	0.19	1	11/14/25 13:29	11/16/25 16:42	7782-49-2	
2320B Alkalinity	Analytical Method: SM 2320B								
	Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**289**	mg/L	20.0	10.5	1		11/18/25 15:17		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
	Pace Analytical Services - Kansas City								
Total Dissolved Solids	**691**	mg/L	13.3	13.3	1		11/18/25 10:38		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**80.8**	mg/L	20.0	15.3	20		12/10/25 18:31	16887-00-6	M1
Fluoride	**1.8**	mg/L	0.20	0.16	1		12/10/25 18:14	16984-48-8	L1
Sulfate	**95.0**	mg/L	20.0	8.6	20		12/10/25 18:52	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 951999
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484246001, 60484246002, 60484246003, 60484246004, 60484246005, 60484246006, 60484246007, 60484246008, 60484246009, 60484246010, 60484246011, 60484246012, 60484246013, 60484246014, 60484246015

METHOD BLANK: 3772999
Matrix: Water
Associated Lab Samples: 60484246001, 60484246002, 60484246003, 60484246004, 60484246005, 60484246006, 60484246007, 60484246008, 60484246009, 60484246010, 60484246011, 60484246012, 60484246013, 60484246014, 60484246015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	<0.64	5.0	0.64	10/24/25 14:15	
Boron	ug/L	<7.3	100	7.3	10/24/25 14:15	
Calcium	ug/L	15.1J	200	12.1	10/24/25 14:15	
Iron	ug/L	<8.7	50.0	8.7	10/24/25 14:15	
Lithium	ug/L	<2.8	10.0	2.8	10/24/25 14:15	
Magnesium	ug/L	<16.0	50.0	16.0	10/24/25 14:15	
Manganese	ug/L	<0.52	5.0	0.52	10/24/25 14:15	
Molybdenum	ug/L	<2.1	20.0	2.1	10/24/25 14:15	
Potassium	ug/L	<66.6	500	66.6	10/24/25 14:15	
Sodium	ug/L	149J	500	46.9	10/24/25 14:15	

LABORATORY CONTROL SAMPLE: 3773000

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	1000	990	99	85-115	
Boron	ug/L	1000	946	95	85-115	
Calcium	ug/L	10000	10100	101	85-115	
Iron	ug/L	10000	10100	101	85-115	
Lithium	ug/L	1000	968	97	85-115	
Magnesium	ug/L	10000	9950	99	85-115	
Manganese	ug/L	1000	983	98	85-115	
Molybdenum	ug/L	1000	995	100	85-115	
Potassium	ug/L	10000	9770	98	85-115	
Sodium	ug/L	10000	9990	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3773001 3773002

Parameter	Units	60484246012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	ug/L	129	1000	1000	1090	1060	96	93	70-130	2	20	
Boron	ug/L	889	1000	1000	1830	1810	94	92	70-130	1	20	
Calcium	ug/L	150000	10000	10000	155000	152000	53	24	70-130	2	20	M1
Iron	ug/L	263	10000	10000	10200	9940	100	97	70-130	3	20	
Lithium	ug/L	42.5	1000	1000	1010	988	97	95	70-130	3	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3773001 3773002

Parameter	Units	60484246012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Magnesium	ug/L	33200	10000	10000	41800	41200	85	79	70-130	1	20	
Manganese	ug/L	95.5	1000	1000	1050	1020	95	92	70-130	3	20	
Molybdenum	ug/L	6.7J	1000	1000	996	972	99	97	70-130	2	20	
Potassium	ug/L	6660	10000	10000	16300	16200	97	95	70-130	1	20	
Sodium	ug/L	66400	10000	10000	73900	73300	75	69	70-130	1	20	M1

MATRIX SPIKE SAMPLE: 3773003

Parameter	Units	60484246010 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	80.9	1000	1070	99	70-130	
Boron	ug/L	4900	1000	6100	120	70-130	
Calcium	ug/L	30000	10000	40900	109	70-130	
Iron	ug/L	458	10000	10600	101	70-130	
Lithium	ug/L	17.3	1000	1020	100	70-130	
Magnesium	ug/L	3660	10000	13300	97	70-130	
Manganese	ug/L	69.6	1000	1040	97	70-130	
Molybdenum	ug/L	305	1000	1320	102	70-130	
Potassium	ug/L	6770	10000	17200	105	70-130	
Sodium	ug/L	165000	10000	180000	152	70-130	M1

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 952133
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484246016, 60484246017, 60484246018

METHOD BLANK: 3773704 Matrix: Water
Associated Lab Samples: 60484246016, 60484246017, 60484246018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	<0.64	5.0	0.64	10/22/25 16:33	
Boron	ug/L	<7.3	100	7.3	10/22/25 16:33	
Calcium	ug/L	<12.1	200	12.1	10/22/25 16:33	
Iron	ug/L	<8.7	50.0	8.7	10/22/25 16:33	
Lithium	ug/L	<2.8	10.0	2.8	10/22/25 16:33	
Magnesium	ug/L	<16.0	50.0	16.0	10/22/25 16:33	
Manganese	ug/L	<0.52	5.0	0.52	10/22/25 16:33	
Molybdenum	ug/L	<2.1	20.0	2.1	10/22/25 16:33	
Potassium	ug/L	<66.6	500	66.6	10/22/25 16:33	
Sodium	ug/L	<46.9	500	46.9	10/22/25 16:33	

LABORATORY CONTROL SAMPLE: 3773705

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	1000	1010	101	85-115	
Boron	ug/L	1000	963	96	85-115	
Calcium	ug/L	10000	10300	103	85-115	
Iron	ug/L	10000	10300	103	85-115	
Lithium	ug/L	1000	995	100	85-115	
Magnesium	ug/L	10000	10100	101	85-115	
Manganese	ug/L	1000	1010	101	85-115	
Molybdenum	ug/L	1000	1020	102	85-115	
Potassium	ug/L	10000	10000	100	85-115	
Sodium	ug/L	10000	10100	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3773706 3773707

Parameter	Units	60484250006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	ug/L	316	1000	1000	1280	1320	97	100	70-130	3	20	
Boron	ug/L	7220	1000	1000	7870	8130	65	91	70-130	3	20	M1
Calcium	ug/L	83700	10000	10000	89100	92700	54	90	70-130	4	20	M1
Iron	ug/L	19000	10000	10000	28000	28800	89	98	70-130	3	20	
Lithium	ug/L	27.2	1000	1000	1010	1020	98	100	70-130	2	20	
Magnesium	ug/L	23600	10000	10000	32200	33400	86	98	70-130	4	20	
Manganese	ug/L	338	1000	1000	1280	1280	94	95	70-130	0	20	
Molybdenum	ug/L	43.2	1000	1000	1030	1030	99	98	70-130	1	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3773706 3773707

Parameter	Units	60484250006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Potassium	ug/L	5540	10000	10000	15300	15600	97	100	70-130	2	20	
Sodium	ug/L	15300	10000	10000	24400	25200	92	99	70-130	3	20	

MATRIX SPIKE SAMPLE: 3773708

Parameter	Units	60484250004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	376	1000	1310	94	70-130	
Boron	ug/L	1200	1000	2120	92	70-130	
Calcium	ug/L	108000	10000	116000	81	70-130	
Iron	ug/L	8280	10000	17800	95	70-130	
Lithium	ug/L	29.8	1000	971	94	70-130	
Magnesium	ug/L	22400	10000	31400	90	70-130	
Manganese	ug/L	454	1000	1380	93	70-130	
Molybdenum	ug/L	29.1	1000	988	96	70-130	
Potassium	ug/L	5150	10000	14800	97	70-130	
Sodium	ug/L	25900	10000	35300	94	70-130	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 952284
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484246021, 60484246022

METHOD BLANK: 3774255 Matrix: Water
Associated Lab Samples: 60484246021, 60484246022

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	<0.75	5.0	0.75	10/28/25 12:49	
Boron	ug/L	<33.2	100	33.2	10/28/25 12:49	
Calcium	ug/L	<45.3	200	45.3	10/28/25 12:49	
Iron	ug/L	<15.4	50.0	15.4	10/28/25 12:49	
Lithium	ug/L	<1.8	10.0	1.8	10/28/25 12:49	
Magnesium	ug/L	<21.1	50.0	21.1	10/28/25 12:49	
Manganese	ug/L	<0.42	5.0	0.42	10/28/25 12:49	
Molybdenum	ug/L	<0.78	20.0	0.78	10/28/25 12:49	
Potassium	ug/L	<45.2	500	45.2	10/28/25 12:49	
Sodium	ug/L	<31.8	500	31.8	10/28/25 12:49	

LABORATORY CONTROL SAMPLE: 3774256

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	1000	990	99	85-115	
Boron	ug/L	1000	957	96	85-115	
Calcium	ug/L	10000	10100	101	85-115	
Iron	ug/L	10000	10100	101	85-115	
Lithium	ug/L	1000	1000	100	85-115	
Magnesium	ug/L	10000	9890	99	85-115	
Manganese	ug/L	1000	981	98	85-115	
Molybdenum	ug/L	1000	986	99	85-115	
Potassium	ug/L	10000	9760	98	85-115	
Sodium	ug/L	10000	9940	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3774257 3774258

Parameter	Units	60484246021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	ug/L	214	1000	1000	1220	1220	101	100	70-130	0	20	
Boron	ug/L	2270	1000	1000	3320	3340	105	107	70-130	0	20	
Calcium	ug/L	107000	10000	10000	119000	119000	121	120	70-130	0	20	
Iron	ug/L	1500	10000	10000	11900	11800	104	103	70-130	1	20	
Lithium	ug/L	22.4	1000	1000	1030	1040	101	102	70-130	1	20	
Magnesium	ug/L	14600	10000	10000	25000	24900	104	103	70-130	0	20	
Manganese	ug/L	1350	1000	1000	2350	2370	100	102	70-130	1	20	
Molybdenum	ug/L	55.8	1000	1000	1080	1080	102	102	70-130	0	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3774257 3774258

Parameter	Units	60484246021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Potassium	ug/L	4880	10000	10000	15000	15200	102	103	70-130	1	20	
Sodium	ug/L	87400	10000	10000	98500	98300	111	109	70-130	0	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 955488
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60484246023

METHOD BLANK: 3786782 Matrix: Water
Associated Lab Samples: 60484246023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Barium	ug/L	<0.64	5.0	0.64	11/25/25 09:38	
Boron	ug/L	<7.3	100	7.3	11/25/25 09:38	
Calcium	ug/L	<12.1	200	12.1	11/25/25 09:38	
Iron	ug/L	<8.7	50.0	8.7	11/25/25 09:38	
Lithium	ug/L	<2.8	10.0	2.8	11/25/25 09:38	
Magnesium	ug/L	<16.0	50.0	16.0	11/25/25 09:38	
Manganese	ug/L	<0.52	5.0	0.52	11/25/25 09:38	
Molybdenum	ug/L	<2.1	20.0	2.1	11/25/25 09:38	
Potassium	ug/L	<66.6	500	66.6	11/25/25 09:38	
Sodium	ug/L	<46.9	500	46.9	11/25/25 09:38	

LABORATORY CONTROL SAMPLE: 3786783

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	1000	967	97	85-115	
Boron	ug/L	1000	929	93	85-115	
Calcium	ug/L	10000	9780	98	85-115	
Iron	ug/L	10000	9900	99	85-115	
Lithium	ug/L	1000	969	97	85-115	
Magnesium	ug/L	10000	9630	96	85-115	
Manganese	ug/L	1000	978	98	85-115	
Molybdenum	ug/L	1000	984	98	85-115	
Potassium	ug/L	10000	9740	97	85-115	
Sodium	ug/L	10000	9820	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3786784 3786785

Parameter	Units	60485894001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	ug/L	41.4	1000	1000	995	996	95	95	70-130	0	20	
Boron	ug/L	ND	1000	1000	962	974	91	93	70-130	1	20	
Calcium	ug/L	36700	10000	10000	45300	45200	85	84	70-130	0	20	
Iron	ug/L	719	10000	10000	10300	10500	95	98	70-130	2	20	
Lithium	ug/L	ND	1000	1000	941	941	94	94	70-130	0	20	
Magnesium	ug/L	3100	10000	10000	12100	12300	90	92	70-130	1	20	
Manganese	ug/L	12.3	1000	1000	988	1000	98	99	70-130	1	20	
Molybdenum	ug/L	ND	1000	1000	1010	1020	100	101	70-130	1	20	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3786784 3786785

Parameter	Units	60485894001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Potassium	ug/L	10600	10000	10000	20200	19900	96	92	70-130	2	20	
Sodium	ug/L	71500	10000	10000	79600	79100	81	76	70-130	1	20	

MATRIX SPIKE SAMPLE: 3786786

Parameter	Units	60485894003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	119	1000	1090	98	70-130	
Boron	ug/L	ND	1000	7980	796	70-130	M1
Calcium	ug/L	120000	10000	35000	-850	70-130	M1
Iron	ug/L	50.6	10000	11300	113	70-130	
Lithium	ug/L	ND	1000	1020	101	70-130	
Magnesium	ug/L	8370	10000	13300	49	70-130	M1
Manganese	ug/L	9.9	1000	1060	105	70-130	
Molybdenum	ug/L	ND	1000	1240	124	70-130	
Potassium	ug/L	9690	10000	14700	50	70-130	M1
Sodium	ug/L	251000	10000	235000	-158	70-130	M1

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 952000
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484246001, 60484246002, 60484246003, 60484246004, 60484246005, 60484246006, 60484246007, 60484246008, 60484246009, 60484246010, 60484246011, 60484246012, 60484246013, 60484246014, 60484246015

METHOD BLANK: 3773012 Matrix: Water
Associated Lab Samples: 60484246001, 60484246002, 60484246003, 60484246004, 60484246005, 60484246006, 60484246007, 60484246008, 60484246009, 60484246010, 60484246011, 60484246012, 60484246013, 60484246014, 60484246015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	<0.12	1.0	0.12	10/20/25 13:42	
Arsenic	ug/L	<0.13	1.0	0.13	10/20/25 13:42	
Selenium	ug/L	<0.19	1.0	0.19	10/20/25 13:42	

LABORATORY CONTROL SAMPLE: 3773013

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	40	39.0	97	85-115	
Arsenic	ug/L	40	40.1	100	85-115	
Selenium	ug/L	40	42.0	105	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3773014 3773015

Parameter	Units	60484246012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	<0.12	40	40	39.1	39.9	98	99	70-130	2	20	
Arsenic	ug/L	0.88J	40	40	41.8	42.0	102	103	70-130	0	20	
Selenium	ug/L	5.6	40	40	44.0	44.1	96	96	70-130	0	20	

MATRIX SPIKE SAMPLE: 3773016

Parameter	Units	60484246011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	<0.12	40	41.0	102	70-130	
Arsenic	ug/L	0.45J	40	40.6	100	70-130	
Selenium	ug/L	<0.19	40	36.6	91	70-130	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 952350
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484246016, 60484246017, 60484246018, 60484246021, 60484246022

METHOD BLANK: 3774441 Matrix: Water
Associated Lab Samples: 60484246016, 60484246017, 60484246018, 60484246021, 60484246022

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	<0.12	1.0	0.12	10/26/25 12:40	
Arsenic	ug/L	<0.13	1.0	0.13	10/26/25 12:40	
Selenium	ug/L	<0.19	1.0	0.19	10/26/25 12:40	

LABORATORY CONTROL SAMPLE: 3774442

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	40	39.8	100	85-115	
Arsenic	ug/L	40	40.0	100	85-115	
Selenium	ug/L	40	40.8	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3774443 3774444

Parameter	Units	60484250006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	<0.12	40	40	40.3	40.4	101	101	70-130	0	20	
Arsenic	ug/L	112	40	40	152	155	100	108	70-130	2	20	
Selenium	ug/L	<0.19	40	40	38.9	39.3	97	98	70-130	1	20	

MATRIX SPIKE SAMPLE: 3774445

Parameter	Units	60484250007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	<0.12	40	38.7	97	70-130	
Arsenic	ug/L	2.4	40	41.1	97	70-130	
Selenium	ug/L	<0.19	40	38.7	97	70-130	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 955542
QC Batch Method: EPA 200.8
Analysis Method: EPA 200.8
Analysis Description: 200.8 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484246023

METHOD BLANK: 3786961 Matrix: Water
Associated Lab Samples: 60484246023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	<0.12	1.0	0.12	11/16/25 16:16	
Arsenic	ug/L	<0.13	1.0	0.13	11/16/25 16:16	
Selenium	ug/L	<0.19	1.0	0.19	11/16/25 16:16	

LABORATORY CONTROL SAMPLE: 3786962

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	40	39.1	98	85-115	
Arsenic	ug/L	40	38.9	97	85-115	
Selenium	ug/L	40	38.8	97	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3786963 3786964

Parameter	Units	60484875002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	40	40	37.8	38.4	92	94	70-130	1	20	
Arsenic	ug/L	2.9	40	40	43.4	43.6	101	102	70-130	1	20	
Selenium	ug/L	3.2	40	40	42.8	43.1	99	100	70-130	1	20	

MATRIX SPIKE SAMPLE: 3786965

Parameter	Units	60485948001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	1.1	40	34.7	84	70-130	
Arsenic	ug/L	2.0	40	43.8	105	70-130	
Selenium	ug/L	2.9	40	46.1	108	70-130	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 952747
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Salina
Associated Lab Samples: 60484246001, 60484246002, 60484246003, 60484246004, 60484246005, 60484246006, 60484246007, 60484246008, 60484246009, 60484246010, 60484246012, 60484246013, 60484246014, 60484246015, 60484246016, 60484246017, 60484246018, 60484246021, 60484246022

METHOD BLANK: 3776148
Matrix: Water
Associated Lab Samples: 60484246001, 60484246002, 60484246003, 60484246004, 60484246005, 60484246006, 60484246007, 60484246008, 60484246009, 60484246010, 60484246012, 60484246013, 60484246014, 60484246015, 60484246016, 60484246017, 60484246018, 60484246021, 60484246022

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.18	1.0	0.18	10/25/25 11:29	
Fluoride	mg/L	<0.040	0.10	0.040	10/25/25 11:29	
Sulfate	mg/L	<0.096	1.0	0.096	10/25/25 11:29	

LABORATORY CONTROL SAMPLE: 3776149

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	94	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	5	4.8	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3776150 3776151

Parameter	Units	60484246001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	25.2	10	10	33.9	33.6	87	85	80-120	1	15	
Fluoride	mg/L	0.23	2.5	2.5	2.7	2.7	97	99	80-120	2	15	
Sulfate	mg/L	16.9	10	10	26.5	26.2	96	93	80-120	1	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3776152 3776153

Parameter	Units	60484246012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	32.7	25	25	55.5	56.9	91	97	80-120	2	15	
Fluoride	mg/L	0.28	2.5	2.5	2.8	2.9	101	103	80-120	1	15	
Sulfate	mg/L	121	50	50	170	170	98	98	80-120	0	15	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 953128
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Salina

Associated Lab Samples: 60484246011

METHOD BLANK: 3777712 Matrix: Water
Associated Lab Samples: 60484246011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.18	1.0	0.18	10/28/25 08:56	
Fluoride	mg/L	<0.040	0.10	0.040	10/28/25 08:56	
Sulfate	mg/L	<0.096	1.0	0.096	10/28/25 08:56	

LABORATORY CONTROL SAMPLE: 3777713

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	98	90-110	
Fluoride	mg/L	2.5	2.7	108	90-110	
Sulfate	mg/L	5	5.1	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3777714 3777715

Parameter	Units	60483723002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	16.4	10	10	25.6	25.8	91	94	80-120	1	15	
Fluoride	mg/L	0.30	2.5	2.5	2.8	2.8	101	99	80-120	2	15	
Sulfate	mg/L	44.9	25	25	69.1	69.8	97	100	80-120	1	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3777716 3777717

Parameter	Units	60484583002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	8.8	5	5	12.5	12.5	75	75	80-120	0	15	M1
Fluoride	mg/L	0.16	2.5	2.5	2.4	2.6	88	98	80-120	11	15	
Sulfate	mg/L	110	50	50	162	159	104	99	80-120	2	15	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 952787
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484246006, 60484246007, 60484246008, 60484246009, 60484246010, 60484246011, 60484246012, 60484246015, 60484246017, 60484246018

METHOD BLANK: 3776316 Matrix: Water
Associated Lab Samples: 60484246006, 60484246007, 60484246008, 60484246009, 60484246010, 60484246011, 60484246012, 60484246015, 60484246017, 60484246018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	10/24/25 03:42	

LABORATORY CONTROL SAMPLE: 3776317

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	486	97	90-110	

SAMPLE DUPLICATE: 3776318

Parameter	Units	60483728006 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	482	466	3	10	H1

SAMPLE DUPLICATE: 3776319

Parameter	Units	60484183015 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	396	386	3	10	

SAMPLE DUPLICATE: 3776320

Parameter	Units	60484246012 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	486	494	2	10	

SAMPLE DUPLICATE: 3776321

Parameter	Units	60484250006 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	162	196	19	10	D6

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 952840
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484246004, 60484246005, 60484246013, 60484246014, 60484246016

METHOD BLANK: 3776540 Matrix: Water
Associated Lab Samples: 60484246004, 60484246005, 60484246013, 60484246014, 60484246016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	10/24/25 18:16	

LABORATORY CONTROL SAMPLE: 3776541

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	474	95	90-110	

SAMPLE DUPLICATE: 3776542

Parameter	Units	60484236022 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	370	372	1	10	

SAMPLE DUPLICATE: 3776543

Parameter	Units	60484290014 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	556	534	4	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 953015
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484246001, 60484246002, 60484246003

METHOD BLANK: 3777234 Matrix: Water
Associated Lab Samples: 60484246001, 60484246002, 60484246003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	10/25/25 15:59	

LABORATORY CONTROL SAMPLE: 3777235

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	490	98	90-110	

SAMPLE DUPLICATE: 3777236

Parameter	Units	60484246001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	282	286	1	10	

SAMPLE DUPLICATE: 3777237

Parameter	Units	60484290010 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	<10.5		10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 953528
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484246021, 60484246022

METHOD BLANK: 3779185 Matrix: Water
Associated Lab Samples: 60484246021, 60484246022

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	10/30/25 16:52	

LABORATORY CONTROL SAMPLE: 3779186

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	502	100	90-110	

SAMPLE DUPLICATE: 3779187

Parameter	Units	60484246021 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	460	444	4	10	

SAMPLE DUPLICATE: 3779188

Parameter	Units	60484431006 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	276	570	70	10	D6

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 955825
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60484246023

METHOD BLANK: 3788123 Matrix: Water
Associated Lab Samples: 60484246023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	11/18/25 12:56	

LABORATORY CONTROL SAMPLE: 3788124

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	502	100	90-110	

SAMPLE DUPLICATE: 3788125

Parameter	Units	60486172006 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	200	194	3	10	H3

SAMPLE DUPLICATE: 3788126

Parameter	Units	60485947005 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	190	190	0	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 952136
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484246006, 60484246007, 60484246008, 60484246009, 60484246010, 60484246011, 60484246012, 60484246015, 60484246017, 60484246018

METHOD BLANK: 3773716
Matrix: Water
Associated Lab Samples: 60484246006, 60484246007, 60484246008, 60484246009, 60484246010, 60484246011, 60484246012, 60484246015, 60484246017, 60484246018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	10/21/25 15:44	

LABORATORY CONTROL SAMPLE: 3773717

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	969	97	80-120	

SAMPLE DUPLICATE: 3773718

Parameter	Units	60484246012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	709	729	3	10	

SAMPLE DUPLICATE: 3773719

Parameter	Units	60484250006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	445	433	3	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 952456
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484246001, 60484246002, 60484246003, 60484246004, 60484246005, 60484246013, 60484246014, 60484246016

METHOD BLANK: 3774773 Matrix: Water
Associated Lab Samples: 60484246001, 60484246002, 60484246003, 60484246004, 60484246005, 60484246013, 60484246014, 60484246016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	10/22/25 13:30	

LABORATORY CONTROL SAMPLE: 3774774

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	989	99	80-120	

SAMPLE DUPLICATE: 3774775

Parameter	Units	60484236026 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	653	635	3	10	

SAMPLE DUPLICATE: 3774776

Parameter	Units	60484250004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	473	478	1	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 952615
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484246021, 60484246022

METHOD BLANK: 3775508 Matrix: Water
Associated Lab Samples: 60484246021, 60484246022

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	10/23/25 10:53	

LABORATORY CONTROL SAMPLE: 3775509

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

SAMPLE DUPLICATE: 3775510

Parameter	Units	60484344001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	223	246	10	10	

SAMPLE DUPLICATE: 3775511

Parameter	Units	60484426002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1090	1090	0	10	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 955803
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484246023

METHOD BLANK: 3788065 Matrix: Water
Associated Lab Samples: 60484246023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	11/18/25 10:37	

LABORATORY CONTROL SAMPLE: 3788066

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	981	98	80-120	

SAMPLE DUPLICATE: 3788067

Parameter	Units	60486172004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	242	240	1	10	H3

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QUALITY CONTROL DATA

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 958078
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60484246023

METHOD BLANK: 3796977 Matrix: Water
Associated Lab Samples: 60484246023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.77	1.0	0.77	12/10/25 17:49	
Fluoride	mg/L	<0.16	0.20	0.16	12/10/25 17:49	
Sulfate	mg/L	<0.43	1.0	0.43	12/10/25 17:49	

METHOD BLANK: 3798001 Matrix: Water
Associated Lab Samples: 60484246023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.77	1.0	0.77	12/10/25 17:35	
Fluoride	mg/L	<0.16	0.20	0.16	12/10/25 17:35	
Sulfate	mg/L	<0.43	1.0	0.43	12/10/25 17:35	

LABORATORY CONTROL SAMPLE: 3796978

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.6	92	90-110	
Fluoride	mg/L	2.5	2.3	94	90-110	
Sulfate	mg/L	5	4.8	95	90-110	

LABORATORY CONTROL SAMPLE: 3798002

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	94	90-110	
Fluoride	mg/L	2.5	2.8	111	90-110	L1
Sulfate	mg/L	5	5.0	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3796979 3796980

Parameter	Units	60484246023 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	80.8	100	100	213	207	132	126	80-120	3	15	M1
Fluoride	mg/L	1.8	2.5	2.5	4.3	4.2	100	98	80-120	2	15	
Sulfate	mg/L	95.0	100	100	192	192	97	97	80-120	0	15	

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

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-05S **Lab ID: 60484246001** Collected: 10/15/25 13:35 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.0578 ± 0.376 (0.757) C:NA T:91%**	pCi/L	11/21/25 14:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.692 ± 0.397 (0.713) C:80% T:84%**	pCi/L	11/18/25 14:38	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-16S **Lab ID: 60484246002** Collected: 10/15/25 13:16 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.124 ± 0.517 (0.987) C:NA T:85%**	pCi/L	11/21/25 14:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.913 ± 0.437 (0.732) C:81% T:81%**	pCi/L	11/18/25 14:38	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-17S **Lab ID: 60484246003** Collected: 10/15/25 13:15 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.427 ± 0.465 (0.732) C:NA T:88%**	pCi/L	11/21/25 14:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**1.31 ± 0.512 (0.781) C:79% T:81%**	pCi/L	11/18/25 14:38	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-17I **Lab ID: 60484246004** Collected: 10/15/25 12:17 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.159 ± 0.276 (0.493) C:NA T:92%**	pCi/L	11/21/25 14:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.936 ± 0.516 (0.915) C:70% T:74%**	pCi/L	11/18/25 14:38	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-17D **Lab ID: 60484246005** Collected: 10/15/25 11:40 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.185 ± 0.320 (0.572) C:NA T:86%**	pCi/L	11/21/25 14:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.787 ± 0.406 (0.710) C:85% T:83%**	pCi/L	11/18/25 14:38	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-19S **Lab ID: 60484246006** Collected: 10/14/25 13:45 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.000 ± 0.273 (0.556) C:NA T:85%**	pCi/L	11/21/25 14:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**1.48 ± 0.550 (0.842) C:83% T:84%**	pCi/L	11/18/25 14:39	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-19I **Lab ID: 60484246007** Collected: 10/14/25 12:57 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.348 ± 0.603 (1.05) C:NA T:90%**	pCi/L	11/21/25 14:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**1.07 ± 0.547 (0.981) C:78% T:78%**	pCi/L	11/18/25 14:39	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-19D **Lab ID: 60484246008** Collected: 10/14/25 12:20 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.0589 ± 0.269 (0.547) C:NA T:92%**	pCi/L	11/21/25 14:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**1.62 ± 0.615 (0.959) C:83% T:80%**	pCi/L	11/18/25 14:39	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-21S **Lab ID: 60484246009** Collected: 10/14/25 12:35 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.116 ± 0.264 (0.425) C:NA T:94%**	pCi/L	11/21/25 14:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**1.72 ± 0.626 (0.940) C:78% T:82%**	pCi/L	11/18/25 14:39	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-21I **Lab ID: 60484246010** Collected: 10/14/25 13:21 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.0590 ± 0.306 (0.635) C:NA T:89%**	pCi/L	11/21/25 14:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**1.68 ± 0.629 (0.925) C:73% T:78%**	pCi/L	11/18/25 14:39	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-21D **Lab ID: 60484246011** Collected: 10/14/25 14:00 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**0.545 ± 0.375 (0.401) C:NA T:92%**	pCi/L	11/21/25 14:27	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**2.27 ± 0.766 (1.05) C:69% T:82%**	pCi/L	11/18/25 14:39	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-22S **Lab ID: 60484246012** Collected: 10/14/25 11:10 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.123 ± 0.267 (0.492) C:NA T:90%**	pCi/L	11/21/25 14:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**1.29 ± 0.567 (0.967) C:74% T:85%**	pCi/L	11/18/25 11:38	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-29S **Lab ID: 60484246013** Collected: 10/15/25 10:05 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 903.1	**1.34 ± 0.569 (0.158) C:NA T:87%**	pCi/L	11/21/25 14:27	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 904.0	**2.59 ± 0.847 (1.20) C:76% T:63%**	pCi/L	11/18/25 11:38	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-29D **Lab ID: 60484246014** Collected: 10/15/25 10:50 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.231 ± 0.480 (0.865) C:NA T:86%**	pCi/L	11/21/25 14:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.952 ± 0.504 (0.931) C:80% T:86%**	pCi/L	11/18/25 11:38	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-CA-DUP-1 **Lab ID: 60484246015** Collected: 10/14/25 08:00 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**-0.116 ± 0.280 (0.698) C:NA T:89%**	pCi/L	11/21/25 14:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**1.63 ± 0.575 (0.870) C:81% T:86%**	pCi/L	11/18/25 11:38	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-CA-DUP-2 **Lab ID: 60484246016** Collected: 10/15/25 08:00 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.542 ± 0.491 (0.724) C:NA T:85%**	pCi/L	11/21/25 14:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.876 ± 0.531 (1.01) C:80% T:73%**	pCi/L	11/18/25 11:38	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-CA-FB-1 **Lab ID: 60484246017** Collected: 10/14/25 12:40 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.117 ± 0.268 (0.159) C:NA T:89%**	pCi/L	11/21/25 14:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.996 ± 0.564 (1.05) C:72% T:85%**	pCi/L	11/18/25 14:42	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-CA-FB-2 **Lab ID: 60484246018** Collected: 10/14/25 14:11 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.0569 ± 0.260 (0.528) C:NA T:86%**	pCi/L	11/21/25 14:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**1.05 ± 0.517 (0.918) C:79% T:85%**	pCi/L	11/18/25 14:42	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-CA-MS-1 **Lab ID: 60484246019** Collected: 10/14/25 11:10 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**100.42 %REC ± NA (NA) C:NA T:NA**	pCi/L	11/21/25 14:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**112.58 %REC ± NA (NA) C:NA T:NA**	pCi/L	11/18/25 14:42	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-CA-MSD-1 **Lab ID: 60484246020** Collected: 10/14/25 11:10 Received: 10/16/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**134.54 %REC 29.05RPD ± NA (NA) C:NA T:NA**	pCi/L	11/21/25 14:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**104.68 %REC 7.27RPD ± NA (NA) C:NA T:NA**	pCi/L	11/18/25 14:48	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-10S **Lab ID: 60484246021** Collected: 10/16/25 09:42 Received: 10/17/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**-0.0606 ± 0.428 (0.910) C:NA T:89%**	pCi/L	12/03/25 11:36	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.845 ± 0.473 (0.871) C:80% T:88%**	pCi/L	11/19/25 11:30	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-30S **Lab ID: 60484246022** Collected: 10/16/25 11:55 Received: 10/17/25 07:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**-0.0580 ± 0.301 (0.697) C:NA T:93%**	pCi/L	12/03/25 11:36	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.189 ± 0.439 (0.973) C:76% T:81%**	pCi/L	11/19/25 11:30	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Sample: R-P-22D **Lab ID: 60484246023** Collected: 11/12/25 13:00 Received: 11/13/25 07:45 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Sample 023 received into Pace-Greensburg on 11/17/2025.
• Only 1 X BP1N received when 3 X BP1N is the recommended volume needed for the requested radiological testing; client notified via SAF.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	**0.353 ± 0.325 (0.191) C:NA T:89%**	pCi/L	12/11/25 14:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	**0.300 ± 0.665 (1.47) C:62% T:84%**	pCi/L	12/11/25 11:56	15262-20-1	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 785470
QC Batch Method: EPA 903.1
Analysis Method: EPA 903.1
Analysis Description: 903.1 Radium-226
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 60484246023

METHOD BLANK: 3832654 Matrix: Water
Associated Lab Samples: 60484246023

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.136 ± 0.236 (0.422) C:NA T:90%	pCi/L	12/11/25 13:55	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 786141
QC Batch Method: EPA 903.1
Analysis Method: EPA 903.1
Analysis Description: 903.1 Radium-226
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 60484246021, 60484246022

METHOD BLANK: 3835588 Matrix: Water
Associated Lab Samples: 60484246021, 60484246022

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.000 ± 0.242 (0.525) C:NA T:96%	pCi/L	12/03/25 11:36	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 782986
QC Batch Method: EPA 904.0
Analysis Method: EPA 904.0
Analysis Description: 904.0 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 60484246001, 60484246002, 60484246003, 60484246004, 60484246005, 60484246006, 60484246007, 60484246008, 60484246009, 60484246010, 60484246011, 60484246012, 60484246013, 60484246014, 60484246015, 60484246016, 60484246017, 60484246018, 60484246019, 60484246020

METHOD BLANK: 3819454
Matrix: Water
Associated Lab Samples: 60484246001, 60484246002, 60484246003, 60484246004, 60484246005, 60484246006, 60484246007, 60484246008, 60484246009, 60484246010, 60484246011, 60484246012, 60484246013, 60484246014, 60484246015, 60484246016, 60484246017, 60484246018, 60484246019, 60484246020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.717 ± 0.423 (0.781) C:78% T:90%	pCi/L	11/18/25 14:38	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 782984
QC Batch Method: EPA 903.1
Analysis Method: EPA 903.1
Analysis Description: 903.1 Radium-226
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 60484246001, 60484246002, 60484246003, 60484246004, 60484246005, 60484246006, 60484246007, 60484246008, 60484246009, 60484246010, 60484246011, 60484246012, 60484246013, 60484246014, 60484246015, 60484246016, 60484246017, 60484246018, 60484246019, 60484246020

METHOD BLANK: 3819453
Matrix: Water
Associated Lab Samples: 60484246001, 60484246002, 60484246003, 60484246004, 60484246005, 60484246006, 60484246007, 60484246008, 60484246009, 60484246010, 60484246011, 60484246012, 60484246013, 60484246014, 60484246015, 60484246016, 60484246017, 60484246018, 60484246019, 60484246020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.237 ± 0.280 (0.440) C:NA T:85%	pCi/L	11/21/25 14:14	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 783747
QC Batch Method: EPA 904.0
Analysis Method: EPA 904.0
Analysis Description: 904.0 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 60484246021, 60484246022

METHOD BLANK: 3823058 Matrix: Water
Associated Lab Samples: 60484246021, 60484246022

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.954 ± 0.477 (0.821) C:73% T:84%	pCi/L	11/19/25 11:30	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

QC Batch: 785471
QC Batch Method: EPA 904.0
Analysis Method: EPA 904.0
Analysis Description: 904.0 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 60484246023

METHOD BLANK: 3832655 Matrix: Water
Associated Lab Samples: 60484246023

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.502 ± 0.378 (0.736) C:73% T:87%	pCi/L	12/11/25 11:54	

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QUALIFIERS

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
H1	Analysis conducted outside the EPA method holding time.
H3	Sample was received or analysis requested beyond the recognized method holding time.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60484246001	**R-P-05S**	EPA 200.7	951999	EPA 200.7	952038
60484246002	**R-P-16S**	EPA 200.7	951999	EPA 200.7	952038
60484246003	**R-P-17S**	EPA 200.7	951999	EPA 200.7	952038
60484246004	**R-P-17I**	EPA 200.7	951999	EPA 200.7	952038
60484246005	**R-P-17D**	EPA 200.7	951999	EPA 200.7	952038
60484246006	**R-P-19S**	EPA 200.7	951999	EPA 200.7	952038
60484246007	**R-P-19I**	EPA 200.7	951999	EPA 200.7	952038
60484246008	**R-P-19D**	EPA 200.7	951999	EPA 200.7	952038
60484246009	**R-P-21S**	EPA 200.7	951999	EPA 200.7	952038
60484246010	**R-P-21I**	EPA 200.7	951999	EPA 200.7	952038
60484246011	**R-P-21D**	EPA 200.7	951999	EPA 200.7	952038
60484246012	**R-P-22S**	EPA 200.7	951999	EPA 200.7	952038
60484246013	**R-P-29S**	EPA 200.7	951999	EPA 200.7	952038
60484246014	**R-P-29D**	EPA 200.7	951999	EPA 200.7	952038
60484246015	**R-CA-DUP-1**	EPA 200.7	951999	EPA 200.7	952038
60484246016	**R-CA-DUP-2**	EPA 200.7	952133	EPA 200.7	952193
60484246017	**R-CA-FB-1**	EPA 200.7	952133	EPA 200.7	952193
60484246018	**R-CA-FB-2**	EPA 200.7	952133	EPA 200.7	952193
60484246021	**R-P-10S**	EPA 200.7	952284	EPA 200.7	952323
60484246022	**R-P-30S**	EPA 200.7	952284	EPA 200.7	952323
60484246023	**R-P-22D**	EPA 200.7	955488	EPA 200.7	955574
60484246001	**R-P-05S**	EPA 200.8	952000	EPA 200.8	952042
60484246002	**R-P-16S**	EPA 200.8	952000	EPA 200.8	952042
60484246003	**R-P-17S**	EPA 200.8	952000	EPA 200.8	952042
60484246004	**R-P-17I**	EPA 200.8	952000	EPA 200.8	952042
60484246005	**R-P-17D**	EPA 200.8	952000	EPA 200.8	952042
60484246006	**R-P-19S**	EPA 200.8	952000	EPA 200.8	952042
60484246007	**R-P-19I**	EPA 200.8	952000	EPA 200.8	952042
60484246008	**R-P-19D**	EPA 200.8	952000	EPA 200.8	952042
60484246009	**R-P-21S**	EPA 200.8	952000	EPA 200.8	952042
60484246010	**R-P-21I**	EPA 200.8	952000	EPA 200.8	952042
60484246011	**R-P-21D**	EPA 200.8	952000	EPA 200.8	952042
60484246012	**R-P-22S**	EPA 200.8	952000	EPA 200.8	952042
60484246013	**R-P-29S**	EPA 200.8	952000	EPA 200.8	952042
60484246014	**R-P-29D**	EPA 200.8	952000	EPA 200.8	952042
60484246015	**R-CA-DUP-1**	EPA 200.8	952000	EPA 200.8	952042
60484246016	**R-CA-DUP-2**	EPA 200.8	952350	EPA 200.8	952384
60484246017	**R-CA-FB-1**	EPA 200.8	952350	EPA 200.8	952384
60484246018	**R-CA-FB-2**	EPA 200.8	952350	EPA 200.8	952384
60484246021	**R-P-10S**	EPA 200.8	952350	EPA 200.8	952384
60484246022	**R-P-30S**	EPA 200.8	952350	EPA 200.8	952384
60484246023	**R-P-22D**	EPA 200.8	955542	EPA 200.8	955578
60484246001	**R-P-05S**	EPA 903.1	782984		
60484246002	**R-P-16S**	EPA 903.1	782984		
60484246003	**R-P-17S**	EPA 903.1	782984		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60484246004	**R-P-17I**	EPA 903.1	782984		
60484246005	**R-P-17D**	EPA 903.1	782984		
60484246006	**R-P-19S**	EPA 903.1	782984		
60484246007	**R-P-19I**	EPA 903.1	782984		
60484246008	**R-P-19D**	EPA 903.1	782984		
60484246009	**R-P-21S**	EPA 903.1	782984		
60484246010	**R-P-21I**	EPA 903.1	782984		
60484246011	**R-P-21D**	EPA 903.1	782984		
60484246012	**R-P-22S**	EPA 903.1	782984		
60484246013	**R-P-29S**	EPA 903.1	782984		
60484246014	**R-P-29D**	EPA 903.1	782984		
60484246015	**R-CA-DUP-1**	EPA 903.1	782984		
60484246016	**R-CA-DUP-2**	EPA 903.1	782984		
60484246017	**R-CA-FB-1**	EPA 903.1	782984		
60484246018	**R-CA-FB-2**	EPA 903.1	782984		
60484246019	**R-CA-MS-1**	EPA 903.1	782984		
60484246020	**R-CA-MSD-1**	EPA 903.1	782984		
60484246021	**R-P-10S**	EPA 903.1	786141		
60484246022	**R-P-30S**	EPA 903.1	786141		
60484246023	**R-P-22D**	EPA 903.1	785470		
60484246001	**R-P-05S**	EPA 904.0	782986		
60484246002	**R-P-16S**	EPA 904.0	782986		
60484246003	**R-P-17S**	EPA 904.0	782986		
60484246004	**R-P-17I**	EPA 904.0	782986		
60484246005	**R-P-17D**	EPA 904.0	782986		
60484246006	**R-P-19S**	EPA 904.0	782986		
60484246007	**R-P-19I**	EPA 904.0	782986		
60484246008	**R-P-19D**	EPA 904.0	782986		
60484246009	**R-P-21S**	EPA 904.0	782986		
60484246010	**R-P-21I**	EPA 904.0	782986		
60484246011	**R-P-21D**	EPA 904.0	782986		
60484246012	**R-P-22S**	EPA 904.0	782986		
60484246013	**R-P-29S**	EPA 904.0	782986		
60484246014	**R-P-29D**	EPA 904.0	782986		
60484246015	**R-CA-DUP-1**	EPA 904.0	782986		
60484246016	**R-CA-DUP-2**	EPA 904.0	782986		
60484246017	**R-CA-FB-1**	EPA 904.0	782986		
60484246018	**R-CA-FB-2**	EPA 904.0	782986		
60484246019	**R-CA-MS-1**	EPA 904.0	782986		
60484246020	**R-CA-MSD-1**	EPA 904.0	782986		
60484246021	**R-P-10S**	EPA 904.0	783747		
60484246022	**R-P-30S**	EPA 904.0	783747		
60484246023	**R-P-22D**	EPA 904.0	785471		
60484246001	**R-P-05S**	EPA 300.0	952747		
60484246002	**R-P-16S**	EPA 300.0	952747		
60484246003	**R-P-17S**	EPA 300.0	952747		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60484246004	**R-P-17I**	EPA 300.0	952747		
60484246005	**R-P-17D**	EPA 300.0	952747		
60484246006	**R-P-19S**	EPA 300.0	952747		
60484246007	**R-P-19I**	EPA 300.0	952747		
60484246008	**R-P-19D**	EPA 300.0	952747		
60484246009	**R-P-21S**	EPA 300.0	952747		
60484246010	**R-P-21I**	EPA 300.0	952747		
60484246011	**R-P-21D**	EPA 300.0	953128		
60484246012	**R-P-22S**	EPA 300.0	952747		
60484246013	**R-P-29S**	EPA 300.0	952747		
60484246014	**R-P-29D**	EPA 300.0	952747		
60484246015	**R-CA-DUP-1**	EPA 300.0	952747		
60484246016	**R-CA-DUP-2**	EPA 300.0	952747		
60484246017	**R-CA-FB-1**	EPA 300.0	952747		
60484246018	**R-CA-FB-2**	EPA 300.0	952747		
60484246021	**R-P-10S**	EPA 300.0	952747		
60484246022	**R-P-30S**	EPA 300.0	952747		
60484246001	**R-P-05S**	SM 2320B	953015		
60484246002	**R-P-16S**	SM 2320B	953015		
60484246003	**R-P-17S**	SM 2320B	953015		
60484246004	**R-P-17I**	SM 2320B	952840		
60484246005	**R-P-17D**	SM 2320B	952840		
60484246006	**R-P-19S**	SM 2320B	952787		
60484246007	**R-P-19I**	SM 2320B	952787		
60484246008	**R-P-19D**	SM 2320B	952787		
60484246009	**R-P-21S**	SM 2320B	952787		
60484246010	**R-P-21I**	SM 2320B	952787		
60484246011	**R-P-21D**	SM 2320B	952787		
60484246012	**R-P-22S**	SM 2320B	952787		
60484246013	**R-P-29S**	SM 2320B	952840		
60484246014	**R-P-29D**	SM 2320B	952840		
60484246015	**R-CA-DUP-1**	SM 2320B	952787		
60484246016	**R-CA-DUP-2**	SM 2320B	952840		
60484246017	**R-CA-FB-1**	SM 2320B	952787		
60484246018	**R-CA-FB-2**	SM 2320B	952787		
60484246021	**R-P-10S**	SM 2320B	953528		
60484246022	**R-P-30S**	SM 2320B	953528		
60484246023	**R-P-22D**	SM 2320B	955825		
60484246001	**R-P-05S**	SM 2540C	952456		
60484246002	**R-P-16S**	SM 2540C	952456		
60484246003	**R-P-17S**	SM 2540C	952456		
60484246004	**R-P-17I**	SM 2540C	952456		
60484246005	**R-P-17D**	SM 2540C	952456		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA-CA
Pace Project No.: 60484246

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60484246006	**R-P-19S**	SM 2540C	952136		
60484246007	**R-P-19I**	SM 2540C	952136		
60484246008	**R-P-19D**	SM 2540C	952136		
60484246009	**R-P-21S**	SM 2540C	952136		
60484246010	**R-P-21I**	SM 2540C	952136		
60484246011	**R-P-21D**	SM 2540C	952136		
60484246012	**R-P-22S**	SM 2540C	952136		
60484246013	**R-P-29S**	SM 2540C	952456		
60484246014	**R-P-29D**	SM 2540C	952456		
60484246015	**R-CA-DUP-1**	SM 2540C	952136		
60484246016	**R-CA-DUP-2**	SM 2540C	952456		
60484246017	**R-CA-FB-1**	SM 2540C	952136		
60484246018	**R-CA-FB-2**	SM 2540C	952136		
60484246021	**R-P-10S**	SM 2540C	952615		
60484246022	**R-P-30S**	SM 2540C	952615		
60484246023	**R-P-22D**	SM 2540C	955803		
60484246023	**R-P-22D**	EPA 300.0	958078		

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WO# : 60484246

60484246

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_Sa		
	Revision: 3	Effective Date: 09/22/2025	Issued By: Lenexa

Client Name: Rocksmith Grocery

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

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

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐ Cooling process has begun ☐

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

Thermometer Used: T-301 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): As-read 2.3/1.4 / 2.0/1.5 Corr. Factor 0.0 **Corrected** 2.3/1.4/2.0/1.5

Date and initials of person examining contents:

Temperature should be above freezing to 6°C 18.4/19.3/14.2/16.9 18.4/19.3/14.2/16.9 PM 10/16/25

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, Radium) LOT#: 96888	☑Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☐No ☑N/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

L0484216

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:			
Project Name:	AMEREN RCPA-CA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other		Regulatory Program (DW, RCRA, etc.) as applicable:	Reportable [ ] Yes [ ] No
		Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other	DW PWSID # or WW Permit # as applicable:
		Date Results Requested:	Field Filtered (if applicable): [ ] Yes [ ] No Analysis:

Specify Container Size **

Identify Container Preservative Type***

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only
Proj. Mgr: Jamie Church
AcctNum / Client ID:
Table #:
Profile / Template: 15854
Prelog / Bottle Ord. ID: EZ 3303609

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	App III and Cat/An Metals*	App IV Metals**	Cl/F/SO4/TDS/Alkalinity	Radium 226/228	Sample Comment	Preservation non-conformance identified for sample.
R-P-05S	WT	G			10/15/25	1335	4			✓	✓	✓	✓		
R-P-10S	WT														
R-P-16S	WT	G			10/15/25	1316	4			✓	✓	✓	✓		
R-P-17S	WT	G			10/15/25	1315	4			✓	✓	✓	✓		
R-P-17I	WT	G			10/15/25	1217	4			✓	✓	✓	✓		
R-P-17D	WT	G			10/15/25	1140	4			✓	✓	✓	✓		
R-P-19S	WT	G			10/14/25	1345	4			✓	✓	✓	✓		
R-P-19I	WT	G			10/14/25	1257	4			✓	✓	✓	✓		
R-P-19D	WT	G			10/14/25	1220	4			✓	✓	✓	✓		
R-P-21S	WT	G			10/14/25	1235	4			✓	✓	✓	✓		

Additional Instructions from Pace®:
App III and Cat/An Metals - EPA 200.7: B, Ca, Fe, Mg, Mn, K, Na
**App IV Metals - EPA 200.7 -Ba, Li, Mo and 200.8 Metals - Sb, As, Se,

Collected By: (Printed Name)
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
8	T-301	0.0	18.4/19.3 14.7/16.9	18.4/19.3 14.7/16.9	

2.7/1.4 2.3/1.4
2.0/1.5 2.0/1.5

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
Rocksmith	10/15/25 1600		10/16 0705	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In- Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEx [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: of 3

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

CHAIN-OF-CUSTODY Analytical Request Document

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Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:			
Project Name:	AMEREN RCPA-CA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri

Data Deliverables:
[ ] Level II [ ] Level III [ ] Level IV
[ ] EQUIS
[ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required):
[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [ ] No
Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	App III and Cat/An Metals*	App IV Metals**	Cl/F/SO4/TDS/Alkalinity	Radium 226/228
R-P-21I	WT	G			10/14/25	1321	4			✓	✓	✓	✓
R-P-21D	WT	G			10/14/25	1400	4			✓	✓	✓	✓
R-P-22S	WT	G			10/14/25	1110	4			✓	✓	✓	✓
R-P-22D	WT												
R-P-29S	WT	G			10/15/25	1005	4			✓	✓	✓	✓
R-P-29D	WT	G			10/15/25	1050	4			✓	✓	✓	✓
R-P-30S	WT												
R-P-31S	WT												
R-CA-DUP-1	WT	G			10/14/25	—	4			✓	✓	✓	✓
R-CA-DUP-2	WT	G			10/15/25	—	4			✓	✓	✓	✓

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only

Proj. Mgr: Jamie Church
AcctNum / Client ID:
Table #:
Profile / Template: 15854
Prelog / Bottle Ord. ID: EZ 3303609

Sample Comment

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:
***App III and Cat/An Metals* - EPA 200.7: B, Ca, Fe, Mg, Mn, K, Na**
****App IV Metals - EPA 200.7 -Ba, Li, Mo and 200.8 Metals - Sb, As, Se,**

Collected By: (Printed Name) John Rossman
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

2.7/1.4
2.0/1.5

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
8	T-301	0.0	18.4/19.3	14.7/16.9	

Relinquished by/Company: (Signature)	Date/Time: 10/15/25 1600	Received by/Company: (Signature)	Date/Time: 10/16 0705	Tracking Number:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In- Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 2 of 3

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Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

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Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:			
Project Name:	AMEREN RCPA-CA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri

Data Deliverables:
[ ] Level II [ ] Level III [ ] Level IV
[ ] EQUIS
[ ] Other

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Rush (Pre-approval required):
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DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [ ] No
Analysis:

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Identify Container Preservative Type***

Analysis Requested

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	App III and Cat/An Metals*	App IV Metals**	Cl/F/SO4/TDS/Alkalinity	Radium 226/228	Sample Comment
R-CA-FB-1	WT	G			10/14/25	1240	4			✓	✓	✓	✓	
R-CA-FB-2	WT	G			10/14/25	1411	4			✓	✓	✓	✓	
R-CA-MS-1	WT	G			10/14/25	1110	4			✓	✓	✓	✓	Taken @ P-225
R-CA-MSD-1	WT	G			10/14/25	1110	4			✓	✓	✓	✓	

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only
Proj. Mgr: Jamie Church
AcctNum / Client ID:
Table #:
Profile / Template: 15854
Prelog / Bottle Ord. ID: EZ 3303609

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:
App III and Cat/An Metals - EPA 200.7: B, Ca, Fe, Mg, Mn, K, Na
**App IV Metals - EPA 200.7 -Ba, Li, Mo and 200.8 Metals - Sb, As, Se,

Collected By: (Printed Name) John Ramm
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
8	T-301	0-0	2.3/1.4 2.0/1.5	18.4/18.3 14.2/16.9	

Relinquished by/Company: (Signature)	Date/Time: 10/15/26/1600	Received by/Company: (Signature)	Date/Time: 10/16 0705	Tracking Number:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In- Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEx [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 3 of 3

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1/3

Client: Rocksmith Geoeng

Profile/EZ #: 3303609

Site:

Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1	WT																		1			2	1									
2	↓																		↓			↓	↓									
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10	↓																		↓			↓	↓									
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60484246

2/3

Client: RockSmith Geoeng Profile/EZ#: 3303609

Site: Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1	WT																		1			2	1									
2	↓																		↓			↓	↓									
3	↓																		3			↓	3									
4																																
5	↓																		1			↓	1									
6	↓																		↓			↓	↓									
7																																
8																																
9	↓																		↓			↓	↓									
10	↓																		↓			↓	↓									
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 10484246

3/3

Client: Rocksmith Geoeng Profile/EZ #: 3303609

Site: Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1	WT																		1			2	1								
2	↓																		↓			↓	↓								
3																																
4																																
5																																
6																																
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Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number:

WO#: 60484246
PM: JLS Due Date: 10/30/25
CLIENT: Rocksmith

WO# : 60484246

60484246

Pace Analytical Services	DC#_Title: ENV-FRM-LENE-0009_Sample Con		
	Revision: 3	Effective Date: 09/22/2025	Issued By: Lenexa

Client Name: Rocksmith Geoeng

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

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

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐ Cooling process has begun ☐

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

Thermometer Used: T-301 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): As-read 1.7/13.7 Corr. Factor 0.0 Corrected 1.7/13.7

Date and initials of person examining contents: AV 10/17/25

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, Radium) LOT#: 96888	☑Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☐No ☑N/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

60484246

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:			
Project Name:	AMEREN RCPA-CA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other		Regulatory Program (DW, RCRA, etc.) as applicable:	Reportable [ ] Yes [ ] No
		Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____	DW PWSID # or WW Permit # as applicable:
		Date Results Requested:	Field Filtered (if applicable): [ ] Yes [ ] No Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	200.7 / 200.8 Metals	Cl/F/SO4/TDS/Alkalinity	Radium 226/228
R-P-05S	WT											
R-P-10S	WT	G			10-16-25	0942	2			✓	✓	✓
R-P-16S	WT											
R-P-17S	WT											
R-P-17I	WT											
R-P-17D	WT											
R-P-19S	WT											
R-P-19I	WT											
R-P-19D	WT											
R-P-21S	WT											

Specify Container Size **: 3 1 1

Identify Container Preservative Type***: 2 1 2

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only

Proj. Mgr: Jamie Church

AcctNum / Client ID:

Table #:

Profile / Template: 15854

Prelog / Bottle Ord. ID: EZ 3303609

Sample Comment

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:
**App III and Cat/An Metals* - EPA 200.7: B, Ca, Fe, Mg, Mn, K, Na
**App IV Metals - EPA 200.7 -Ba, Li, Mo and 200.8 Metals - Sb, As, Se,

Collected By: (Printed Name) Daniel Quick

Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp (°C)	Corrected Temp. (°C)	On Ice:
2	T-301	0.0	1.7/13.7	1.7/13.7	

	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	1415 10-16-25		10/17/25 0705
Relinquished by/Company: (Signature)			
Relinquished by/Company: (Signature)			
Relinquished by/Company: (Signature)			

Tracking Number:

Delivered by: [ ] In- Person [ ] Courier [ ] FedEX [ ] UPS [ ] Other

Page: 1 of 3

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

60484246

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:			
Project Name:	AMEREN RCPA-CA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other		Regulatory Program (DW, RCRA, etc.) as applicable:	Reportable [ ] Yes [ ] No
		Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____	DW PWSID # or WW Permit # as applicable:
		Date Results Requested:	Field Filtered (if applicable): [ ] Yes [ ] No Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: 3 1 1

Identify Container Preservative Type***: 2 1 1

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	200.7 / 200.8 Metals	Cl/F/SO4/TDS/Alkalinity	Radium 226/228	Sample Comment
R-P-21I	WT												
R-P-21D	WT												
R-P-22S	WT												
R-P-22D	WT												
R-P-29S	WT												
R-P-29D	WT												
R-P-30S	WT	G			10-16-25	1155	4			✓	✓	✓	
R-P-31S	WT												
R-CA-DUP-1	WT												
R-CA-DUP-2	WT												

Lab Use Only

Proj. Mgr: Jamie Church

AcctNum / Client ID:

Table #:

Profile / Template: 15854

Prelog / Bottle Ord. ID: EZ 3303609

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:
**App III and Cat/An Metals* - EPA 200.7: B, Ca, Fe, Mg, Mn, K, Na
**App IV Metals - EPA 200.7 -Ba, Li, Mo and 200.8 Metals - Sb, As, Se,

Collected By: (Printed Name) David Quick

Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
2	T-301	0.0	1.7/13.7	1.7/13.7	

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
Rocksmith	10-16-25 1415		10/17/25 0705	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In- Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 2 of 3

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

1/2

Client: Rocksmith Geoeng

Profile/EZ #: Only Print what you log.

Site:

Notes: Append to 6C184246

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1																																
2	WT																		1			2	1									
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 6C184246

2/2

Client: Rocksmith Geoeng

Profile/EZ #:

Site:

Notes: Append to 60184246

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1																																
2																																
3																																
4																																
5																																
6																																
7	WT																		1			2	1									
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60184246

WO# : 60484246

60484246

DC#_Title: ENV-FRM-LENE-0009_Sample Co		
Revision: 3	Effective Date: 09/22/2025	Issued By: Lenexa

Client Name: Rocksmith Geoeng

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

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

Custody Seal on Cooler/Box Present: Yes ☐ No ☐ Seals intact: Yes ☐ No ☐ Cooling process has begun ☐

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

Thermometer Used: T-301 **Type of Ice:** Wet Blue None

Cooler Temperature (°C): As-read 1-3 Corr. Factor 0.0 Corrected 1.3

Date and initials of person examining contents: AW 11/13/25

Temperature should be above freezing to 6°C

Chain of Custody present:	☐Yes ☐No ☐N/A	
Chain of Custody relinquished:	☐Yes ☐No ☐N/A	
Samples arrived within holding time:	☐Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☐No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☐No ☐N/A	
Sufficient volume:	☐Yes ☐No ☐N/A	
Correct containers used:	☐Yes ☐No ☐N/A	
Pace containers used:	☐Yes ☐No ☐N/A	
Containers intact:	☐Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☐N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☐N/A	
Sample labels match COC: Date / time / ID / analyses	☐Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☐No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, Radium) LOT#: 96488	☐Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☐N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☐N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Qualtrax Document ID: 30468

Pace® Location Requested (City/State):
Pace Analytical Kansas
9608 Loiret Blvd., Lenexa, KS 66219

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

60484246

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:			
Project Name:	AMEREN RCPA-CA	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET

County / State origin of sample(s): Missouri

Data Deliverables:
[ ] Level II [ ] Level III [ ] Level IV
[ ] EQUIS
[ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required):
[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	200.7 / 200.8 Metals	Cl/F/SO4/TDS/Alkalinity	Radium 226/228
R-P-21I	WT											
R-P-21D	WT											
R-P-22S	WT											
R-P-22D	WT	G			11-12-25	1300	3	—		✓	✓	✓
R-P-29S	WT											
R-P-29D	WT											
R-P-30S	WT											
R-P-31S	WT											
R-CA-DUP-1	WT											
R-CA-DUP-2	WT											

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only

Proj. Mgr: Jamie Church
AcctNum / Client ID:
Table #:
Profile / Template: 15854
Prelog / Bottle Ord. ID: EZ 3303609

Sample Comment

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:
***App III and Cat/An Metals* - EPA 200.7: B, Ca, Fe, Mg, Mn, K, Na**
****App IV Metals - EPA 200.7 -Ba, Li, Mo and 200.8 Metals - Sb, As, Se,**

Collected By: (Printed Name) David Quer
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
1	T-301	0.0	1.3	1.3	

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Rocksmith [signature]	11-12-25 1530	[signature]	11/13/25 0745
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

Tracking Number:

Delivered by: [ ] In- Person [ ] Courier
[ ] FedEX [ ] UPS [ ] Other

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

Client: Rocksmith Geoeng

Profile/EZ # Only print what you log.

Site:

Notes Append to 60484246

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1																																
2																																
3																																
4	WT																		1			1	1										
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60484246

Internal Transfer Chain of Custody

☐ Rush Multiplier_____X

☐ Samples Pre-Logged into eCOC

State Of Origin: MO

Cert. Needed: ☐ Yes ☒ No

Workorder: 60484246 **Workorder Name:** AMEREN RCPA-CA

Owner Received Date: 10/16/2025 **Results Requested By:** 11/7/2025

Report To	Subcontract To
Jamie Church Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 314-838-7223	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3						Requested Analysis Radium 226	Radium 228											LAB USE ONLY
1	R-P-05S	PS	10/15/2025 13:35	60484246001	Water	2						X	X											001
2	R-P-16S	PS	10/15/2025 13:16	60484246002	Water	2						X	X											002
3	R-P-17S	PS	10/15/2025 13:15	60484246003	Water	2						X	X											003
4	R-P-17I	PS	10/15/2025 12:17	60484246004	Water	2						X	X											004
5	R-P-17D	PS	10/15/2025 11:40	60484246005	Water	2						X	X											005
6	R-P-19S	PS	10/14/2025 13:45	60484246006	Water	2						X	X											006
7	R-P-19I	PS	10/14/2025 12:57	60484246007	Water	2						X	X											007
8	R-P-19D	PS	10/14/2025 12:20	60484246008	Water	2						X	X											008
9	R-P-21S	PS	10/14/2025 12:35	60484246009	Water	2						X	X											009
10	R-P-21I	PS	10/14/2025 13:21	60484246010	Water	2						X	X											010
11	R-P-21D	PS	10/14/2025 14:00	60484246011	Water	2						X	X											011
12	R-P-22S	RQS	10/14/2025 11:10	60484246012	Water	2						X	X											012
13	R-P-29S	PS	10/15/2025 10:05	60484246013	Water	2						X	X											013
14	R-P-29D	PS	10/15/2025 10:50	60484246014	Water	2						X	X											014
15	R-CA-DUP-1	PS	10/14/2025 08:00	60484246015	Water	2						X	X											015
16	R-CA-DUP-2	PS	10/15/2025 08:00	60484246016	Water	2						X	X											016
17	R-CA-FB-1	PS	10/14/2025 12:40	60484246017	Water	2						X	X											017
18	R-CA-FB-2	PS	10/14/2025 14:11	60484246018	Water	2						X	X											018
19	R-CA-MS-1	PS	10/14/2025 11:10	60484246019	Water	2						X	X											019

WO# : 30824783

30824783

Internal Transfer Chain of Custody

☐ Rush Multiplier____X
☐ Samples Pre-Logged into eCOC

State Of Origin: MO
Cert. Needed: ☐ Yes ☒ No
Owner Received Date: 10/16/2025 **Results Requested By:** 11/7/2025

Workorder: 60484246 **Workorder Name:** AMEREN RCPA-CA

Report To	Subcontract To
Jamie Church Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 314-838-7223	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3	Requested Analysis: Radium 226	Radium 228	LAB USE ONLY
20	R-CA-MSD-1	PS	10/14/2025 11:10	60484246020	Water	2	X	X	020
21	R-P-10S	PS	10/16/2025 09:42	60484246021	Water	2	X	X	021
22	R-P-30S	PS	10/16/2025 11:55	60484246022	Water	2	X	X	022
23									
24									

Transfers	Released By	Date/Time	Received By	Date/Time
1	Stanley B Pace	11-7-25 1200	Matthew Smith	11/7/25 10:55
2				
3				

Comments

Location: (44)BP1N 60-R01-S4A

Cooler Temperature on Receipt ___ °C | **Custody Seal** Y or (N) | **Received on Ice** Y or (N) | **Samples Intact** (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

WO#: 30824783
PM: CMC Due Date: 12/02/25
CLIENT: PACE_60_LEKS

WO#: 30824783

PM: CMC Due Date: 12/02/25
CLIENT: PACE_60_LEKS

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-GBUR-0088 v09_Sam Greensburg
	Effective Date: 06/24/2025

Client Name: Pace KS **Project #:**

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking Number: 4830 9808 6539

Initial / Date

Examined By: ES 11/10/25
Labeled By: ES 11/10/25
Temped By: —

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

Therm. Used: — **Type of Ice:** Wet Blue (None)

Cooler Temp: Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 6S03010 / D.P.D. Residual Chlorine Lot # —
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC		✓		
Chain of Custody Relinquished	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID Matrix: WT				
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous samples field filtered:			✓	13.
Organic Samples checked for dechlorination			✓	14:
Filtered volume received for dissolved tests: **Cr6+, Orthophosphate, DOC, Metals**			✓	15:
All containers checked for preservation:	✓			16.
exceptions: VOA, coliform, TOC, O&G, TOX, LL Hg, Radon, non-aqueous matrix				pH < 2
All containers meet method preservation requirements:	✓			Initial when completed ES / Date/Time of Preservation / Lot# of added Preservative
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.
624.1: Headspace in VOA Vials (0mm)			✓	18.
Radon: Headspace in RAD Vials (0mm)			✓	19.
Trip Blank Present:			✓	Trip blank custody seal present? YES or NO
Rad Samples Screened <.05 mrem/hr.	✓			Initial when completed MS / Date: 11/8/25 / Survey Meter SN: 7501438O

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Memorandum

December 23, 2025

To:	Project File Rocksmith Geoengineering, LLC	**Project Number:**	23008-25
CC:	Mark Haddock, Jeffrey Ingram		
From:	Valerie Hurt	**Email:**	Valerei.Hurt@rocksmithgeo.com
RE:	**Data Validation Summary, Rush Island Energy Center – RCPA-CA – Data Package 60484246**		

The following is a summary of instances where quality control criteria in the functional guidelines were not met and data qualification was required:

- When a duplicate criterion was not met, the associated sample result was qualified as an estimate (J for detects, UJ for non-detects).
- When a matrix spike/matrix spike duplicate (MS/MSD) criterion was not met, the associated sample result was qualified as an estimate (J, J+ for estimates based high, and J- for estimates based low).
- When a laboratory control sample criterion was not met, the associated sample result was qualified as an estimate (J for detects, UJ for non-detects).

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Company Name: Rocksmith Geoengineering
Project Manager: J. Ingram
Project Name: Ameren RCPA-CA
Project Number: 23008-25
Reviewer: V. Hurt
Validation Date: 12/23/2025

Laboratory: Pace Analytical
SDG #: 60484246
Analytical Method (type and no.): EPA 200.7/200.8 (Total Metals); SM 2320B (Alkalinity); SM 2540C (TDS); EPA 300.0 (Anions);
Matrix: ☐ Air ☐ Soil/Sed. ■ Water ☐ Waste ☐ EPA 903.1/904.0 (Radium 226+228)
Sample Names R-P-05S, R-P-16S, R-P-17S, R-P-17I, R-P-17D, R-P-19S, R-P-19I, R-P-19D, R-P-21S, R-P-21I, R-P-21D, R-P-22S
R-P-29S, R-P-29D, R-CA-DUP-1, R-CA-DUP-2, R-CA-FB-1, R-CA-FB-2, R-CA-MS-1, R0CA0MSD-1, R-P-10S, R-P-30S, R-P-22D

NOTE: Please provide calculation in Comment areas or on the back (if on the back please indicate in comment areas).

Field Information	YES	NO	NA	COMMENTS
a) Sampling dates noted?	x			10/14/2025-10/16/2025 and 11/12/2025
b) Sampling team indicated?	x			JTR & JDQ
c) Sample location noted?	x			
d) Sample depth indicated (Soils)?			x	
e) Sample type indicated (grab/composite)?	x			Grab
f) Field QC noted?	x			See Notes
g) Field parameters collected (note types)?	x			pH, Spec Cond, Turb, Temp, DO, ORP
h) Field Calibration within control limits?	x			
i) Notations of unacceptable field conditions/performances from field logs or field notes?		x		
j) Does the laboratory narrative indicate deficiencies?			x	No lab narrative.

Note Deficiencies:

Chain-of-Custody (COC)	YES	NO	NA	COMMENTS
a) Was the COC properly completed?	x			
b) Was the COC signed by both field and laboratory personnel?	x			
c) Were samples received in good condition?	x			

General (reference QAPP or Method)	YES	NO	NA	COMMENTS
a) Were hold times met for sample pretreatment?	x			
b) Were hold times met for sample analysis?	x			
c) Were the correct preservatives used?	x			
d) Was the correct method used?	x			
e) Were appropriate reporting limits achieved?	x			
f) Were any sample dilutions noted?	x			See Notes
g) Were any matrix problems noted?		x		

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Blanks	YES	NO	NA	COMMENTS
a) Were analytes detected in the method blank(s)?	x			See Notes
b) Were analytes detected in the field blank(s)?	x			See Notes
c) Were analytes detected in the equipment blank(s)?			x	
d) Were analytes detected in the trip blank(s)?			x	

Laboratory Control Sample (LCS)	YES	NO	NA	COMMENTS
a) Was a LCS analyzed once per SDG?	x			
b) Were the proper analytes included in the LCS?	x			
c) Was the LCS accuracy criteria met?		x		See Notes

Duplicates	YES	NO	NA	COMMENTS
a) Were field duplicates collected (note original and duplicate sample names)?	x			
b) Were field dup. precision criteria met (note RPD)?		x		See Notes
c) Were lab duplicates analyzed (note original and duplicate samples)?	x			
d) Were lab dup. precision criteria met (note RPD)?	x			

Blind Standards	YES	NO	NA	COMMENTS
a) Was a blind standard used (indicate name, analytes included and concentrations)?			x	
b) Was the %D within control limits?			x	

Matrix Spike/Matrix Spike Duplicate (MS/MSD)	YES	NO	NA	COMMENTS
a) Was MS accuracy criteria met?		x		See Notes
Recovery could not be calculated since sample contained high concentration of analyte?			x	
b) Was MSD accuracy criteria met?		x		See Notes
Recovery could not be calculated since sample contained high concentration of analyte?			x	
c) Were MS/MSD precision criteria met?	x			See Notes

Comments/Notes:

General:

Chloride and sulfate were diluted in several samples; no qualification necessary.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Comments/Notes:

Method Blanks:

3772999: Associated with samples -001 through -015. Calcium (15.1J) was detected > than MDL < than RL.

All associated results > 10x the method blank result, therefore no qualification necessary.

Field Blanks:

R-CA-FB-1 @ R-P-19D: Calcium (14.9J) and sodium (77.2J). Associated results > 10x blank, no qualification necessary.

R-CA-FB-2 @ R-P-21D: Calcium (12.7J) and radium-228 (1.05). Calcium > 10x blank, no qualification necessary; radium < 10x blank, result qualified as estimate.

Field Duplicates:

R-CA-DUP-1 @ R-P-19S: All analytes within RPD control limit (20%).

R-CA-DUP-2 @ R-P-17I: RPD control limit (20%) was exceeded for lithium (29%), result qualified as estimate. Radium-228 detected in parent sample and not in field duplicate, results qualified as estimates.

MS/MSD:

3773001/3773002: Calcium MS/MSD recovery low, RPD OK. Associated with sample -012, result qualified as estimates.

3773003: Sodium MS recovery high. Associated with sample -010, result qualified estimate.

3773706/3773707: Boron and calcium MS recovery low. MSD and RPD OK, associated with unrelated sample. No qualification necessary.

3786786: Boron, calcium, magnesium, potassium, and sodium MS recovery out of range. Associated with unrelated sample, no qualification necessary.

3777716/3777717: Chloride MS/MSD recovery low, RPD OK. Associated with unrelated sample, no qualification necessary.

3796979/3796980: Chloride MS/MSD recovery high, RPD OK. Associated with sample -023, result qualified as estimate.

Laboratory Control Samples:

3798002: LCS recovery high for fluoride, associated with sample -023, result qualified as estimate.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Data Qualification:

Sample Name	Constituent(s)	Result	Qualifier	Reason
R-P-21D	Radium-228	2.27	J	Detected in blank, result < 10x blank
R-P-17I	"	0.936	J	Detected in parent sample and not in field duplicate
R-CA-DUP-2	"	1.01	UJ	"
R-P-17I	Lithium	3.5	J	Duplicate RPD outside control limit
R-CA-DUP-2	"	4.7	J	"
R-P-22S	Calcium	150000	J-	MS/MSD recoveries low, RPD OK
R-P-21I	Sodium	165000	J+	MS recovery exceeds control limit
R-P-22D	Chloride	80.8	J+	MS/MSD recoveries high, RPD OK
"	Fluoride	1.8	J+	LCS recovery high

Signature: _____ Date: 12/23/2025

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

December 17, 2025

Mark Haddock
Rocksmith Geoengineering, LLC.
2320 Creve Coeur Mill Road
Maryland Heights, MO 63043

RE: Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60486888

Dear Mark Haddock:

Enclosed are the analytical results for sample(s) received by the laboratory on December 03, 2025. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Kansas City

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

Sincerely,



Jamie Church
jamie.church@pacelabs.com
314-838-7223
Project Manager

Enclosures

cc: Jeffrey Ingram, Rocksmith Geoengineering, LLC.
Lisa Meyer, Ameren
Grant Morey, Rocksmith Geoengineering, LLC.
Austin Nieman, Ameren

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

CERTIFICATIONS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60486888

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219
EPA Lab Code: KS00021
Arkansas Certification #: 88-00679
Illinois Certification #: 200030
Colorado Division of Oil and Public Safety
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Oklahoma Certification #: 9205
Texas Certification #: T104704407
Utah Certification #: KS0002125-15
UDSA_CA : #KS-SC-DOM-25-01

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

SAMPLE SUMMARY

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60486888

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60486888001	**R-MW-1**	Water	12/01/25 11:50	12/03/25 08:47
60486888002	**R-MW-2**	Water	12/01/25 12:35	12/03/25 08:47
60486888003	**R-DUP-1**	Water	12/01/25 00:00	12/03/25 08:47
60486888004	**R-FB-1**	Water	12/01/25 12:32	12/03/25 08:47

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

SAMPLE ANALYTE COUNT

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60486888

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60486888001	**R-MW-1**	SM 2540C	DLJ	1	PASI-K
		EPA 300.0	PL	1	PASI-K
60486888002	**R-MW-2**	SM 2540C	DLJ	1	PASI-K
		EPA 300.0	PL	1	PASI-K
60486888003	**R-DUP-1**	SM 2540C	DLJ	1	PASI-K
		EPA 300.0	PL	1	PASI-K
60486888004	**R-FB-1**	SM 2540C	DLJ	1	PASI-K
		EPA 300.0	PL	1	PASI-K

PASI-K = Pace Analytical Services - Kansas City

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

ANALYTICAL RESULTS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60486888

Sample: R-MW-1 **Lab ID: 60486888001** Collected: 12/01/25 11:50 Received: 12/03/25 08:47 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**769**	mg/L	13.3	13.3	1		12/08/25 10:54		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**27.0**	mg/L	20.0	15.3	20		12/13/25 14:03	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60486888

Sample: R-MW-2 **Lab ID: 60486888002** Collected: 12/01/25 12:35 Received: 12/03/25 08:47 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**904**	mg/L	13.3	13.3	1		12/08/25 10:54		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**172**	mg/L	50.0	38.3	50		12/13/25 14:36	16887-00-6	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60486888

Sample: R-DUP-1 **Lab ID: 60486888003** Collected: 12/01/25 00:00 Received: 12/03/25 08:47 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**915**	mg/L	13.3	13.3	1		12/08/25 10:54		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**175**	mg/L	50.0	38.3	50		12/13/25 15:10	16887-00-6	

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ANALYTICAL RESULTS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60486888

Sample: R-FB-1 **Lab ID: 60486888004** Collected: 12/01/25 12:32 Received: 12/03/25 08:47 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**<5.0**	mg/L	5.0	5.0	1		12/08/25 10:54		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**<0.77**	mg/L	1.0	0.77	1		12/13/25 15:21	16887-00-6	

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QUALITY CONTROL DATA

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60486888

QC Batch: 957722
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60486888001, 60486888002, 60486888003, 60486888004

METHOD BLANK: 3795881 Matrix: Water
Associated Lab Samples: 60486888001, 60486888002, 60486888003, 60486888004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	12/08/25 10:53	

LABORATORY CONTROL SAMPLE: 3795882

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	890	89	80-120	

SAMPLE DUPLICATE: 3795883

Parameter	Units	60486888001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	769	765	1	10	

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60486888

QC Batch: 958532 | Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 | Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60486888001, 60486888002, 60486888003, 60486888004

METHOD BLANK: 3799073 Matrix: Water
Associated Lab Samples: 60486888001, 60486888002, 60486888003, 60486888004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.77	1.0	0.77	12/13/25 12:57	

LABORATORY CONTROL SAMPLE: 3799074

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.1	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3799075 3799076

Parameter	Units	60486888001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	27.0	100	100	109	109	82	82	80-120	0	15	

MATRIX SPIKE SAMPLE: 3799098

Parameter	Units	60486914002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	21.4	5	27.0	112	80-120	E

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

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60486888

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN RCPA-VERIFICATION
Pace Project No.: 60486888

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60486888001	**R-MW-1**	SM 2540C	957722		
60486888002	**R-MW-2**	SM 2540C	957722		
60486888003	**R-DUP-1**	SM 2540C	957722		
60486888004	**R-FB-1**	SM 2540C	957722		
60486888001	**R-MW-1**	EPA 300.0	958532		
60486888002	**R-MW-2**	EPA 300.0	958532		
60486888003	**R-DUP-1**	EPA 300.0	958532		
60486888004	**R-FB-1**	EPA 300.0	958532		

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WO# : 60486888

60486888

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_Sample Cor		
	Revision: 3	Effective Date: 09/22/2025	Issued By: Lenexa

DP 12.3

Client Name: Rock Smith Geoengineering

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

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

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐ Cooling process has begun ☐

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

Thermometer Used: T301 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): As-read 0.1 Corr. Factor 0.0 Corrected 0.1

Date and initials of person examining contents: DP 12-3

Temperature should be above freezing to 6°C

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

_____

_____

Project Manager Review: _____ Date: _____

Qualtrax Document ID: 30468

Page 1 of 1

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CHAIN-OF-CUSTODY / Analytical Request Document

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

60486888

Page: 1 of 1

Section A — **Required** Client Information:

Company:	Rocksmith Geoengineering, LLC
Address:	5233 Roanoke Drive
	St. Charles, MO 63304
Email To:	mark.haddock@rocksmithgeo.com
Pho	314-974-5678
Fax	
Requested Due Date/TAT:	Standard

Section B — **Required** Project Information:

Report To:	Mark Haddock
Copy To:	Jeffery Ingram, Grant Morey
Purchase Order No.:	COC #1
Project Name:	Ameren RCPA - Verification Sampling
Project Number:	COC#

Section C — Invoice Information:

Attention:	
Company Name:	Rocksmith
Address:	
Pace Quote Reference:	Jamie Church
Pace Project Manager:	
Pace Profile #:	15856, line 1

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA O _____

Site Location STATE: MO

Section D — **Required** Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRA DATE	COLLECTED COMPOSITE END/GRA TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: Chloride	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N: N	N		
1	R-MW-1	WT	G			12-1-25	1150		1	X								X	X		
2	R-MW-2	WT	G				1235		1	X								X	X		
3	R-DUP-1	WT	G						1	X								X	X		
4	R-FB-1	WT	G				1232		1	X								X	X		
5	R-MS-1	WT	G				1150		1	X								X	X		
6	R-MSD-1	WT	G				1150		1	X								X	X		Taken @ R-MW-1
7		WT	G																		
8		WT	G																		
9		WT	G																		
10		WT	G																		
11		WT	G																		
12		WT	G																		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	David Church Rocksmith	12-2-25	1545	Carmen Jure Pace	12/3	0847	0.1

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: David Church

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 12-2-25

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

Client: Rocksmith Geoengineering

Profile/EZ # 15856, 1

Site: Ameren RCPA verification Sampling

Notes • no time, R-OUP-1
• Sample 5,6 on line 1

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1	WT																			3												
2	|																		1												
3	|																		1												
4	|																		1												
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1B	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2B	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3B	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60486858

Memorandum

December 18, 2025

To:	Project File Rocksmith Geoengineering, LLC	**Project Number:**	23008-25
CC:	Mark Haddock, Jeffrey Ingram		
From:	Valerie Hurt	**Email:**	Valerei.Hurt@rocksmithgeo.com
RE:	**Data Validation Summary, Rush Island Energy Center – RCPA – Data Package 60486888**		

The following is a summary of instances where quality control criteria in the functional guidelines were not met and data qualification was required:

- None.

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Company Name: Rocksmith Geoengineering
Project Manager: J. Ingram
Project Name: Ameren RCPA Verification
Project Number: 23008-25
Reviewer: V. Hurt
Validation Date: 12/18/2025

Laboratory: Pace Analytical
SDG #: 60486888
Analytical Method (type and no.): SM 2540C and EPA 300.0 (Chloride)
Matrix: ☐ Air ☐ Soil/Sed. ☒ Water ☐ Waste ☐ _____
Sample Names R-MW-1, R-MW-2, R-DUP-1, R-FB-1

NOTE: Please provide calculation in Comment areas or on the back (if on the back please indicate in comment areas).

Field Information	YES	NO	NA	COMMENTS
a) Sampling dates noted?	x			12/1/2025
b) Sampling team indicated?	x			JDQ
c) Sample location noted?	x			
d) Sample depth indicated (Soils)?			x	
e) Sample type indicated (grab/composite)?	x			Grab
f) Field QC noted?	x			See Notes
g) Field parameters collected (note types)?	x			pH, Spec Cond, Turb, Temp, DO, ORP
h) Field Calibration within control limits?	x			
i) Notations of unacceptable field conditions/performances from field logs or field notes?		x		
j) Does the laboratory narrative indicate deficiencies?			x	No lab narrative.

Note Deficiencies: _____

Chain-of-Custody (COC)	YES	NO	NA	COMMENTS
a) Was the COC properly completed?	x			
b) Was the COC signed by both field and laboratory personnel?	x			
c) Were samples received in good condition?	x			

General (reference QAPP or Method)	YES	NO	NA	COMMENTS
a) Were hold times met for sample pretreatment?	x			
b) Were hold times met for sample analysis?	x			
c) Were the correct preservatives used?	x			
d) Was the correct method used?	x			
e) Were appropriate reporting limits achieved?	x			
f) Were any sample dilutions noted?	x			See Notes
g) Were any matrix problems noted?		x		

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Blanks	YES	NO	NA	COMMENTS
a) Were analytes detected in the method blank(s)?	☐	☒	☐	
b) Were analytes detected in the field blank(s)?	☐	☒	☐	R-FB-1 @ R-MW-7
c) Were analytes detected in the equipment blank(s)?	☐	☐	☒	
d) Were analytes detected in the trip blank(s)?	☐	☐	☒	

Laboratory Control Sample (LCS)	YES	NO	NA	COMMENTS
a) Was a LCS analyzed once per SDG?	☒	☐	☐	
b) Were the proper analytes included in the LCS?	☒	☐	☐	
c) Was the LCS accuracy criteria met?	☒	☐	☐	

Duplicates	YES	NO	NA	COMMENTS
a) Were field duplicates collected (note original and duplicate sample names)?	☒	☐	☐	R-DUP-1 collected @ R-MW-2
b) Were field dup. precision criteria met (note RPD)?	☒	☐	☐	
c) Were lab duplicates analyzed (note original and duplicate samples)?	☒	☐	☐	
d) Were lab dup. precision criteria met (note RPD)?	☒	☐	☐	

Blind Standards	YES	NO	NA	COMMENTS
a) Was a blind standard used (indicate name, analytes included and concentrations)?	☐	☐	☒	
b) Was the %D within control limits?	☐	☐	☒	

Matrix Spike/Matrix Spike Duplicate (MS/MSD)	YES	NO	NA	COMMENTS
a) Was MS accuracy criteria met?	☒	☐	☐	
Recovery could not be calculated since sample contained high concentration of analyte?	☐	☐	☒	
b) Was MSD accuracy criteria met?	☒	☐	☐	
Recovery could not be calculated since sample contained high concentration of analyte?	☐	☐	☒	
c) Were MS/MSD precision criteria met?	☒	☐	☐	

Comments/Notes:

General:

Chloride samples diluted, no qualification necessary.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Comments/Notes:

MS/MSD:

3799098: Analyte concentration exceeded calibration range. Associated with unrelated sample, no qualification necessary.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Data Qualification:

Sample Name	Constituent(s)	Result	Qualifier	Reason

Signature: _____ Date: 12/18/2025

Appendix B

November 2024 Assessment Monitoring Statistical Evaluation

Memorandum

March 12, 2025

To:	Ameren Missouri – Lisa Meyer	**Project Number:**	23008-24
CC:	Ameren Missouri - Susan Knowles, Craig Giesmann, Bill Kutosky, Austin Nieman		
From:	Rocksmith Geoengineering - Mark Haddock, P.E., Jeff Ingram, R.G., Grant Morey, Amanda Derhake, PhD, P.E.	**Email:**	jeff.ingram@rocksmithgeo.com
RE:	**Assessment Monitoring Statistical Evaluation, RCPA Surface Impoundment Rush Island Energy Center, Jefferson County, Missouri**		

This Technical Memorandum provides the results of the Assessment Monitoring Statistical Evaluation for the November 2024 sampling event at the RCPA Surface Impoundment at the Rush Island Energy Center located in Jefferson County, Missouri. Included in the memorandum is a summary of constituents that are present at a Statistically Significant Level (SSL), a list of site-specific Groundwater Protection Standards (**Table 1**), and the Sanitas Technologies™ (Sanitas) statistical software output for each of the Appendix IV parameters (**Appendix A** and **Appendix B**).

The Appendix IV constituents were evaluated for SSLs using the methods and procedures outlined in the Statistical Analysis Plan (SAP). As with previous statistical evaluations, an analysis was conducted to identify new outliers in the dataset with the inclusion of data collected in November 2024. The following outliers were removed from the dataset prior to calculation of confidence limits:

- Antimony
  - R-MW-7 at 0.55 J micrograms per liter (µg/L) on 3/10/2016: result is statistically higher than other antimony values at the same monitoring well. This higher result is not consistent with subsequent antimony results at the well and is an outlier.
- Barium
  - R-MW-2 at 26.2 µg/L on 3/10/2016: result is statistically higher than other barium values at the same monitoring well. This higher result is not consistent with subsequent barium results at the well and is an outlier.
- Beryllium
  - R-MW-3 at 1.0 µg/L on 6/7/2024: result is statistically higher than other beryllium values at the same monitoring well. This higher result is not consistent with previous or subsequent beryllium results at the well and is an outlier.

- Fluoride
    - R-MW-3 at 0.51 milligrams per liter (mg/L) on 4/25/2023: result is statistically lower than other fluoride values at the same monitoring well. This lower result is not consistent with previous or subsequent fluoride results at the well and is an outlier.
- Lead
    - R-MW-2 at non-detect (<2.5 µg/L) on 5/2/2016: result is statistically lower than other lead values at the same monitoring well. This lower result is not consistent with previous or subsequent lead results at the well and is an outlier.
- Radium 226 + 228
    - R-MW-7 at 1.426 and 1.278 picocuries per liter (pCi/L) on 11/2/2018 and 9/30/2019, respectively: results are statistically higher than other radium values at the same monitoring well. These higher results are not consistent with previous or subsequent radium results at the well and are outliers.

An analysis of the outliers removed from the dataset to-date was completed. One previously identified outlier was added back into the dataset prior to the calculation of confidence intervals in **Appendix A** and trending confidence bands in **Appendix B**:

- Radium 226 + 228
    - R-MW-2 at non-detect (<5.56 pCi/L) on 10/26/2021: removed during the statistical evaluation for the October 2023 sampling event because the result was statistically higher than other radium results at the same monitoring well. This was due to the high minimum detectable concentration (MDC) reported. Based on subsequent sampling results, the higher result was confirmed, and the result is no longer an outlier.

Based on the results from the confidence interval and trend analysis, no new SSLs were noted. SSLs at the RCPA Surface Impoundment as of November 2024 continue to be:

- Arsenic at R-MW-2, R-MW-3, and R-MW-7/R-MW-7(R)
- Molybdenum at R-MW-2 and R-MW-3

Rocksmith appreciates this opportunity to provide hydrogeological and engineering support services to Ameren. If you have any questions or comments regarding the information provided, please contact the undersigned.

Sincerely,

Rocksmith Geoengineering, LLC



Jeff Ingram, R.G.
Senior Geologist, Partner



Amanda Derhake, PhD, P.E.
Principal Engineer, Senior Partner

Attachments

Tables

Table 1 – RCPA Groundwater Protection Standards

Appendices

Appendix A – Sanitas Confidence Interval Statistical Output

Appendix B – Sanitas Trending Confidence Bands Statistical Output

Tables

Table 1 - RCPA Groundwater Protection Standards
RCPA Surface Impoundment
Rush Island Energy Center

Parameter	Units	MCL or Health Based GWPS	Site GWPS	Value to Return to Detection Monitoring[6]
Antimony	µg/L	6	6	DQR
Arsenic	µg/L	10	30	30
Barium	µg/L	2000	2000	548.6
Beryllium	µg/L	4	4	DQR
Cadmium	µg/L	5	5	DQR
Chromium	µg/L	100	100	2.363
Cobalt	µg/L	6	6	DQR
Fluoride	mg/L	4	4	0.2896
Lead	µg/L	15	15	DQR
Lithium	µg/L	40	64.7	64.7
Mercury	µg/L	2	2	DQR
Molybdenum	µg/L	100	100	DQR
Radium 226 + 228	pCi/L	5	5	2.297
Selenium	µg/L	50	50	DQR
Thallium	µg/L	2	2	DQR

Notes:

1. µg/L - micrograms per liter
2. mg/L - milligrams per liter
3. pCi/L - picocuries per liter
4. MCL - Maximum Contaminant Level. MCLs from United States Environmental Protection Agency (USEPA) 2012 Edition of the Drinking Water Standards and Health Advisories. Updated January 9, 2023 at https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations.
5. Health Based Groundwater Protection Standards (GWPS) were adoped for Appendix IV parameters without an MCL (i.e. cobalt, lithium, molybdenum, and lead). Information available at https://www.epa.gov/coalash/coal-ash-rule.
6. Values were calculated using statistical methods outlined for Detection Monitoring and are used for returning to Detection Monitoring based on available data to date.
7. DQR - Double Quantification Rule. If all baseline data are less than the Practical Quantitation Limit (PQL), then the DQR will be used. More information on the DQR is provided in the Statistical Analysis Plan.
8. Site GWPS is either the MCL/Health Based GWPS or based on background levels (calculated as described in the Statistical Analysis Plan for Assessment Monitoring), whichever is higher.
9. GWPS and background values calculated using results up through April 2023 from monitoring wells MW-B1 and MW-B2.

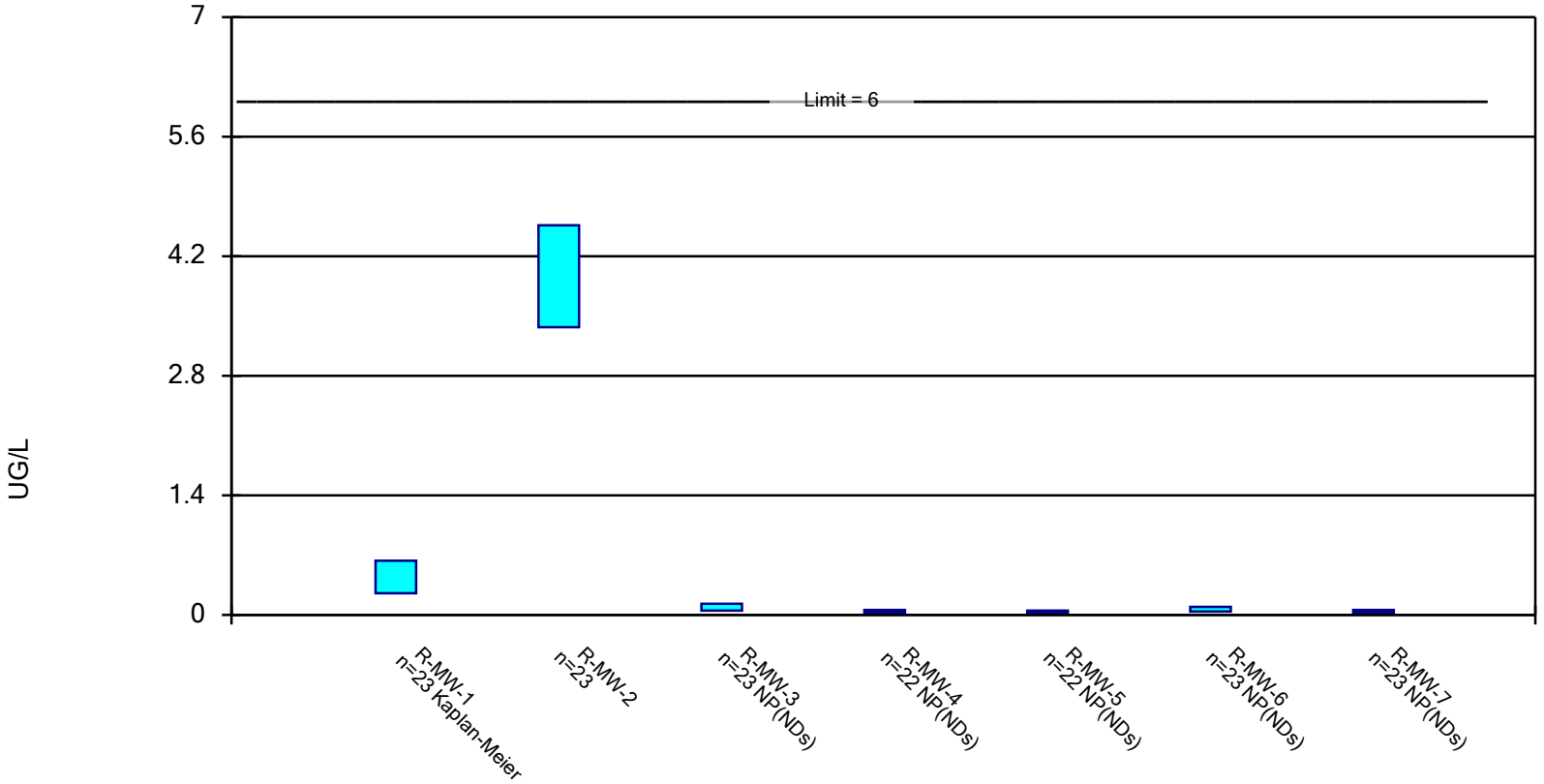
ROCKSMITH GEOENGINEERING

Prepared by: GTM
Checked by: JSI
Reviewed by: MNH

Appendix A
Sanitas Confidence Interval Statistical Output

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



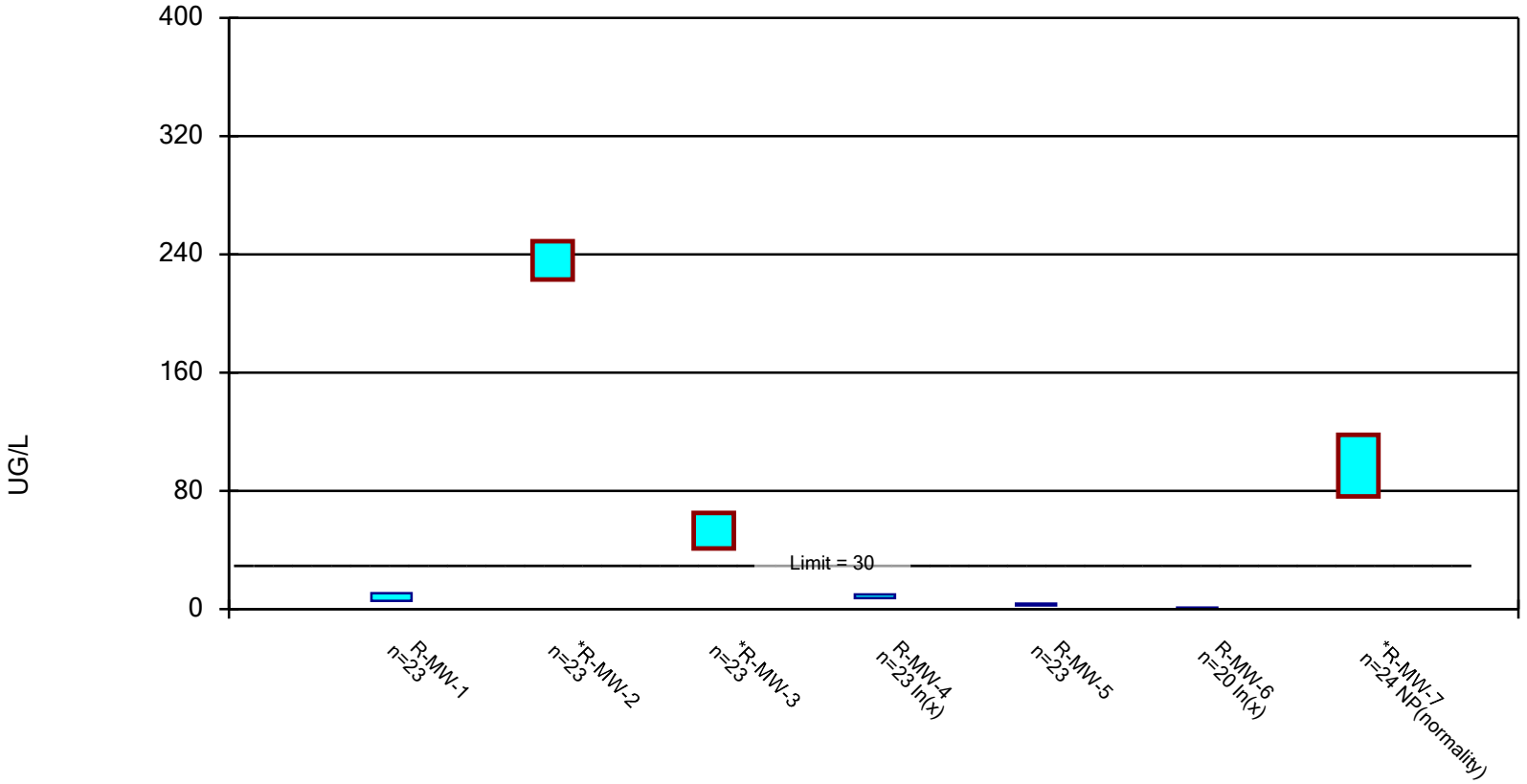
Constituent: ANTIMONY, TOTAL Analysis Run 3/10/2025 4:52 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

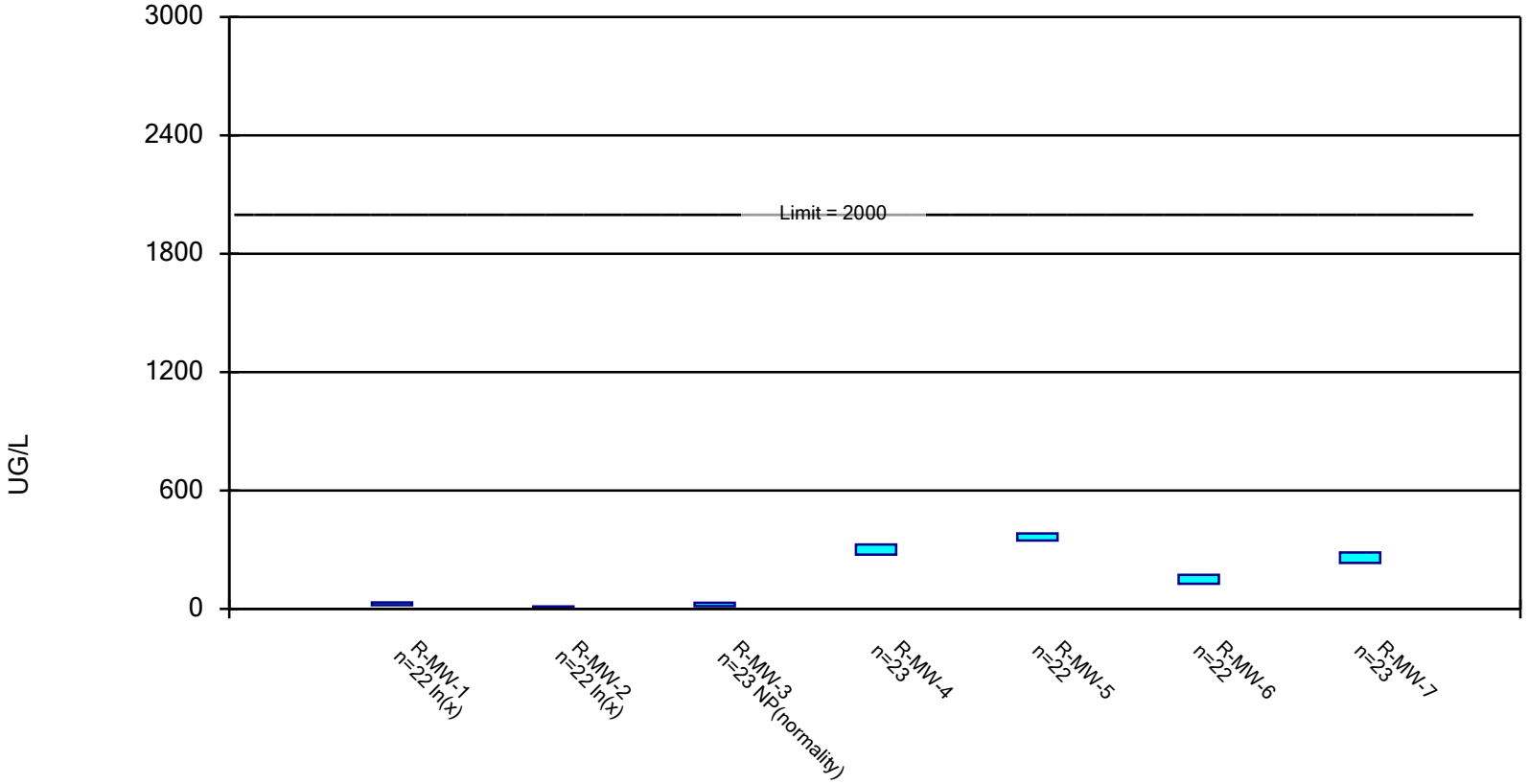


Constituent: ARSENIC, TOTAL Analysis Run 3/10/2025 4:52 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



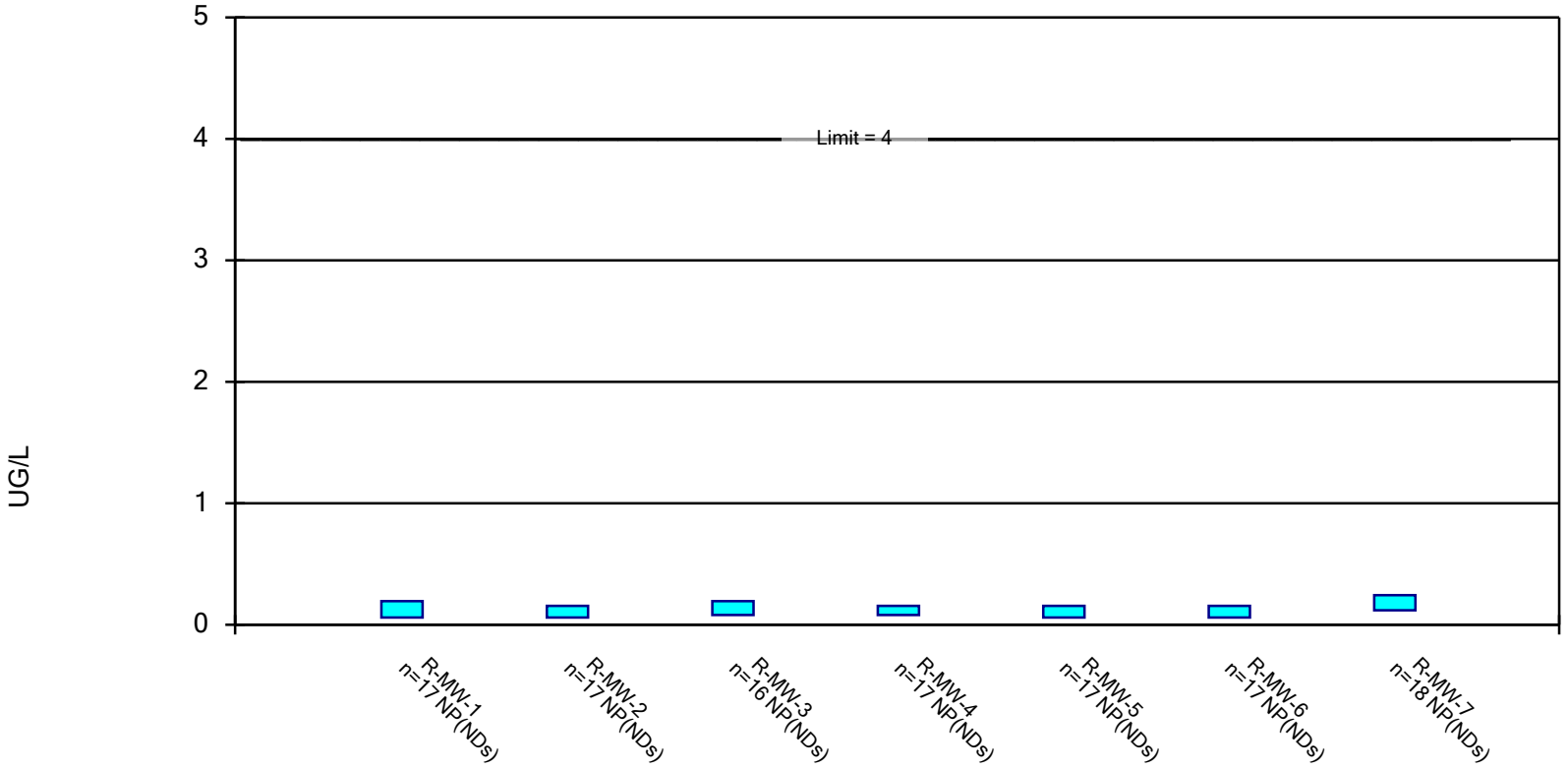
Constituent: BARIUM, TOTAL Analysis Run 3/10/2025 4:52 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

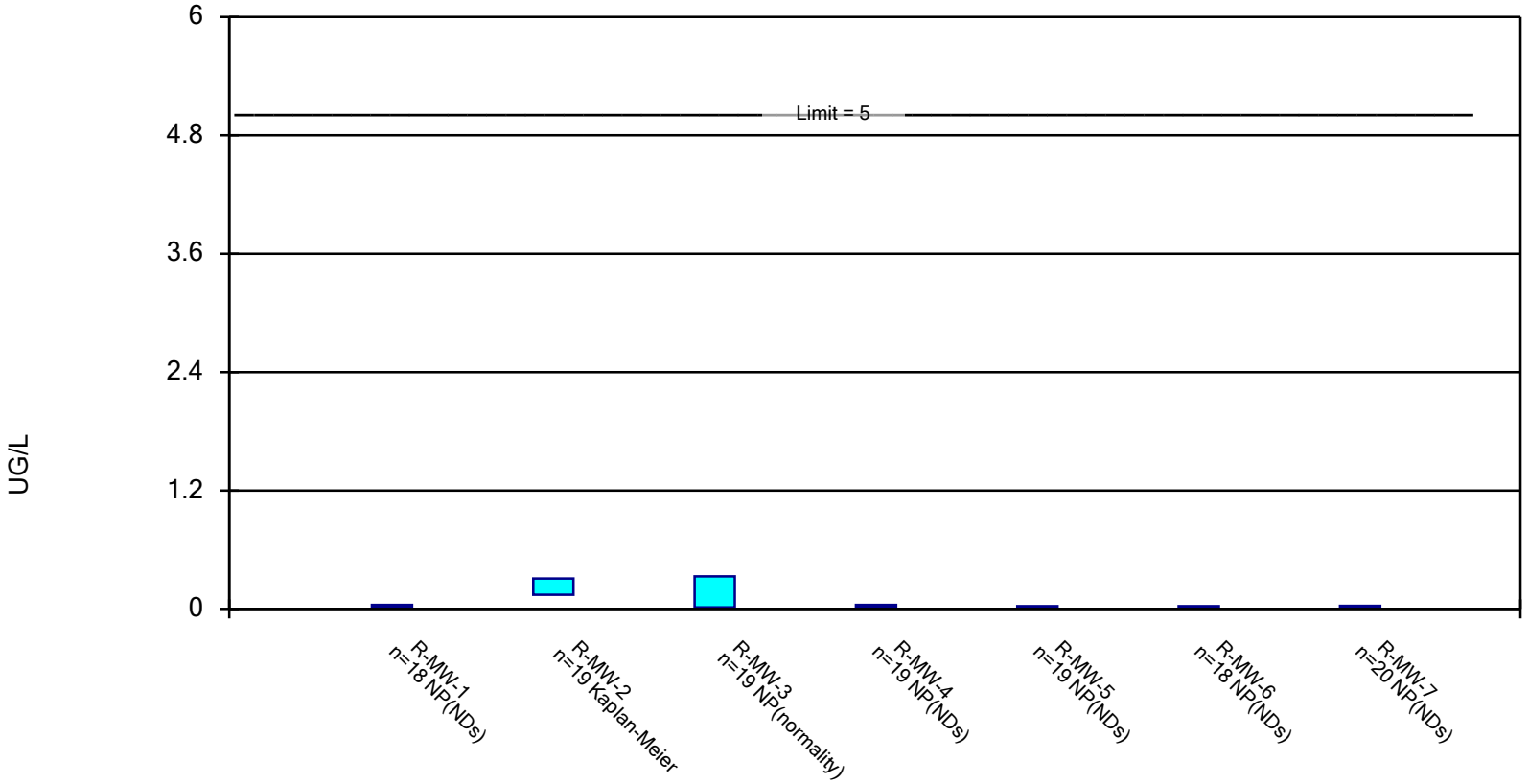


Constituent: BERYLLIUM, TOTAL Analysis Run 3/10/2025 4:52 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

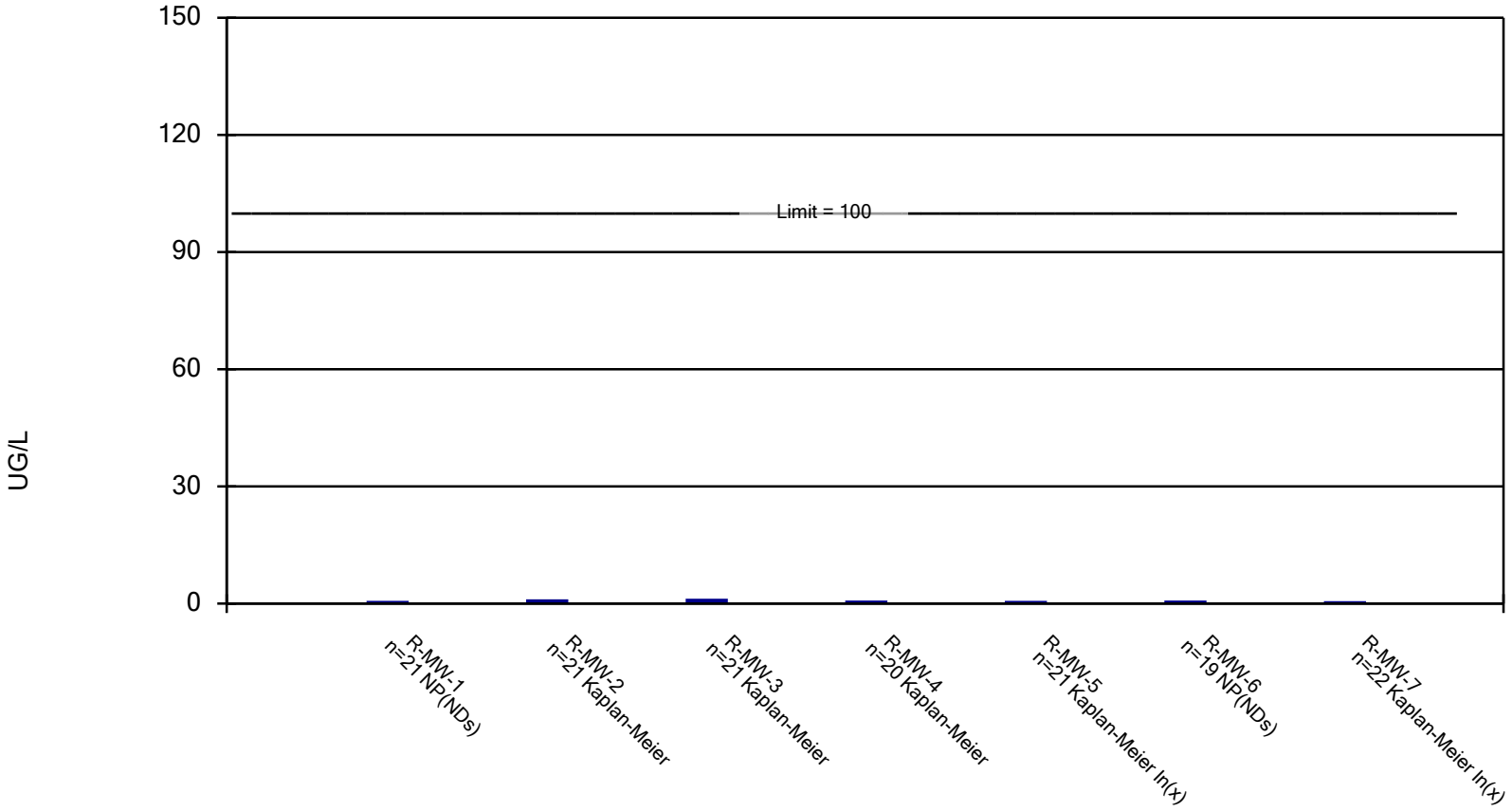


Constituent: CADMIUM, TOTAL Analysis Run 3/10/2025 4:52 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



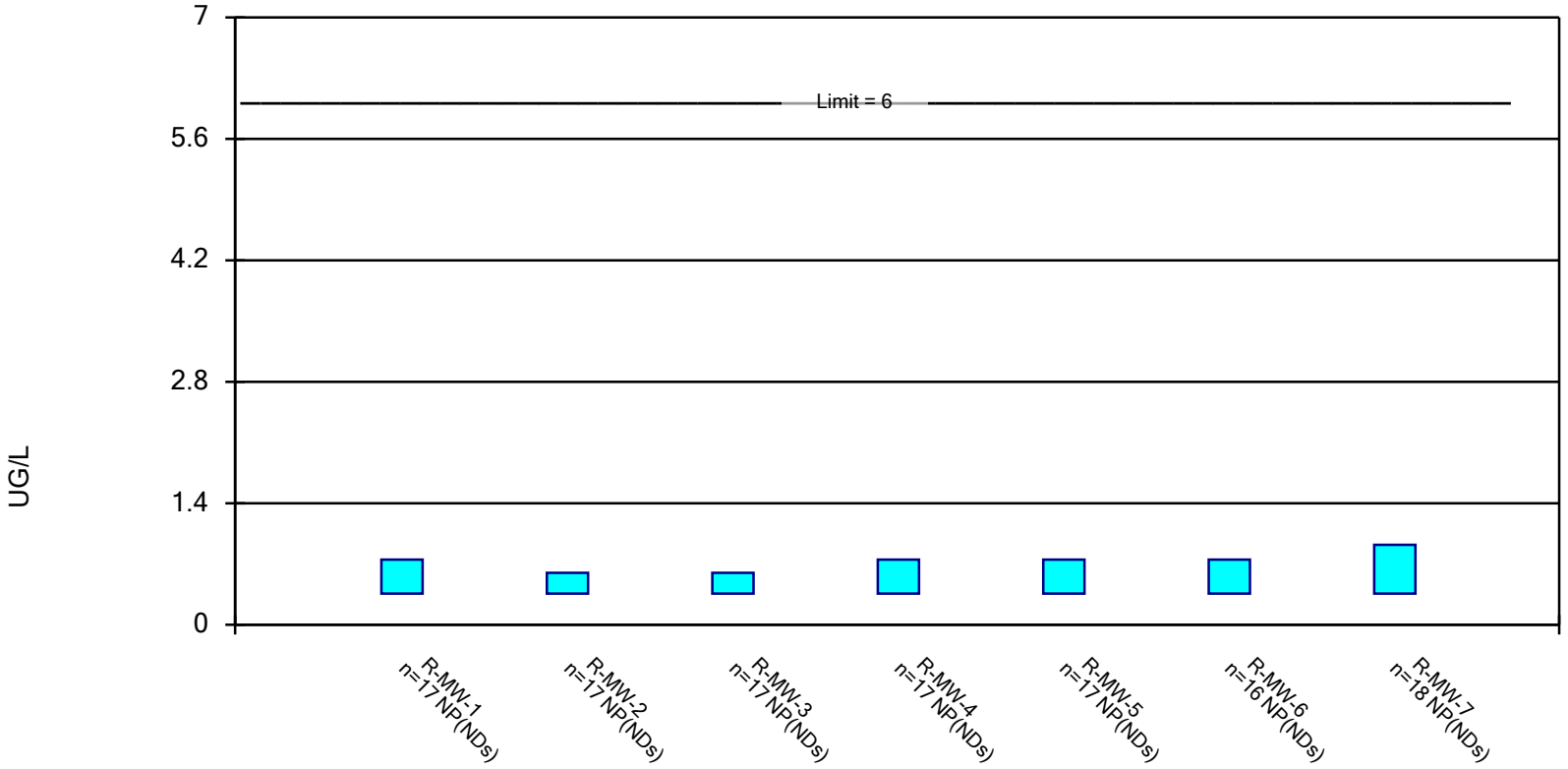
Constituent: CHROMIUM, TOTAL Analysis Run 3/10/2025 4:52 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



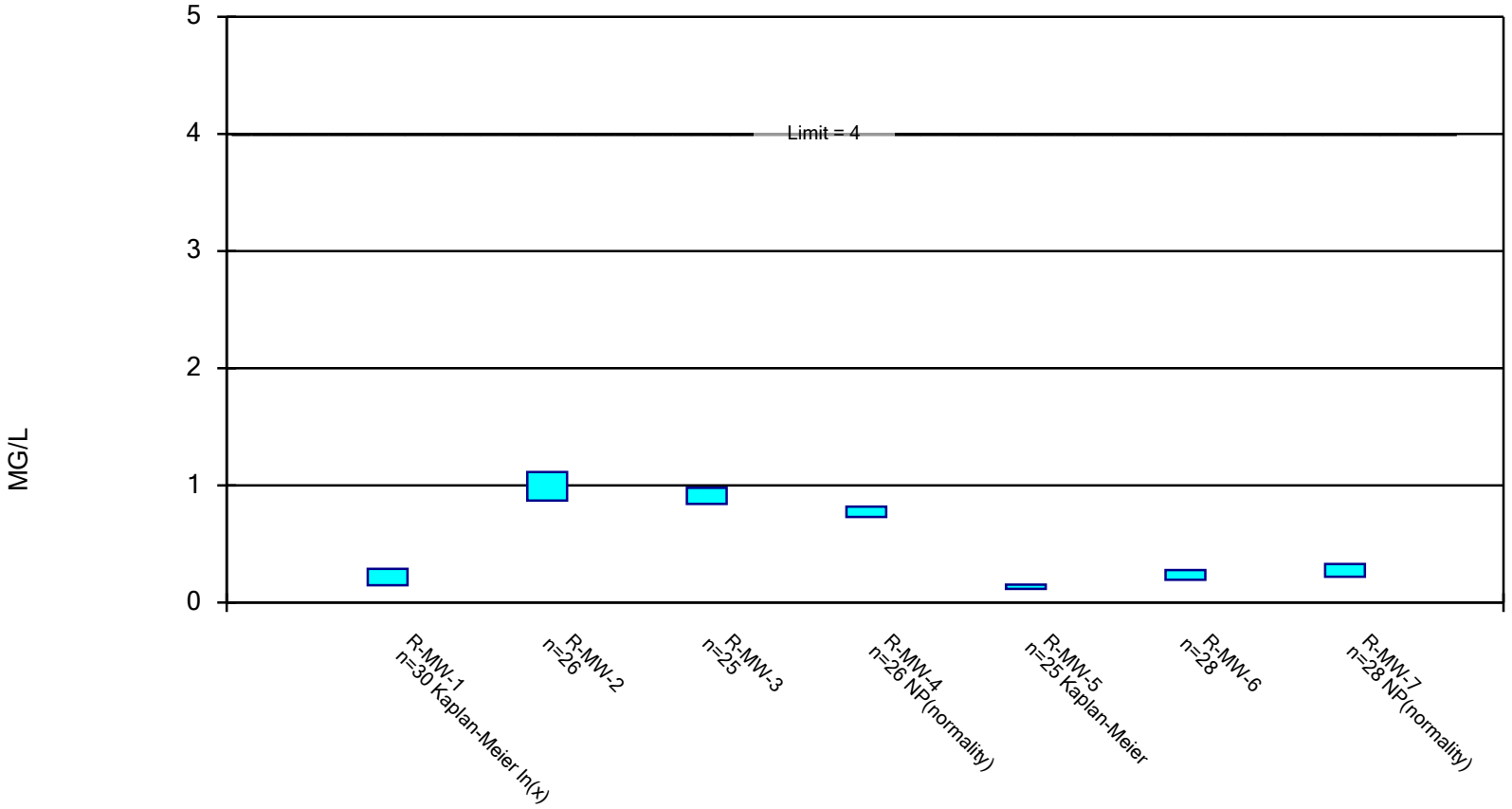
Constituent: COBALT, TOTAL Analysis Run 3/10/2025 4:52 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



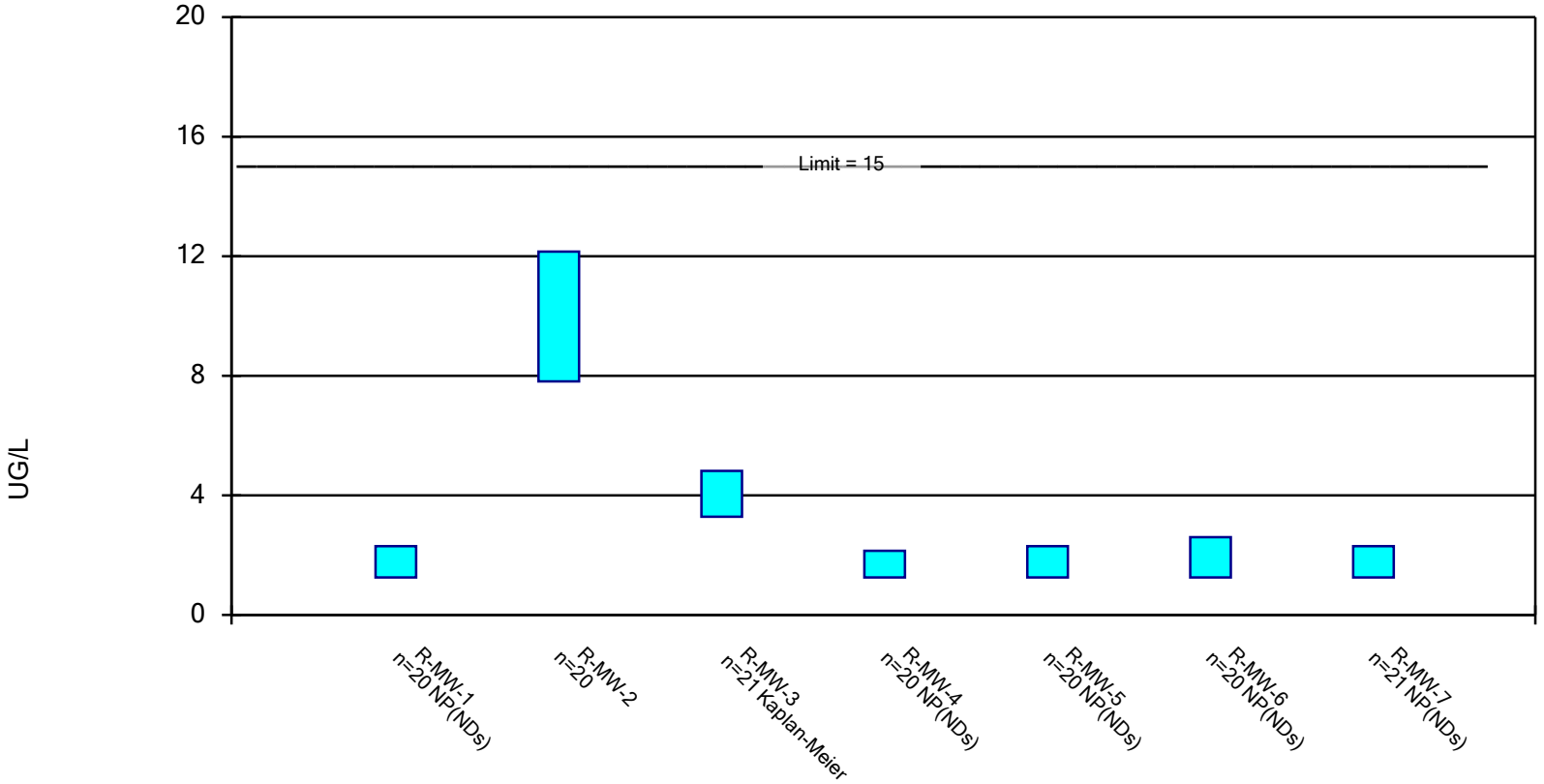
Constituent: FLUORIDE, TOTAL Analysis Run 3/10/2025 4:52 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



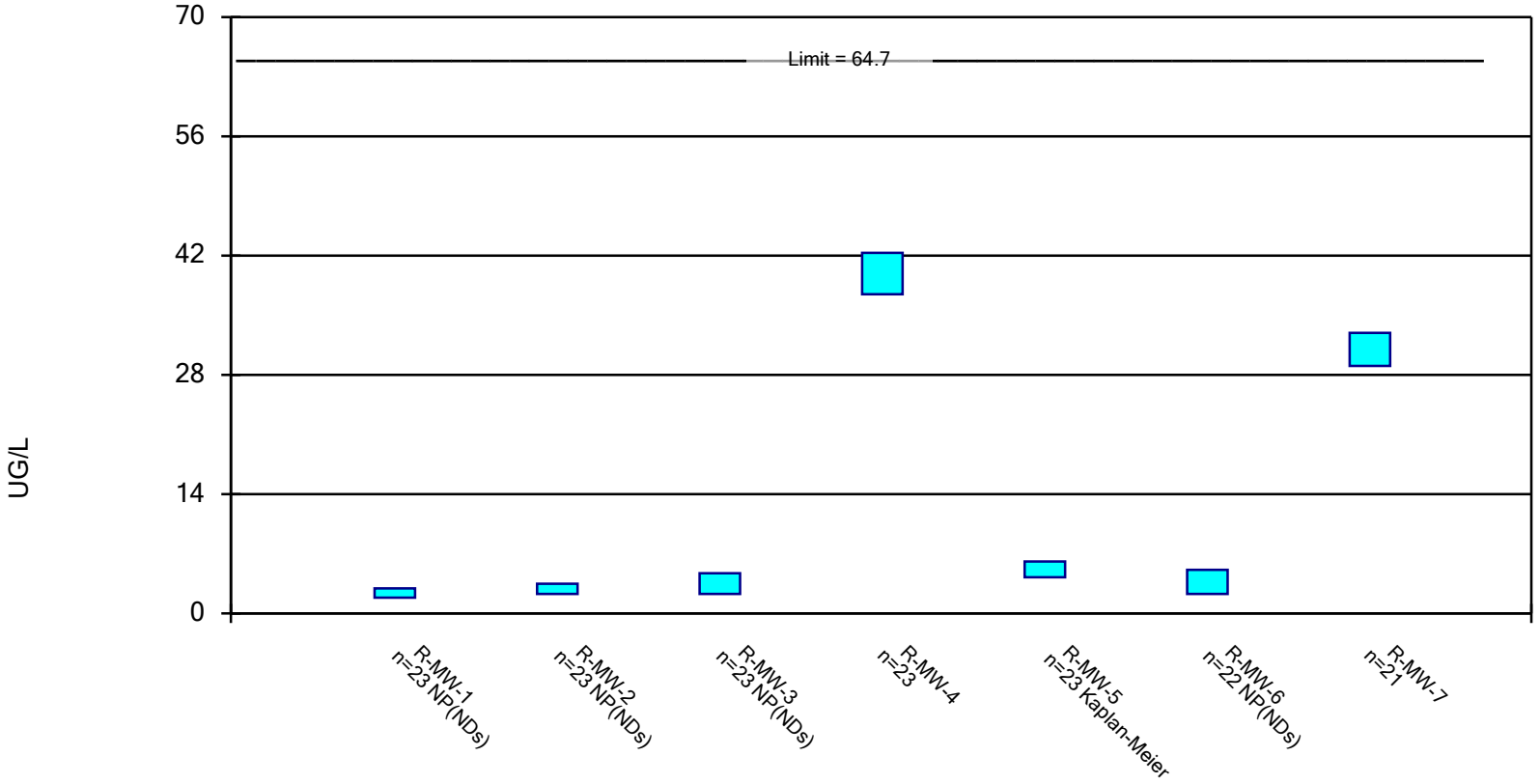
Constituent: LEAD, TOTAL Analysis Run 3/10/2025 4:52 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

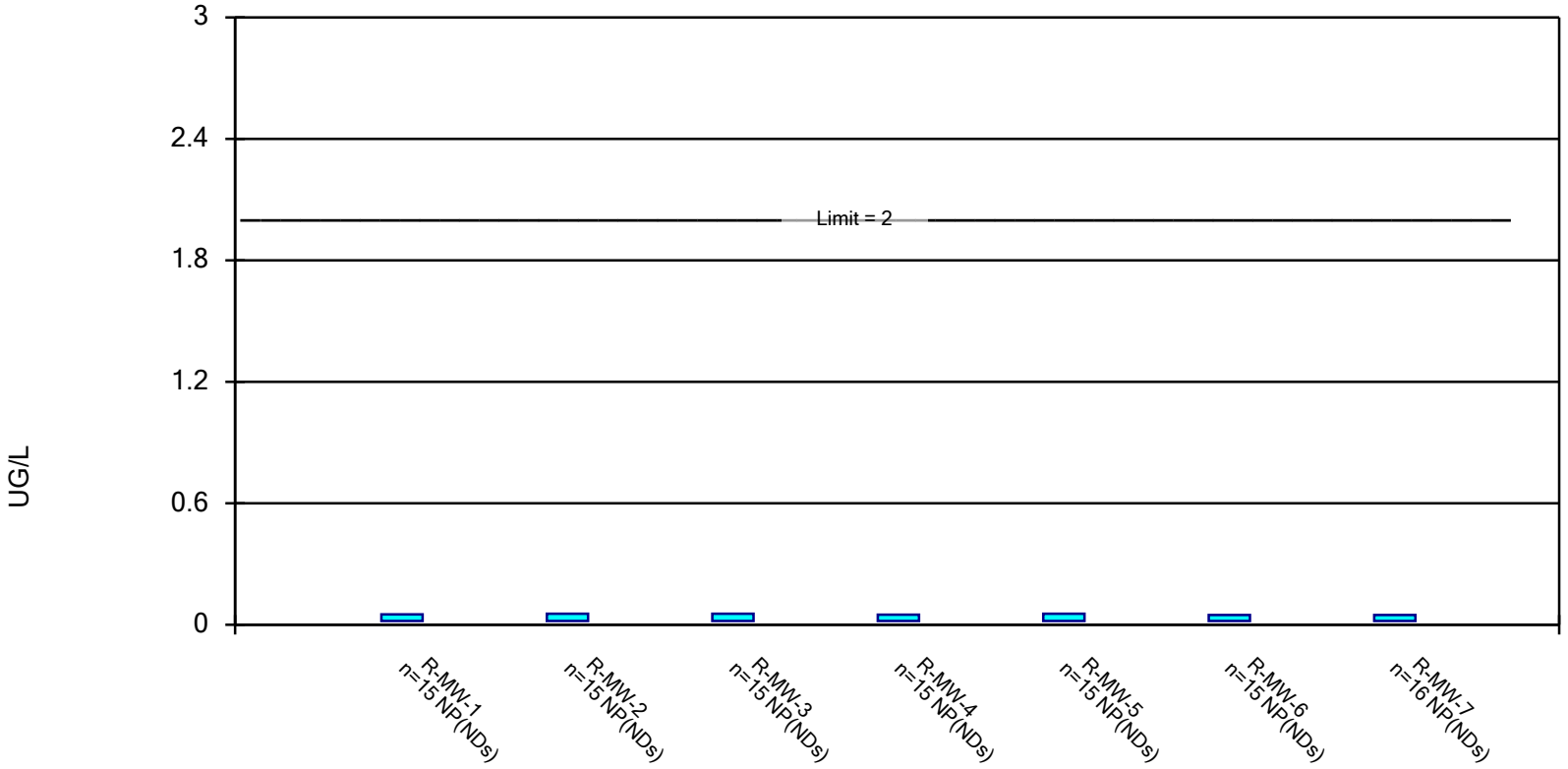


Constituent: LITHIUM, TOTAL Analysis Run 3/10/2025 4:52 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



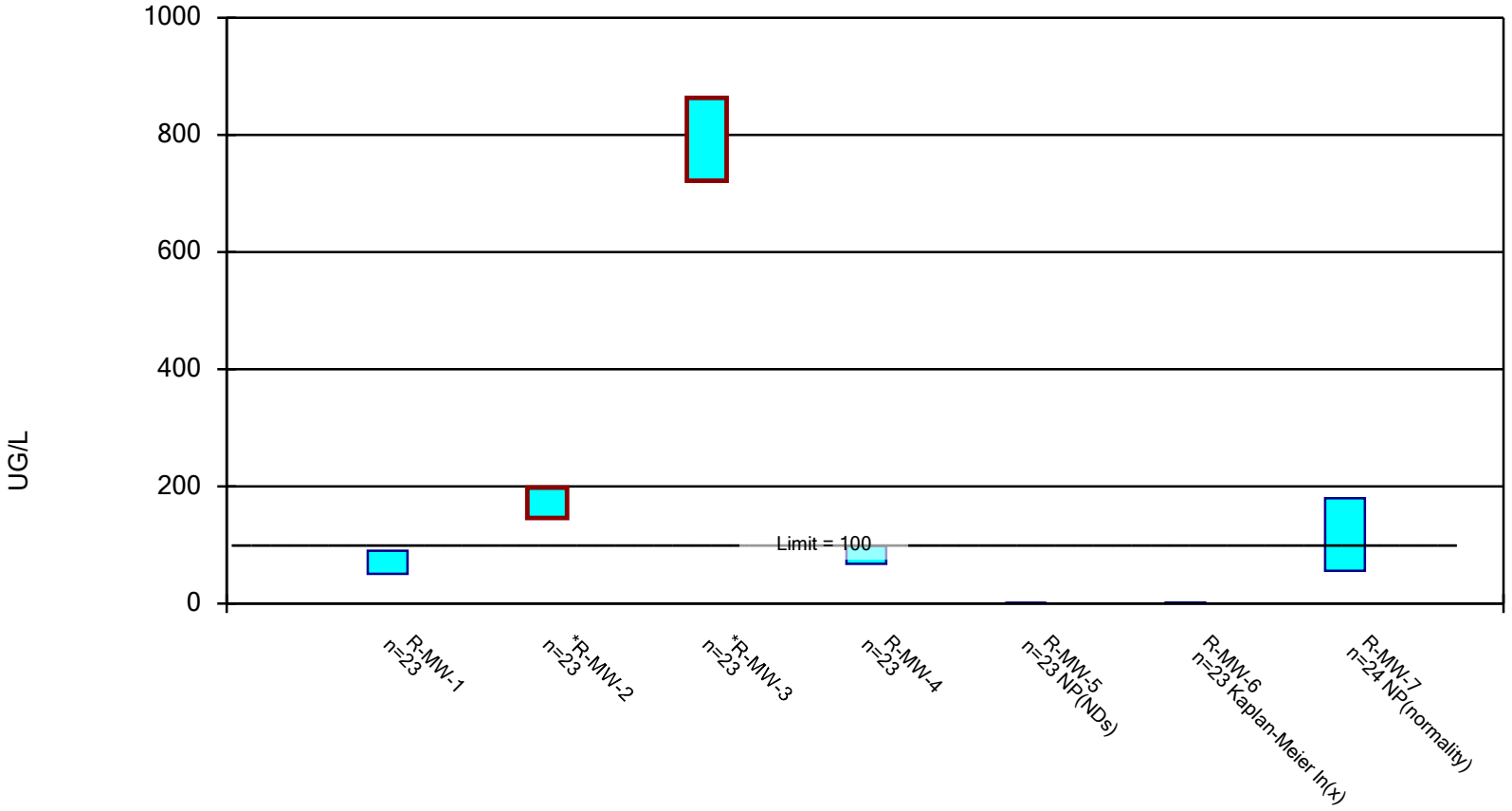
Constituent: MERCURY, TOTAL Analysis Run 3/10/2025 4:52 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



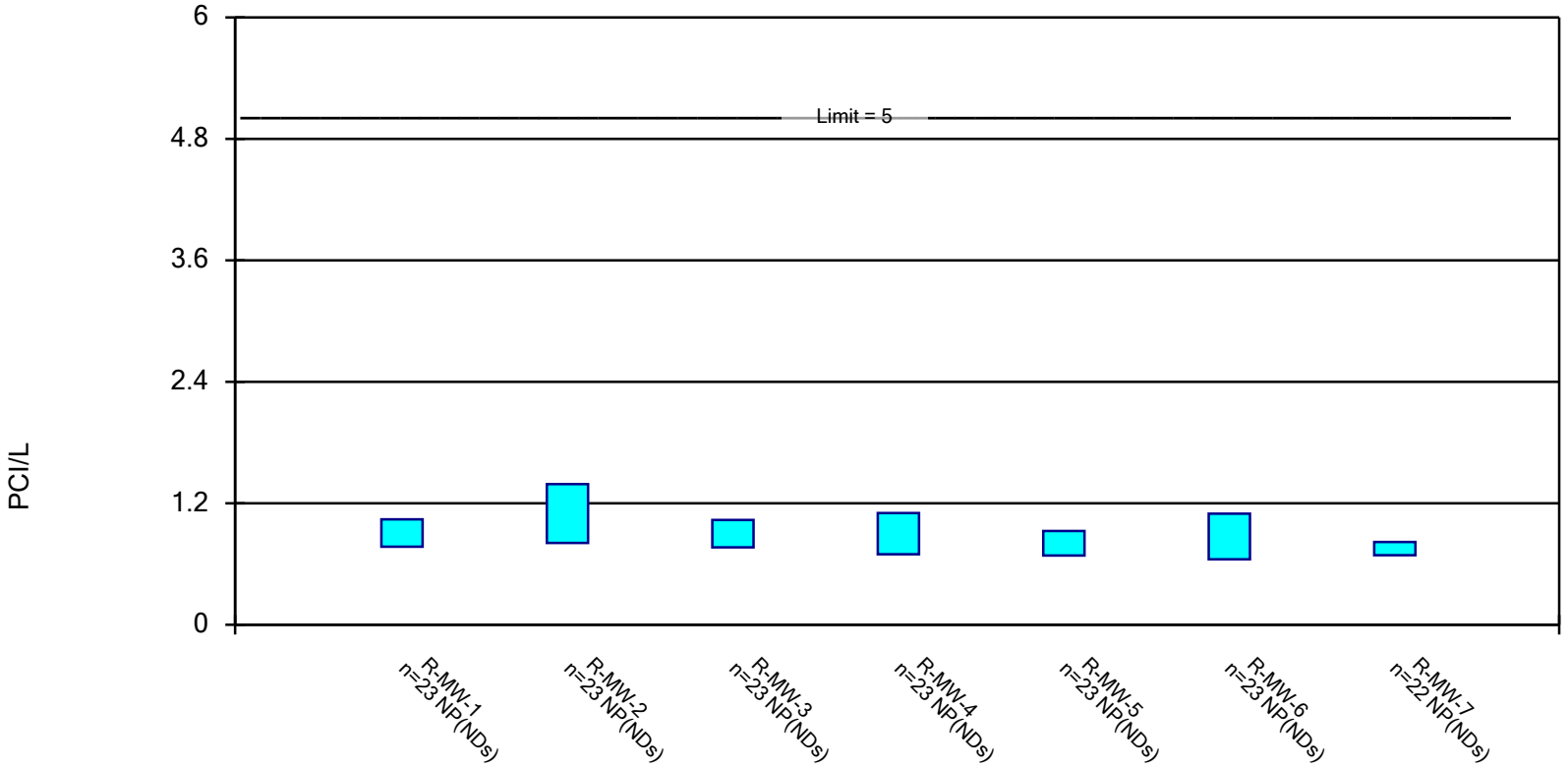
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



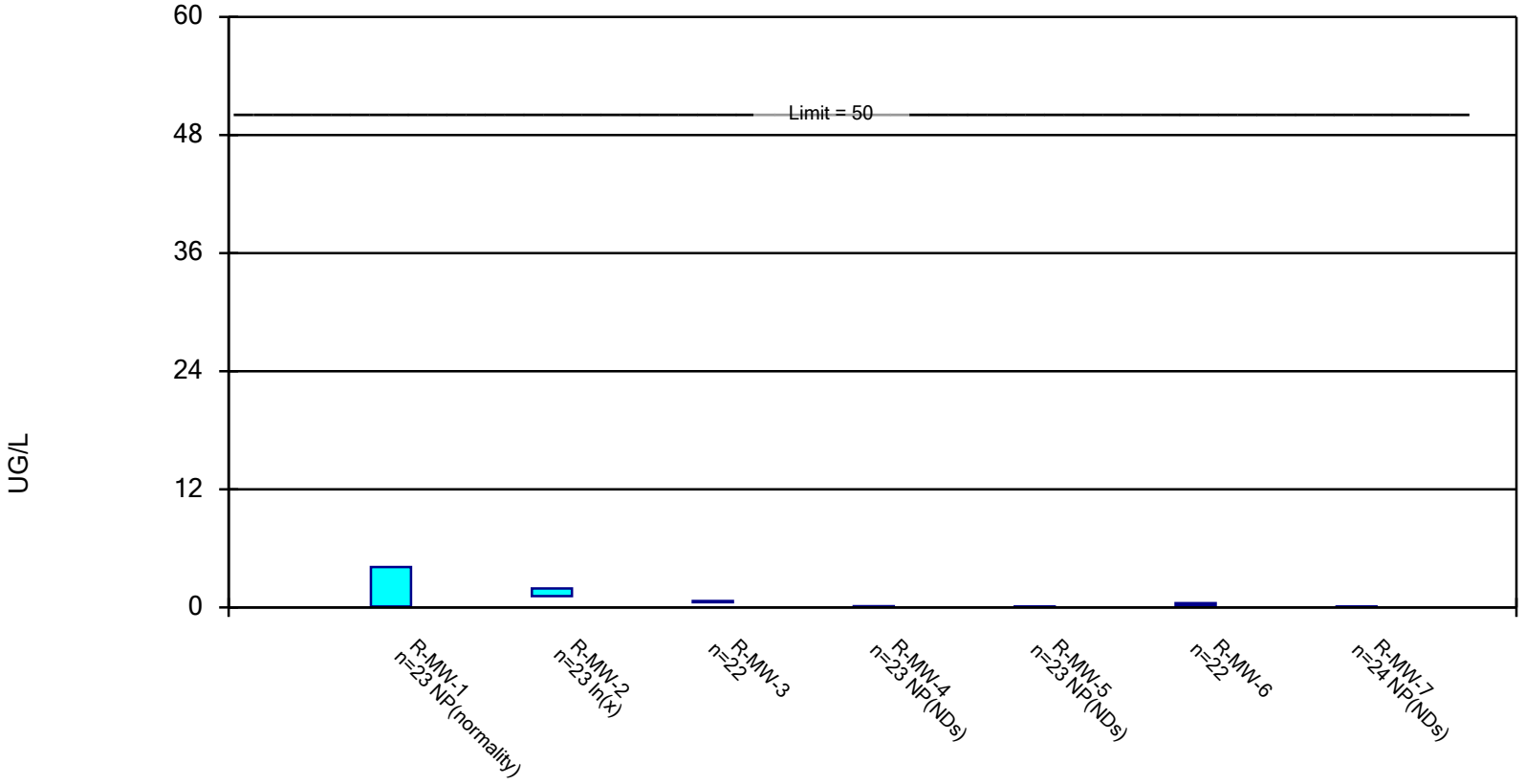
Constituent: RADIUM [226 + 228] Analysis Run 3/10/2025 4:52 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

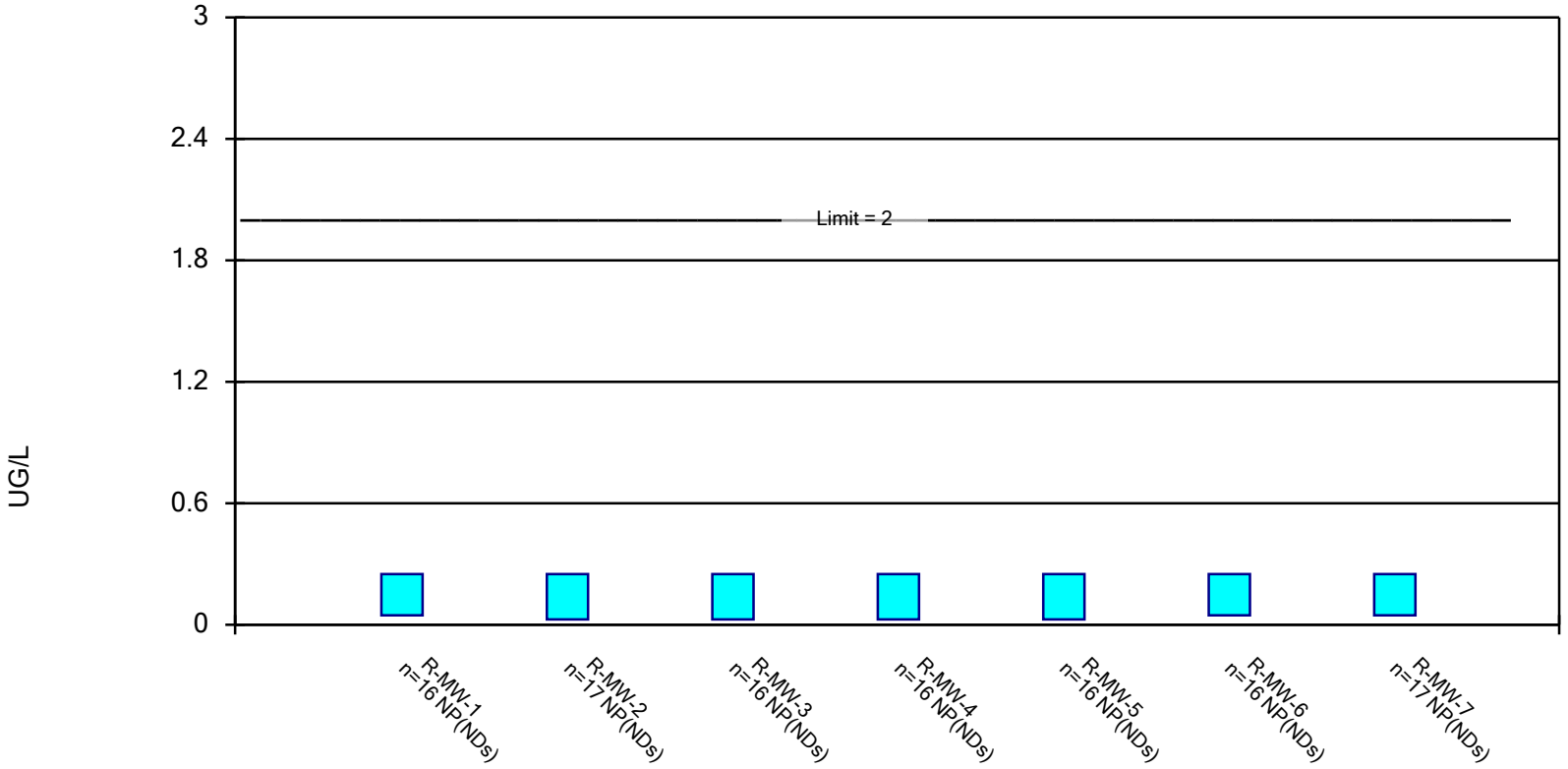


Constituent: SELENIUM, TOTAL Analysis Run 3/10/2025 4:52 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: THALLIUM, TOTAL Analysis Run 3/10/2025 4:52 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Confidence Interval

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 3/10/2025, 4:52 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
ANTIMONY, TOTAL (UG/L)	R-MW-1	0.6334	0.2533	6	No	23	17.39	No	0.01	Param.
ANTIMONY, TOTAL (UG/L)	R-MW-2	4.56	3.37	6	No	23	0	No	0.01	Param.
ANTIMONY, TOTAL (UG/L)	R-MW-3	0.13	0.05	6	No	23	56.52	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-MW-4	0.06	0.029	6	No	22	86.36	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-MW-5	0.05	0.029	6	No	22	95.45	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-MW-6	0.094	0.039	6	No	23	69.57	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-MW-7	0.06	0.029	6	No	23	86.96	No	0.01	NP (NDs)
ARSENIC, TOTAL (UG/L)	R-MW-1	10.82	5.528	30	No	23	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	**R-MW-2**	**249**	**223**	**30**	**Yes**	**23**	**0**	**No**	**0.01**	**Param.**
ARSENIC, TOTAL (UG/L)	**R-MW-3**	**65.03**	**41.09**	**30**	**Yes**	**23**	**0**	**No**	**0.01**	**Param.**
ARSENIC, TOTAL (UG/L)	R-MW-4	9.887	7.423	30	No	23	0	ln(x)	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-MW-5	3.743	2.422	30	No	23	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-MW-6	1.009	0.2549	30	No	20	15	ln(x)	0.01	Param.
ARSENIC, TOTAL (UG/L)	**R-MW-7**	**118**	**76.3**	**30**	**Yes**	**24**	**0**	**No**	**0.01**	**NP (normality)**
BARIUM, TOTAL (UG/L)	R-MW-1	32.72	19.28	2000	No	22	0	ln(x)	0.01	Param.
BARIUM, TOTAL (UG/L)	R-MW-2	12.59	10.01	2000	No	22	0	ln(x)	0.01	Param.
BARIUM, TOTAL (UG/L)	R-MW-3	30.5	14.2	2000	No	23	0	No	0.01	NP (normality)
BARIUM, TOTAL (UG/L)	R-MW-4	326.2	275.8	2000	No	23	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-MW-5	382.1	347.1	2000	No	22	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-MW-6	173	126.9	2000	No	22	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-MW-7	285.7	232.9	2000	No	23	0	No	0.01	Param.
BERYLLIUM, TOTAL (UG/L)	R-MW-1	0.195	0.06	4	No	17	100	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-2	0.155	0.06	4	No	17	100	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-3	0.195	0.08	4	No	16	87.5	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-4	0.155	0.08	4	No	17	94.12	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-5	0.155	0.06	4	No	17	100	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-6	0.155	0.06	4	No	17	94.12	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-7	0.245	0.12	4	No	18	83.33	No	0.01	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-MW-1	0.041	0.0145	5	No	18	77.78	No	0.01	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-MW-2	0.3086	0.1447	5	No	19	15.79	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-MW-3	0.33	0.0145	5	No	19	42.11	No	0.01	NP (normality)
CADMIUM, TOTAL (UG/L)	R-MW-4	0.041	0.0145	5	No	19	78.95	No	0.01	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-MW-5	0.028	0.0145	5	No	19	100	No	0.01	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-MW-6	0.028	0.0145	5	No	18	100	No	0.01	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-MW-7	0.031	0.0145	5	No	20	80	No	0.01	NP (NDs)
CHROMIUM, TOTAL (UG/L)	R-MW-1	0.42	0.086	100	No	21	52.38	No	0.01	NP (NDs)
CHROMIUM, TOTAL (UG/L)	R-MW-2	0.7536	0.3837	100	No	21	23.81	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-MW-3	0.9224	0.402	100	No	21	23.81	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-MW-4	0.4958	0.2007	100	No	20	40	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-MW-5	0.4141	0.1524	100	No	21	28.57	ln(x)	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-MW-6	0.5	0.08	100	No	19	52.63	No	0.01	NP (NDs)
CHROMIUM, TOTAL (UG/L)	R-MW-7	0.3112	0.122	100	No	22	50	ln(x)	0.01	Param.
COBALT, TOTAL (UG/L)	R-MW-1	0.75	0.36	6	No	17	88.24	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-2	0.6	0.36	6	No	17	100	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-3	0.6	0.36	6	No	17	94.12	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-4	0.75	0.36	6	No	17	82.35	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-5	0.75	0.36	6	No	17	88.24	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-6	0.75	0.36	6	No	16	93.75	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-7	0.92	0.36	6	No	18	77.78	No	0.01	NP (NDs)
FLUORIDE, TOTAL (MG/L)	R-MW-1	0.2867	0.1481	4	No	30	20	ln(x)	0.01	Param.

Confidence Interval

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 3/10/2025, 4:52 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
FLUORIDE, TOTAL (MG/L)	R-MW-2	1.114	0.8694	4	No	26	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-MW-3	0.9795	0.8413	4	No	25	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-MW-4	0.82	0.73	4	No	26	0	No	0.01	NP (normality)
FLUORIDE, TOTAL (MG/L)	R-MW-5	0.154	0.1163	4	No	25	16	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-MW-6	0.2775	0.1935	4	No	28	10.71	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-MW-7	0.33	0.22	4	No	28	17.86	No	0.01	NP (normality)
LEAD, TOTAL (UG/L)	R-MW-1	2.3	1.25	15	No	20	100	No	0.01	NP (NDs)
LEAD, TOTAL (UG/L)	R-MW-2	12.16	7.812	15	No	20	0	No	0.01	Param.
LEAD, TOTAL (UG/L)	R-MW-3	4.822	3.281	15	No	21	42.86	No	0.01	Param.
LEAD, TOTAL (UG/L)	R-MW-4	2.15	1.25	15	No	20	95	No	0.01	NP (NDs)
LEAD, TOTAL (UG/L)	R-MW-5	2.3	1.25	15	No	20	85	No	0.01	NP (NDs)
LEAD, TOTAL (UG/L)	R-MW-6	2.6	1.25	15	No	20	80	No	0.01	NP (NDs)
LEAD, TOTAL (UG/L)	R-MW-7	2.3	1.25	15	No	21	90.48	No	0.01	NP (NDs)
LITHIUM, TOTAL (UG/L)	R-MW-1	2.95	1.85	64.7	No	23	91.3	No	0.01	NP (NDs)
LITHIUM, TOTAL (UG/L)	R-MW-2	3.5	2.3	64.7	No	23	78.26	No	0.01	NP (NDs)
LITHIUM, TOTAL (UG/L)	R-MW-3	4.7	2.3	64.7	No	23	73.91	No	0.01	NP (NDs)
LITHIUM, TOTAL (UG/L)	R-MW-4	42.34	37.45	64.7	No	23	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-MW-5	6.082	4.254	64.7	No	23	43.48	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-MW-6	5.1	2.3	64.7	No	22	63.64	No	0.01	NP (NDs)
LITHIUM, TOTAL (UG/L)	R-MW-7	32.94	29.05	64.7	No	21	0	No	0.01	Param.
MERCURY, TOTAL (UG/L)	R-MW-1	0.052	0.0195	2	No	15	93.33	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-2	0.055	0.0195	2	No	15	93.33	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-3	0.054	0.0195	2	No	15	93.33	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-4	0.05	0.0195	2	No	15	93.33	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-5	0.054	0.0195	2	No	15	93.33	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-6	0.048	0.0195	2	No	15	100	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-7	0.048	0.0195	2	No	16	100	No	0.01	NP (NDs)
MOLYBDENUM, TOTAL (UG/L)	R-MW-1	90.2	51.01	100	No	23	0	No	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	**R-MW-2**	**197.8**	**146.2**	**100**	**Yes**	**23**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	**R-MW-3**	**863.3**	**721.8**	**100**	**Yes**	**23**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	R-MW-4	98.37	67.9	100	No	23	0	No	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	R-MW-5	1	0.45	100	No	23	82.61	No	0.01	NP (NDs)
MOLYBDENUM, TOTAL (UG/L)	R-MW-6	1.708	0.7992	100	No	23	39.13	ln(x)	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	R-MW-7	180	56.1	100	No	24	0	No	0.01	NP (normality)
RADIUM [226 + 228] (PCI/L)	R-MW-1	1.04	0.772	5	No	23	95.65	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-MW-2	1.39	0.807	5	No	23	95.65	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-MW-3	1.036	0.765	5	No	23	95.65	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-MW-4	1.103	0.696	5	No	23	82.61	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-MW-5	0.925	0.6855	5	No	23	82.61	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-MW-6	1.099	0.646	5	No	23	78.26	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-MW-7	0.818	0.688	5	No	22	100	No	0.01	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-MW-1	4.1	0.09	50	No	23	34.78	No	0.01	NP (normality)
SELENIUM, TOTAL (UG/L)	R-MW-2	1.934	1.144	50	No	23	0	ln(x)	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-MW-3	0.6532	0.5386	50	No	22	0	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-MW-4	0.12	0.09	50	No	23	69.57	No	0.01	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-MW-5	0.09	0.043	50	No	23	100	No	0.01	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-MW-6	0.4456	0.2394	50	No	22	13.64	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-MW-7	0.097	0.06	50	No	24	83.33	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-1	0.25	0.0465	2	No	16	93.75	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-2	0.25	0.026	2	No	17	100	No	0.01	NP (NDs)

Confidence Interval

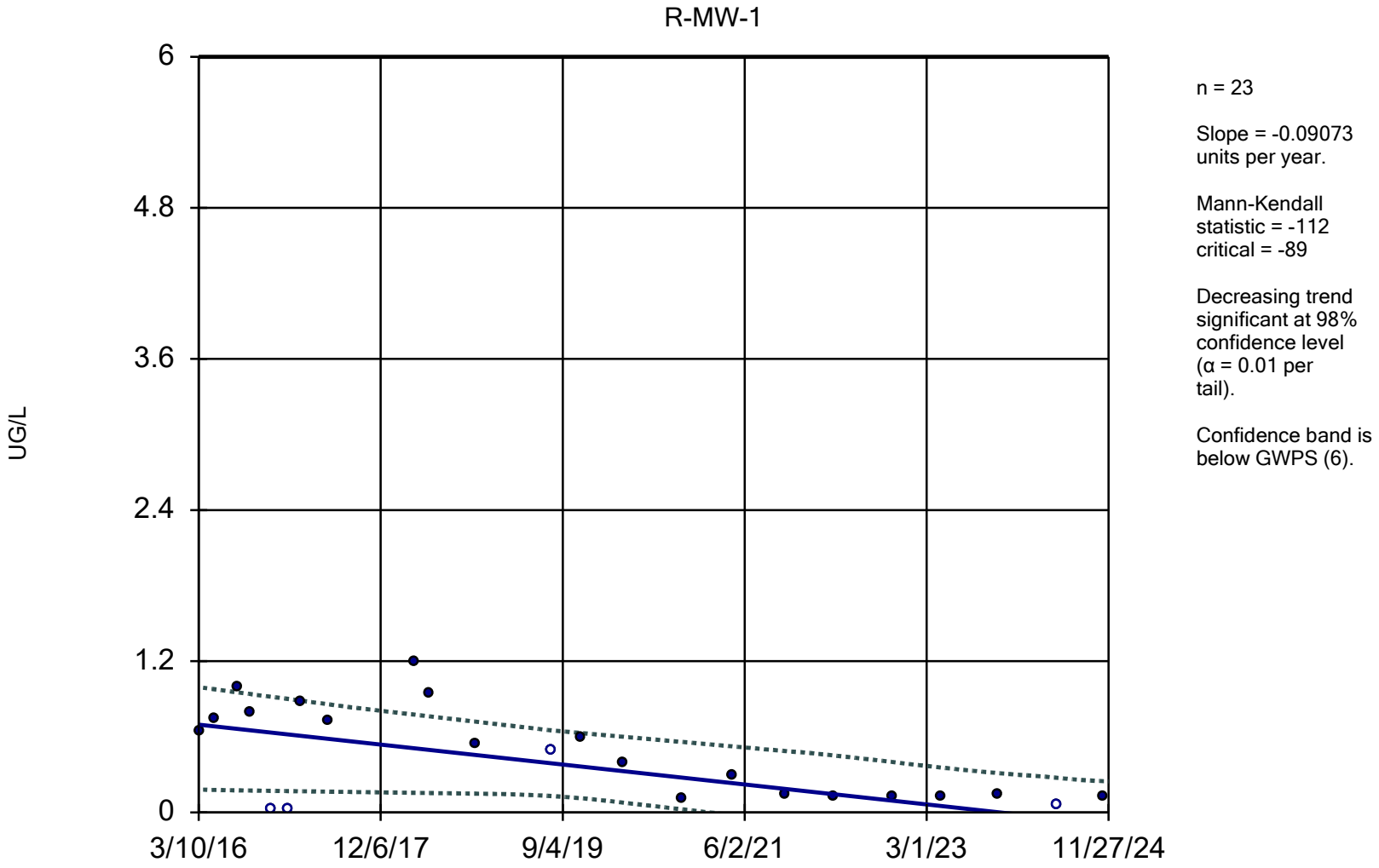
Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 3/10/2025, 4:52 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
THALLIUM, TOTAL (UG/L)	R-MW-3	0.25	0.026	2	No	16	100	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-4	0.25	0.026	2	No	16	100	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-5	0.25	0.026	2	No	16	100	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-6	0.25	0.0465	2	No	16	93.75	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-7	0.25	0.0465	2	No	17	94.12	No	0.01	NP (NDs)

Appendix B
Sanitas Trending Confidence Bands Statistical Output

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



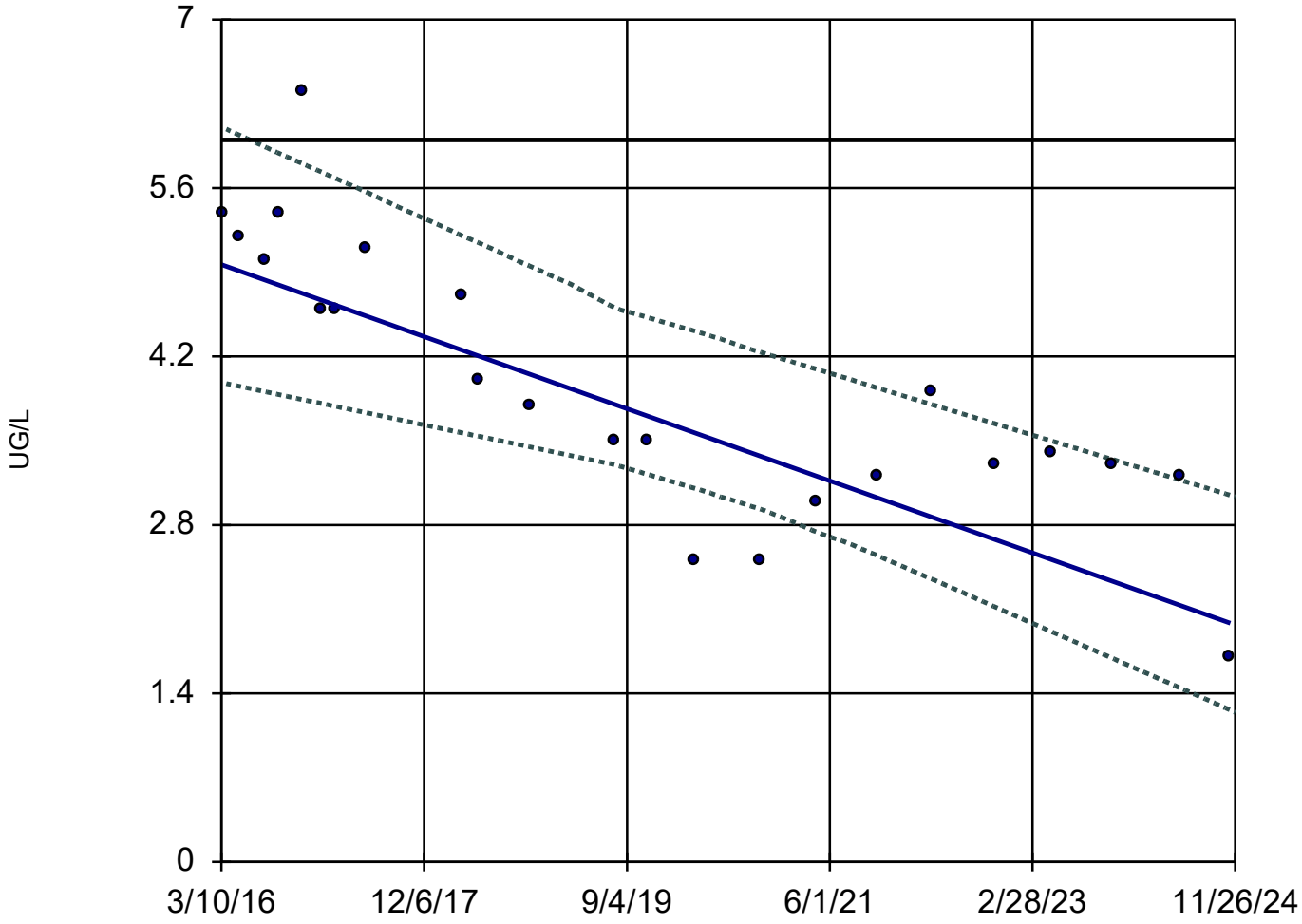
Constituent: ANTIMONY, TOTAL Analysis Run 3/10/2025 5:12 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-MW-2



n = 23

Slope = -0.343 units per year.

Mann-Kendall statistic = -169 critical = -89

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

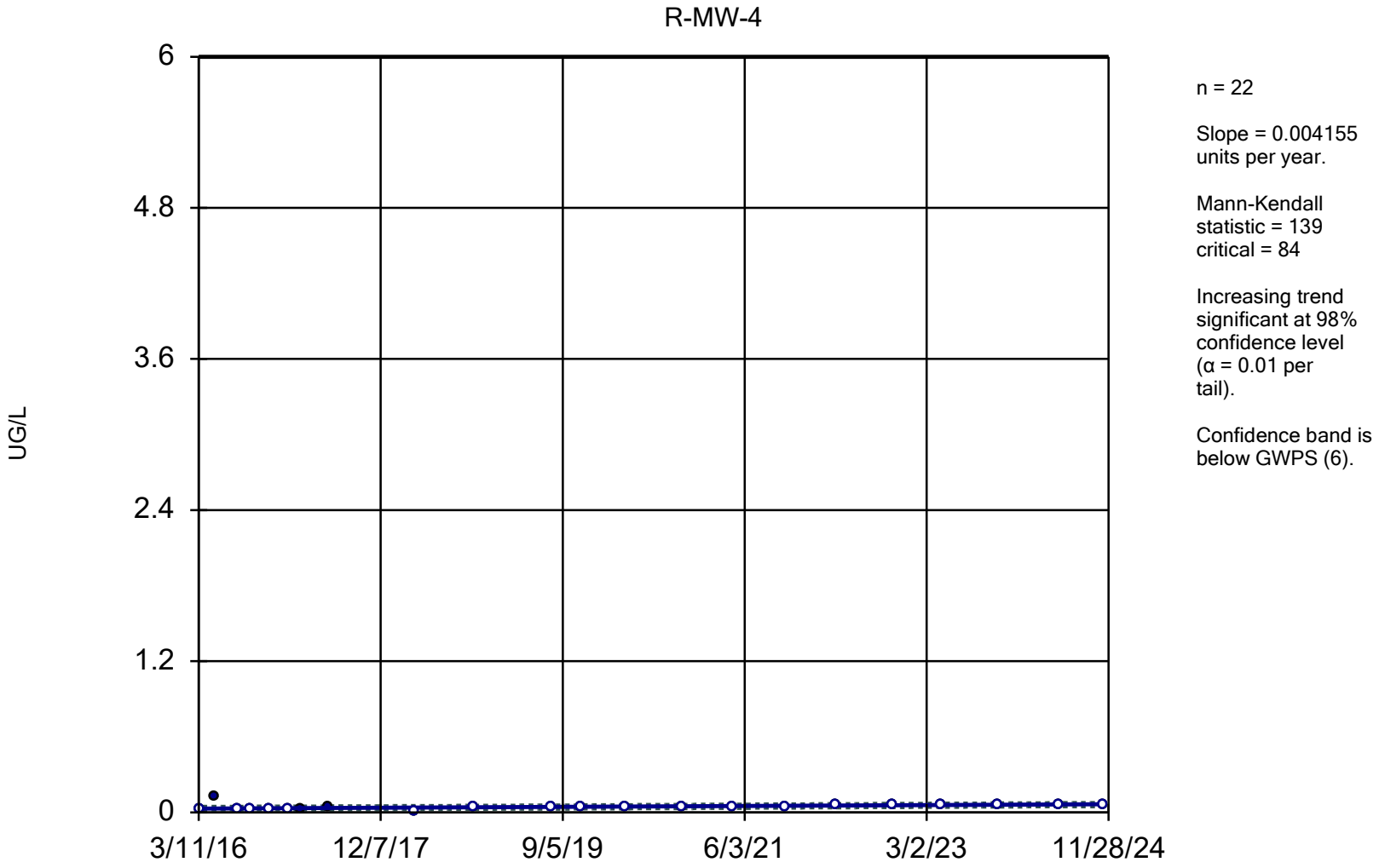
Confidence band intersects GWPS (6) on 06/28/16.

Constituent: ANTIMONY, TOTAL Analysis Run 3/10/2025 5:12 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

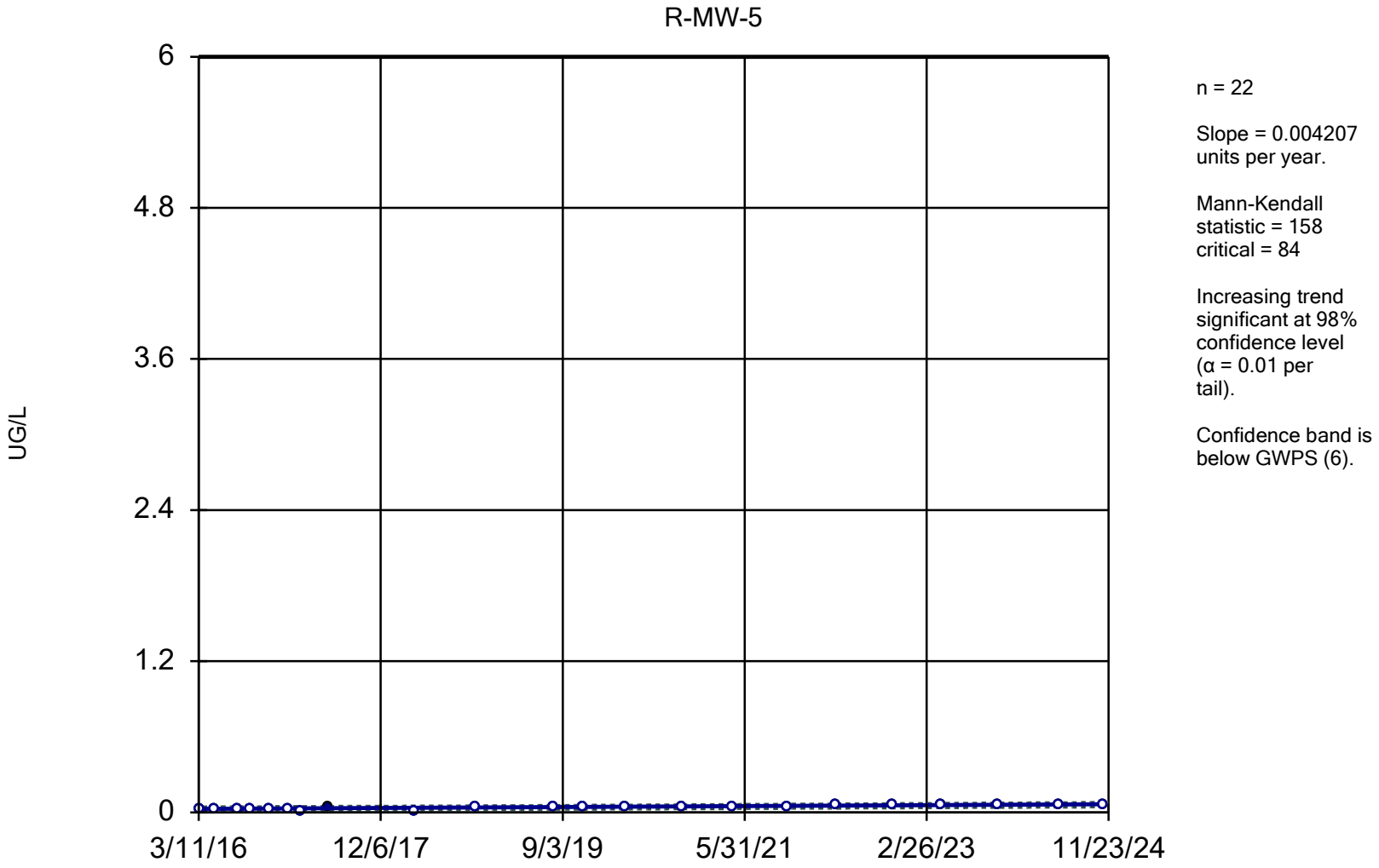


Constituent: ANTIMONY, TOTAL Analysis Run 3/10/2025 5:12 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



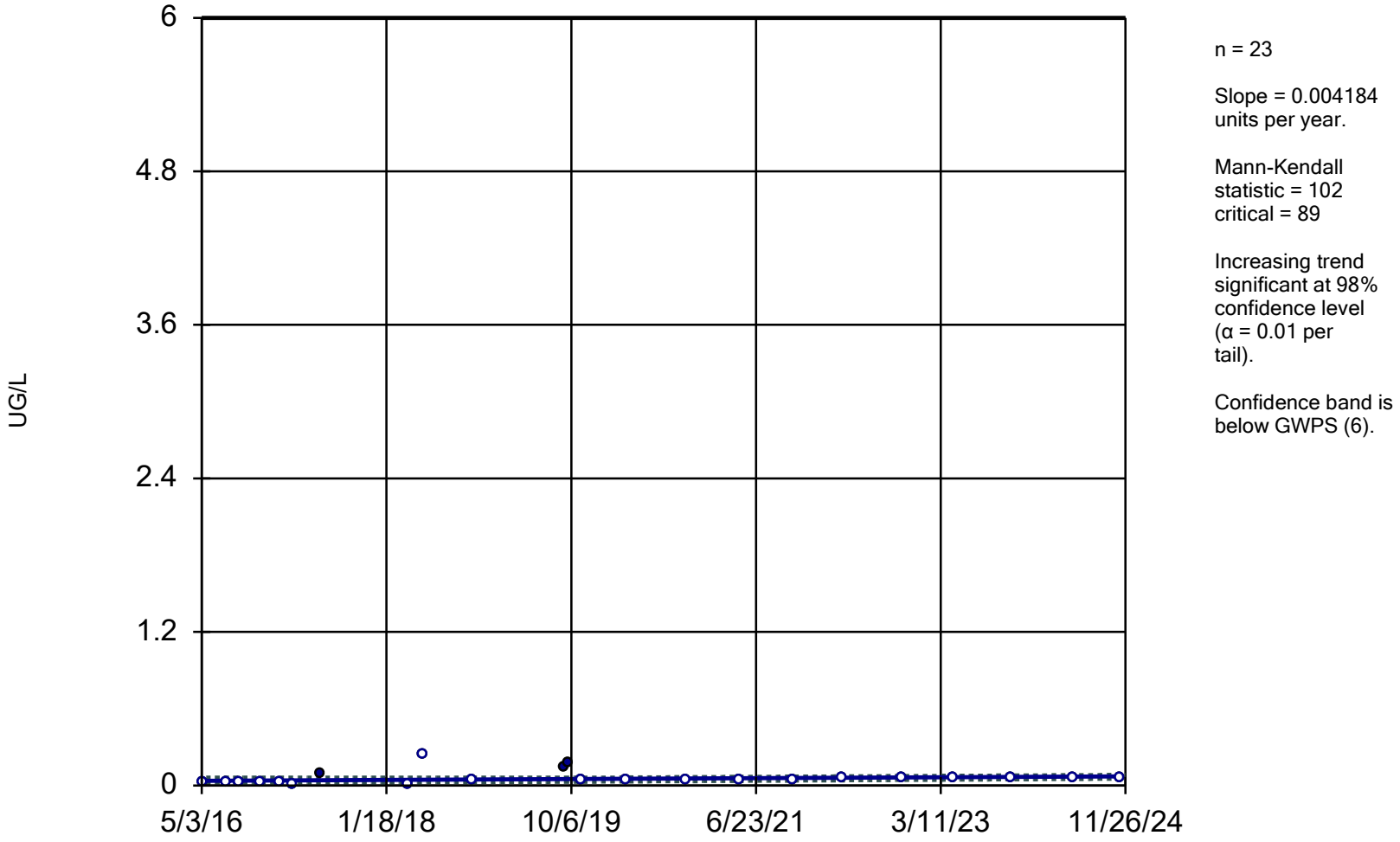
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-7



n = 23

Slope = 0.004184 units per year.

Mann-Kendall statistic = 102
critical = 89

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

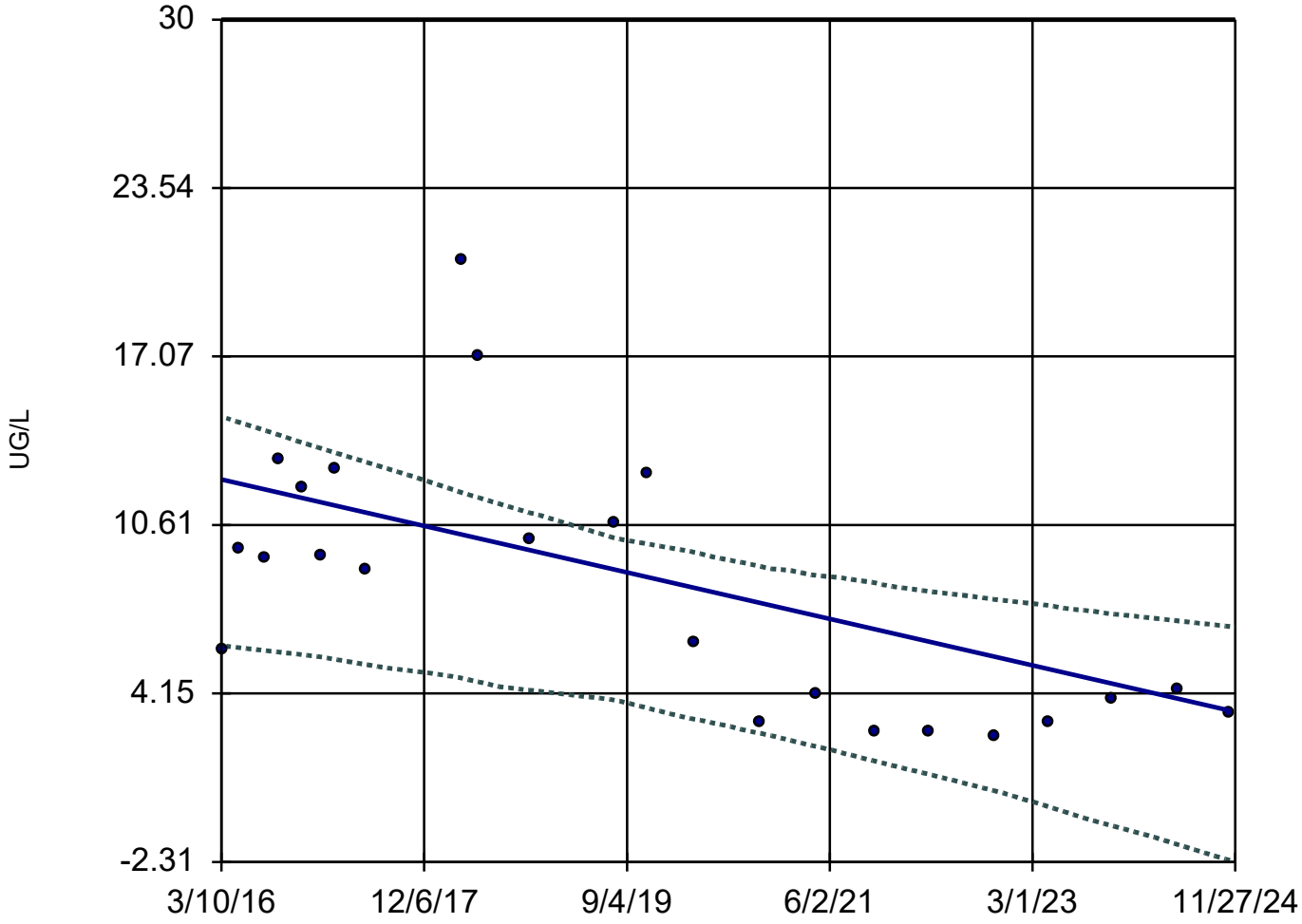
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Sen's Slope and 95% Confidence Band

R-MW-1



n = 23

Slope = -1.022 units per year.

Mann-Kendall statistic = -105 critical = -89

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (30).

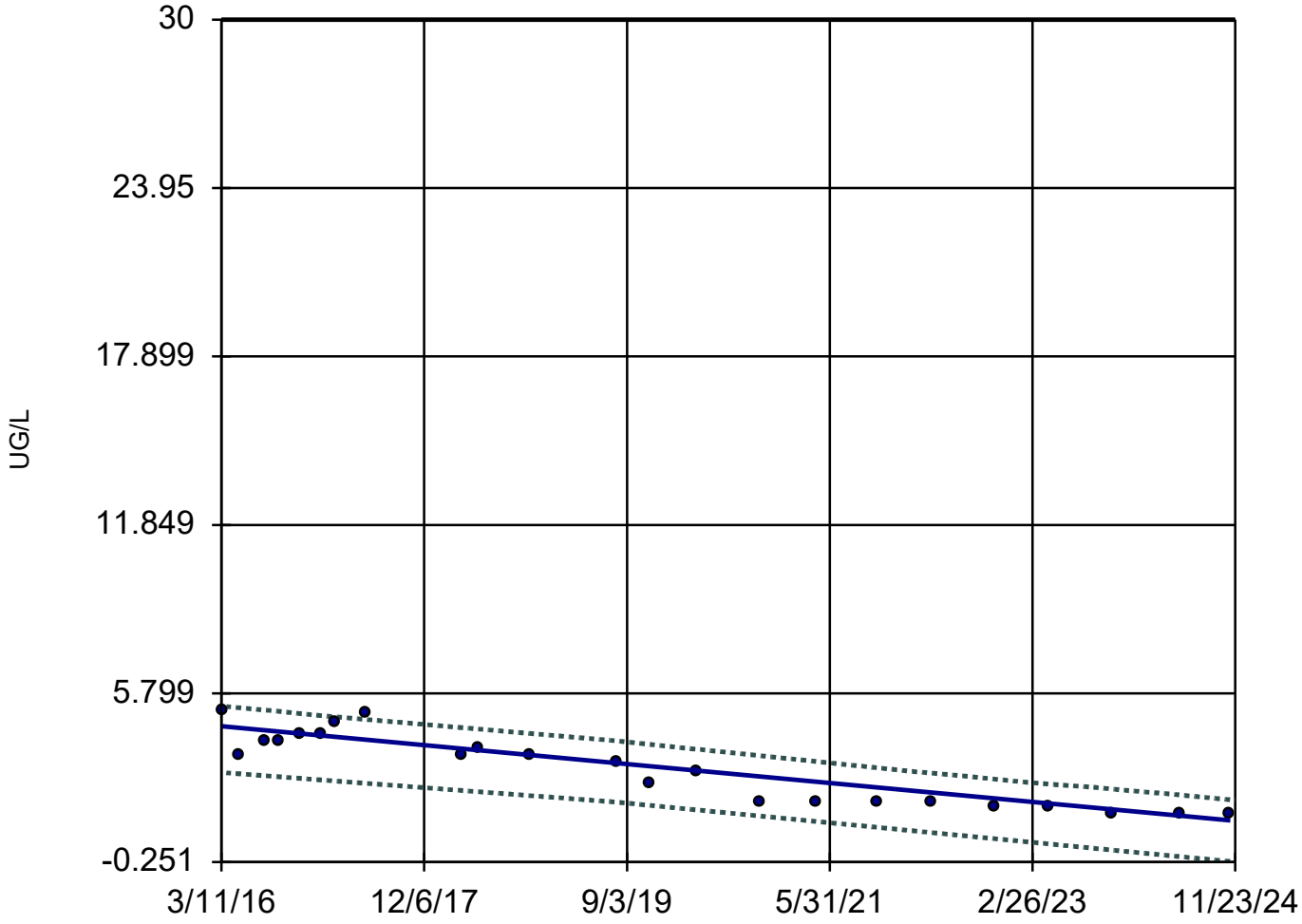
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Sen's Slope and 95% Confidence Band

R-MW-5



n = 23

Slope = -0.3899 units per year.

Mann-Kendall statistic = -194
critical = -89

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

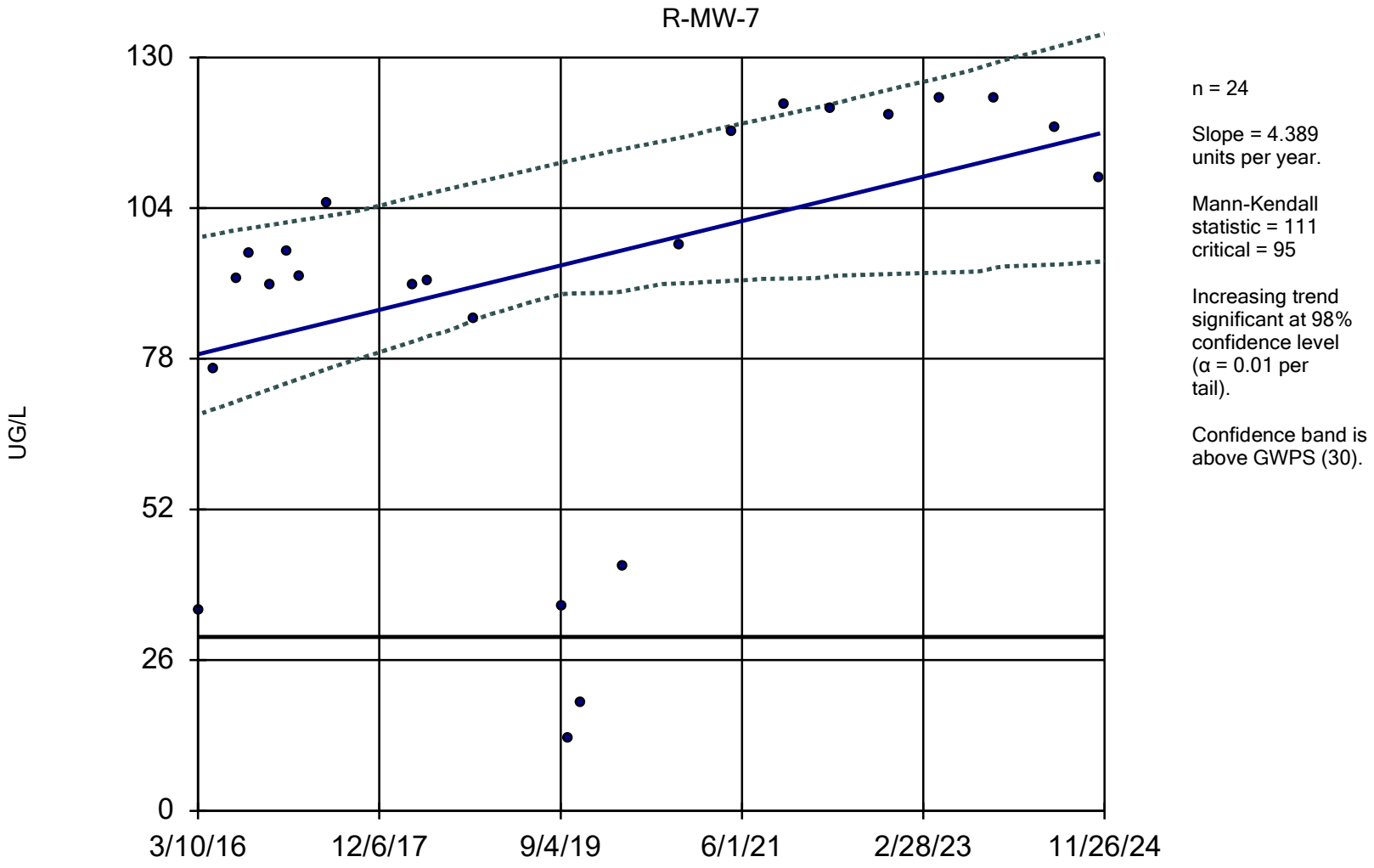
Confidence band is below GWPS (30).

Constituent: ARSENIC, TOTAL Analysis Run 3/10/2025 5:12 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Sen's Slope and 95% Confidence Band



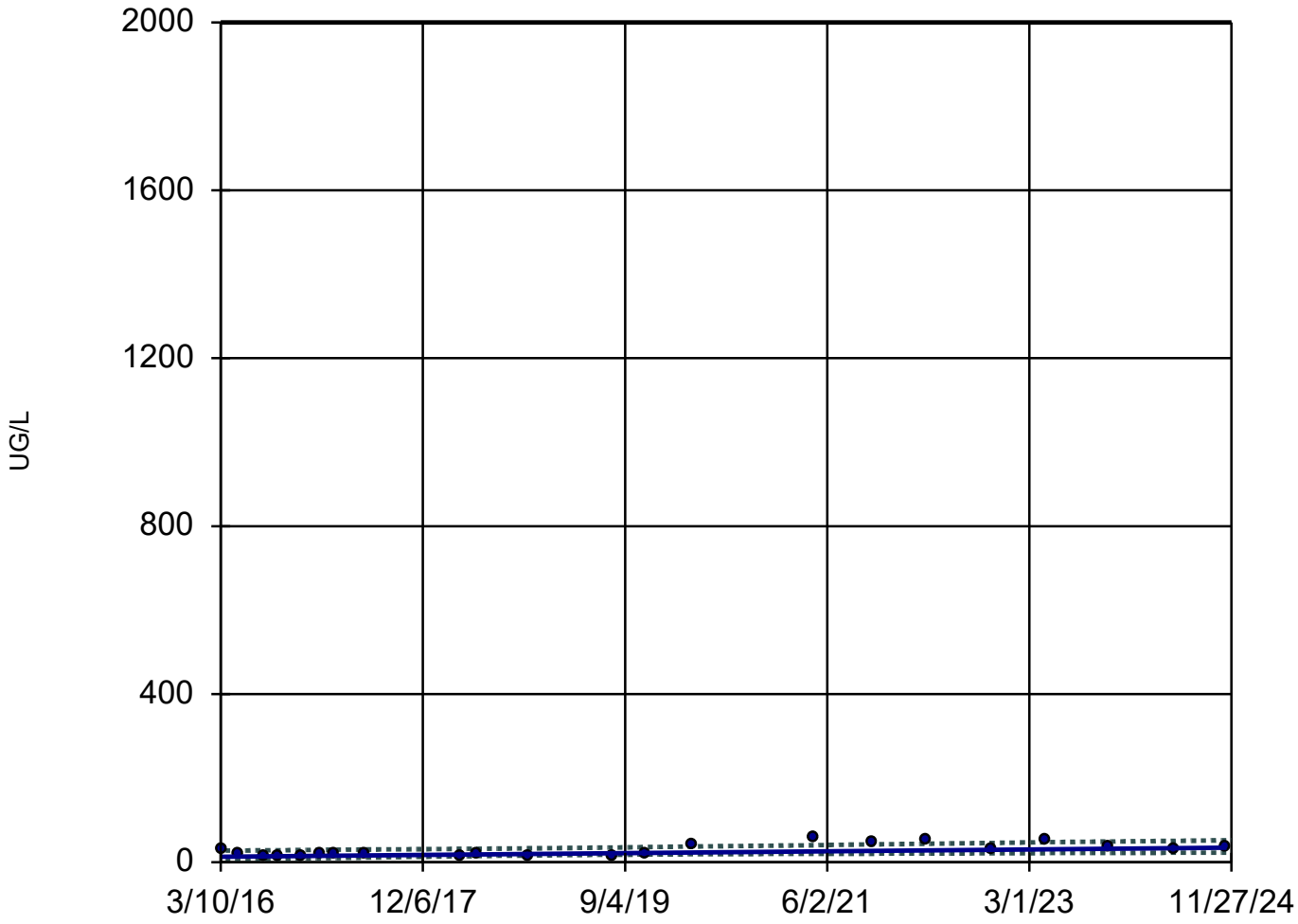
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-MW-1



n = 22

Slope = 2.541 units per year.

Mann-Kendall statistic = 96
critical = 84

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2000).

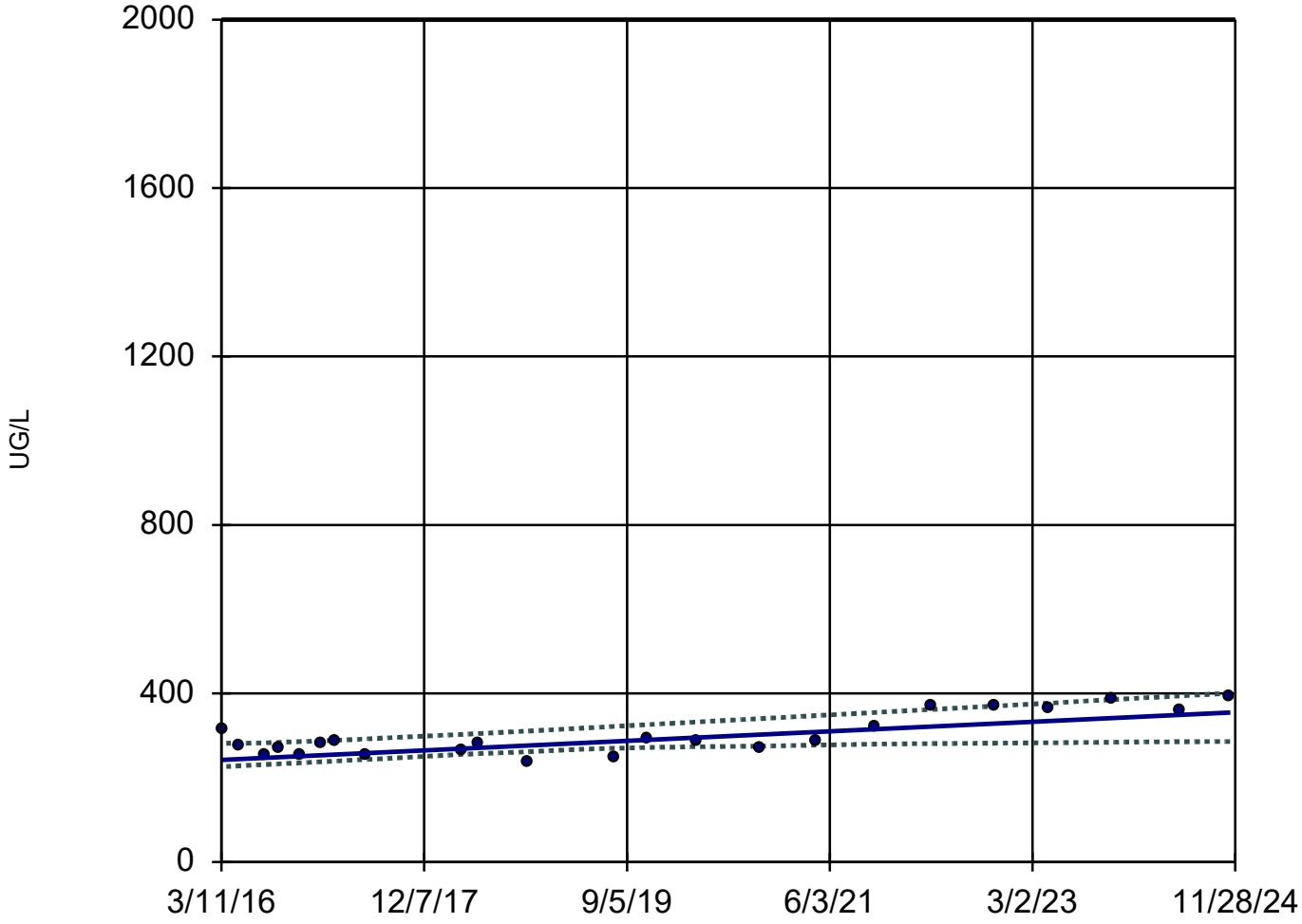
Constituent: BARIUM, TOTAL Analysis Run 3/10/2025 5:12 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-MW-4



n = 23

Slope = 12.96 units per year.

Mann-Kendall statistic = 126 critical = 89

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2000).

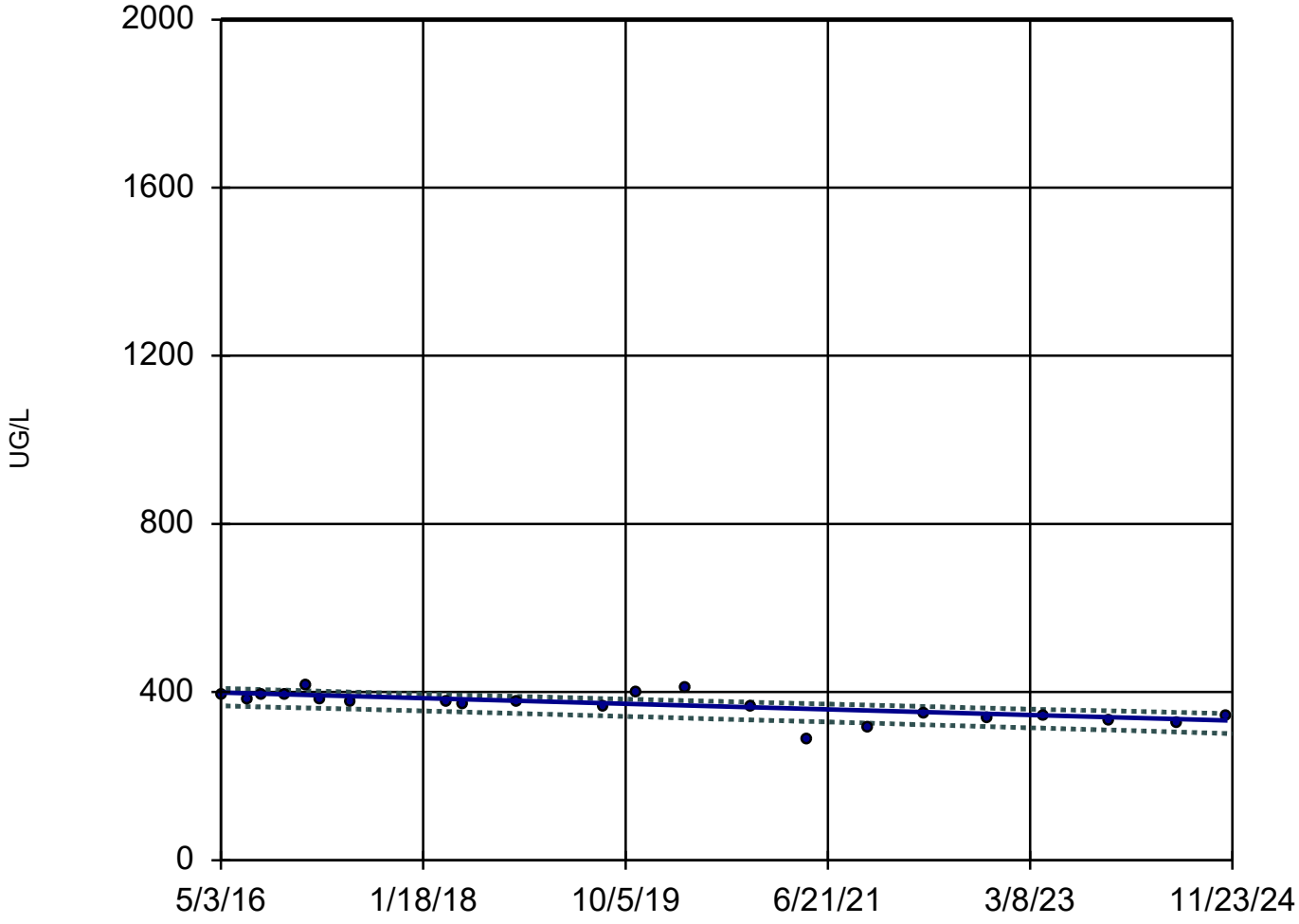
Constituent: BARIUM, TOTAL Analysis Run 3/10/2025 5:12 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-MW-5



n = 22

Slope = -7.828 units per year.

Mann-Kendall statistic = -132 critical = -84

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2000).

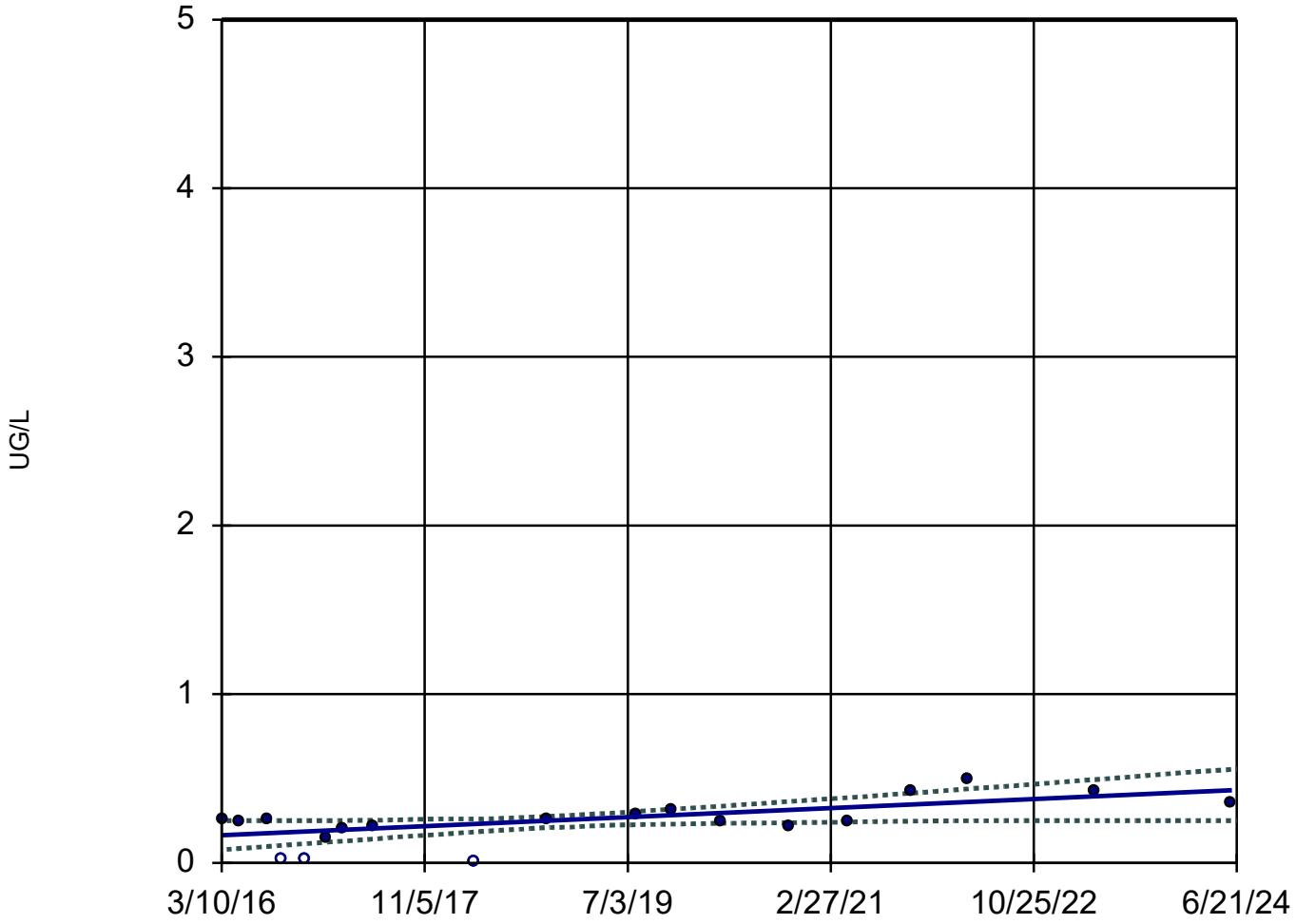
Constituent: BARIUM, TOTAL Analysis Run 3/10/2025 5:12 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-2



n = 19

Slope = 0.03235 units per year.

Mann-Kendall statistic = 70
critical = 68

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

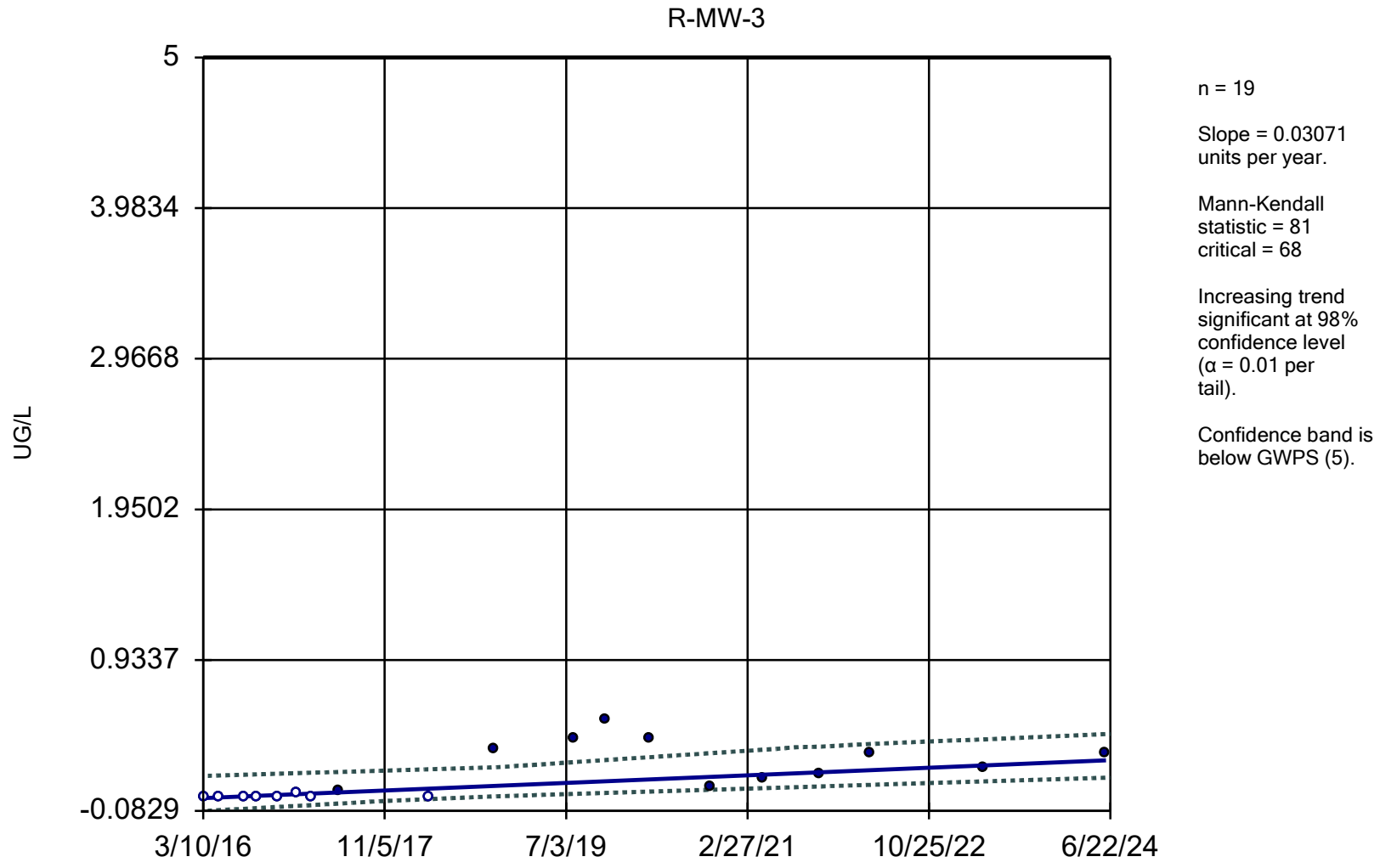
Confidence band is below GWPS (5).

Constituent: CADMIUM, TOTAL Analysis Run 3/10/2025 5:12 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



n = 19

Slope = 0.03071 units per year.

Mann-Kendall statistic = 81
critical = 68

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (5).

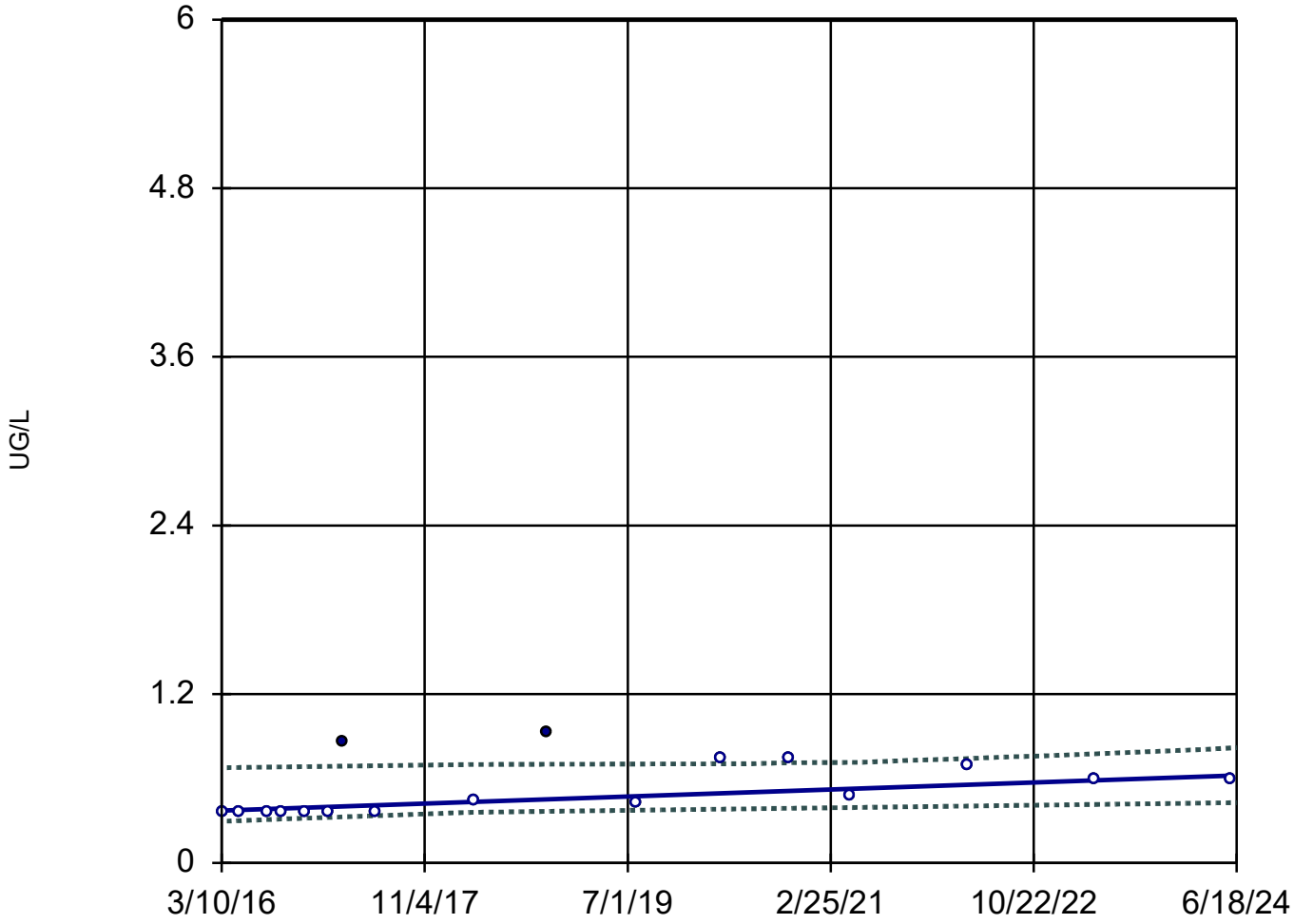
Constituent: CADMIUM, TOTAL Analysis Run 3/10/2025 5:12 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-1



n = 17

Slope = 0.03009 units per year.

Mann-Kendall statistic = 65
critical = 58

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

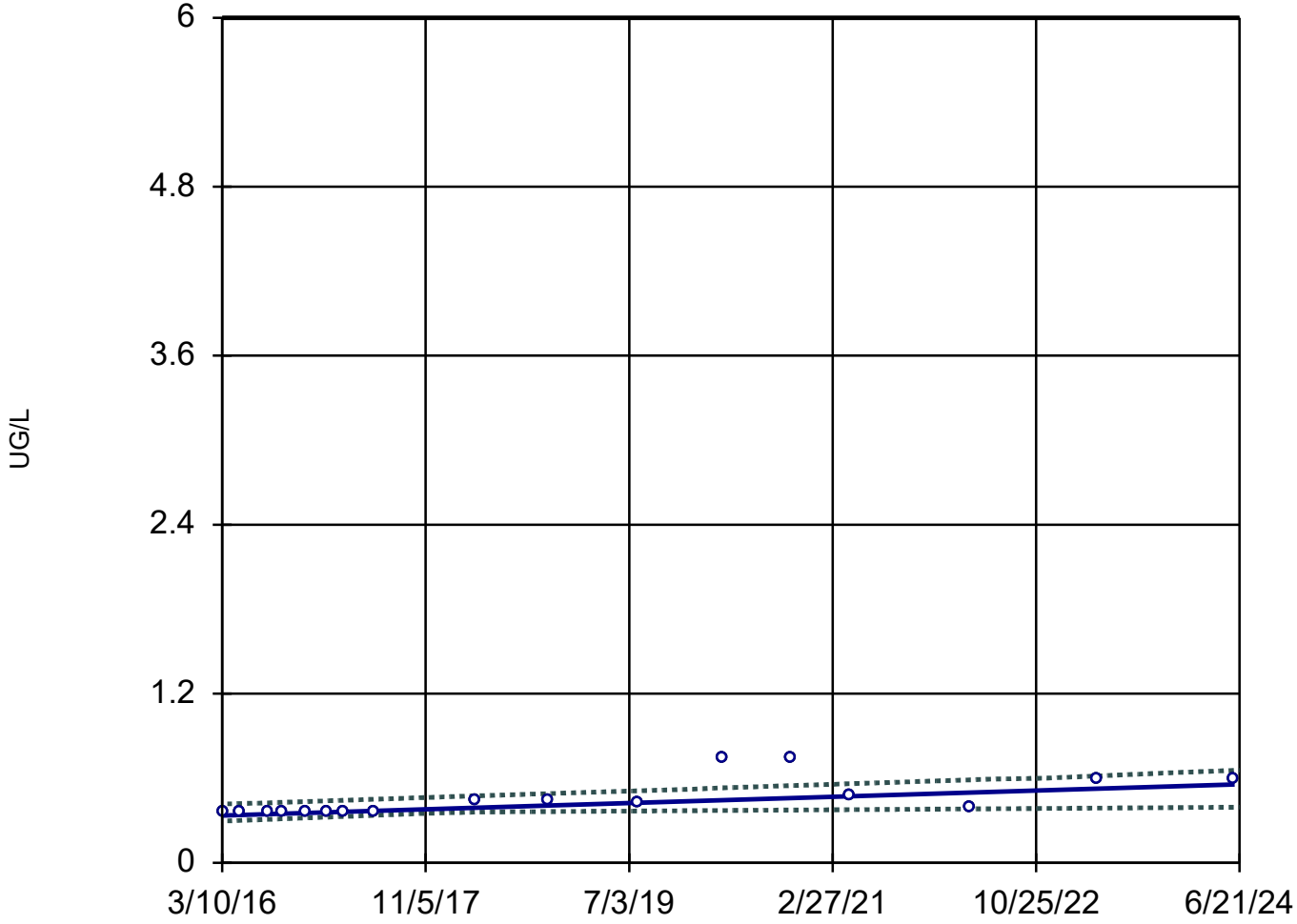
Constituent: COBALT, TOTAL Analysis Run 3/10/2025 5:12 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-2



n = 17

Slope = 0.02665 units per year.

Mann-Kendall statistic = 89
critical = 58

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

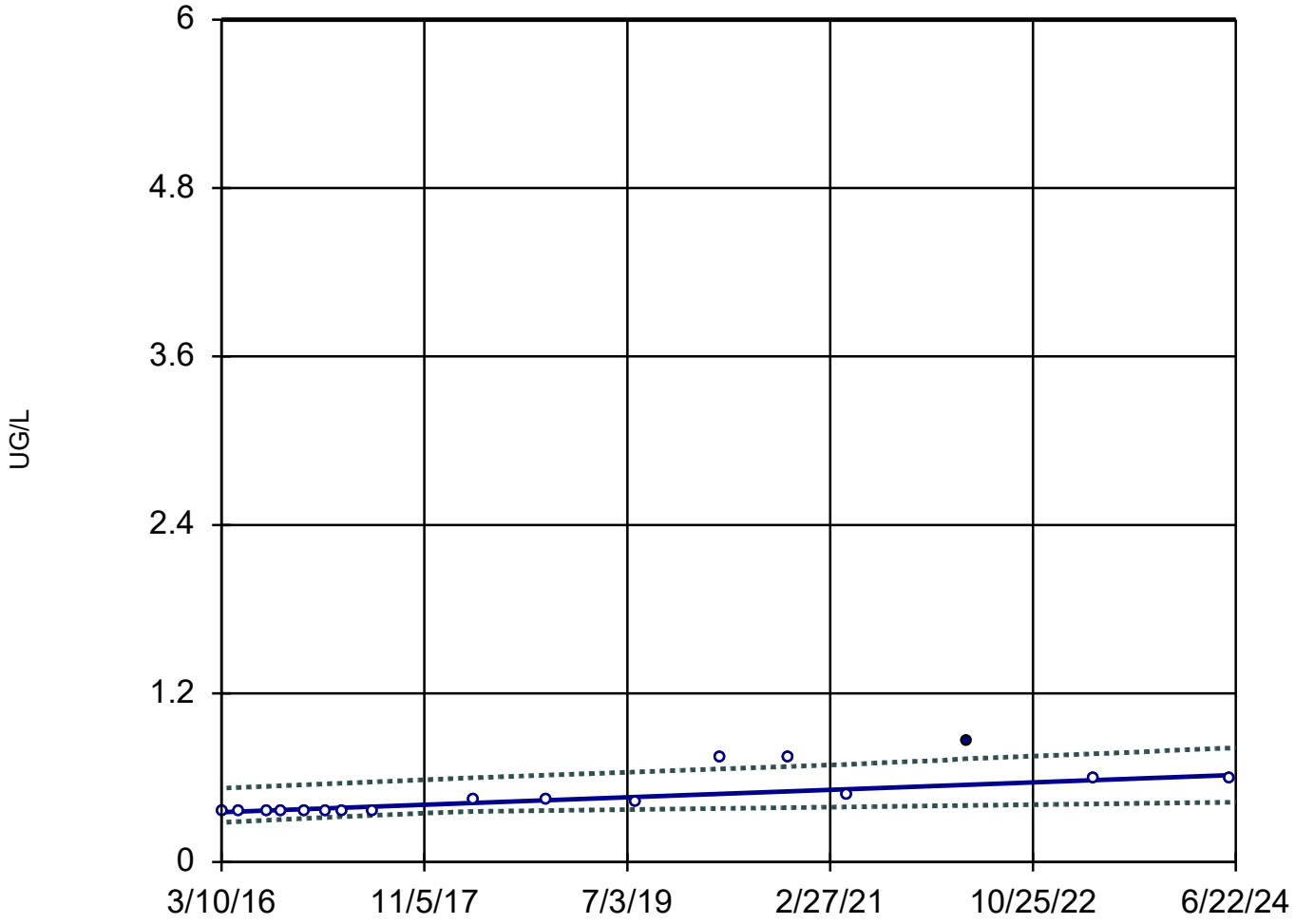
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-3



n = 17

Slope = 0.03207 units per year.

Mann-Kendall statistic = 97
critical = 58

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

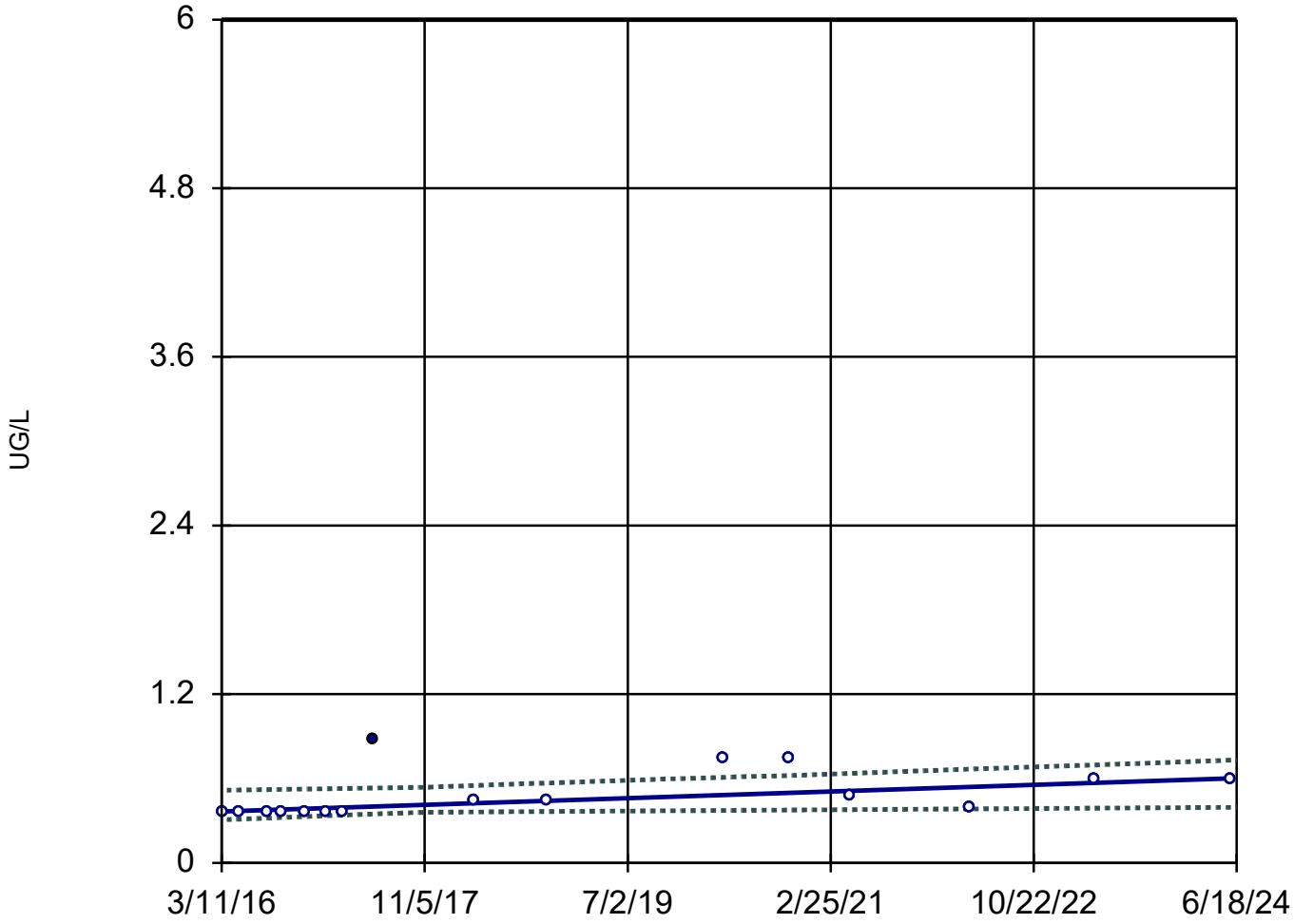
Constituent: COBALT, TOTAL Analysis Run 3/10/2025 5:12 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-6



n = 16

Slope = 0.02868 units per year.

Mann-Kendall statistic = 64
critical = 53

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

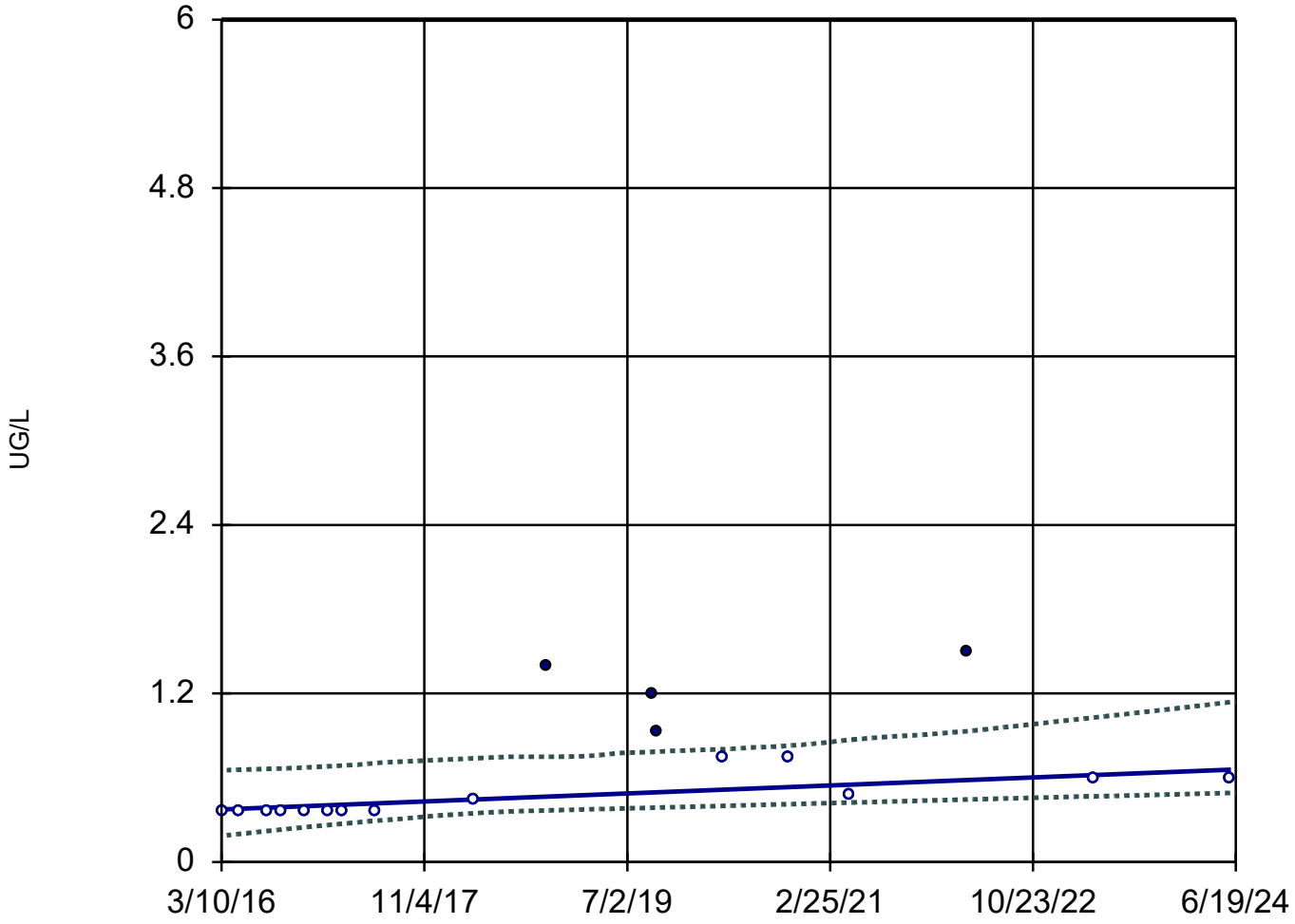
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-7



n = 18

Slope = 0.03438 units per year.

Mann-Kendall statistic = 83
critical = 63

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

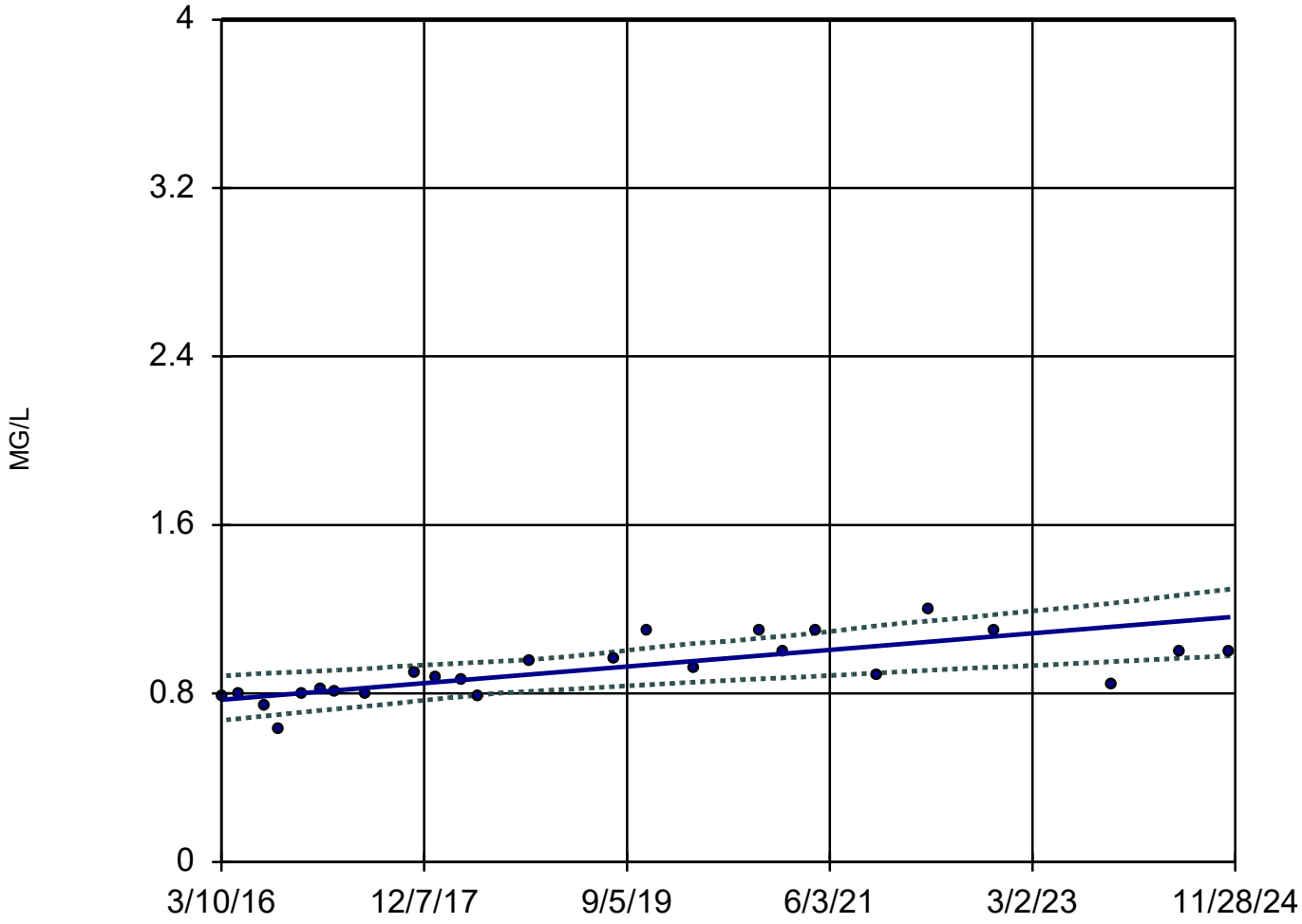
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-MW-3



n = 25

Slope = 0.04525 units per year.

Mann-Kendall statistic = 175
critical = 101

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (4).

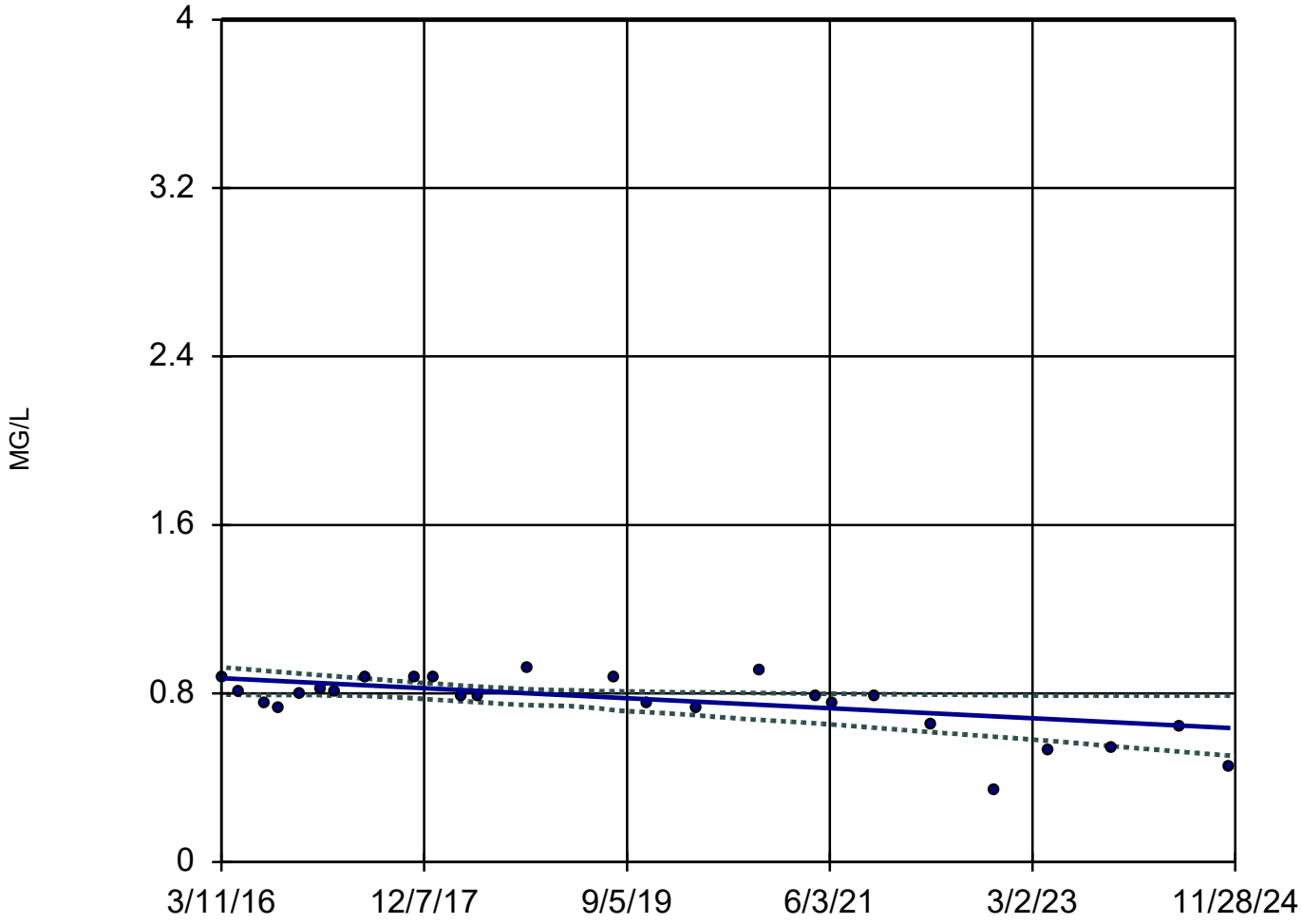
Constituent: FLUORIDE, TOTAL Analysis Run 3/10/2025 5:12 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-MW-4



n = 26

Slope = -0.02724 units per year.

Mann-Kendall statistic = -130
critical = -106

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (4).

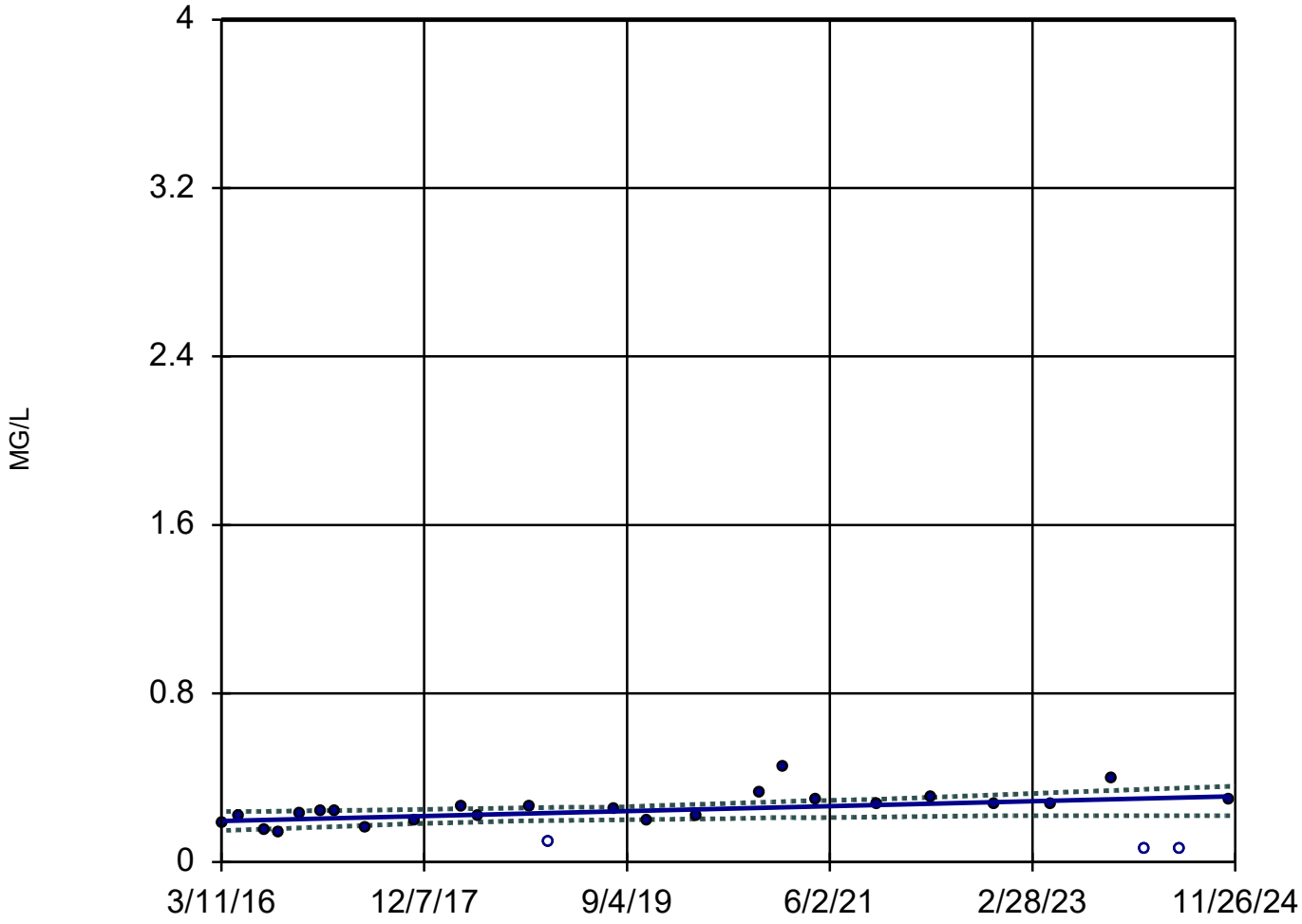
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-6



n = 27

Slope = 0.01354 units per year.

Mann-Kendall statistic = 114
critical = 112

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (4).

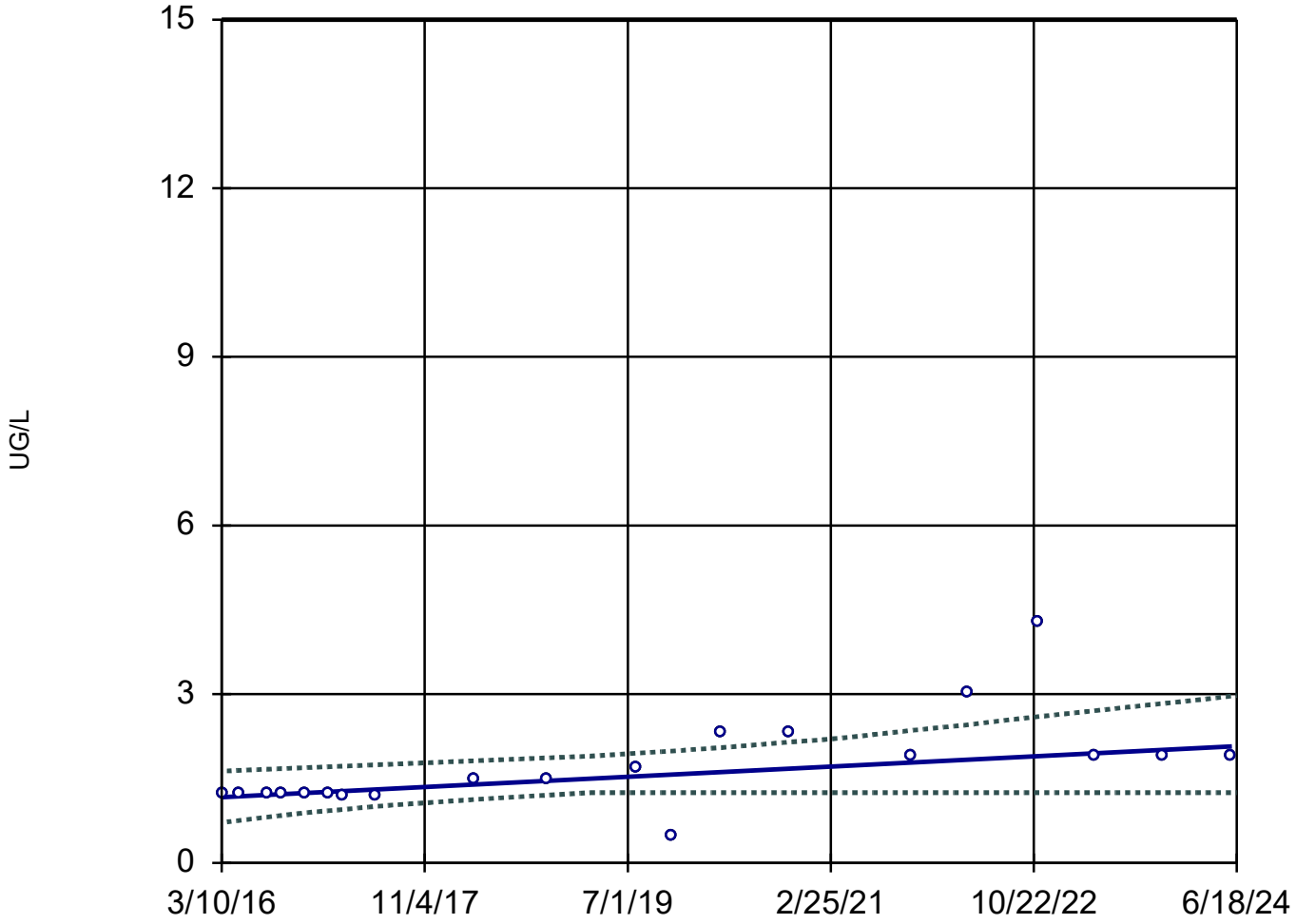
Constituent: FLUORIDE, TOTAL Analysis Run 3/10/2025 5:13 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-1



n = 20

Slope = 0.1095 units per year.

Mann-Kendall statistic = 92
critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (15).

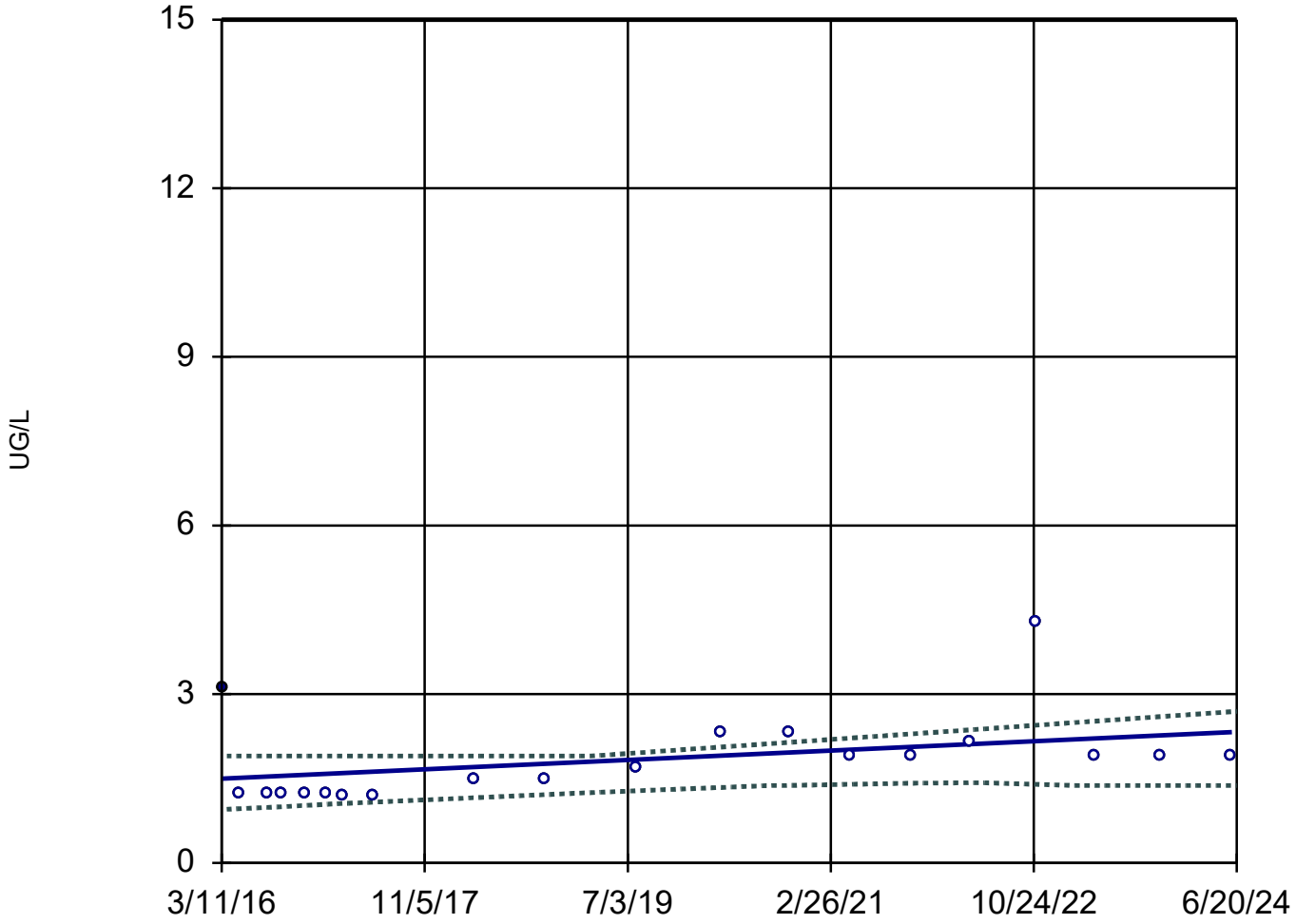
Constituent: LEAD, TOTAL Analysis Run 3/10/2025 5:13 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Sen's Slope and 95% Confidence Band

R-MW-4



n = 20

Slope = 0.1006 units per year.

Mann-Kendall statistic = 75
critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (15).

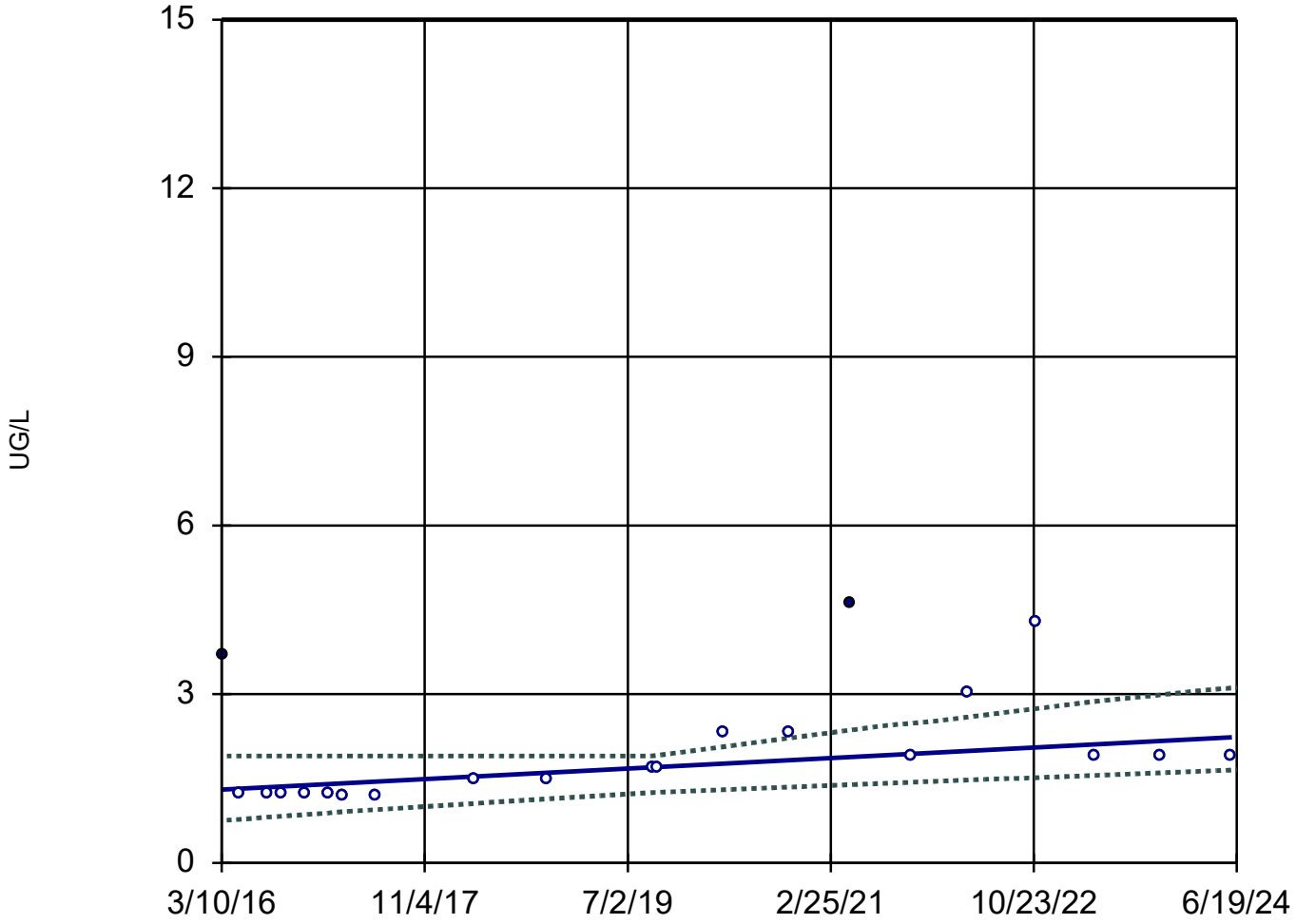
Constituent: LEAD, TOTAL Analysis Run 3/10/2025 5:13 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-7



n = 21

Slope = 0.113 units per year.

Mann-Kendall statistic = 94
critical = 78

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

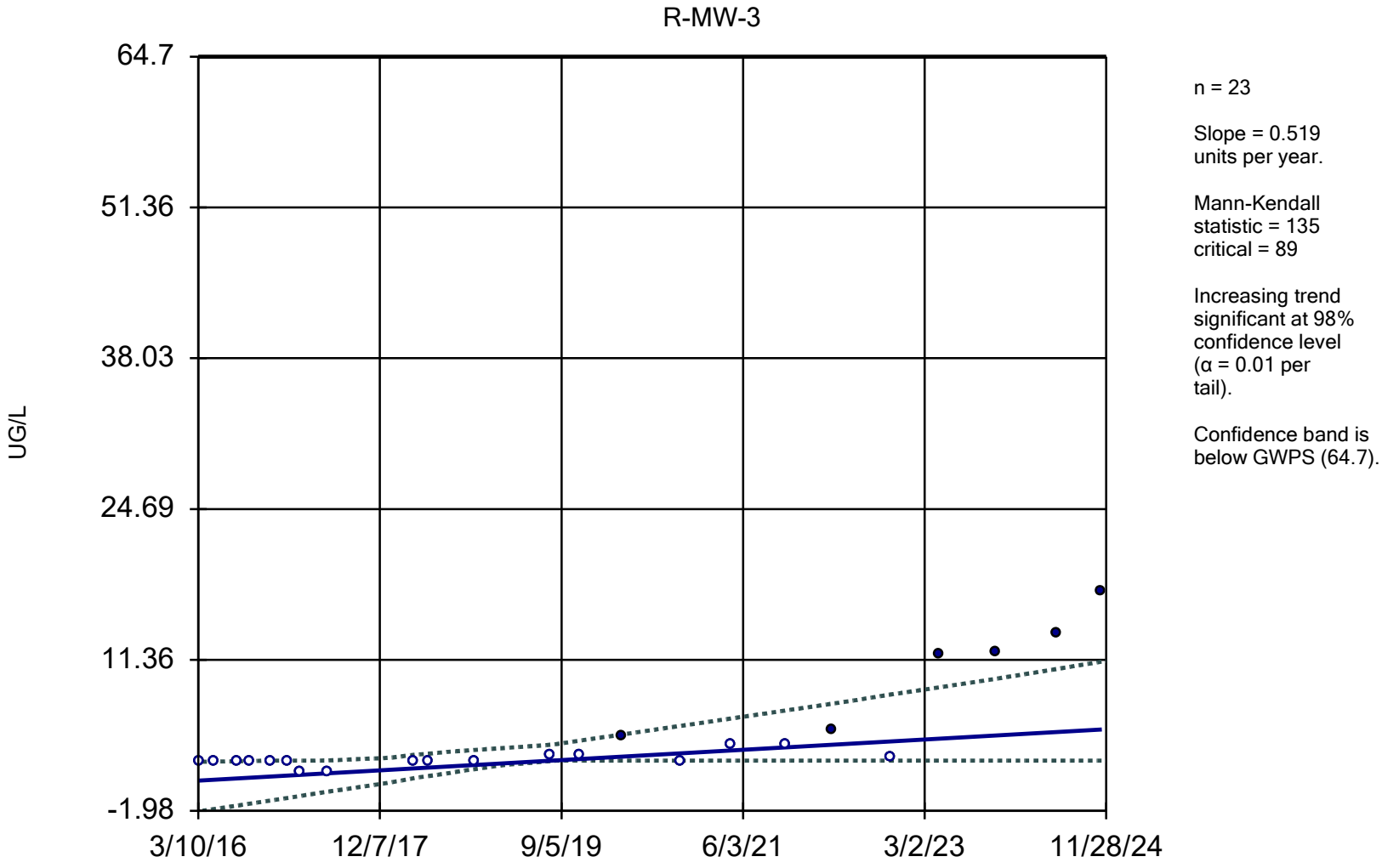
Confidence band is below GWPS (15).

Constituent: LEAD, TOTAL Analysis Run 3/10/2025 5:13 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



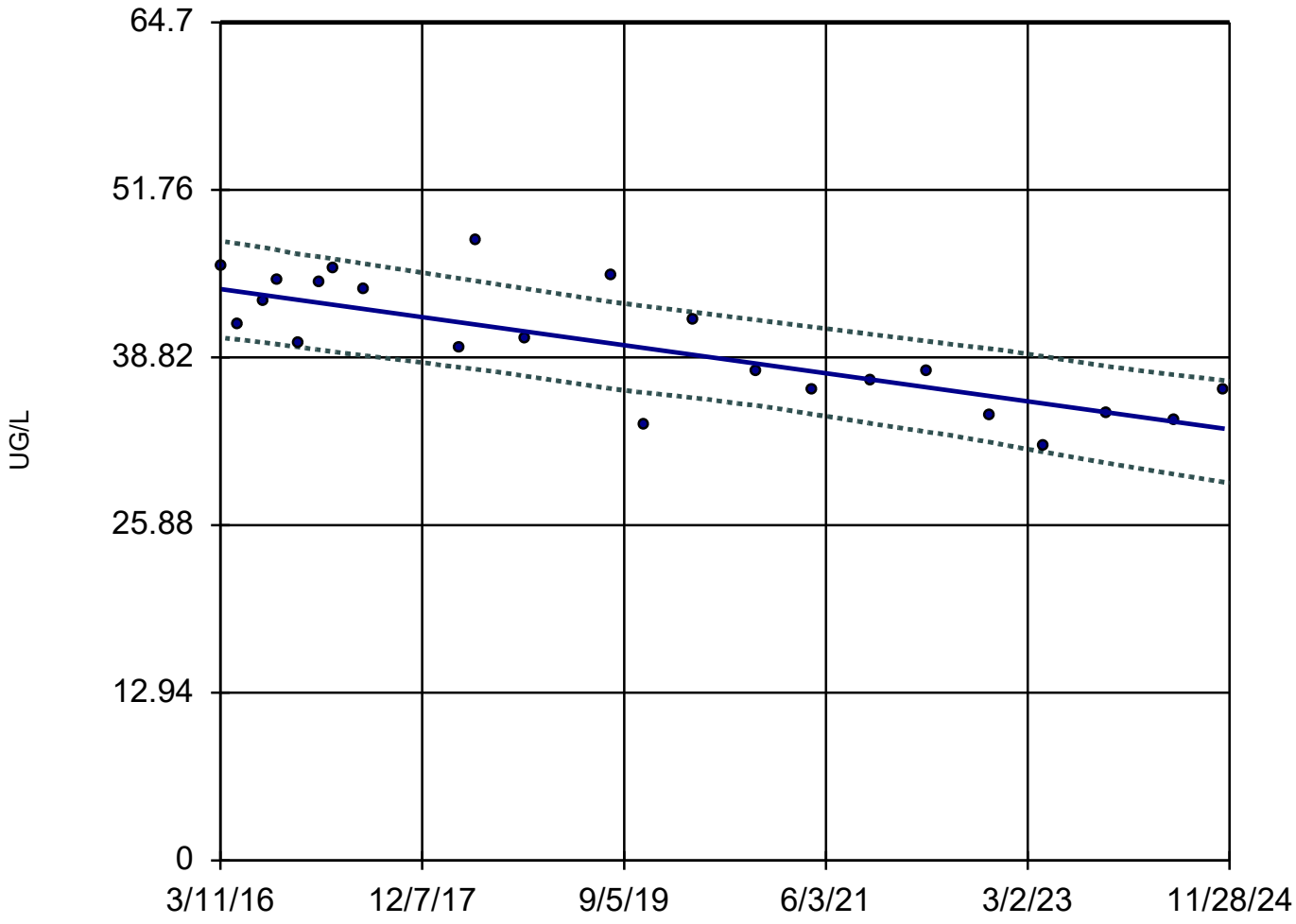
Constituent: LITHIUM, TOTAL Analysis Run 3/10/2025 5:13 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Sen's Slope and 95% Confidence Band

R-MW-4



n = 23

Slope = -1.244 units per year.

Mann-Kendall statistic = -141 critical = -89

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

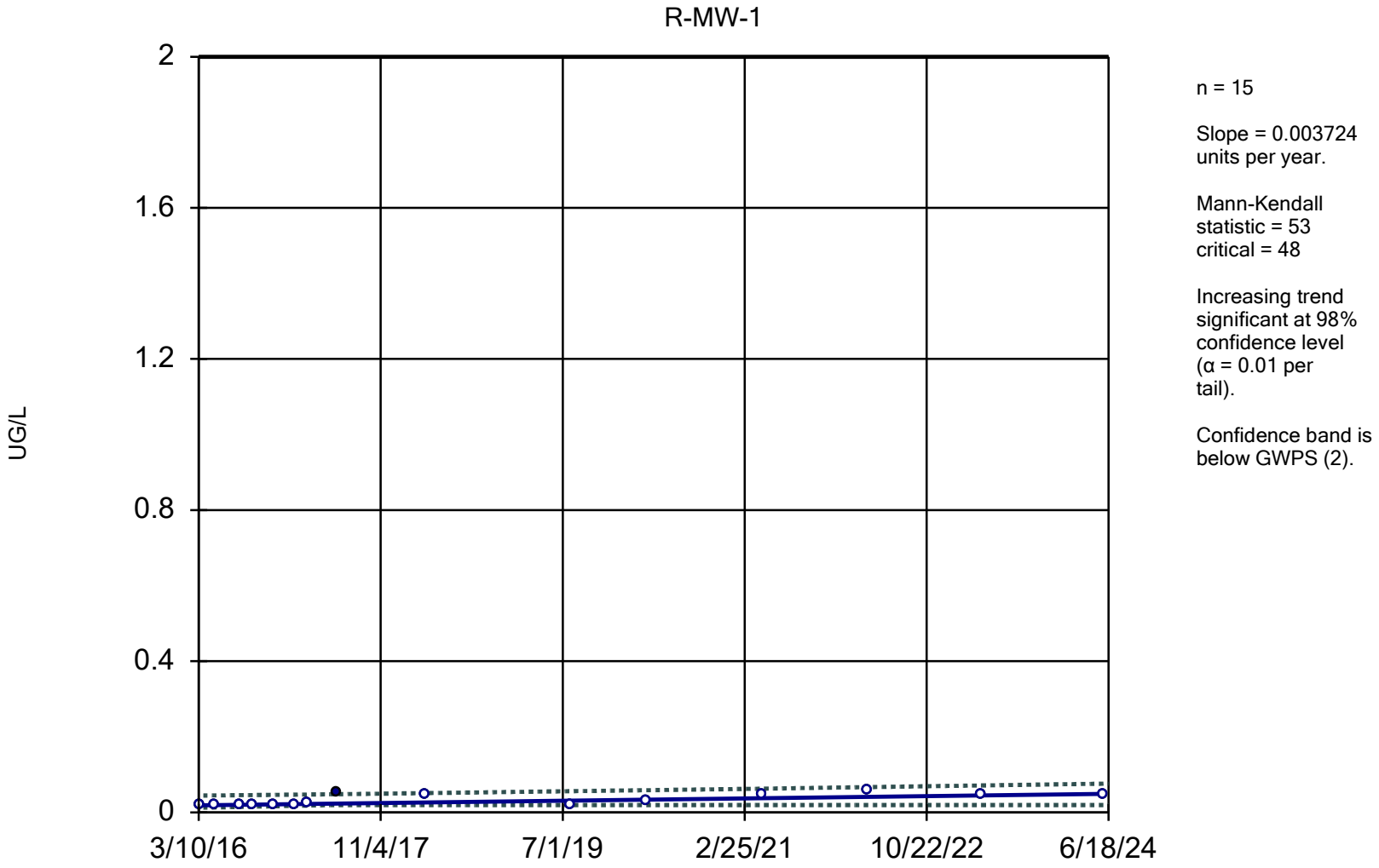
Confidence band is below GWPS (64.7).

Constituent: LITHIUM, TOTAL Analysis Run 3/10/2025 5:13 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



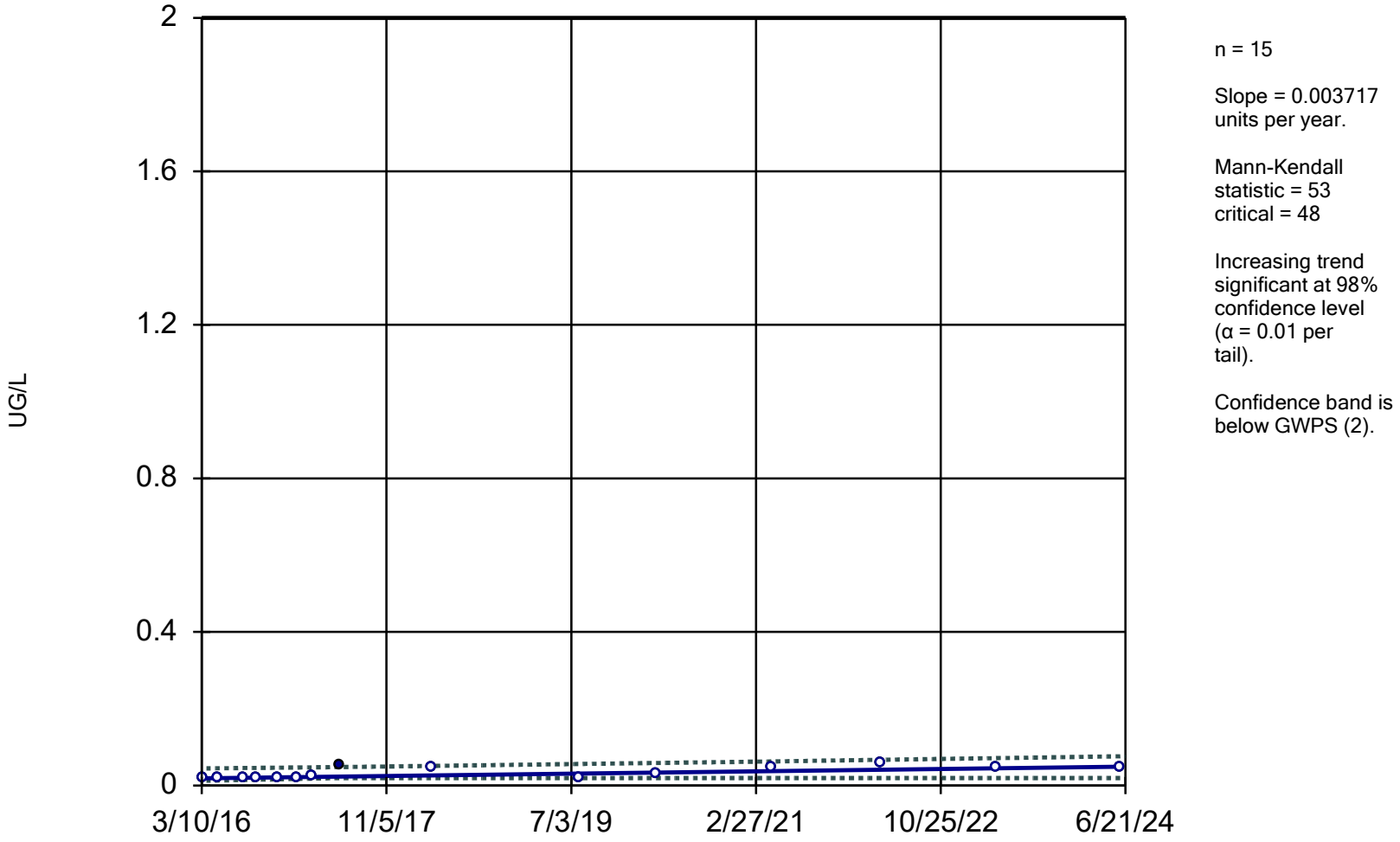
Constituent: MERCURY, TOTAL Analysis Run 3/10/2025 5:13 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-2



n = 15

Slope = 0.003717 units per year.

Mann-Kendall statistic = 53
critical = 48

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2).

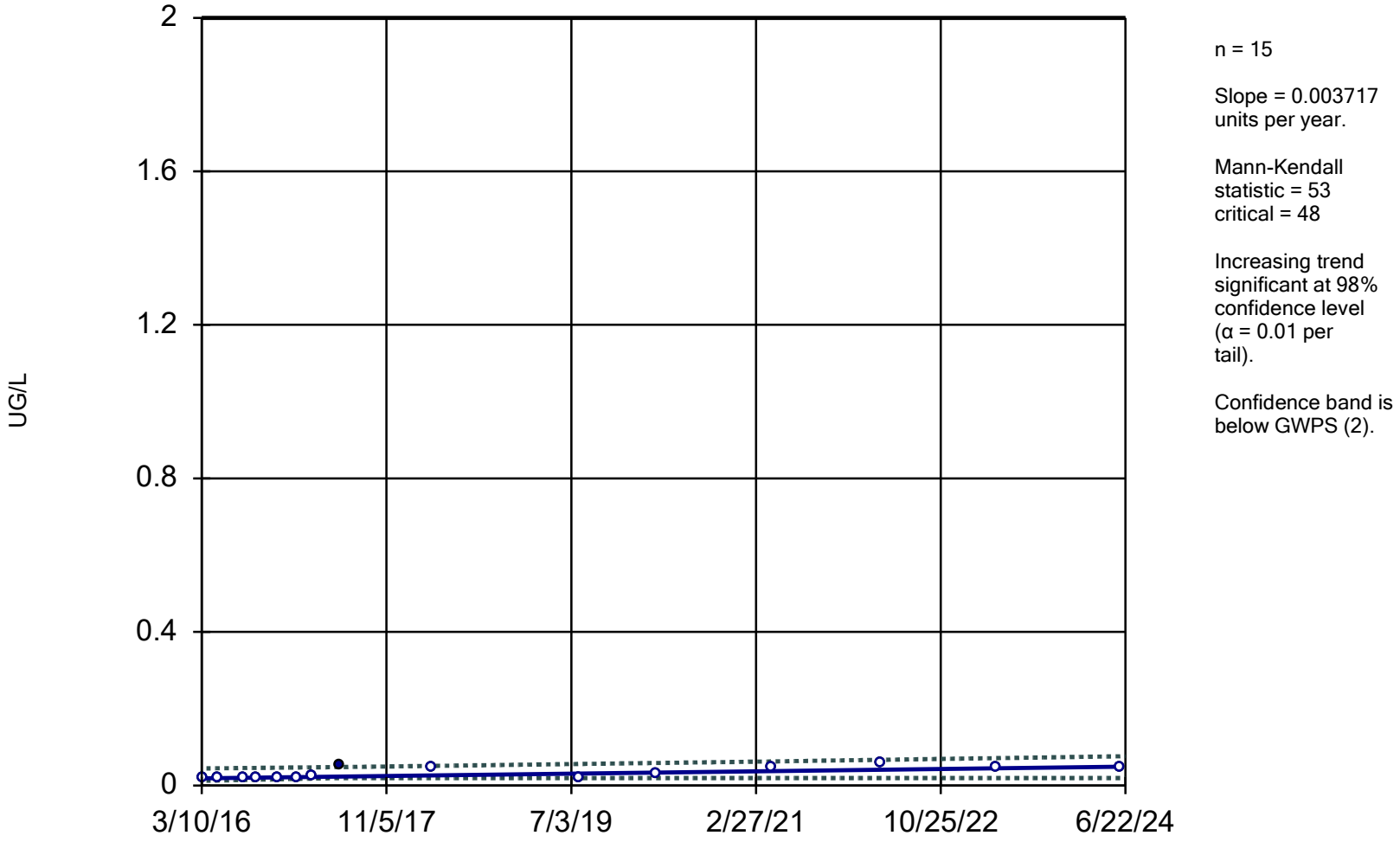
Constituent: MERCURY, TOTAL Analysis Run 3/10/2025 5:13 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-3



n = 15

Slope = 0.003717 units per year.

Mann-Kendall statistic = 53
critical = 48

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2).

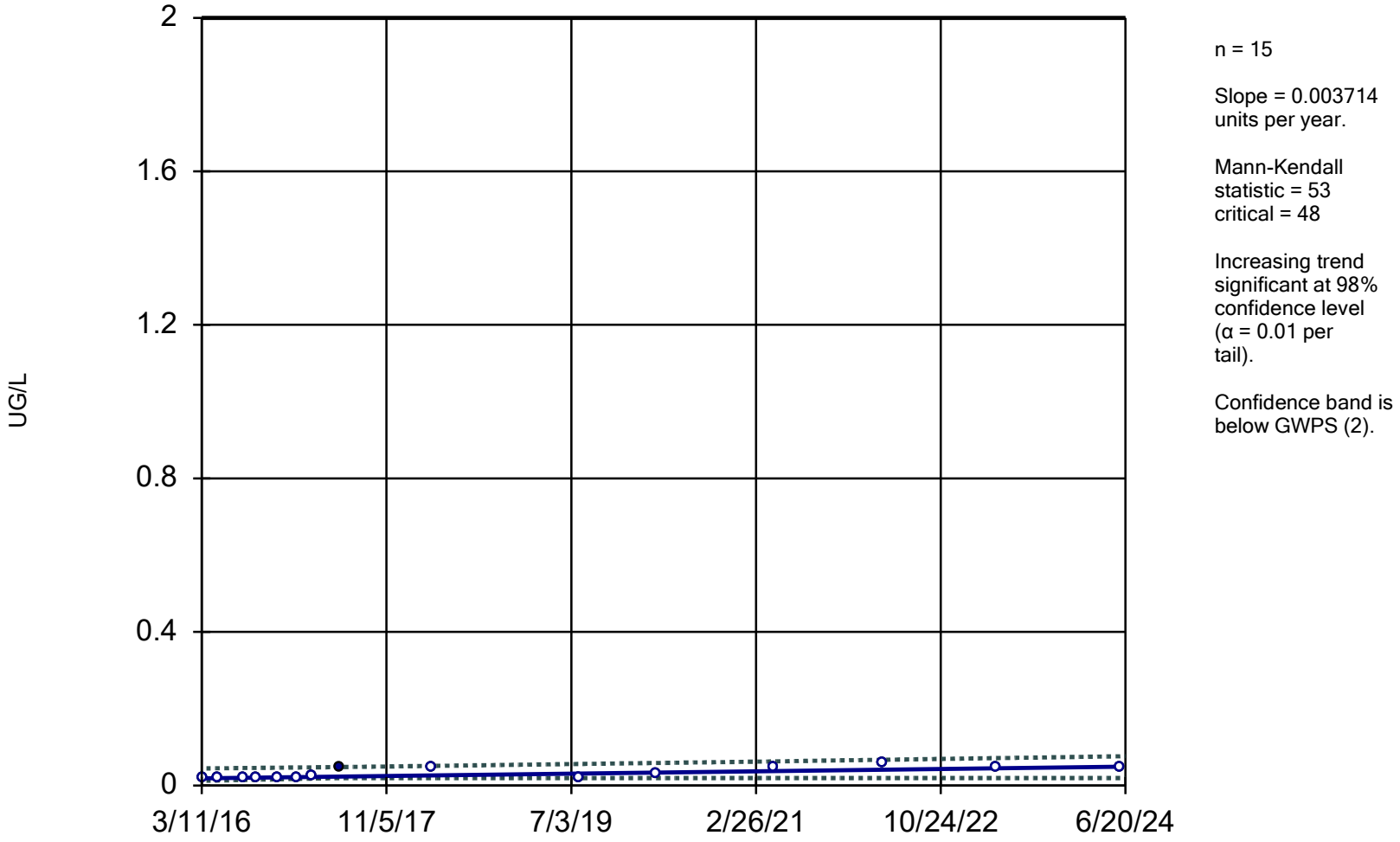
Constituent: MERCURY, TOTAL Analysis Run 3/10/2025 5:13 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-4



n = 15

Slope = 0.003714 units per year.

Mann-Kendall statistic = 53
critical = 48

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2).

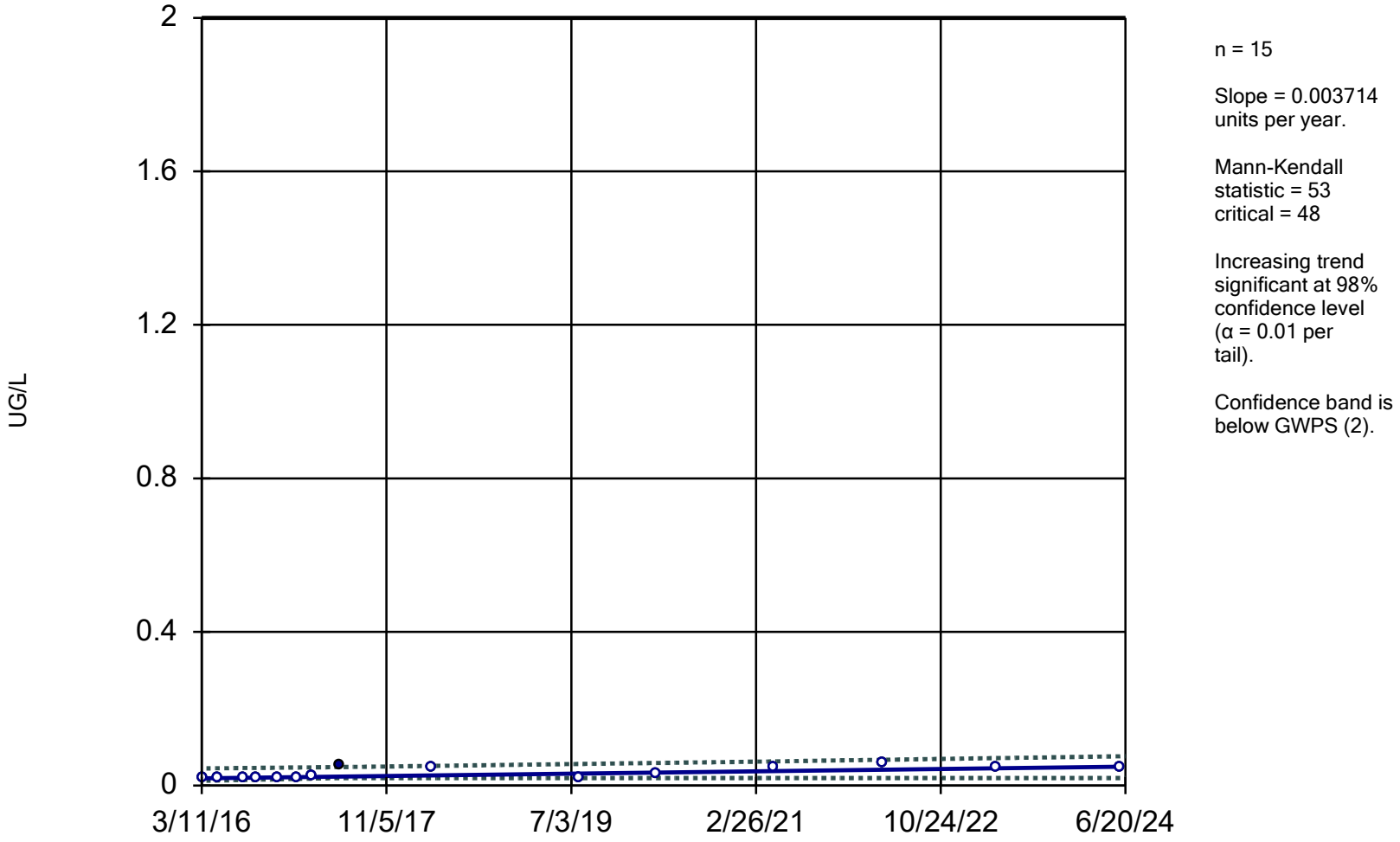
Constituent: MERCURY, TOTAL Analysis Run 3/10/2025 5:13 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-5



n = 15

Slope = 0.003714 units per year.

Mann-Kendall statistic = 53
critical = 48

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2).

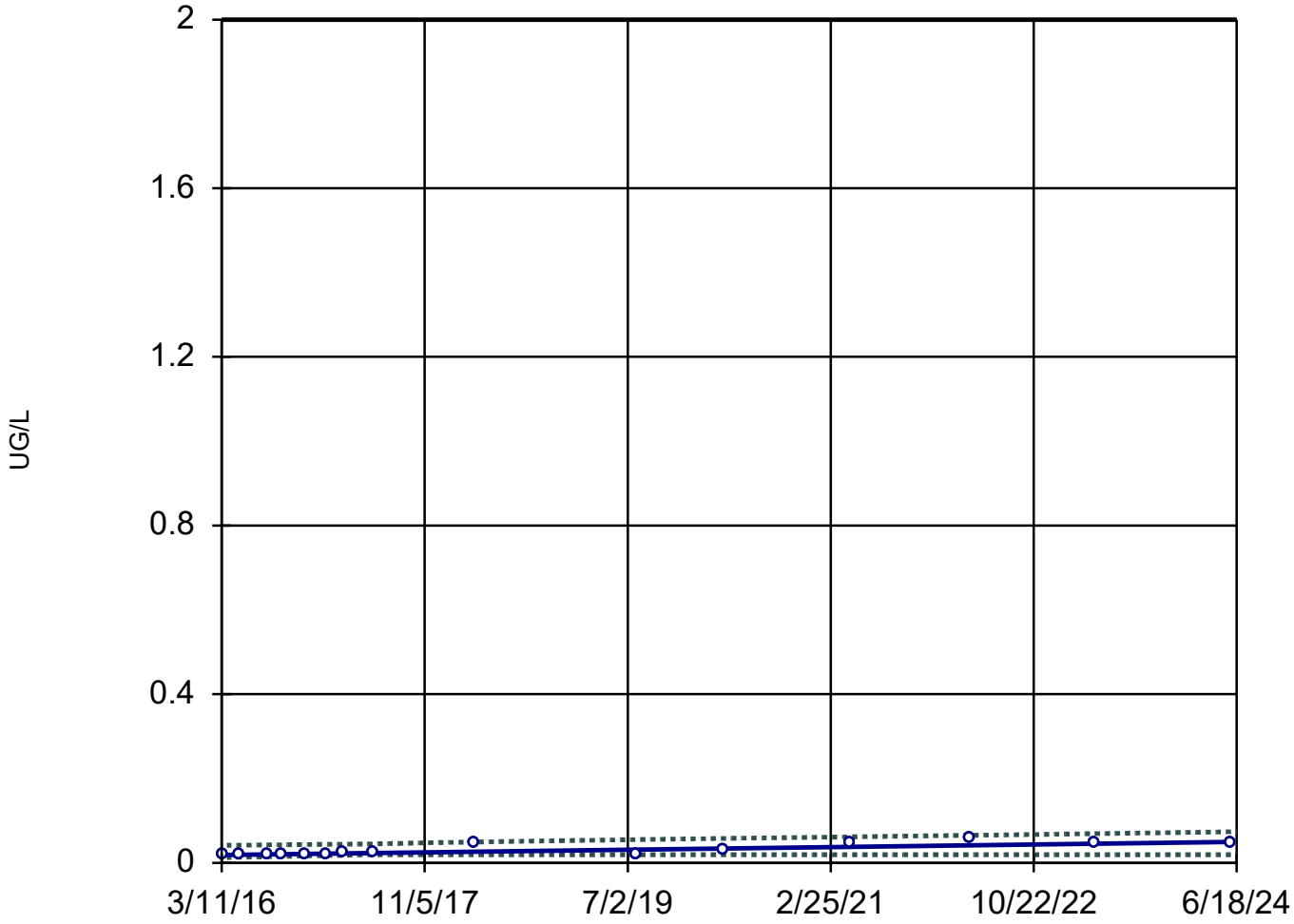
Constituent: MERCURY, TOTAL Analysis Run 3/10/2025 5:13 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-6



n = 15

Slope = 0.003774 units per year.

Mann-Kendall statistic = 62
critical = 48

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2).

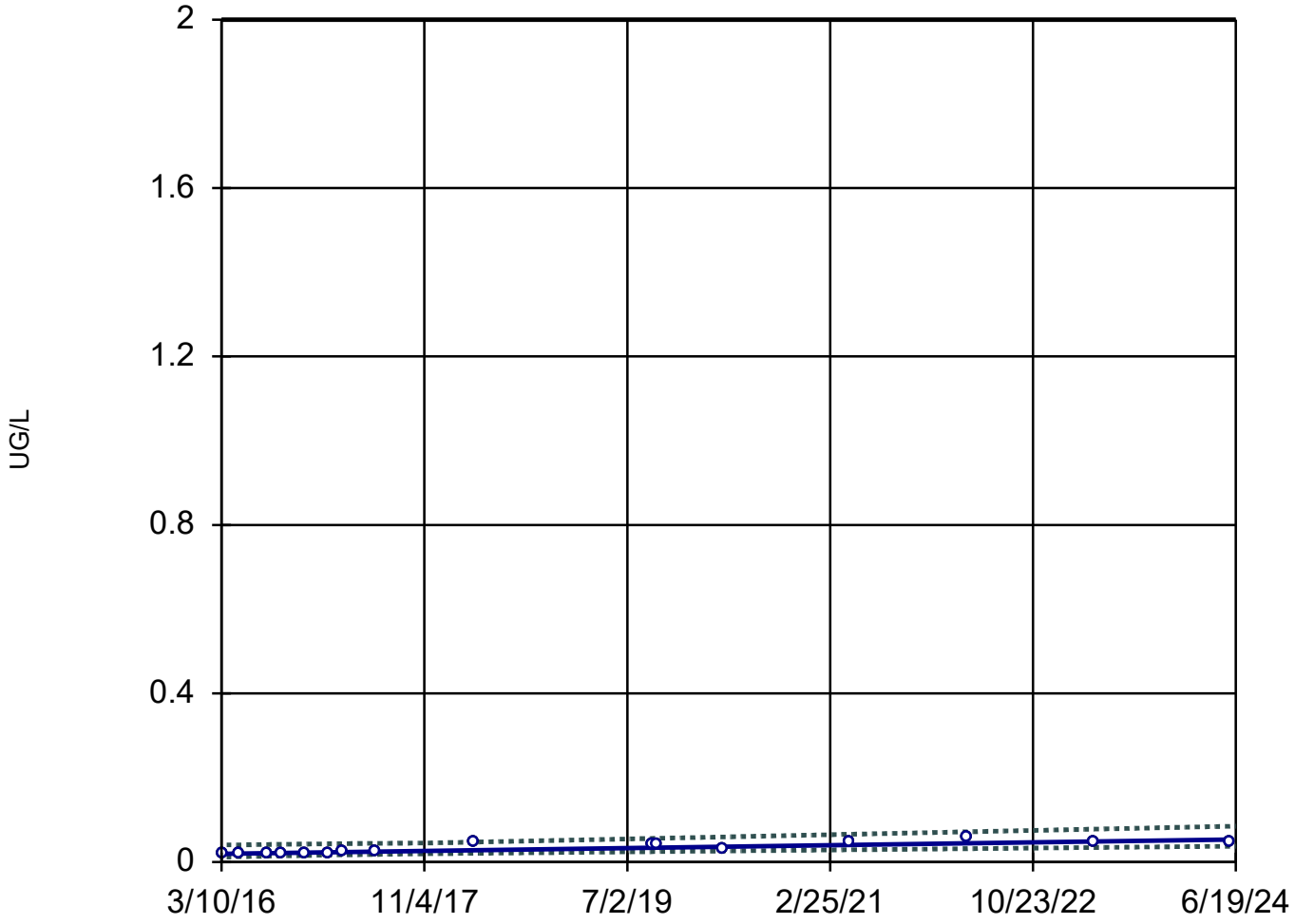
Constituent: MERCURY, TOTAL Analysis Run 3/10/2025 5:13 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-7



n = 16

Slope = 0.004122 units per year.

Mann-Kendall statistic = 86
critical = 53

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2).

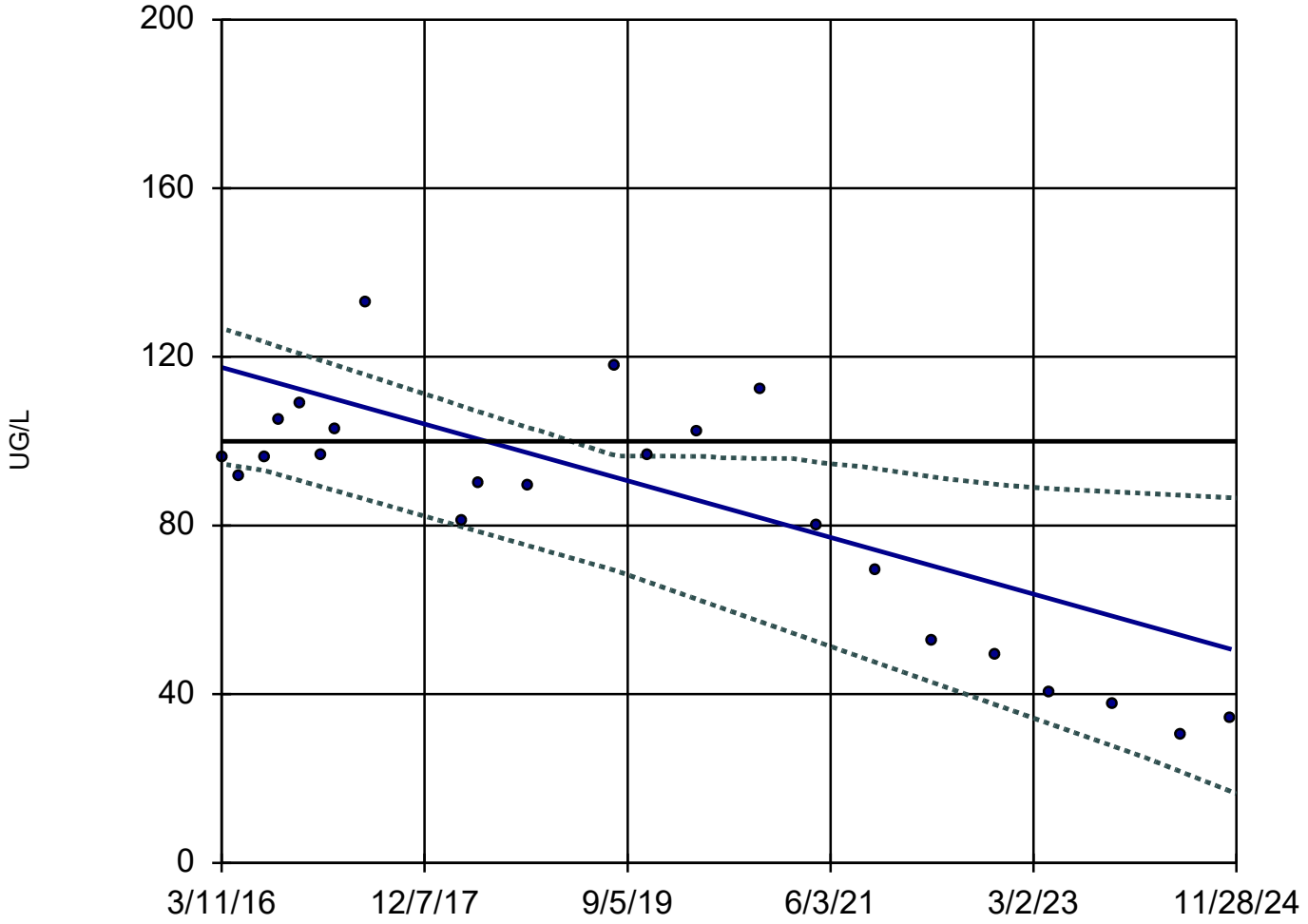
Constituent: MERCURY, TOTAL Analysis Run 3/10/2025 5:13 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Sen's Slope and 95% Confidence Band

R-MW-4



n = 23

Slope = -7.696 units per year.

Mann-Kendall statistic = -131 critical = -89

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band intersects GWPS (100) on 04/09/19.

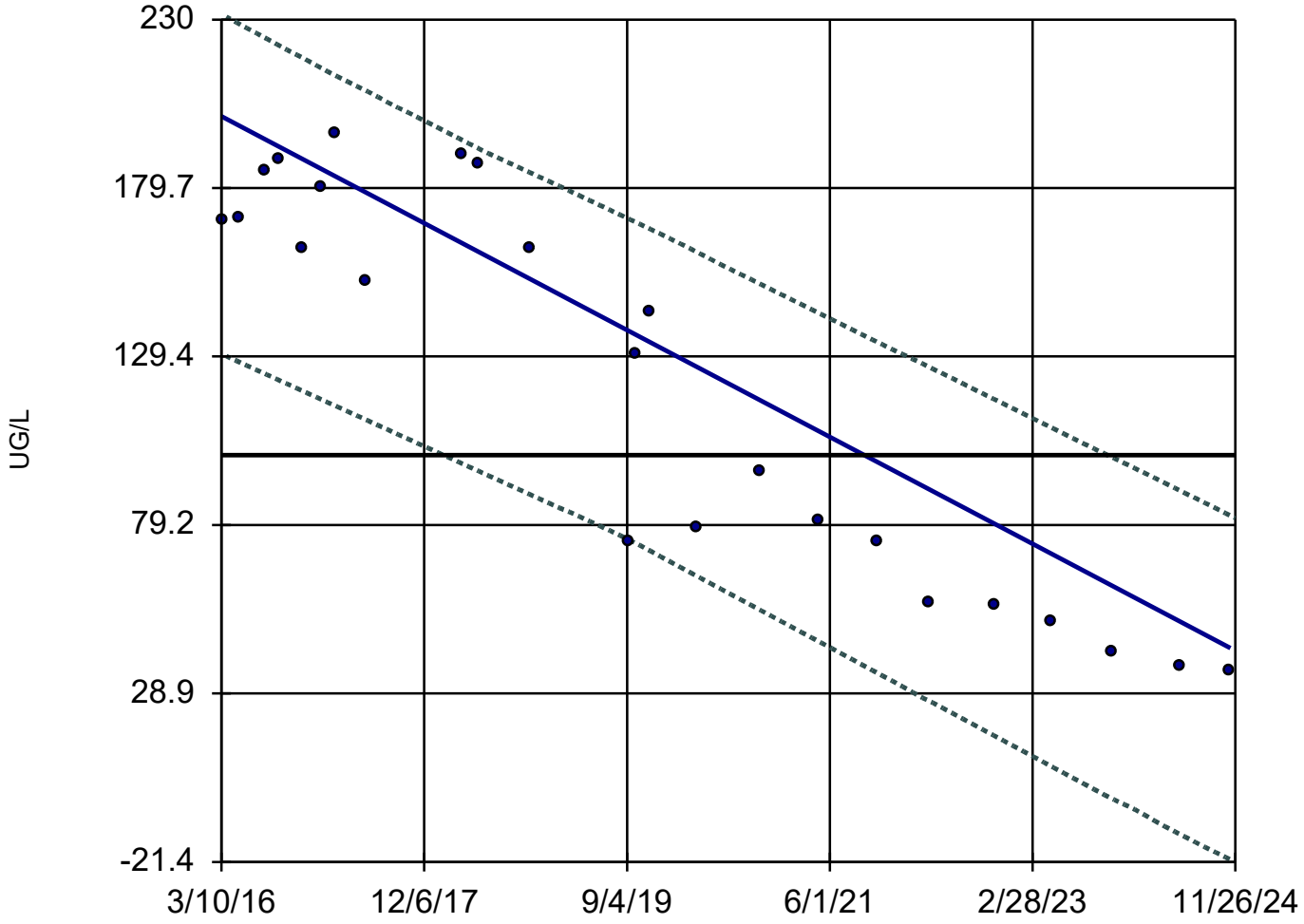
Constituent: MOLYBDENUM, TOTAL Analysis Run 3/10/2025 5:13 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-MW-7



n = 24

Slope = -18.29 units per year.

Mann-Kendall statistic = -201 critical = -95

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band intersects GWPS (100) on 02/20/18 and 11/12/23.

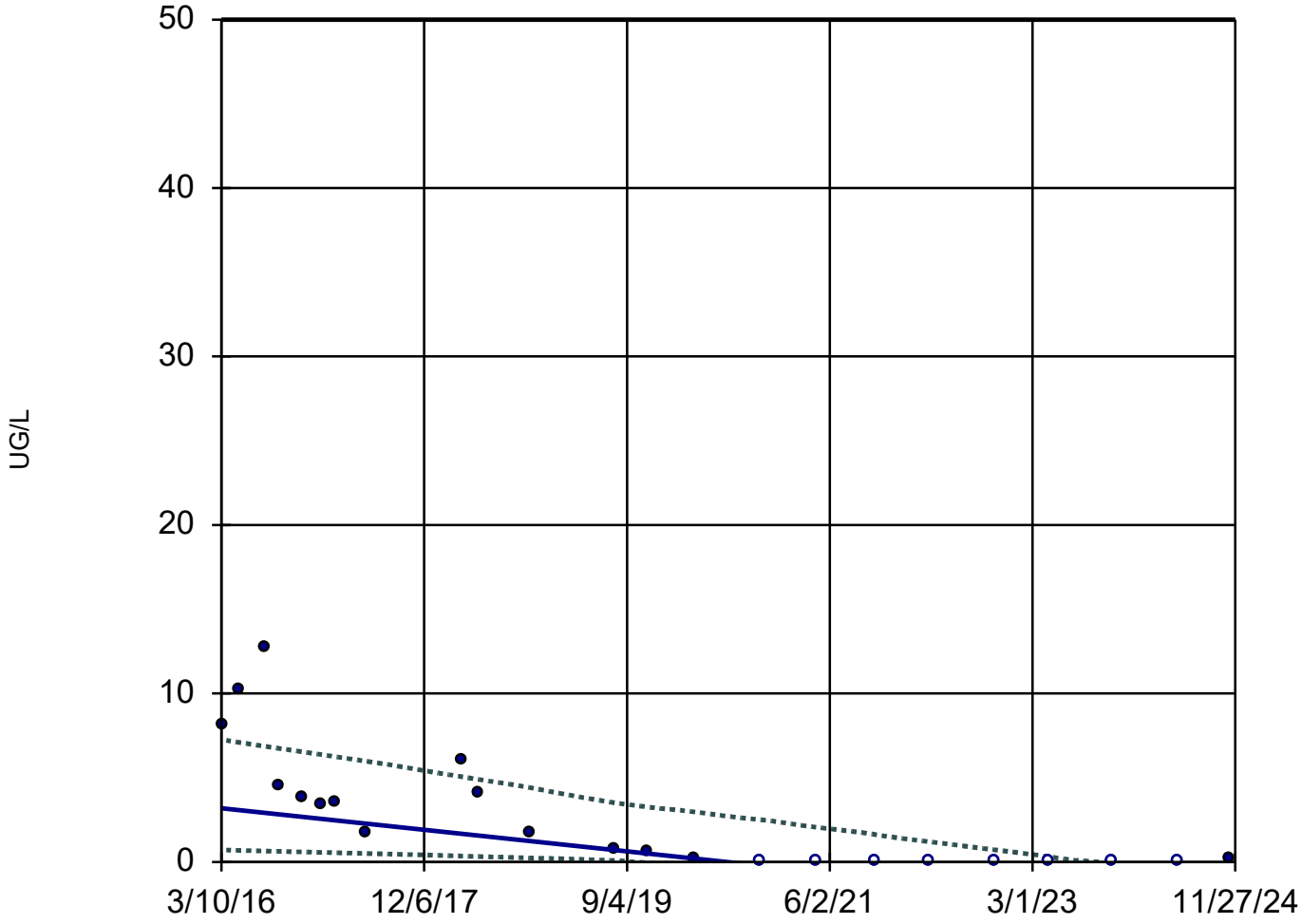
Constituent: MOLYBDENUM, TOTAL Analysis Run 3/10/2025 5:13 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-1



n = 23

Slope = -0.734 units per year.

Mann-Kendall statistic = -181 critical = -89

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (50).

Constituent: SELENIUM, TOTAL Analysis Run 3/10/2025 5:13 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Trend Test

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 3/10/2025, 5:14 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
ANTIMONY, TOTAL (UG/L)	**R-MW-1**	**-0.09073**	**-112**	**-89**	**Yes**	**23**	**17.39**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	**R-MW-2**	**-0.343**	**-169**	**-89**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	R-MW-3	-0.00...	-50	-89	No	23	56.52	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	**R-MW-4**	**0.004155**	**139**	**84**	**Yes**	**22**	**86.36**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	**R-MW-5**	**0.004207**	**158**	**84**	**Yes**	**22**	**95.45**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	R-MW-6	0.002503	35	89	No	23	69.57	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	**R-MW-7**	**0.004184**	**102**	**89**	**Yes**	**23**	**86.96**	**n/a**	**n/a**	**0.02**	**NP**
ARSENIC, TOTAL (UG/L)	**R-MW-1**	**-1.022**	**-105**	**-89**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.02**	**NP**
ARSENIC, TOTAL (UG/L)	R-MW-2	1.588	28	89	No	23	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-MW-3	-3.662	-53	-89	No	23	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-MW-4	0.2809	67	89	No	23	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	**R-MW-5**	**-0.3899**	**-194**	**-89**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.02**	**NP**
ARSENIC, TOTAL (UG/L)	R-MW-6	0.02981	30	73	No	20	15	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	**R-MW-7**	**4.389**	**111**	**95**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.02**	**NP**
BARIUM, TOTAL (UG/L)	**R-MW-1**	**2.541**	**96**	**84**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.02**	**NP**
BARIUM, TOTAL (UG/L)	R-MW-2	-0.2844	-50	-84	No	22	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-MW-3	2.534	73	89	No	23	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	**R-MW-4**	**12.96**	**126**	**89**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.02**	**NP**
BARIUM, TOTAL (UG/L)	**R-MW-5**	**-7.828**	**-132**	**-84**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.02**	**NP**
BARIUM, TOTAL (UG/L)	R-MW-6	0	1	84	No	22	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-MW-7	-3.309	-50	-89	No	23	0	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	R-MW-1	-0.00...	-52	-58	No	17	100	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	R-MW-2	-0.00...	-38	-58	No	17	100	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	R-MW-3	0	3	53	No	16	87.5	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	R-MW-4	0	-12	-58	No	17	94.12	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	R-MW-5	-0.00...	-38	-58	No	17	100	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	R-MW-6	-0.00...	-32	-58	No	17	94.12	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	R-MW-7	0	4	63	No	18	83.33	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-MW-1	0.002721	45	63	No	18	77.78	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	**R-MW-2**	**0.03235**	**70**	**68**	**Yes**	**19**	**15.79**	**n/a**	**n/a**	**0.02**	**NP**
CADMIUM, TOTAL (UG/L)	**R-MW-3**	**0.03071**	**81**	**68**	**Yes**	**19**	**42.11**	**n/a**	**n/a**	**0.02**	**NP**
CADMIUM, TOTAL (UG/L)	R-MW-4	0.001557	42	68	No	19	78.95	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-MW-5	0.001585	68	68	No	19	100	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-MW-6	0.001473	59	63	No	18	100	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-MW-7	0.001714	56	73	No	20	80	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-1	0	-2	-78	No	21	52.38	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-2	-0.02666	-34	-78	No	21	23.81	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-3	-0.03708	-37	-78	No	21	23.81	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-4	-0.02481	-36	-73	No	20	40	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-5	-0.01588	-42	-78	No	21	28.57	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-6	0.007958	8	68	No	19	52.63	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-7	-0.00...	-12	-84	No	22	50	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	**R-MW-1**	**0.03009**	**65**	**58**	**Yes**	**17**	**88.24**	**n/a**	**n/a**	**0.02**	**NP**
COBALT, TOTAL (UG/L)	**R-MW-2**	**0.02665**	**89**	**58**	**Yes**	**17**	**100**	**n/a**	**n/a**	**0.02**	**NP**
COBALT, TOTAL (UG/L)	**R-MW-3**	**0.03207**	**97**	**58**	**Yes**	**17**	**94.12**	**n/a**	**n/a**	**0.02**	**NP**
COBALT, TOTAL (UG/L)	R-MW-4	0.02397	51	58	No	17	82.35	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	R-MW-5	0.01754	40	58	No	17	88.24	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	**R-MW-6**	**0.02868**	**64**	**53**	**Yes**	**16**	**93.75**	**n/a**	**n/a**	**0.02**	**NP**
COBALT, TOTAL (UG/L)	**R-MW-7**	**0.03438**	**83**	**63**	**Yes**	**18**	**77.78**	**n/a**	**n/a**	**0.02**	**NP**
FLUORIDE, TOTAL (MG/L)	R-MW-1	-0.01483	-75	-125	No	29	20.69	n/a	n/a	0.02	NP

Trend Test

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 3/10/2025, 5:14 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
FLUORIDE, TOTAL (MG/L)	R-MW-2	0.01364	22	101	No	25	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	**R-MW-3**	**0.04525**	**175**	**101**	**Yes**	**25**	**0**	**n/a**	**n/a**	**0.02**	**NP**
FLUORIDE, TOTAL (MG/L)	**R-MW-4**	**-0.02724**	**-130**	**-106**	**Yes**	**26**	**0**	**n/a**	**n/a**	**0.02**	**NP**
FLUORIDE, TOTAL (MG/L)	R-MW-5	0	13	101	No	25	16	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	**R-MW-6**	**0.01354**	**114**	**112**	**Yes**	**27**	**11.11**	**n/a**	**n/a**	**0.02**	**NP**
FLUORIDE, TOTAL (MG/L)	R-MW-7	-0.0199	-109	-119	No	28	17.86	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	**R-MW-1**	**0.1095**	**92**	**73**	**Yes**	**20**	**100**	**n/a**	**n/a**	**0.02**	**NP**
LEAD, TOTAL (UG/L)	R-MW-2	-0.08124	-10	-73	No	20	0	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-MW-3	-0.2968	-75	-78	No	21	42.86	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	**R-MW-4**	**0.1006**	**75**	**73**	**Yes**	**20**	**95**	**n/a**	**n/a**	**0.02**	**NP**
LEAD, TOTAL (UG/L)	R-MW-5	0.1006	73	73	No	20	85	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-MW-6	0.1029	60	73	No	20	80	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	**R-MW-7**	**0.113**	**94**	**78**	**Yes**	**21**	**90.48**	**n/a**	**n/a**	**0.02**	**NP**
LITHIUM, TOTAL (UG/L)	R-MW-1	0	12	89	No	23	91.3	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-MW-2	0.06046	42	89	No	23	78.26	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	**R-MW-3**	**0.519**	**135**	**89**	**Yes**	**23**	**73.91**	**n/a**	**n/a**	**0.02**	**NP**
LITHIUM, TOTAL (UG/L)	**R-MW-4**	**-1.244**	**-141**	**-89**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.02**	**NP**
LITHIUM, TOTAL (UG/L)	R-MW-5	0.1649	31	89	No	23	43.48	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-MW-6	0.1573	47	84	No	22	63.64	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-MW-7	-0.5377	-69	-78	No	21	0	n/a	n/a	0.02	NP
MERCURY, TOTAL (UG/L)	**R-MW-1**	**0.003724**	**53**	**48**	**Yes**	**15**	**93.33**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-2**	**0.003717**	**53**	**48**	**Yes**	**15**	**93.33**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-3**	**0.003717**	**53**	**48**	**Yes**	**15**	**93.33**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-4**	**0.003714**	**53**	**48**	**Yes**	**15**	**93.33**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-5**	**0.003714**	**53**	**48**	**Yes**	**15**	**93.33**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-6**	**0.003774**	**62**	**48**	**Yes**	**15**	**100**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-7**	**0.004122**	**86**	**53**	**Yes**	**16**	**100**	**n/a**	**n/a**	**0.02**	**NP**
MOLYBDENUM, TOTAL (UG/L)	R-MW-1	6.473	77	89	No	23	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-MW-2	-4.134	-27	-89	No	23	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-MW-3	-11.58	-35	-89	No	23	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	**R-MW-4**	**-7.696**	**-131**	**-89**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.02**	**NP**
MOLYBDENUM, TOTAL (UG/L)	R-MW-5	0	3	89	No	23	82.61	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-MW-6	0.008964	9	89	No	23	39.13	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	**R-MW-7**	**-18.29**	**-201**	**-95**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.02**	**NP**
RADIUM [226 + 228] (PCI/L)	R-MW-1	0.02886	50	89	No	23	95.65	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-2	0.05955	83	89	No	23	95.65	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-3	0.02141	49	89	No	23	95.65	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-4	0.01741	44	89	No	23	82.61	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-5	0.005319	25	89	No	23	82.61	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-6	0.005058	11	89	No	23	78.26	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-7	0.0136	47	84	No	22	100	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	**R-MW-1**	**-0.734**	**-181**	**-89**	**Yes**	**23**	**34.78**	**n/a**	**n/a**	**0.02**	**NP**
SELENIUM, TOTAL (UG/L)	R-MW-2	0	-2	-89	No	23	0	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-3	-0.01869	-67	-84	No	22	0	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-4	0	-43	-89	No	23	69.57	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-5	0	16	89	No	23	100	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-6	-0.00...	-5	-84	No	22	13.64	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-7	0	2	95	No	24	83.33	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-1	-0.02205	-37	-53	No	16	93.75	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-2	-0.00...	-23	-58	No	17	100	n/a	n/a	0.02	NP

Trend Test

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 3/10/2025, 5:14 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
THALLIUM, TOTAL (UG/L)	R-MW-3	-0.00...	-23	-53	No	16	100	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-4	-0.00...	-23	-53	No	16	100	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-5	-0.00...	-23	-53	No	16	100	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-6	-0.01476	-37	-53	No	16	93.75	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-7	-0.00...	-33	-58	No	17	94.12	n/a	n/a	0.02	NP

Appendix C

May 2025 Assessment Monitoring Statistical Evaluation

Memorandum
September 3, 2025

To:	Ameren Missouri – Lisa Meyer	**Project Number:**	23008-25
CC:	Ameren Missouri - Susan Knowles, Craig Giesmann, Bill Kutosky, Austin Nieman		
From:	Rocksmith Geoengineering - Mark Haddock, P.E., Jeff Ingram, R.G., Grant Morey, R. G.	**Email:**	jeff.ingram@rocksmithgeo.com
RE:	**Assessment Monitoring Statistical Evaluation, RCPA Surface Impoundment Rush Island Energy Center, Jefferson County, Missouri**		

This Technical Memorandum provides the results of the Assessment Monitoring Statistical Evaluation for the May 2025 sampling event at the RCPA Surface Impoundment at the Rush Island Energy Center located in Jefferson County, Missouri. Included in the memorandum is a summary of constituents that are present at a Statistically Significant Level (SSL), a list of site-specific Groundwater Protection Standards (**Table 1**), and the Sanitas Technologies™ (Sanitas) statistical software output for each of the Appendix IV parameters.

The Appendix IV constituents were evaluated for SSLs using the methods and procedures outlined in the Statistical Analysis Plan (SAP). As with previous statistical evaluations, an analysis was conducted to identify new outliers in the dataset with the inclusion of data collected in May 2025. The following outliers were removed from the dataset prior to subsequent statistical testing:

- Arsenic
  - R-MW-6 at 4.4 J micrograms per liter (µg/L) on 4/22/2021: result is statistically higher than other arsenic values at the same monitoring well. This high result is not consistent with previous or subsequent arsenic results at the well and is an outlier.
- Chromium
  - R-MW-2 at non-detect (ND) [<0.16, <0.054, and <0.078 micrograms per liter (µg/L)] on 1/19/2017, 3/6/2017 and 11/5/2018, respectively: results are statistically lower than other chromium values at the same monitoring well. These low results are not consistent with previous or subsequent chromium results at the well and are outliers.
  - R-MW-3 at ND (<0.16, <0.054, and <0.078 µg/L) on 1/19/2017, 3/6/2017 and 11/2/2018 respectively: results are statistically lower than other chromium values at the same monitoring well. These low results are not consistent with previous or subsequent chromium results at the well and are outliers.
  - R-MW-5 at ND (<0.054) µg/L on 3/6/2017: result is statistically lower than other chromium values at the same monitoring well. This low result is not consistent with previous or subsequent chromium results at the well and is an outlier.

- Radium 226 + 228
    - R-MW-3 at ND [<4.21 picocuries per liter (pCi/L)] on 11/11/2024: result is statistically higher than other radium values at the same monitoring well due to the high minimum detectable concentration (MDC) reported by the laboratory. This high result is not consistent with previous or subsequent radium results at the well and is an outlier.

An analysis of the outliers removed from the dataset to-date was completed. One previously identified outlier was added back into the dataset prior to subsequent statistical analysis:

- Lead
    - R-MW-2 at ND (<2.5 µg/L) on 5/2/2016: removed during the statistical evaluation for the November 2024 sampling event because the result was statistically lower than other lead results at the same monitoring well. Based on subsequent sampling results, the low result was confirmed, and the result is no longer an outlier.

Assessment monitoring data for the RCPA has been collected since March 2016, prior to closure of the unit and the initiation of the groundwater treatment system. Closure of the RCPA was initiated in August 2019 and substantially completed on December 15, 2020. A pilot groundwater treatment system was installed in 2021, and the full-scale treatment system was installed and has been fully operational since February 2022. Previous statistical evaluations for the RCPA incorporated all available assessment monitoring data (except outliers) into the calculation of confidence intervals and trends for SSL determination. The United States Environmental Protection Agency (USEPA) Unified Guidance (Chapter 7, USEPA, 2009) offers guidance on accounting for temporal shifts in compliance point (well) data. In instances where data is shifted (such as the result of remedial measures), older data may not accurately represent present conditions and may incorrectly bias calculated confidence limits used for new SSL determination. By constraining statistical testing to data collected after an identified shift, the statistical power of the tests improves.

To account for potential shifts in constituent concentrations because of closure activities, Mann-Whitney tests were conducted to compare data collected prior to closure (2016 – 2020) and post-closure (2021 – present). Mann-Whitney test outputs are included in **Appendix A** and results are summarized in **Table 2**. For well-constituent pairs identified as having a statistically significant dissimilarity (alpha=0.05) in concentrations pre- and post-closure, confidence intervals (**Appendix B**) and trends (**Appendix C**) were calculated using only the data collected post-closure (2021 – present). Confidence intervals and trends were calculated using all available data (except outliers) for well-constituent pairs having no statistical dissimilarity between pre- and post-closure data or when all available data are below the practical quantitation limit (PQL).

Based on the results from the confidence interval and trend analysis, no new SSLs were identified. SSLs at the RCPA Surface Impoundment as of May 2025 continue to be:

- Arsenic at R-MW-2, R-MW-3, and R-MW-7/R-MW-7(R)
- Molybdenum at R-MW-2[1] and R-MW-3

[1] The two most recent molybdenum results at R-MW-2 (collected November 2024 and May 2025) are lower than the site GWPS for molybdenum of 100 µg/L. These recent decreased molybdenum concentrations are likely attributed to the groundwater treatment system, and molybdenum concentrations at this well will be closely evaluated following future sampling events.

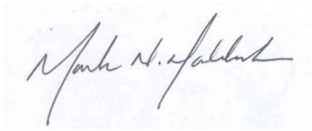
Rocksmith appreciates this opportunity to provide hydrogeological and engineering support services to Ameren. If you have any questions or comments regarding the information provided, please contact the undersigned.

Sincerely,

Rocksmith Geoengineering, LLC



Jeff Ingram, R.G.
Senior Geologist, Partner



Mark Haddock, P.E., R.G.
Principal Engineer, Senior Partner

Attachments

Tables

Table 1 – RCPA Groundwater Protection Standards

Table 2 – Intrawell Mann-Whitney Analysis

Appendices

Appendix A – Sanitas Mann-Whitney Analysis Outputs

Appendix B – Sanitas Confidence Interval Statistical Outputs

Appendix C – Sanitas Trending Confidence Bands Statistical Outputs

Tables

Table 1 - RCPA Groundwater Protection Standards
RCPA Surface Impoundment
Rush Island Energy Center

Parameter	Units	MCL or Health Based GWPS	Site GWPS	Value to Return to Detection Monitoring [6]
Antimony	µg/L	6	6	DQR
Arsenic	µg/L	10	30	30
Barium	µg/L	2000	2000	554.8
Beryllium	µg/L	4	4	DQR
Cadmium	µg/L	5	5	DQR
Chromium	µg/L	100	100	1.909
Cobalt	µg/L	6	6	DQR
Fluoride	mg/L	4	4	0.2515
Lead	µg/L	15	15	DQR
Lithium	µg/L	40	64.7	64.7
Mercury	µg/L	2	2	DQR
Molybdenum	µg/L	100	100	DQR
Radium 226 + 228	pCi/L	5	5	2.297
Selenium	µg/L	50	50	DQR
Thallium	µg/L	2	2	DQR

Notes:

1. µg/L - micrograms per liter

2. mg/L - milligrams per liter

3. pCi/L - picocuries per liter

4. MCL - Maximum Contaminant Level. MCLs from United States Environmental Protection Agency (USEPA) National Primary Drinking Water Regulations. Updated December 12, 2024 at https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations

5. Health Based Groundwater Protection Standards (GWPS) were adoped for Appendix IV parameters without an MCL (i.e. cobalt, lithium, molybdenum, and lead). Information available at https://www.epa.gov/coalash/coal-ash-rule.

6. Values were calculated using statistical methods outlined for Detection Monitoring and are used for returning to Detection Monitoring based on available data to date.

7. DQR - Double Quantification Rule. If all baseline data are less than the Practical Quantitation Limit (PQL), then the DQR will be used. More information on the DQR is provided in the Statistical Analysis Plan.

8. Site GWPS is either the MCL/Health Based GWPS or based on background levels (calculated as described in the Statistical Analysis Plan for Assessment Monitoring), whichever is higher.

9. GWPS and background values calculated using results through May 2025 from monitoring wells MW-B1 and MW-B2.

ROCKSMITH GEOENGINEERING

Prepared by: JTR
Checked by: GTM
Reviewed by: JSI

Table 2 - Intrawell Mann-Whitney Analysis
RCPA Surface Impoundment
Rush Island Energy Center

Constituent Name	Monitoring Well						
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7(R)
	Significant Dissimilarity (Alpha=0.05)						
ANTIMONY, TOTAL	Yes	Yes	<PQL	<PQL	<PQL	<PQL	<PQL
ARSENIC, TOTAL	Yes	No	Yes	Yes	Yes	No	Yes
BARIUM, TOTAL	Yes	No	Yes	Yes	Yes	No	No
BERYLLIUM, TOTAL	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL	No
CADMIUM, TOTAL	<PQL	<PQL	No	<PQL	<PQL	<PQL	<PQL
CHROMIUM, TOTAL	No	No	No	<PQL	No	No	No
COBALT, TOTAL	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
FLUORIDE, TOTAL	Yes	No	Yes	Yes	No	Yes	Yes
LEAD, TOTAL	<PQL	No	<PQL	<PQL	<PQL	<PQL	<PQL
LITHIUM, TOTAL	<PQL	<PQL	Yes	Yes	<PQL	<PQL	Yes
MERCURY, TOTAL	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
MOLYBDENUM, TOTAL	No	No	No	Yes	<PQL	<PQL	Yes
RADIUM 226 + 228	No	Yes	No	No	No	No	<MDC
SELENIUM, TOTAL	Yes	No	<PQL	<PQL	<PQL	<PQL	<PQL
THALLIUM, TOTAL	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL

Notes:

1) Mann-Whitney tests performed for each Appendix IV constituent at each monitoring well comparing data collected before closure of the RCPA CCR Unit (2016 - 2020) and post-closure (2021 - Present).

2) Yellow highlighted "Yes" indicates a statistical dissimilarity at the alpha 0.05 level between results collected before closure and post-closure. Data collected post-closure (excluding outliers) is used to calculate confidence intervals and

3) "No" indicates no statistical dissimilarity at the alpha 0.05 level between results collected before closure and post-closure. All available data (excluding outliers) is used to calculate confidence intervals and trends.

4) "<PQL" / "<MDC" indicates all available results (excluding outliers) are below the Practical Quantitation Limit (PQL) or Minimum Detectable Concentration (MDC). All available data (excluding outliers) is used to calculate confidence intervals

5) NA - not applicable. Radium 226 + 228 is not reported with a PQL but rather an MDC.

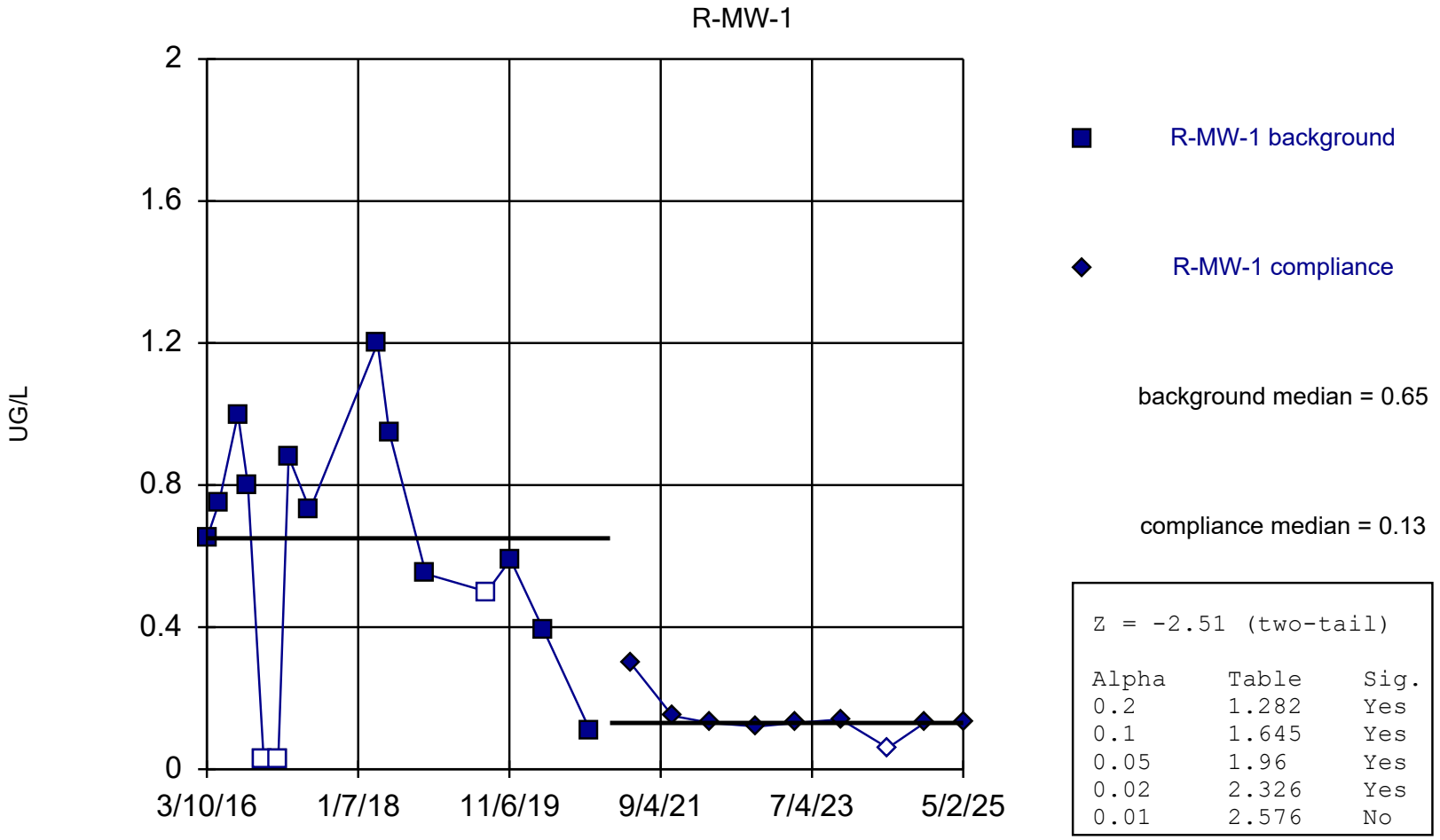
ROCKSMITH GEOENGINEERING

Prepared by: GTM
Checked by: JTR
Reviewed by: JSI

Appendix A
Sanitas Mann-Whitney Analysis Outputs

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)




```
Z = -2.51 (two-tail)

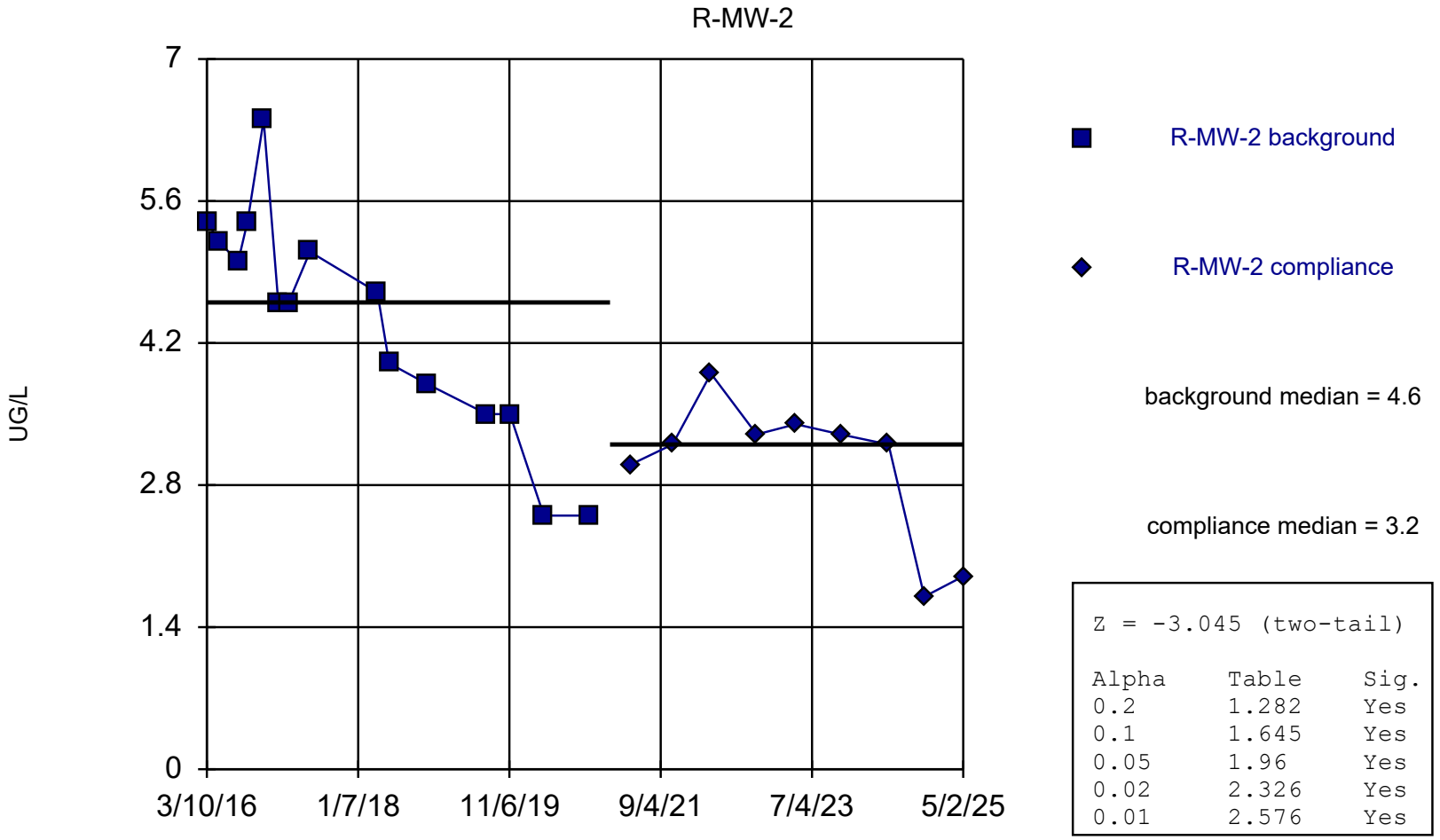
Alpha     Table     Sig.
0.2       1.282     Yes
0.1       1.645     Yes
0.05      1.96      Yes
0.02      2.326     Yes
0.01      2.576     No
```

Constituent: ANTIMONY, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = -3.045 (two-tail)

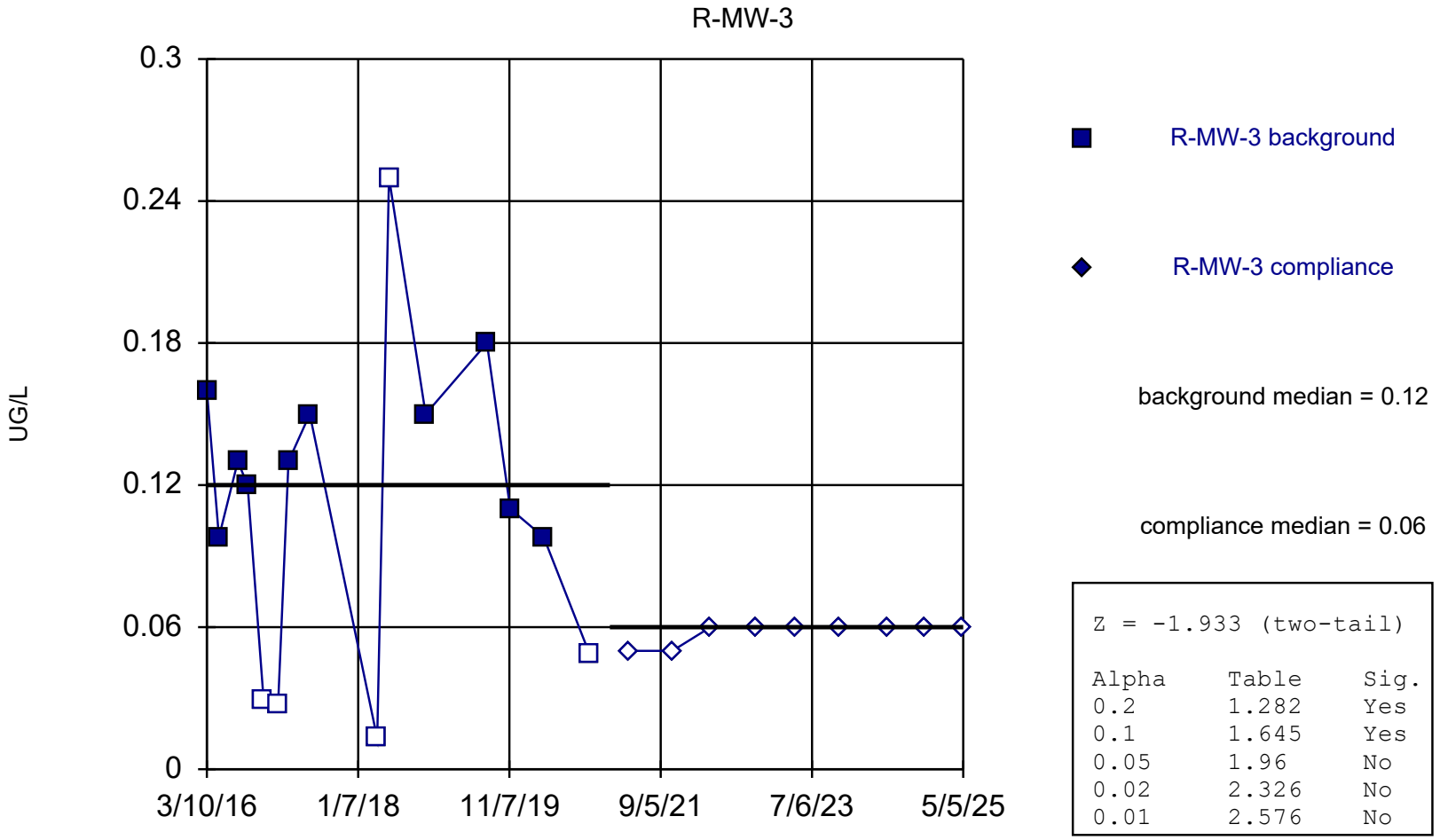
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: ANTIMONY, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -1.933 (two-tail)

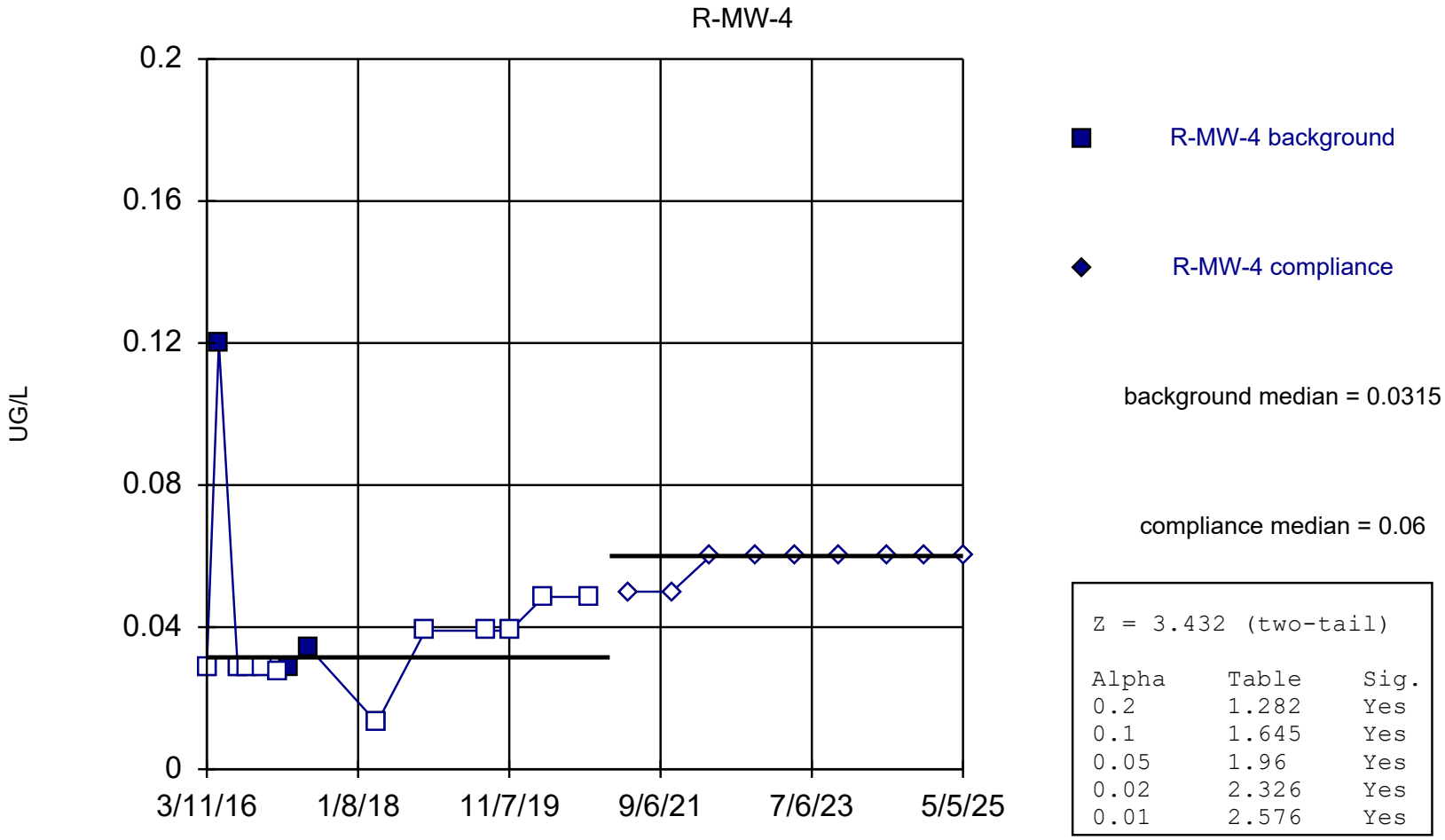
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: ANTIMONY, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 3.432 (two-tail)

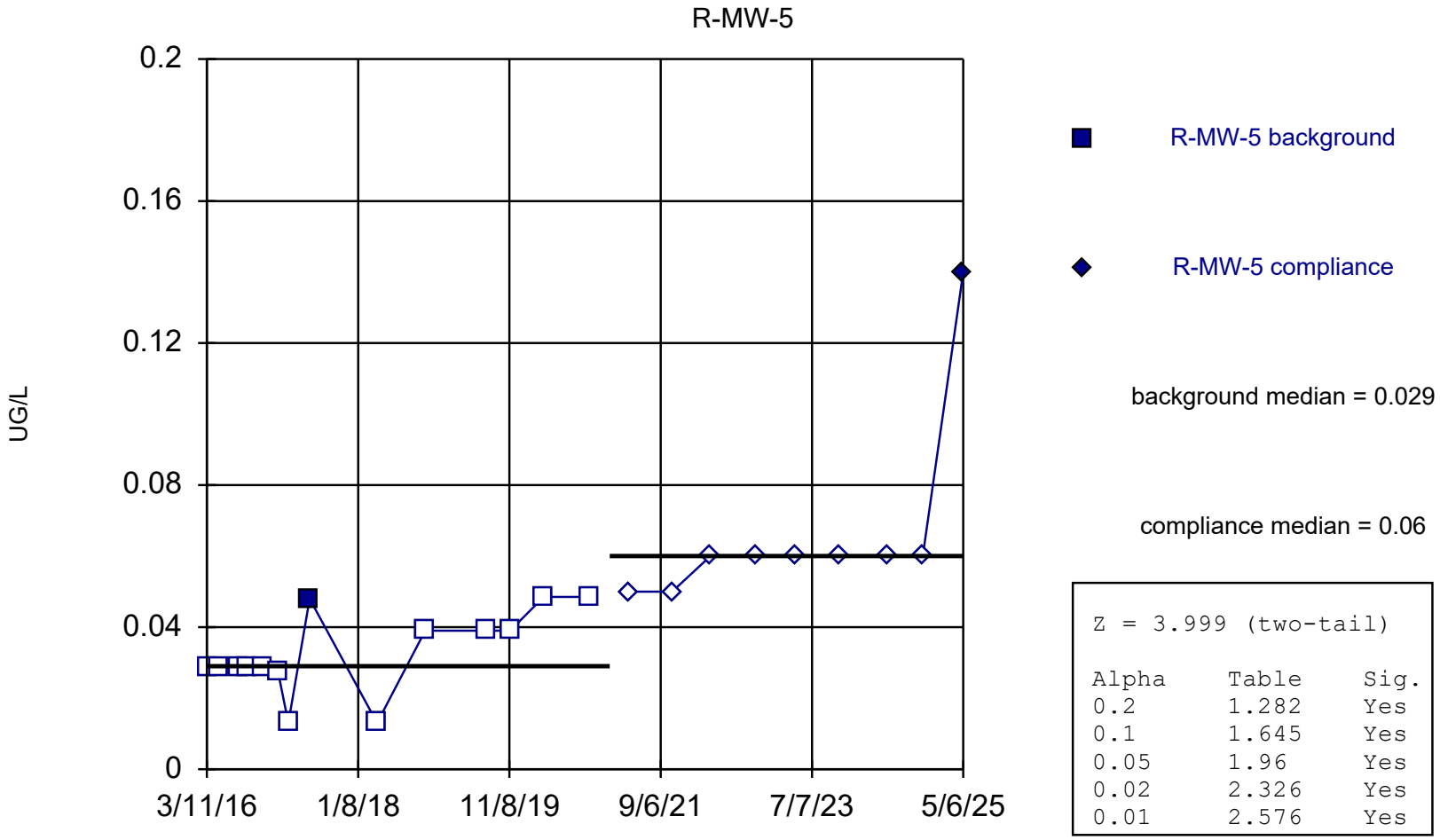
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: ANTIMONY, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 3.999 (two-tail)

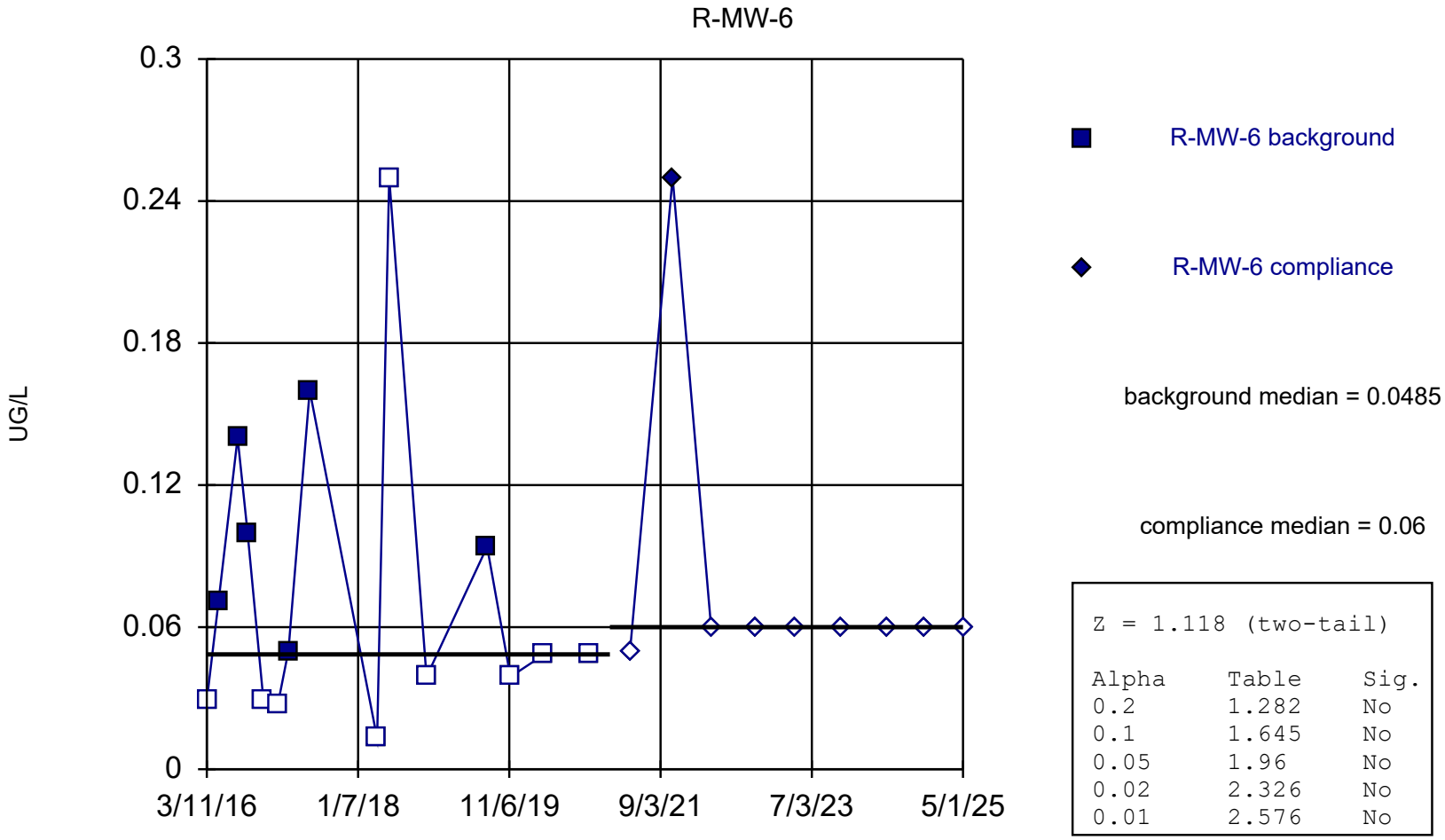
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: ANTIMONY, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.118 (two-tail)

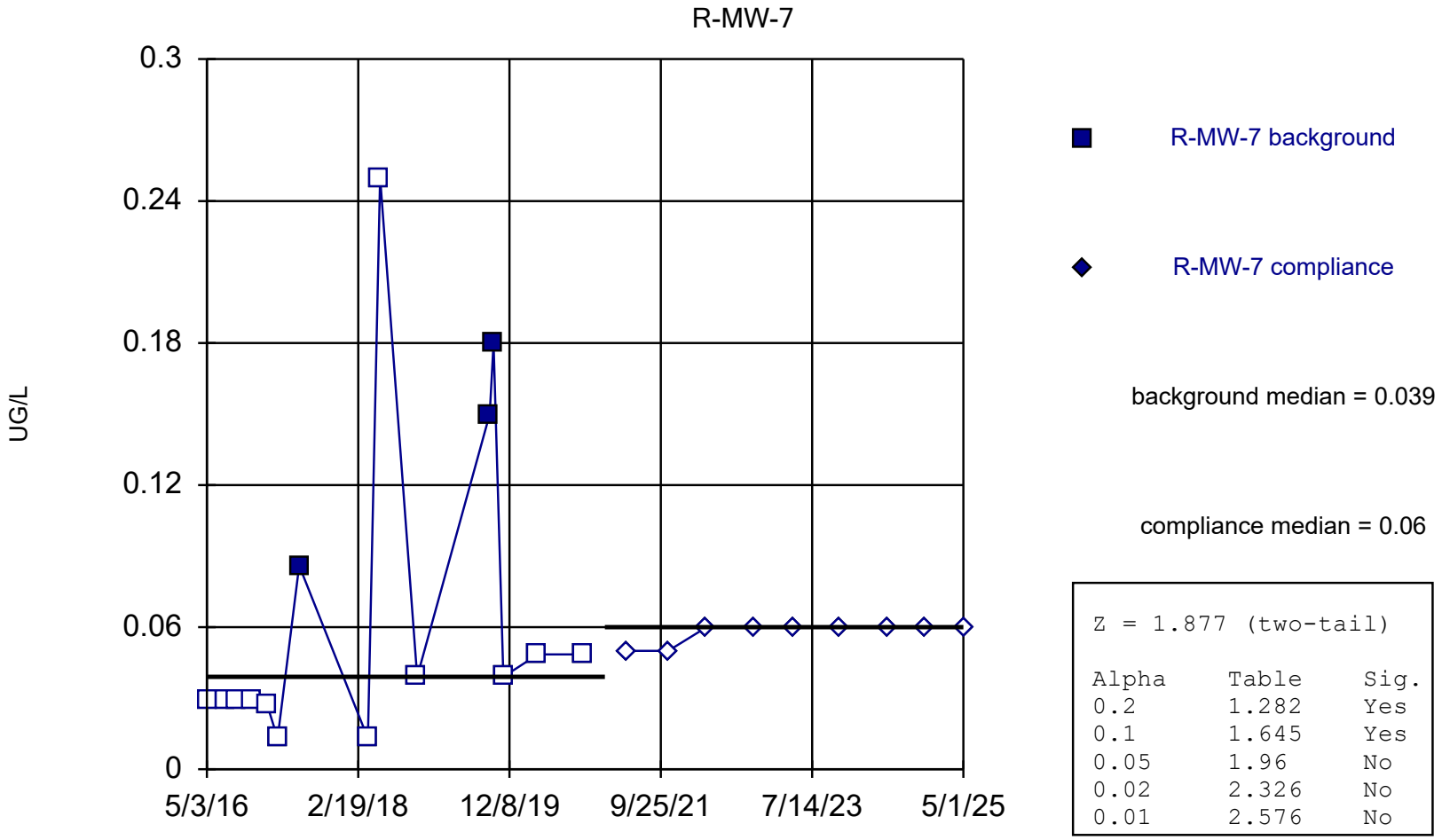
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: ANTIMONY, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

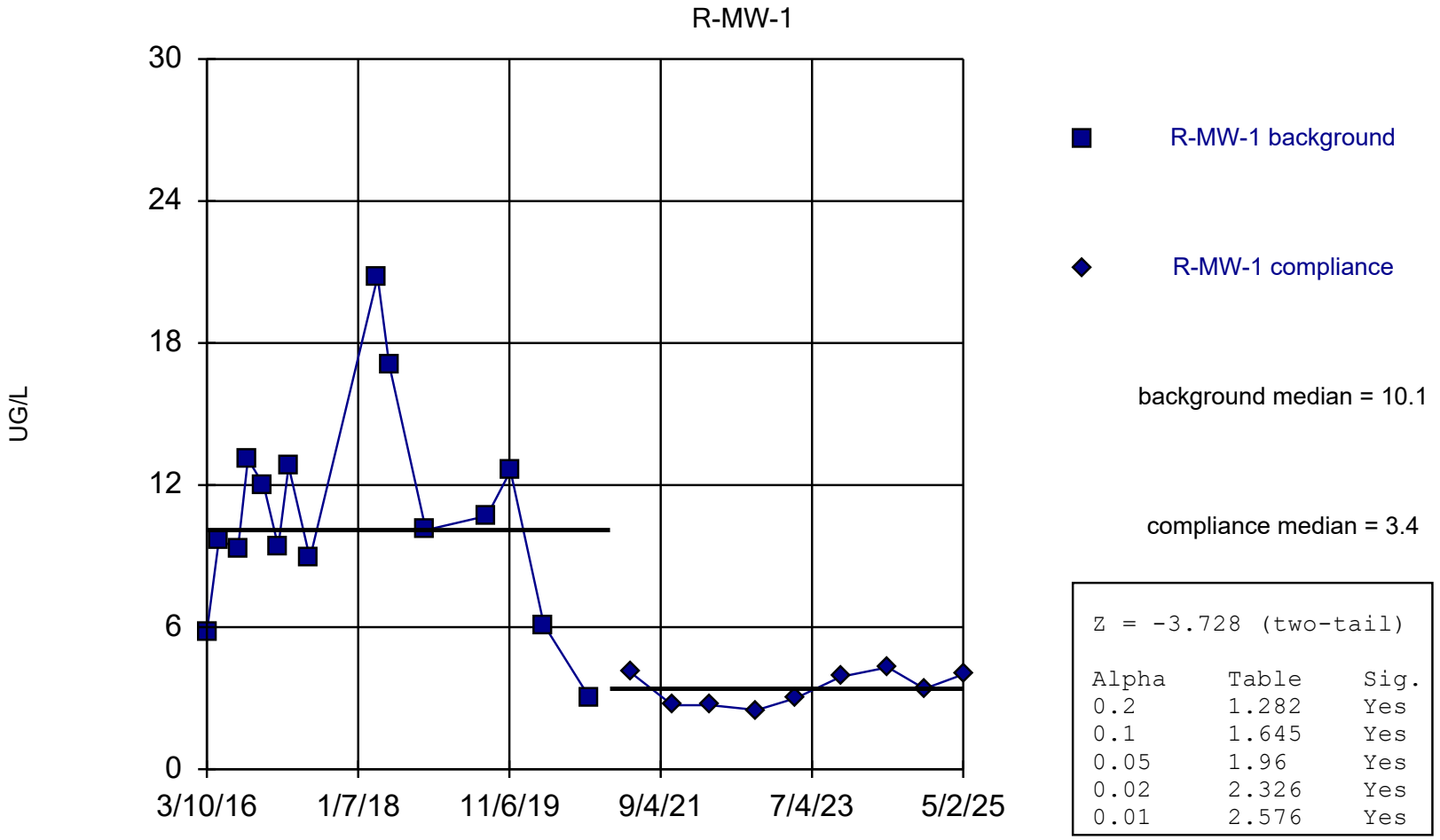


Constituent: ANTIMONY, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = -3.728 (two-tail)

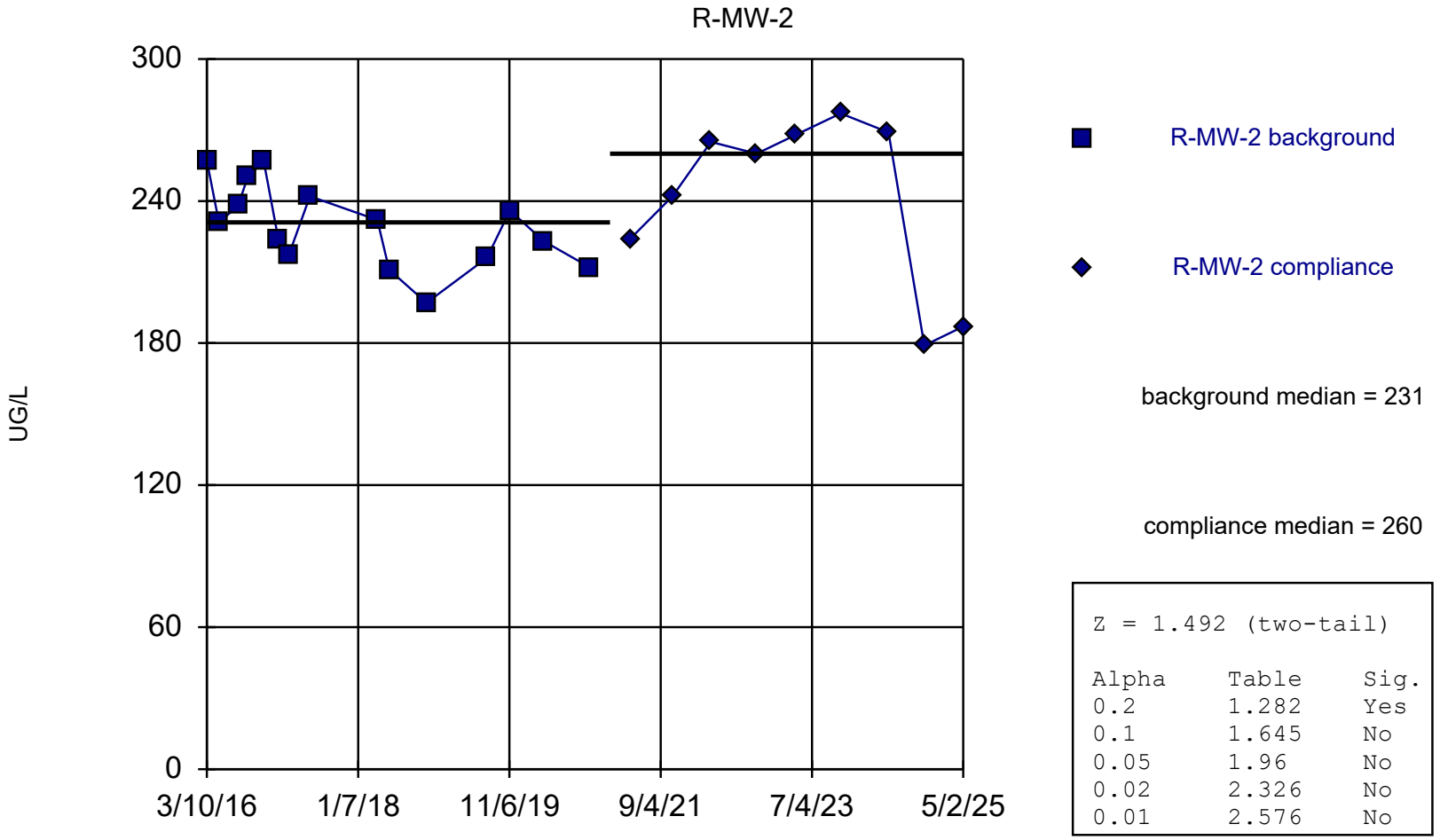
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: ARSENIC, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.492 (two-tail)

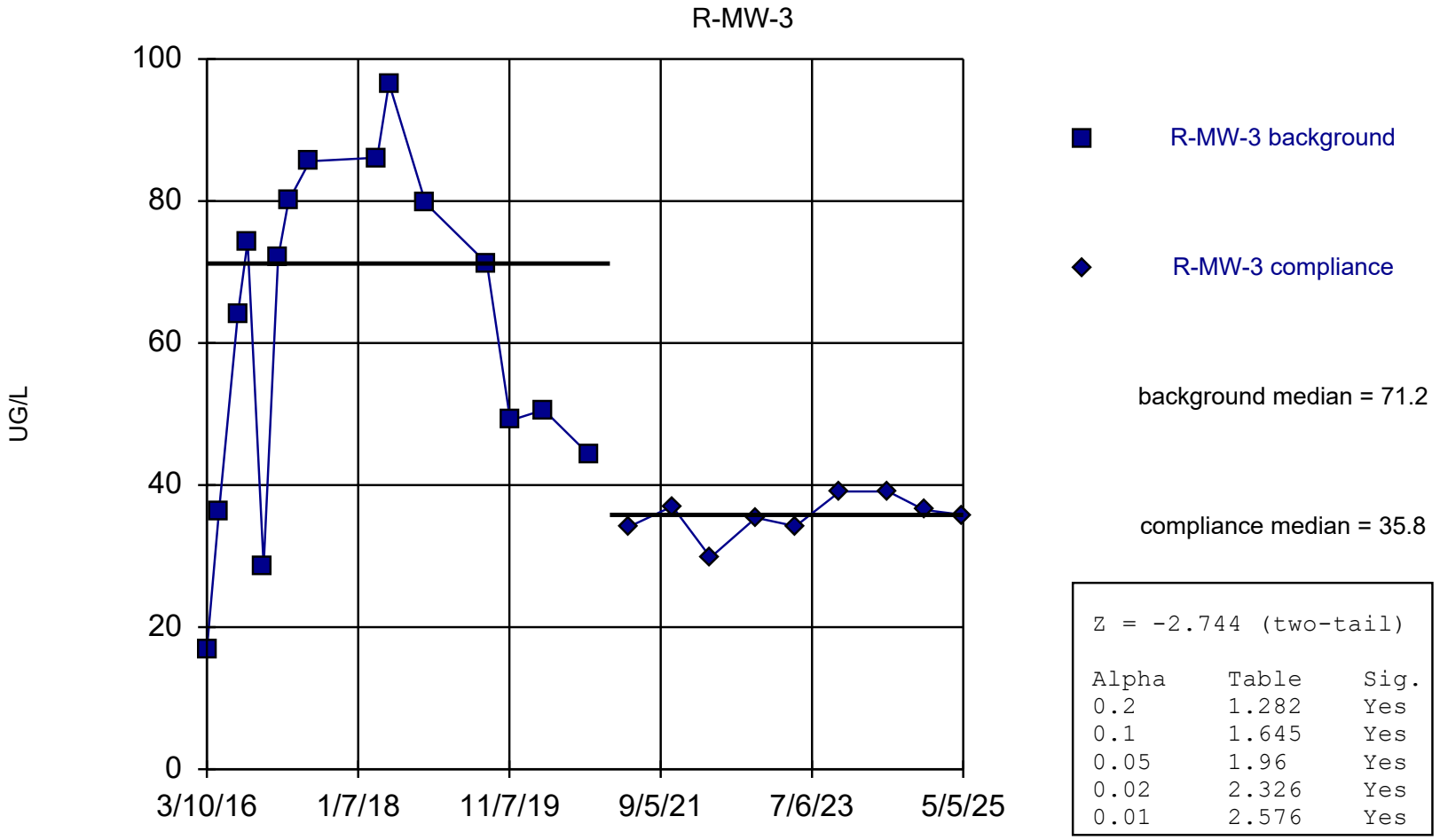
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: ARSENIC, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Mann-Whitney (Wilcoxon Rank Sum)



Z = -2.744 (two-tail)

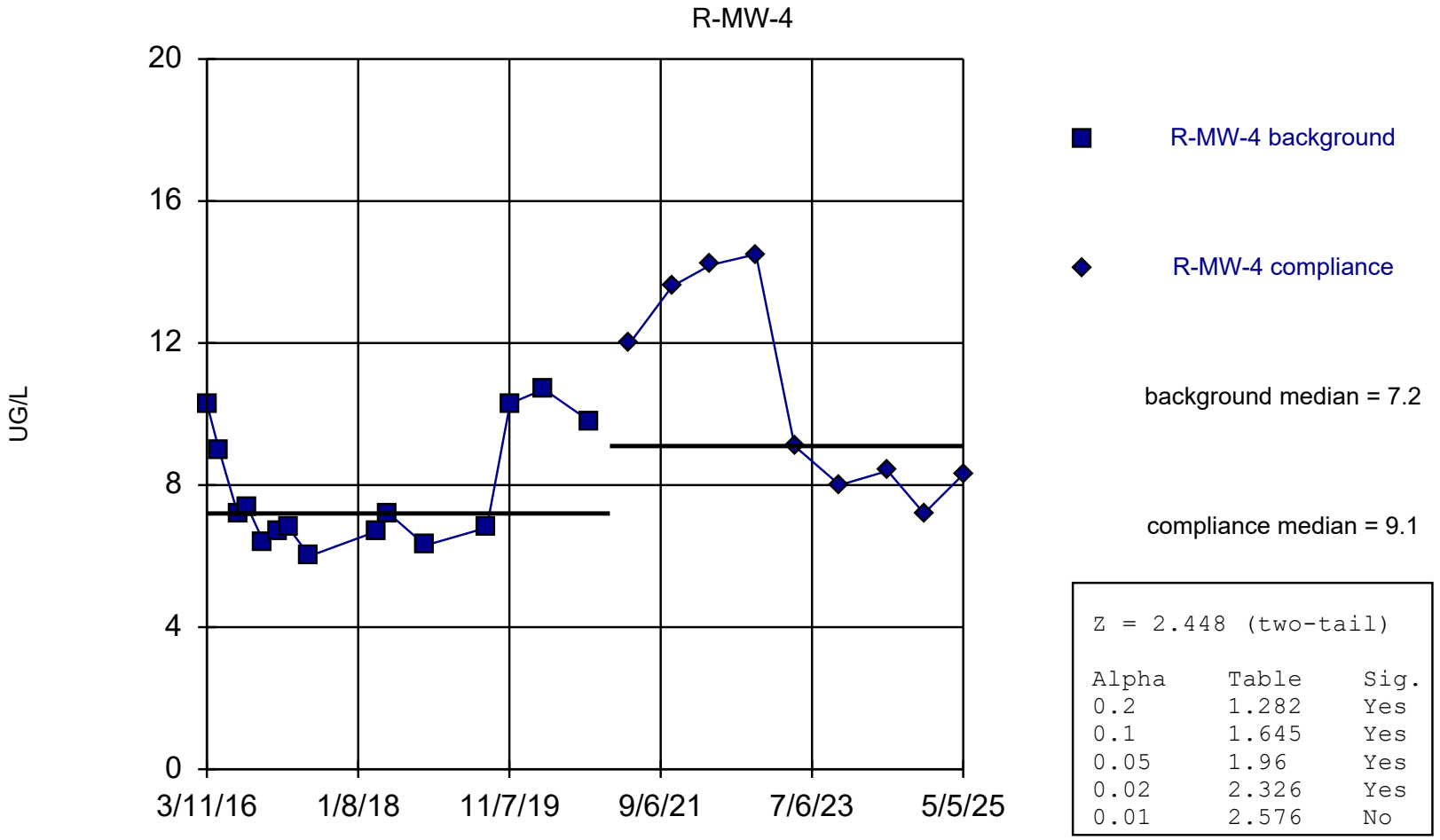
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: ARSENIC, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.448 (two-tail)

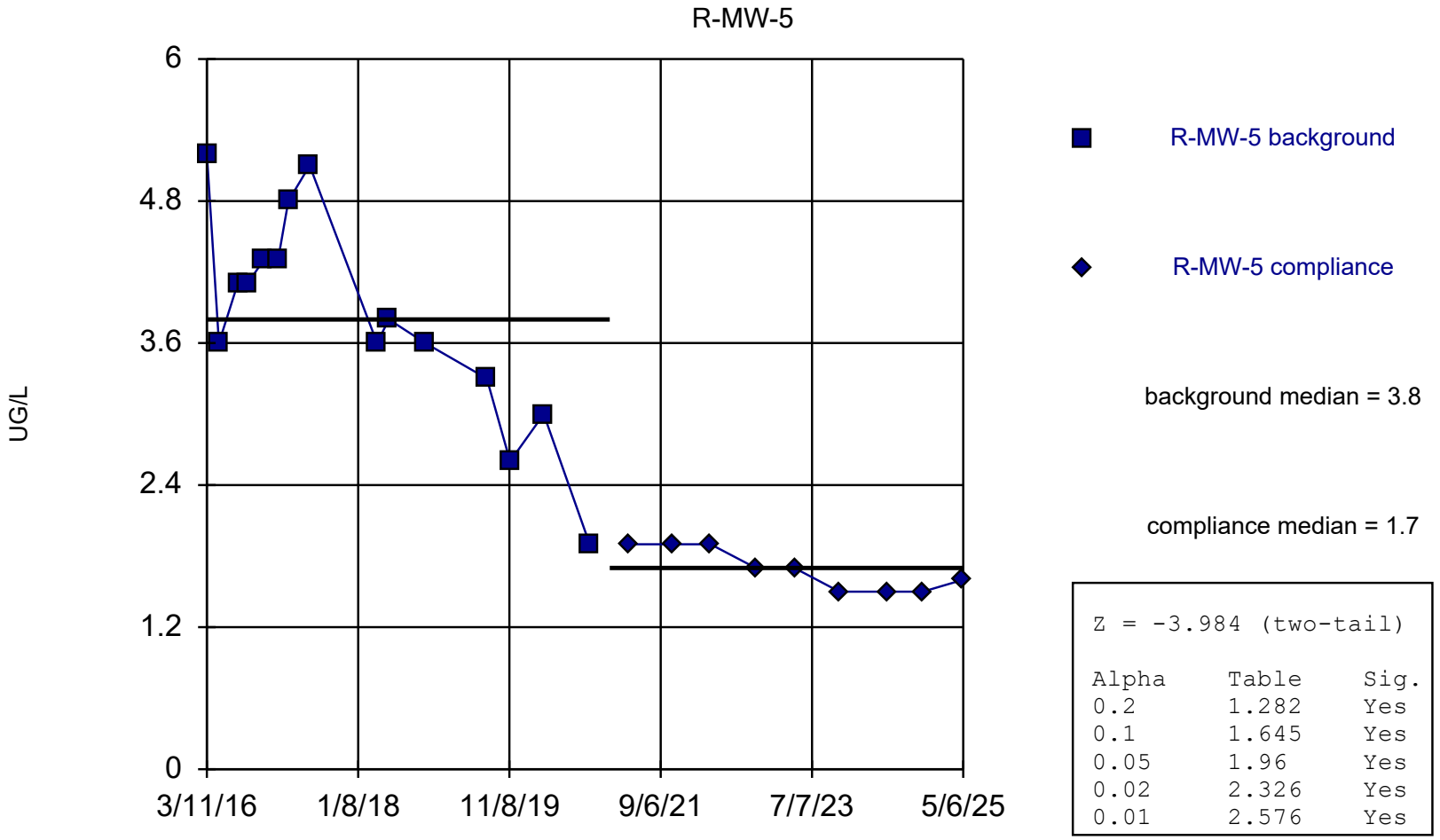
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	No

Constituent: ARSENIC, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



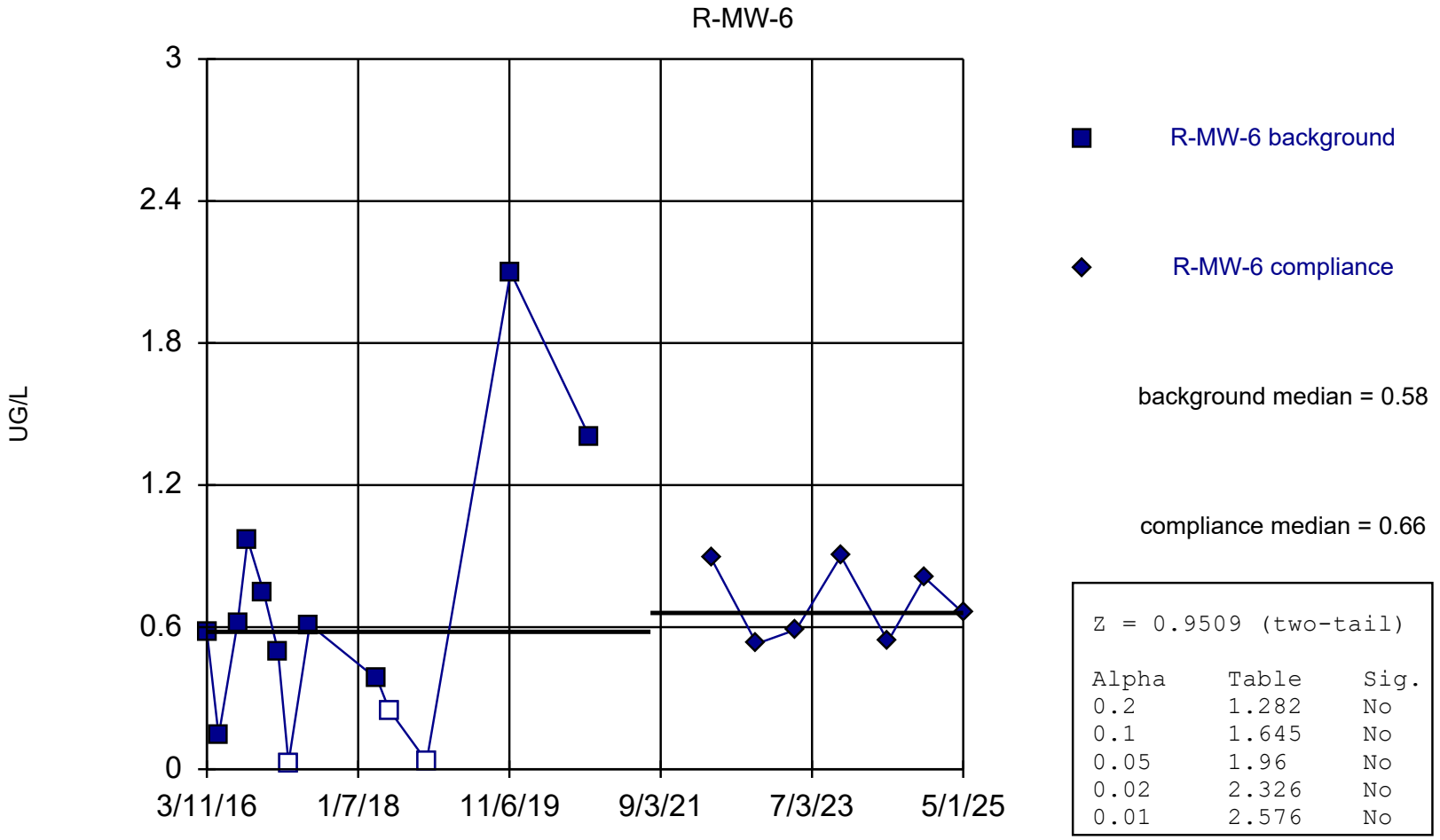
Z = -3.984 (two-tail)		
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: ARSENIC, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.9509 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

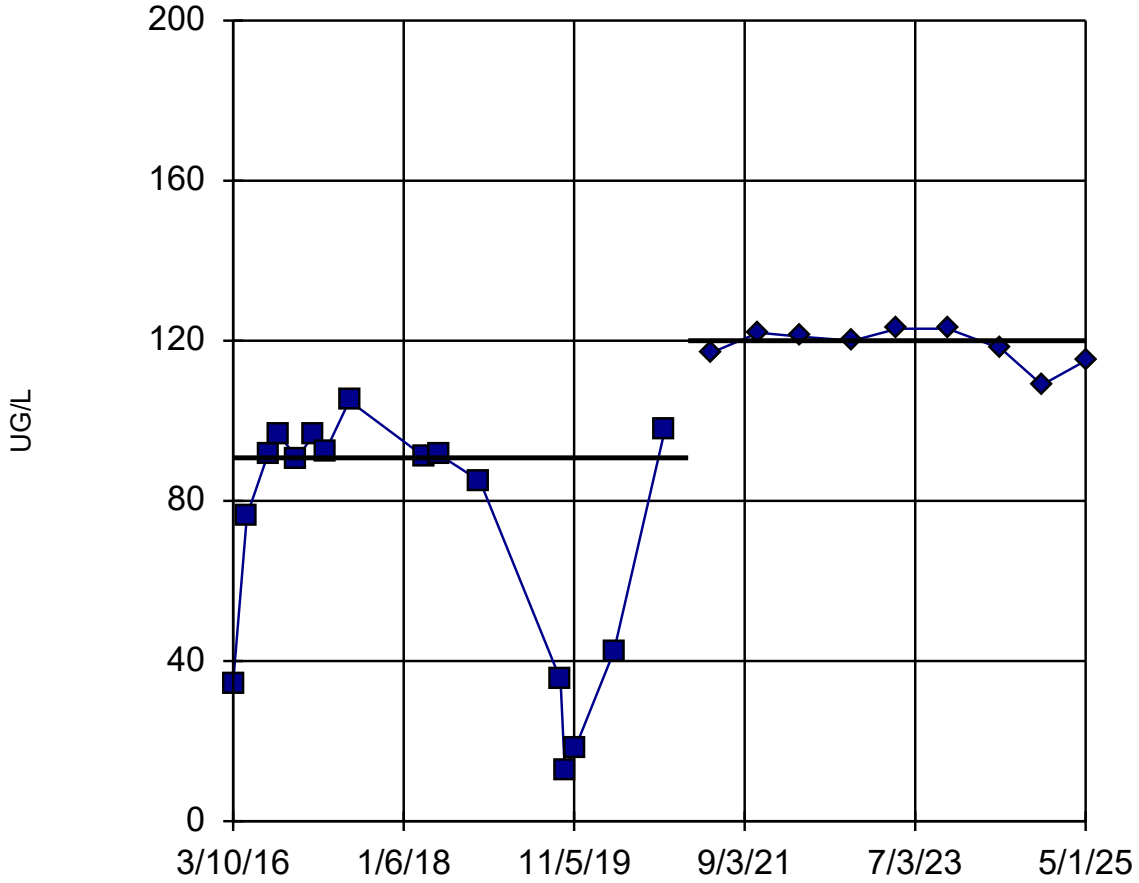
Constituent: ARSENIC, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Mann-Whitney (Wilcoxon Rank Sum)

R-MW-7



R-MW-7 background

R-MW-7 compliance

background median = 90.75

compliance median = 120

Z = 4.049 (two-tail)

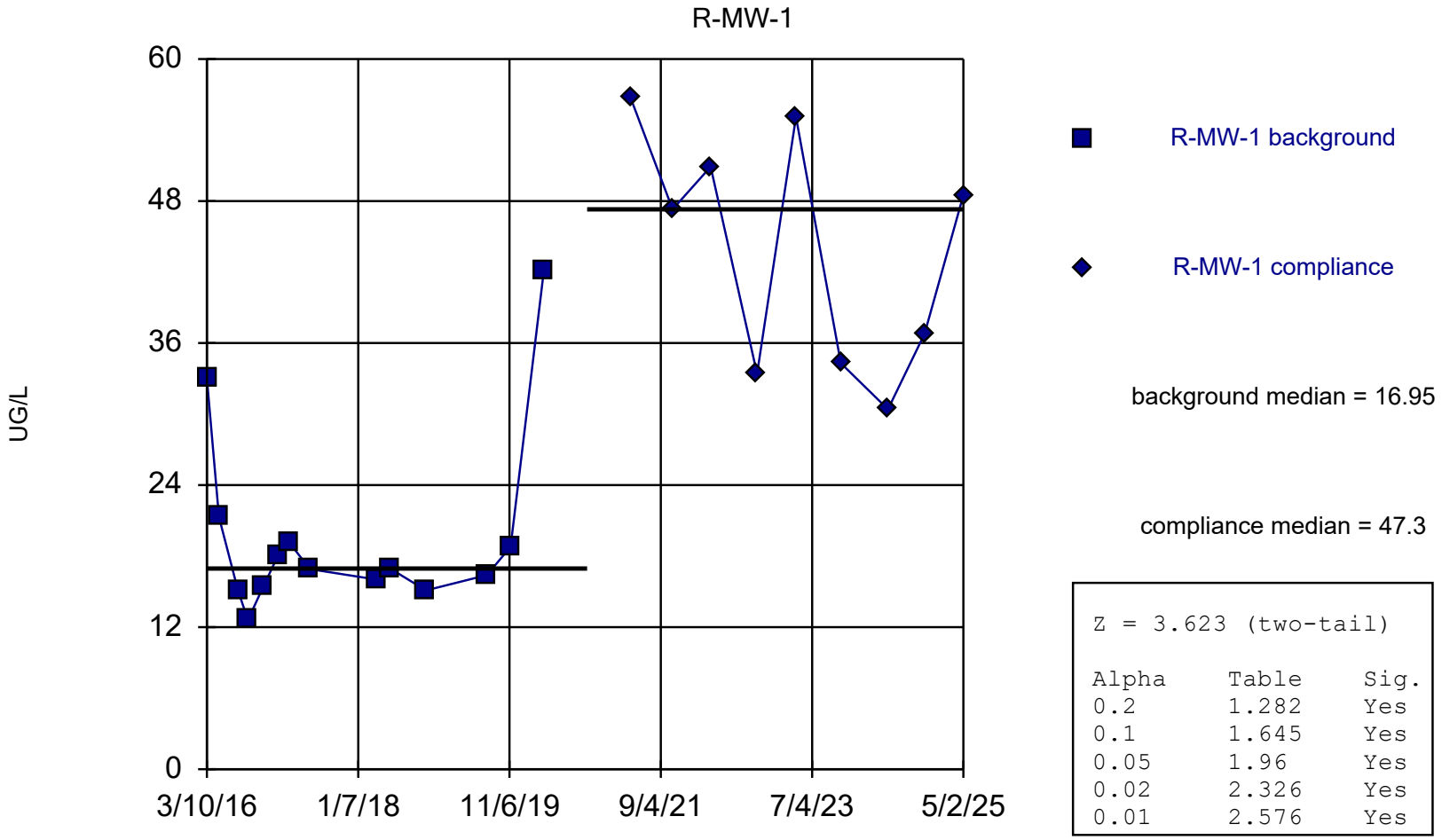
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: ARSENIC, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = 3.623 (two-tail)

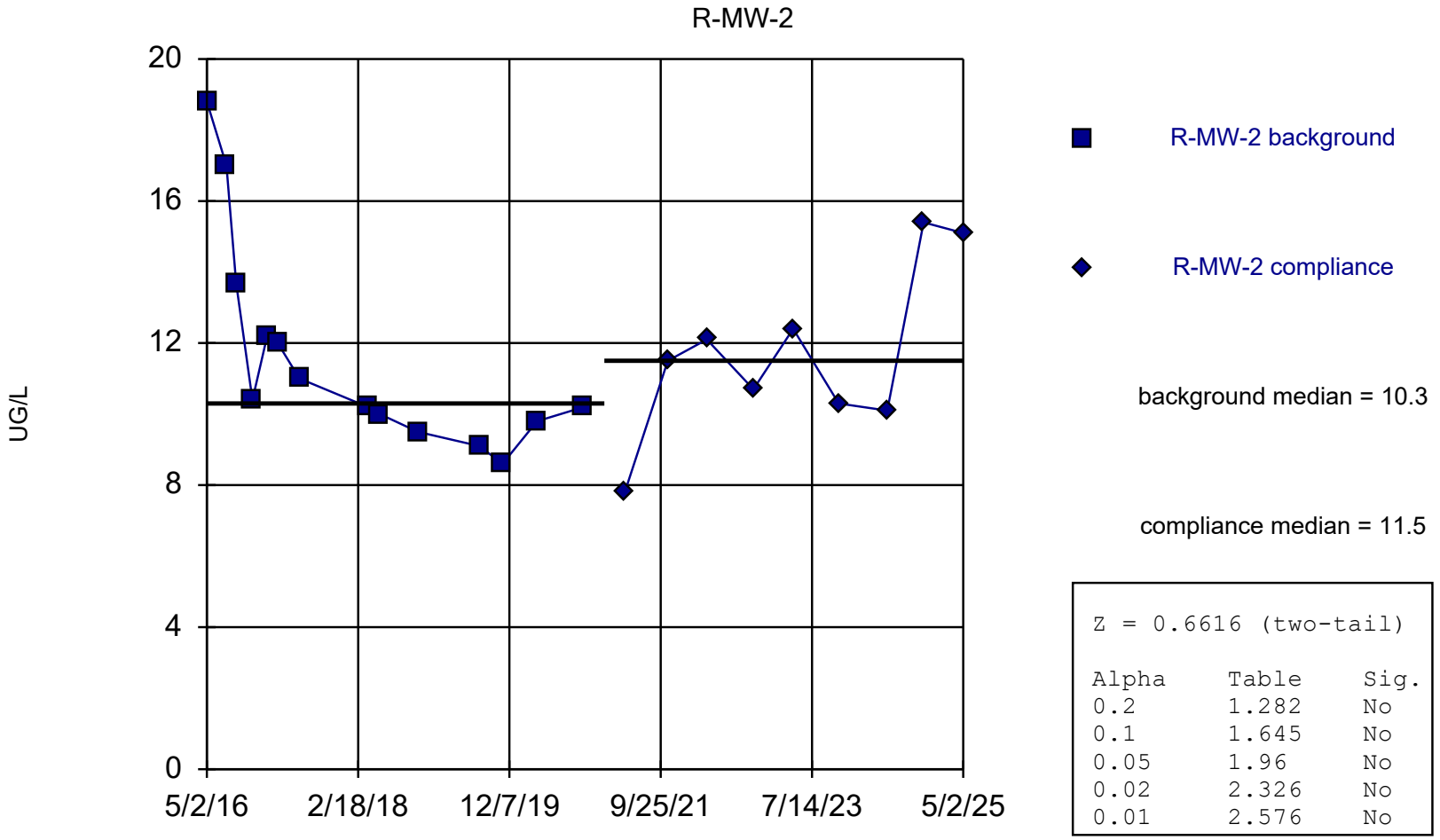
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: BARIUM, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.6616 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

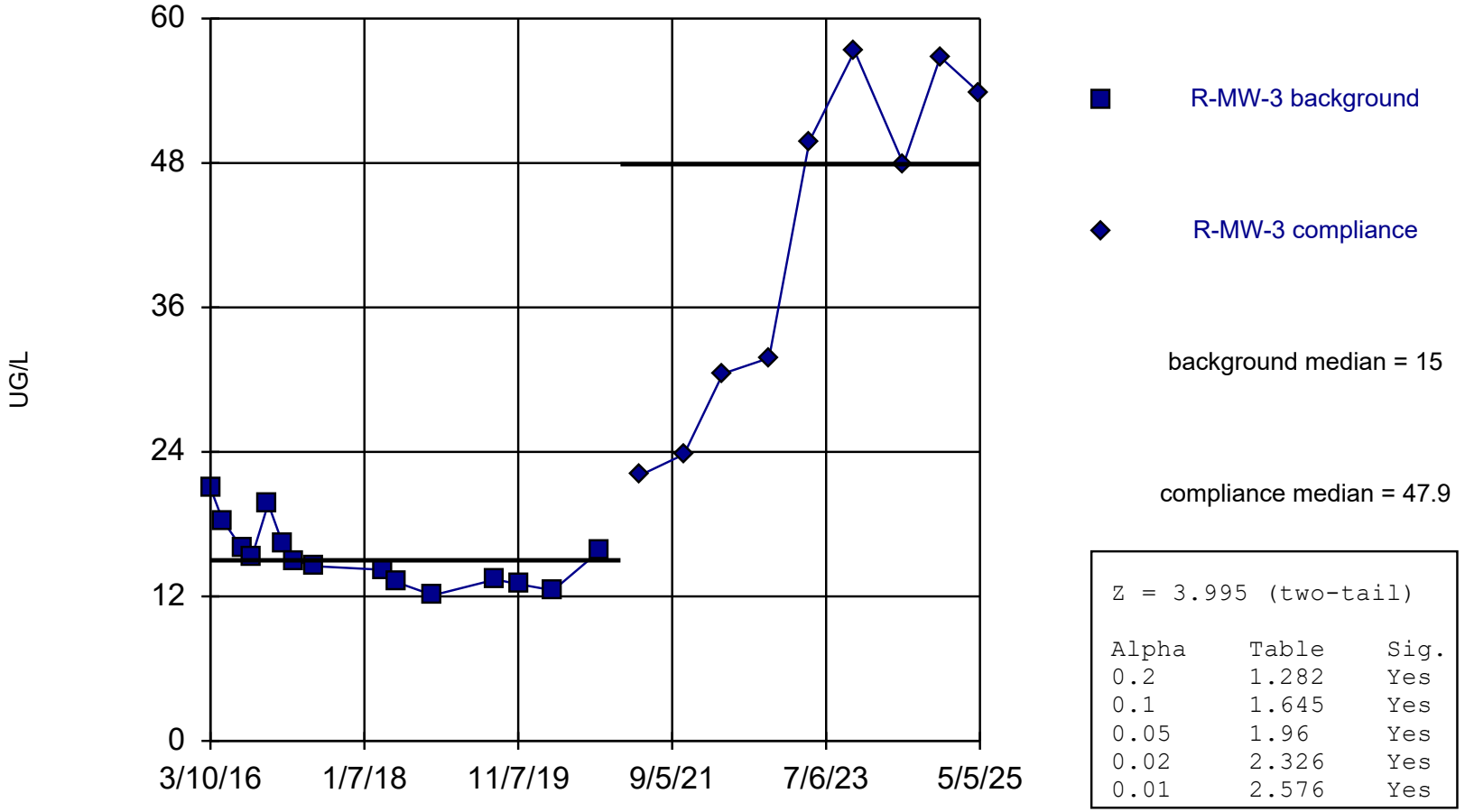
Constituent: BARIUM, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Mann-Whitney (Wilcoxon Rank Sum)

R-MW-3



Z = 3.995 (two-tail)

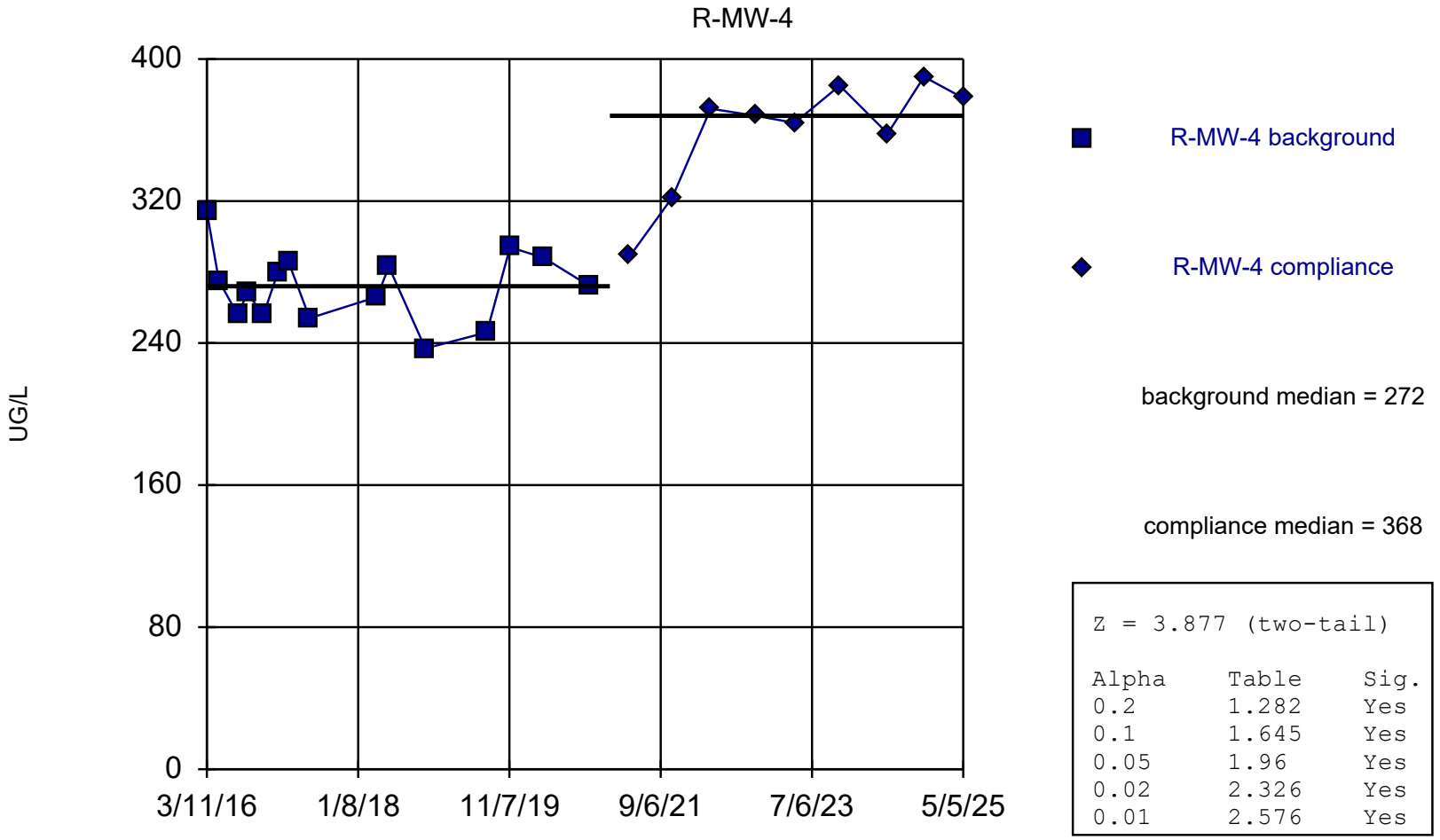
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: BARIUM, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



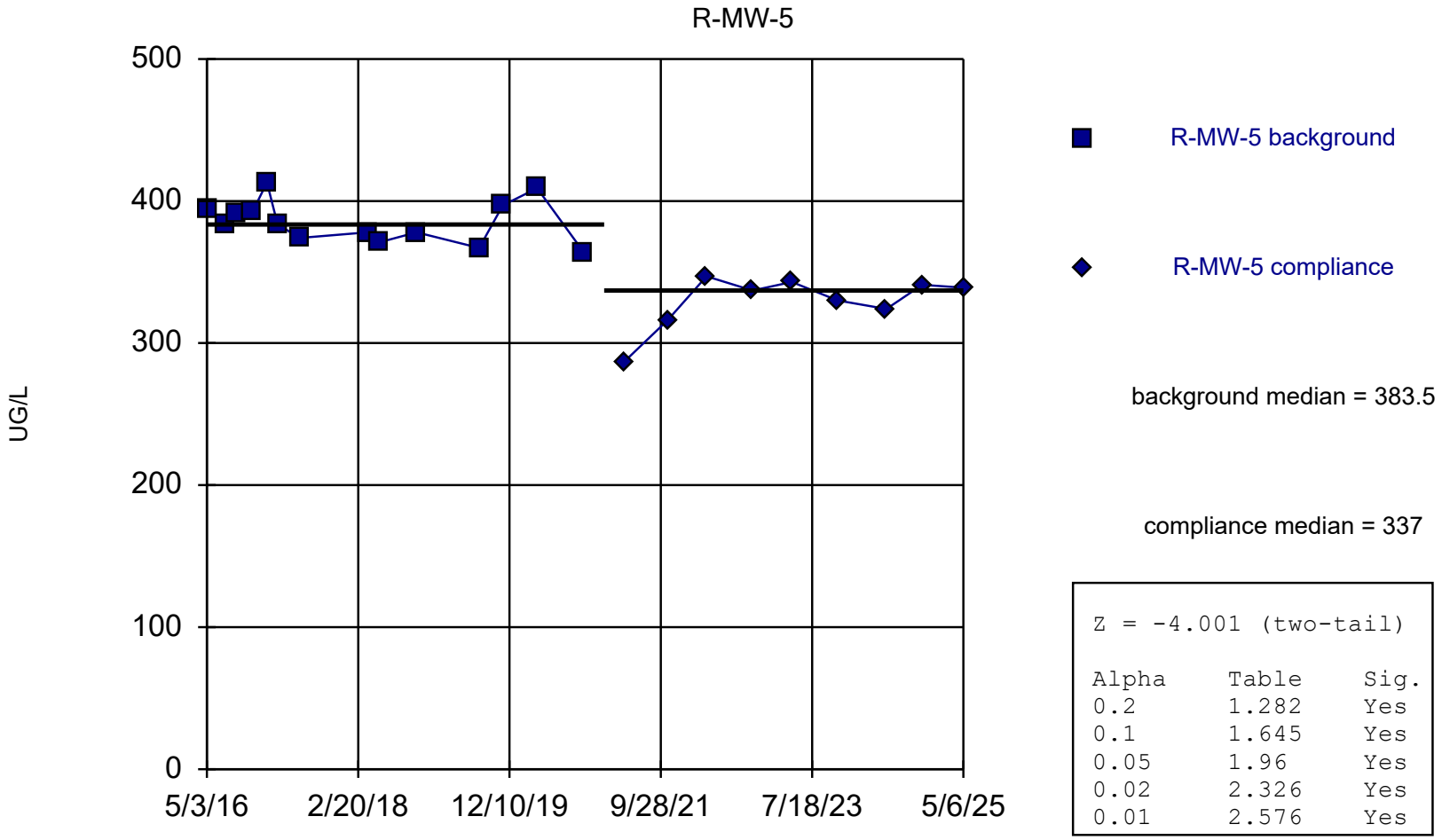
Z = 3.877 (two-tail)		
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: BARIUM, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = -4.001 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

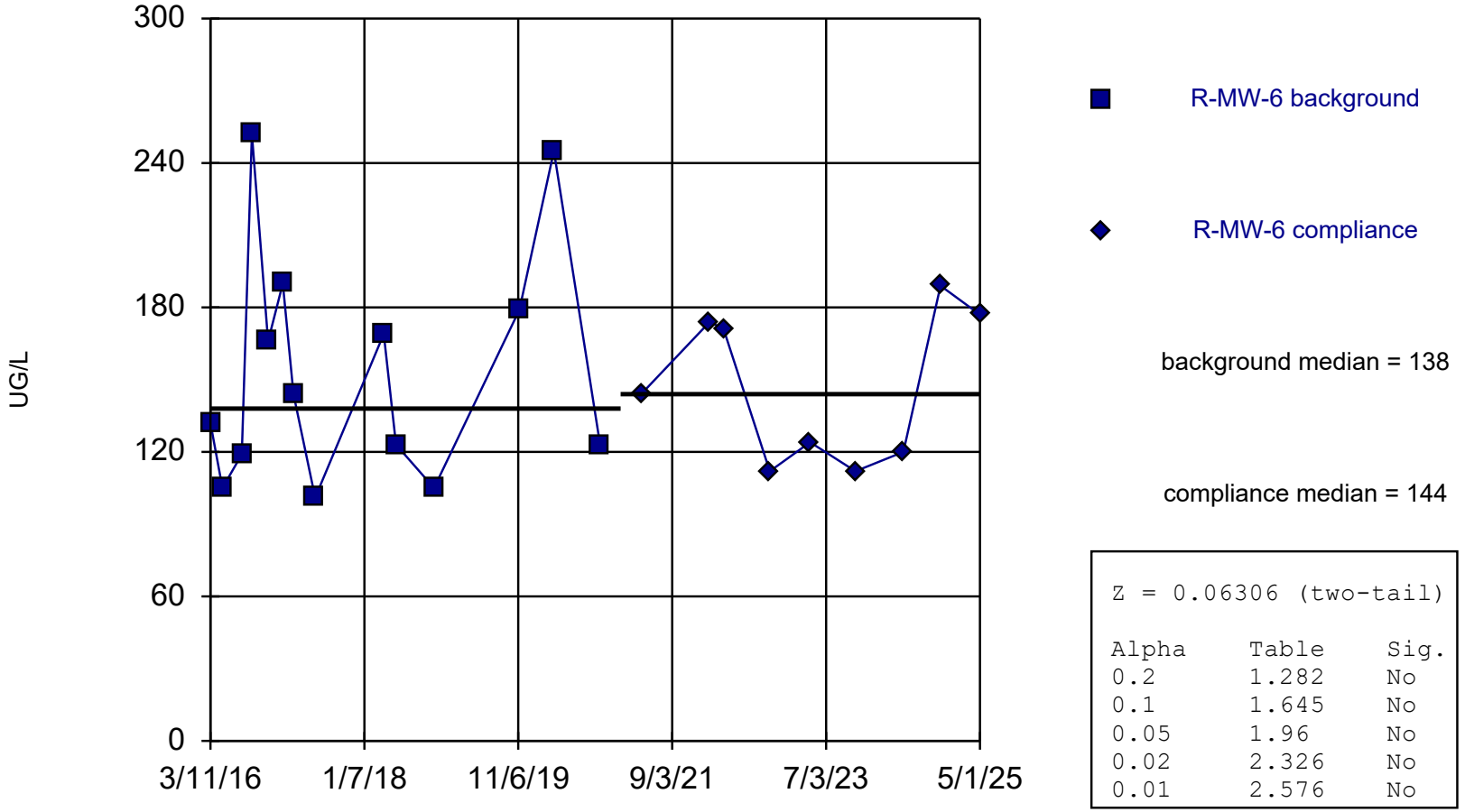
Constituent: BARIUM, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Mann-Whitney (Wilcoxon Rank Sum)

R-MW-6



Z = 0.06306 (two-tail)		
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

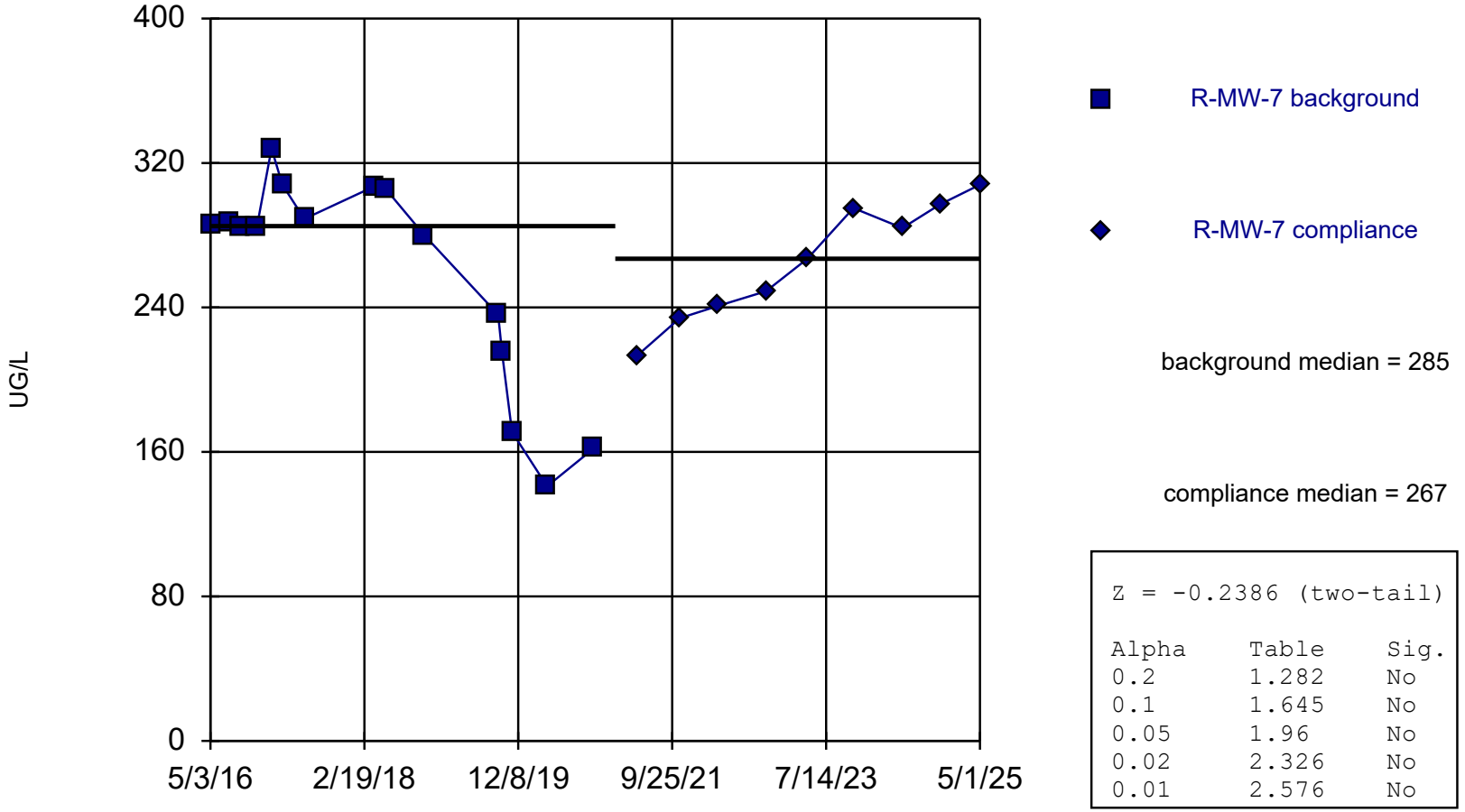
Constituent: BARIUM, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-7



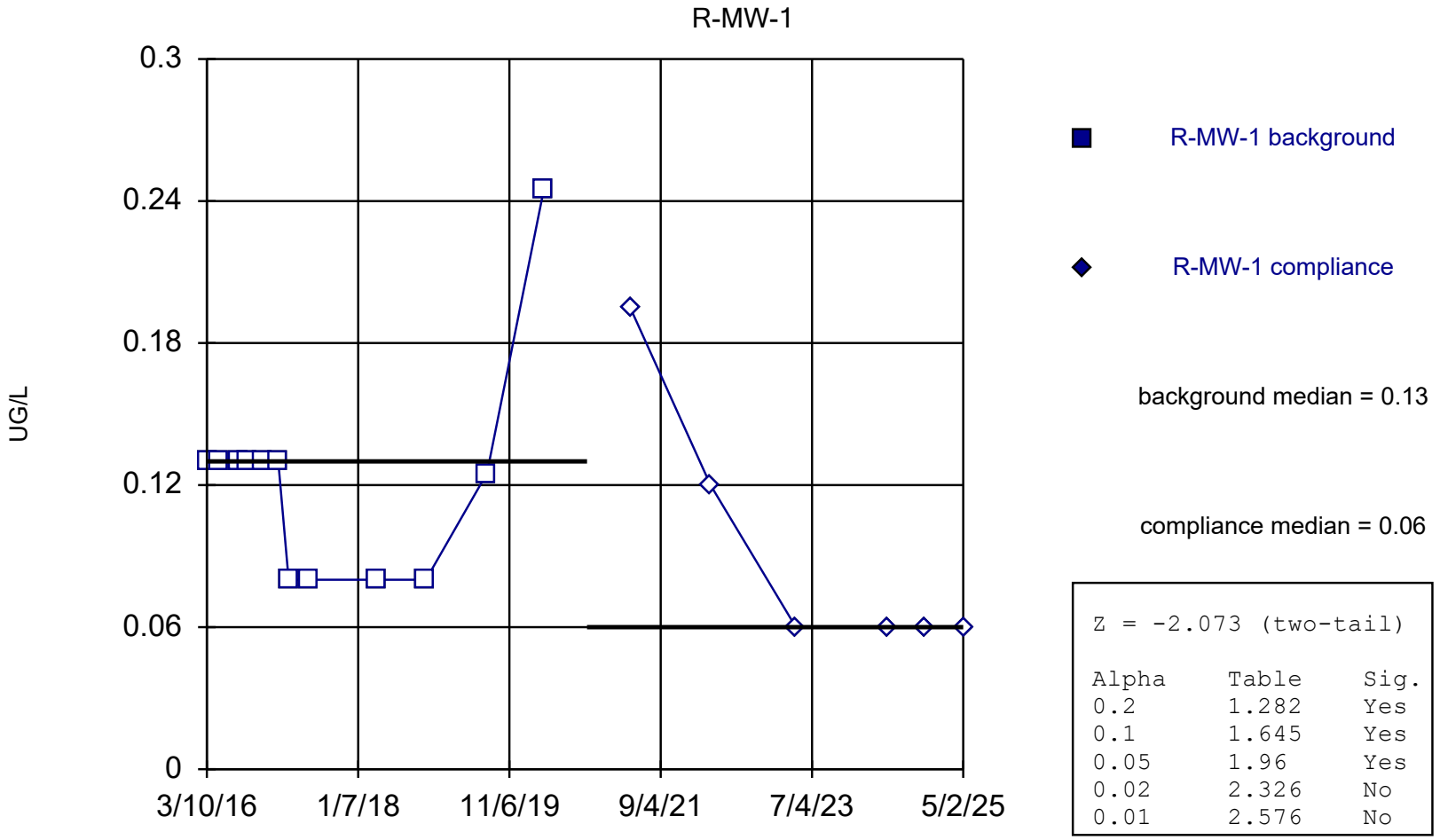
Z = -0.2386 (two-tail)		
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: BARIUM, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -2.073 (two-tail)

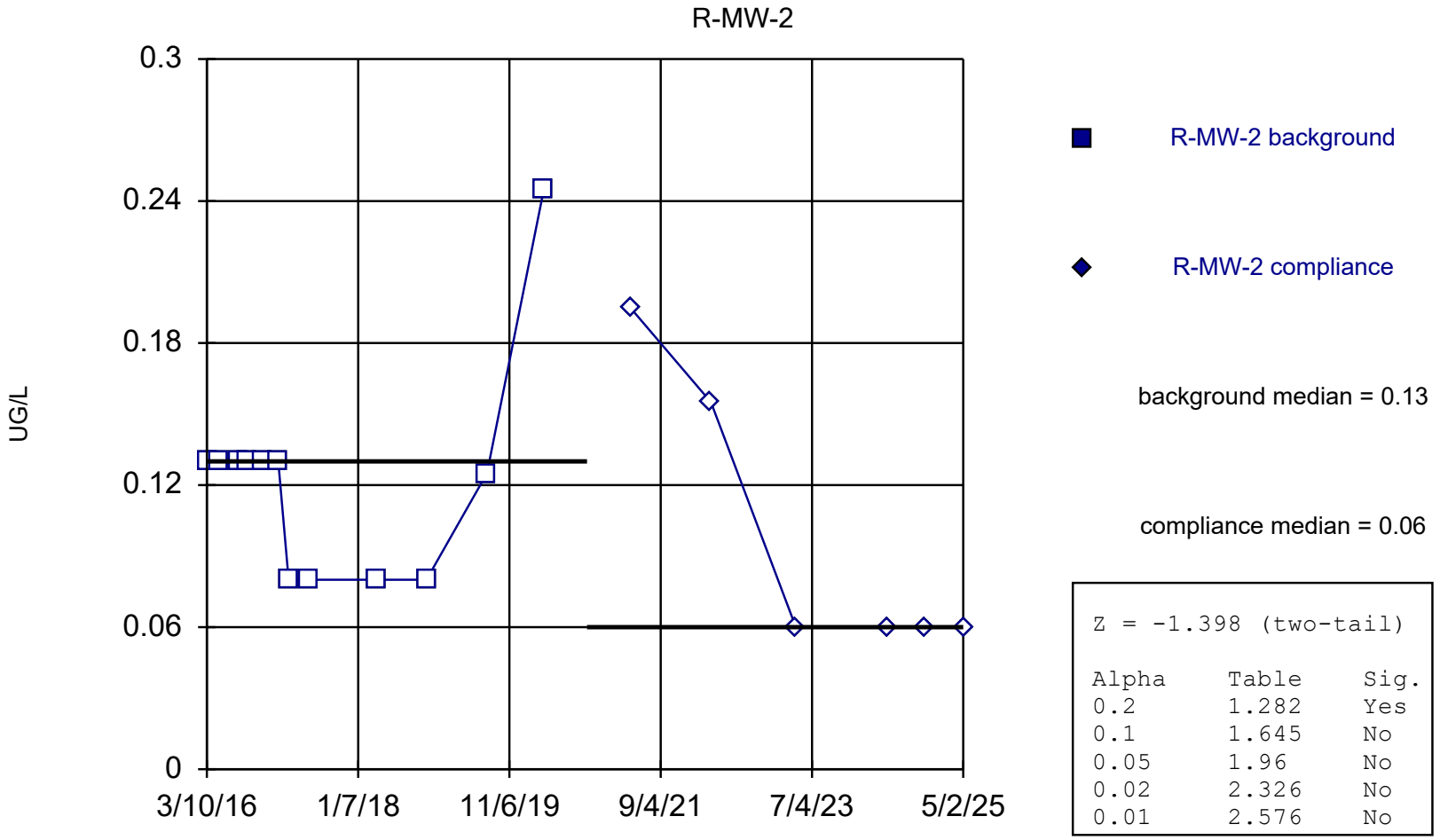
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: BERYLLIUM, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -1.398 (two-tail)

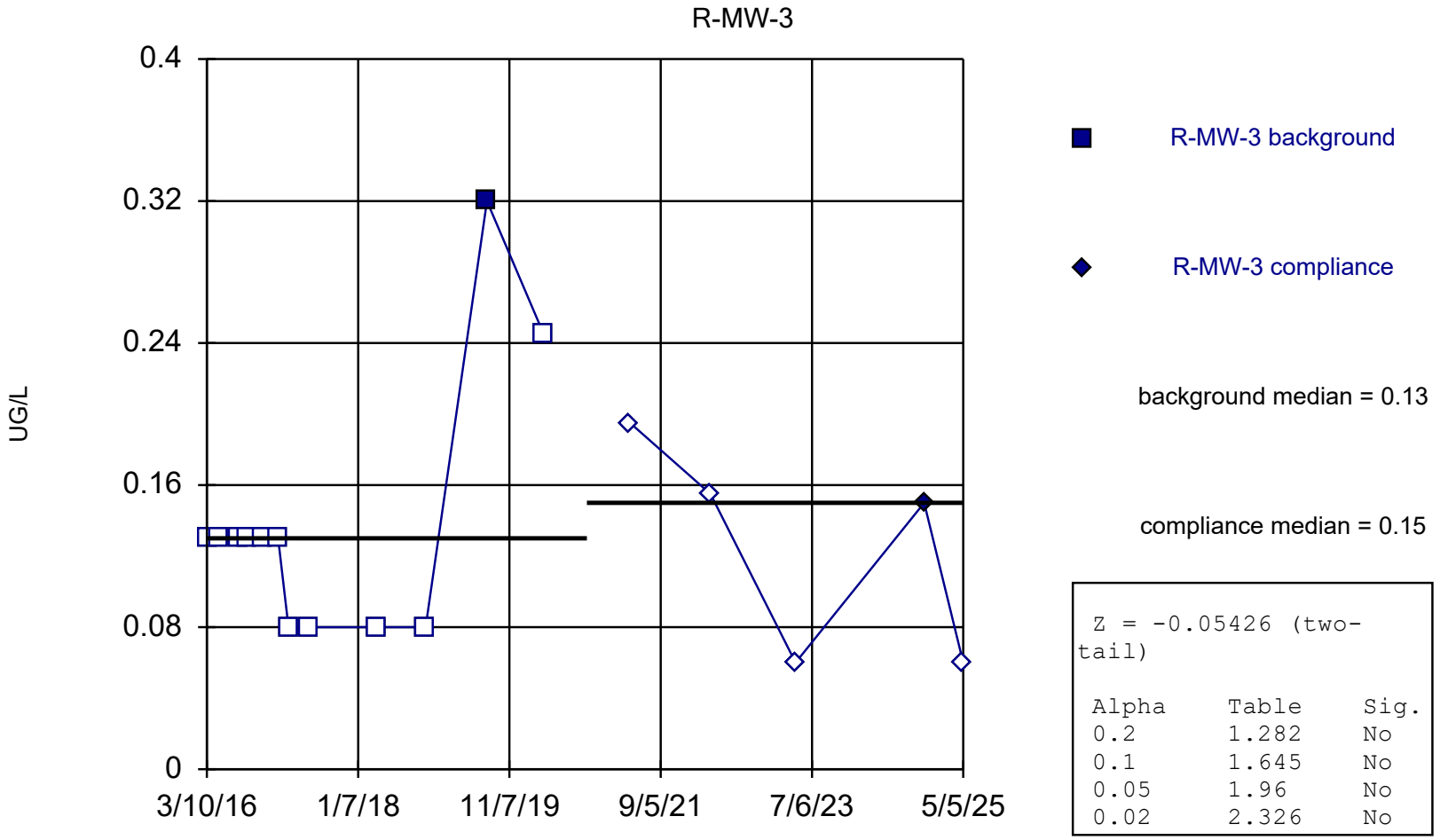
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: BERYLLIUM, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.05426 (two-tail)

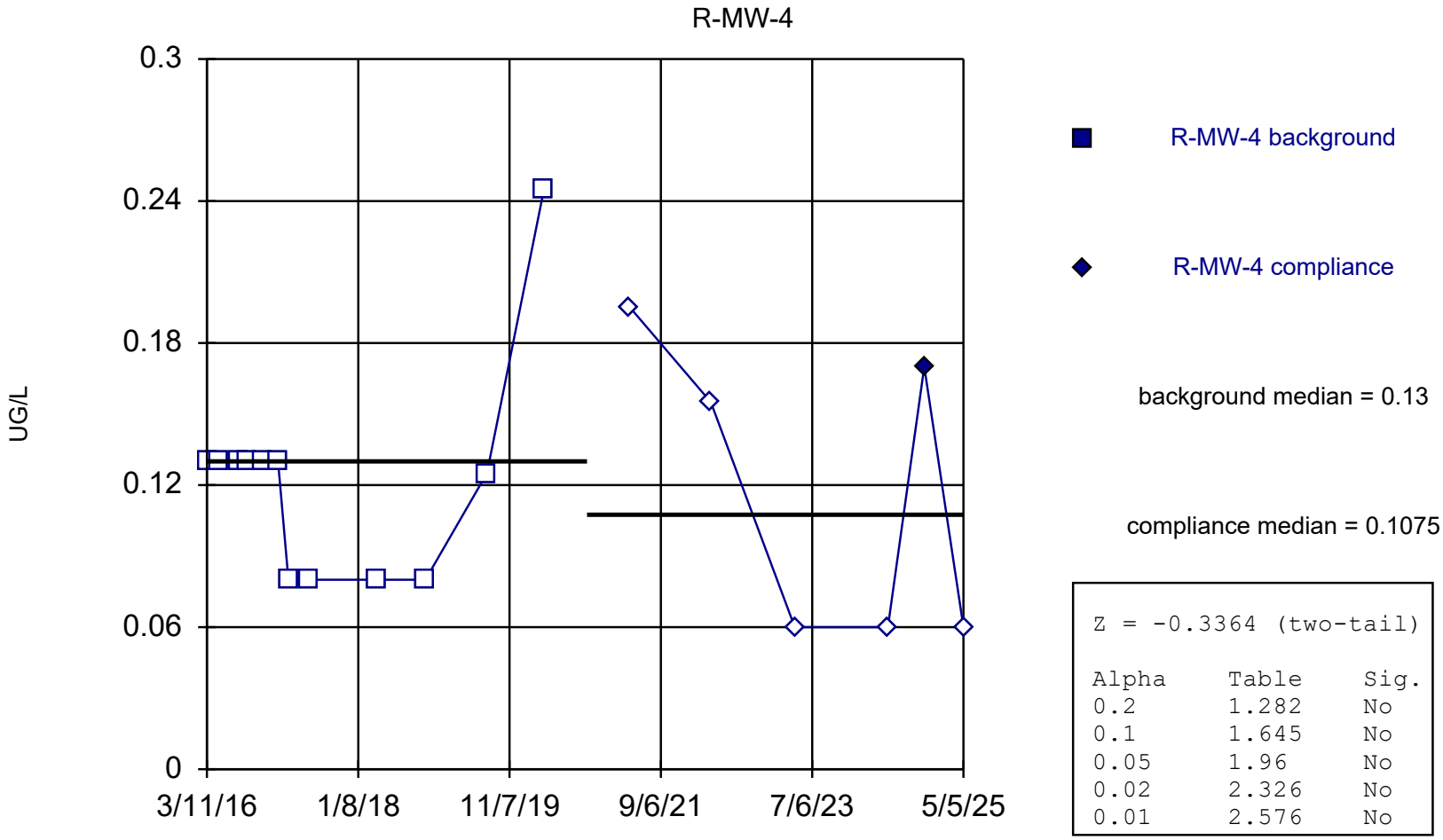
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No

Constituent: BERYLLIUM, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.3364 (two-tail)

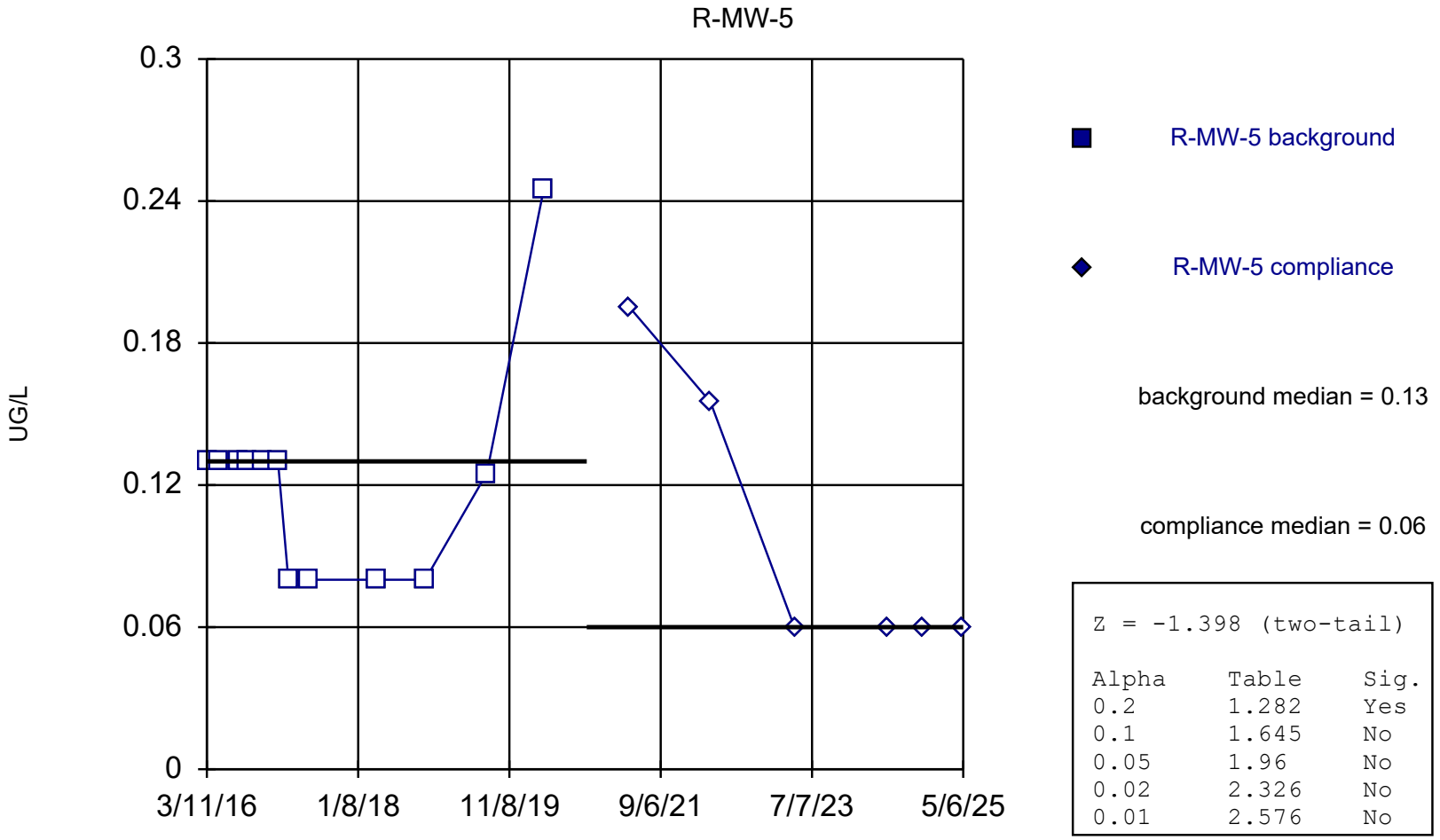
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: BERYLLIUM, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -1.398 (two-tail)

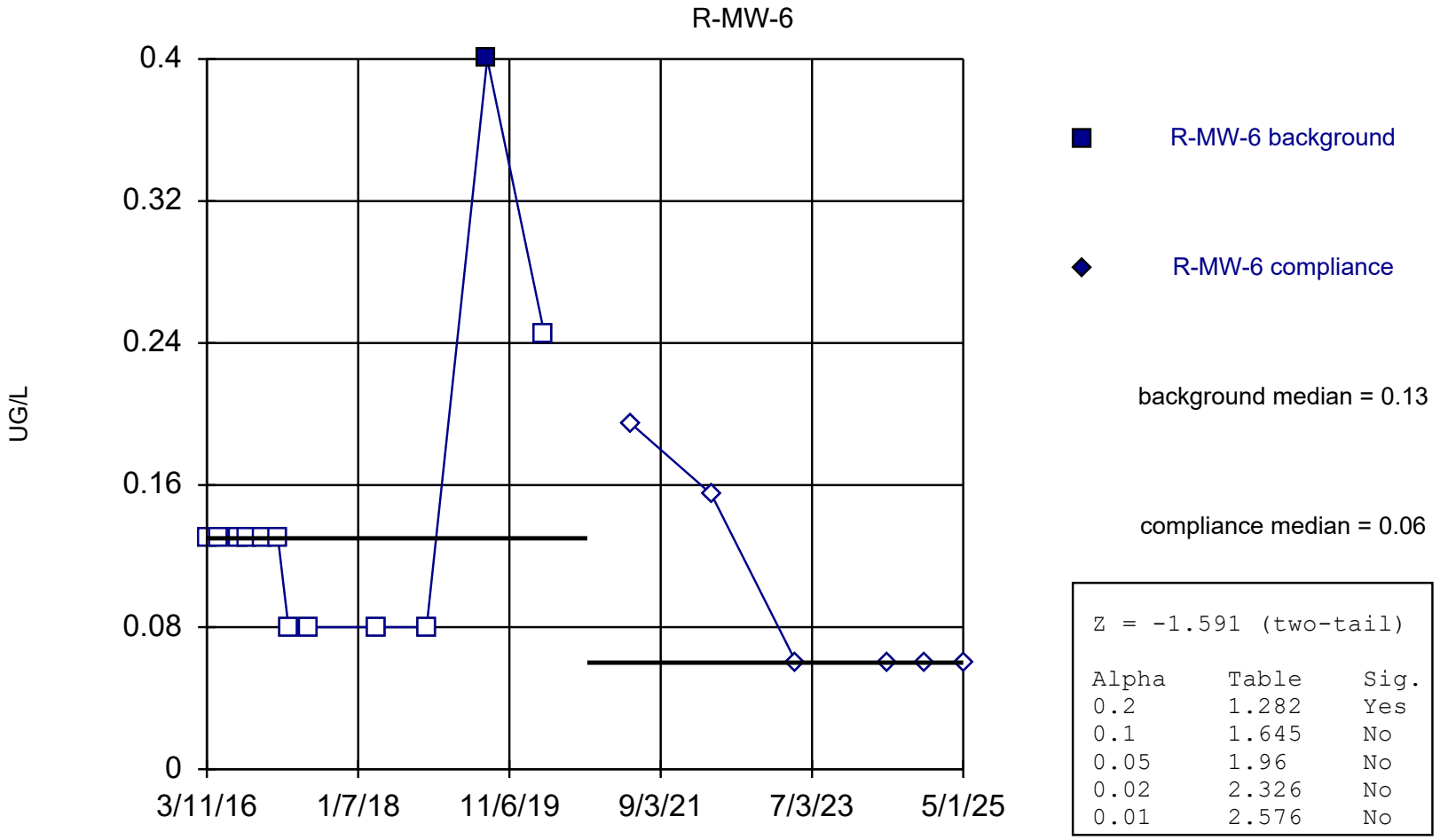
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: BERYLLIUM, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -1.591 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

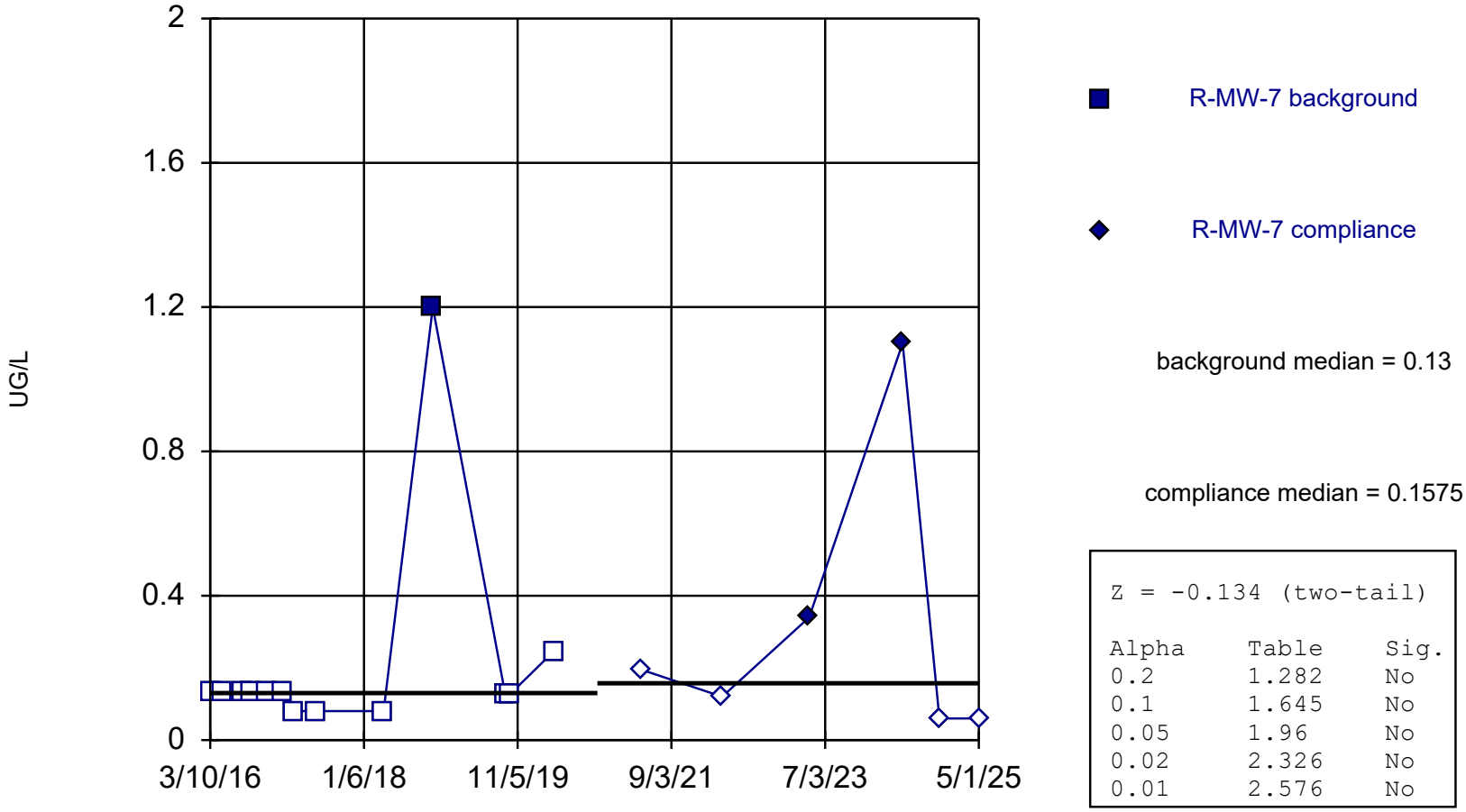
Constituent: BERYLLIUM, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-7



background median = 0.13

compliance median = 0.1575

Z = -0.134 (two-tail)

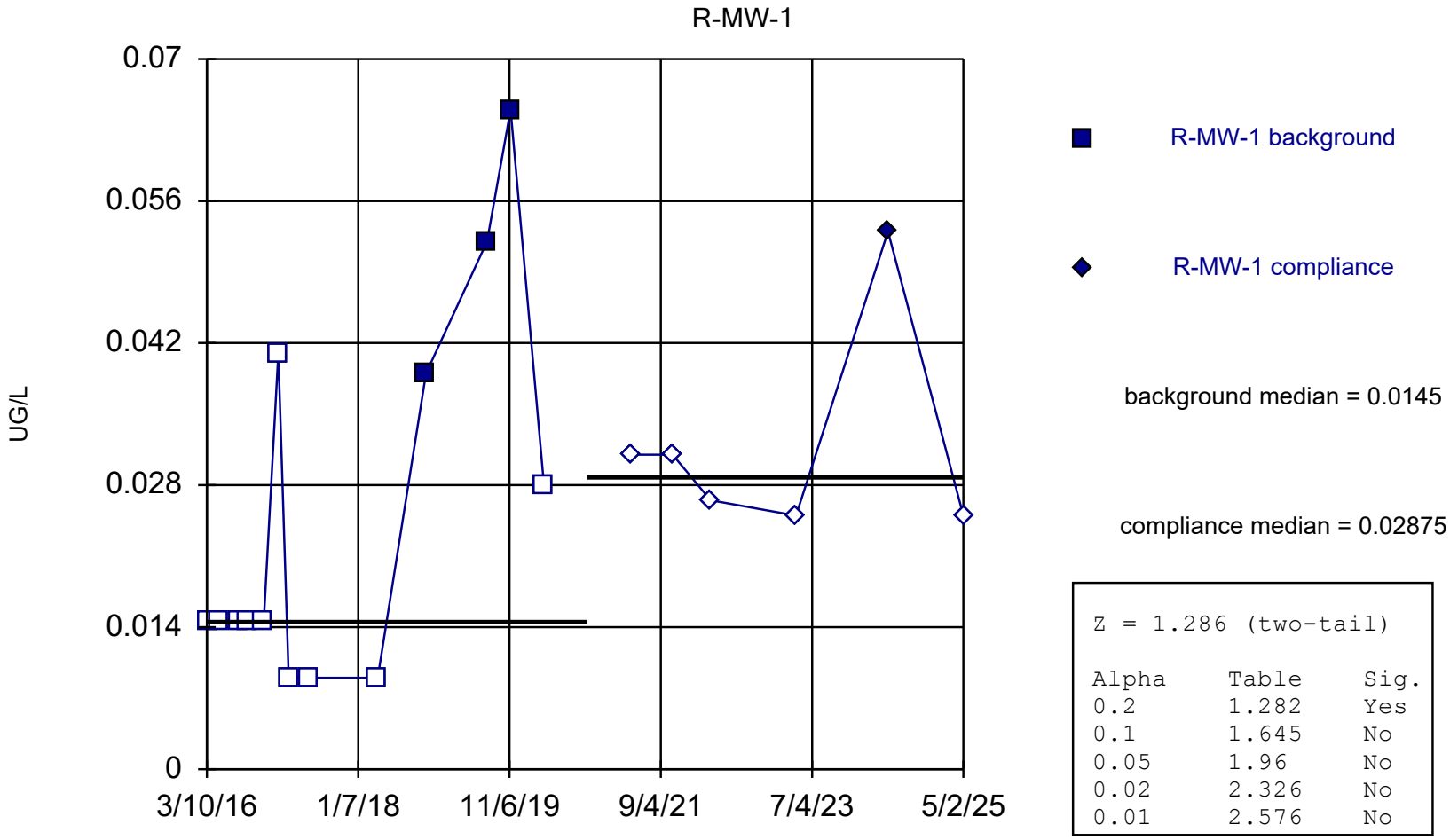
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: BERYLLIUM, TOTAL Analysis Run 8/27/2025 12:58 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.286 (two-tail)

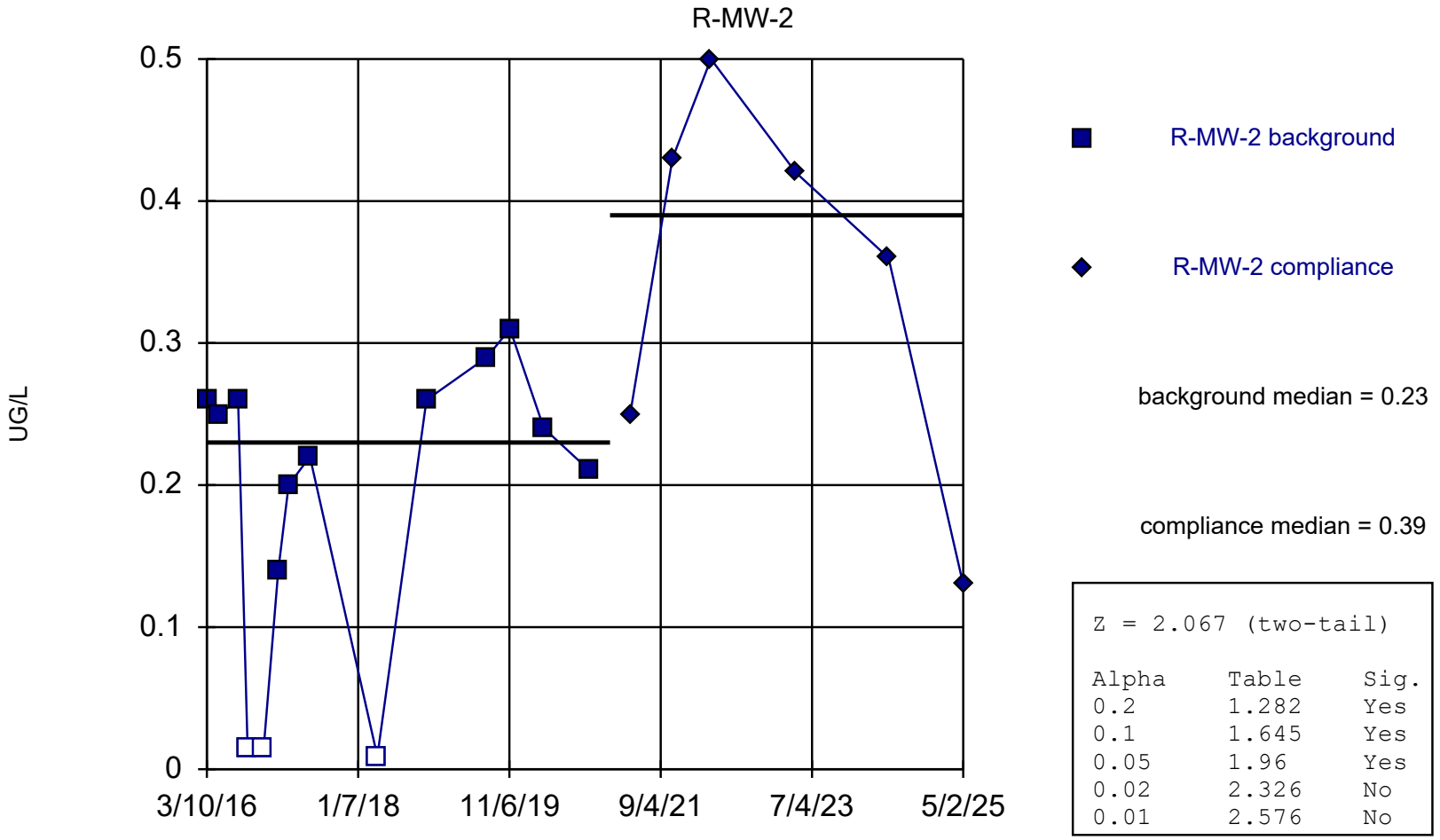
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CADMIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.067 (two-tail)

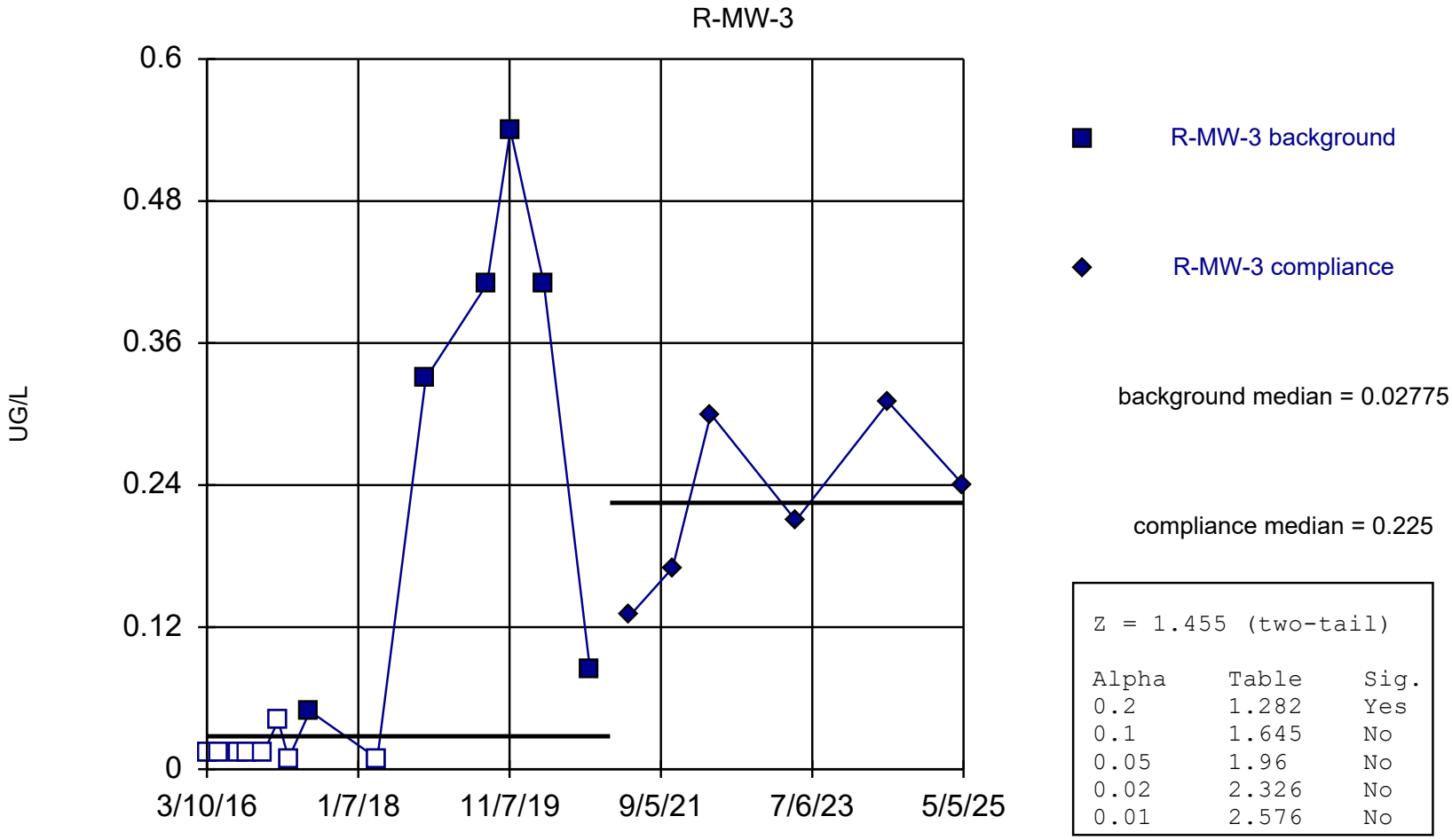
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: CADMIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.455 (two-tail)

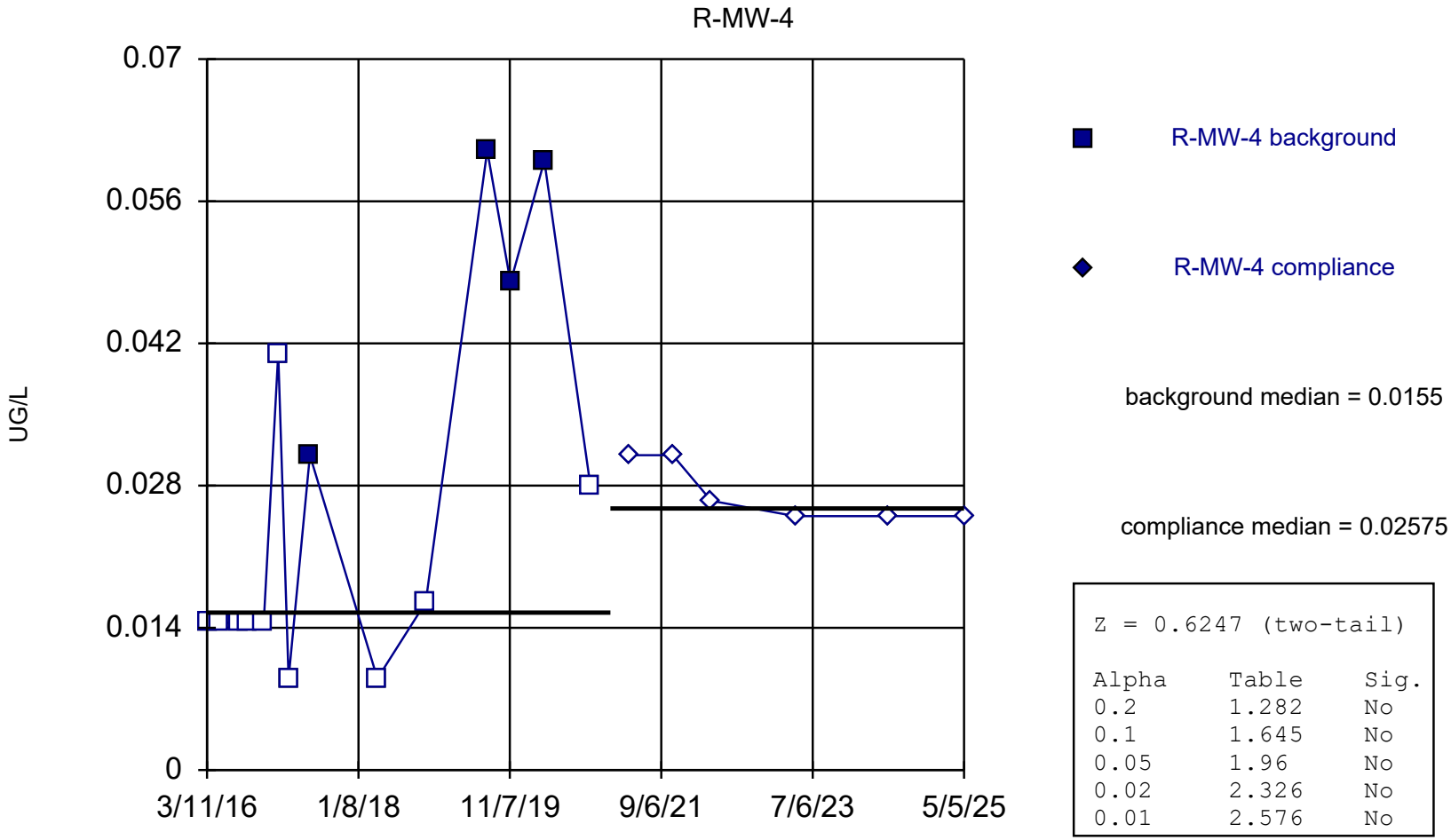
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CADMIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.6247 (two-tail)

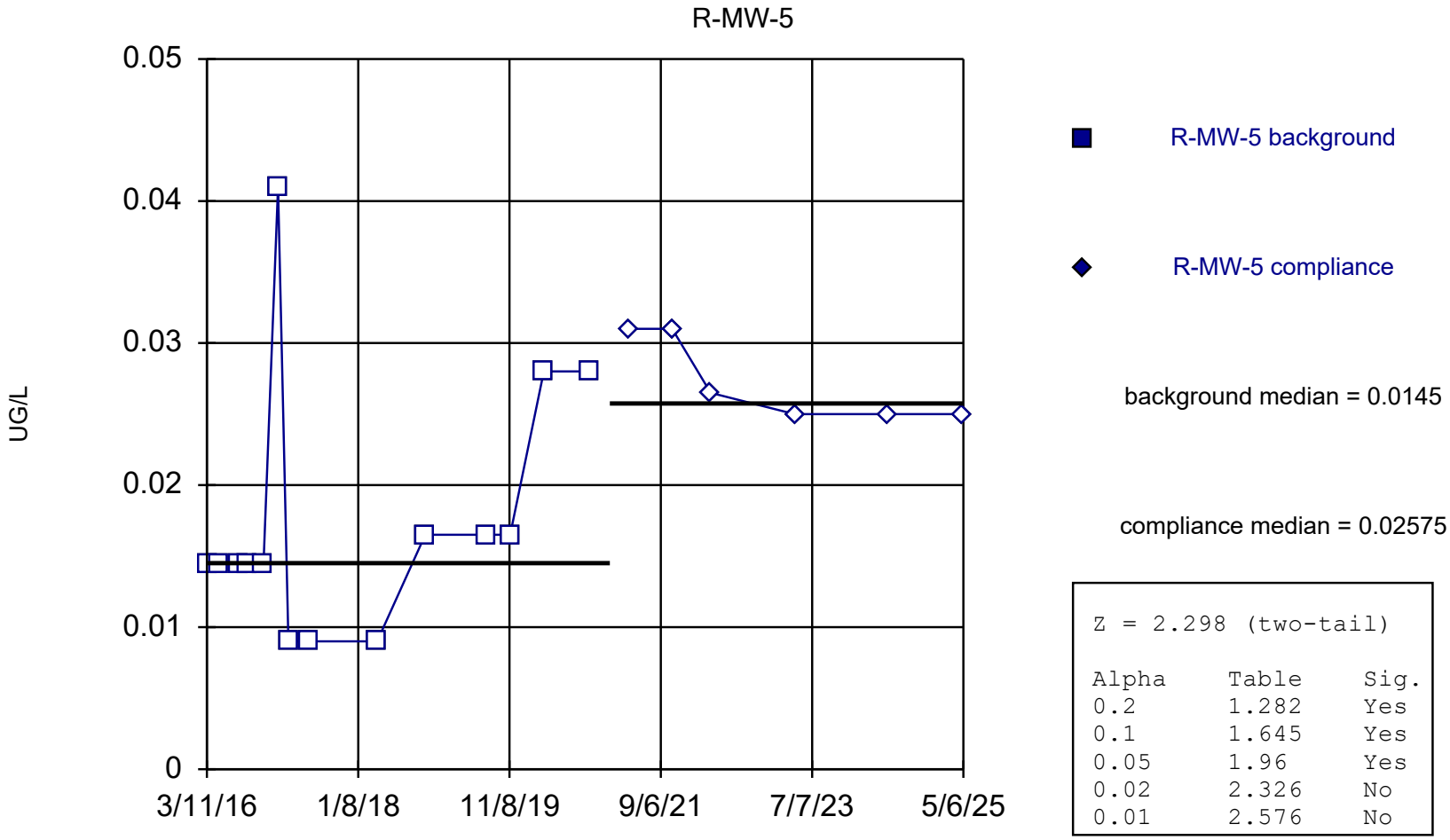
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CADMIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.298 (two-tail)

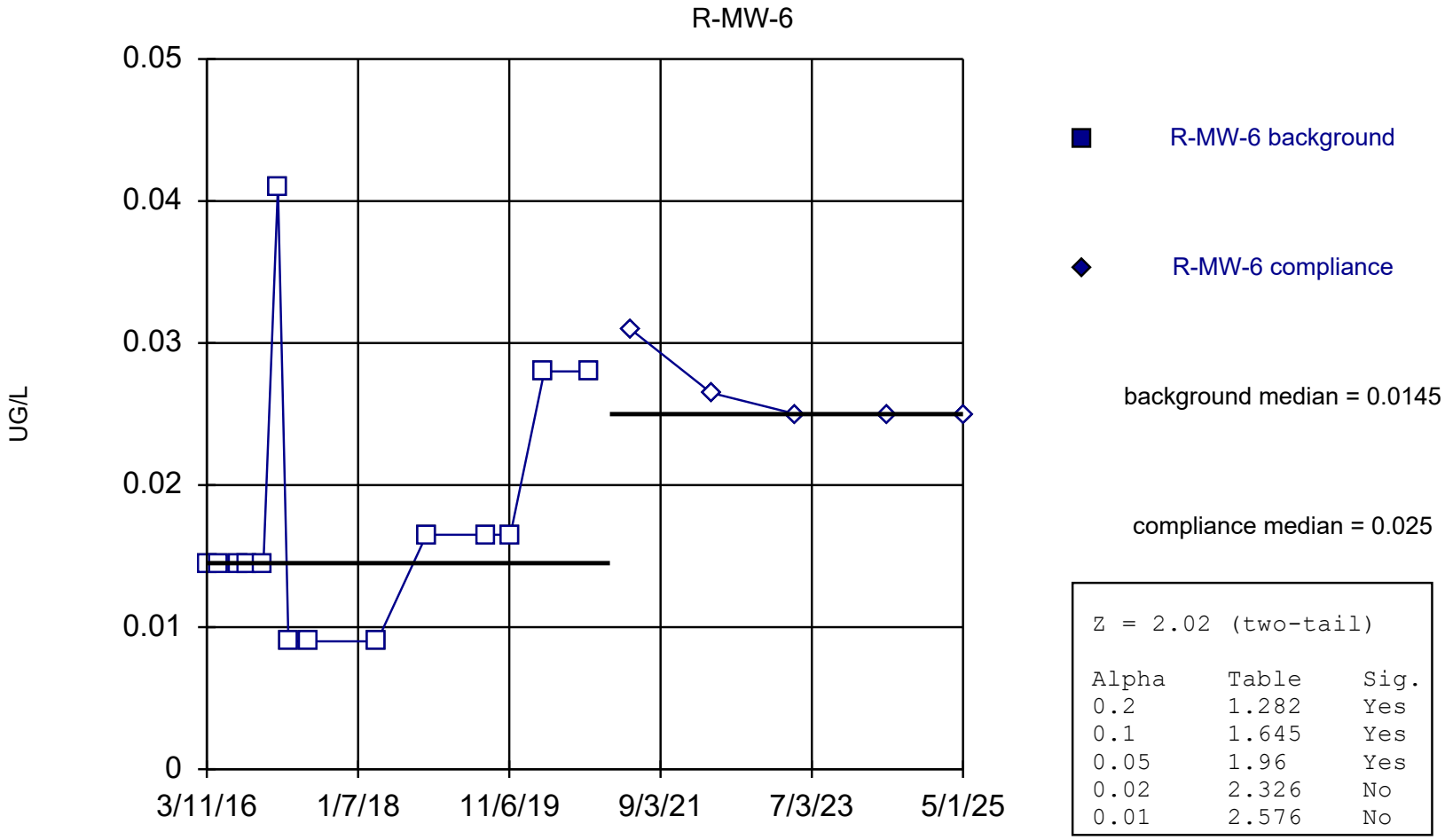
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: CADMIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.02 (two-tail)

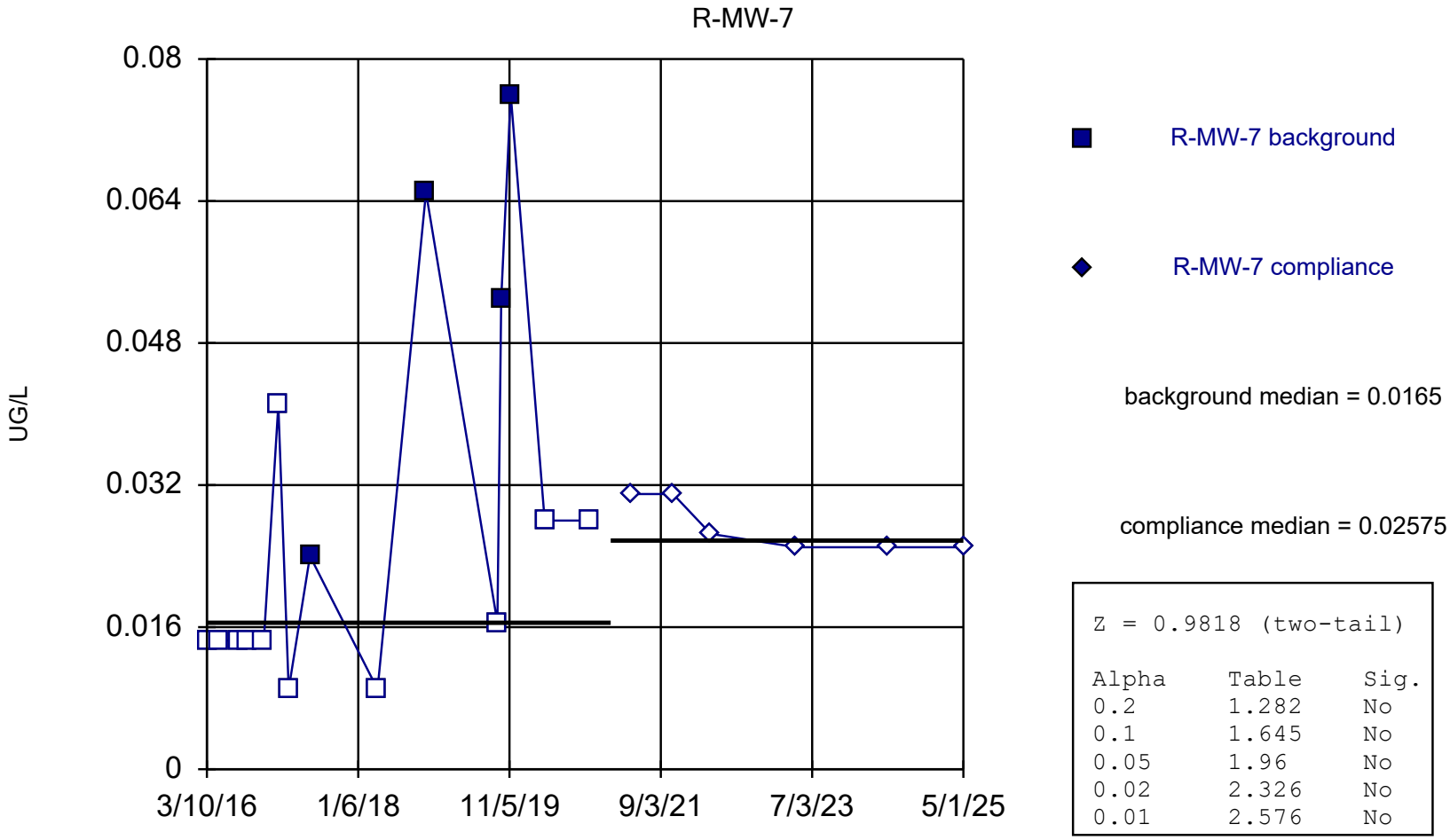
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: CADMIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.9818 (two-tail)

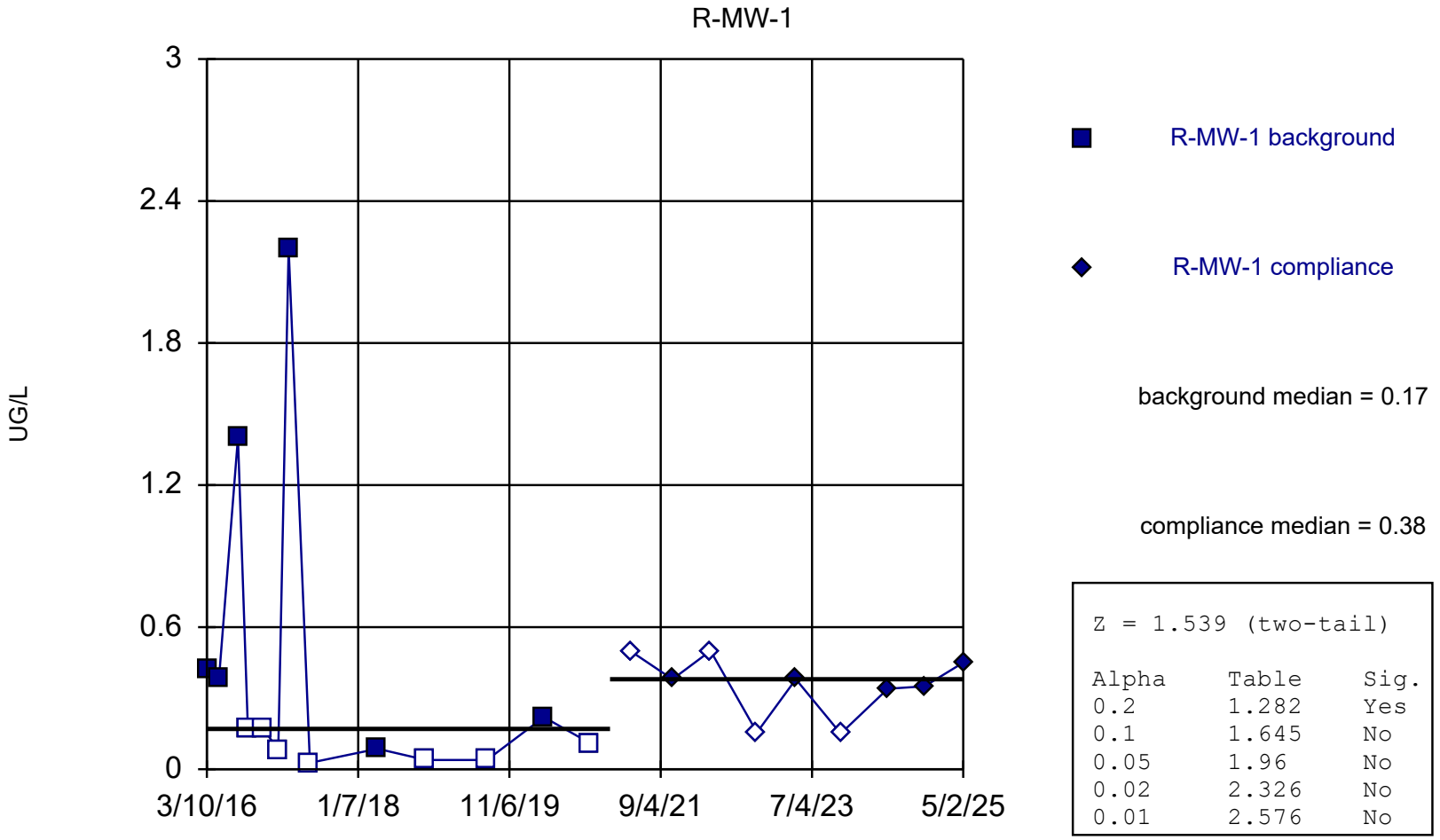
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CADMIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.539 (two-tail)

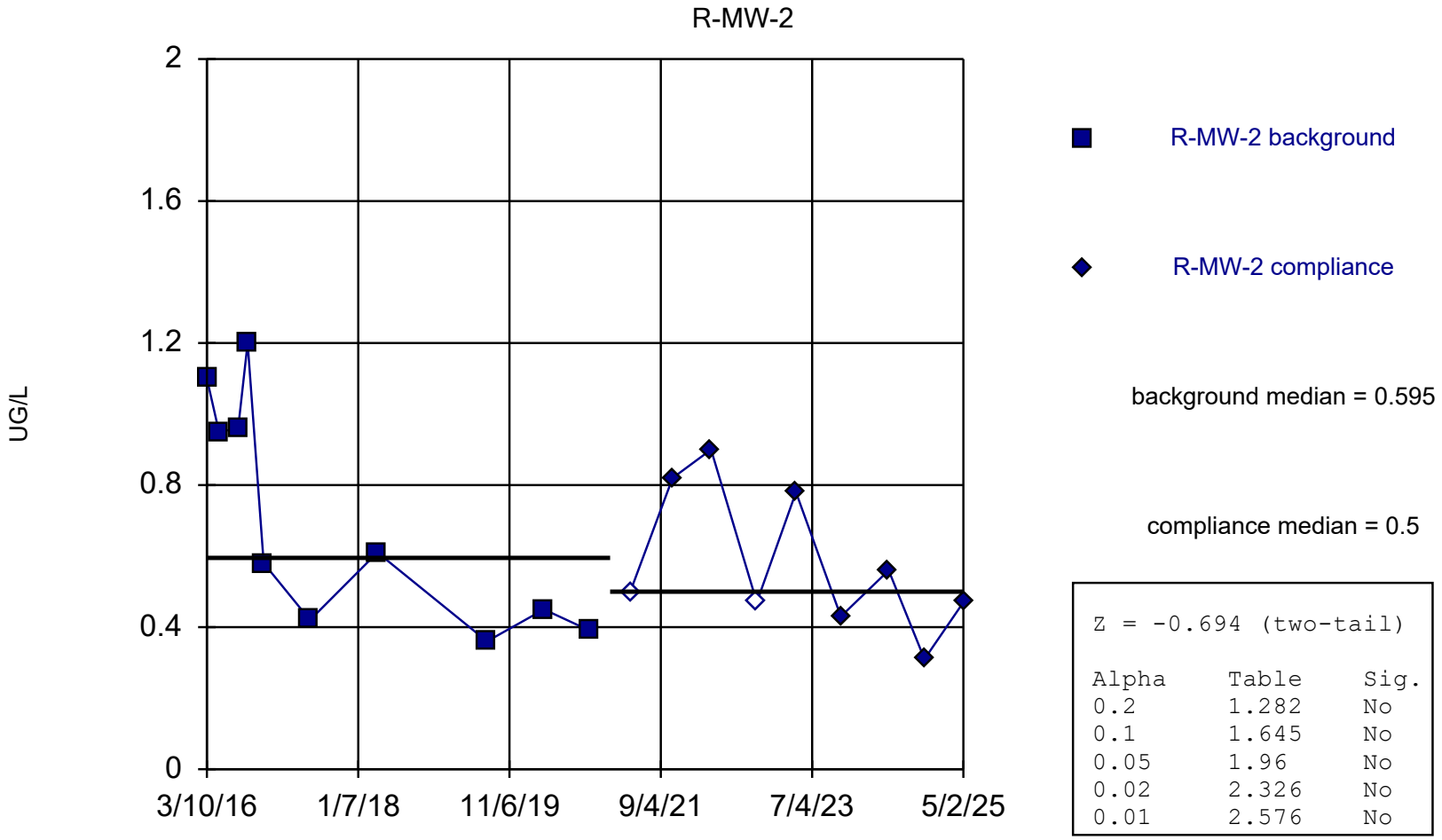
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CHROMIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.694 (two-tail)

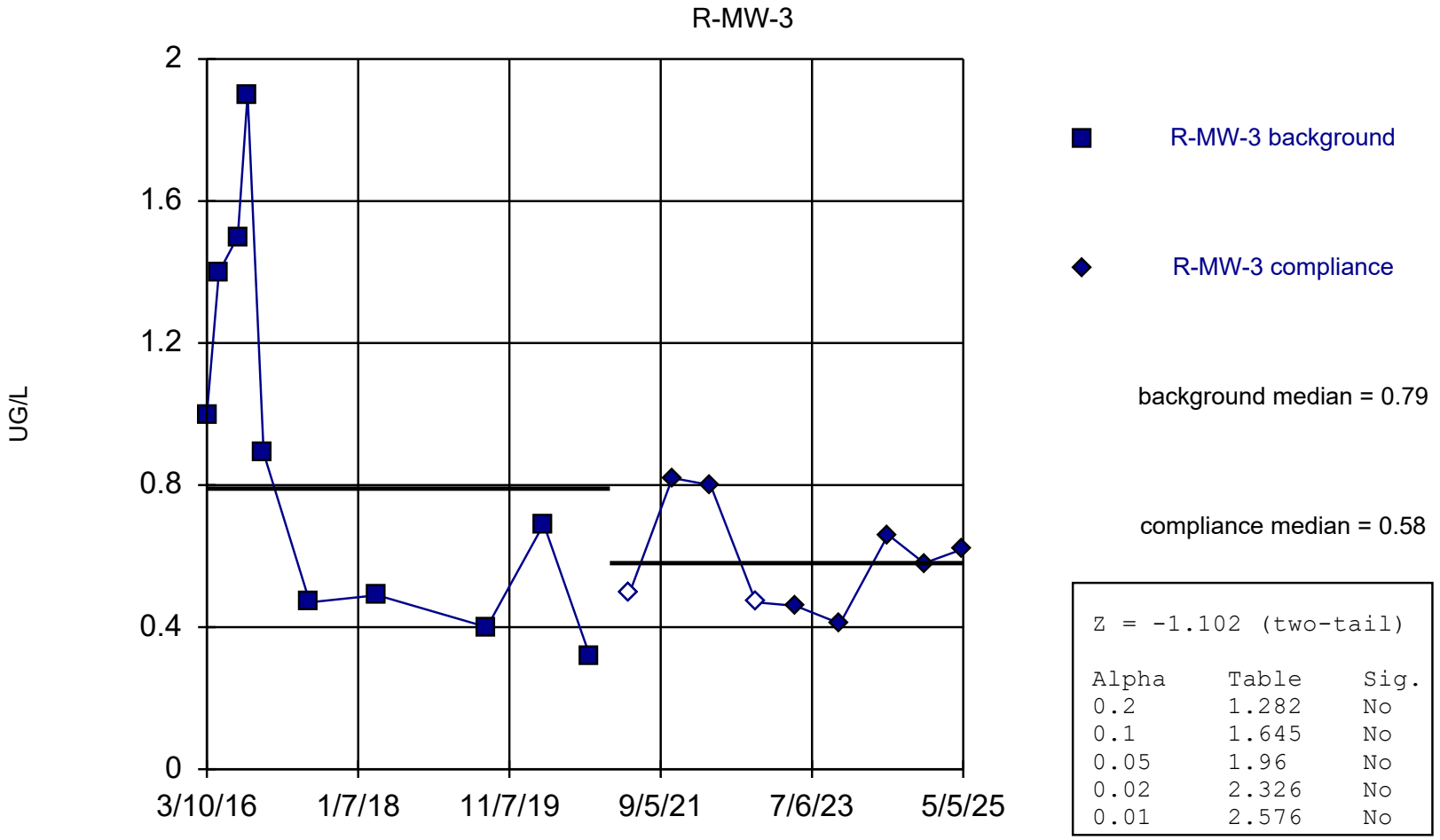
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CHROMIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -1.102 (two-tail)

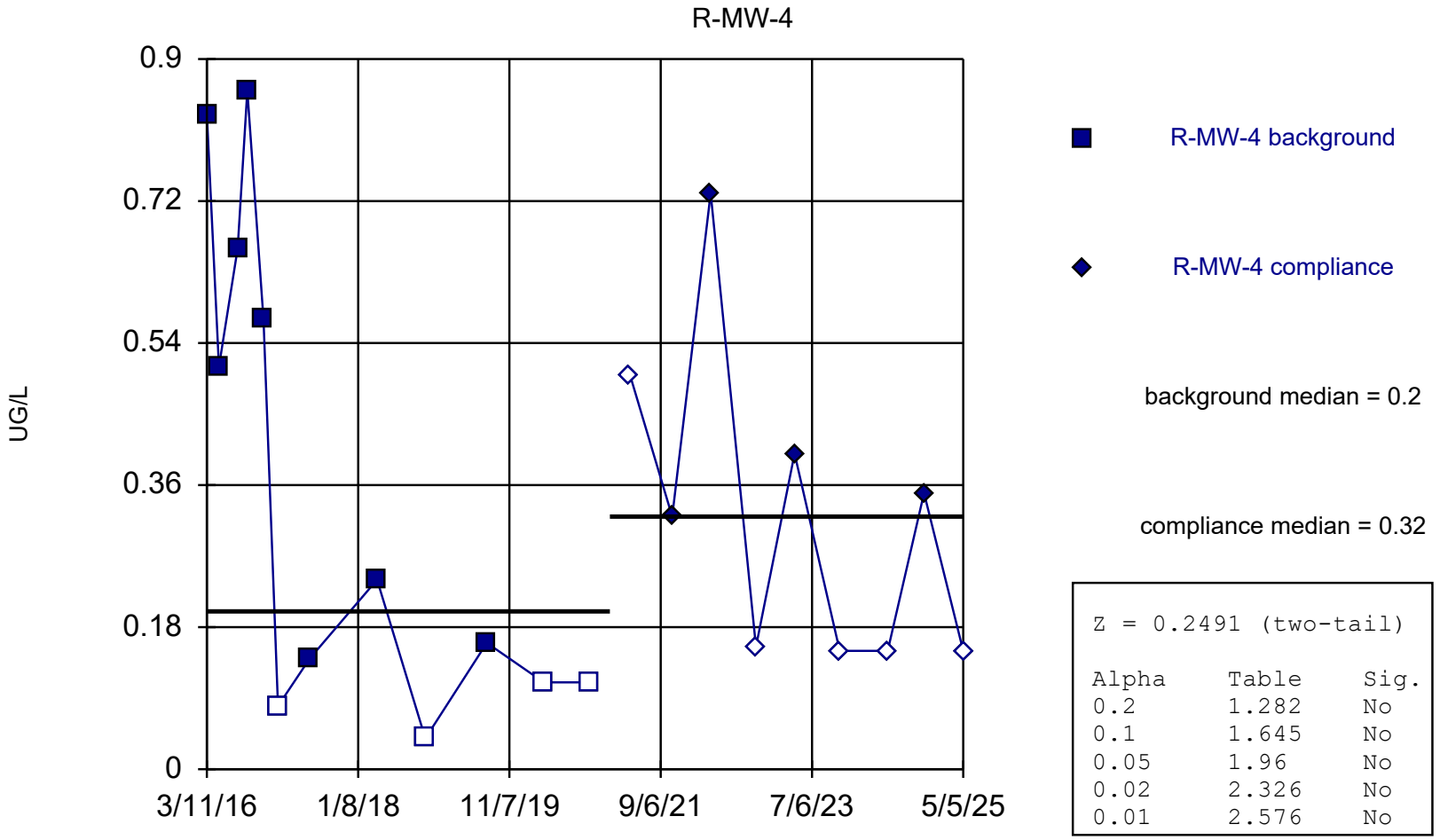
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CHROMIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.2491 (two-tail)

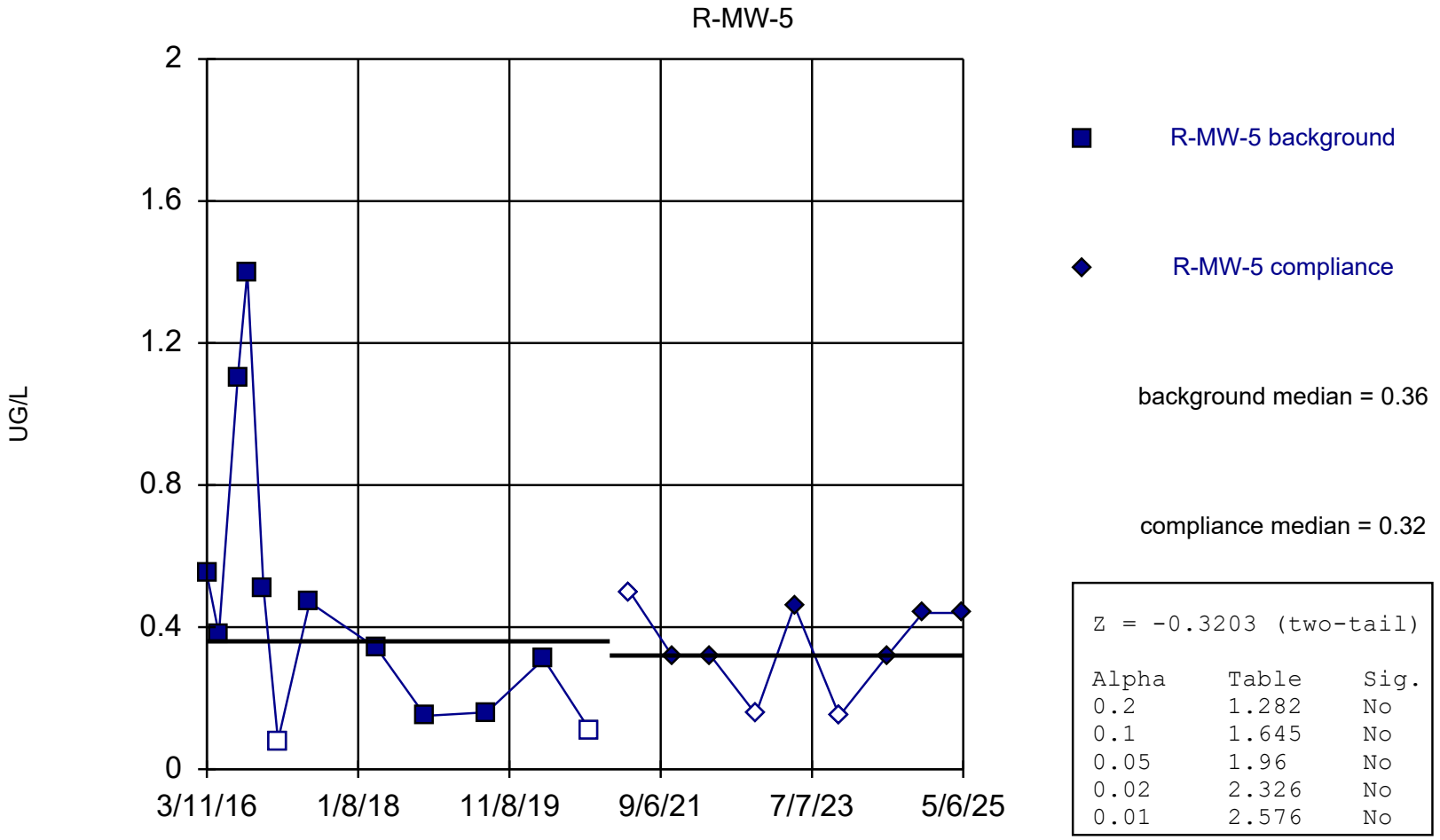
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CHROMIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.3203 (two-tail)

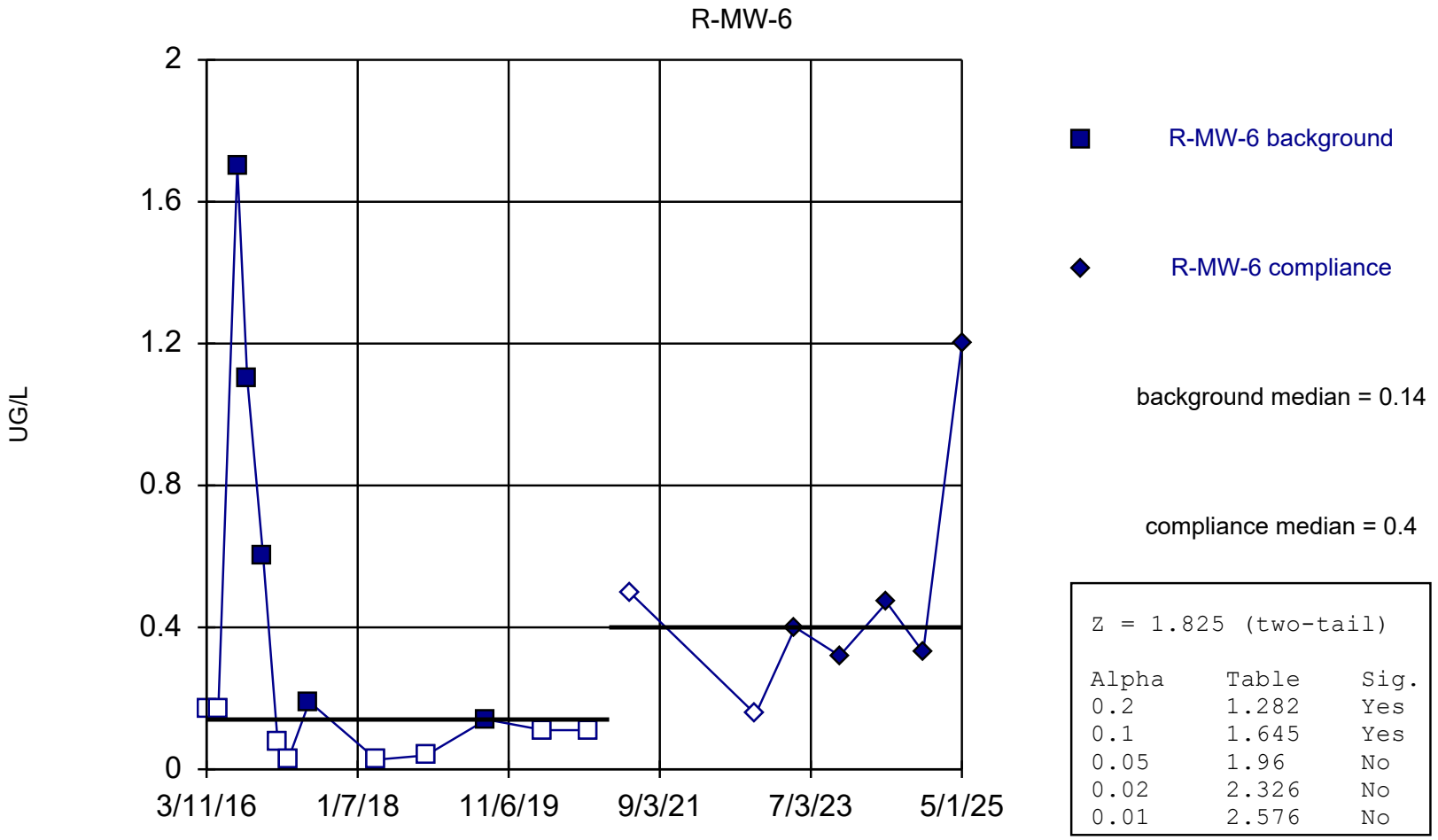
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CHROMIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.825 (two-tail)

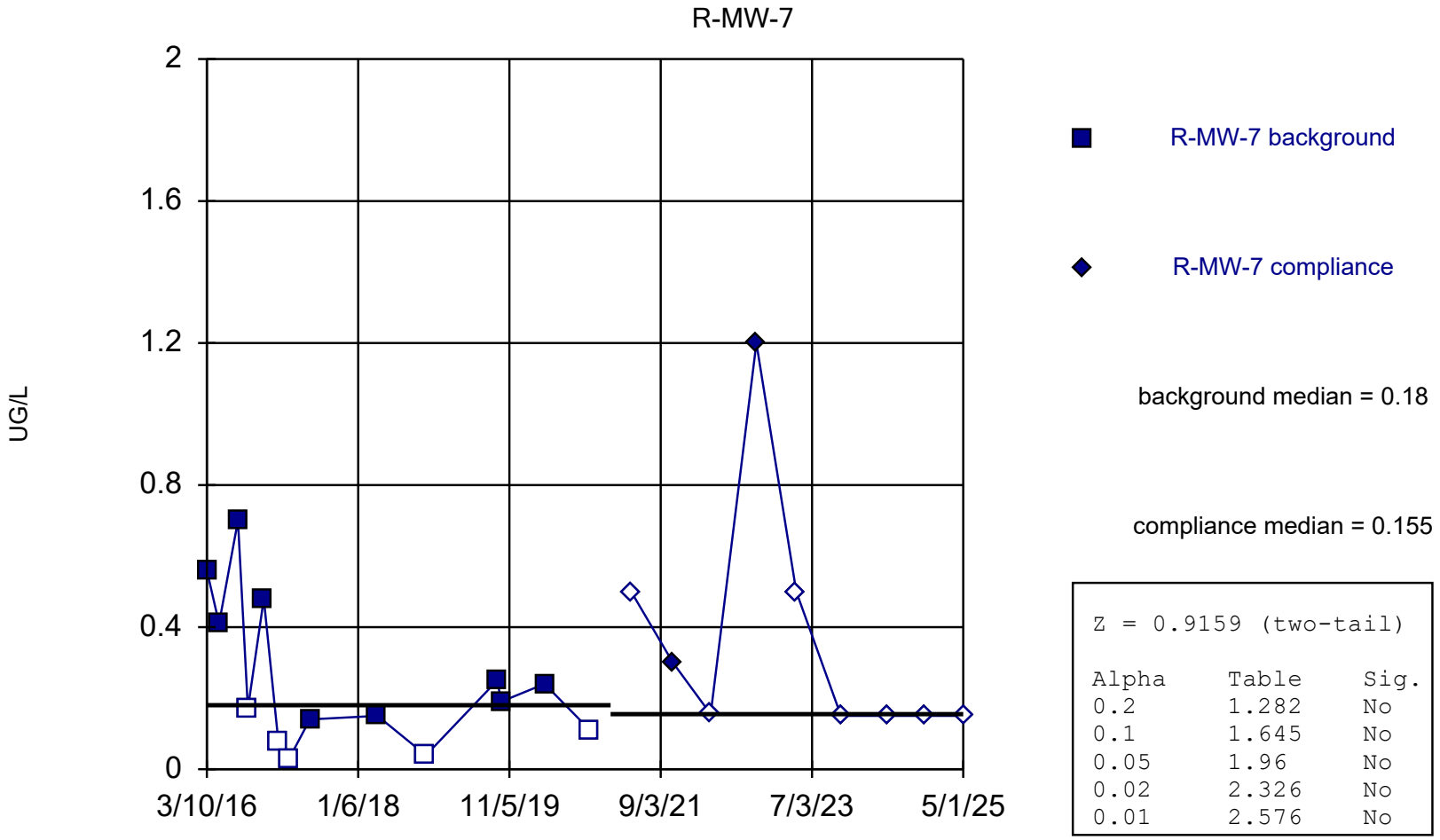
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CHROMIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.9159 (two-tail)

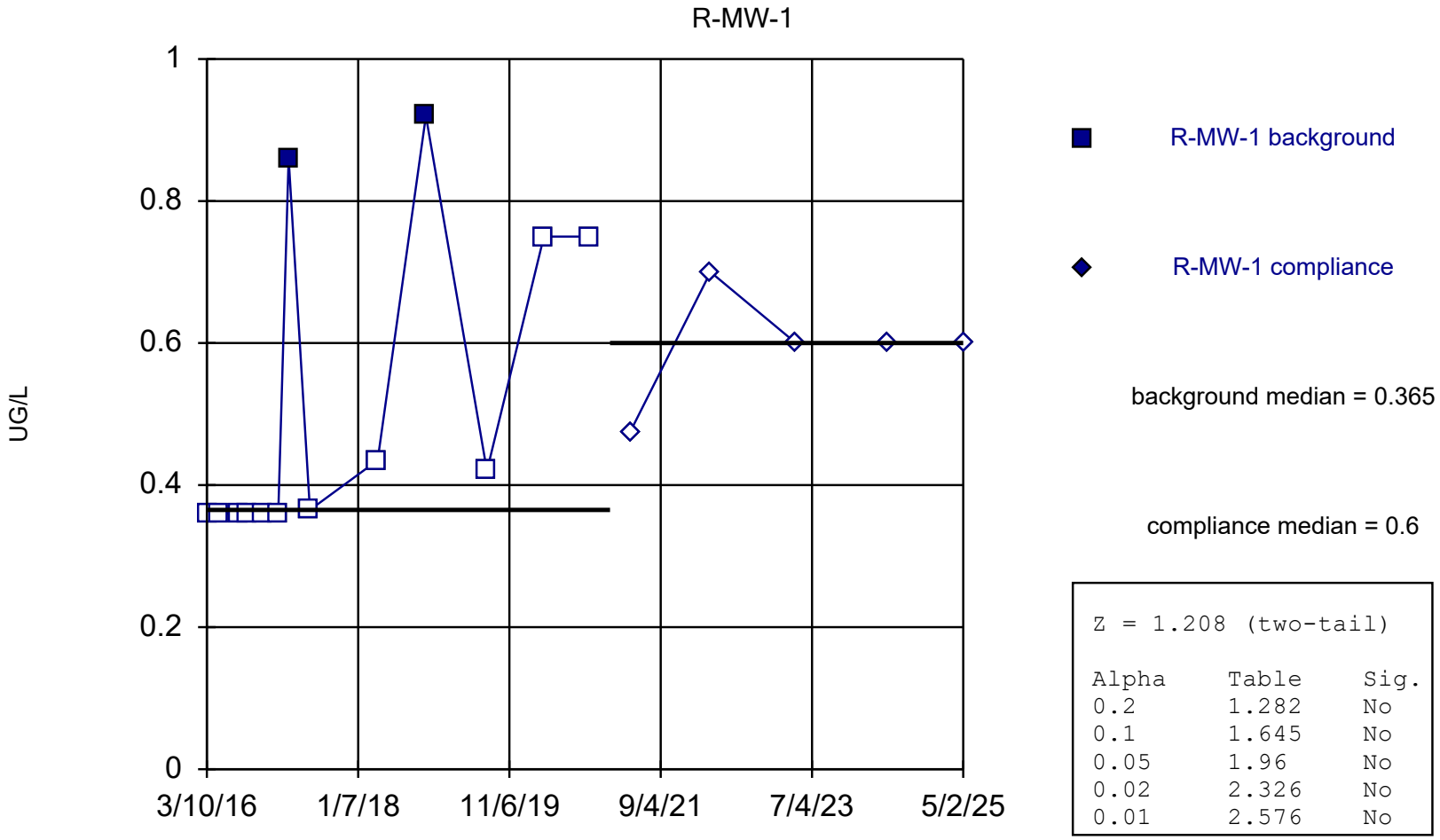
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CHROMIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.208 (two-tail)

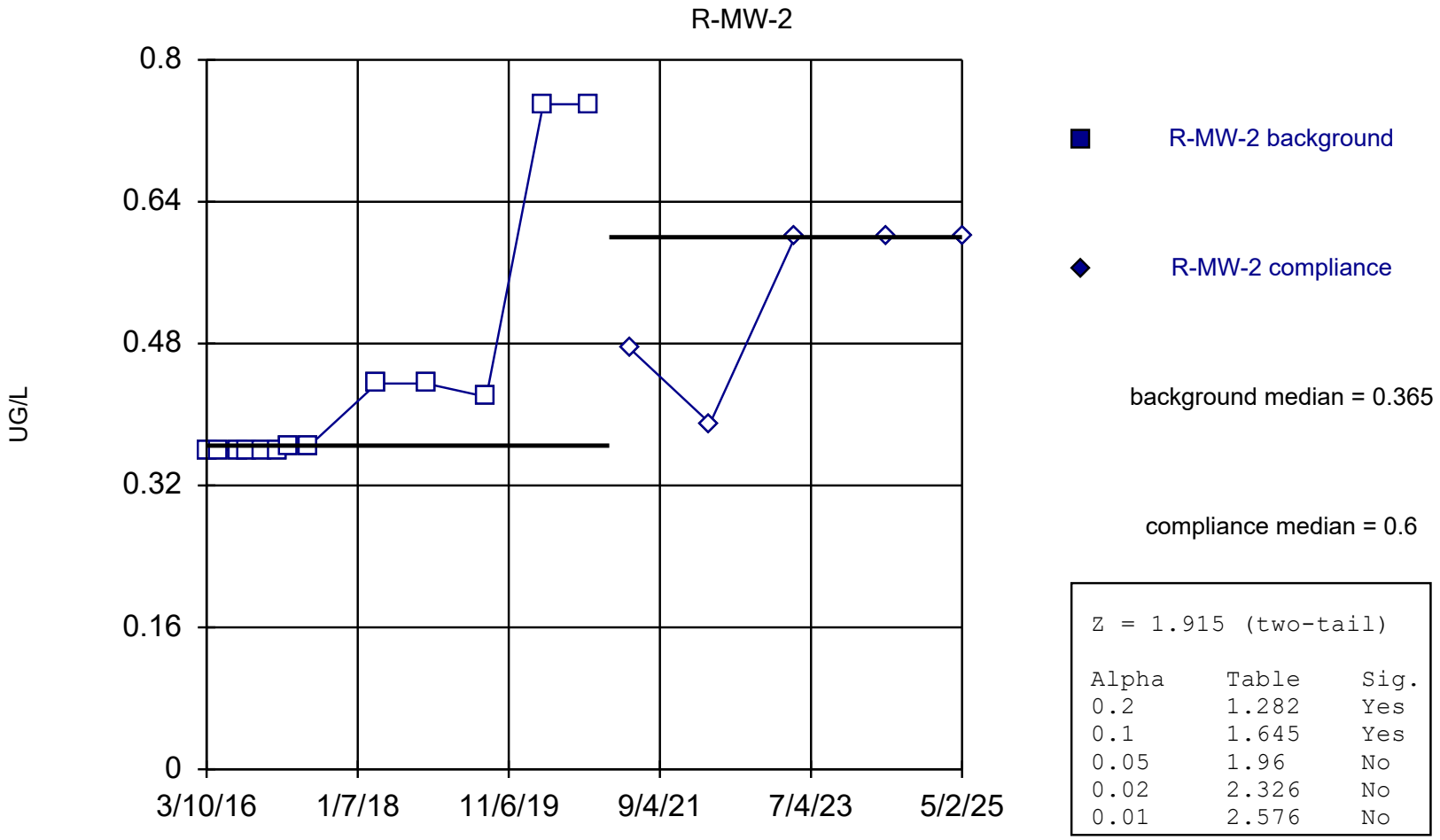
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: COBALT, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.915 (two-tail)

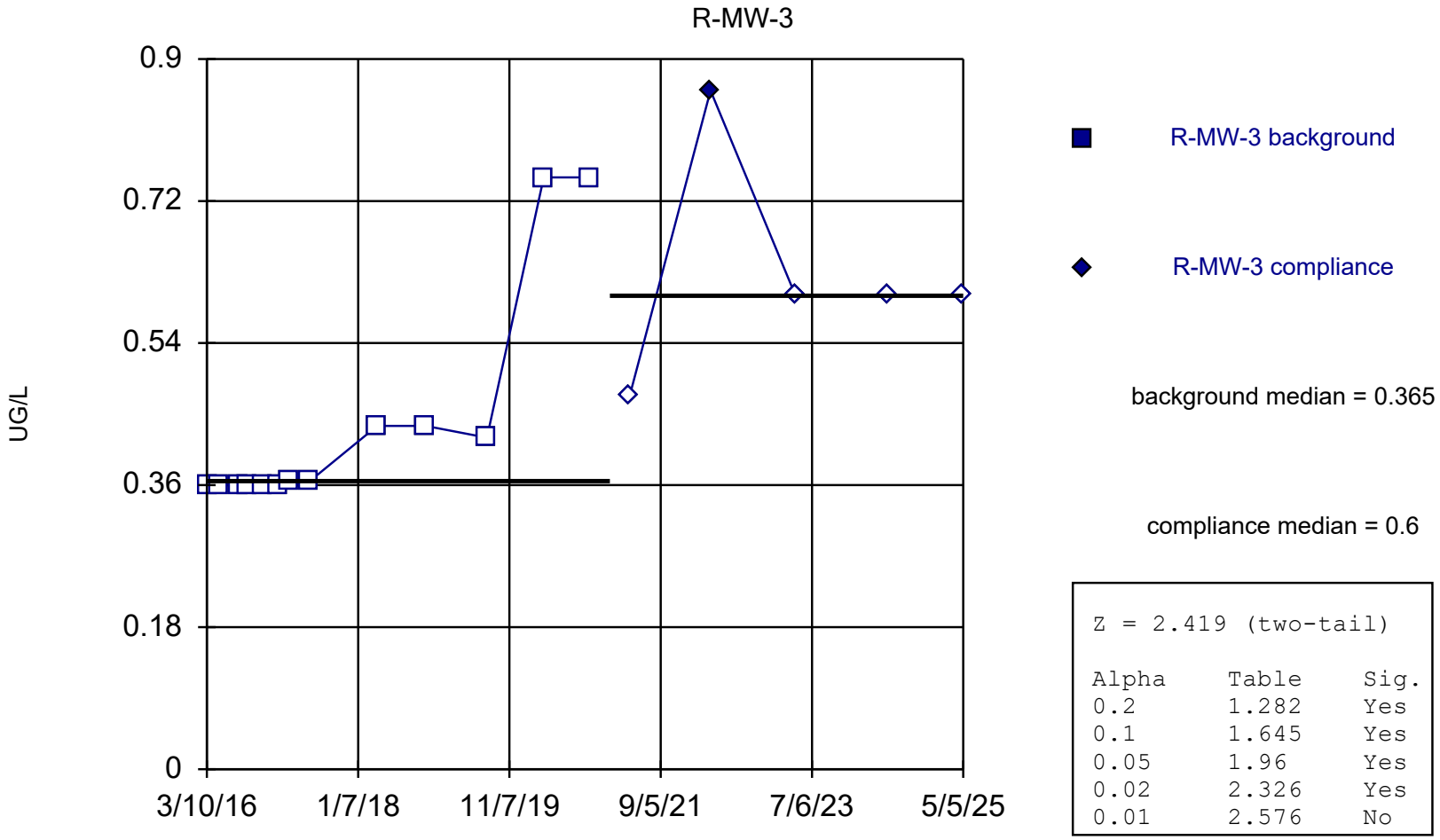
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: COBALT, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.419 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	No

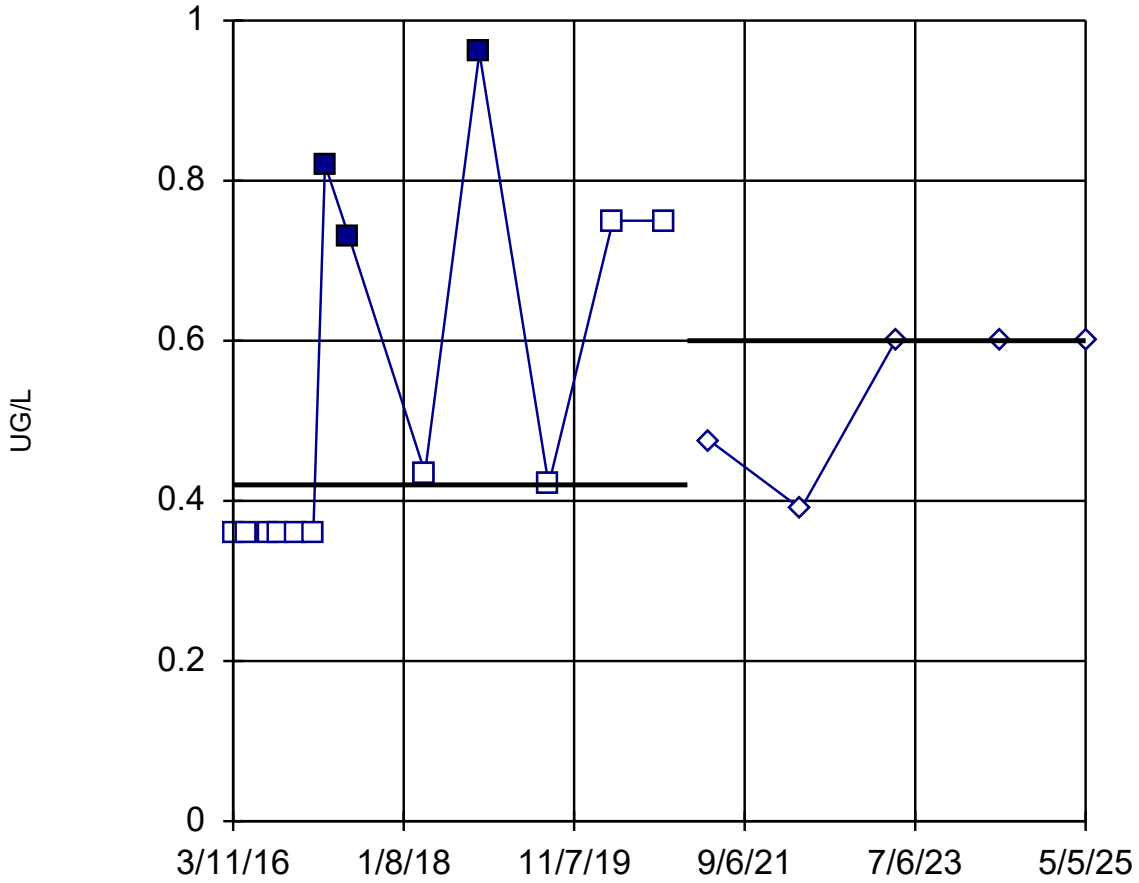
Constituent: COBALT, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-4



R-MW-4 background

R-MW-4 compliance

background median = 0.42

compliance median = 0.6

Z = 0.5034 (two-tail)

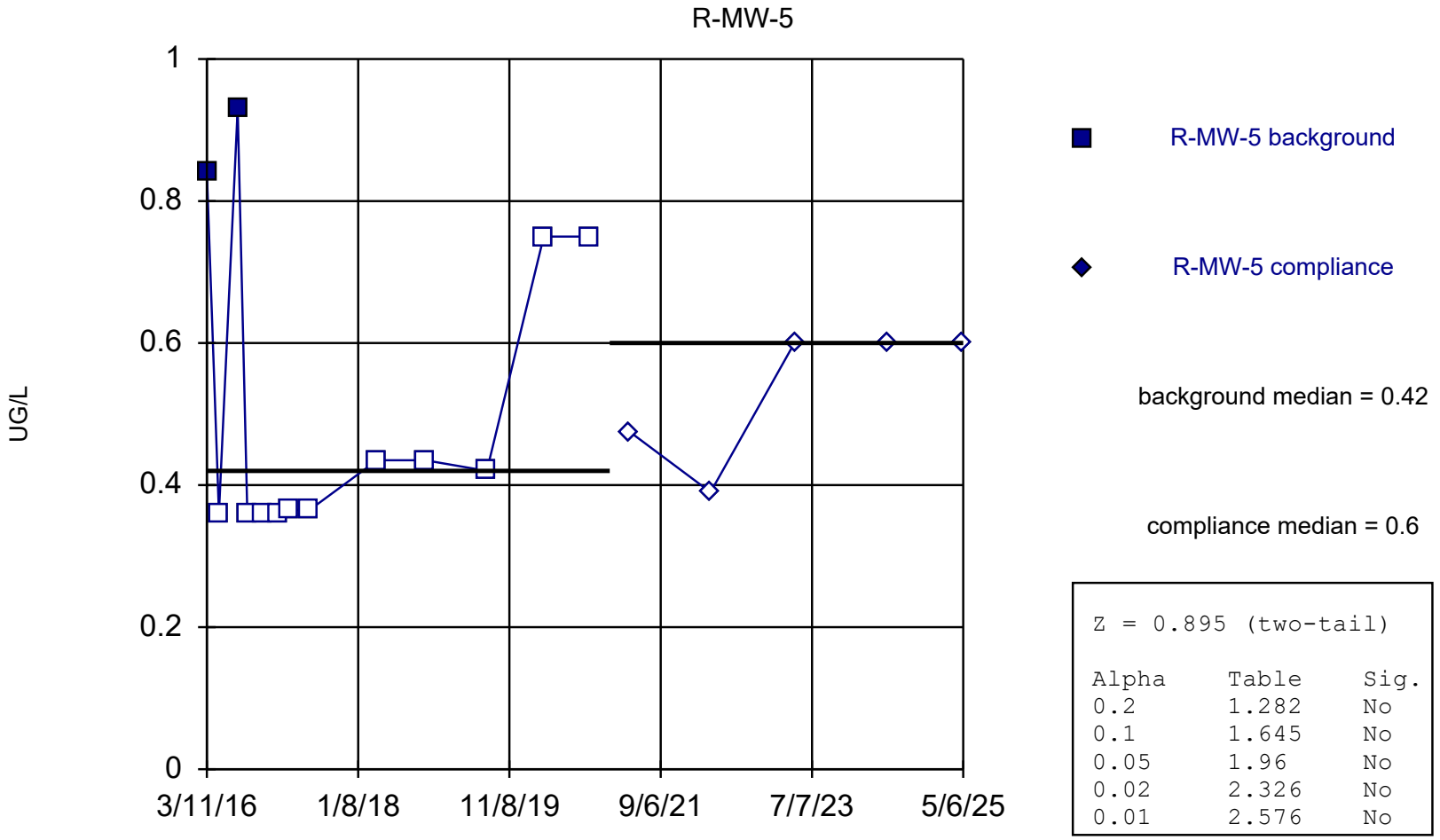
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: COBALT, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.895 (two-tail)

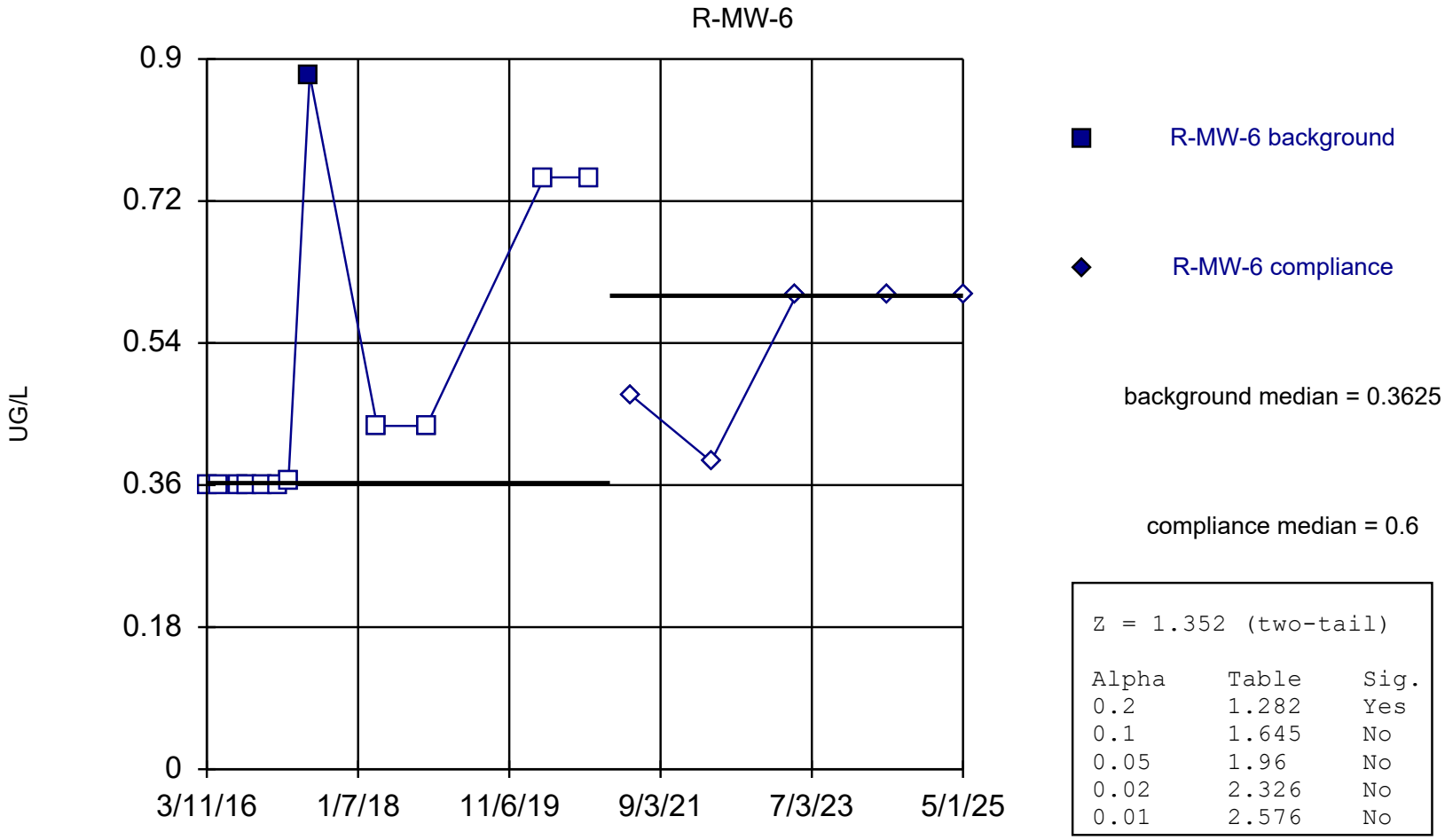
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: COBALT, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.352 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

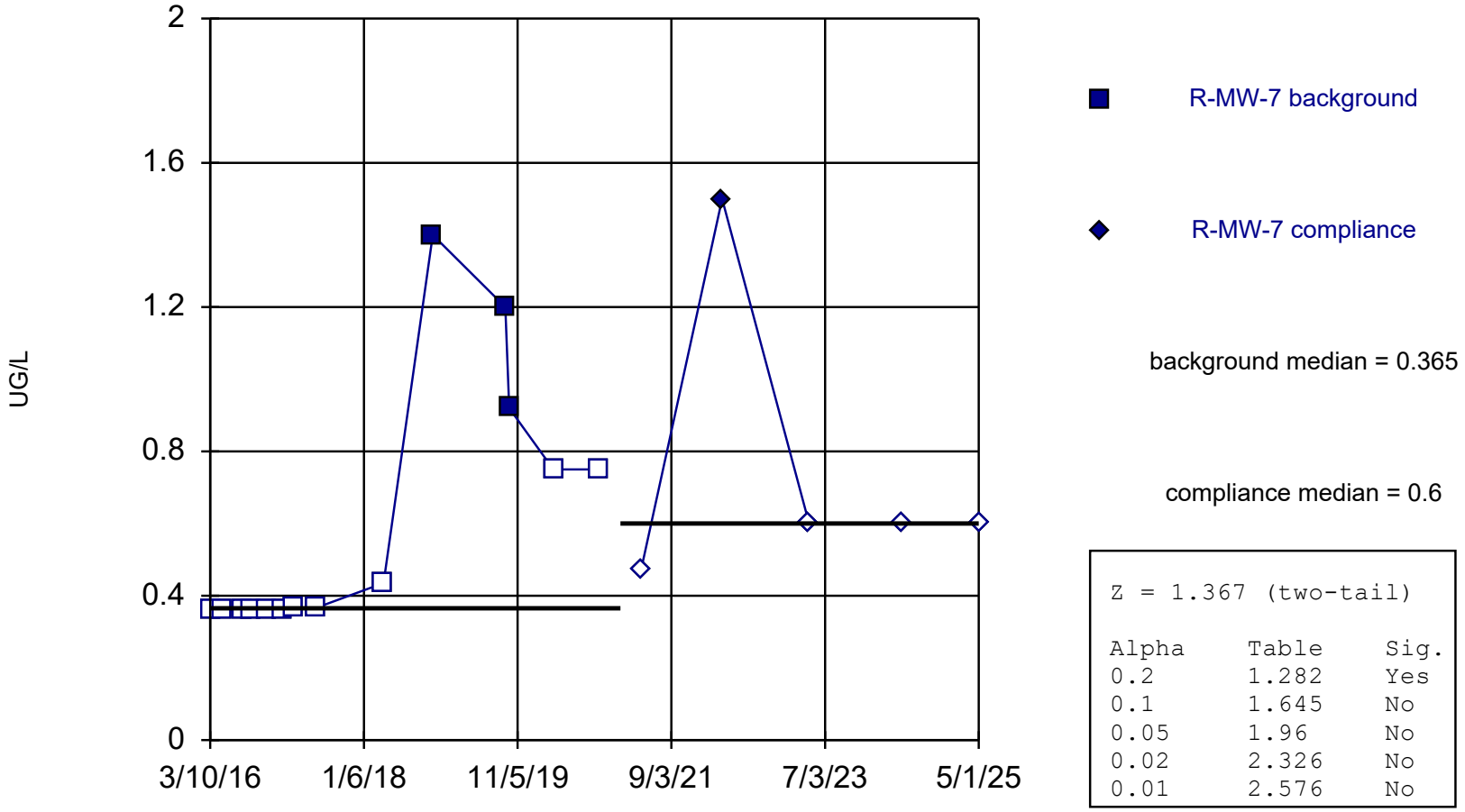
Constituent: COBALT, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-7



Z = 1.367 (two-tail)

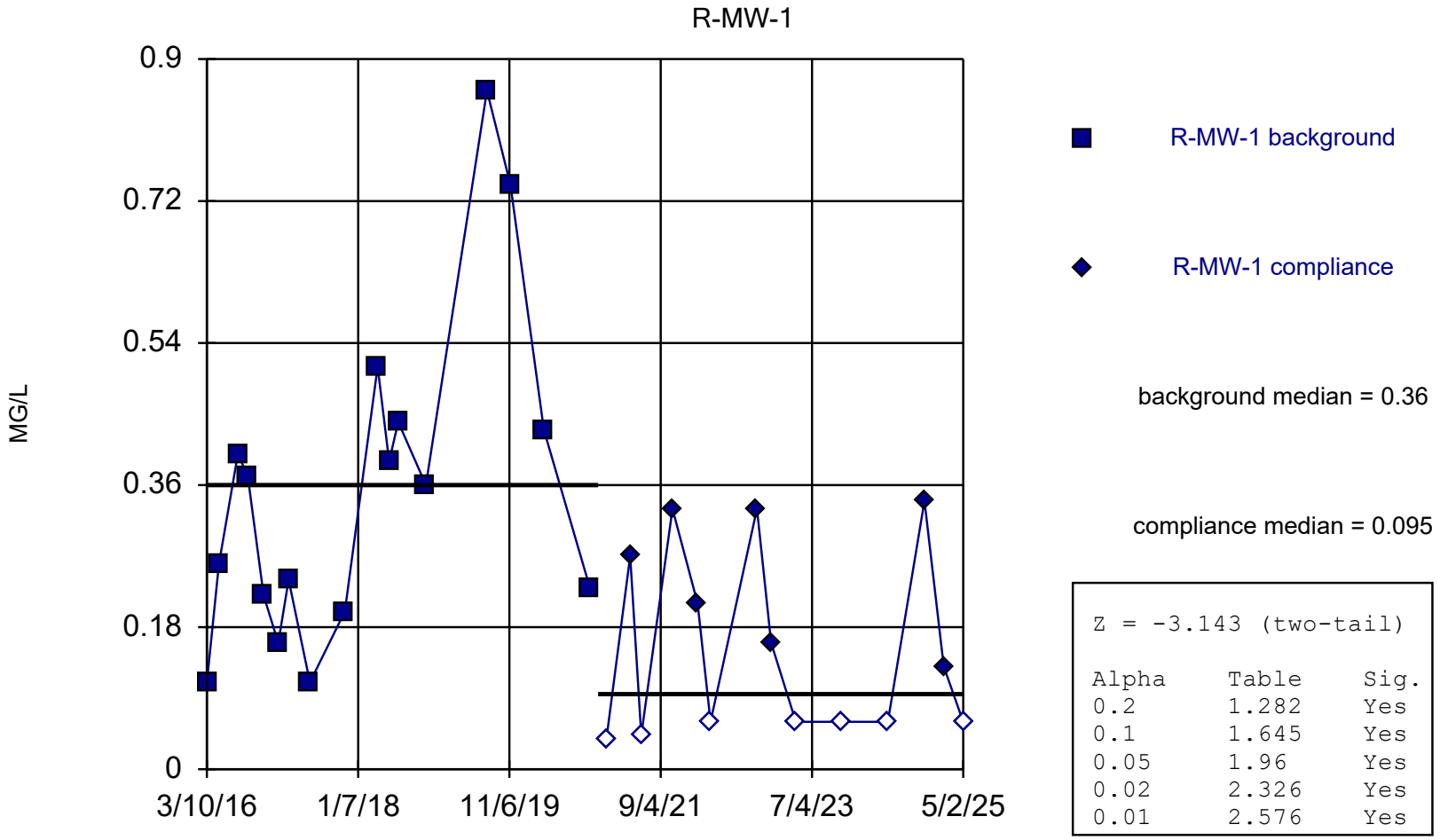
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: COBALT, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -3.143 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

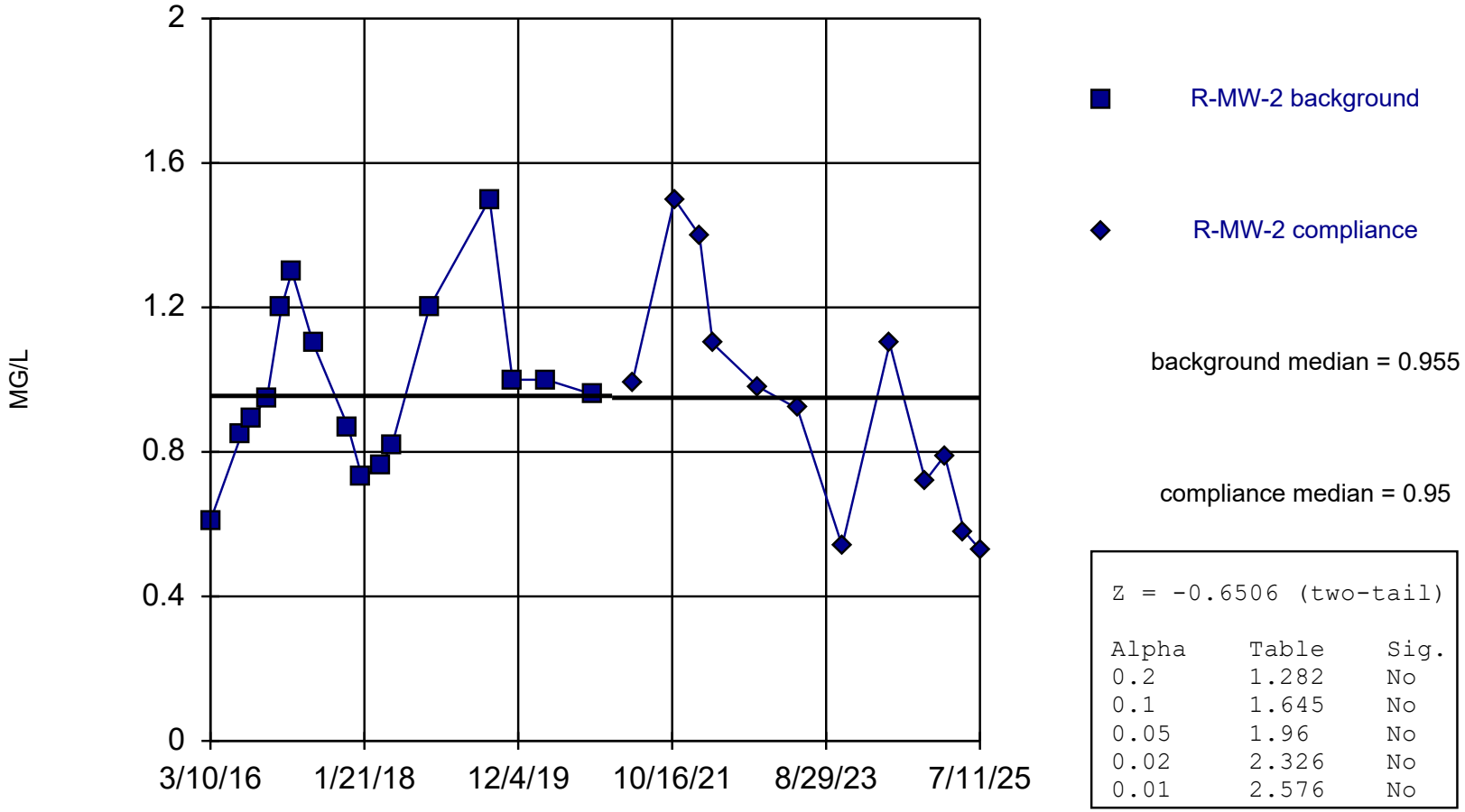
Constituent: FLUORIDE, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-2



Z = -0.6506 (two-tail)

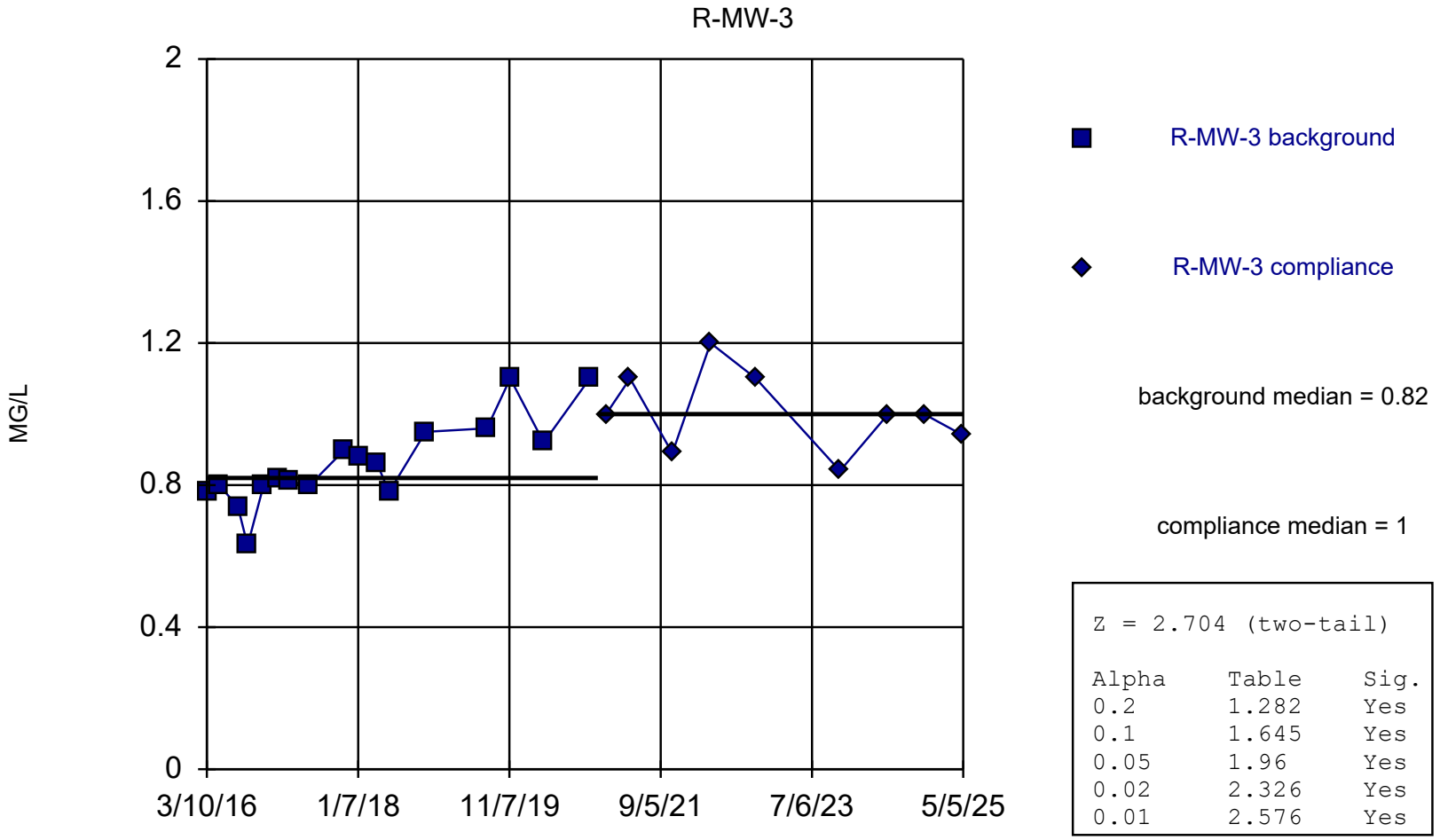
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: FLUORIDE, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.704 (two-tail)

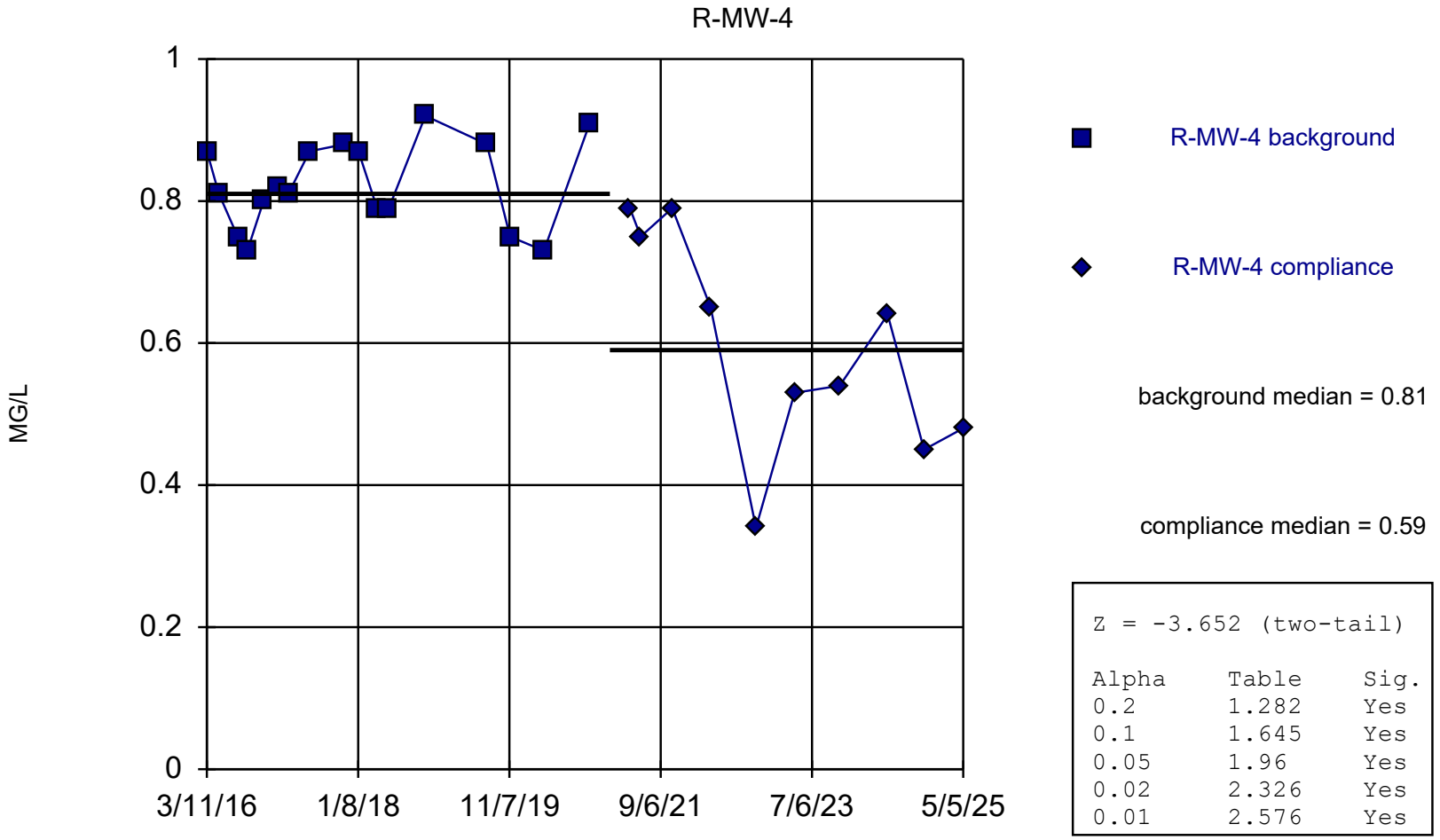
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: FLUORIDE, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = -3.652 (two-tail)

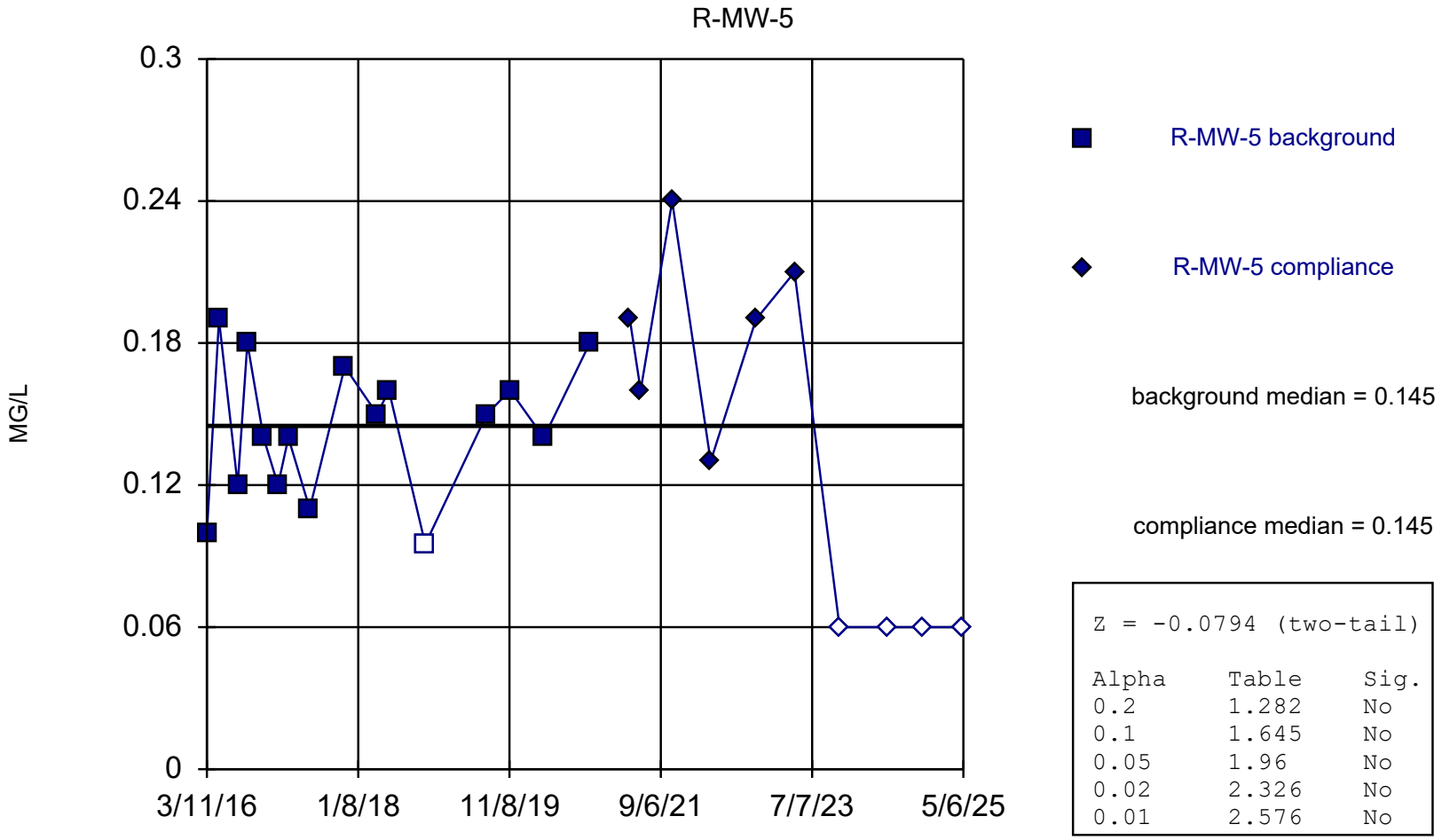
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: FLUORIDE, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.0794 (two-tail)

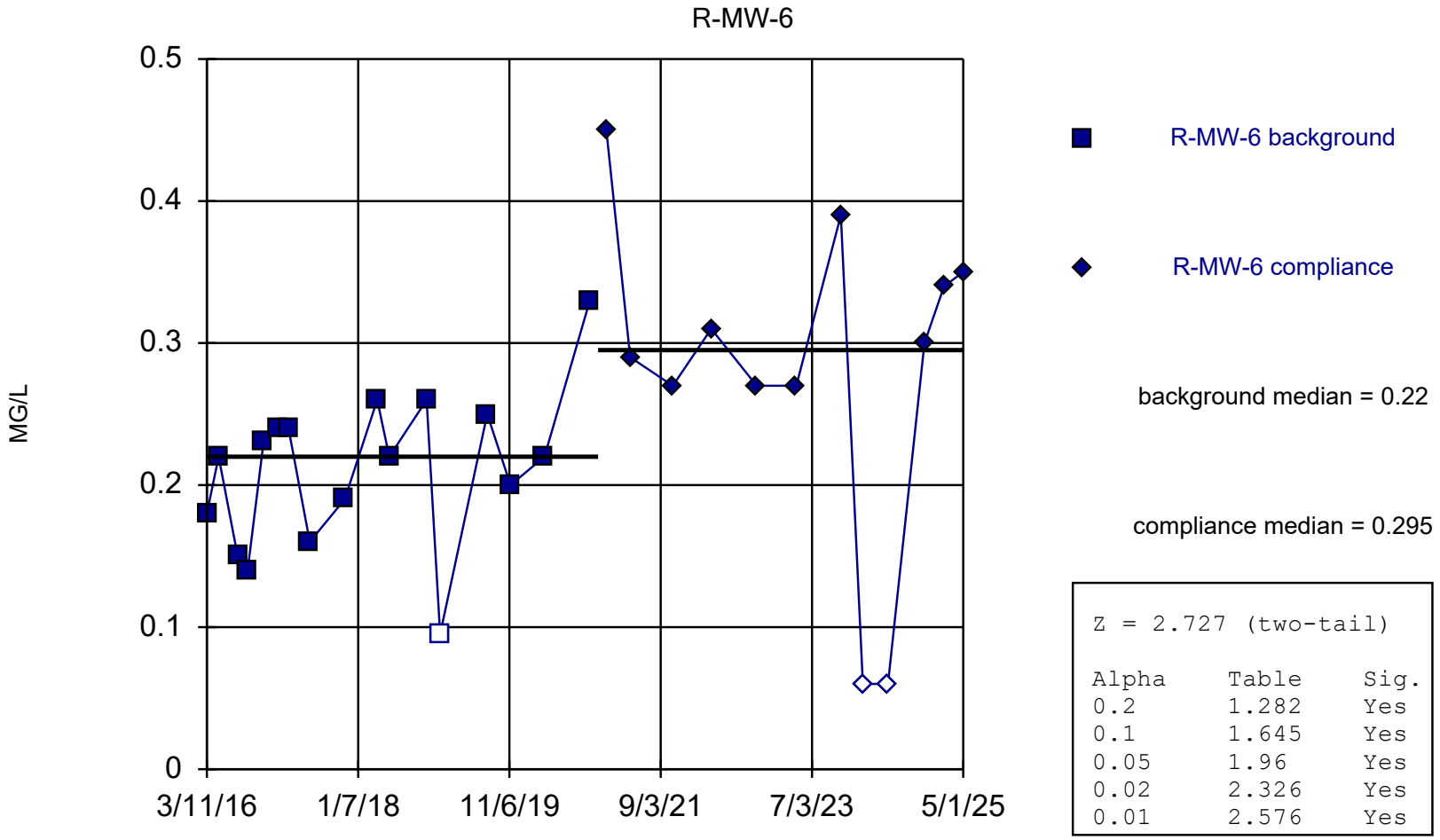
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: FLUORIDE, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.727 (two-tail)

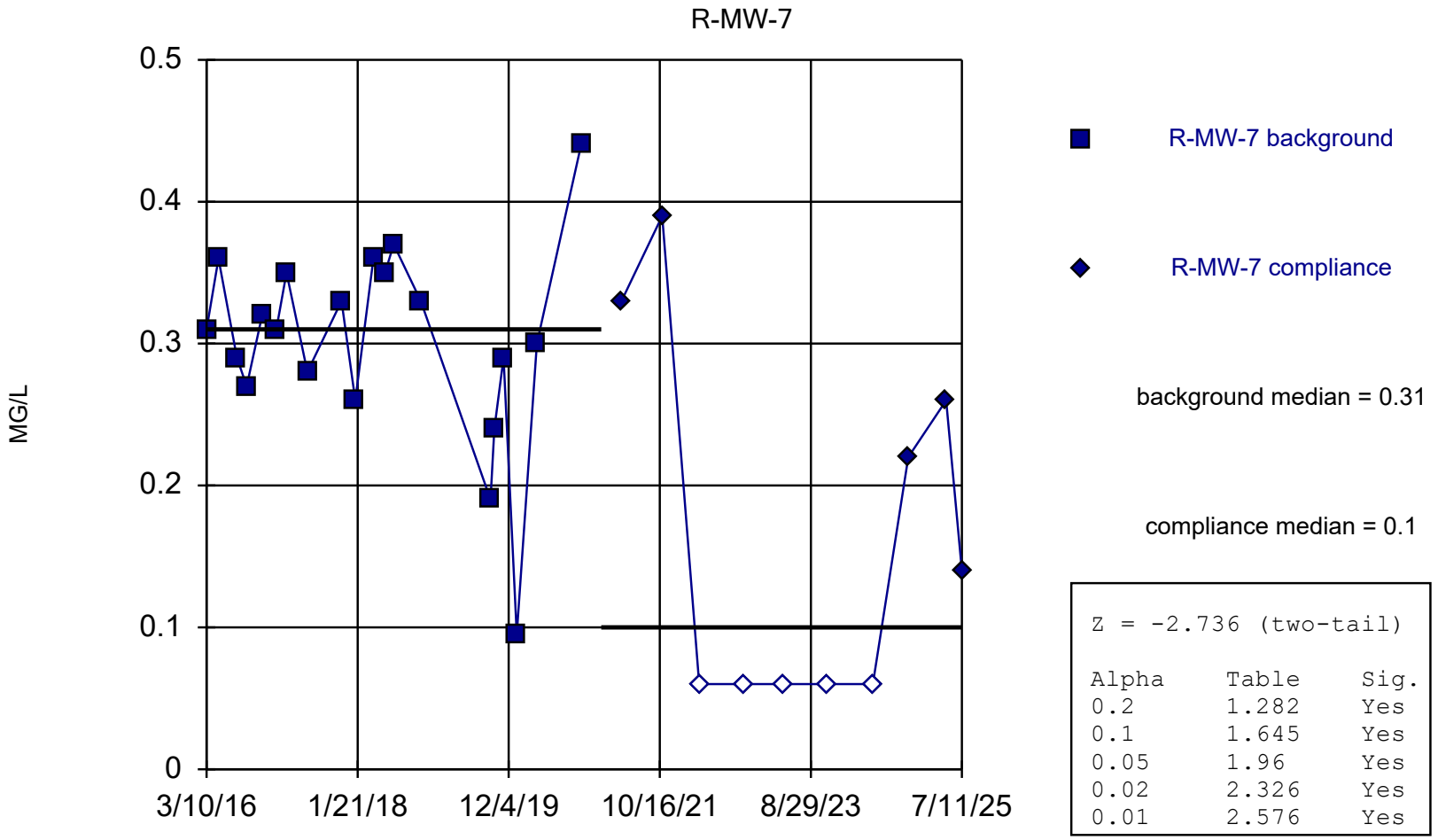
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: FLUORIDE, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -2.736 (two-tail)

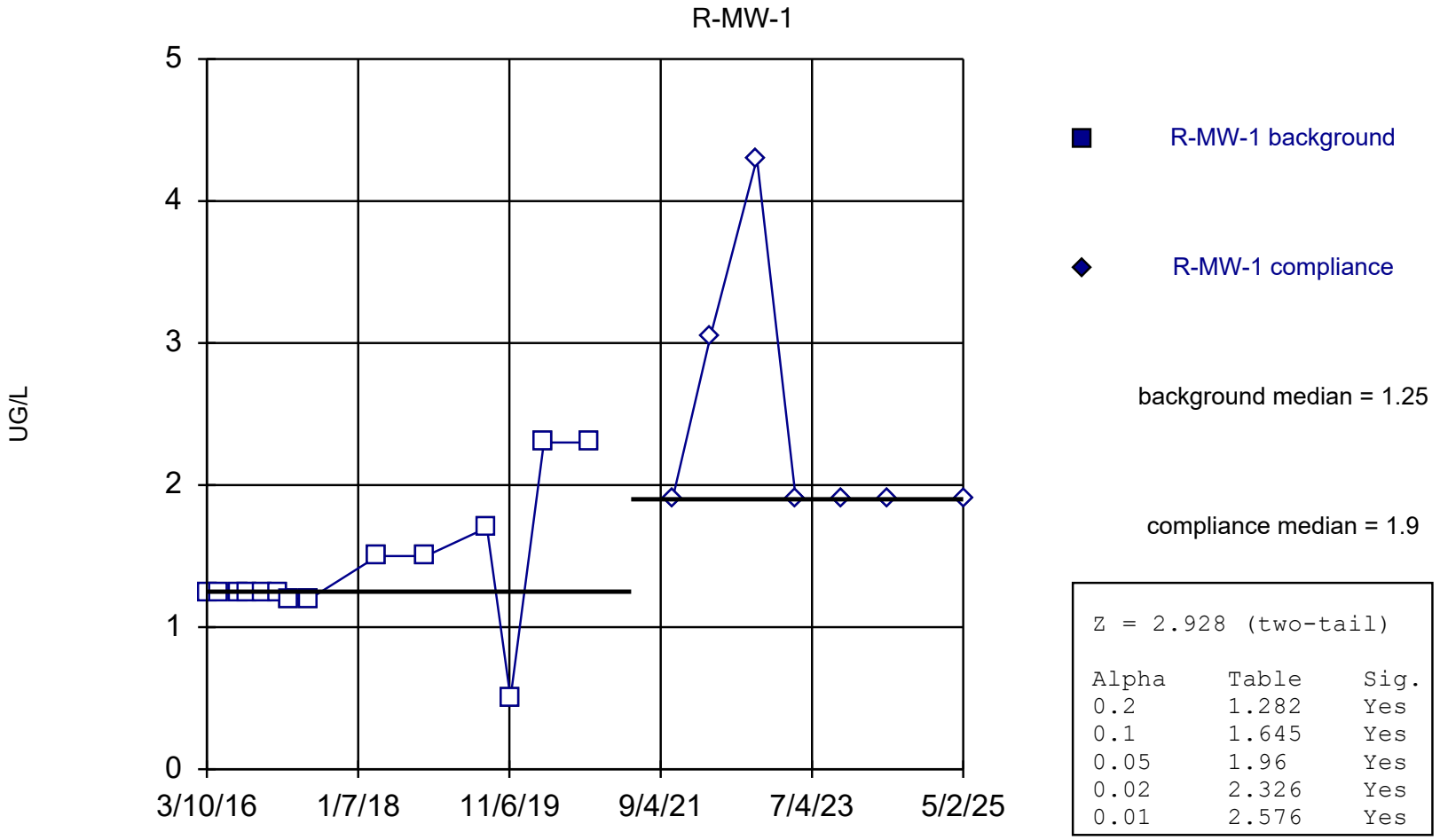
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: FLUORIDE, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.928 (two-tail)

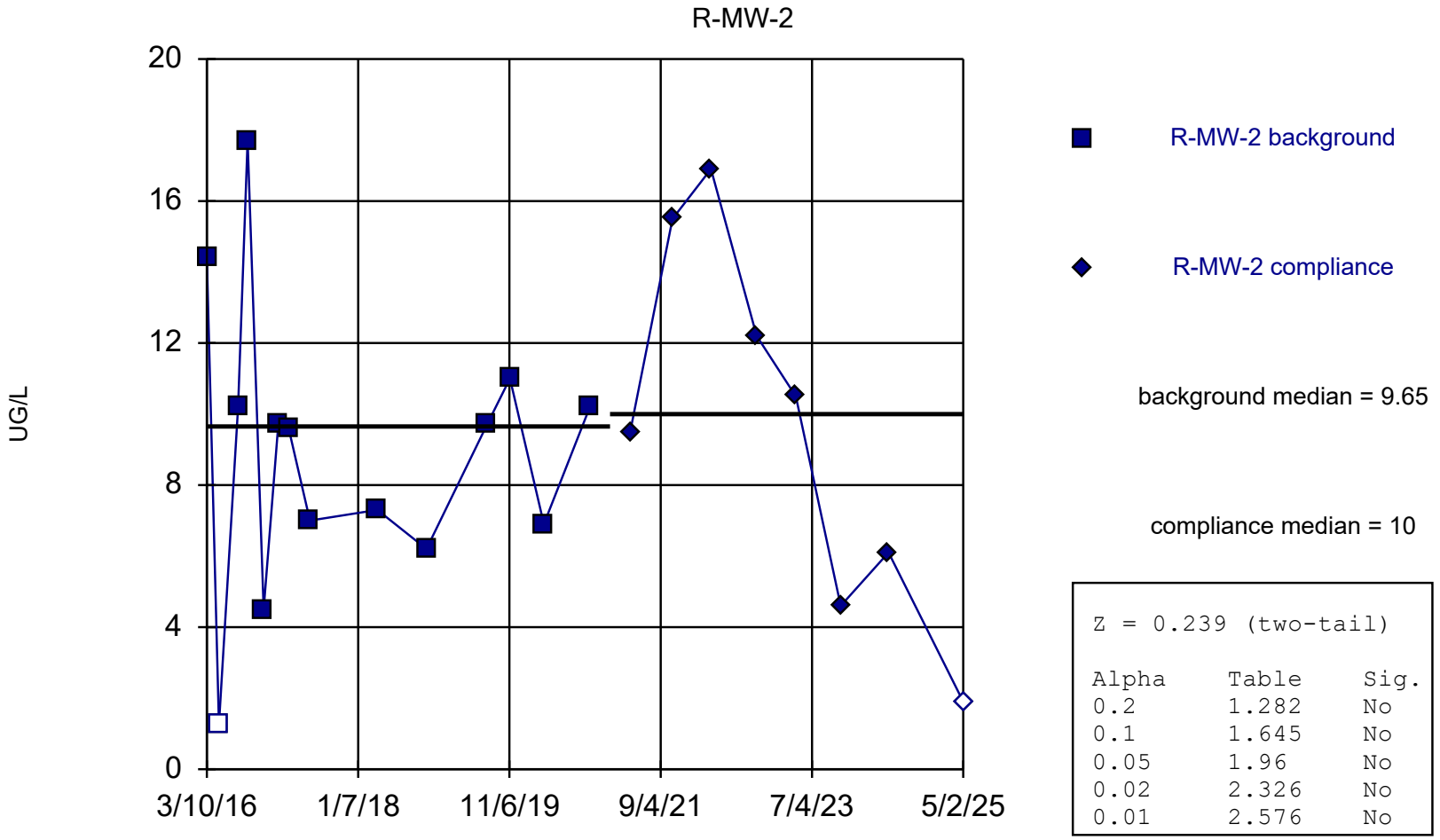
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: LEAD, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.239 (two-tail)

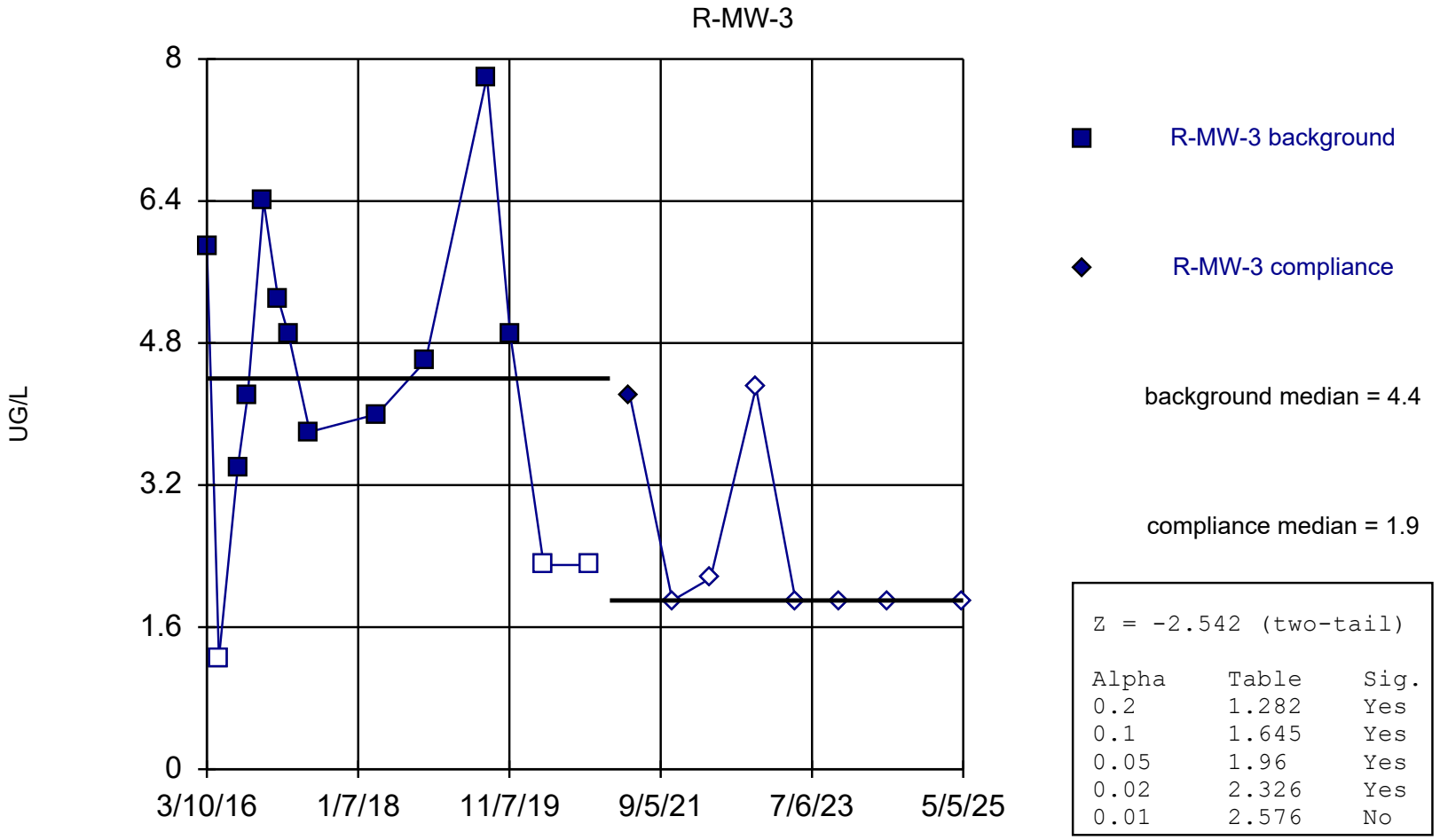
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: LEAD, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -2.542 (two-tail)

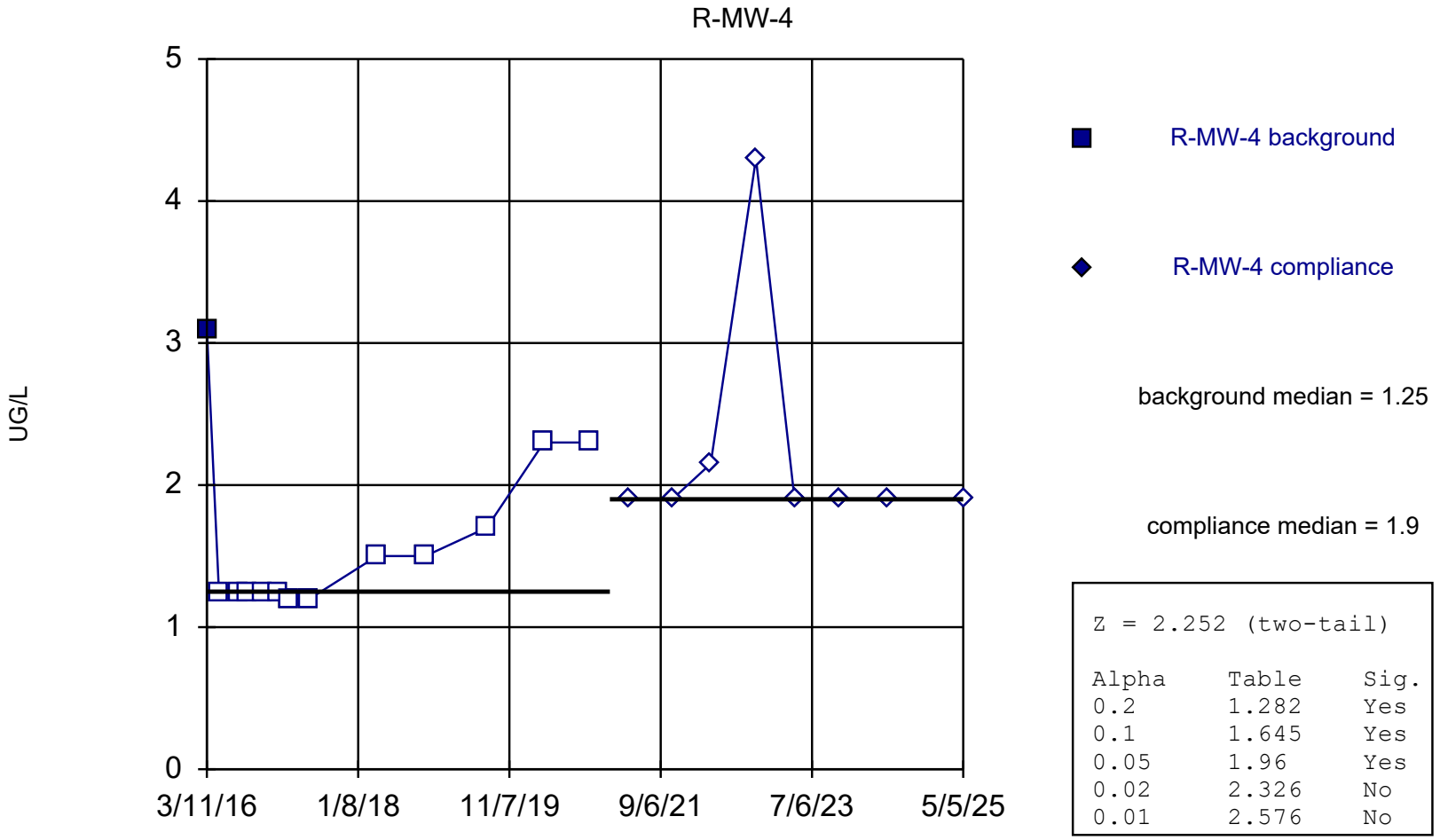
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	No

Constituent: LEAD, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.252 (two-tail)

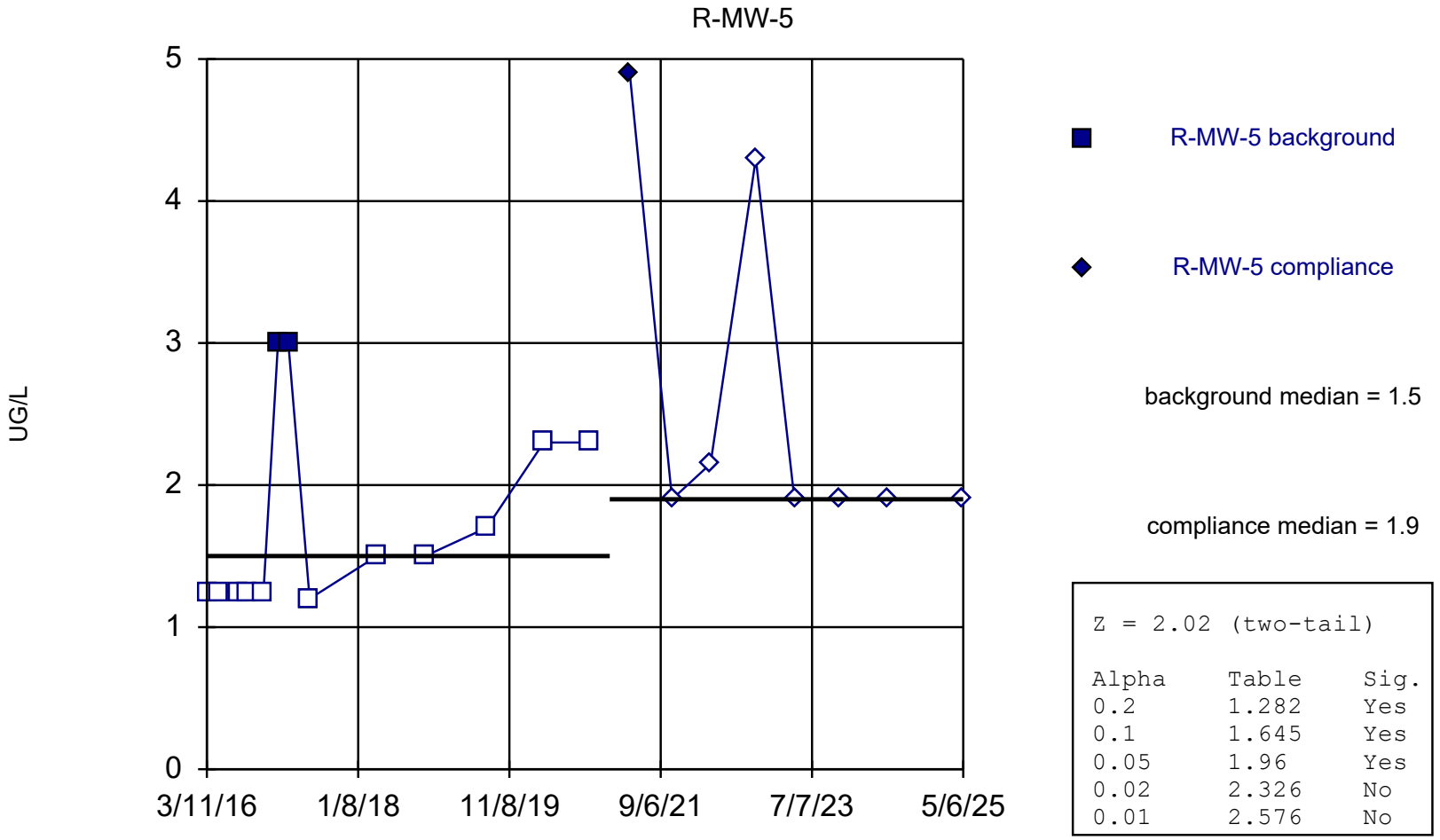
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: LEAD, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.02 (two-tail)

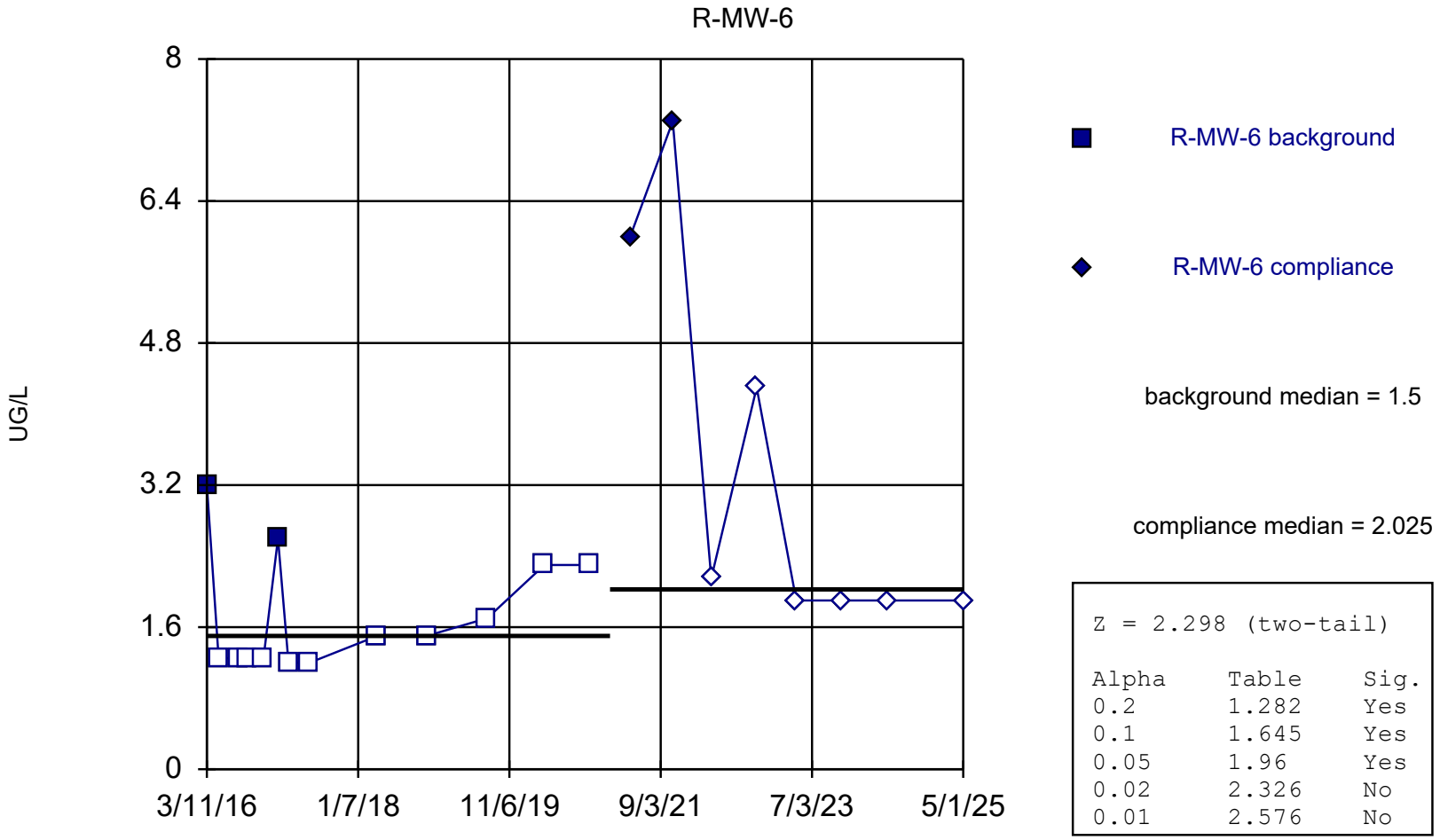
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: LEAD, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.298 (two-tail)

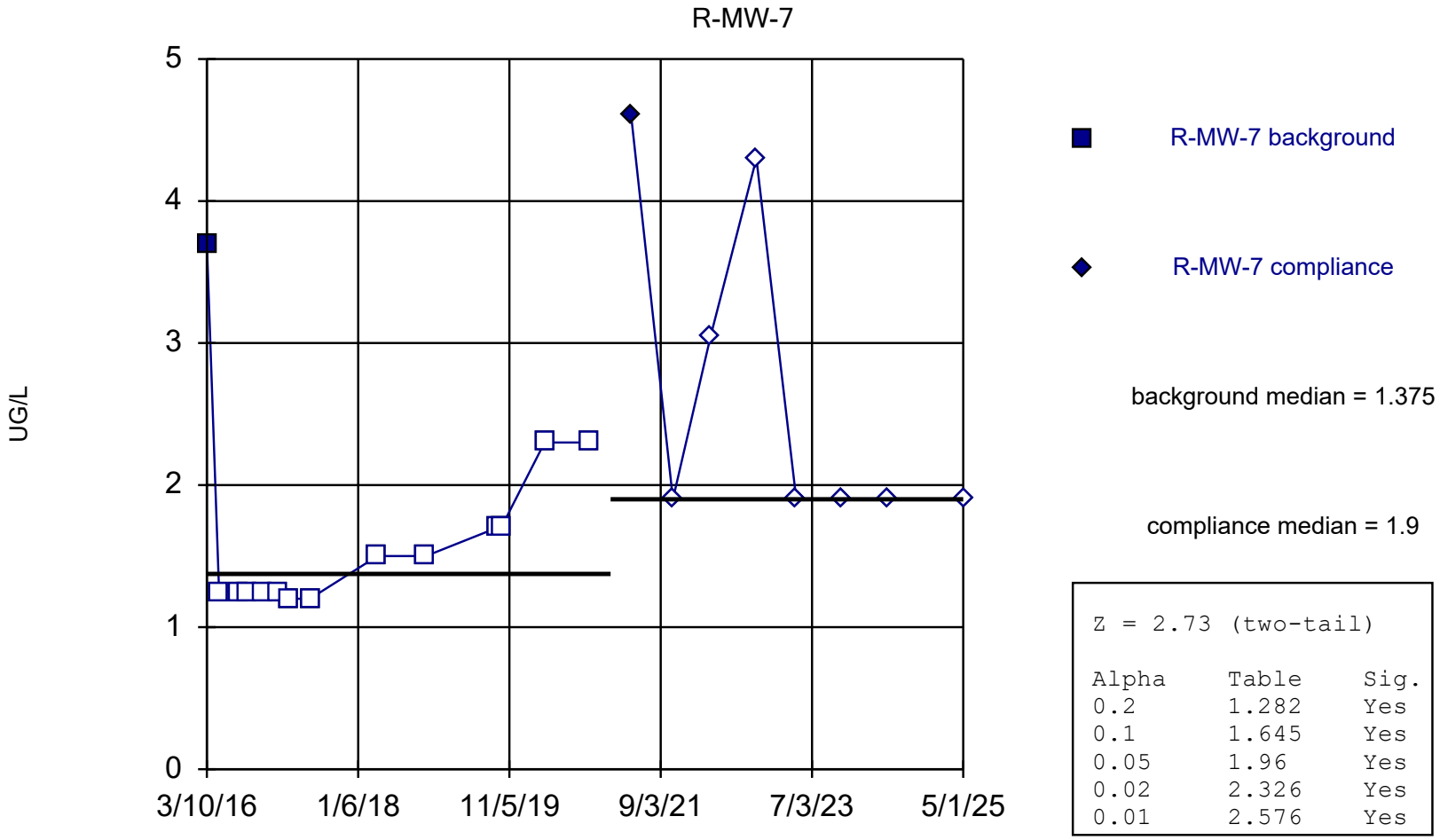
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: LEAD, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.73 (two-tail)

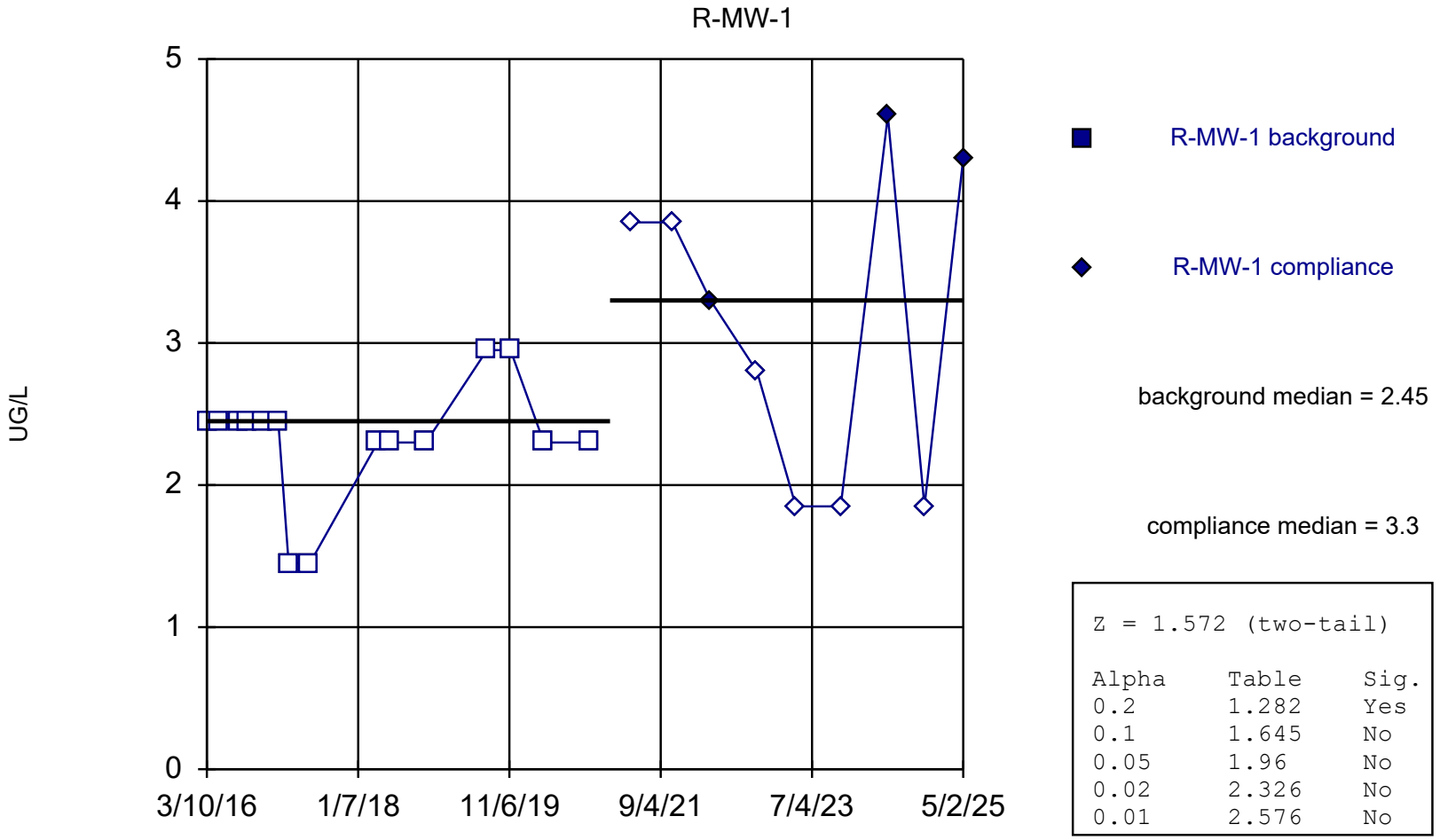
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: LEAD, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.572 (two-tail)

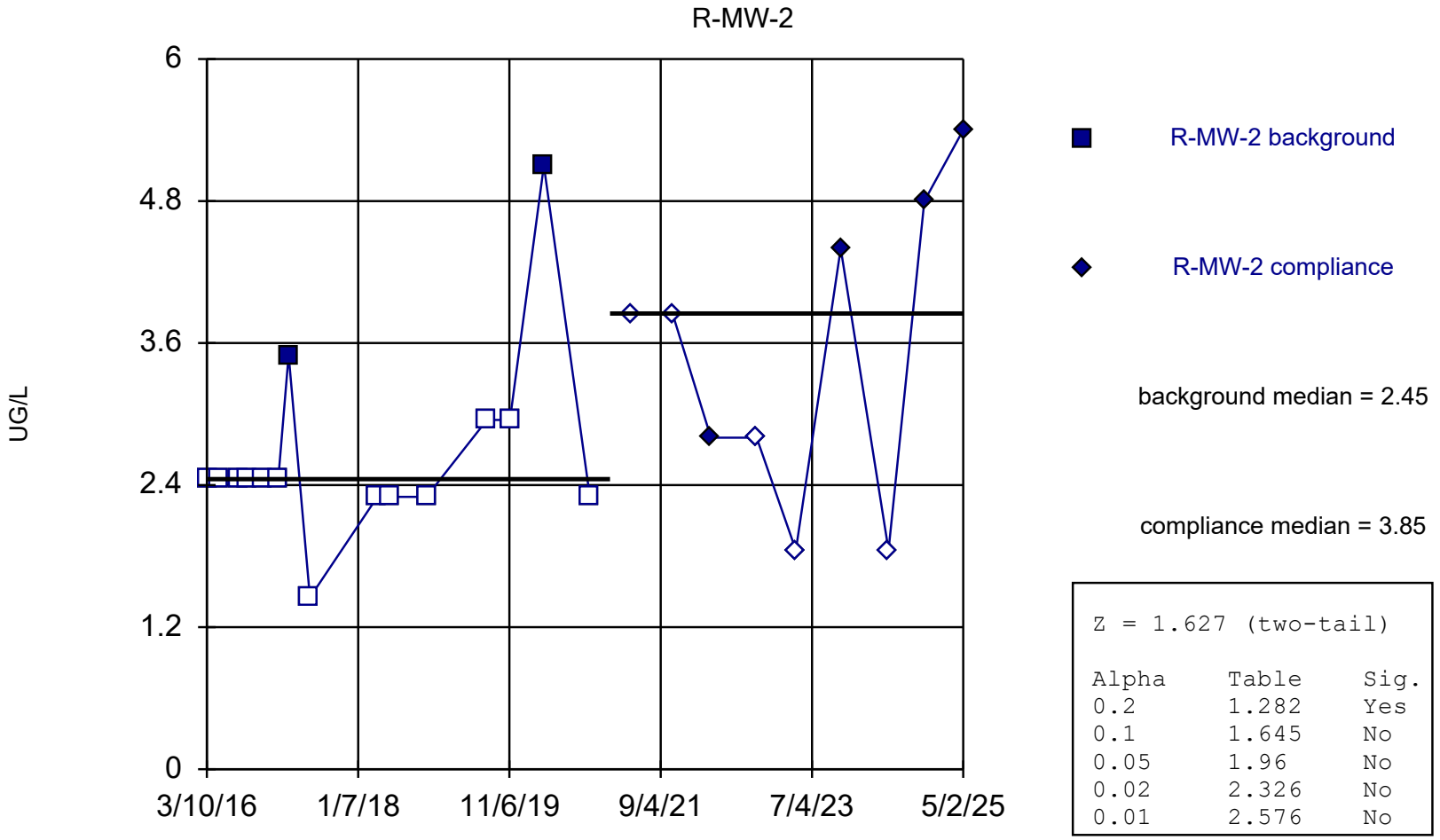
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: LITHIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.627 (two-tail)

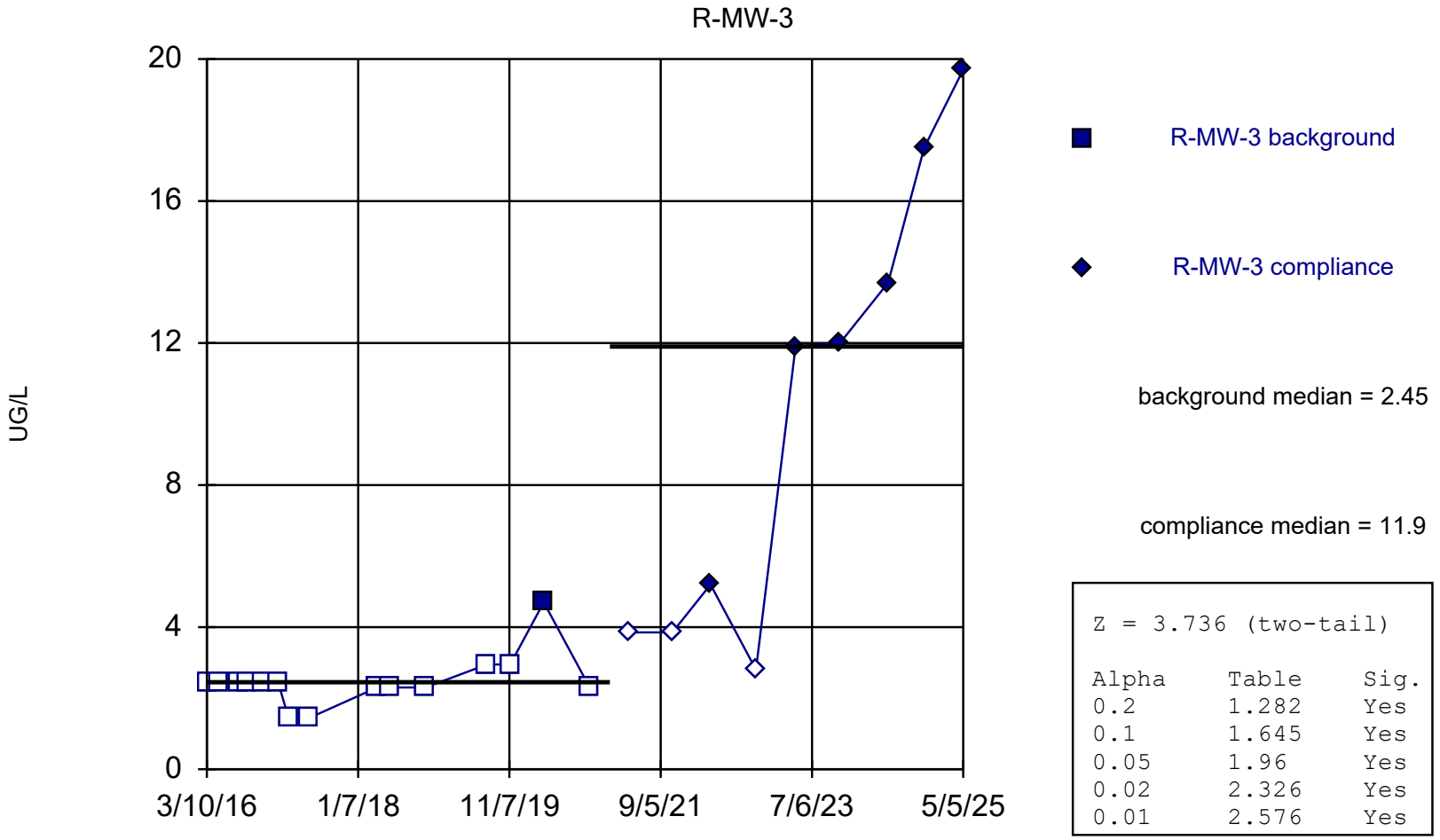
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: LITHIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

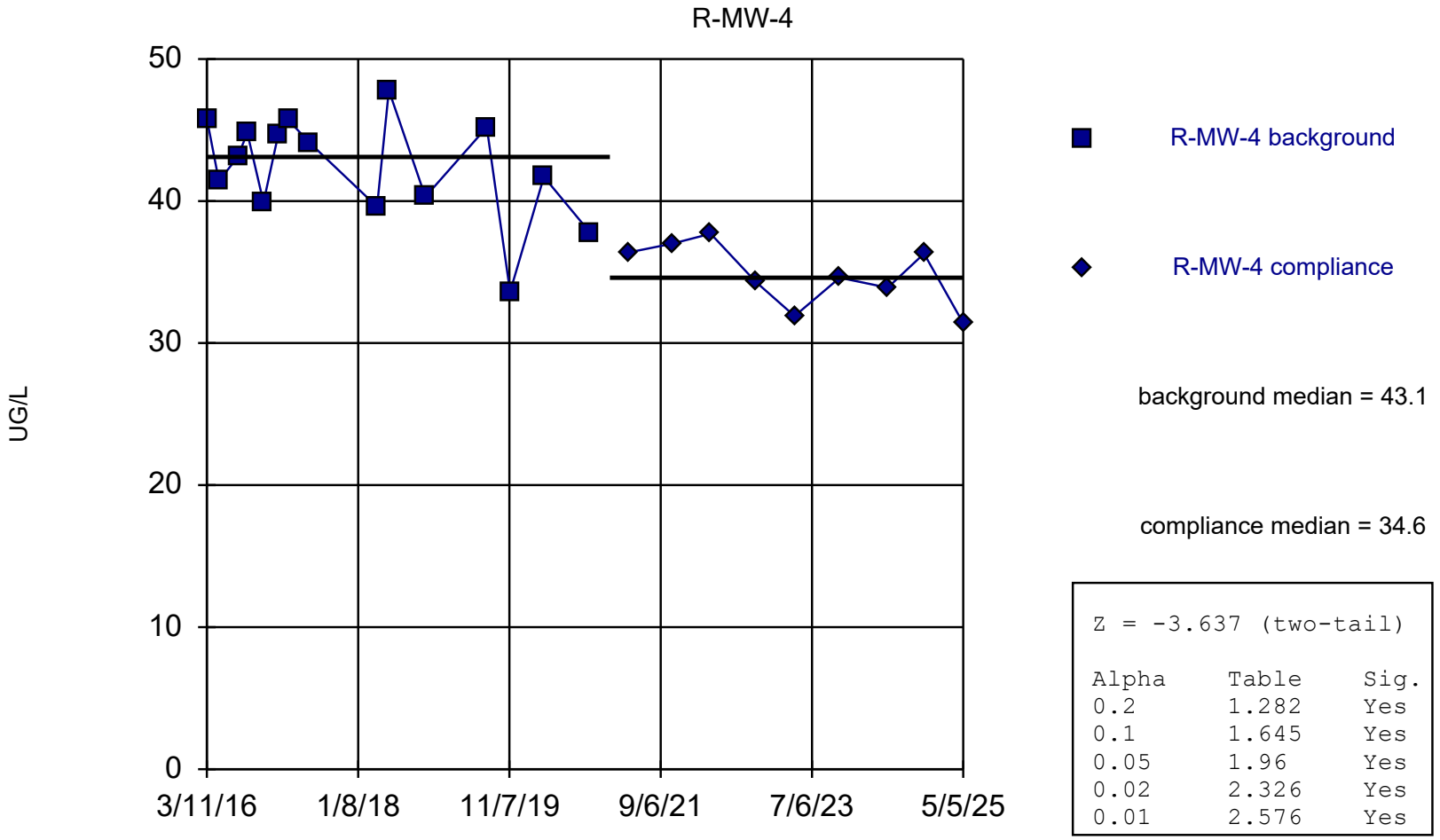


Constituent: LITHIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = -3.637 (two-tail)

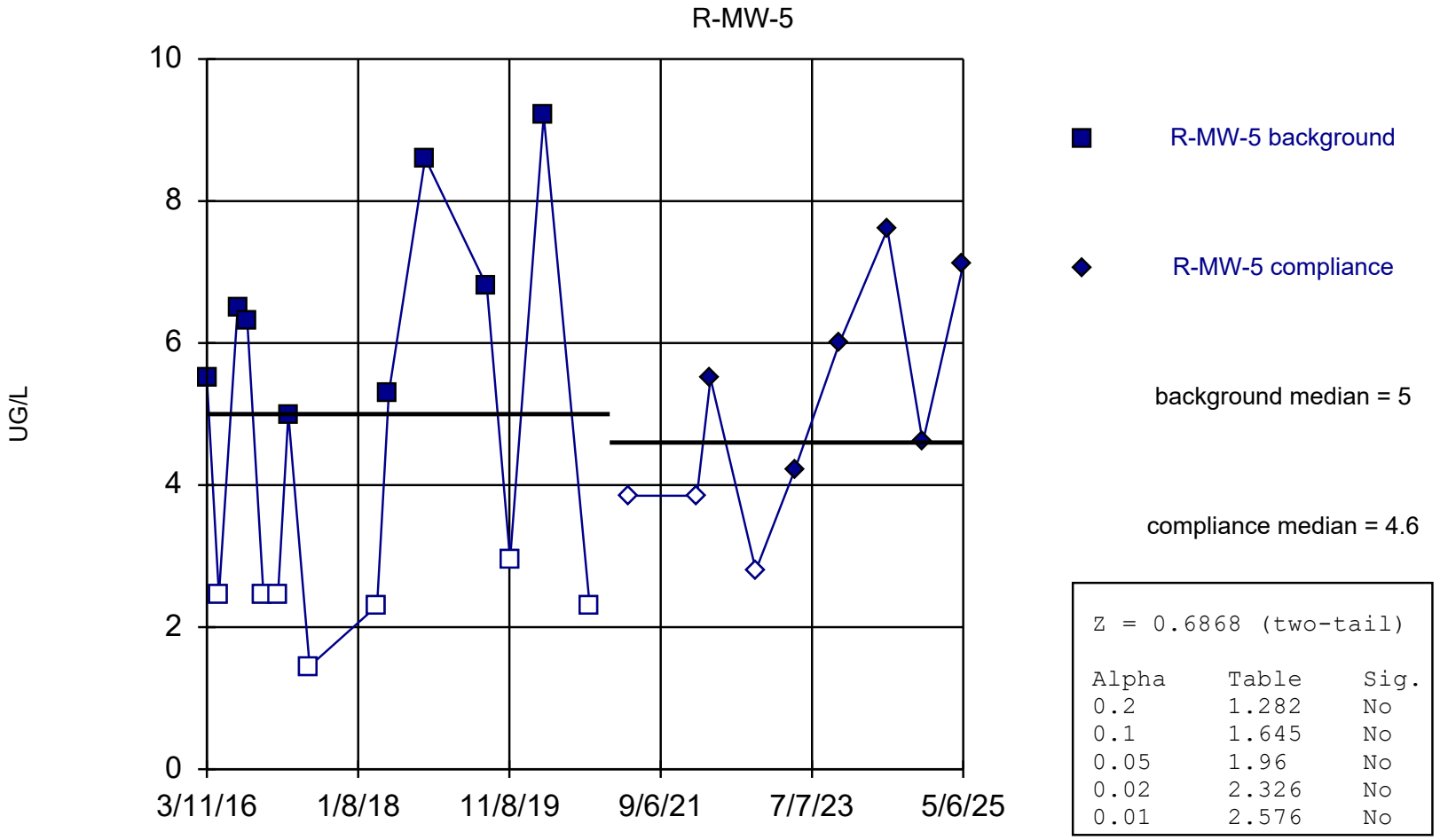
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: LITHIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.6868 (two-tail)

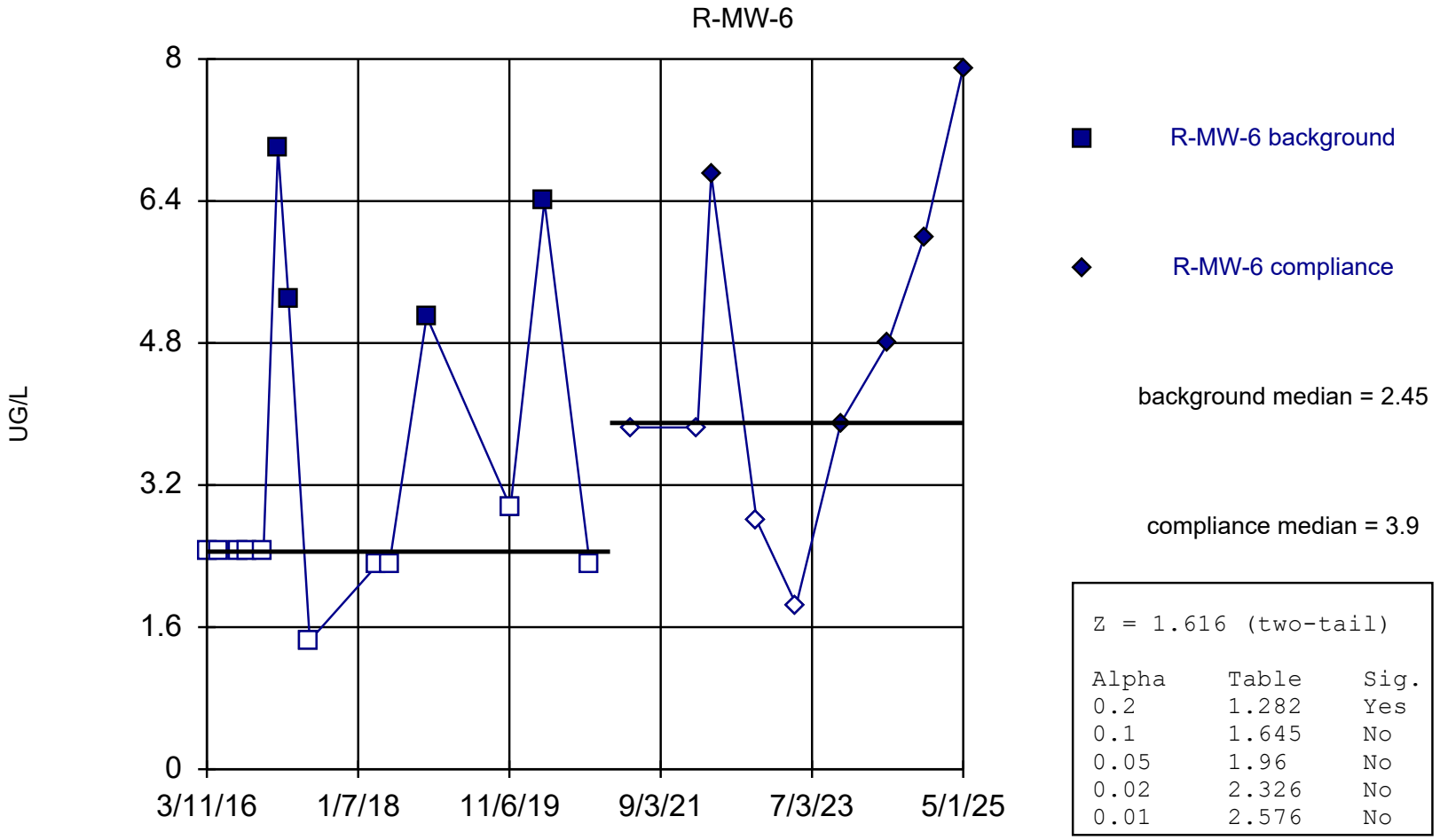
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: LITHIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.616 (two-tail)

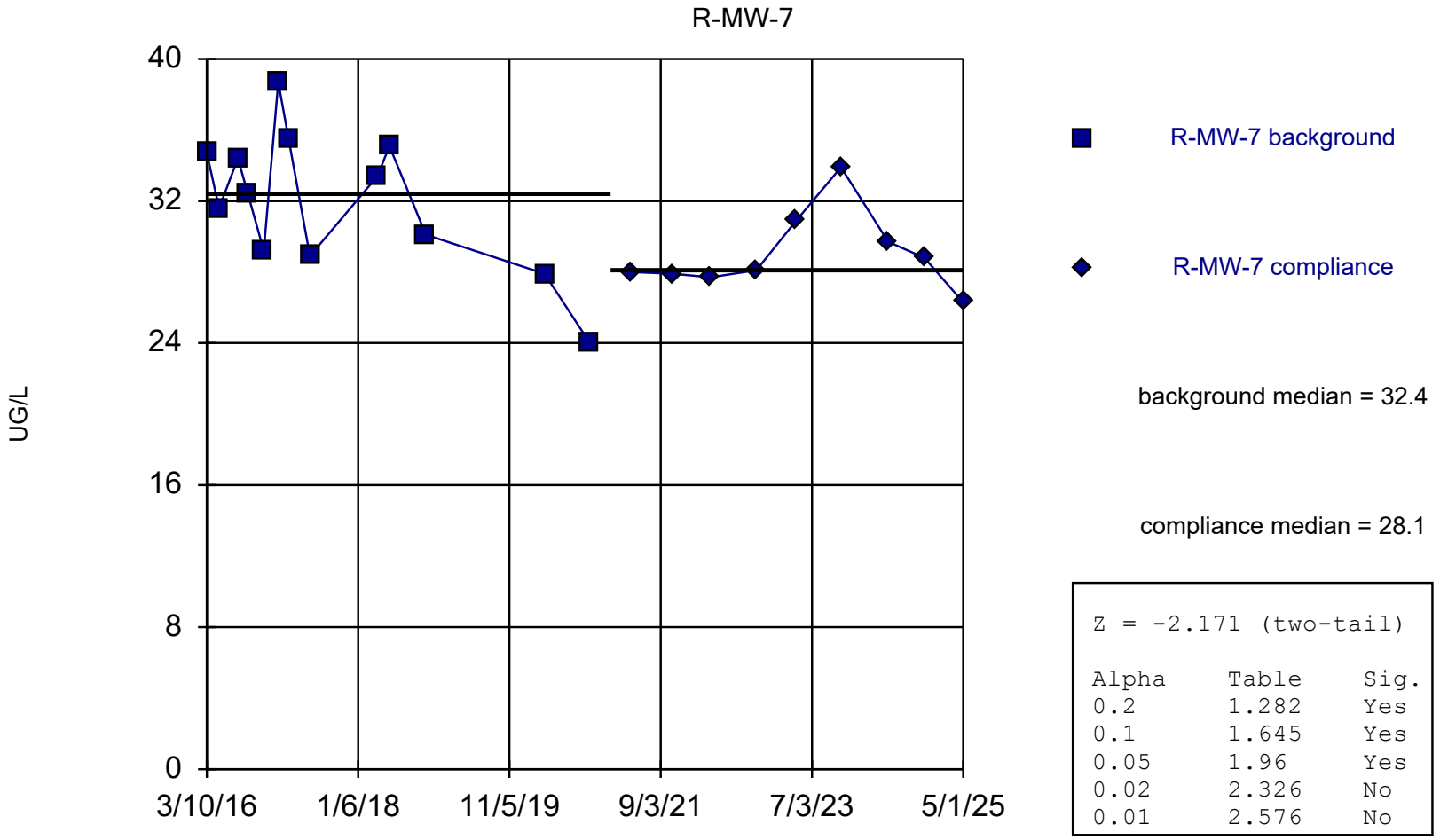
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: LITHIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = -2.171 (two-tail)

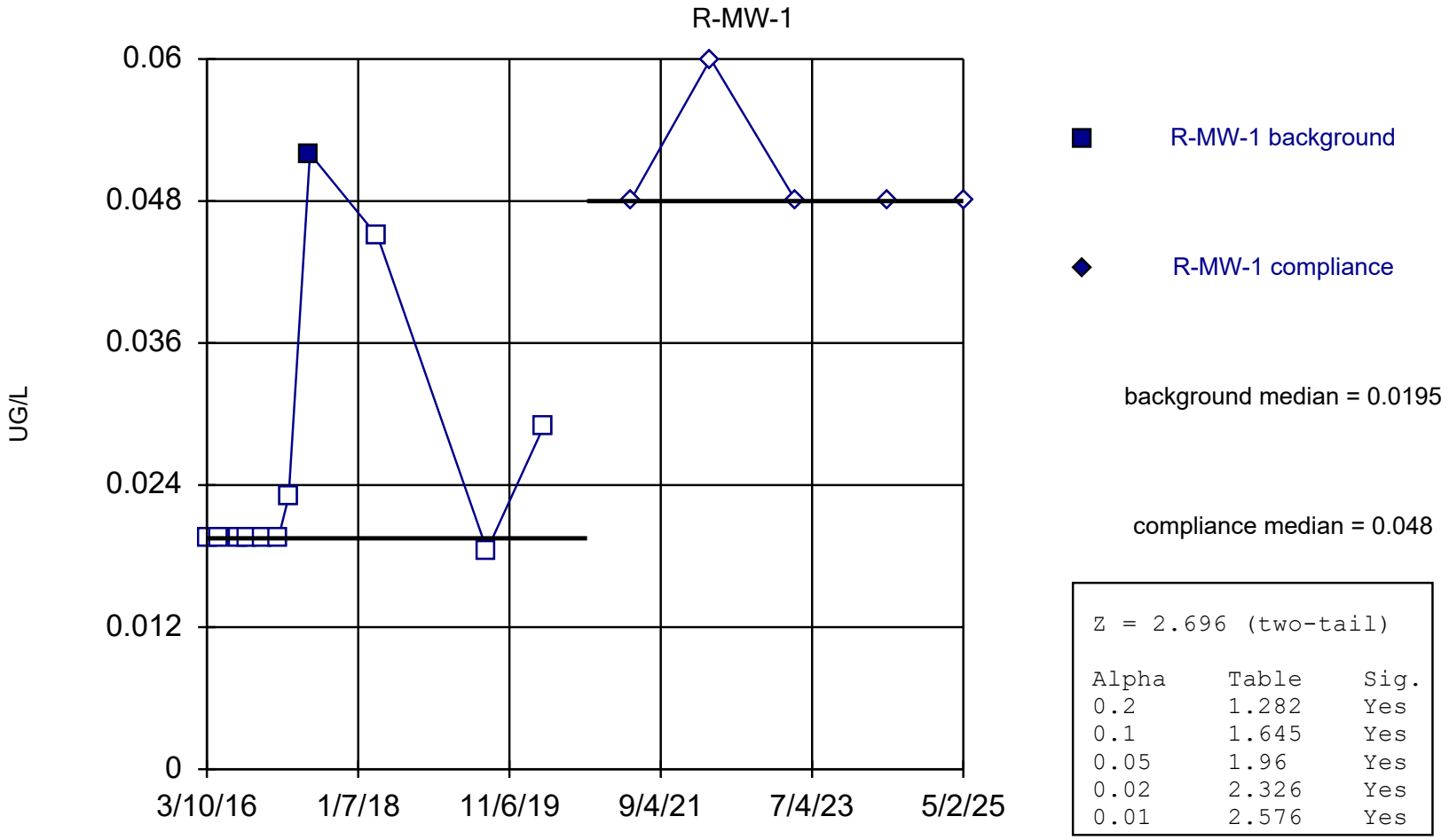
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: LITHIUM, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



background median = 0.0195

compliance median = 0.048

Z = 2.696 (two-tail)

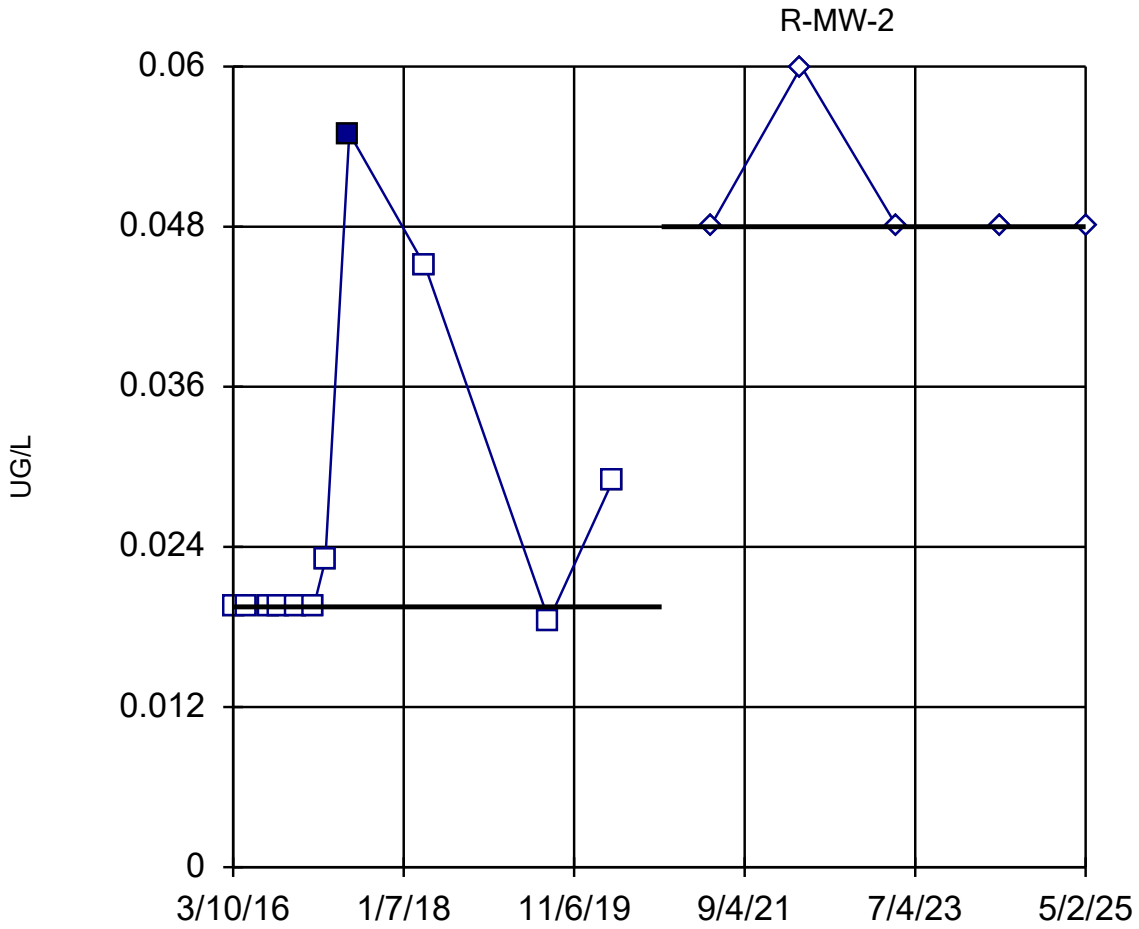
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: MERCURY, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



R-MW-2 background

R-MW-2 compliance

background median = 0.0195

compliance median = 0.048

Z = 2.696 (two-tail)

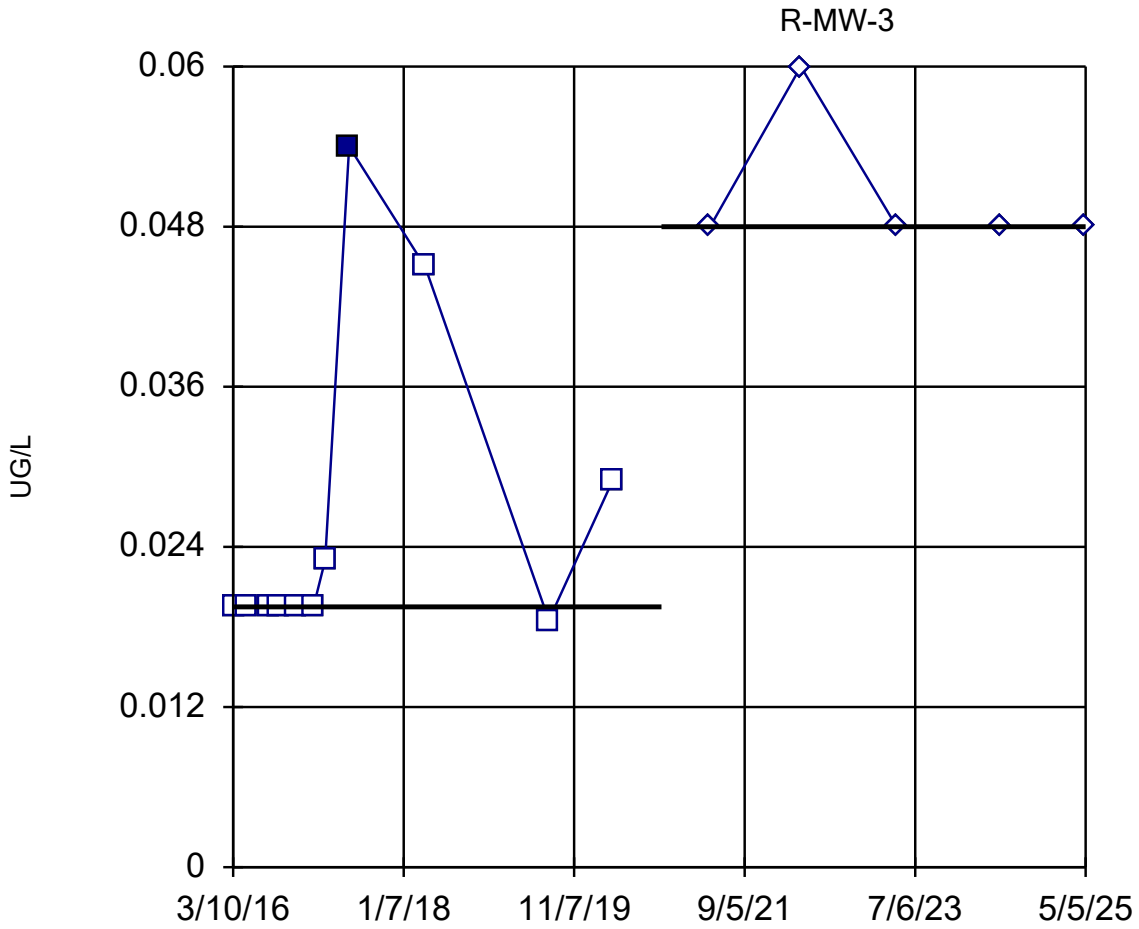
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: MERCURY, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



R-MW-3 background

R-MW-3 compliance

background median = 0.0195

compliance median = 0.048

Z = 2.696 (two-tail)

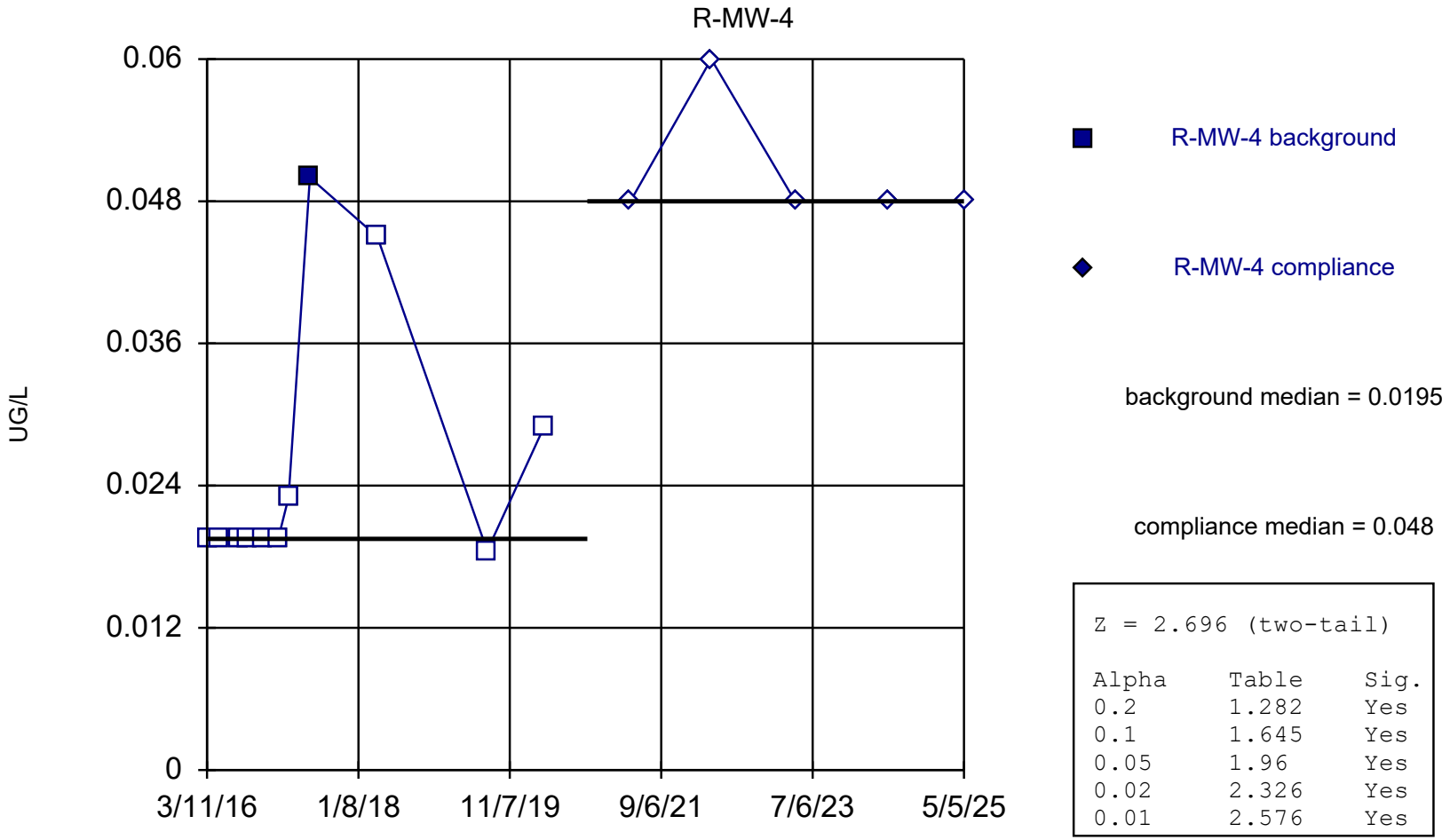
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: MERCURY, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



background median = 0.0195

compliance median = 0.048

Z = 2.696 (two-tail)

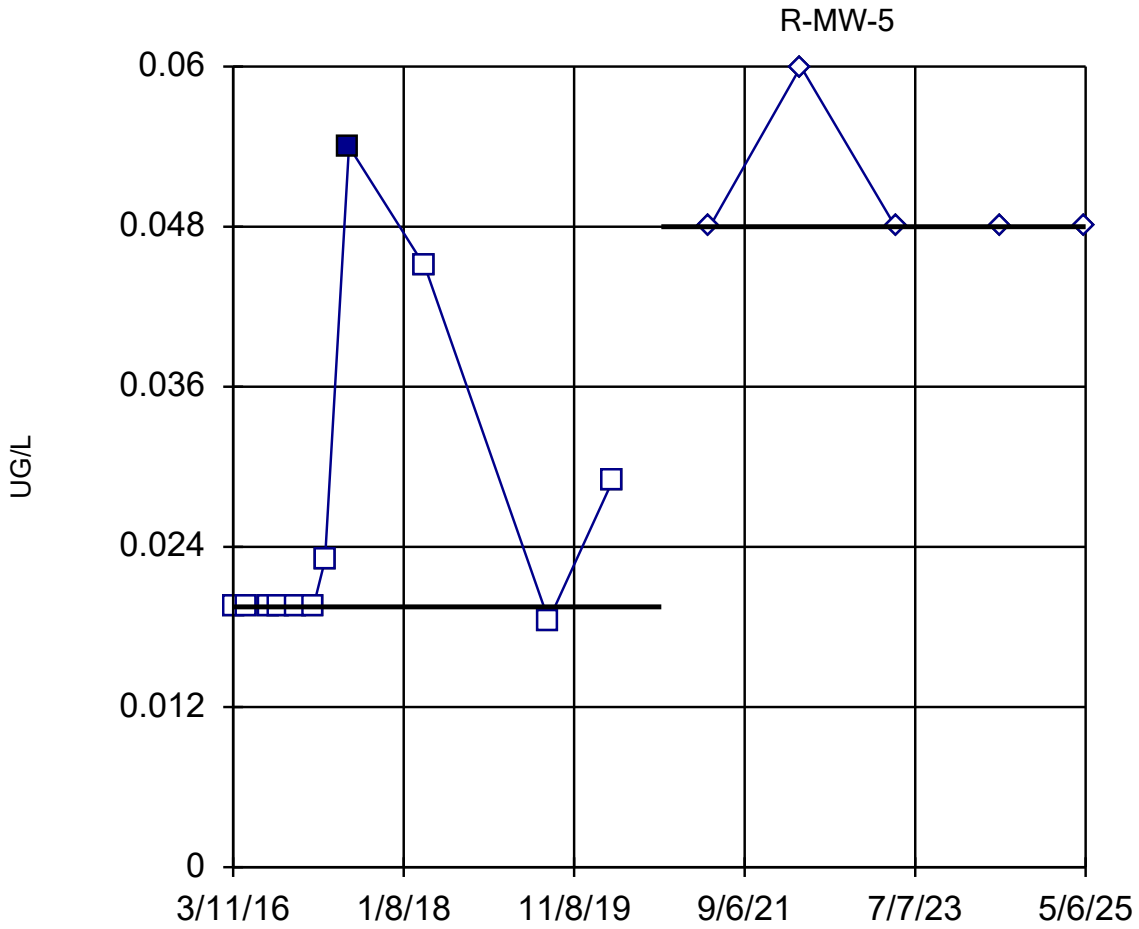
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: MERCURY, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



R-MW-5 background

R-MW-5 compliance

background median = 0.0195

compliance median = 0.048

Z = 2.696 (two-tail)

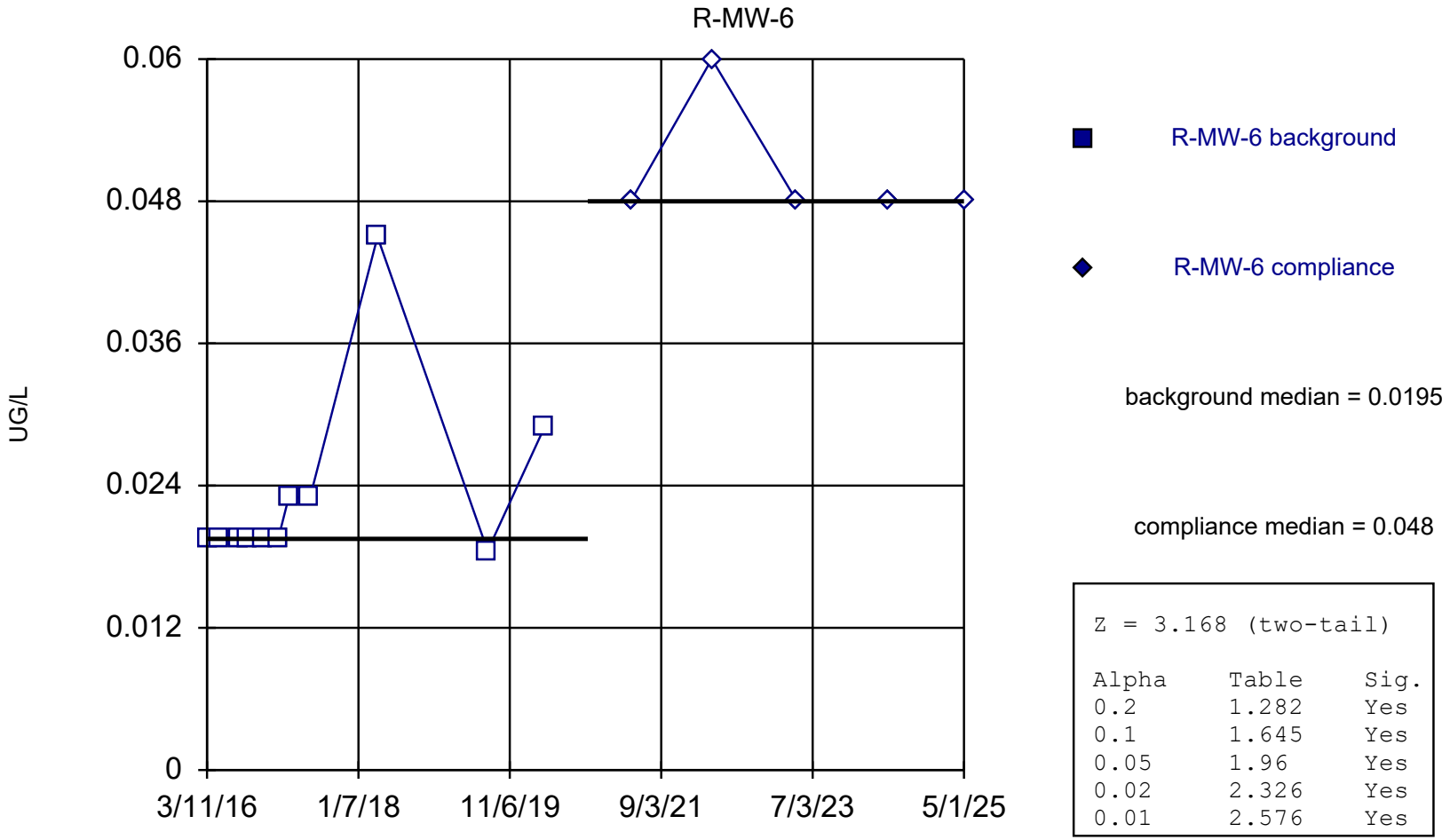
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: MERCURY, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



background median = 0.0195

compliance median = 0.048

Z = 3.168 (two-tail)

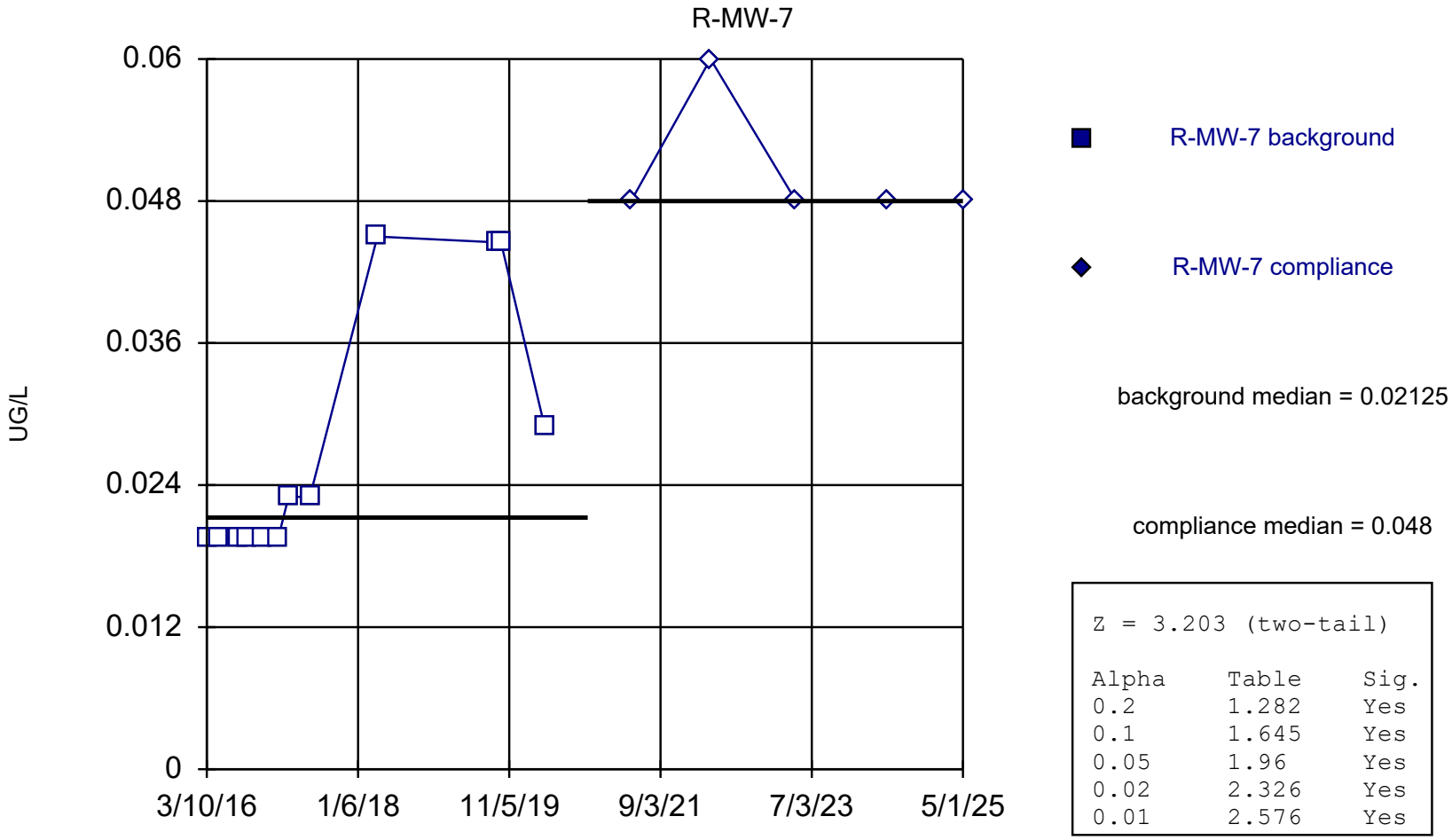
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: MERCURY, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



background median = 0.02125

compliance median = 0.048

Z = 3.203 (two-tail)

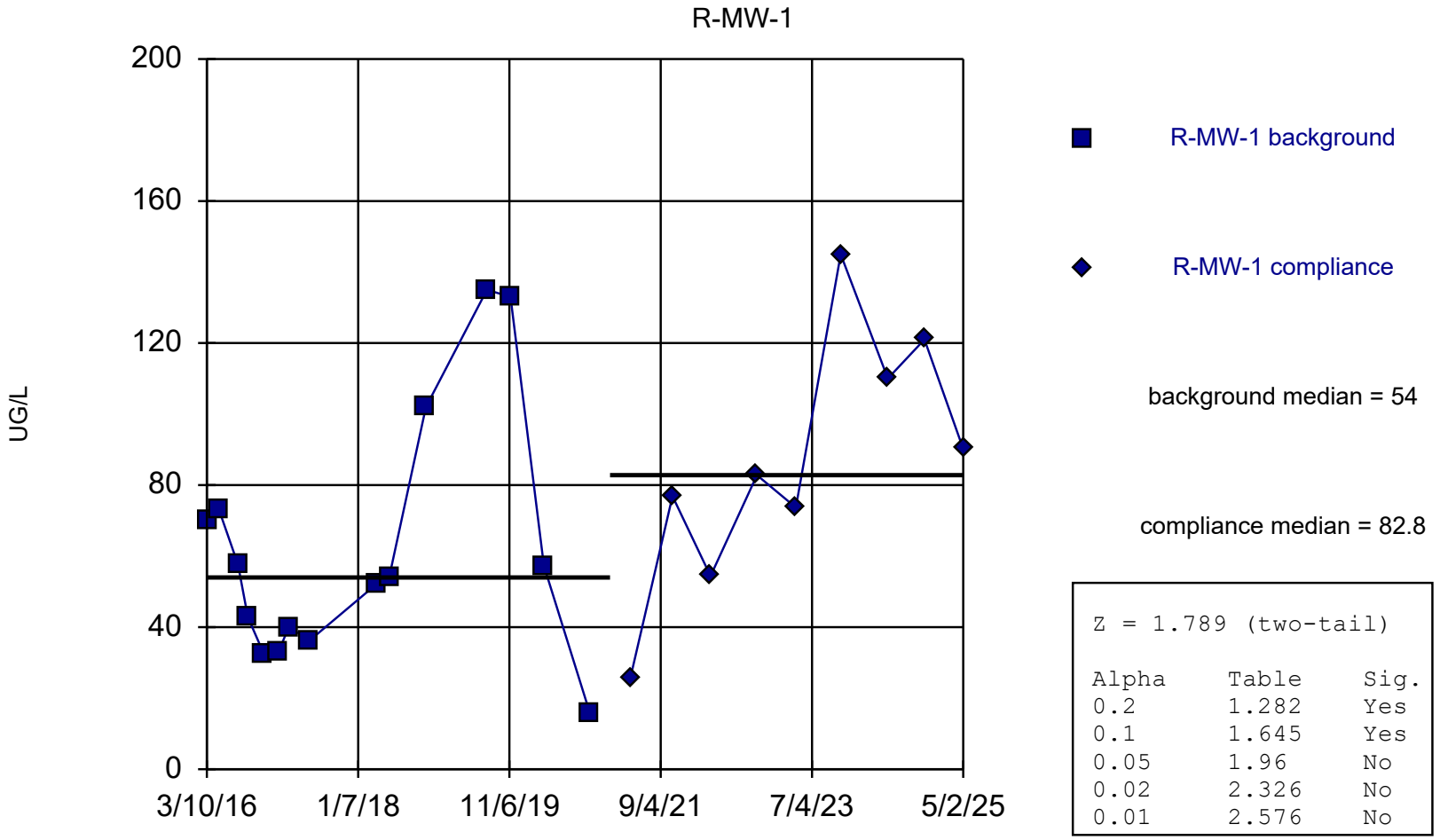
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: MERCURY, TOTAL Analysis Run 8/27/2025 12:59 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.789 (two-tail)

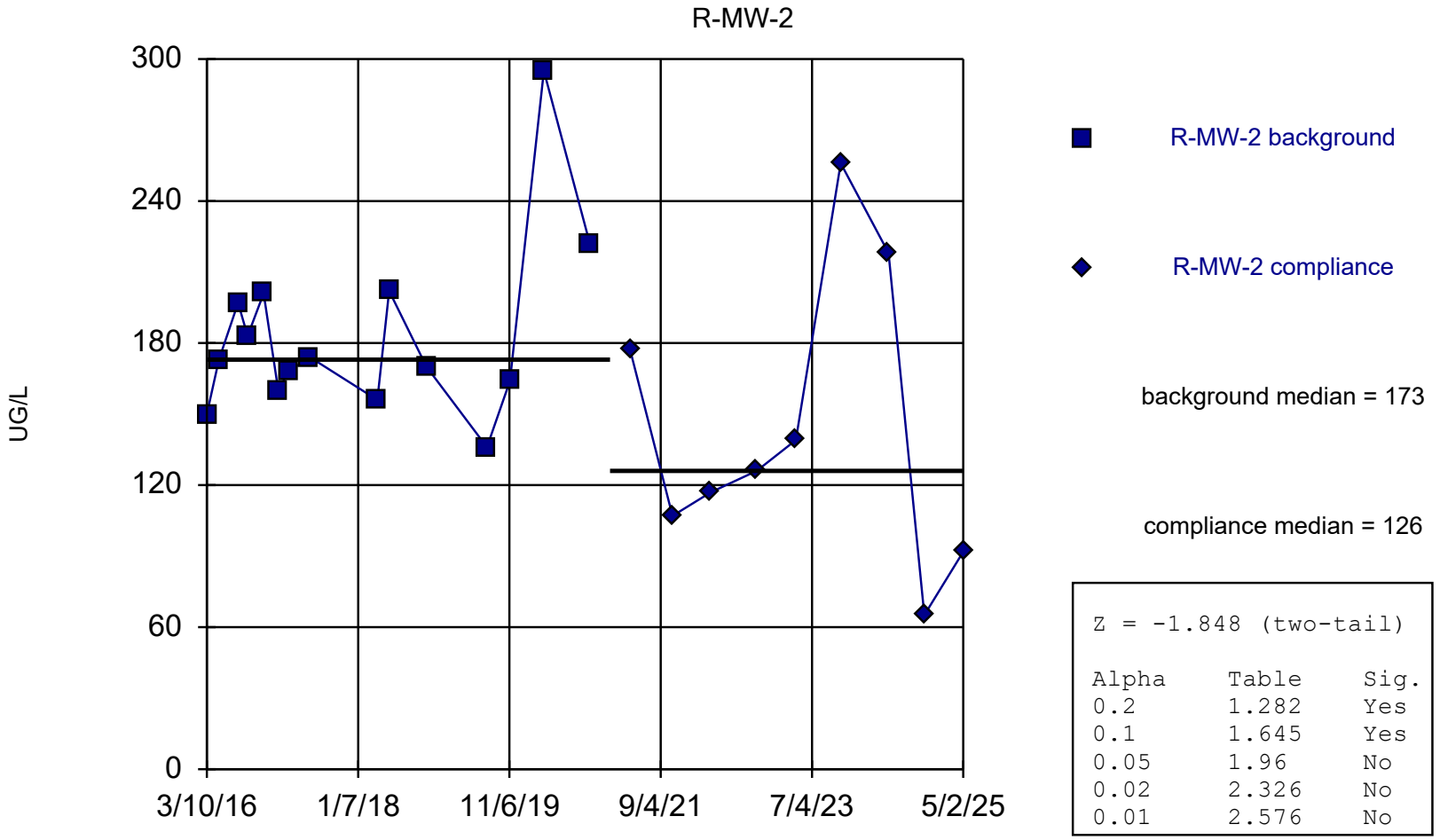
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: MOLYBDENUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = -1.848 (two-tail)

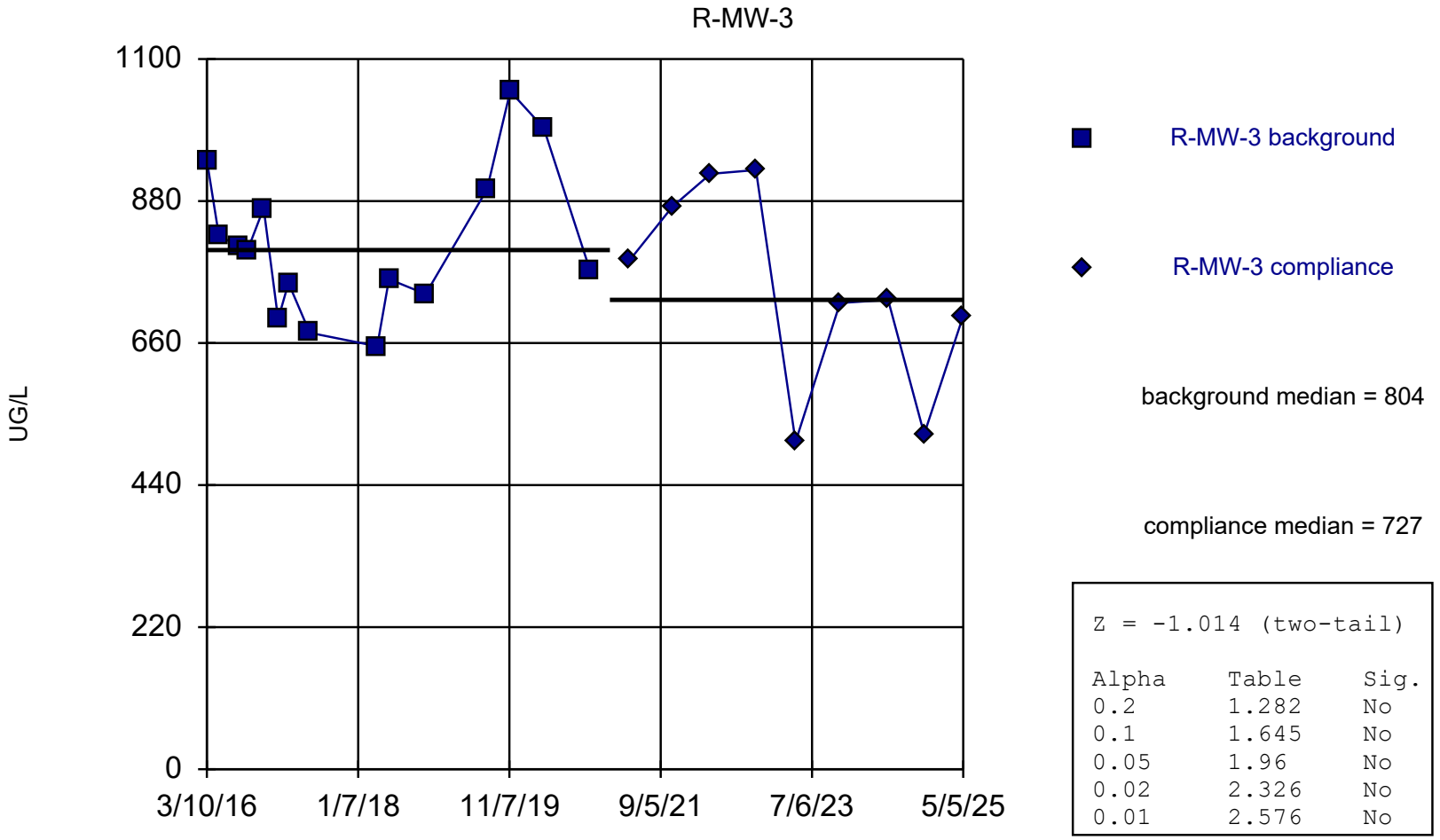
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: MOLYBDENUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = -1.014 (two-tail)

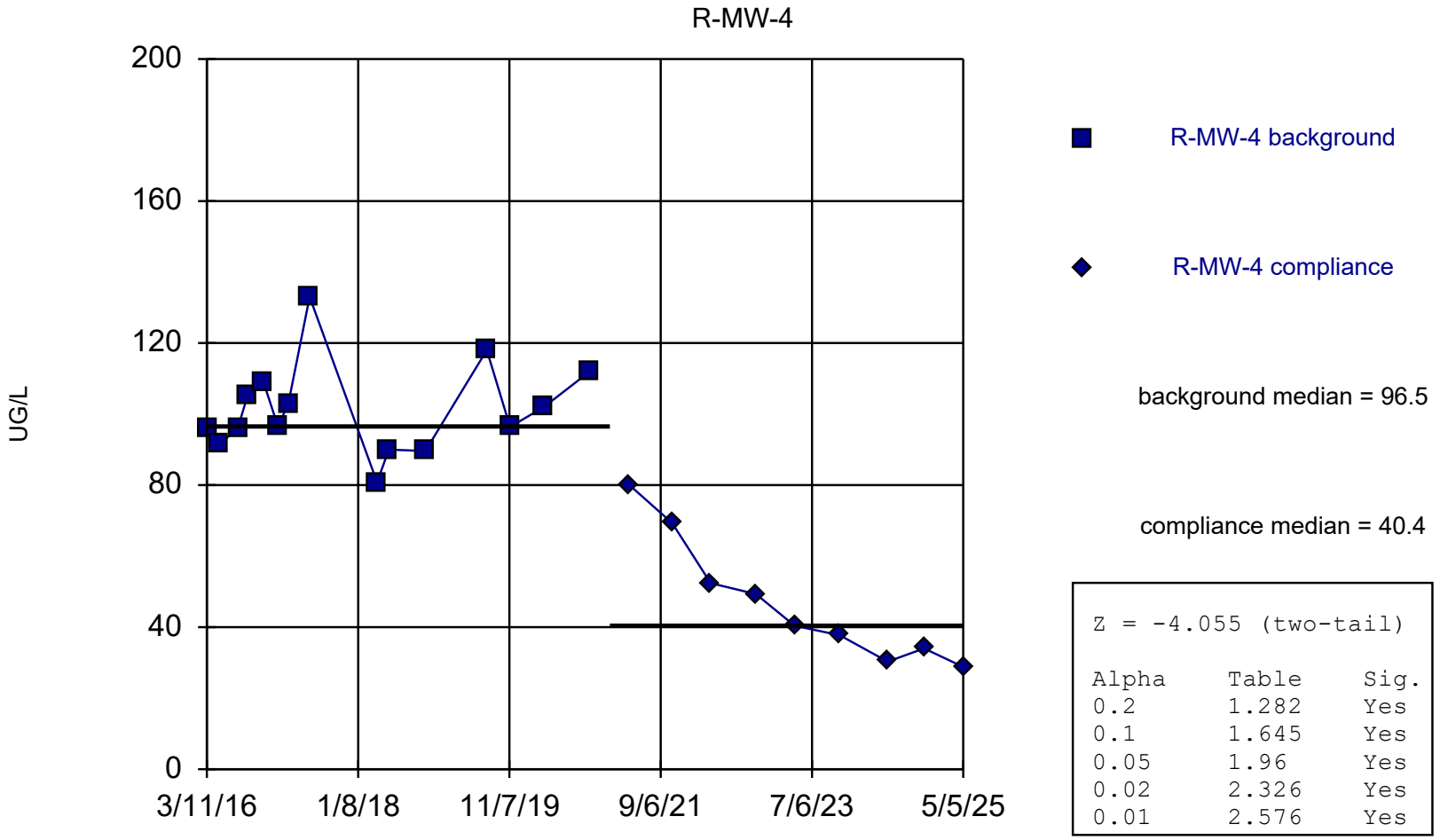
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: MOLYBDENUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = -4.055 (two-tail)

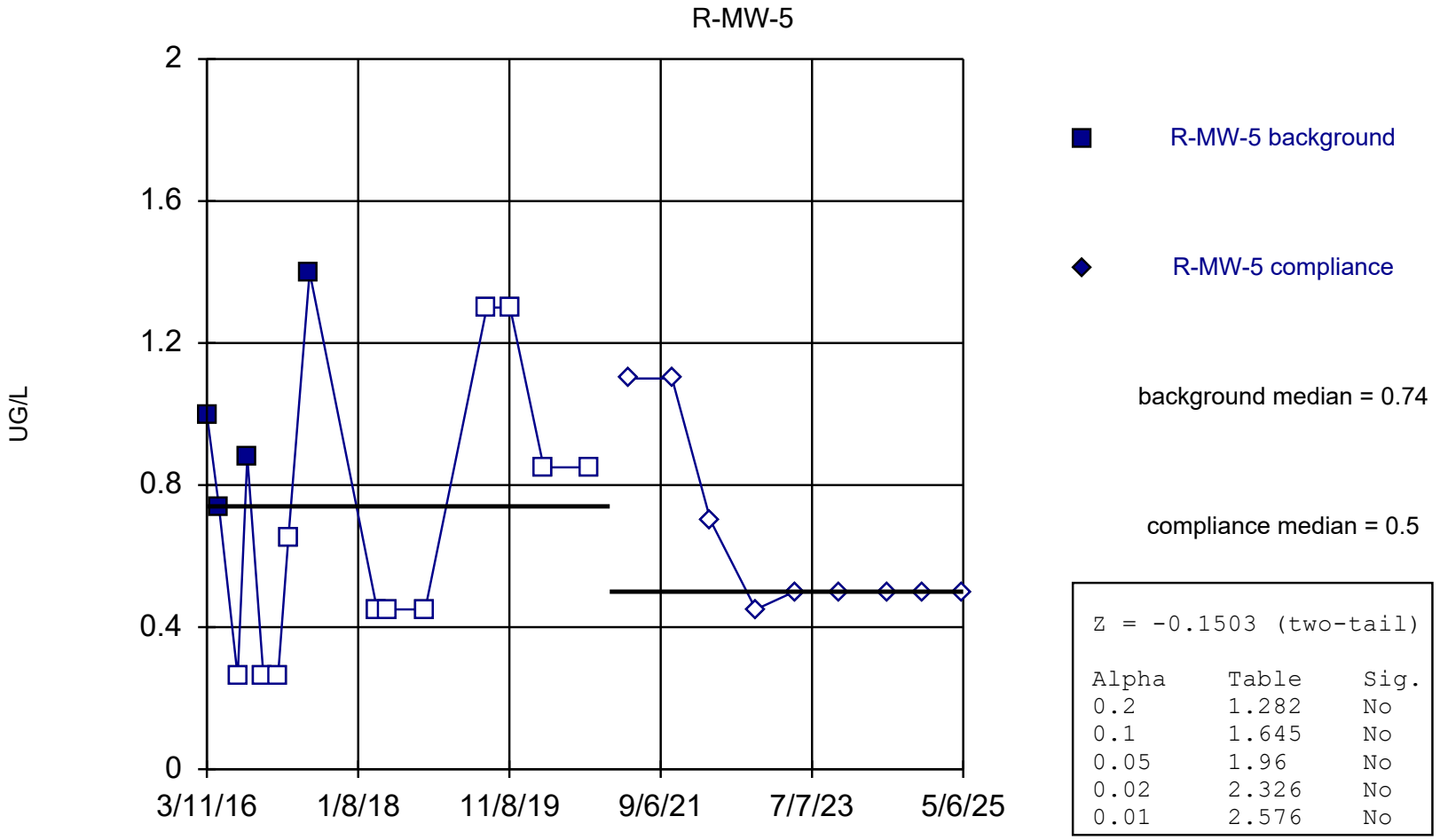
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: MOLYBDENUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.1503 (two-tail)

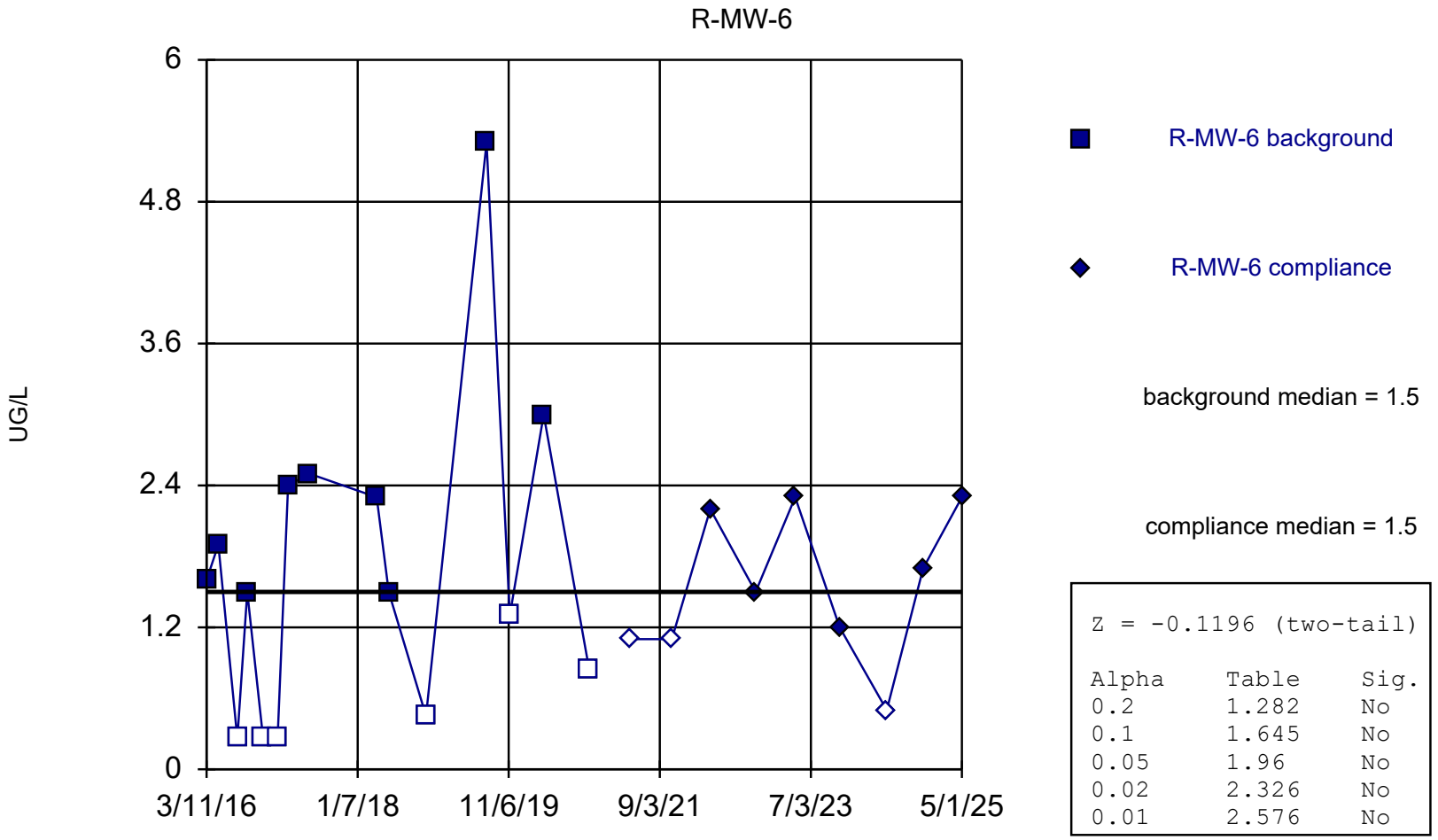
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: MOLYBDENUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.1196 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

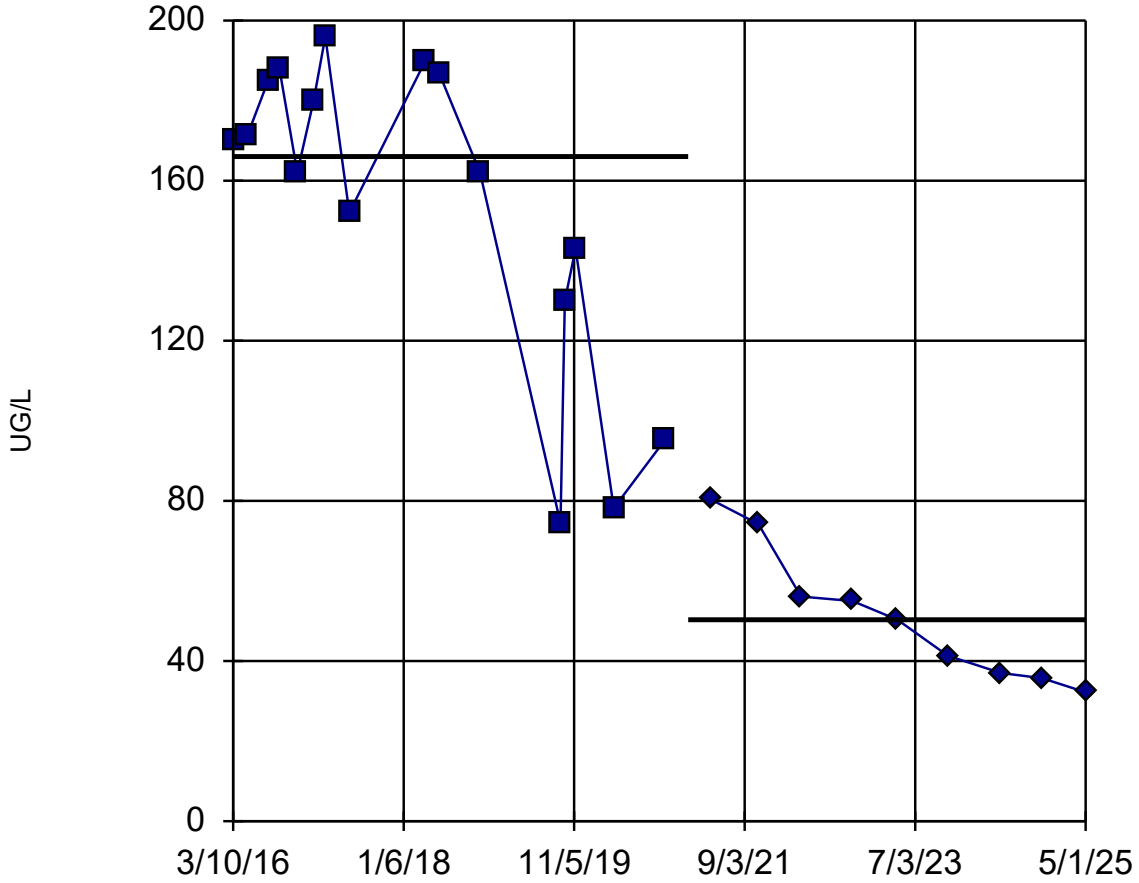
Constituent: MOLYBDENUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-7



R-MW-7 background

R-MW-7 compliance

background median = 166

compliance median = 50.3

Z = -3.992 (two-tail)

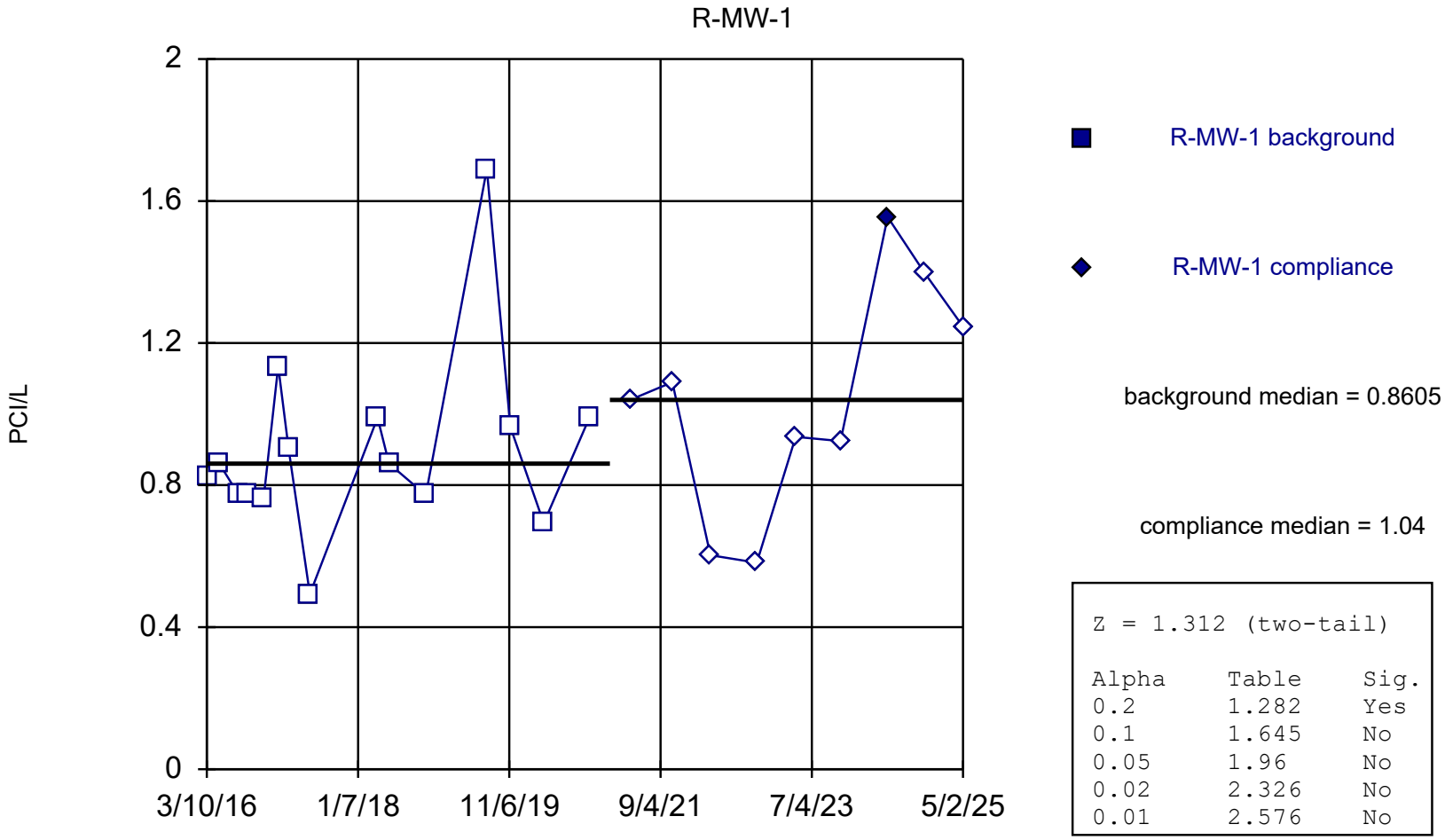
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: MOLYBDENUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.312 (two-tail)

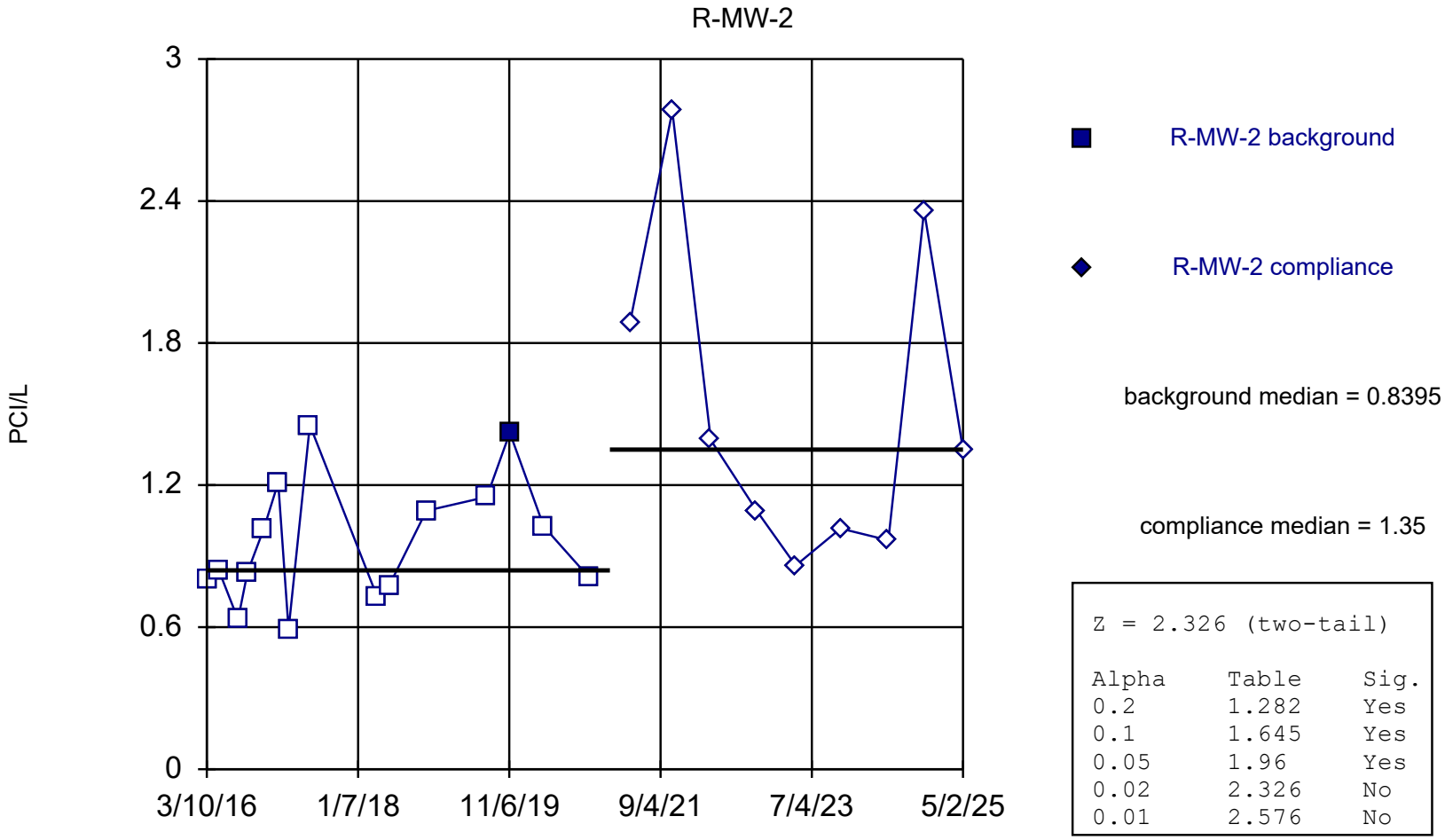
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: RADIUM [226 + 228] Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.326 (two-tail)

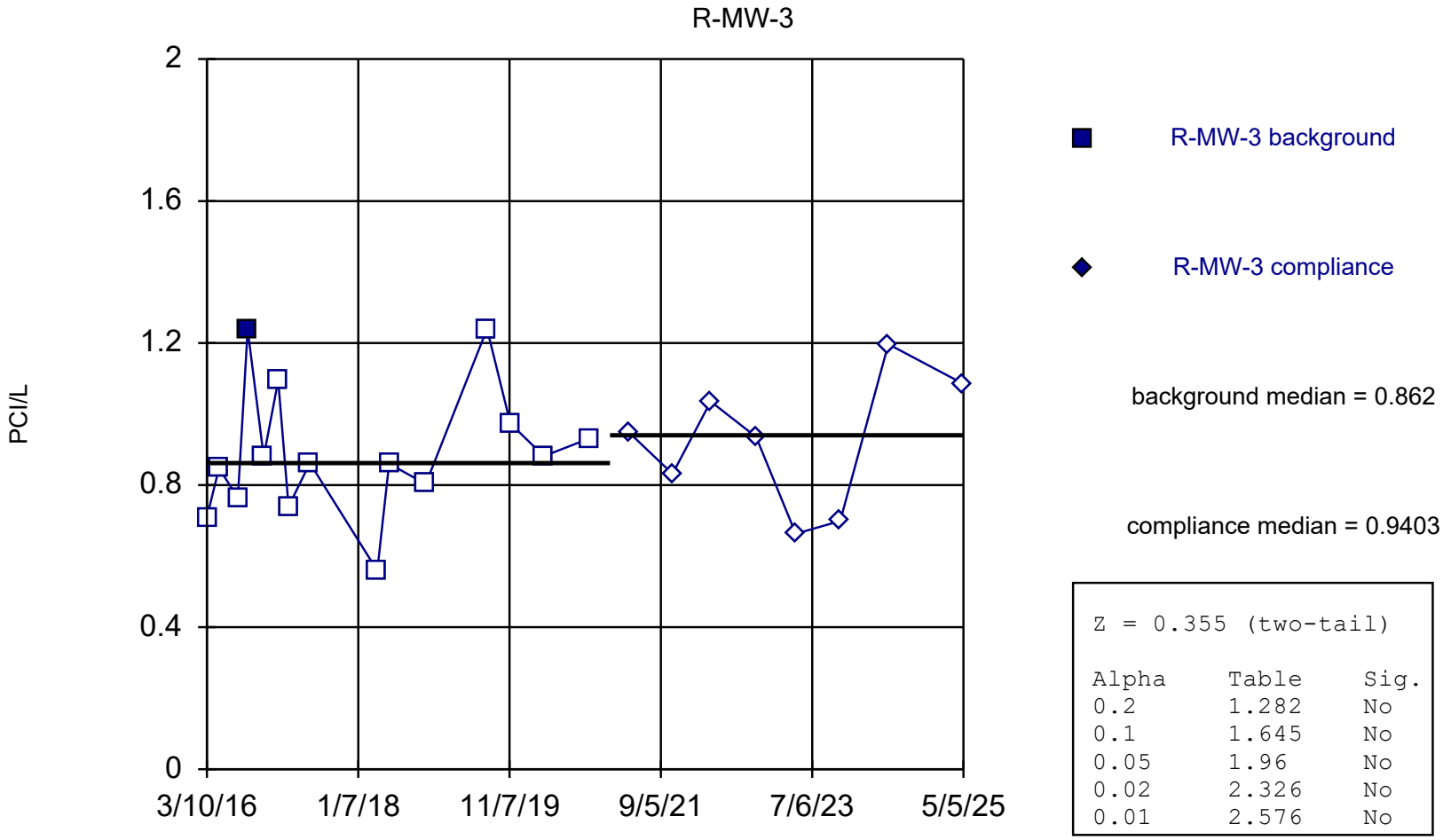
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: RADIUM [226 + 228] Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.355 (two-tail)

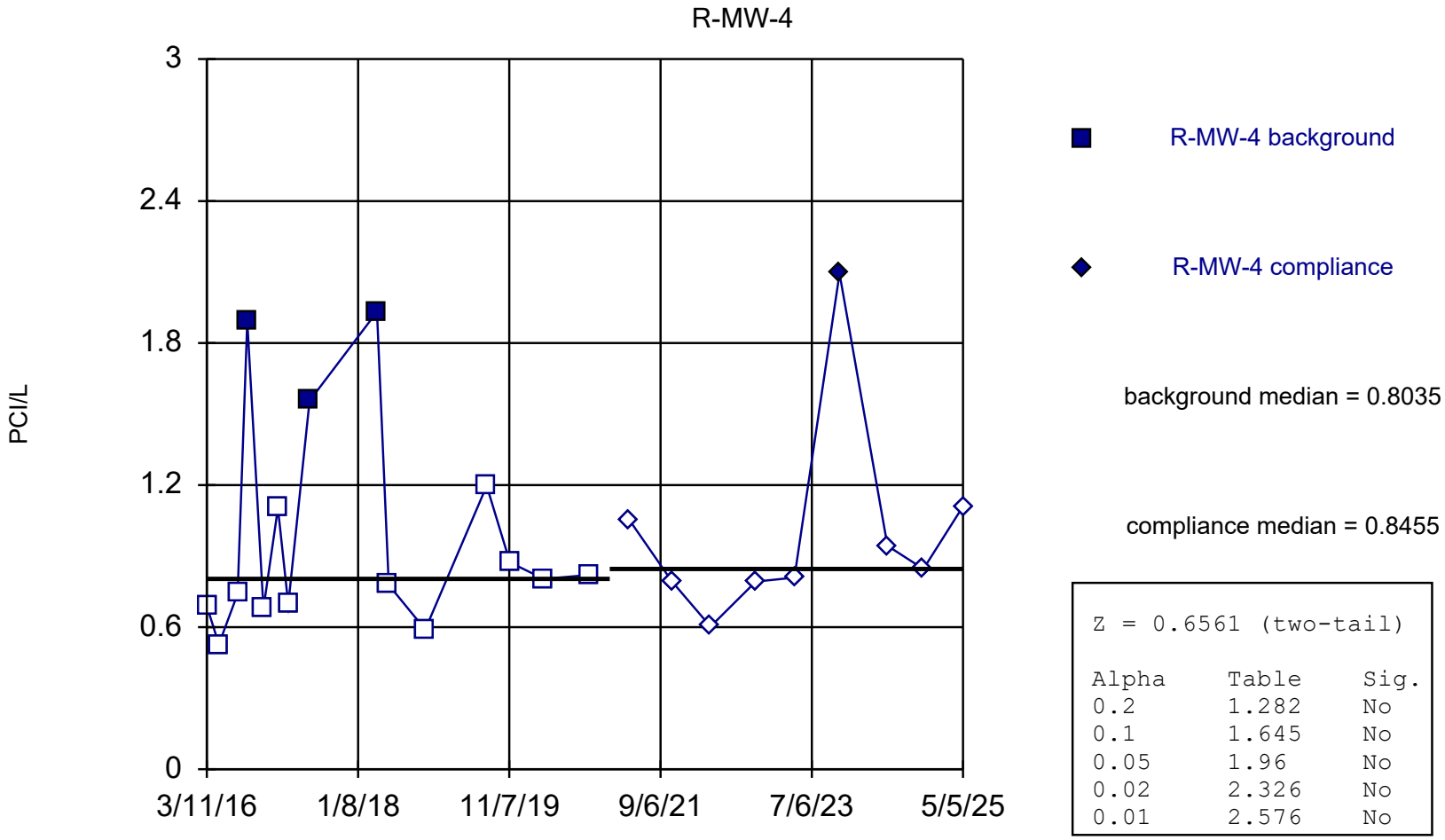
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: RADIUM [226 + 228] Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.6561 (two-tail)

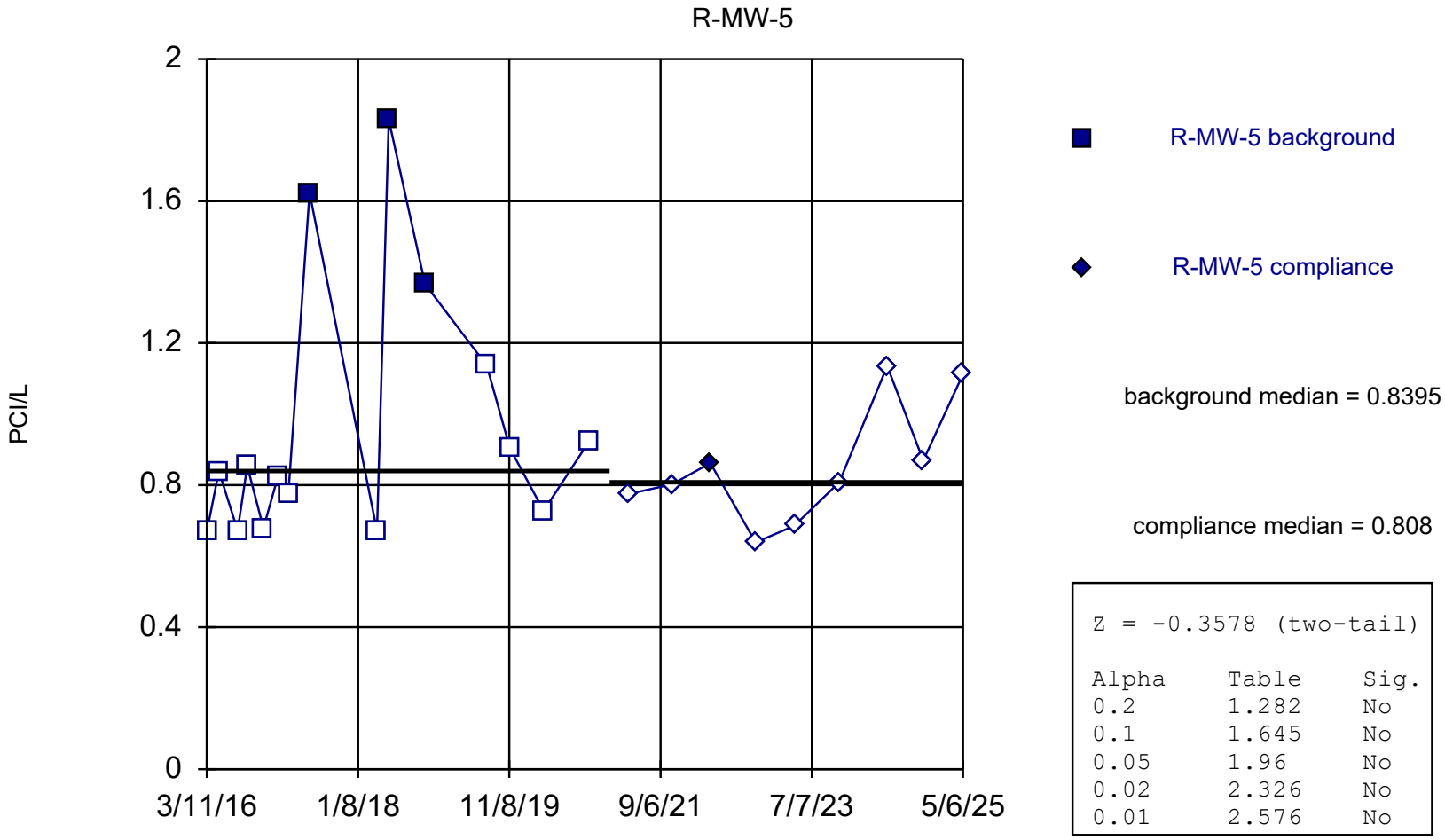
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: RADIUM [226 + 228] Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.3578 (two-tail)

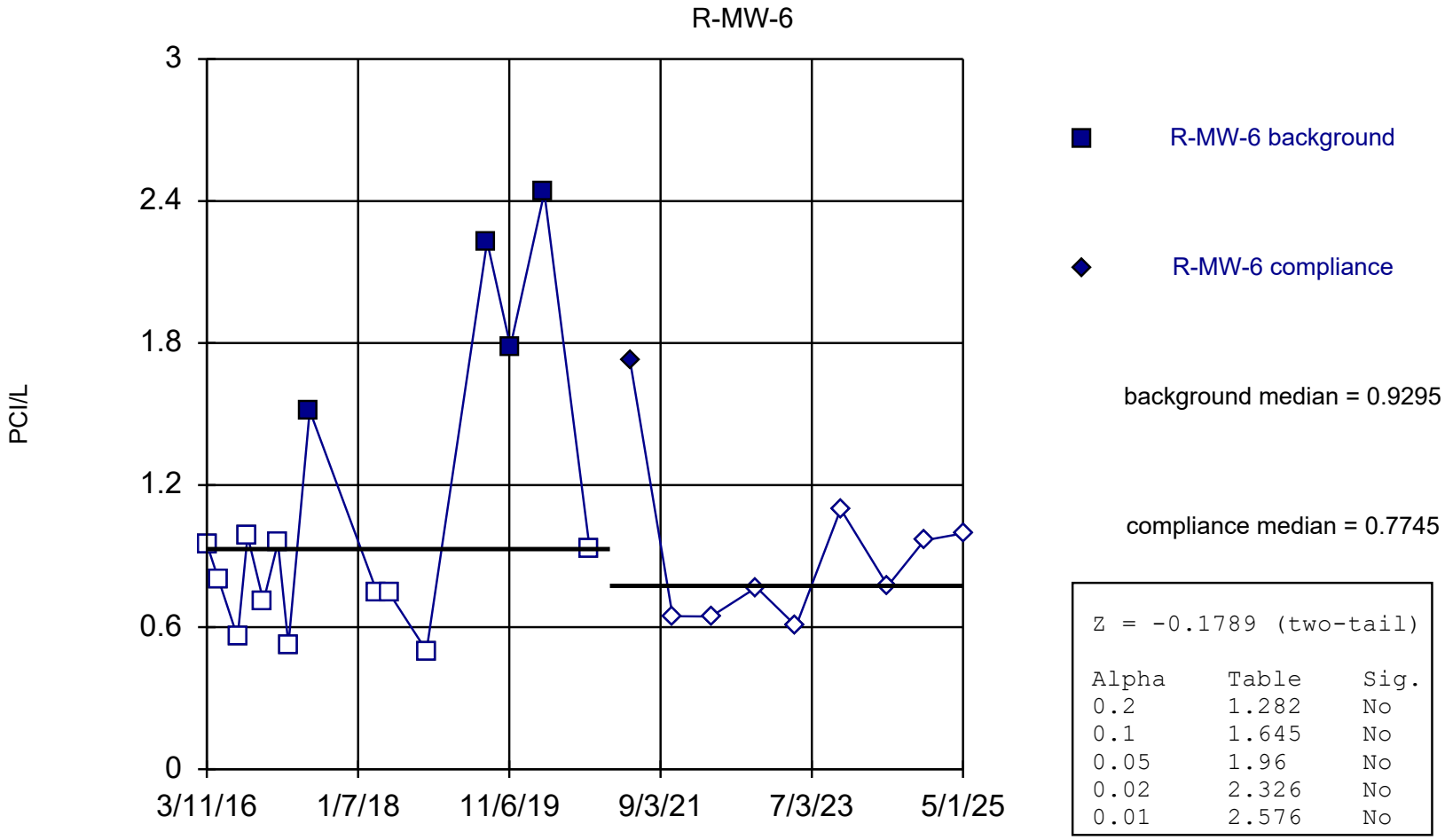
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: RADIUM [226 + 228] Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.1789 (two-tail)

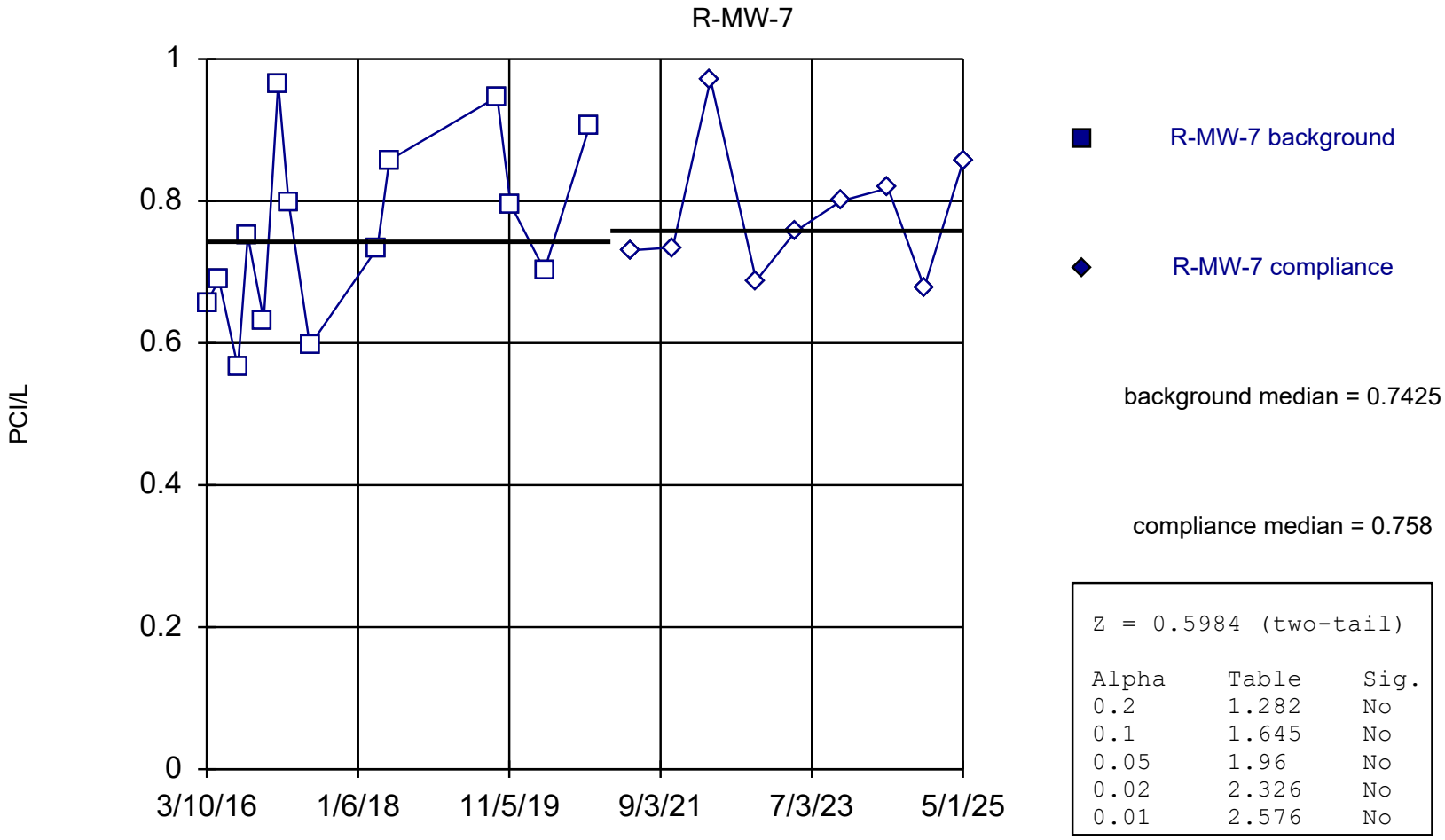
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: RADIUM [226 + 228] Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



background median = 0.7425

compliance median = 0.758

Z = 0.5984 (two-tail)

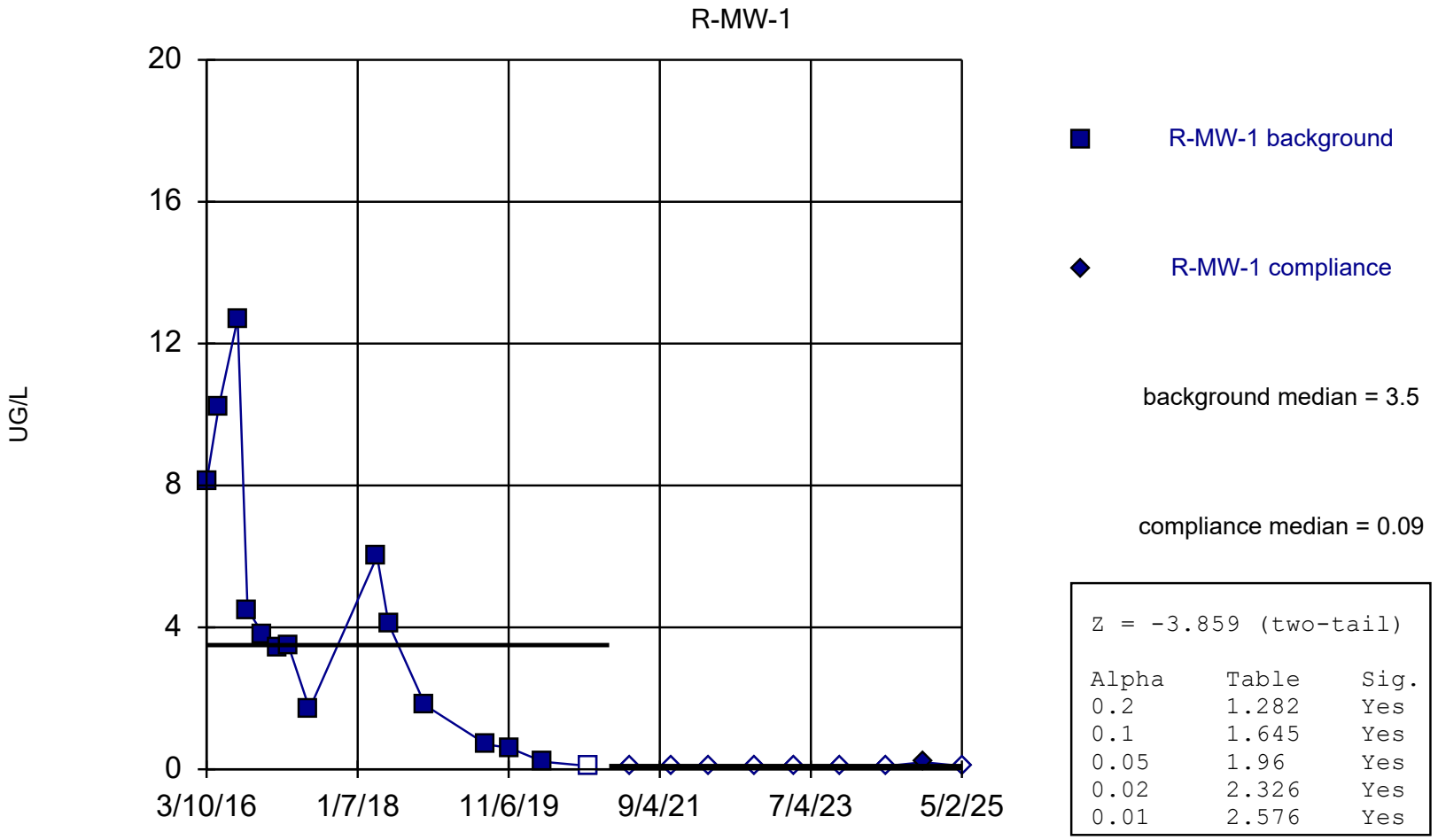
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: RADIUM [226 + 228] Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



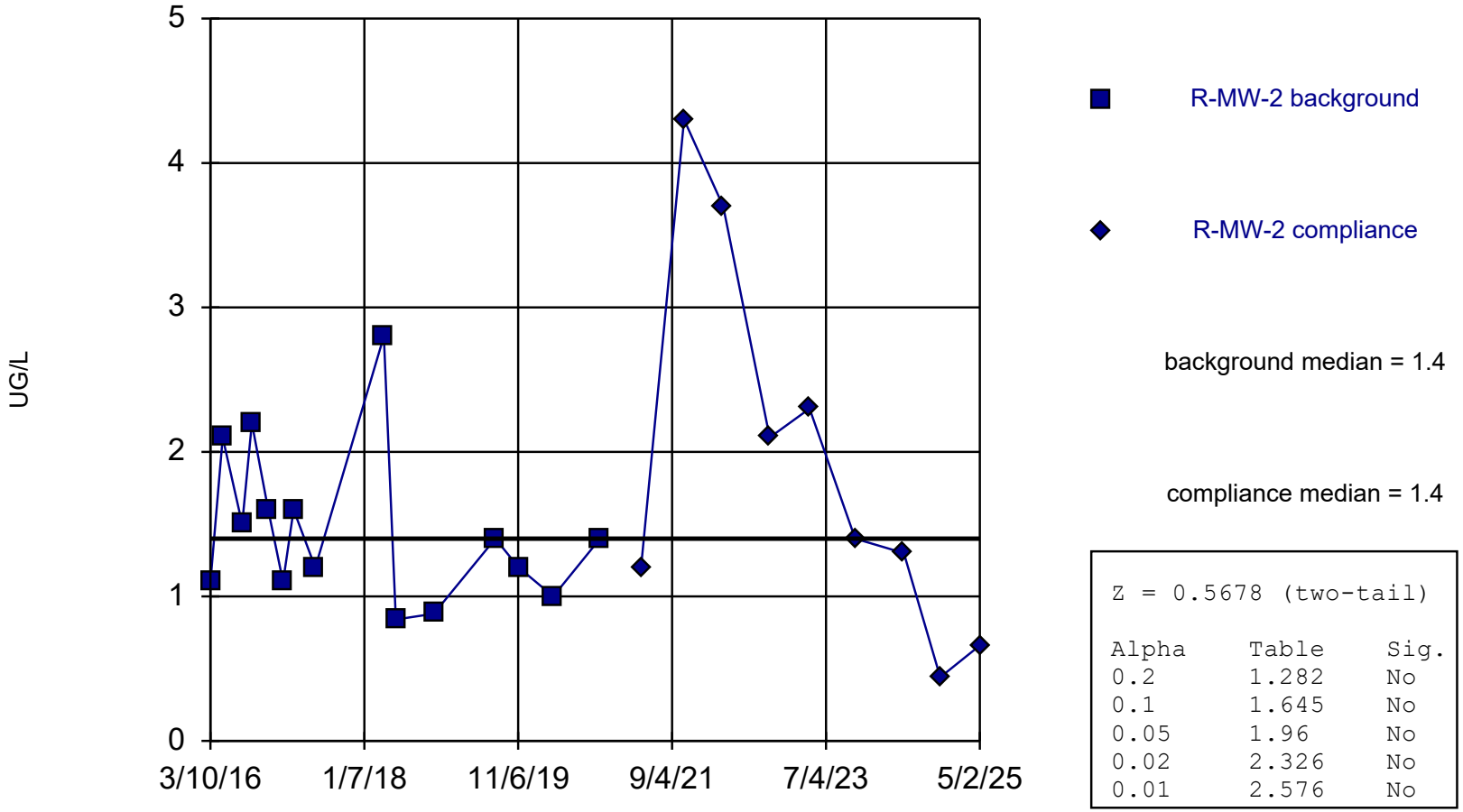
Constituent: SELENIUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-2



Z = 0.5678 (two-tail)

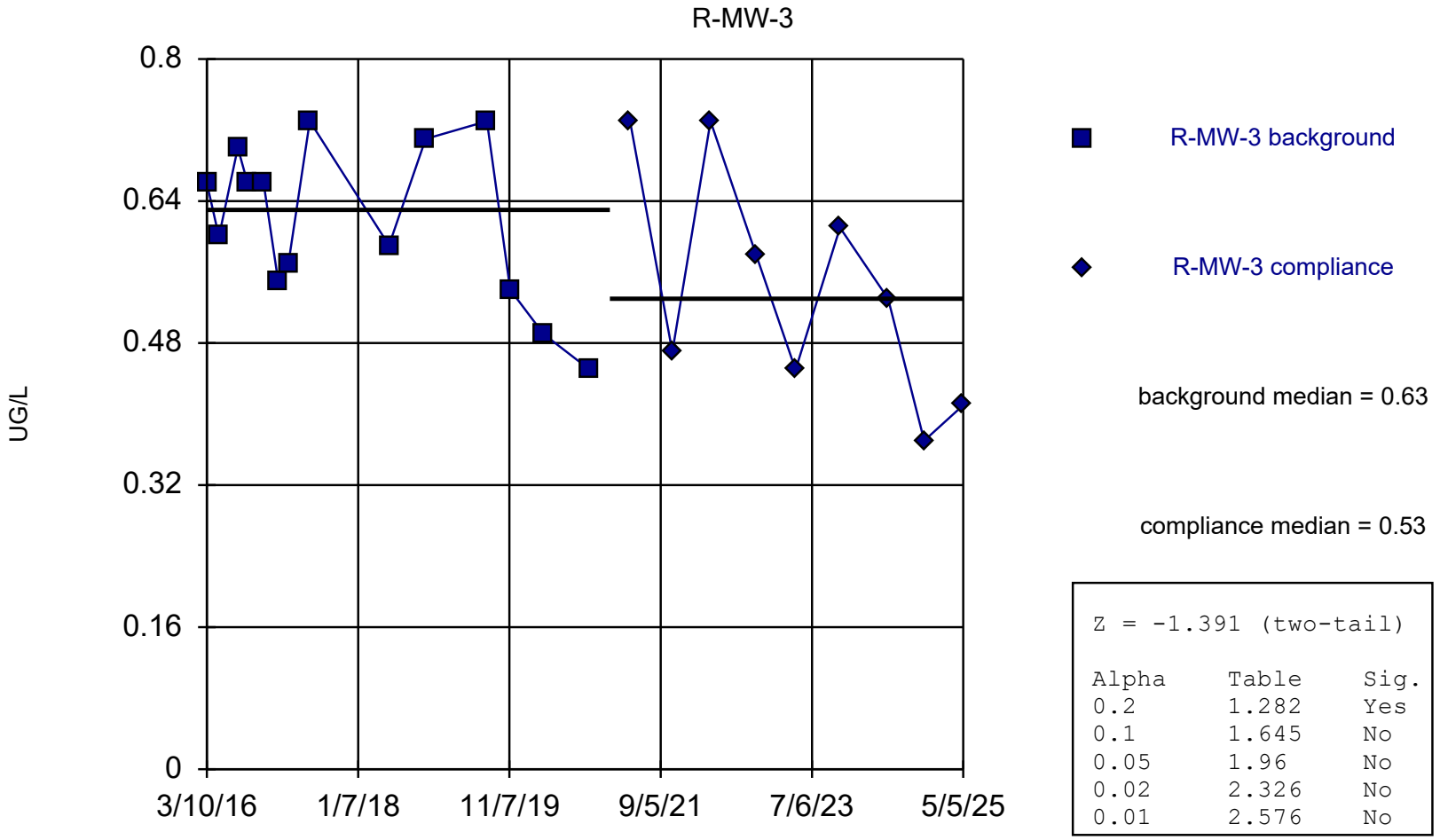
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: SELENIUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = -1.391 (two-tail)

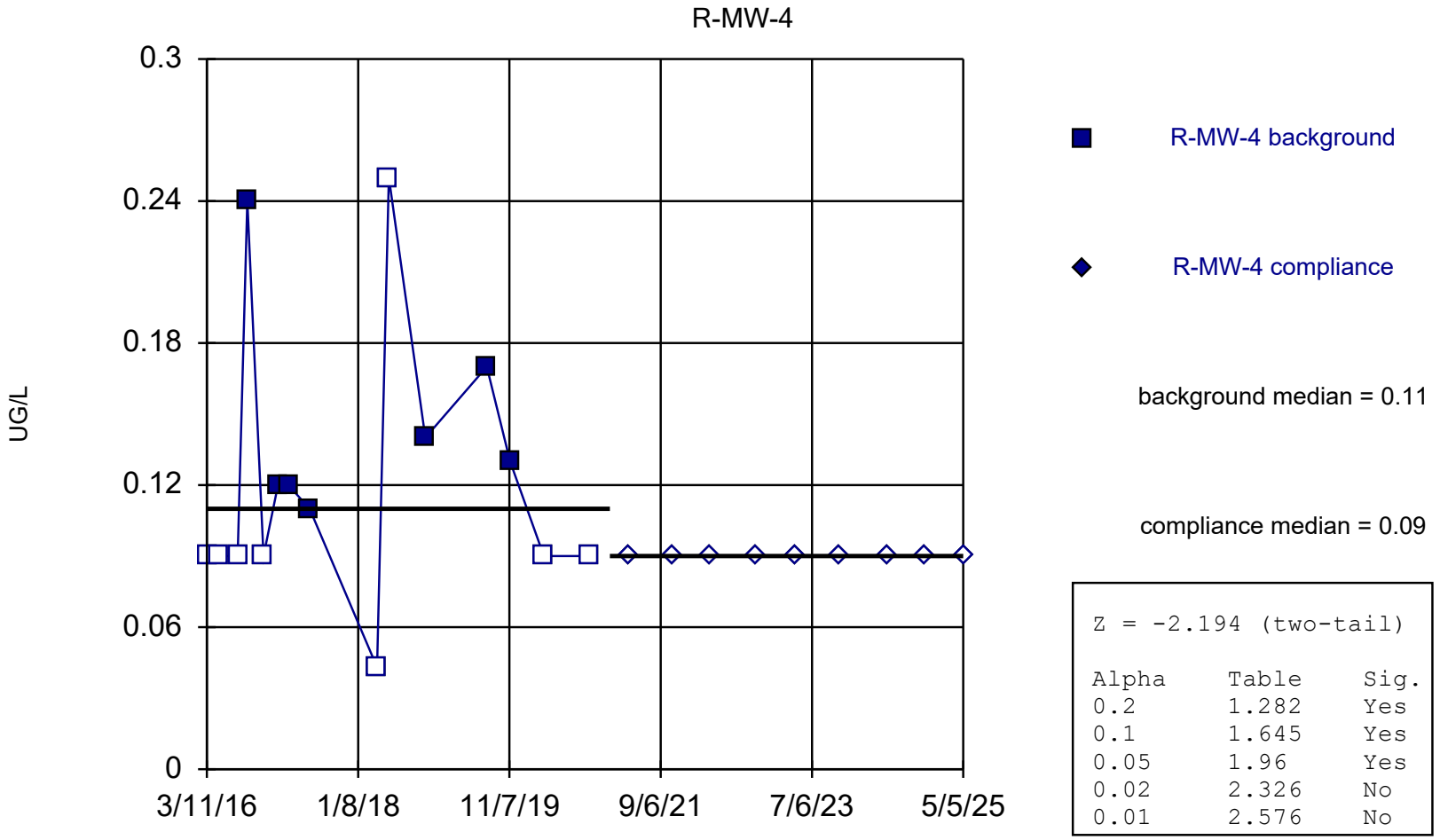
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: SELENIUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -2.194 (two-tail)

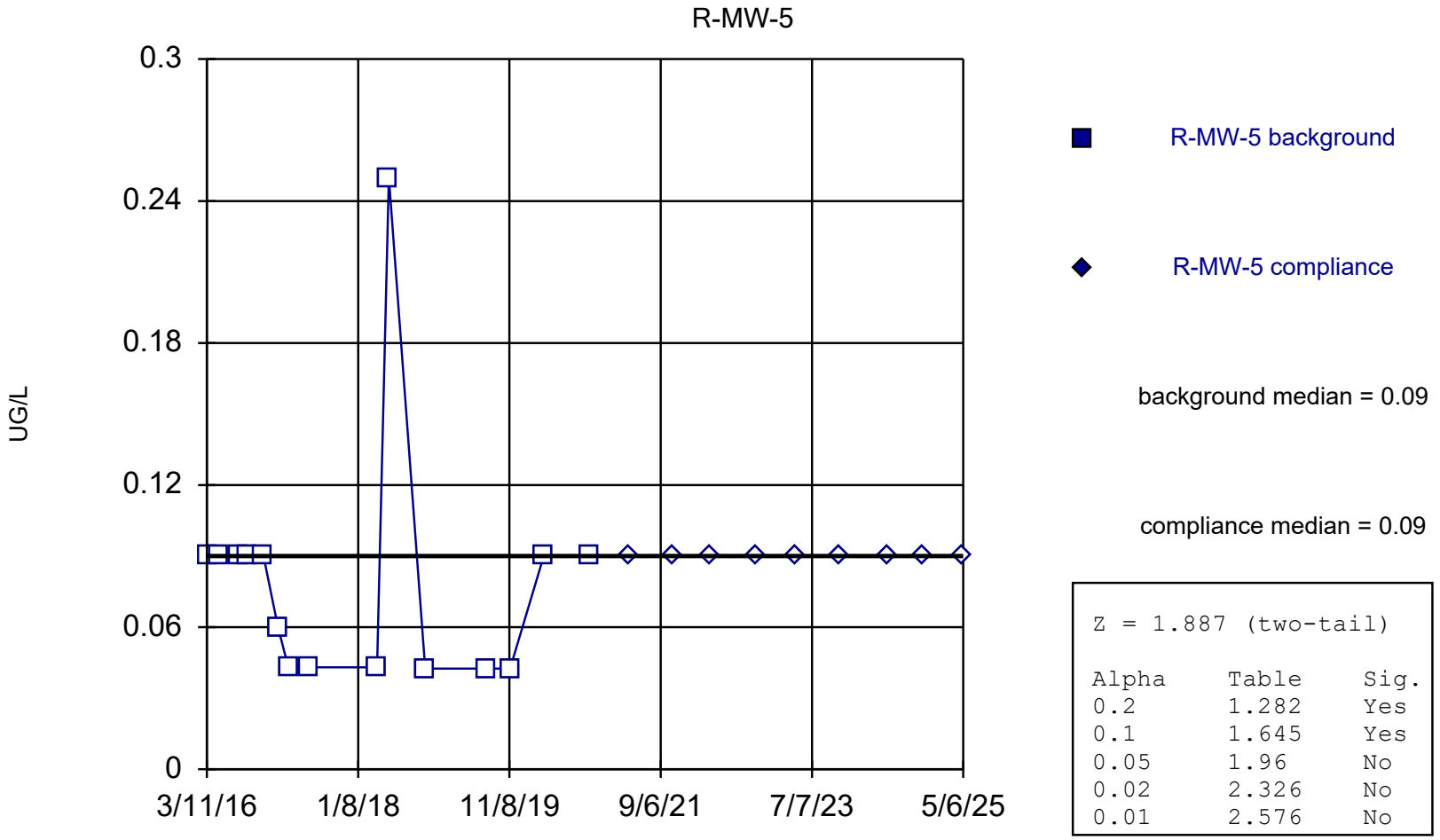
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: SELENIUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.887 (two-tail)

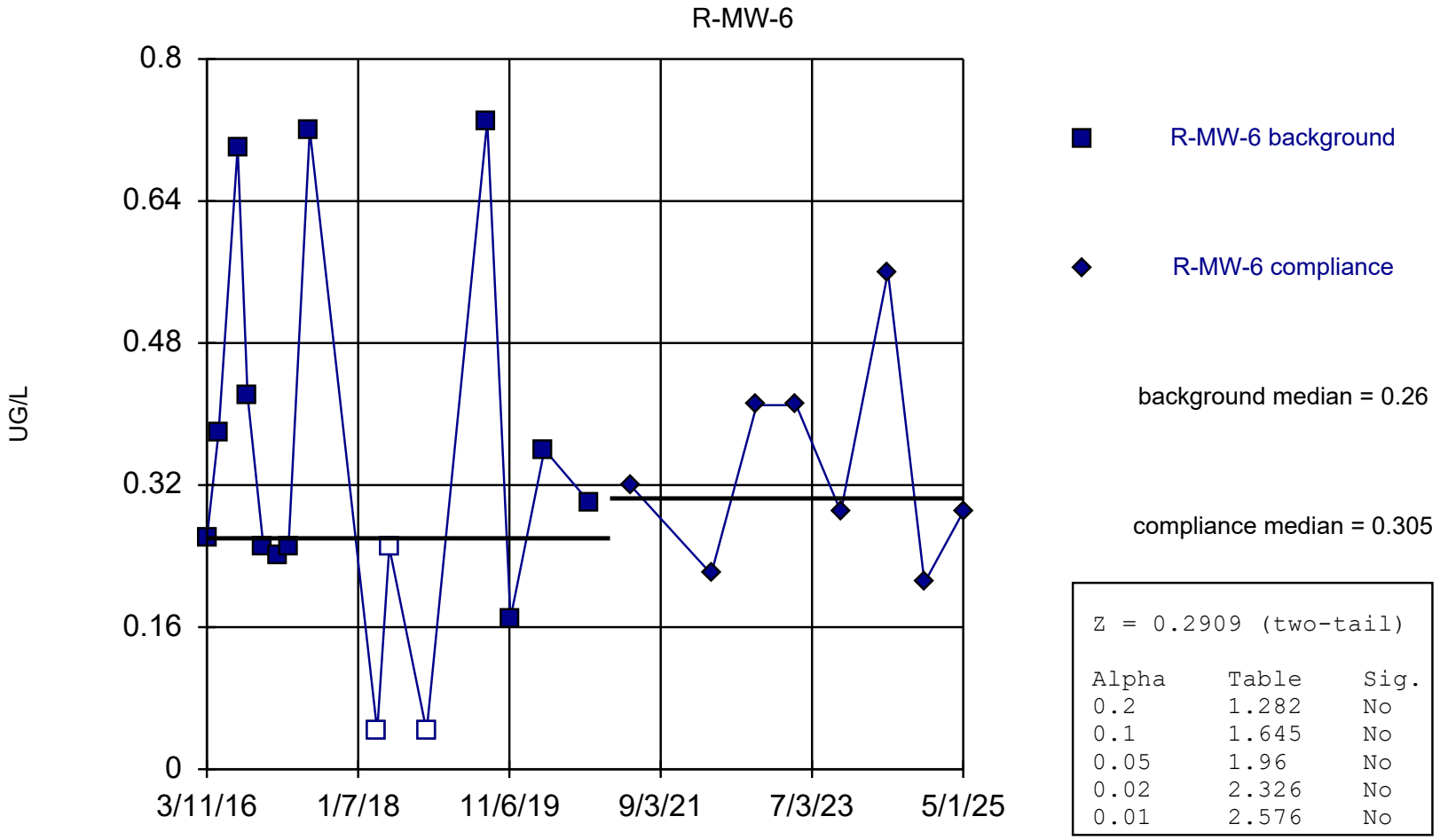
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: SELENIUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.2909 (two-tail)

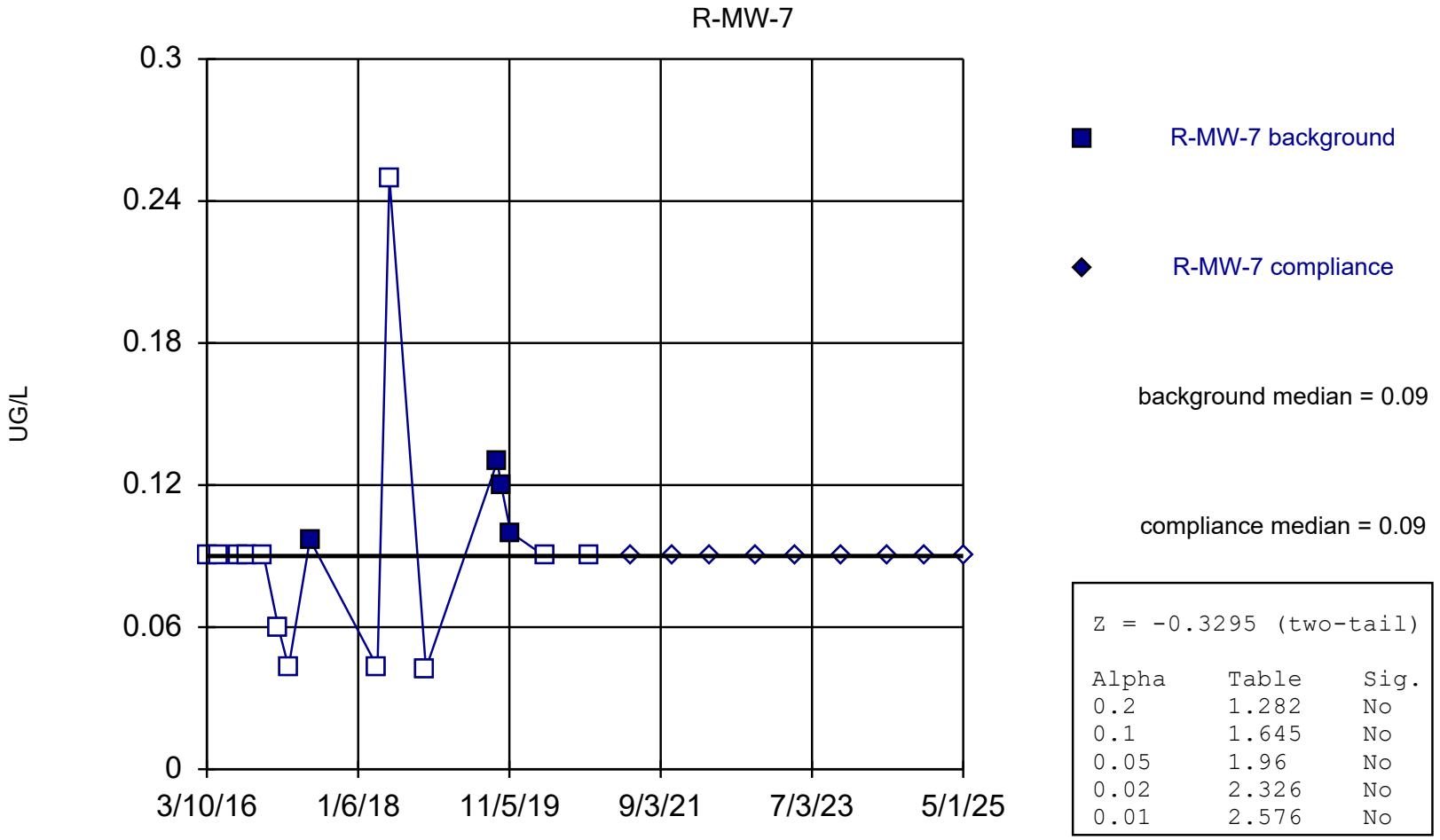
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: SELENIUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.3295 (two-tail)

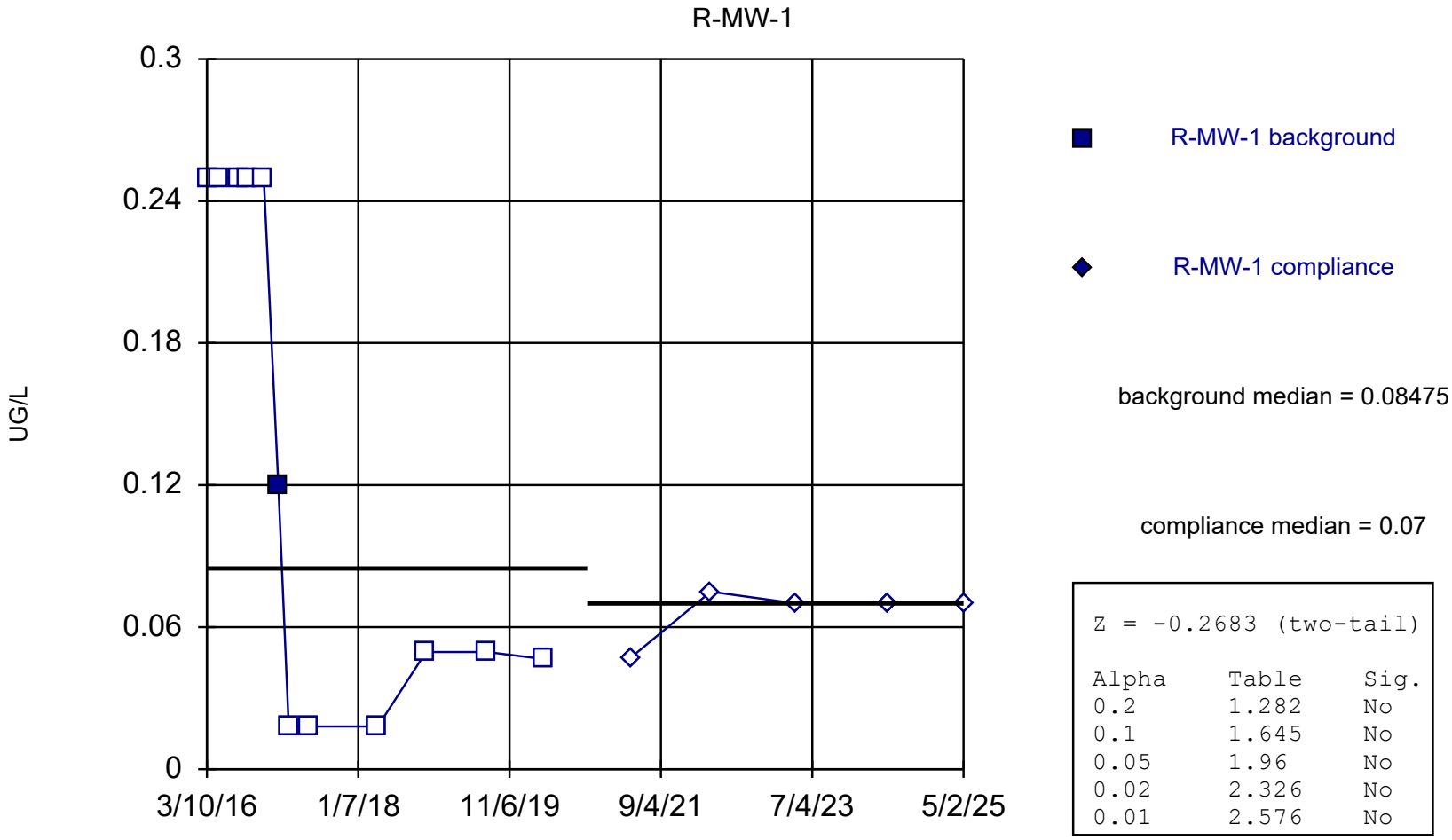
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: SELENIUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.2683 (two-tail)

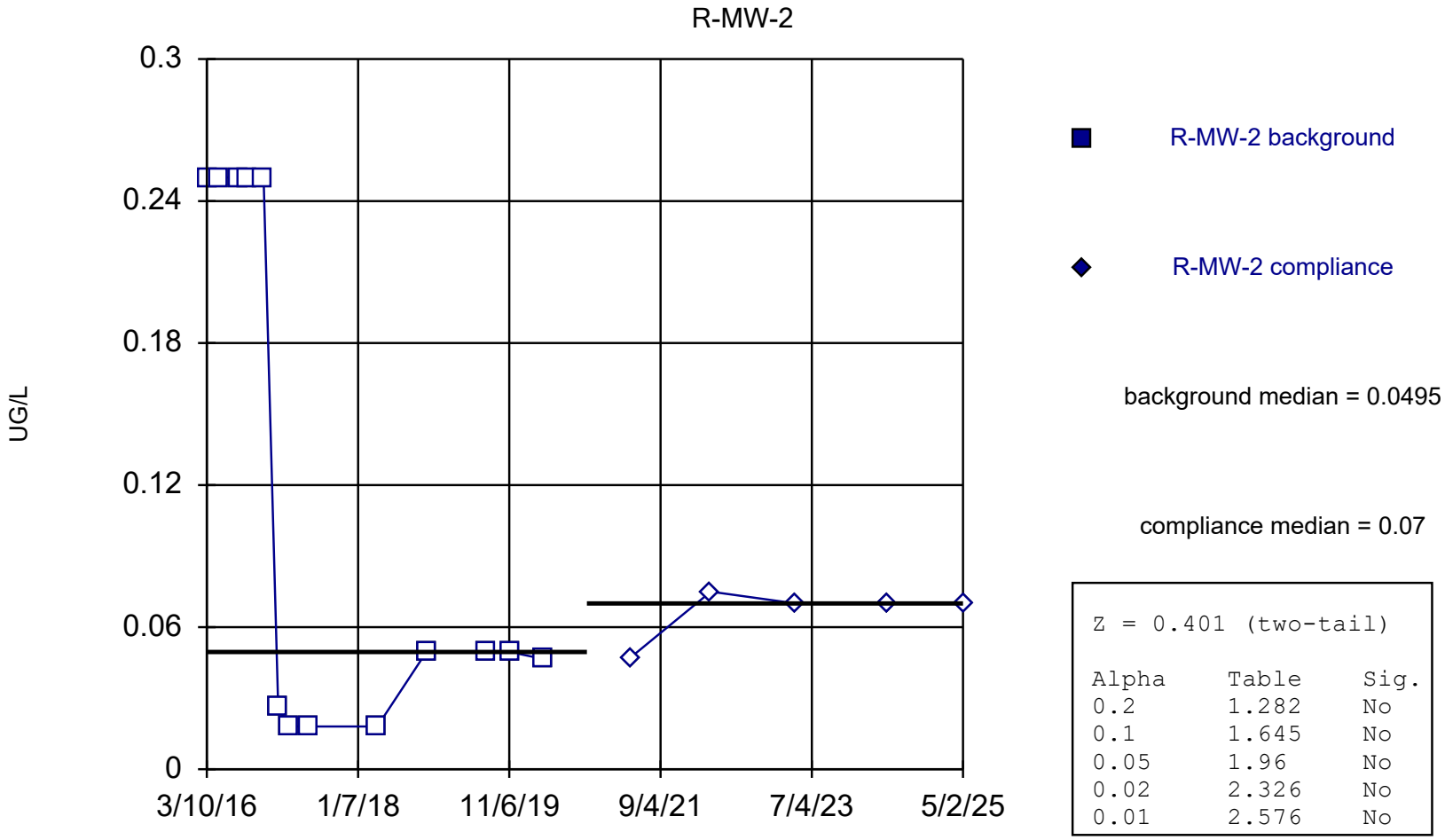
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: THALLIUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.401 (two-tail)

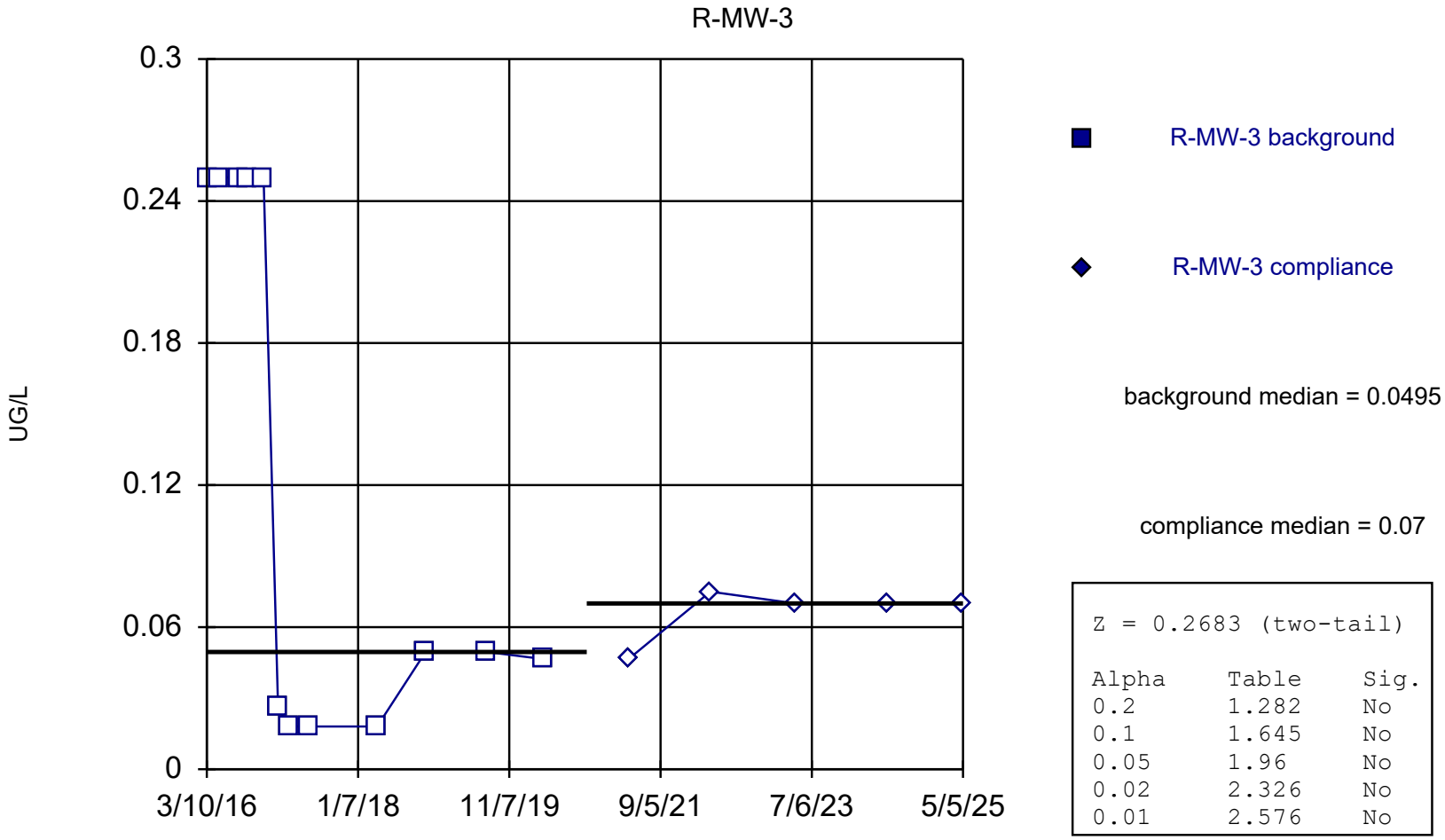
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: THALLIUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.2683 (two-tail)

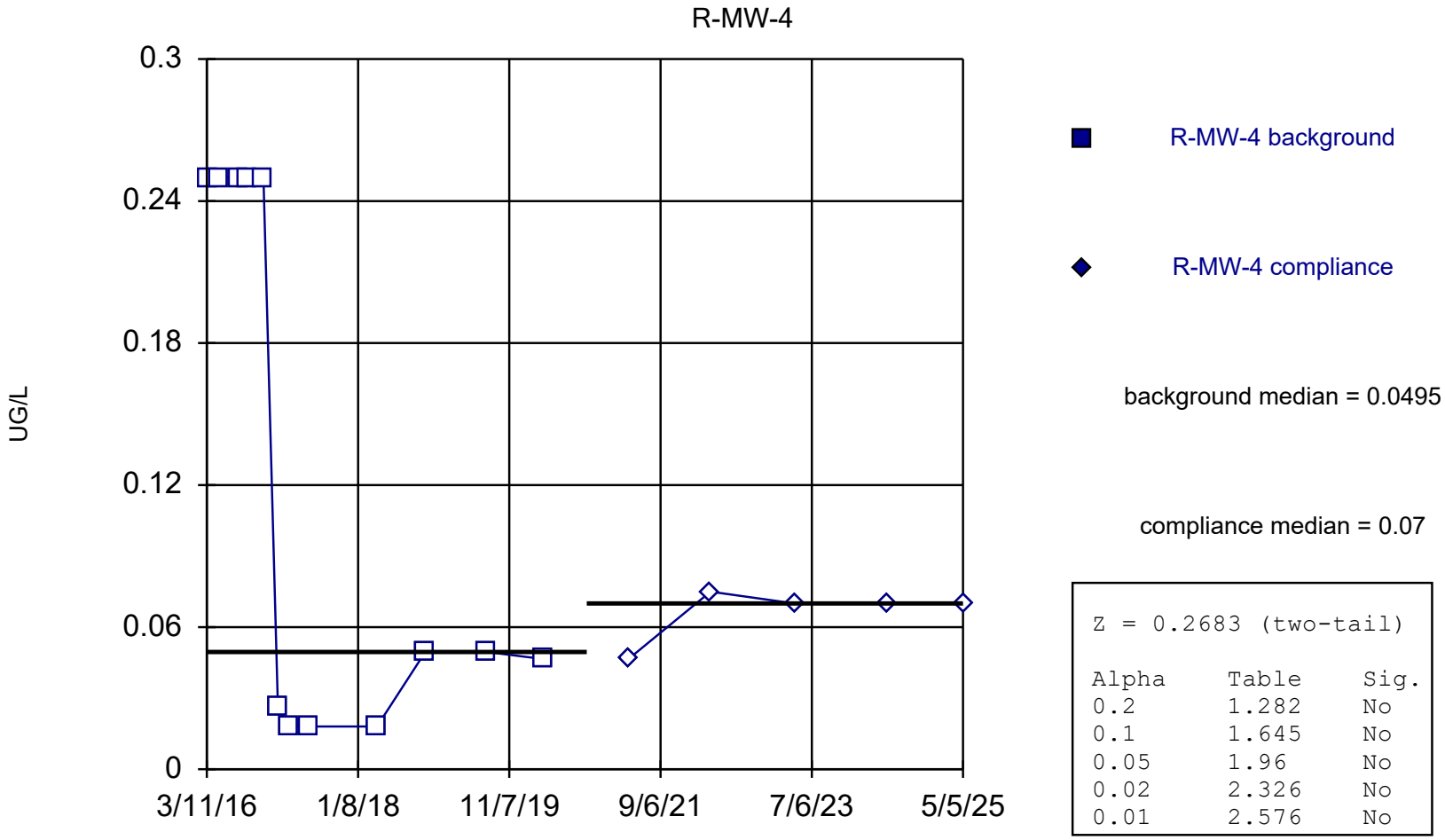
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: THALLIUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.2683 (two-tail)

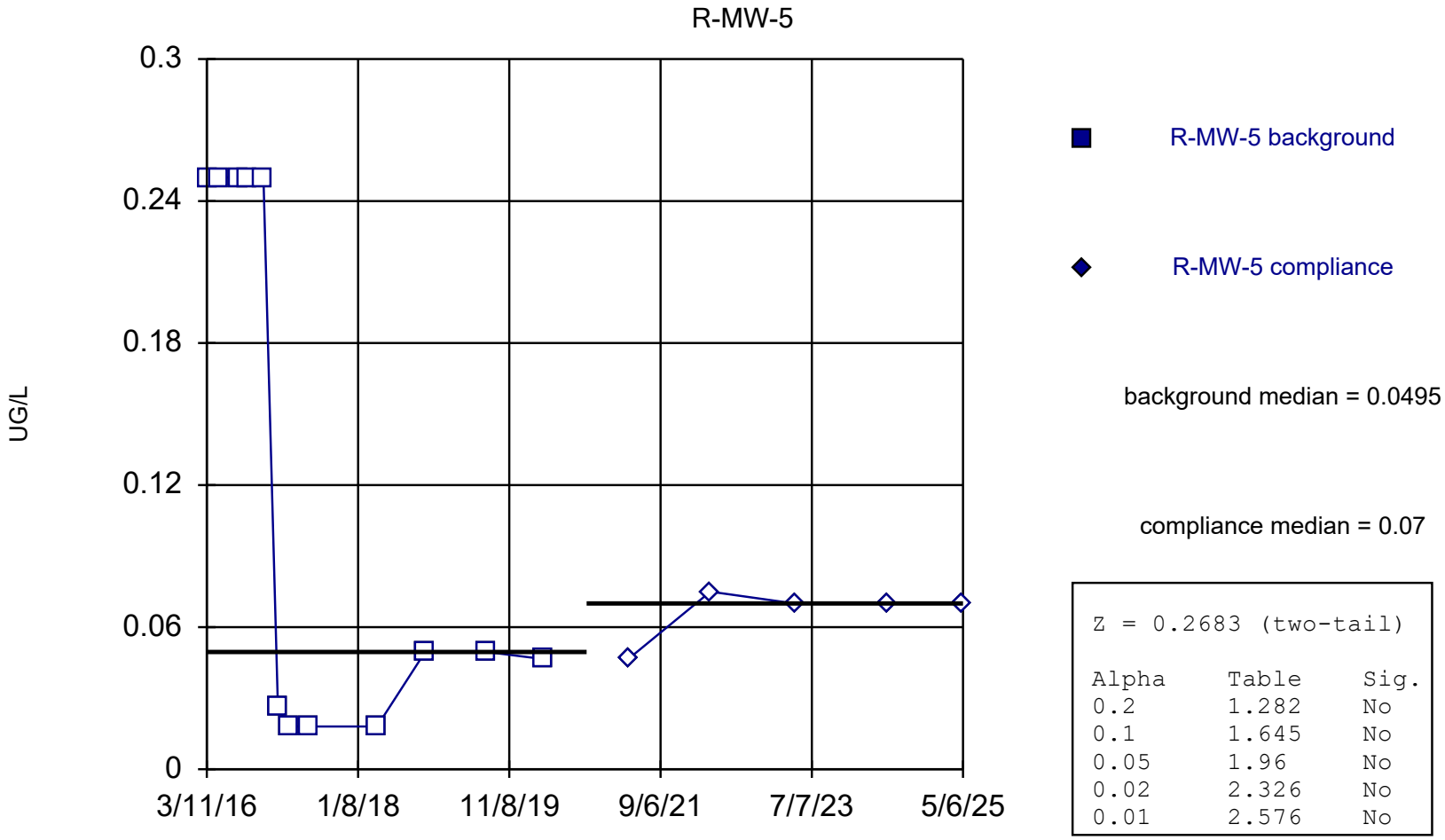
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: THALLIUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.2683 (two-tail)

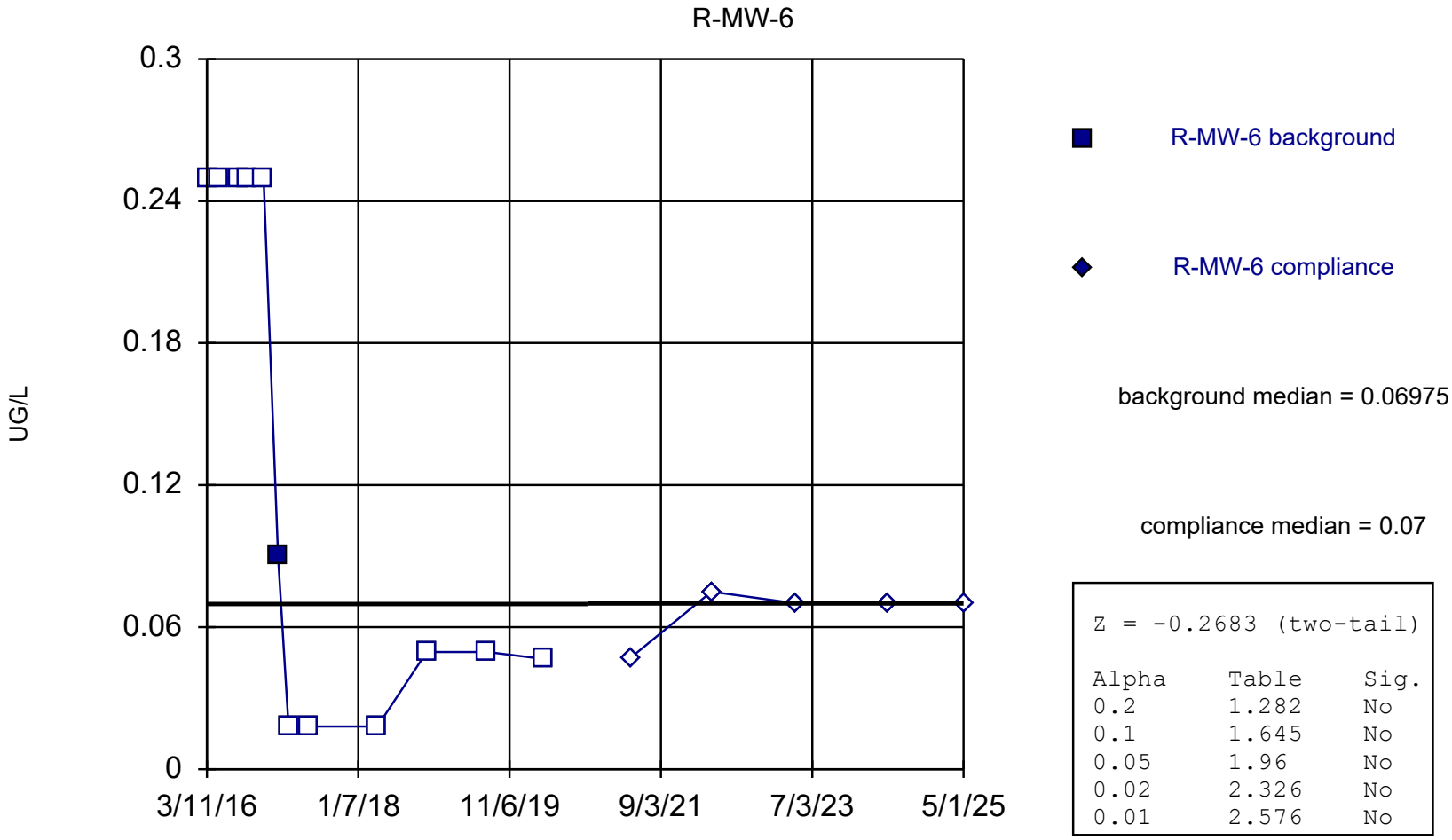
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: THALLIUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.2683 (two-tail)

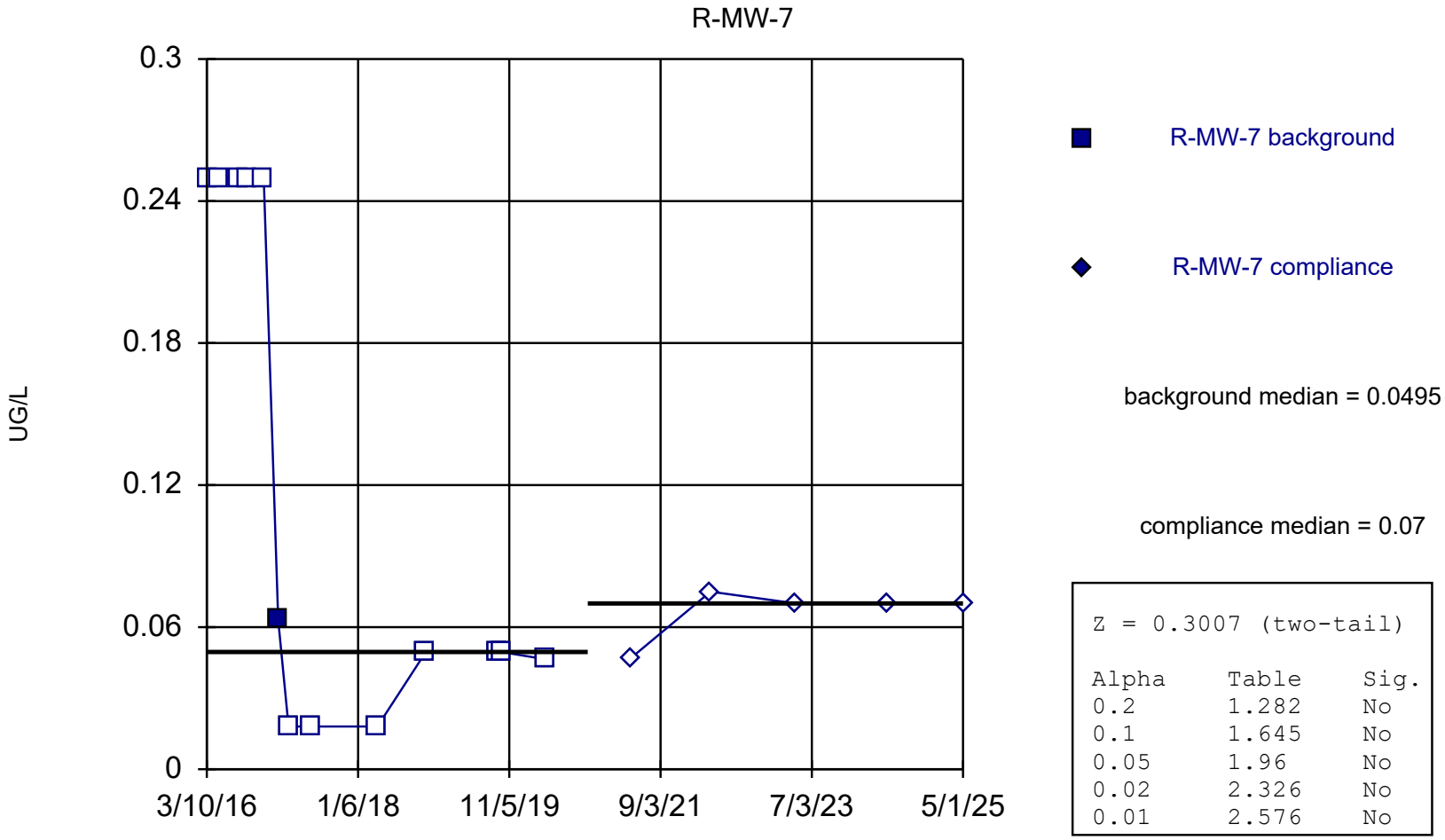
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: THALLIUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.3007 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: THALLIUM, TOTAL Analysis Run 8/27/2025 1:00 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Welch's t-test/Mann-Whitney

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 8/27/2025, 1:10 PM

Constituent	Well	Calc.	0.1	0.05	0.025	0.01	Method
ANTIMONY, TOTAL (UG/L)	**R-MW-1**	**-2.51**	**Yes**	**Yes**	**Yes**	**No**	**Mann-W**
ANTIMONY, TOTAL (UG/L)	**R-MW-2**	**-3.045**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
ANTIMONY, TOTAL (UG/L)	R-MW-3	-1.933	Yes	No	No	No	Mann-W
ANTIMONY, TOTAL (UG/L)	**R-MW-4**	**3.432**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
ANTIMONY, TOTAL (UG/L)	**R-MW-5**	**3.999**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
ANTIMONY, TOTAL (UG/L)	R-MW-6	1.118	No	No	No	No	Mann-W
ANTIMONY, TOTAL (UG/L)	R-MW-7	1.877	Yes	No	No	No	Mann-W
ARSENIC, TOTAL (UG/L)	**R-MW-1**	**-3.728**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
ARSENIC, TOTAL (UG/L)	R-MW-2	1.492	No	No	No	No	Mann-W
ARSENIC, TOTAL (UG/L)	**R-MW-3**	**-2.744**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
ARSENIC, TOTAL (UG/L)	**R-MW-4**	**2.448**	**Yes**	**Yes**	**Yes**	**No**	**Mann-W**
ARSENIC, TOTAL (UG/L)	**R-MW-5**	**-3.984**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
ARSENIC, TOTAL (UG/L)	R-MW-6	0.9509	No	No	No	No	Mann-W
ARSENIC, TOTAL (UG/L)	**R-MW-7**	**4.049**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
BARIUM, TOTAL (UG/L)	**R-MW-1**	**3.623**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
BARIUM, TOTAL (UG/L)	R-MW-2	0.6616	No	No	No	No	Mann-W
BARIUM, TOTAL (UG/L)	**R-MW-3**	**3.995**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
BARIUM, TOTAL (UG/L)	**R-MW-4**	**3.877**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
BARIUM, TOTAL (UG/L)	**R-MW-5**	**-4.001**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
BARIUM, TOTAL (UG/L)	R-MW-6	0.0...	No	No	No	No	Mann-W
BARIUM, TOTAL (UG/L)	R-MW-7	-0....	No	No	No	No	Mann-W
BERYLLIUM, TOTAL (UG/L)	R-MW-1	-2.073	Yes	Yes	No	No	Mann-W
BERYLLIUM, TOTAL (UG/L)	R-MW-2	-1.398	No	No	No	No	Mann-W
BERYLLIUM, TOTAL (UG/L)	R-MW-3	-0....	No	No	No	No	Mann-W
BERYLLIUM, TOTAL (UG/L)	R-MW-4	-0....	No	No	No	No	Mann-W
BERYLLIUM, TOTAL (UG/L)	R-MW-5	-1.398	No	No	No	No	Mann-W
BERYLLIUM, TOTAL (UG/L)	R-MW-6	-1.591	No	No	No	No	Mann-W
BERYLLIUM, TOTAL (UG/L)	R-MW-7	-0.134	No	No	No	No	Mann-W
CADMIUM, TOTAL (UG/L)	R-MW-1	1.286	No	No	No	No	Mann-W
CADMIUM, TOTAL (UG/L)	R-MW-2	2.067	Yes	Yes	No	No	Mann-W
CADMIUM, TOTAL (UG/L)	R-MW-3	1.455	No	No	No	No	Mann-W
CADMIUM, TOTAL (UG/L)	R-MW-4	0.6247	No	No	No	No	Mann-W
CADMIUM, TOTAL (UG/L)	R-MW-5	2.298	Yes	Yes	No	No	Mann-W
CADMIUM, TOTAL (UG/L)	R-MW-6	2.02	Yes	Yes	No	No	Mann-W
CADMIUM, TOTAL (UG/L)	R-MW-7	0.9818	No	No	No	No	Mann-W
CHROMIUM, TOTAL (UG/L)	R-MW-1	1.539	No	No	No	No	Mann-W
CHROMIUM, TOTAL (UG/L)	R-MW-2	-0.694	No	No	No	No	Mann-W
CHROMIUM, TOTAL (UG/L)	R-MW-3	-1.102	No	No	No	No	Mann-W
CHROMIUM, TOTAL (UG/L)	R-MW-4	0.2491	No	No	No	No	Mann-W
CHROMIUM, TOTAL (UG/L)	R-MW-5	-0....	No	No	No	No	Mann-W
CHROMIUM, TOTAL (UG/L)	R-MW-6	1.825	Yes	No	No	No	Mann-W
CHROMIUM, TOTAL (UG/L)	R-MW-7	0.9159	No	No	No	No	Mann-W
COBALT, TOTAL (UG/L)	R-MW-1	1.208	No	No	No	No	Mann-W
COBALT, TOTAL (UG/L)	R-MW-2	1.915	Yes	No	No	No	Mann-W
COBALT, TOTAL (UG/L)	**R-MW-3**	**2.419**	**Yes**	**Yes**	**Yes**	**No**	**Mann-W**
COBALT, TOTAL (UG/L)	R-MW-4	0.5034	No	No	No	No	Mann-W
COBALT, TOTAL (UG/L)	R-MW-5	0.895	No	No	No	No	Mann-W
COBALT, TOTAL (UG/L)	R-MW-6	1.352	No	No	No	No	Mann-W
COBALT, TOTAL (UG/L)	R-MW-7	1.367	No	No	No	No	Mann-W
FLUORIDE, TOTAL (MG/L)	**R-MW-1**	**-3.143**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**

Welch's t-test/Mann-Whitney

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 8/27/2025, 1:10 PM

Constituent	Well	Calc.	0.1	0.05	0.025	0.01	Method
FLUORIDE, TOTAL (MG/L)	R-MW-2	-0....	No	No	No	No	Mann-W
FLUORIDE, TOTAL (MG/L)	**R-MW-3**	**2.704**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
FLUORIDE, TOTAL (MG/L)	**R-MW-4**	**-3.652**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
FLUORIDE, TOTAL (MG/L)	R-MW-5	-0....	No	No	No	No	Mann-W
FLUORIDE, TOTAL (MG/L)	**R-MW-6**	**2.727**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
FLUORIDE, TOTAL (MG/L)	**R-MW-7**	**-2.736**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
LEAD, TOTAL (UG/L)	**R-MW-1**	**2.928**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
LEAD, TOTAL (UG/L)	R-MW-2	0.239	No	No	No	No	Mann-W
LEAD, TOTAL (UG/L)	**R-MW-3**	**-2.542**	**Yes**	**Yes**	**Yes**	**No**	**Mann-W**
LEAD, TOTAL (UG/L)	R-MW-4	2.252	Yes	Yes	No	No	Mann-W
LEAD, TOTAL (UG/L)	R-MW-5	2.02	Yes	Yes	No	No	Mann-W
LEAD, TOTAL (UG/L)	R-MW-6	2.298	Yes	Yes	No	No	Mann-W
LEAD, TOTAL (UG/L)	**R-MW-7**	**2.73**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
LITHIUM, TOTAL (UG/L)	R-MW-1	1.572	No	No	No	No	Mann-W
LITHIUM, TOTAL (UG/L)	R-MW-2	1.627	No	No	No	No	Mann-W
LITHIUM, TOTAL (UG/L)	**R-MW-3**	**3.736**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
LITHIUM, TOTAL (UG/L)	**R-MW-4**	**-3.637**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
LITHIUM, TOTAL (UG/L)	R-MW-5	0.6868	No	No	No	No	Mann-W
LITHIUM, TOTAL (UG/L)	R-MW-6	1.616	No	No	No	No	Mann-W
LITHIUM, TOTAL (UG/L)	R-MW-7	-2.171	Yes	Yes	No	No	Mann-W
MERCURY, TOTAL (UG/L)	**R-MW-1**	**2.696**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
MERCURY, TOTAL (UG/L)	**R-MW-2**	**2.696**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
MERCURY, TOTAL (UG/L)	**R-MW-3**	**2.696**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
MERCURY, TOTAL (UG/L)	**R-MW-4**	**2.696**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
MERCURY, TOTAL (UG/L)	**R-MW-5**	**2.696**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
MERCURY, TOTAL (UG/L)	**R-MW-6**	**3.168**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
MERCURY, TOTAL (UG/L)	**R-MW-7**	**3.203**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
MOLYBDENUM, TOTAL (UG/L)	R-MW-1	1.789	Yes	No	No	No	Mann-W
MOLYBDENUM, TOTAL (UG/L)	R-MW-2	-1.848	Yes	No	No	No	Mann-W
MOLYBDENUM, TOTAL (UG/L)	R-MW-3	-1.014	No	No	No	No	Mann-W
MOLYBDENUM, TOTAL (UG/L)	**R-MW-4**	**-4.055**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
MOLYBDENUM, TOTAL (UG/L)	R-MW-5	-0....	No	No	No	No	Mann-W
MOLYBDENUM, TOTAL (UG/L)	R-MW-6	-0....	No	No	No	No	Mann-W
MOLYBDENUM, TOTAL (UG/L)	**R-MW-7**	**-3.992**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
RADIUM [226 + 228] (PCI/L)	R-MW-1	1.312	No	No	No	No	Mann-W
RADIUM [226 + 228] (PCI/L)	R-MW-2	2.326	Yes	Yes	No	No	Mann-W
RADIUM [226 + 228] (PCI/L)	R-MW-3	0.355	No	No	No	No	Mann-W
RADIUM [226 + 228] (PCI/L)	R-MW-4	0.6561	No	No	No	No	Mann-W
RADIUM [226 + 228] (PCI/L)	R-MW-5	-0....	No	No	No	No	Mann-W
RADIUM [226 + 228] (PCI/L)	R-MW-6	-0....	No	No	No	No	Mann-W
RADIUM [226 + 228] (PCI/L)	R-MW-7	0.5984	No	No	No	No	Mann-W
SELENIUM, TOTAL (UG/L)	**R-MW-1**	**-3.859**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
SELENIUM, TOTAL (UG/L)	R-MW-2	0.5678	No	No	No	No	Mann-W
SELENIUM, TOTAL (UG/L)	R-MW-3	-1.391	No	No	No	No	Mann-W
SELENIUM, TOTAL (UG/L)	R-MW-4	-2.194	Yes	Yes	No	No	Mann-W
SELENIUM, TOTAL (UG/L)	R-MW-5	1.887	Yes	No	No	No	Mann-W
SELENIUM, TOTAL (UG/L)	R-MW-6	0.2909	No	No	No	No	Mann-W
SELENIUM, TOTAL (UG/L)	R-MW-7	-0....	No	No	No	No	Mann-W
THALLIUM, TOTAL (UG/L)	R-MW-1	-0....	No	No	No	No	Mann-W
THALLIUM, TOTAL (UG/L)	R-MW-2	0.401	No	No	No	No	Mann-W

Welch's t-test/Mann-Whitney

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 8/27/2025, 1:10 PM

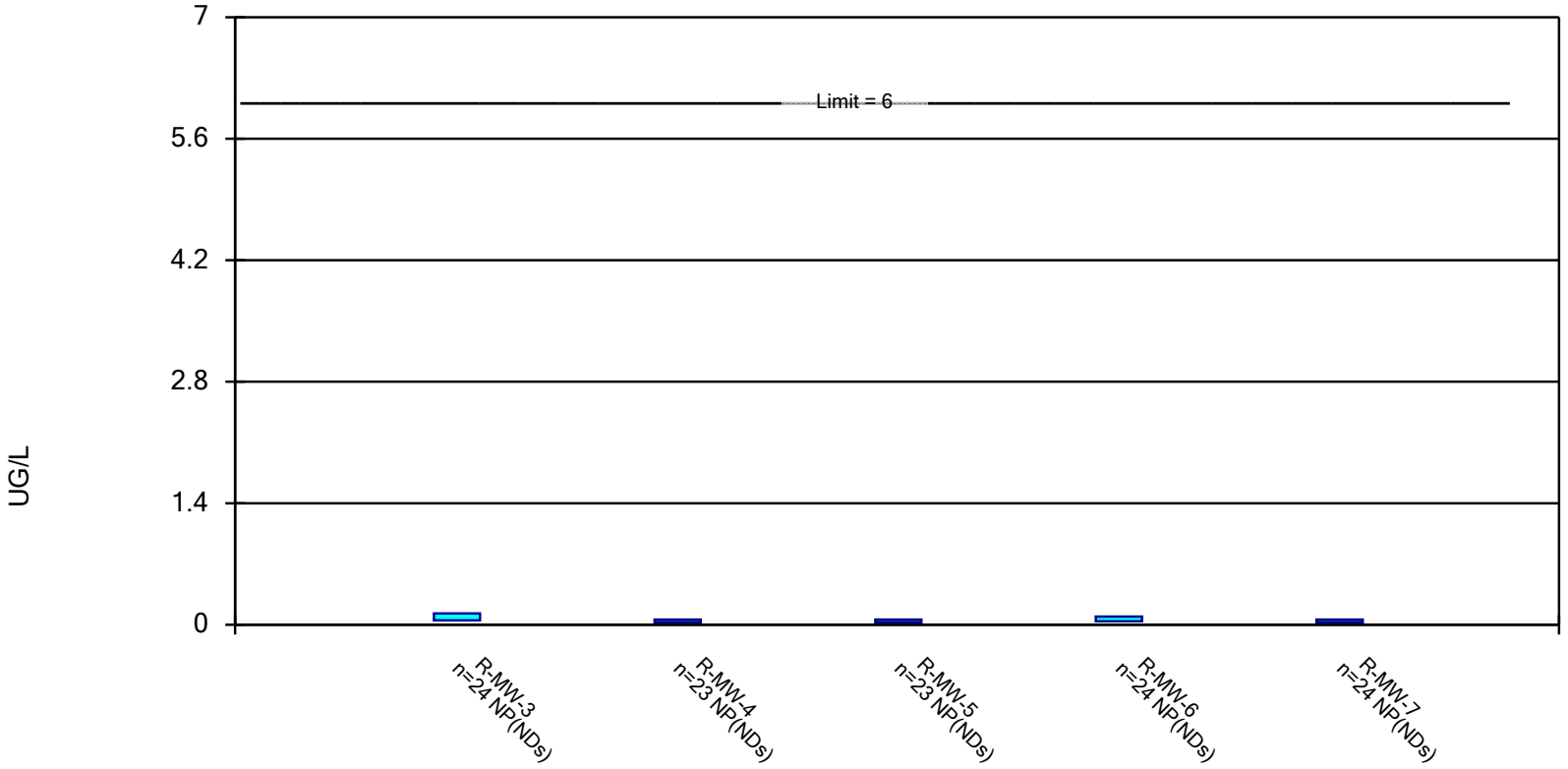
Constituent	Well	Calc.	0.1	0.05	0.025	0.01	Method
THALLIUM, TOTAL (UG/L)	R-MW-3	0.2683	No	No	No	No	Mann-W
THALLIUM, TOTAL (UG/L)	R-MW-4	0.2683	No	No	No	No	Mann-W
THALLIUM, TOTAL (UG/L)	R-MW-5	0.2683	No	No	No	No	Mann-W
THALLIUM, TOTAL (UG/L)	R-MW-6	-0....	No	No	No	No	Mann-W
THALLIUM, TOTAL (UG/L)	R-MW-7	0.3007	No	No	No	No	Mann-W

Appendix B
Sanitas Confidence Interval Statistical Output

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



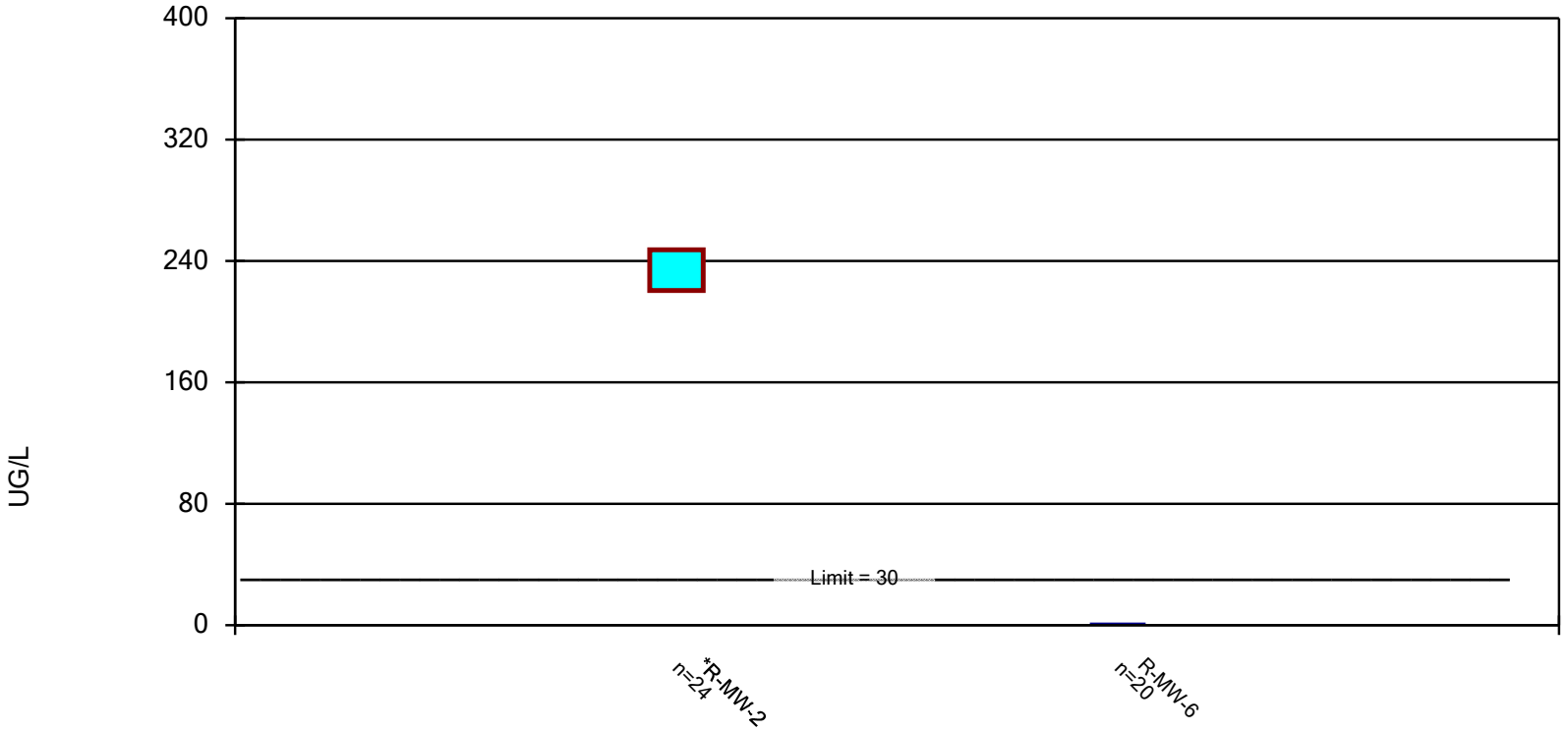
Constituent: ANTIMONY, TOTAL Analysis Run 8/28/2025 10:18 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



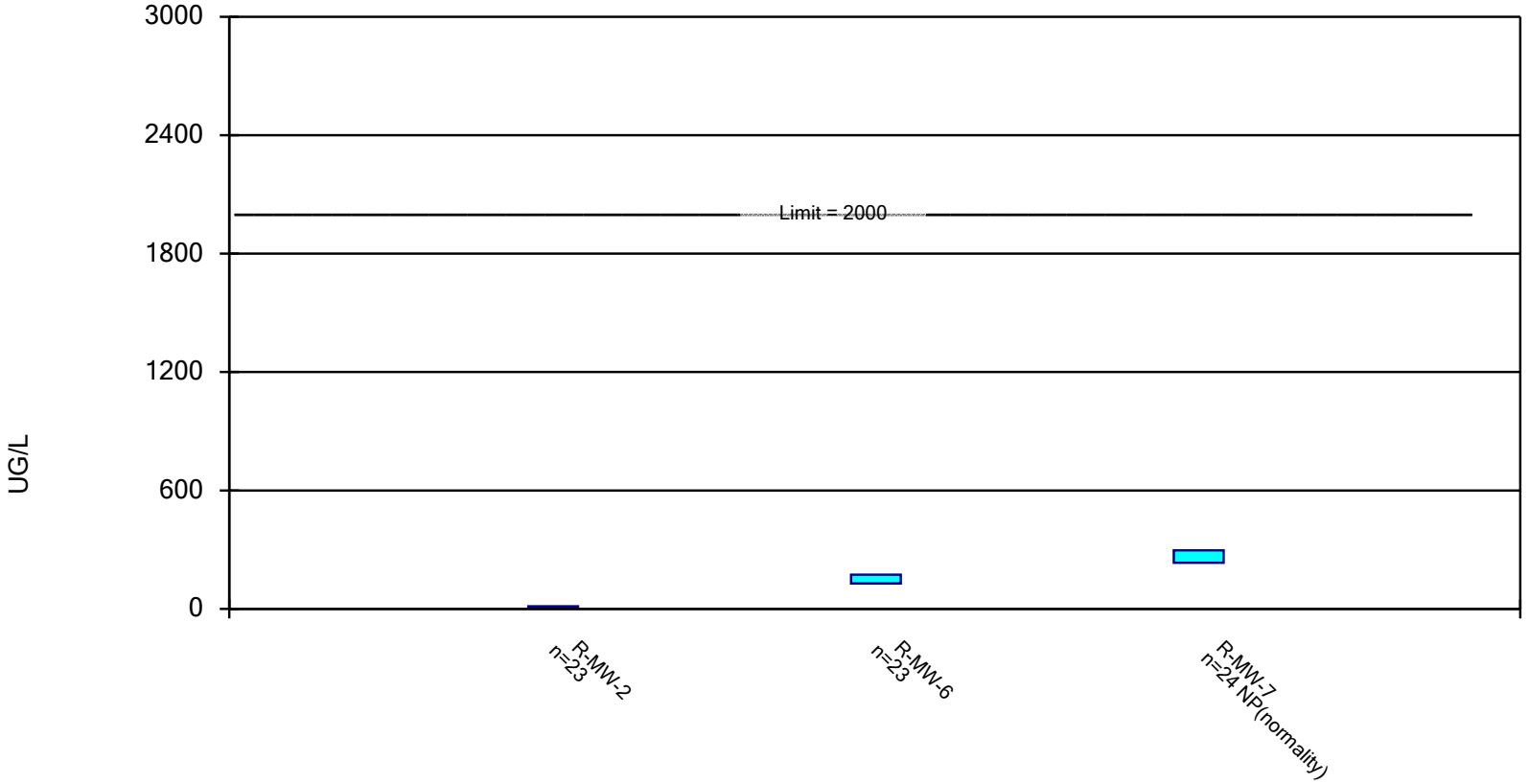
Constituent: ARSENIC, TOTAL Analysis Run 8/28/2025 10:18 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



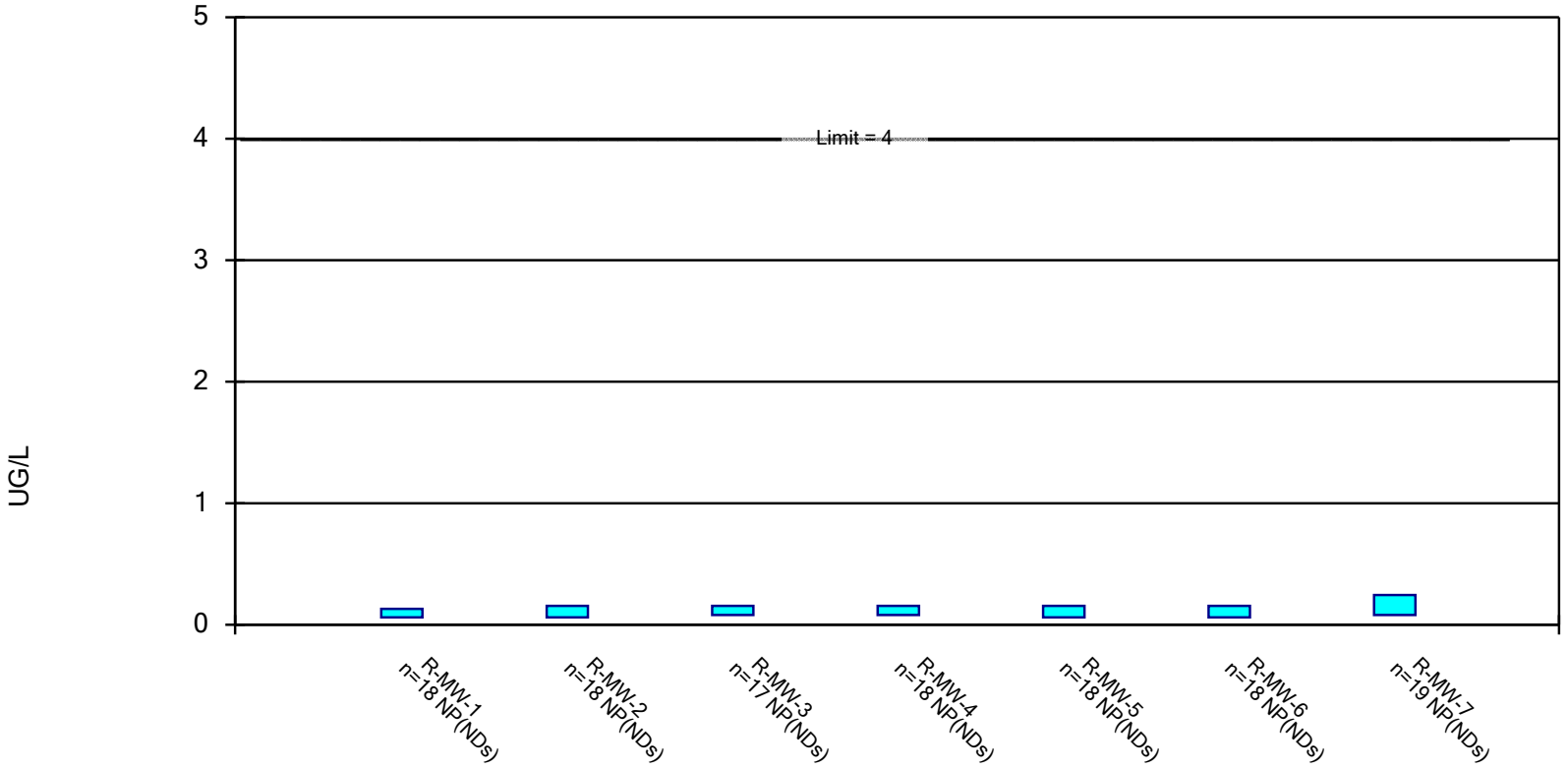
Constituent: BARIUM, TOTAL Analysis Run 8/28/2025 10:18 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



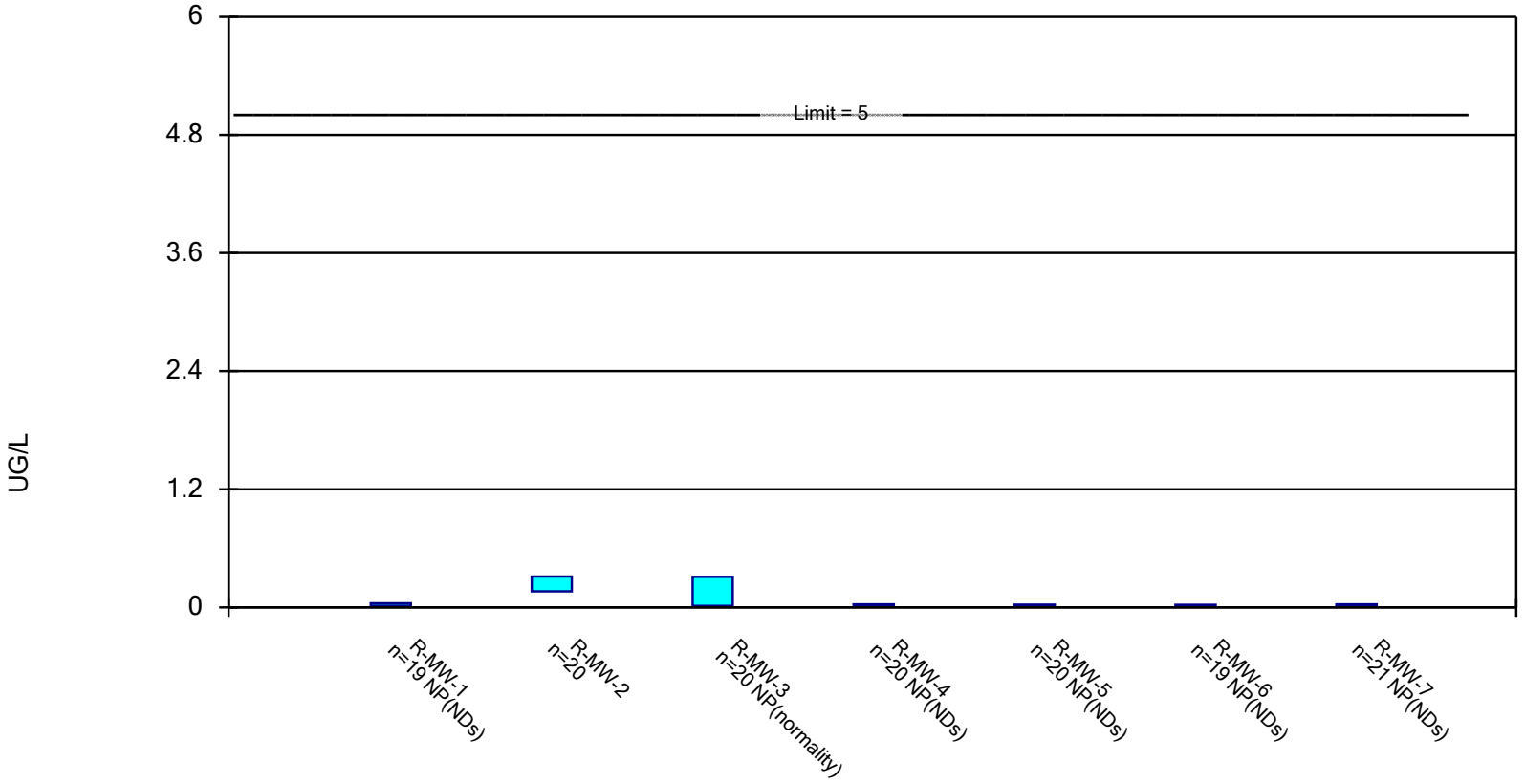
Constituent: BERYLLIUM, TOTAL Analysis Run 8/28/2025 10:18 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

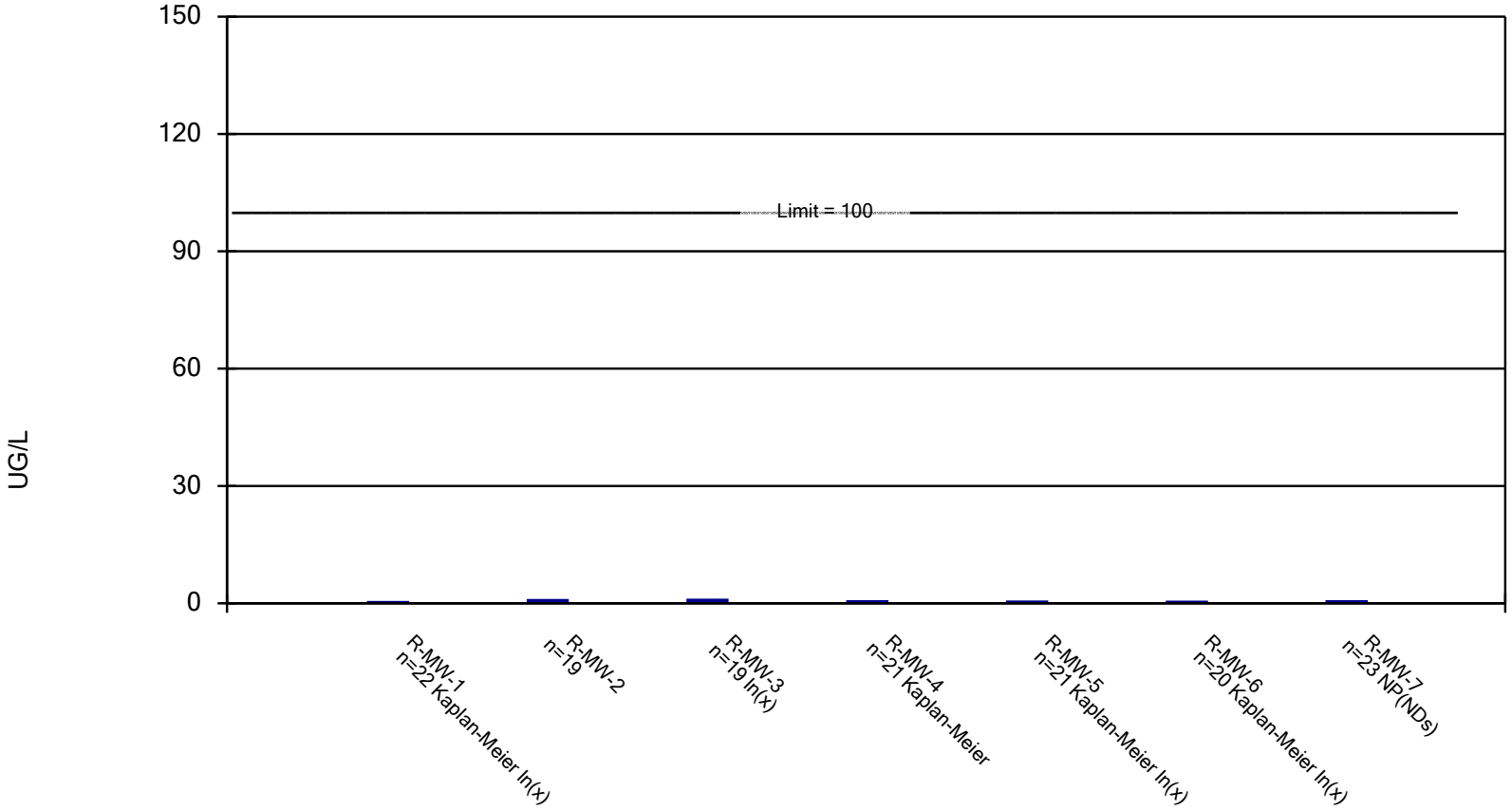


Constituent: CADMIUM, TOTAL Analysis Run 8/28/2025 10:18 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



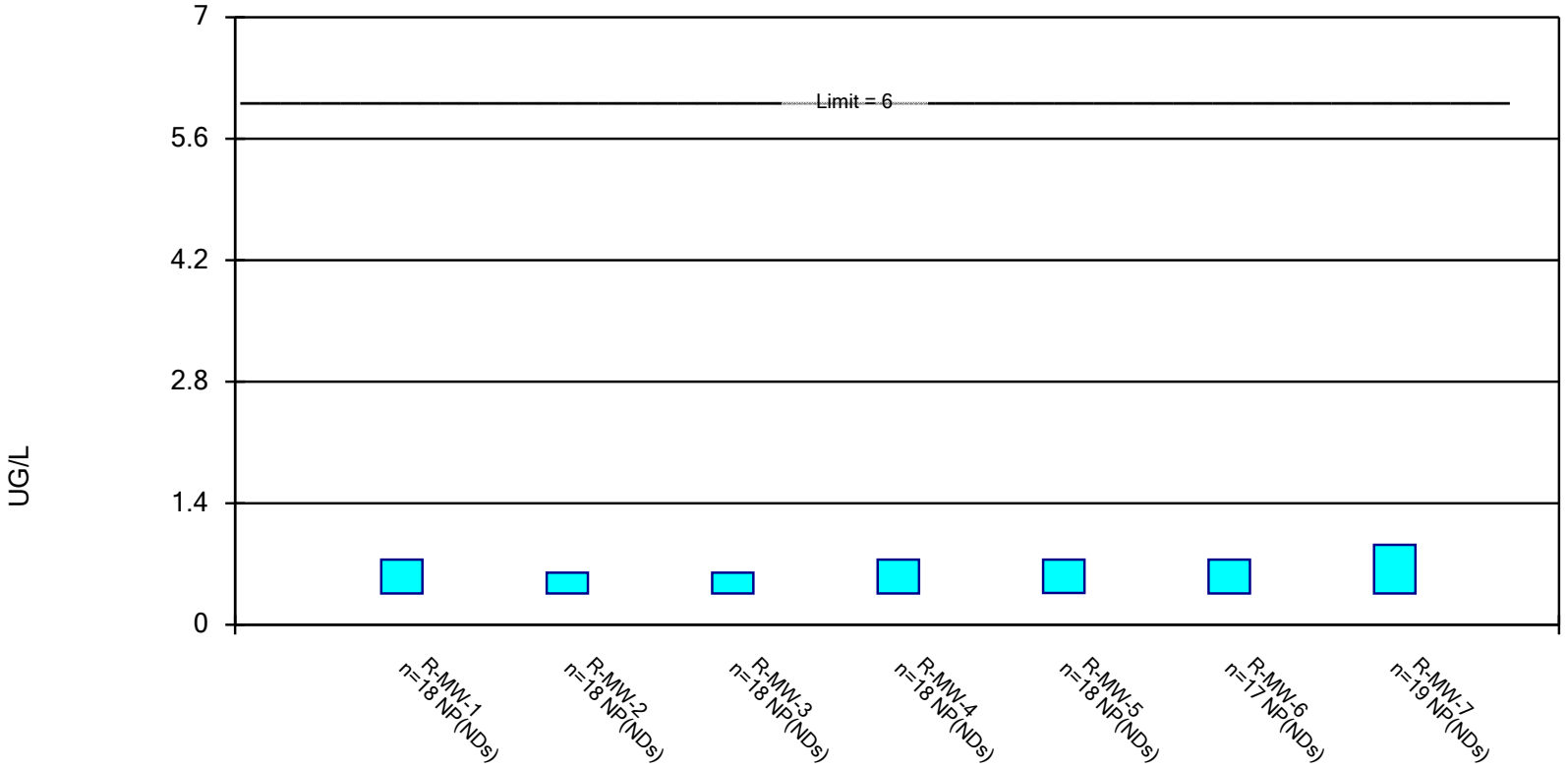
Constituent: CHROMIUM, TOTAL Analysis Run 8/28/2025 10:18 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



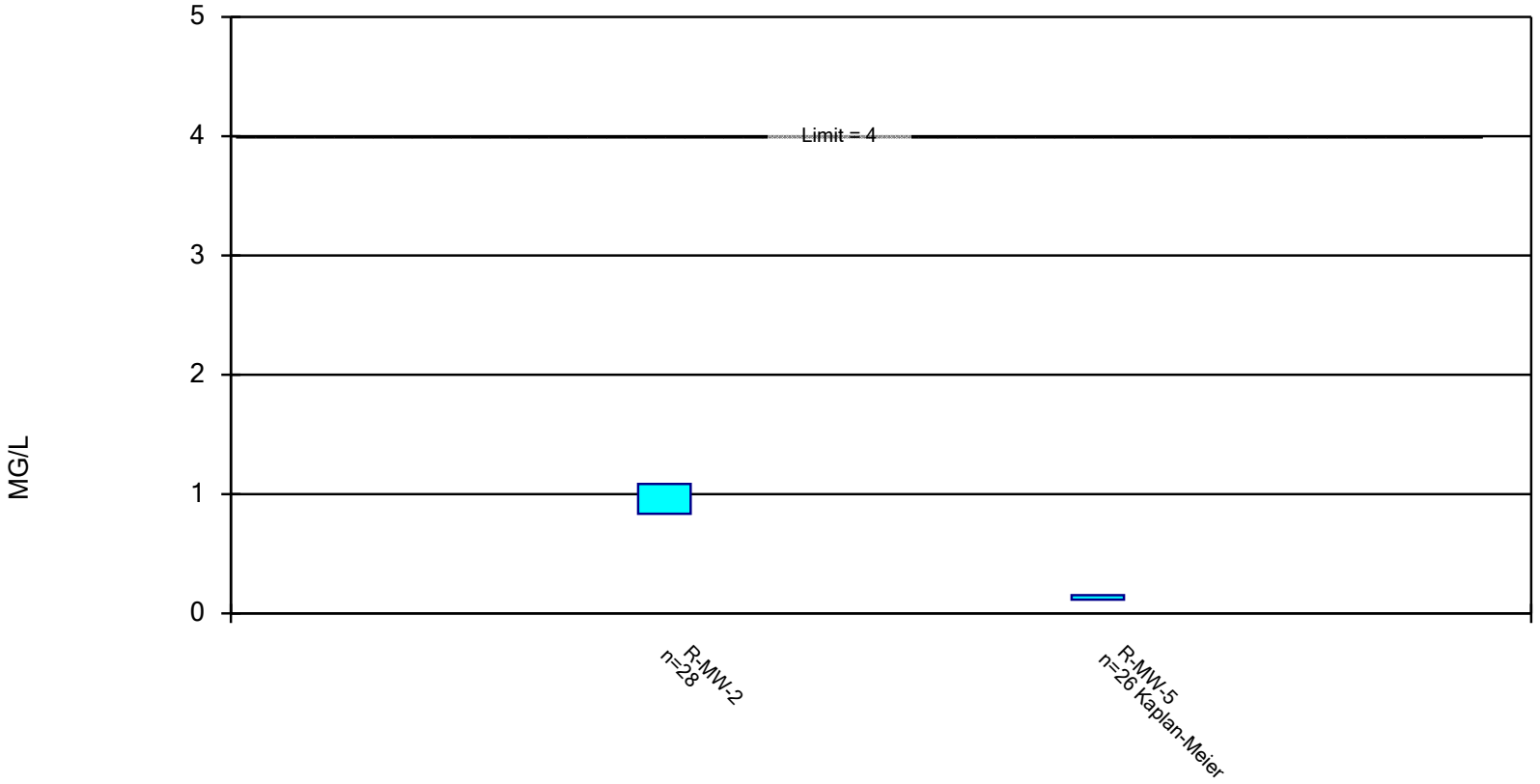
Constituent: COBALT, TOTAL Analysis Run 8/28/2025 10:18 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



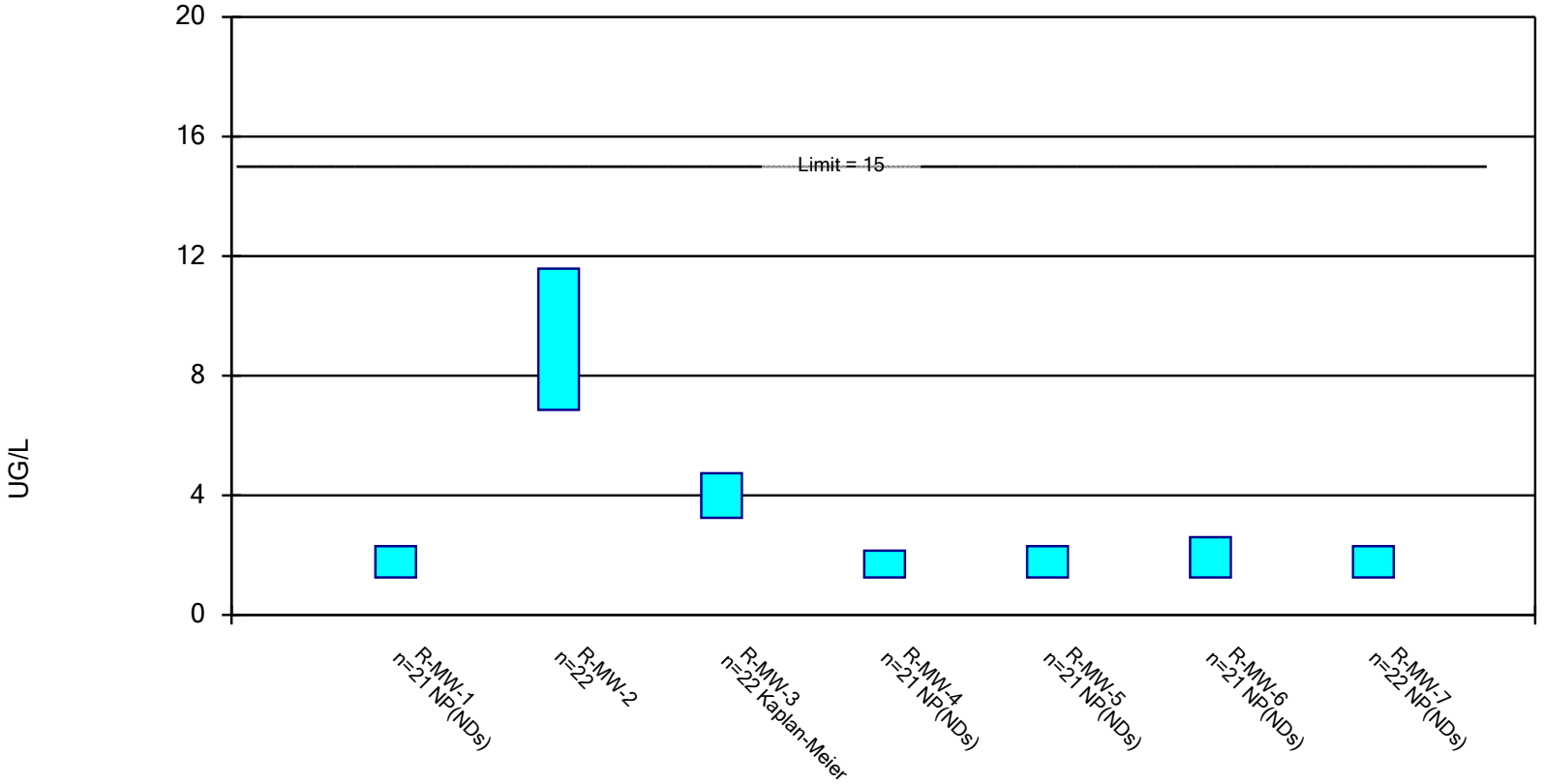
Constituent: FLUORIDE, TOTAL Analysis Run 8/28/2025 10:18 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



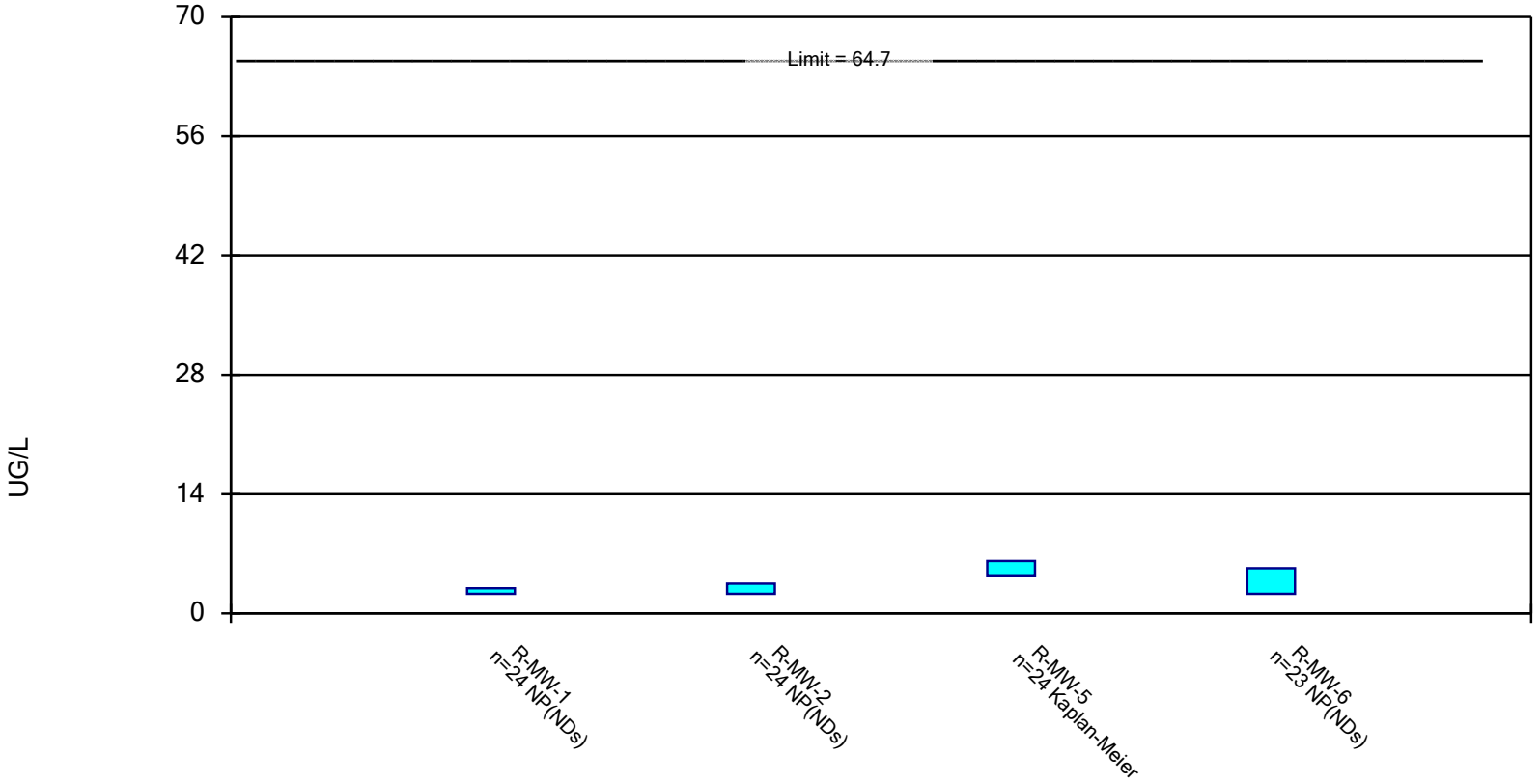
Constituent: LEAD, TOTAL Analysis Run 8/28/2025 10:18 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



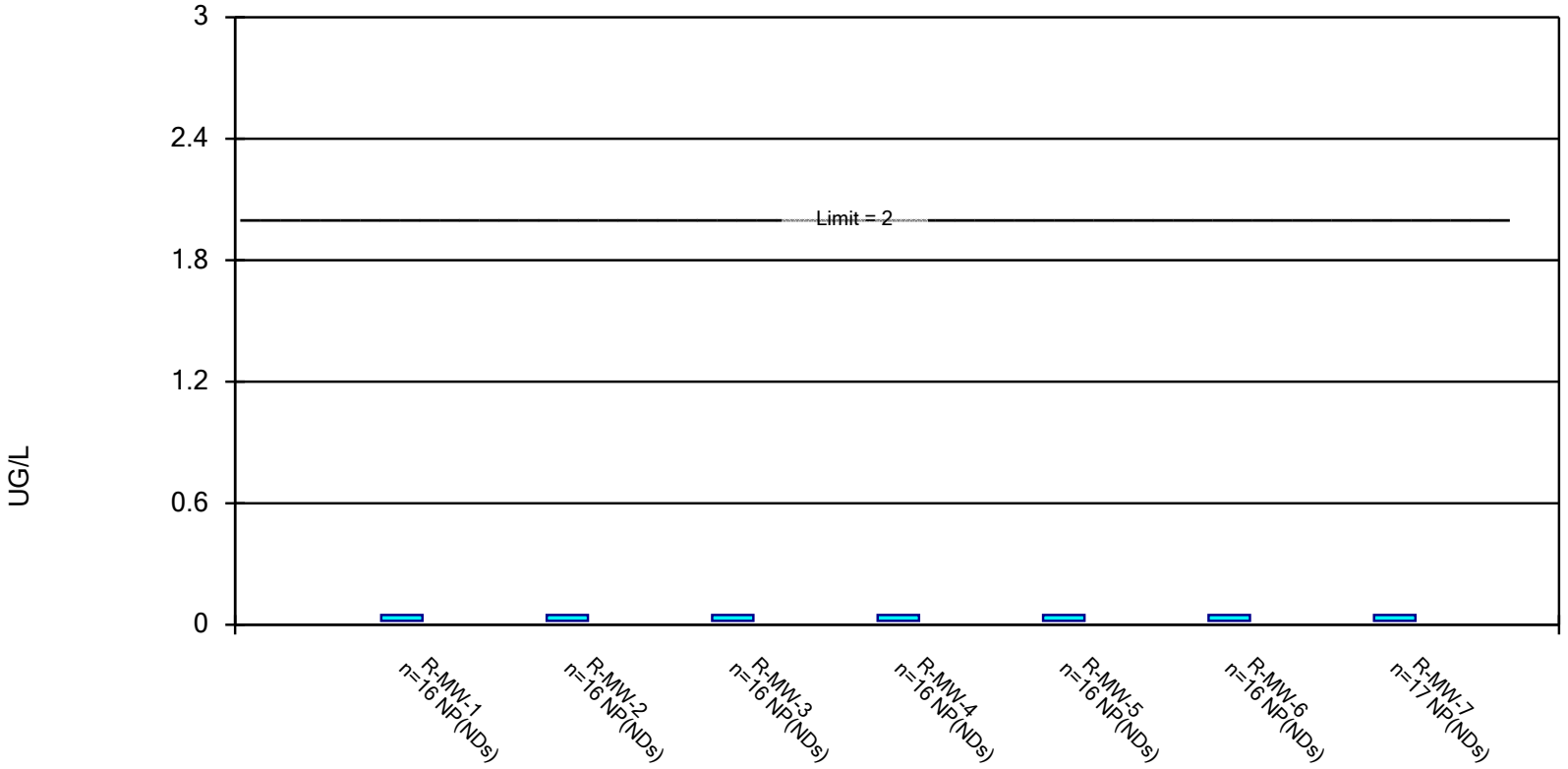
Constituent: LITHIUM, TOTAL Analysis Run 8/28/2025 10:18 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



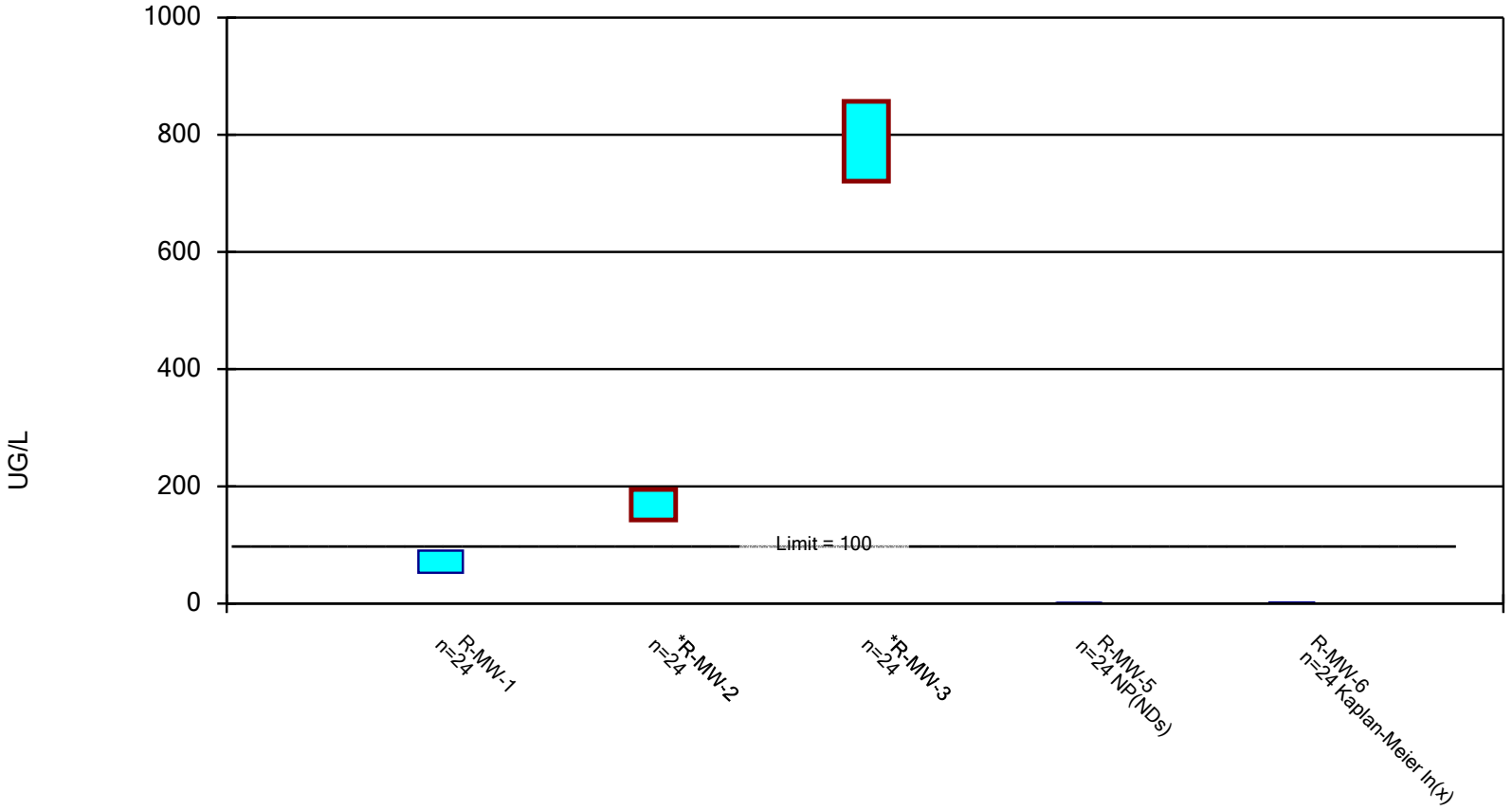
Constituent: MERCURY, TOTAL Analysis Run 8/28/2025 10:18 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



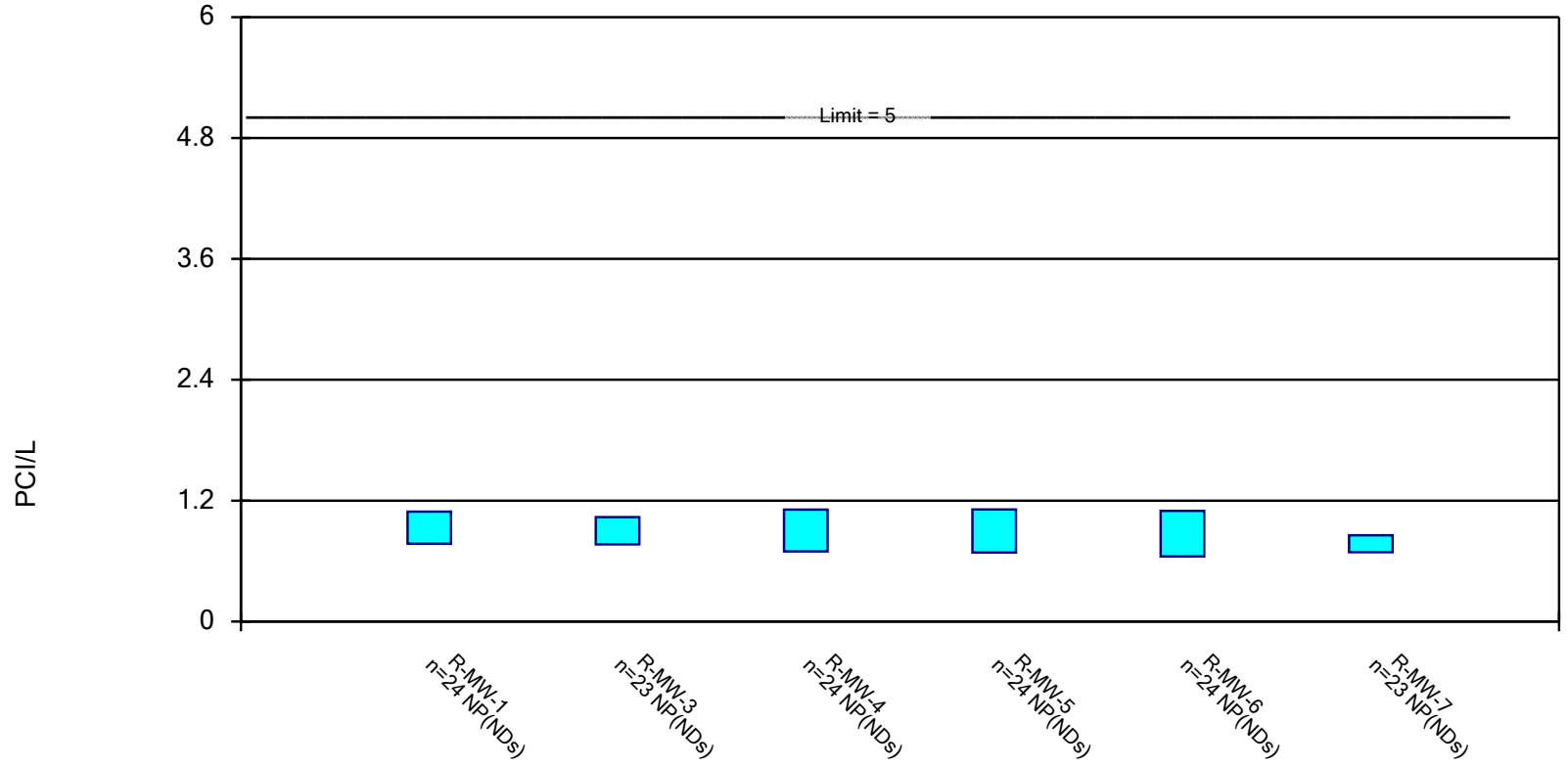
Constituent: MOLYBDENUM, TOTAL Analysis Run 8/28/2025 10:18 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



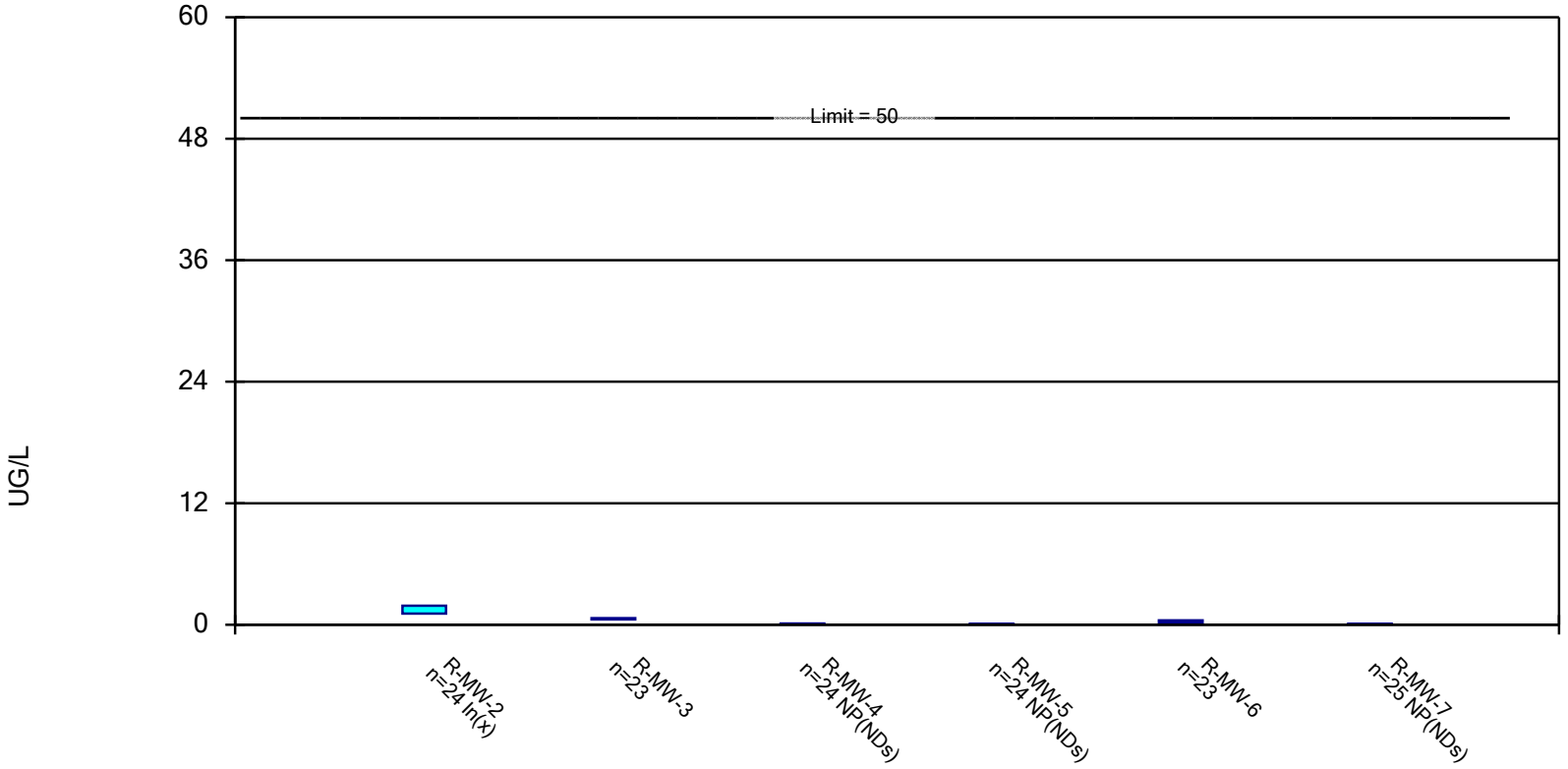
Constituent: RADIUM [226 + 228] Analysis Run 8/28/2025 10:18 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



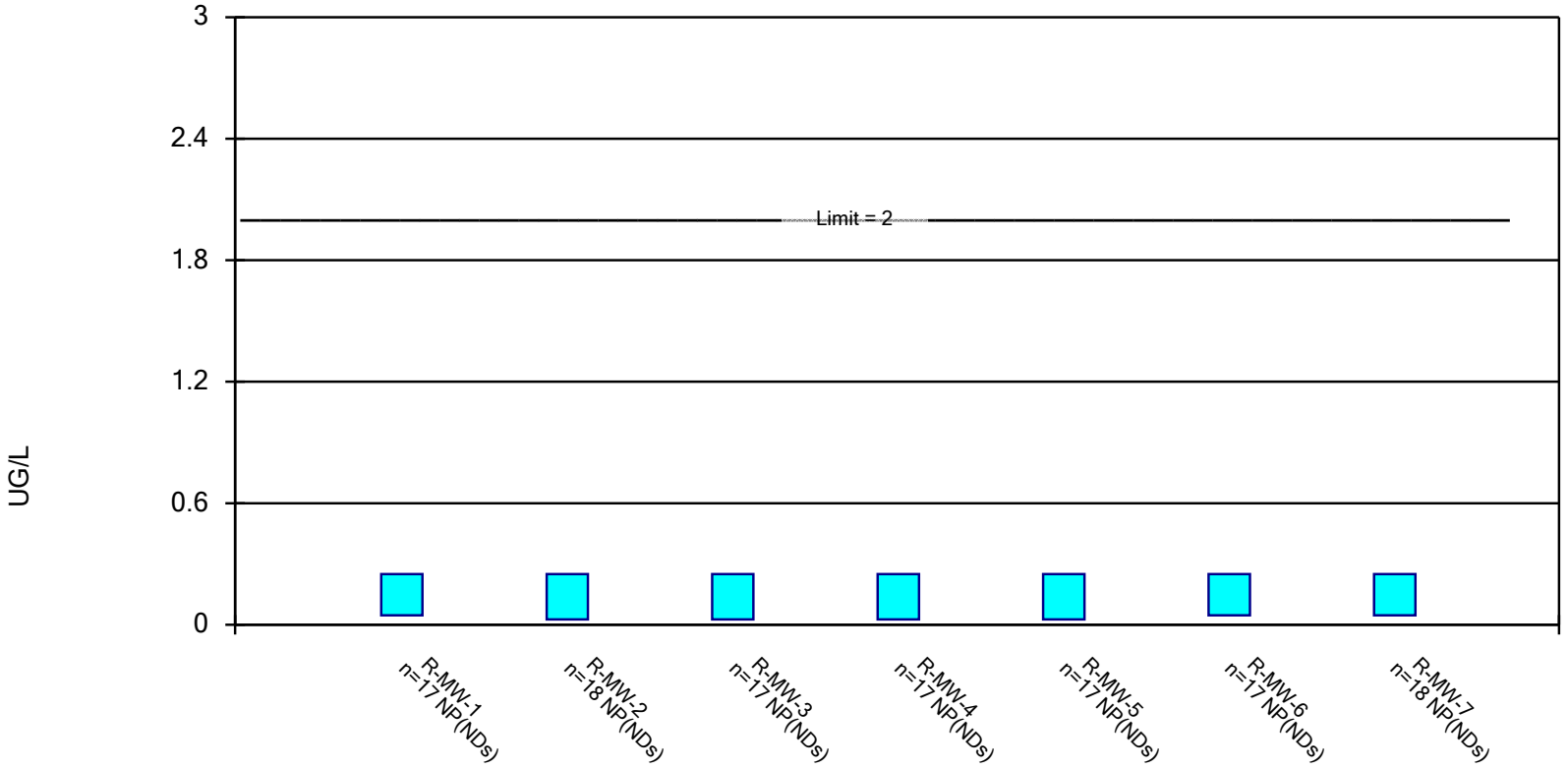
Constituent: SELENIUM, TOTAL Analysis Run 8/28/2025 10:18 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: THALLIUM, TOTAL Analysis Run 8/28/2025 10:18 AM View: SSL All Data

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Confidence Interval

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 8/28/2025, 10:23 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
ANTIMONY, TOTAL (UG/L)	R-MW-3	0.13	0.05	6	No	24	58.33	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-MW-4	0.06	0.029	6	No	23	86.96	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-MW-5	0.06	0.029	6	No	23	91.3	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-MW-6	0.094	0.039	6	No	24	70.83	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-MW-7	0.06	0.029	6	No	24	87.5	No	0.01	NP (NDs)
ARSENIC, TOTAL (UG/L)	**R-MW-2**	**247.3**	**220.5**	**30**	**Yes**	**24**	**0**	**No**	**0.01**	**Param.**
ARSENIC, TOTAL (UG/L)	R-MW-6	0.9323	0.3956	30	No	20	15	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-MW-2	13.08	10.22	2000	No	23	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-MW-6	173.3	129	2000	No	23	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-MW-7	297	234	2000	No	24	0	No	0.01	NP (normality)
BERYLLIUM, TOTAL (UG/L)	R-MW-1	0.13	0.06	4	No	18	100	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-2	0.155	0.06	4	No	18	100	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-3	0.155	0.08	4	No	17	88.24	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-4	0.155	0.08	4	No	18	94.44	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-5	0.155	0.06	4	No	18	100	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-6	0.155	0.06	4	No	18	94.44	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-7	0.245	0.08	4	No	19	84.21	No	0.01	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-MW-1	0.041	0.0145	5	No	19	78.95	No	0.01	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-MW-2	0.3143	0.1625	5	No	20	15	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-MW-3	0.31	0.0145	5	No	20	40	No	0.01	NP (normality)
CADMIUM, TOTAL (UG/L)	R-MW-4	0.031	0.0145	5	No	20	80	No	0.01	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-MW-5	0.028	0.0145	5	No	20	100	No	0.01	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-MW-6	0.0265	0.0145	5	No	19	100	No	0.01	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-MW-7	0.031	0.0145	5	No	21	80.95	No	0.01	NP (NDs)
CHROMIUM, TOTAL (UG/L)	R-MW-1	0.2837	0.08432	100	No	22	50	ln(x)	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-MW-2	0.8032	0.4873	100	No	19	10.53	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-MW-3	0.8908	0.5042	100	No	19	10.53	ln(x)	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-MW-4	0.4799	0.1957	100	No	21	42.86	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-MW-5	0.436	0.2095	100	No	21	23.81	ln(x)	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-MW-6	0.3736	0.1017	100	No	20	50	ln(x)	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-MW-7	0.48	0.15	100	No	23	52.17	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-1	0.75	0.36	6	No	18	88.89	No	0.01	NP (NDs)
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COBALT, TOTAL (UG/L)	R-MW-3	0.6	0.36	6	No	18	94.44	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-4	0.75	0.36	6	No	18	83.33	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-5	0.75	0.365	6	No	18	88.89	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-6	0.75	0.36	6	No	17	94.12	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-7	0.92	0.36	6	No	19	78.95	No	0.01	NP (NDs)
FLUORIDE, TOTAL (MG/L)	R-MW-2	1.085	0.8356	4	No	28	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-MW-5	0.152	0.1153	4	No	26	19.23	No	0.01	Param.
LEAD, TOTAL (UG/L)	R-MW-1	2.3	1.25	15	No	21	100	No	0.01	NP (NDs)
LEAD, TOTAL (UG/L)	R-MW-2	11.58	6.857	15	No	22	9.091	No	0.01	Param.
LEAD, TOTAL (UG/L)	R-MW-3	4.738	3.245	15	No	22	45.45	No	0.01	Param.
LEAD, TOTAL (UG/L)	R-MW-4	2.15	1.25	15	No	21	95.24	No	0.01	NP (NDs)
LEAD, TOTAL (UG/L)	R-MW-5	2.3	1.25	15	No	21	85.71	No	0.01	NP (NDs)
LEAD, TOTAL (UG/L)	R-MW-6	2.6	1.25	15	No	21	80.95	No	0.01	NP (NDs)
LEAD, TOTAL (UG/L)	R-MW-7	2.3	1.25	15	No	22	90.91	No	0.01	NP (NDs)
LITHIUM, TOTAL (UG/L)	R-MW-1	2.95	2.3	64.7	No	24	87.5	No	0.01	NP (NDs)
LITHIUM, TOTAL (UG/L)	R-MW-2	3.5	2.3	64.7	No	24	75	No	0.01	NP (NDs)
LITHIUM, TOTAL (UG/L)	R-MW-5	6.153	4.362	64.7	No	24	41.67	No	0.01	Param.

Confidence Interval

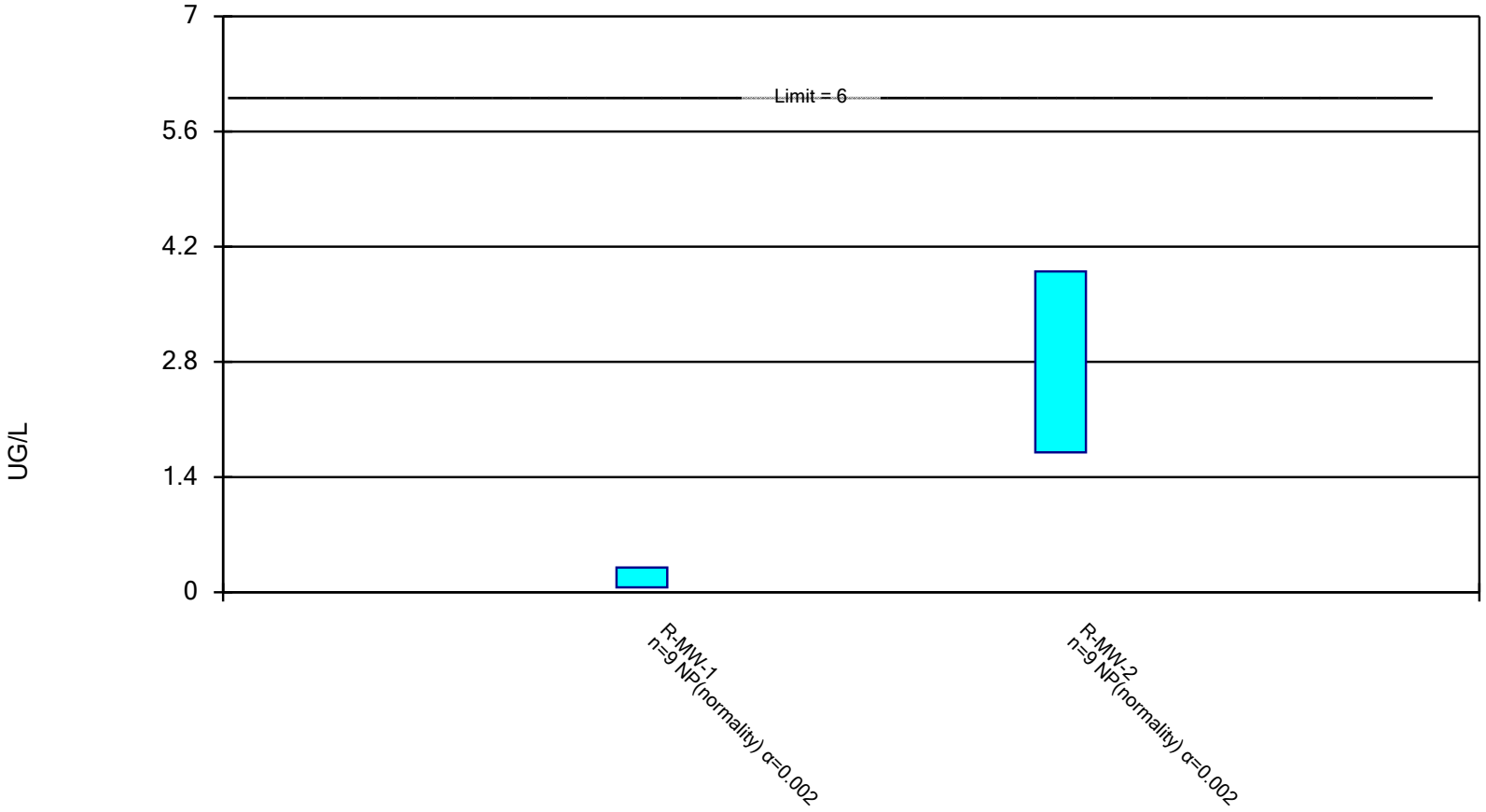
Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 8/28/2025, 10:23 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
LITHIUM, TOTAL (UG/L)	R-MW-6	5.3	2.3	64.7	No	23	60.87	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-1	0.048	0.0195	2	No	16	93.75	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-2	0.048	0.0195	2	No	16	93.75	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-3	0.048	0.0195	2	No	16	93.75	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-4	0.048	0.0195	2	No	16	93.75	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-5	0.048	0.0195	2	No	16	93.75	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-6	0.048	0.0195	2	No	16	100	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-7	0.048	0.0195	2	No	17	100	No	0.01	NP (NDs)
MOLYBDENUM, TOTAL (UG/L)	R-MW-1	90.23	52.62	100	No	24	0	No	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	**R-MW-2**	**194.6**	**142.7**	**100**	**Yes**	**24**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	**R-MW-3**	**856.9**	**720.6**	**100**	**Yes**	**24**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	R-MW-5	1	0.45	100	No	24	83.33	No	0.01	NP (NDs)
MOLYBDENUM, TOTAL (UG/L)	R-MW-6	1.67	0.7989	100	No	24	37.5	ln(x)	0.01	Param.
RADIUM [226 + 228] (PCI/L)	R-MW-1	1.09	0.772	5	No	24	95.83	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-MW-3	1.036	0.765	5	No	23	95.65	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-MW-4	1.11	0.696	5	No	24	83.33	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-MW-5	1.112	0.6855	5	No	24	83.33	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-MW-6	1.099	0.646	5	No	24	79.17	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-MW-7	0.8555	0.688	5	No	23	100	No	0.01	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-MW-2	1.873	1.104	50	No	24	0	ln(x)	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-MW-3	0.646	0.5296	50	No	23	0	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-MW-4	0.12	0.09	50	No	24	70.83	No	0.01	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-MW-5	0.09	0.06	50	No	24	100	No	0.01	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-MW-6	0.4386	0.2419	50	No	23	13.04	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-MW-7	0.097	0.06	50	No	25	84	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-1	0.25	0.0465	2	No	17	94.12	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-2	0.25	0.026	2	No	18	100	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-3	0.25	0.026	2	No	17	100	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-4	0.25	0.026	2	No	17	100	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-5	0.25	0.026	2	No	17	100	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-6	0.25	0.0465	2	No	17	94.12	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-7	0.25	0.0465	2	No	18	94.44	No	0.01	NP (NDs)

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



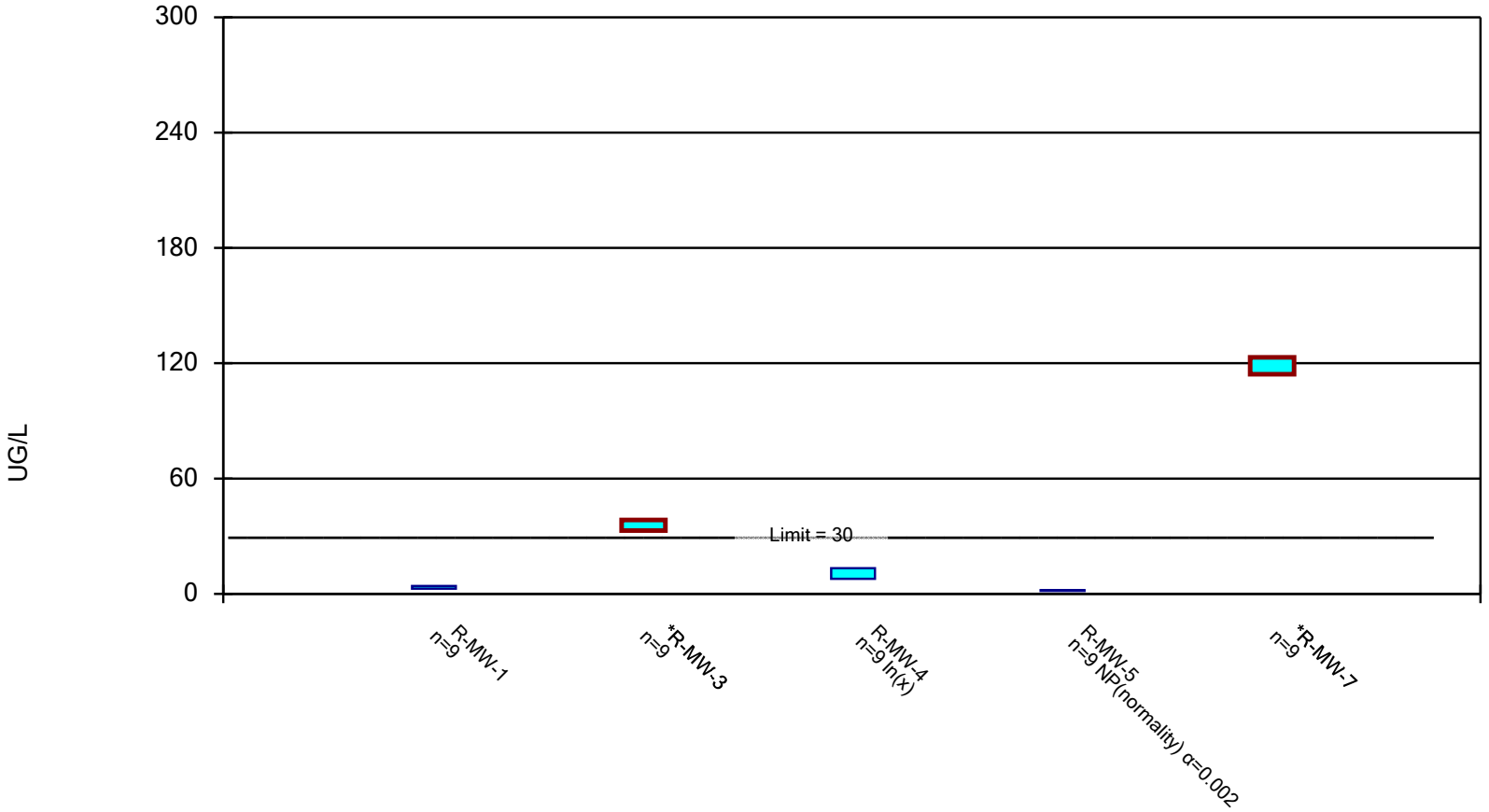
Constituent: ANTIMONY, TOTAL Analysis Run 8/28/2025 10:28 AM View: SSL Post-Closure

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



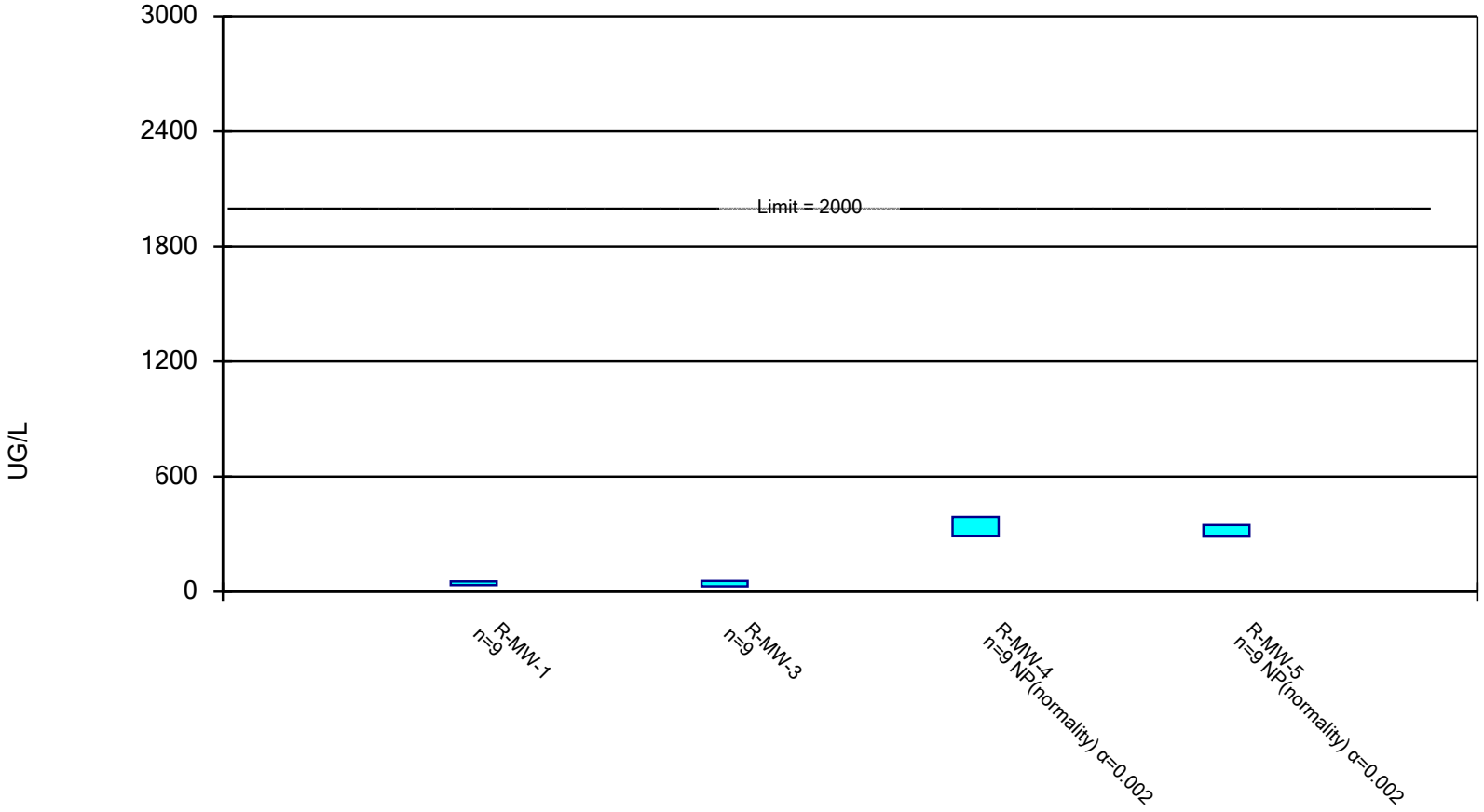
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



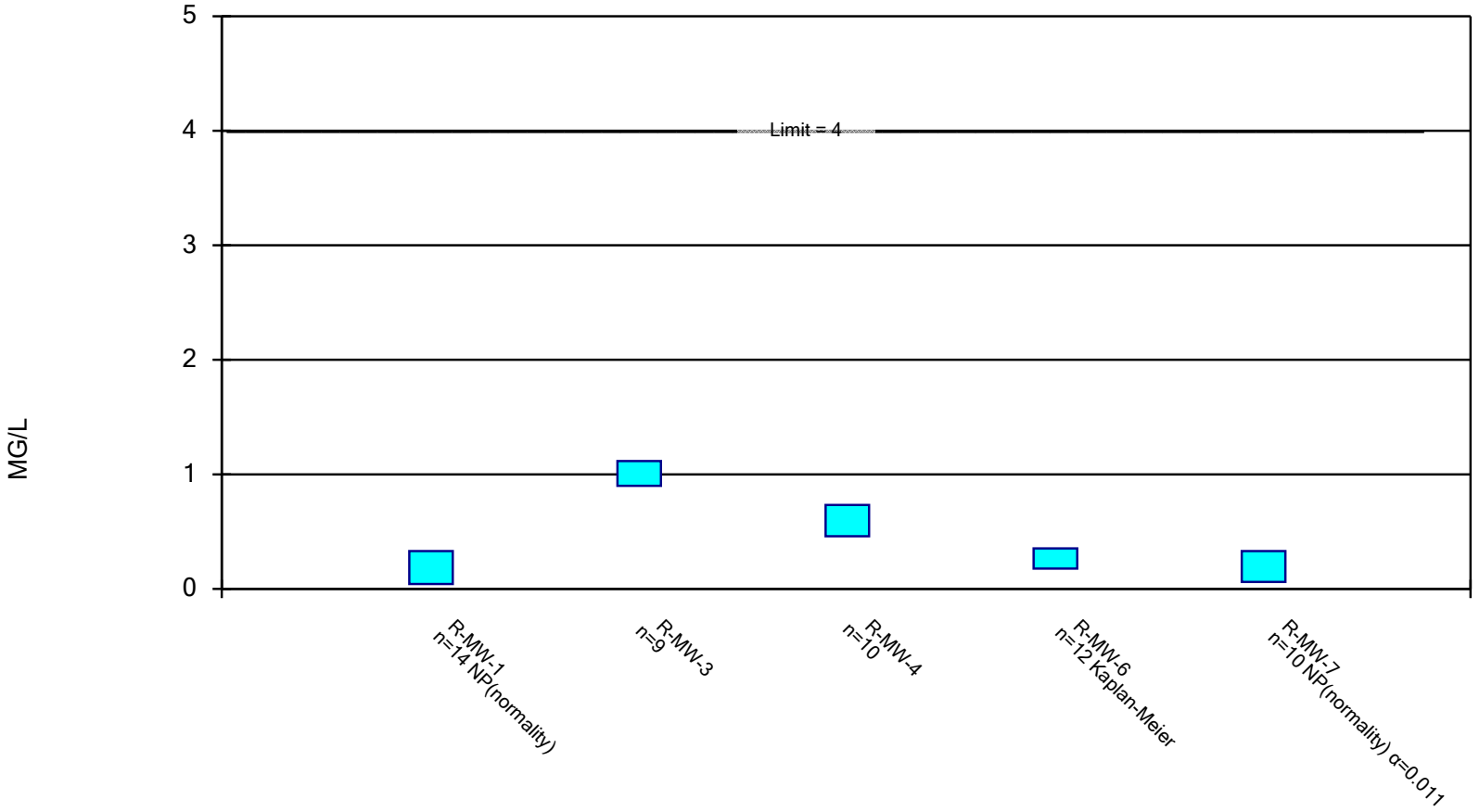
Constituent: BARIUM, TOTAL Analysis Run 8/28/2025 10:28 AM View: SSL Post-Closure

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



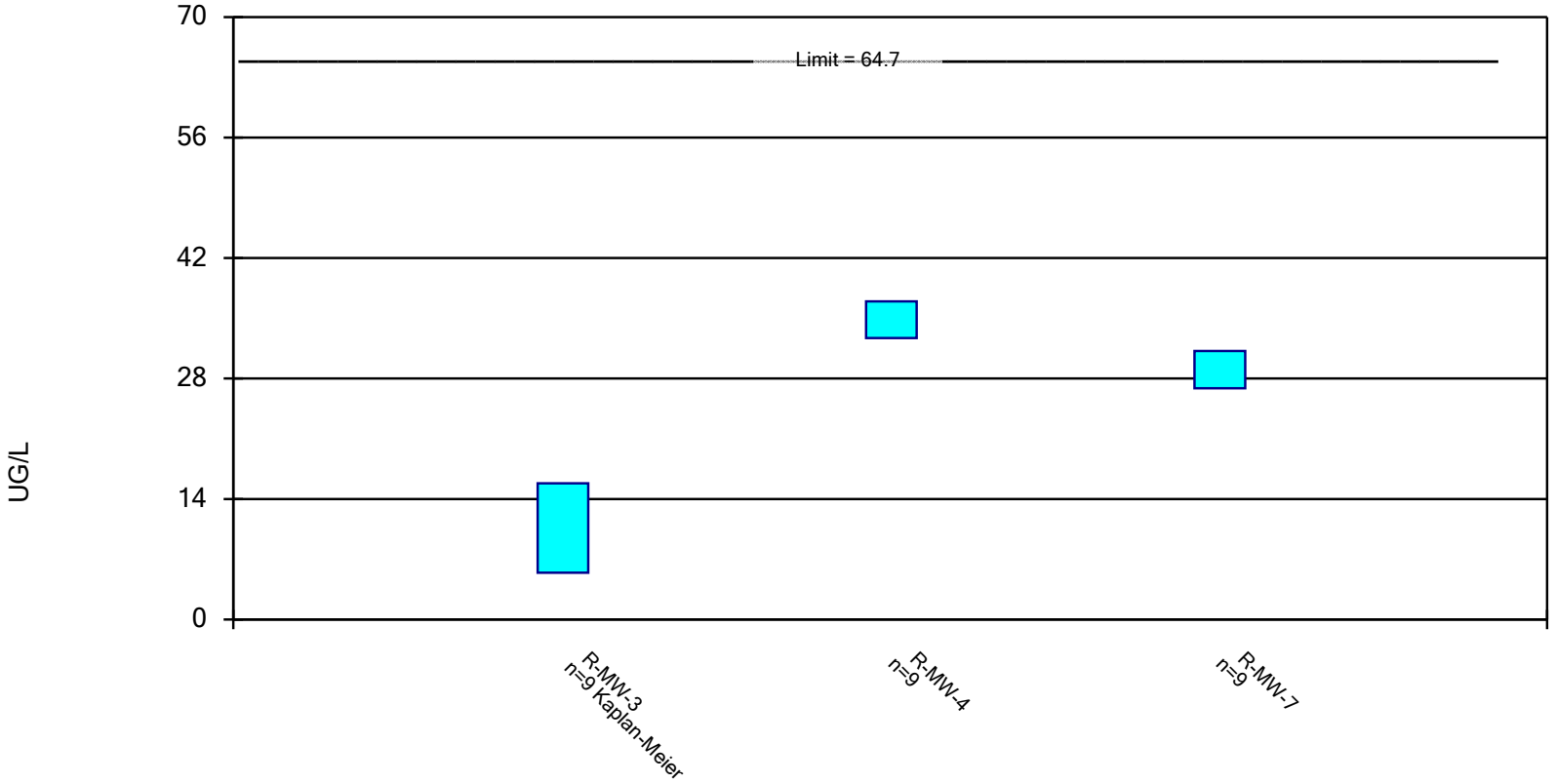
Constituent: FLUORIDE, TOTAL Analysis Run 8/28/2025 10:28 AM View: SSL Post-Closure

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



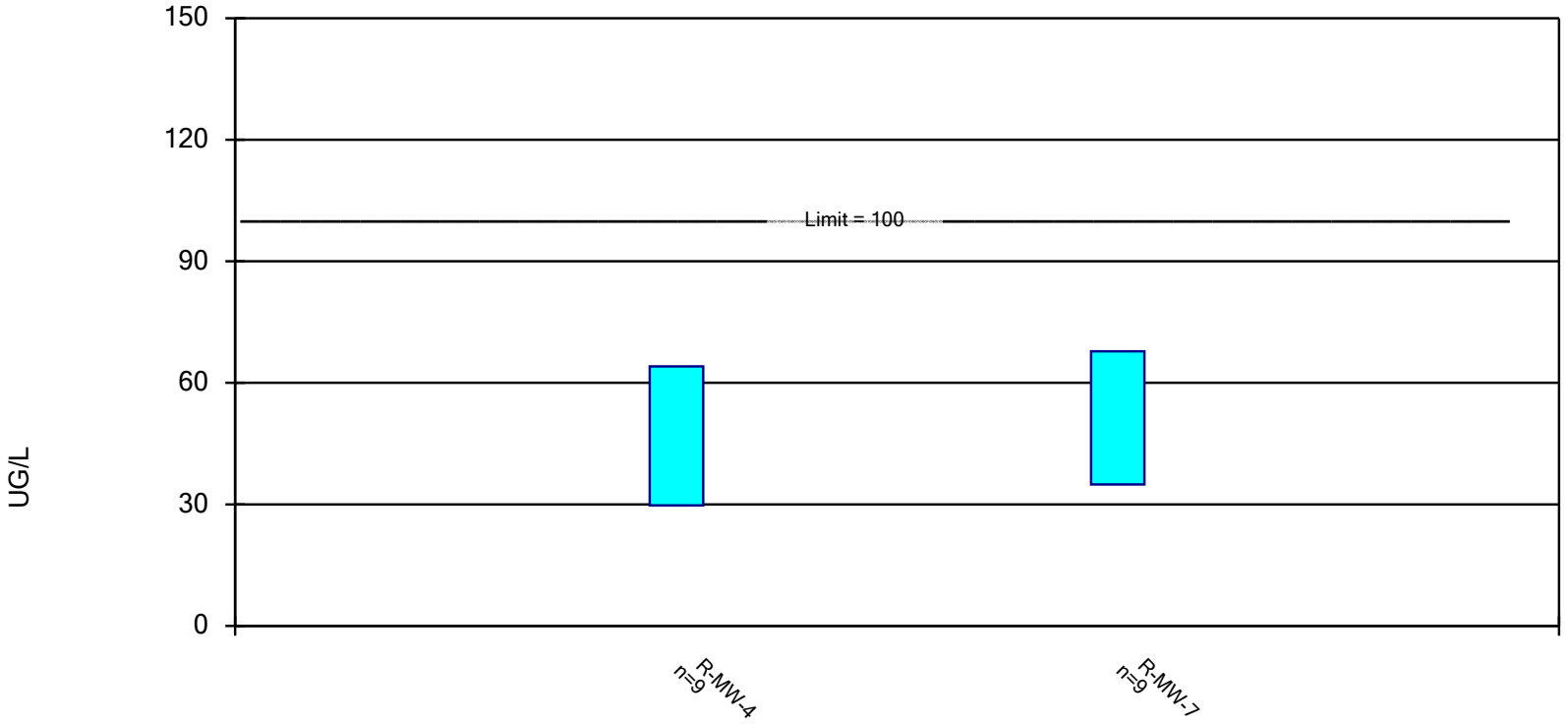
Constituent: LITHIUM, TOTAL Analysis Run 8/28/2025 10:28 AM View: SSL Post-Closure

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



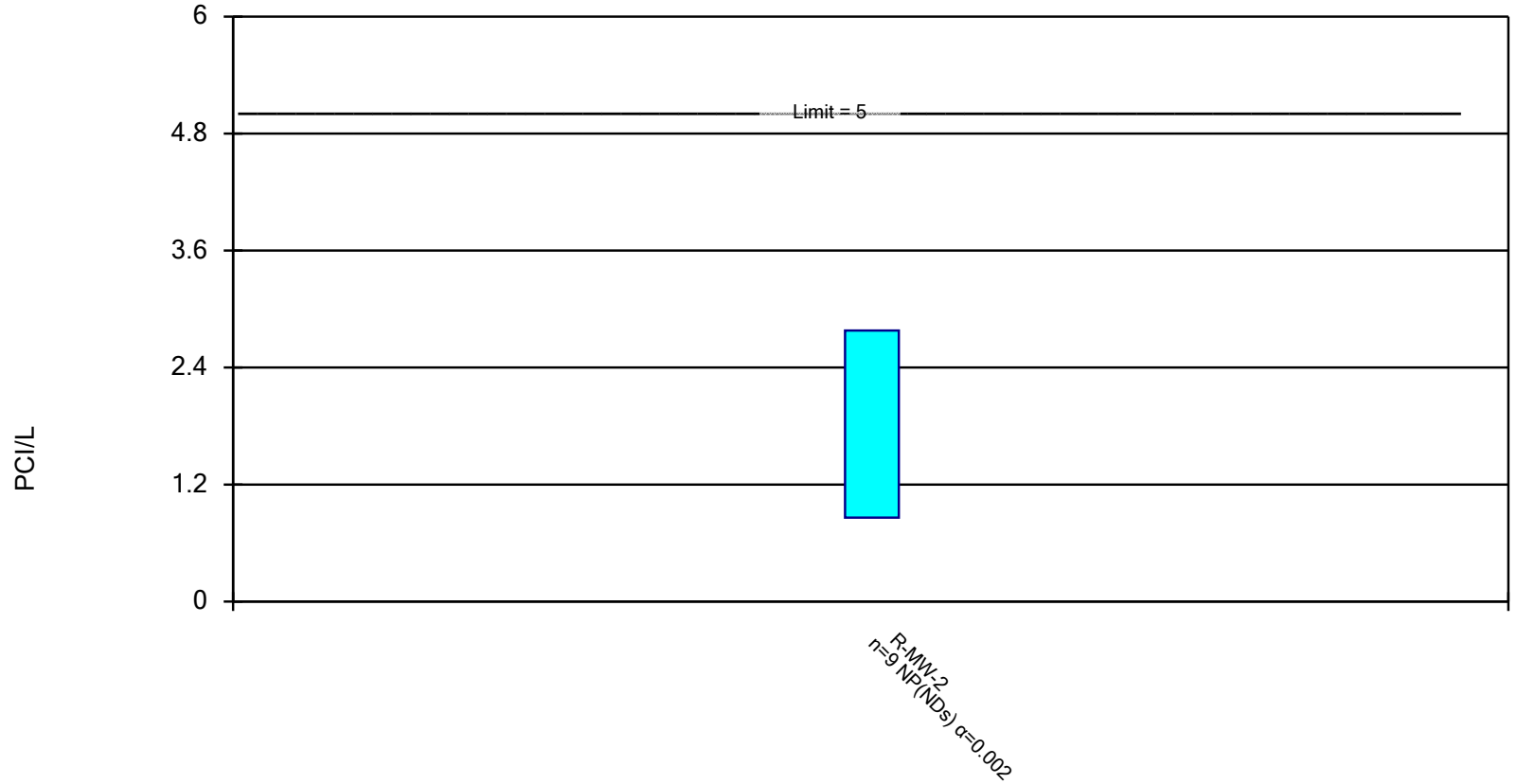
Constituent: MOLYBDENUM, TOTAL Analysis Run 8/28/2025 10:28 AM View: SSL Post-Closure

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



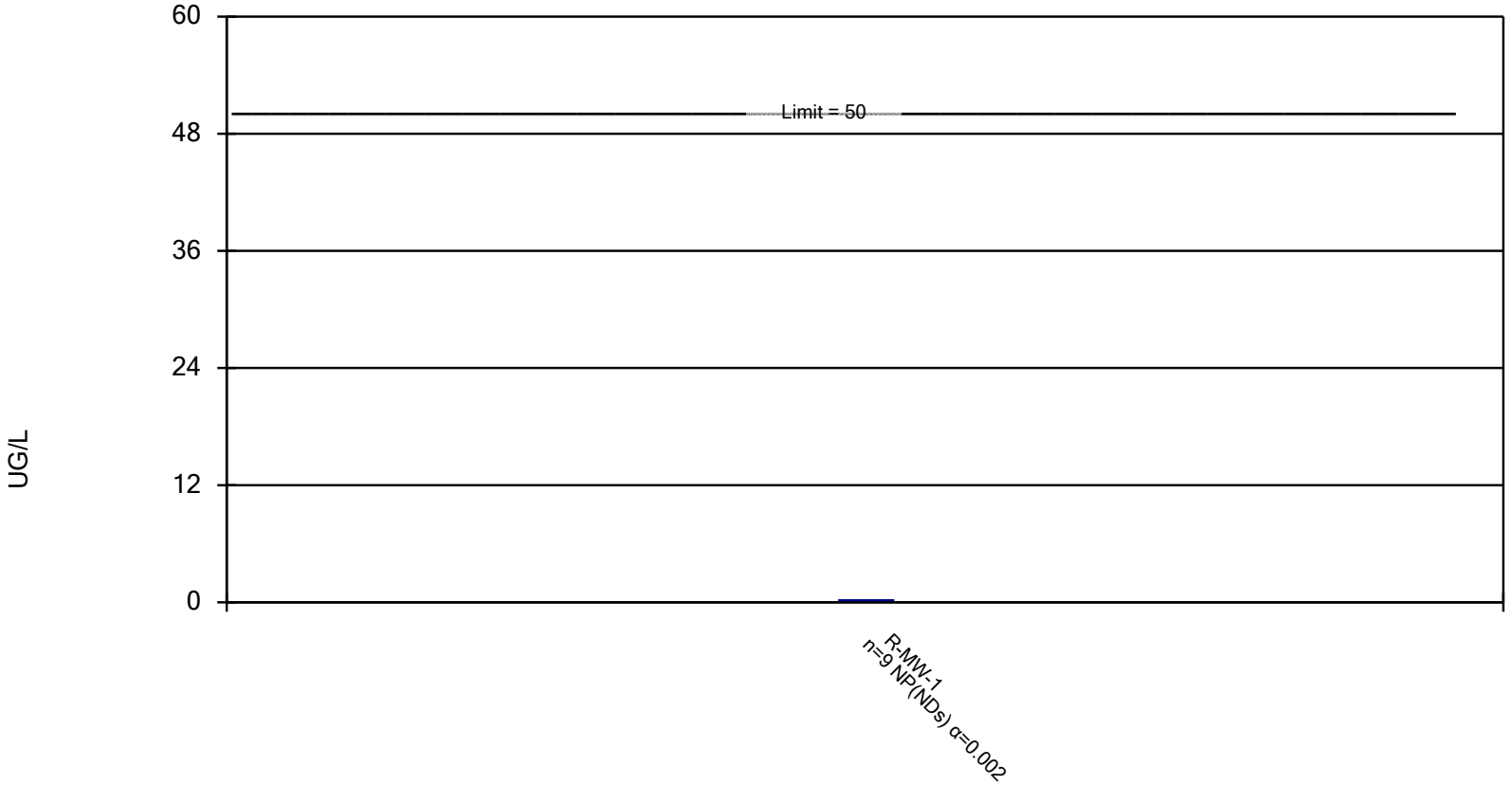
Constituent: RADIUM [226 + 228] Analysis Run 8/28/2025 10:28 AM View: SSL Post-Closure

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: SELENIUM, TOTAL Analysis Run 8/28/2025 10:28 AM View: SSL Post-Closure

Rush Island E.C. Client: Ameren Data: RIEC DATA

Confidence Interval

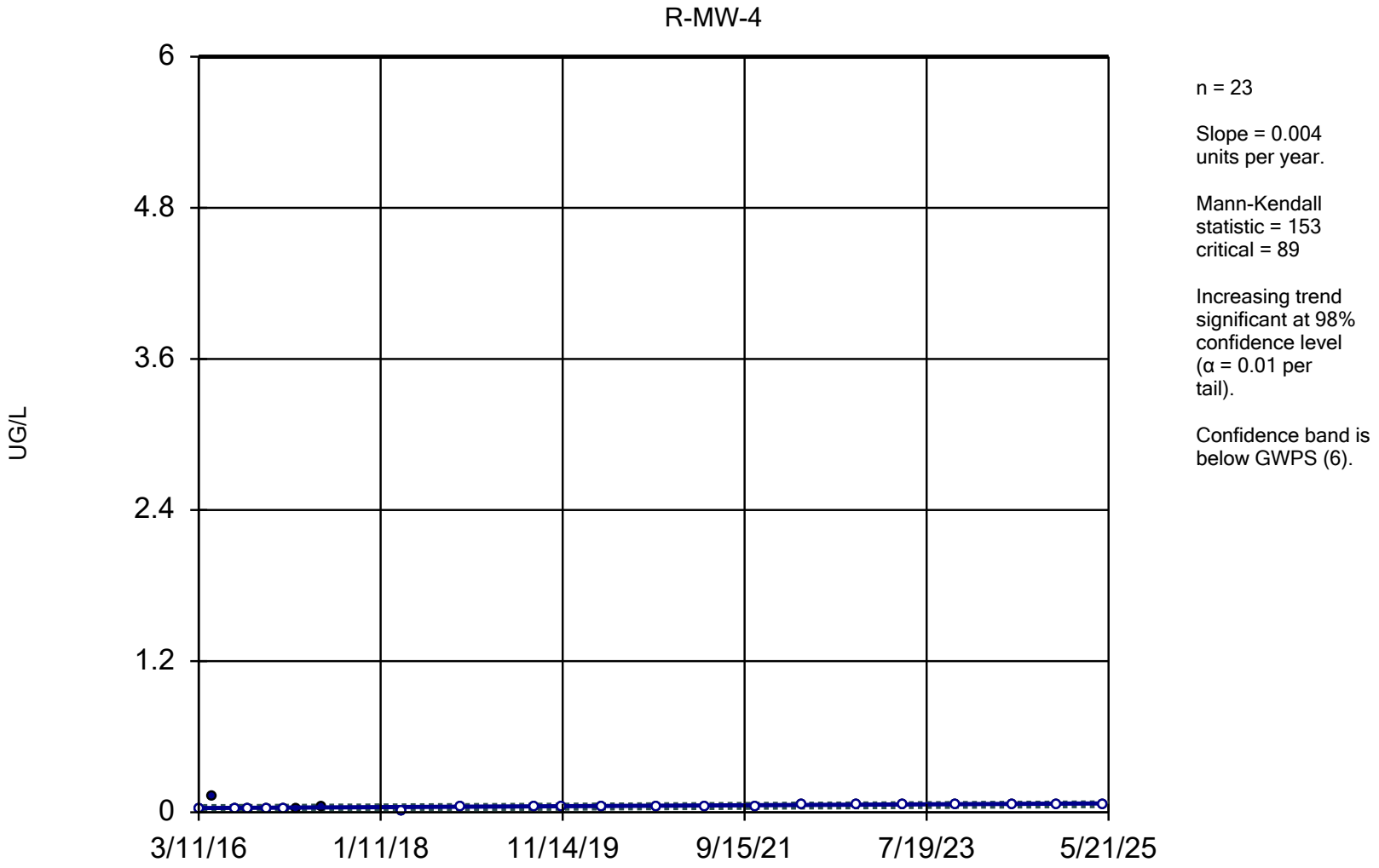
Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 8/28/2025, 10:29 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
ANTIMONY, TOTAL (UG/L)	R-MW-1	0.3	0.06	6	No	9	11.11	No	0.002	NP (normality)
ANTIMONY, TOTAL (UG/L)	R-MW-2	3.9	1.7	6	No	9	0	No	0.002	NP (normality)
ARSENIC, TOTAL (UG/L)	R-MW-1	4.071	2.729	30	No	9	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	**R-MW-3**	**38.43**	**32.93**	**30**	**Yes**	**9**	**0**	**No**	**0.01**	**Param.**
ARSENIC, TOTAL (UG/L)	R-MW-4	13.37	7.827	30	No	9	0	ln(x)	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-MW-5	1.9	1.5	30	No	9	0	No	0.002	NP (normality)
ARSENIC, TOTAL (UG/L)	**R-MW-7**	**123.1**	**114.3**	**30**	**Yes**	**9**	**0**	**No**	**0.01**	**Param.**
BARIUM, TOTAL (UG/L)	R-MW-1	53.43	34.02	2000	No	9	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-MW-3	55.4	27.67	2000	No	9	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-MW-4	390	289	2000	No	9	0	No	0.002	NP (normality)
BARIUM, TOTAL (UG/L)	R-MW-5	347	287	2000	No	9	0	No	0.002	NP (normality)
FLUORIDE, TOTAL (MG/L)	R-MW-1	0.33	0.043	4	No	14	50	No	0.01	NP (normality)
FLUORIDE, TOTAL (MG/L)	R-MW-3	1.116	0.8994	4	No	9	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-MW-4	0.7328	0.4592	4	No	10	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-MW-6	0.3529	0.1771	4	No	12	16.67	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-MW-7	0.33	0.06	4	No	10	50	No	0.011	NP (normality)
LITHIUM, TOTAL (UG/L)	R-MW-3	15.81	5.43	64.7	No	9	33.33	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-MW-4	36.97	32.7	64.7	No	9	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-MW-7	31.2	26.87	64.7	No	9	0	No	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	R-MW-4	64.05	29.75	100	No	9	0	No	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	R-MW-7	67.77	34.92	100	No	9	0	No	0.01	Param.
RADIUM [226 + 228] (PCI/L)	R-MW-2	2.78	0.86	5	No	9	100	No	0.002	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-MW-1	0.2	0.09	50	No	9	88.89	No	0.002	NP (NDs)

Appendix C
Sanitas Trending Confidence Bands Statistical Output

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

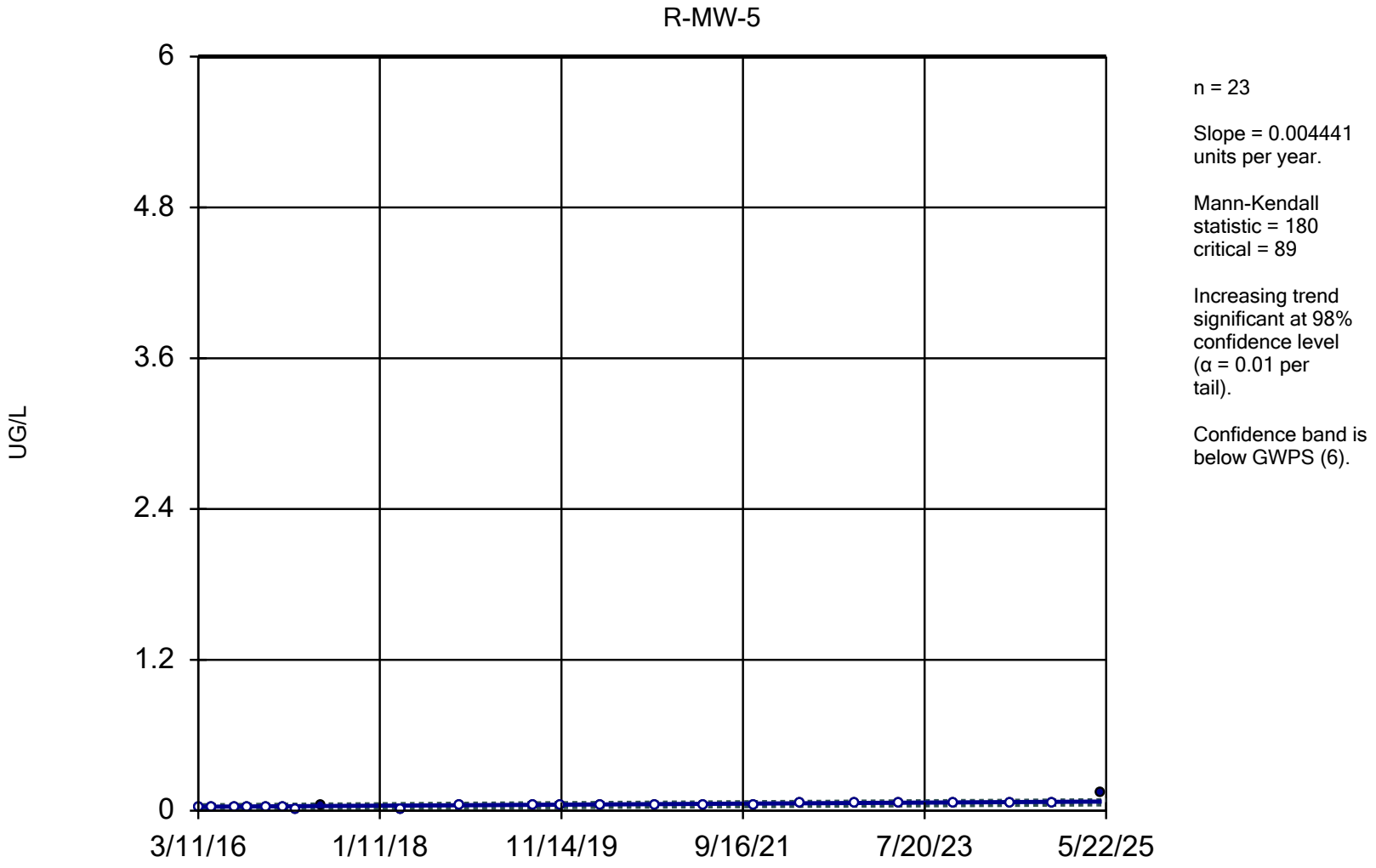


Constituent: ANTIMONY, TOTAL Analysis Run 8/28/2025 10:23 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



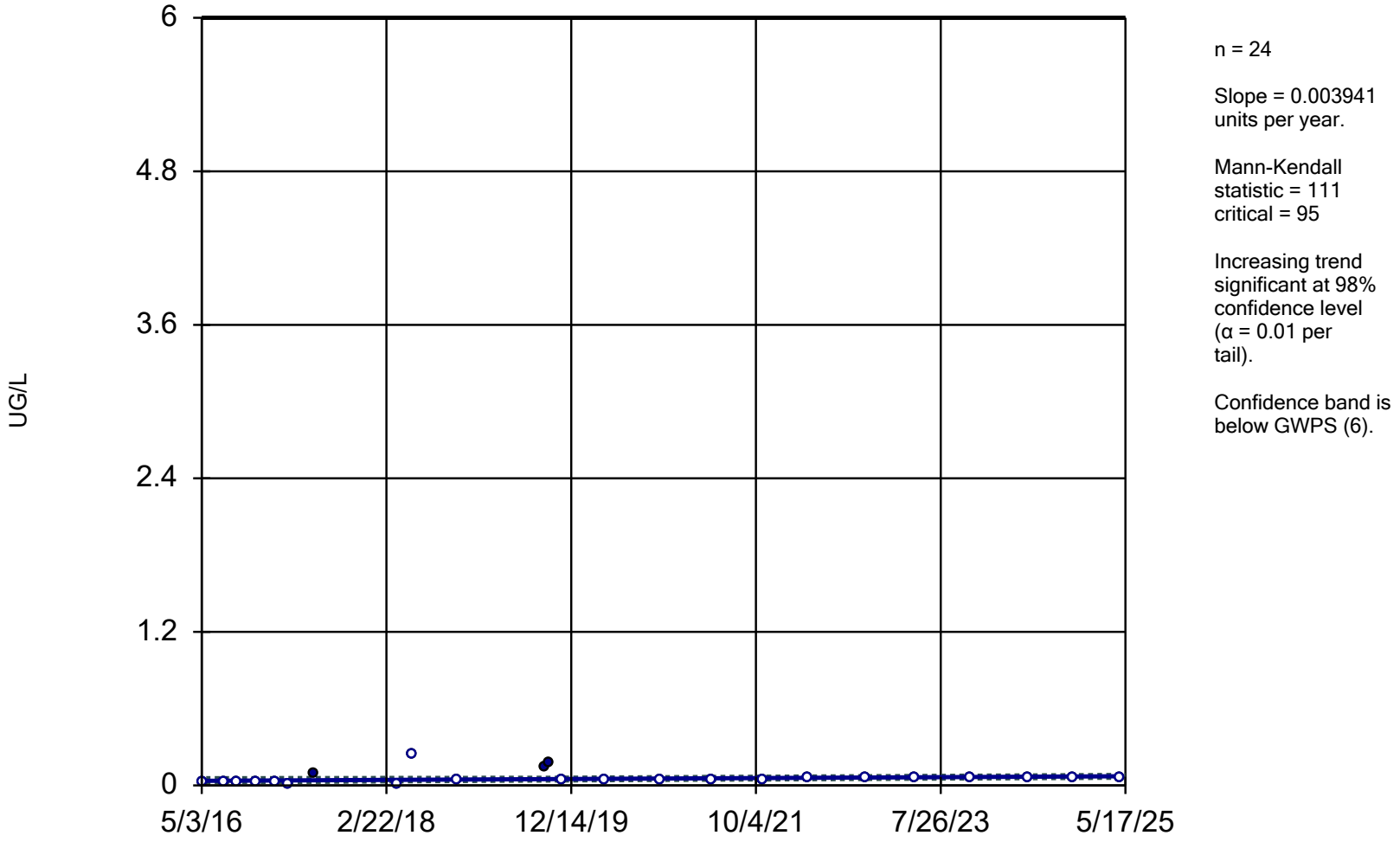
Constituent: ANTIMONY, TOTAL Analysis Run 8/28/2025 10:23 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-7



n = 24

Slope = 0.003941 units per year.

Mann-Kendall statistic = 111
critical = 95

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

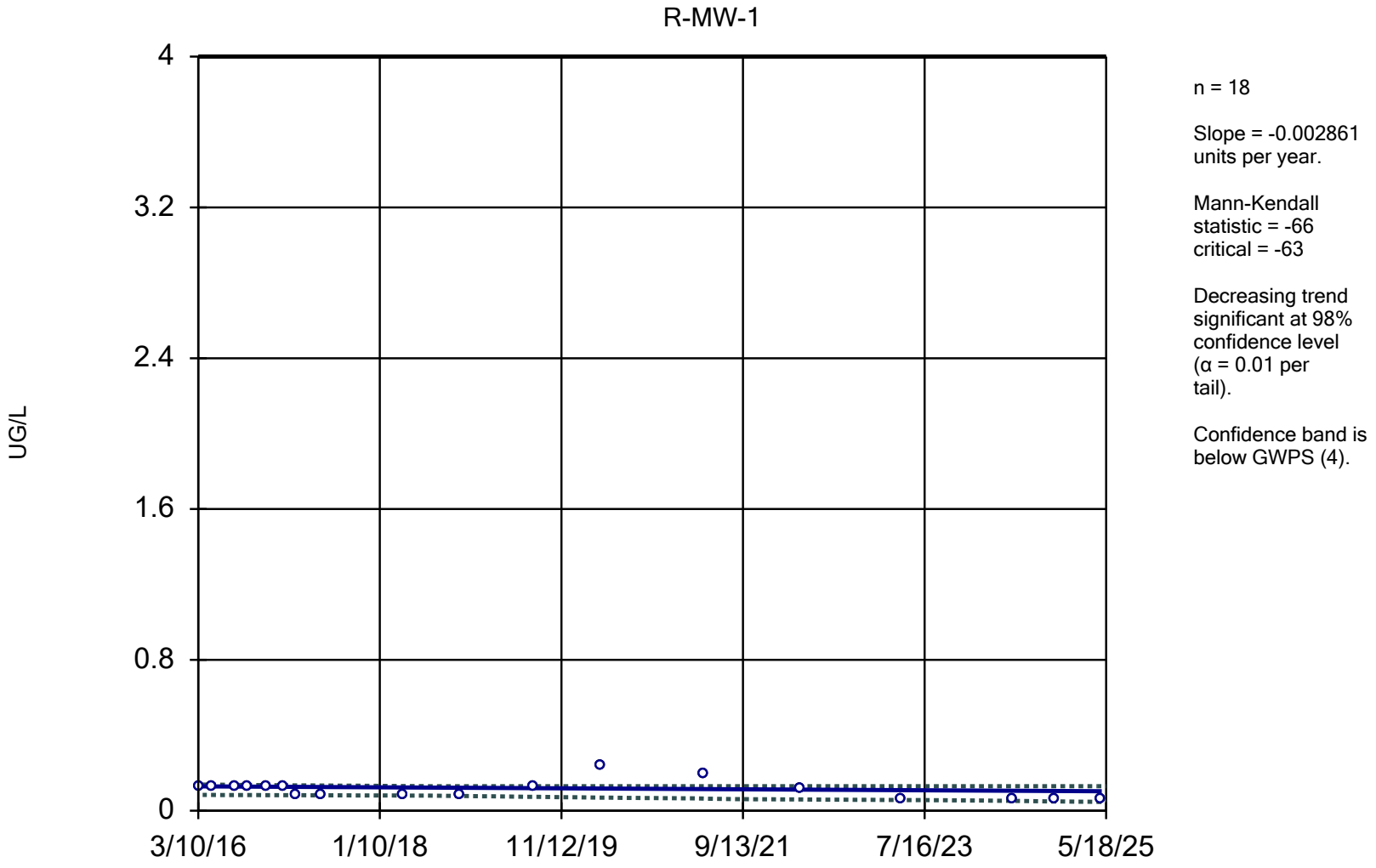
Confidence band is below GWPS (6).

Constituent: ANTIMONY, TOTAL Analysis Run 8/28/2025 10:23 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



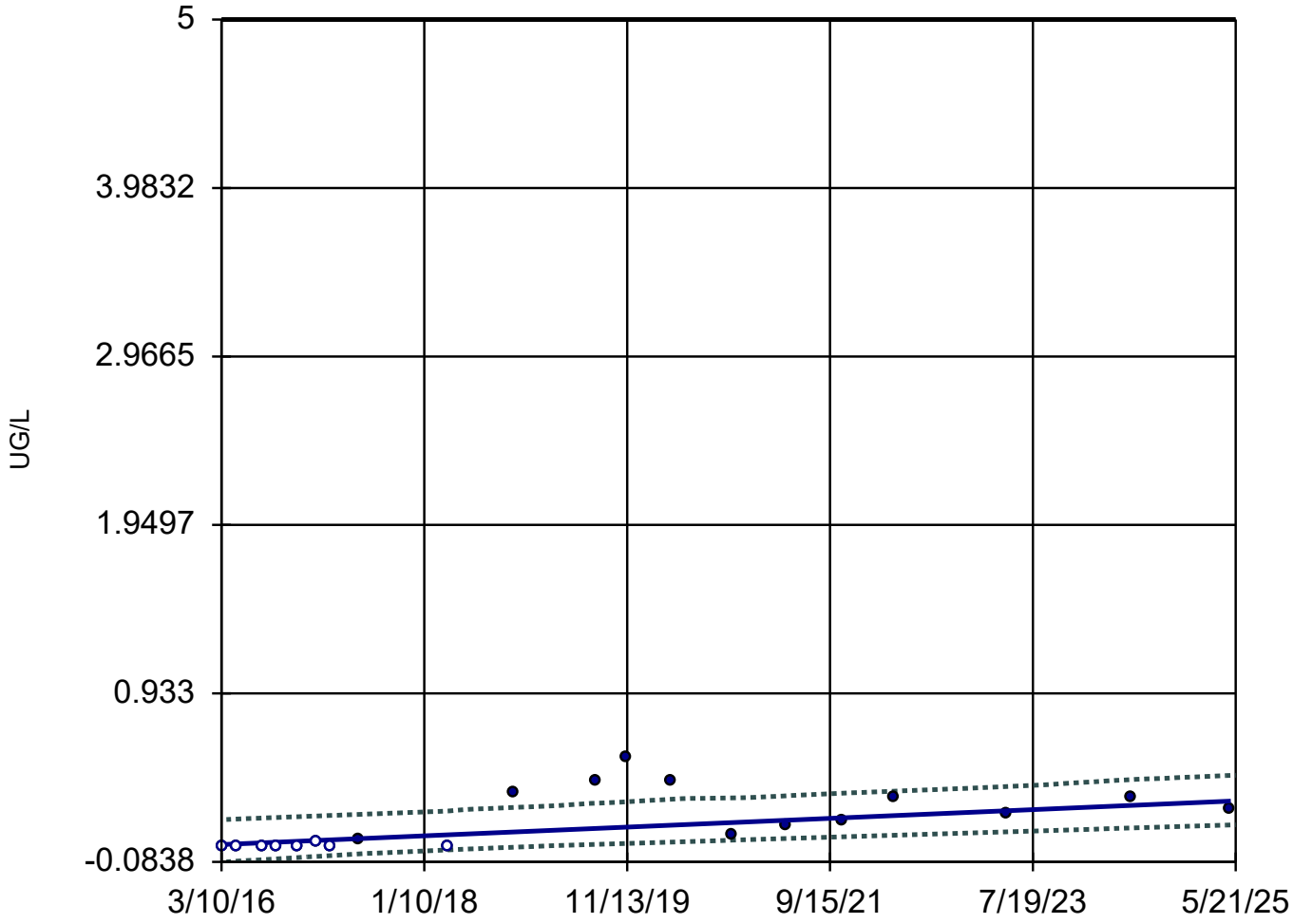
Constituent: BERYLLIUM, TOTAL Analysis Run 8/28/2025 10:23 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-3



n = 20

Slope = 0.02864 units per year.

Mann-Kendall statistic = 88
critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (5).

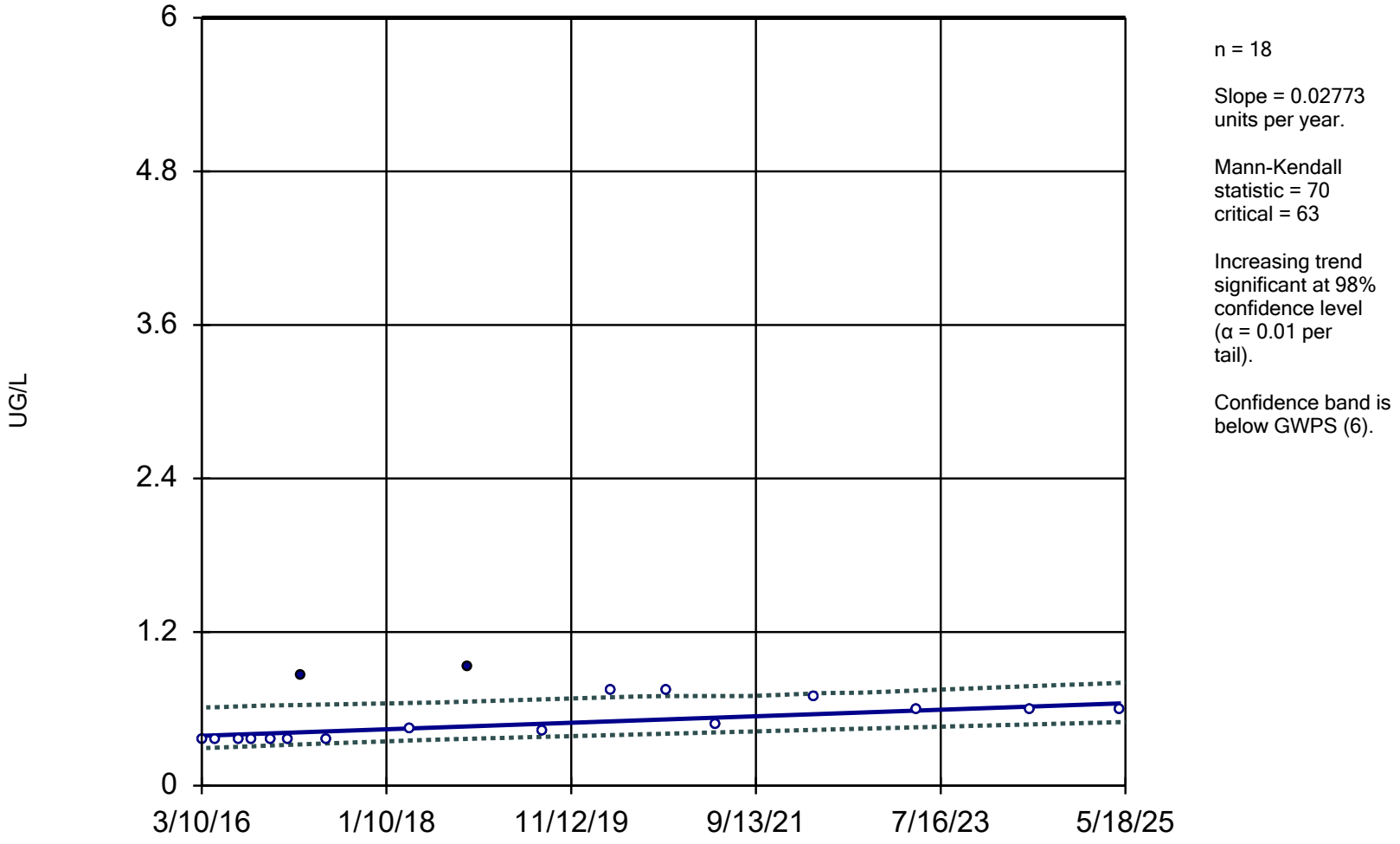
Constituent: CADMIUM, TOTAL Analysis Run 8/28/2025 10:23 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-1



n = 18

Slope = 0.02773 units per year.

Mann-Kendall statistic = 70
critical = 63

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

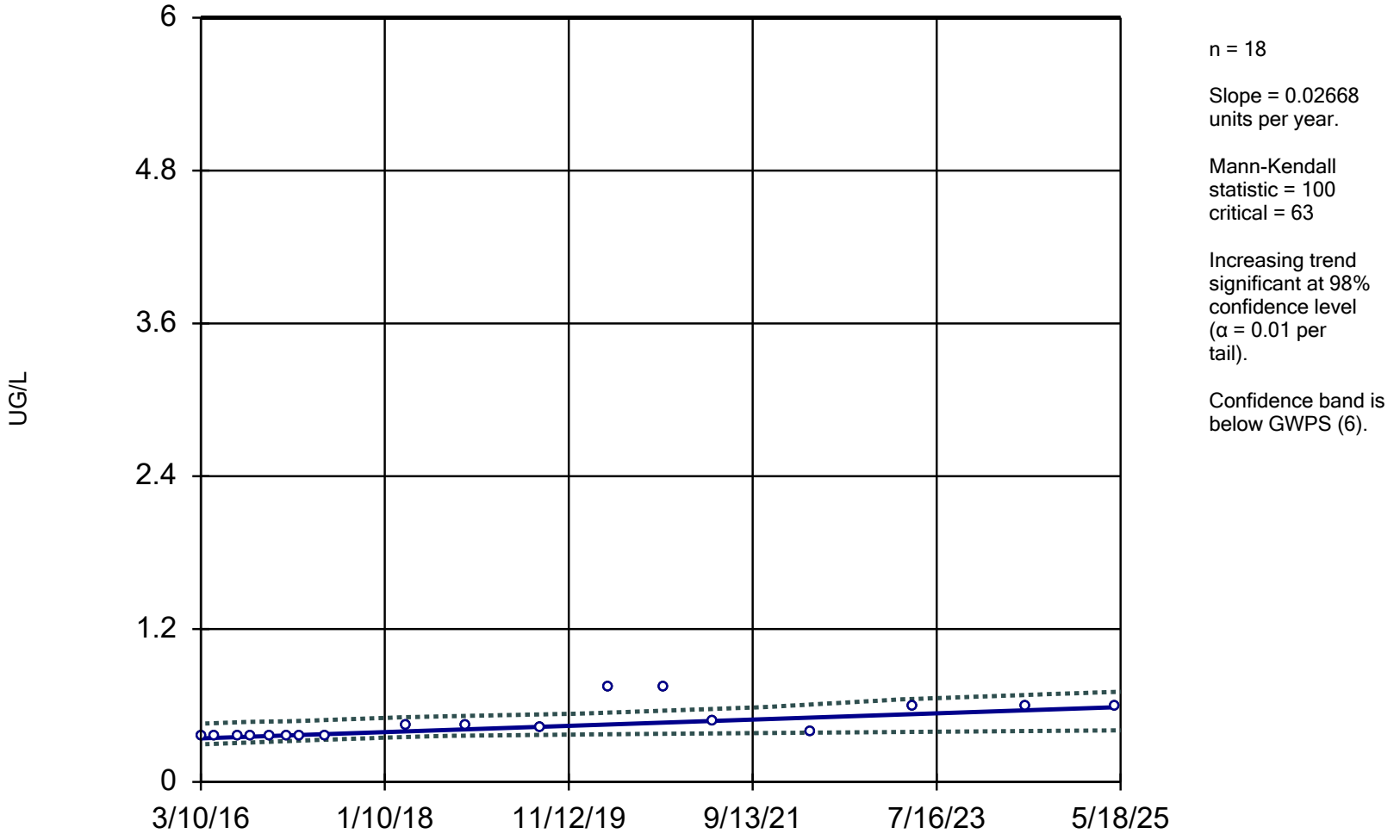
Constituent: COBALT, TOTAL Analysis Run 8/28/2025 10:24 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-2



n = 18

Slope = 0.02668 units per year.

Mann-Kendall statistic = 100
critical = 63

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

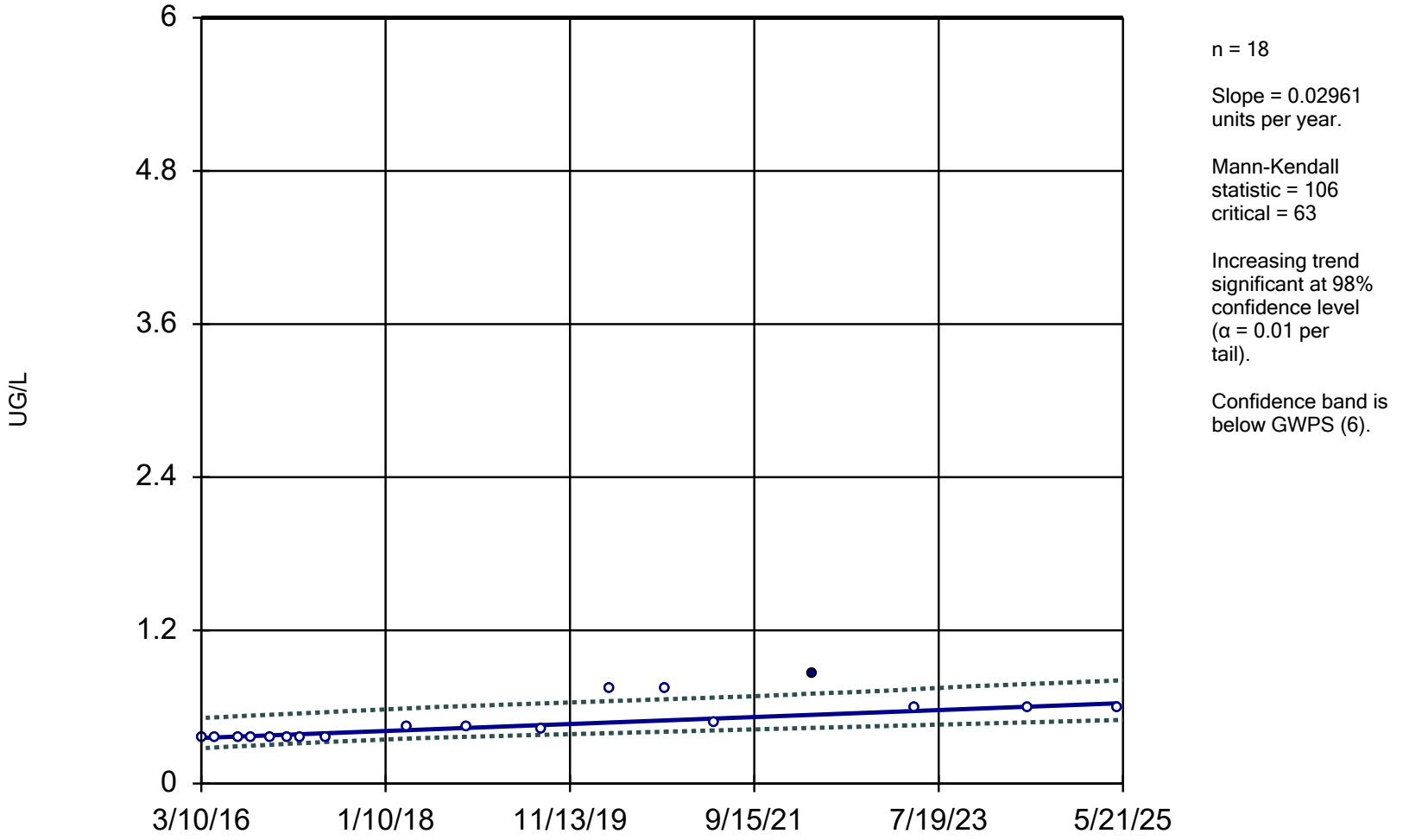
Constituent: COBALT, TOTAL Analysis Run 8/28/2025 10:24 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-3



n = 18

Slope = 0.02961 units per year.

Mann-Kendall statistic = 106
critical = 63

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

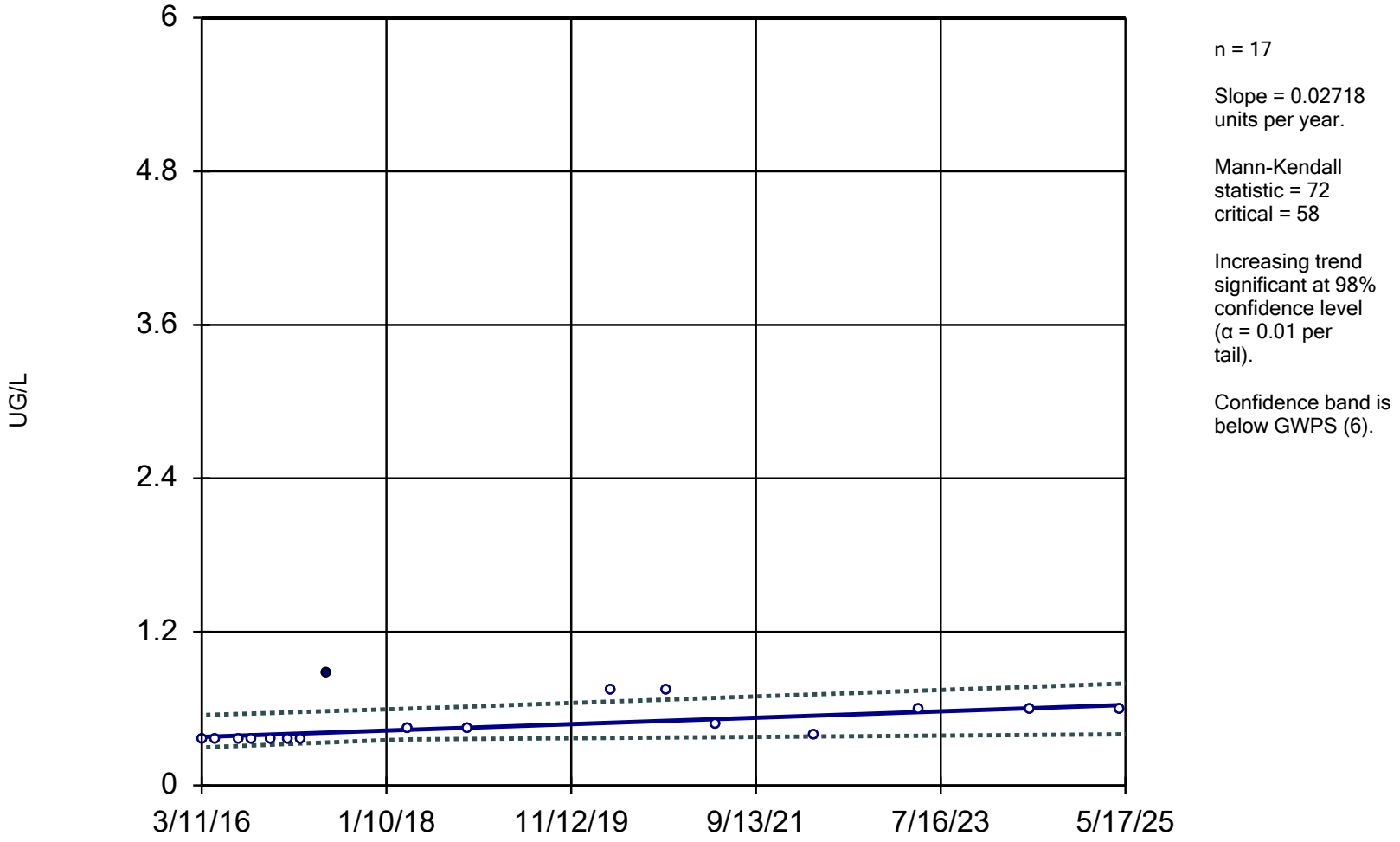
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-6



n = 17

Slope = 0.02718 units per year.

Mann-Kendall statistic = 72
critical = 58

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

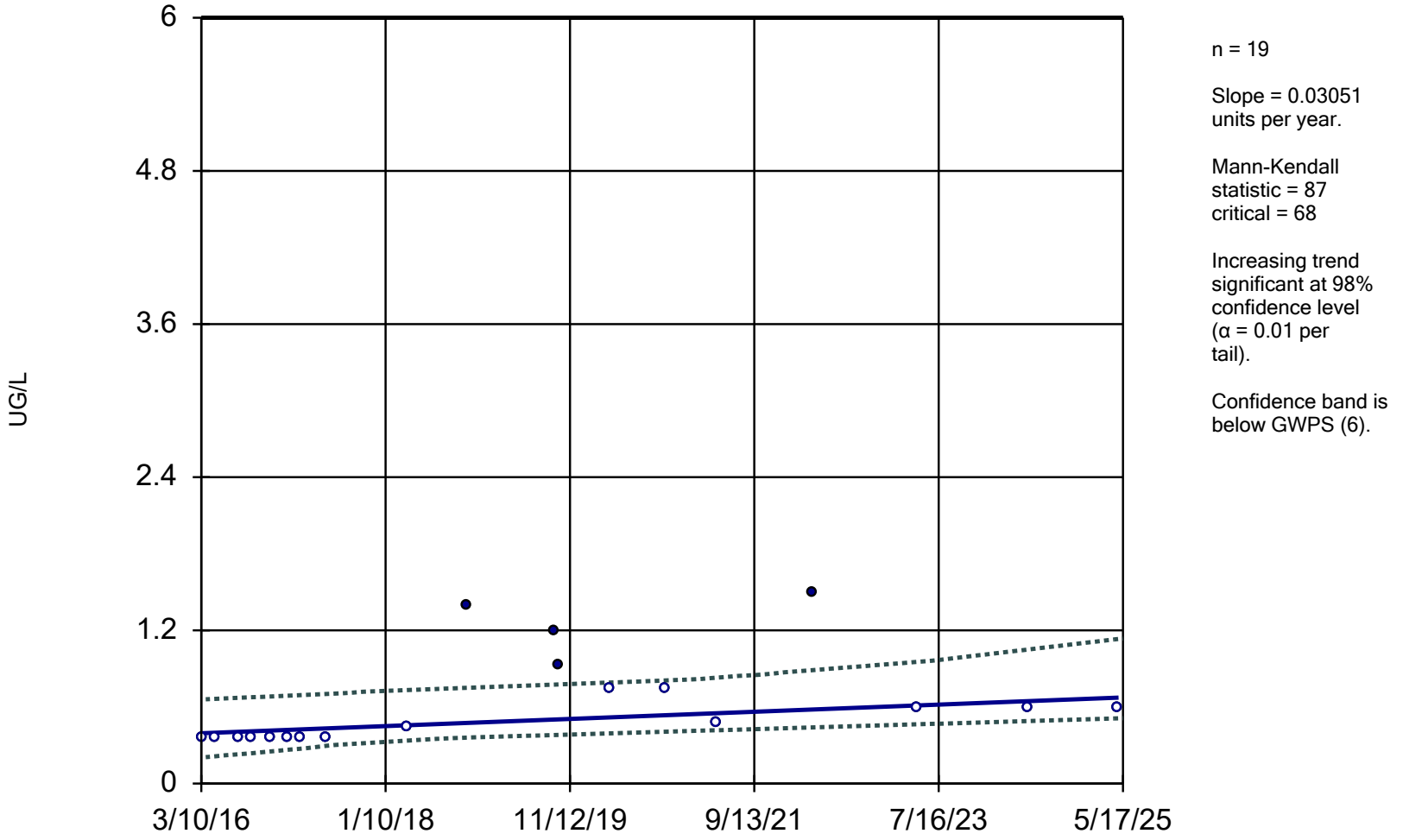
Constituent: COBALT, TOTAL Analysis Run 8/28/2025 10:24 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-7



n = 19

Slope = 0.03051 units per year.

Mann-Kendall statistic = 87
critical = 68

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

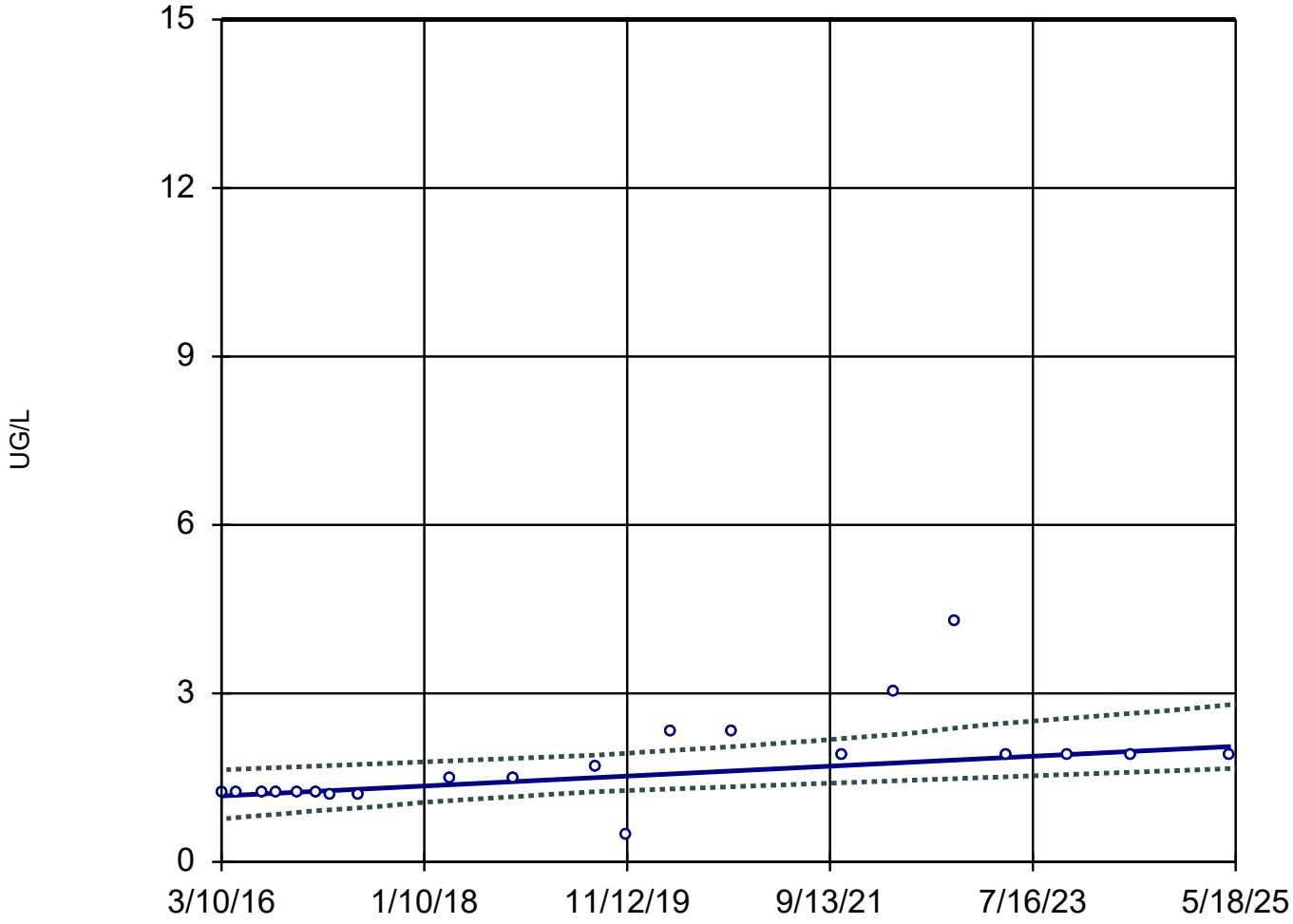
Constituent: COBALT, TOTAL Analysis Run 8/28/2025 10:24 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-1



n = 21

Slope = 0.0959 units per year.

Mann-Kendall statistic = 100
critical = 78

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (15).

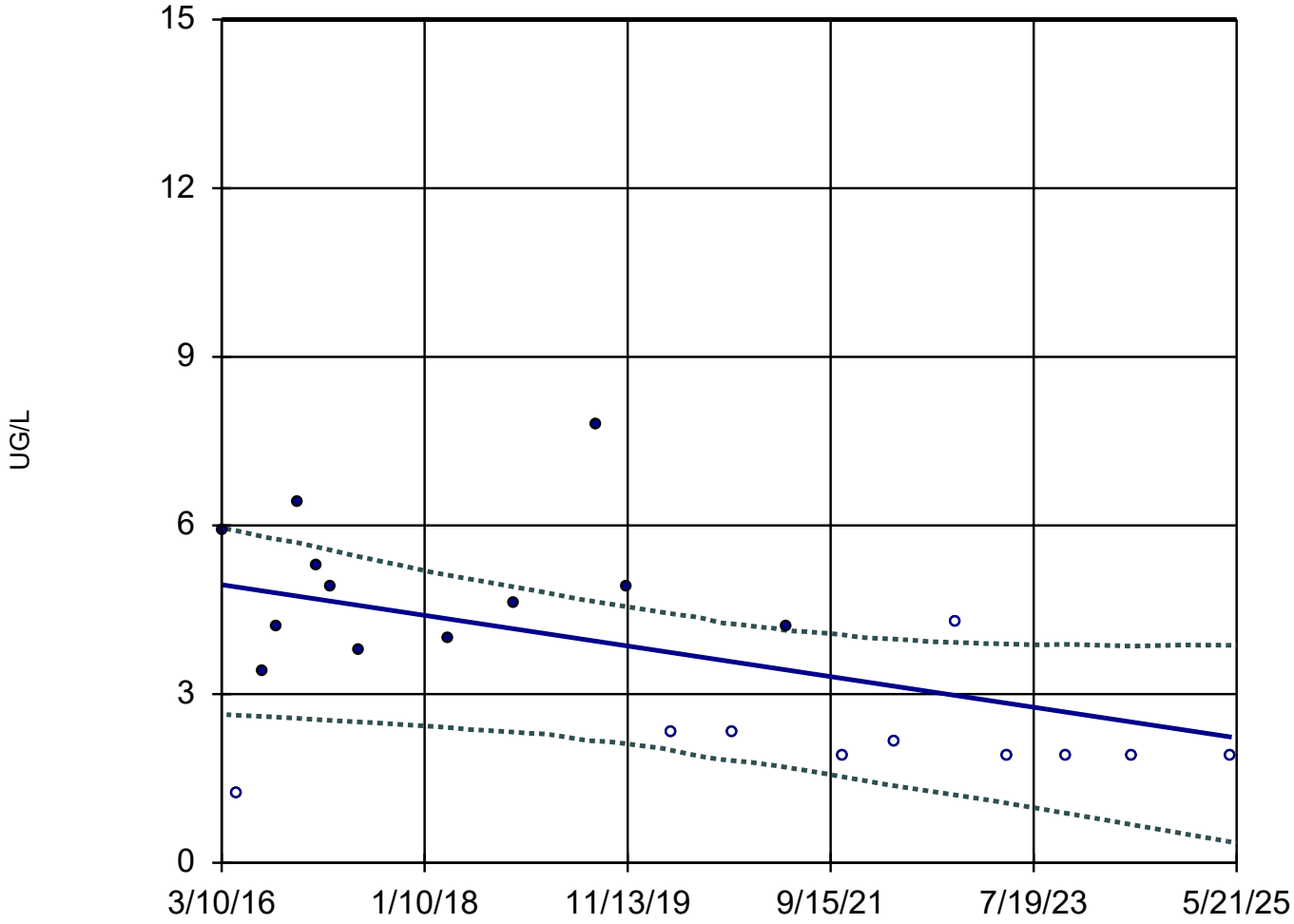
Constituent: LEAD, TOTAL Analysis Run 8/28/2025 10:24 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-3



n = 22

Slope = -0.296 units per year.

Mann-Kendall statistic = -90
critical = -84

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (15).

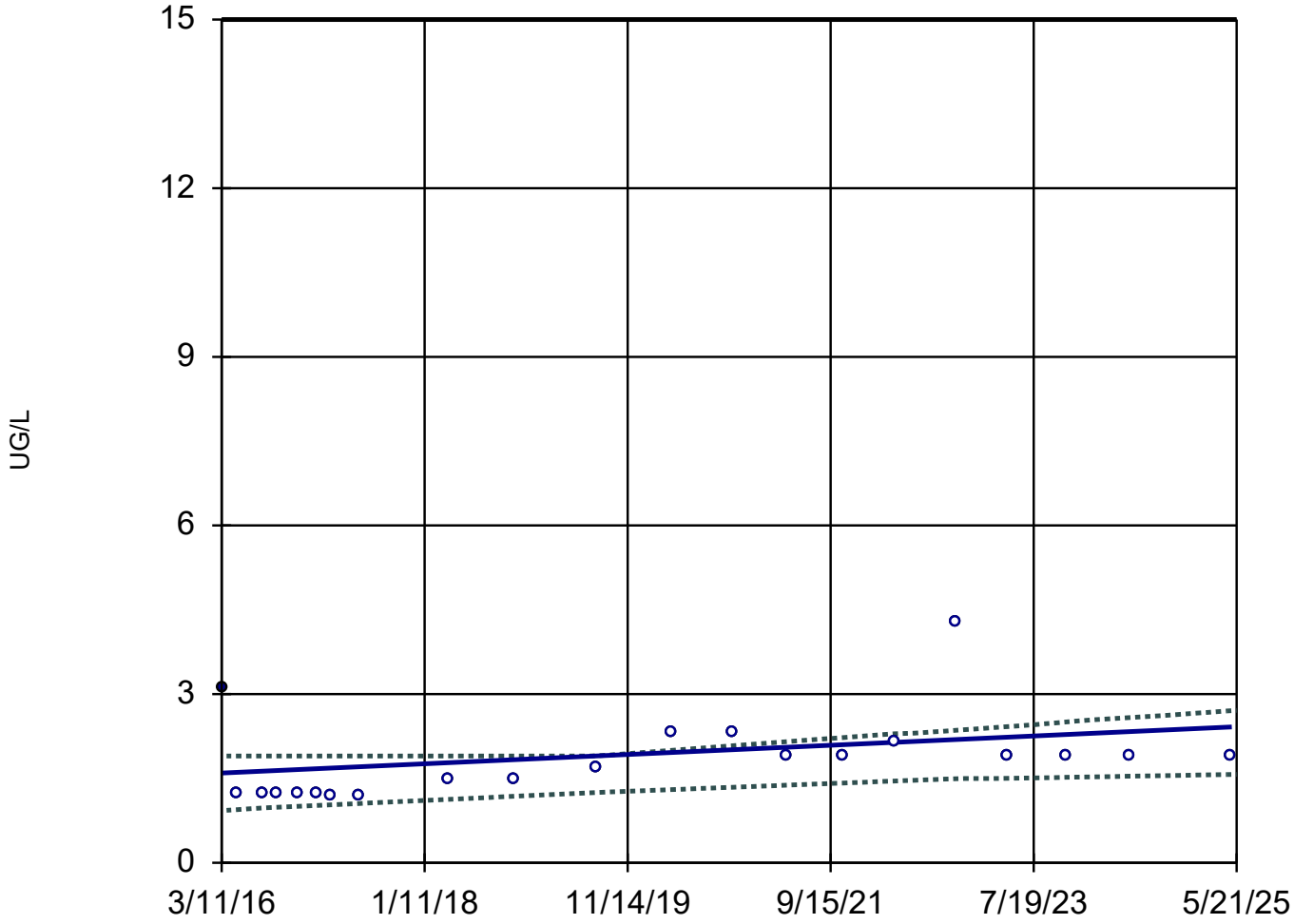
Constituent: LEAD, TOTAL Analysis Run 8/28/2025 10:24 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-4



n = 21

Slope = 0.08933 units per year.

Mann-Kendall statistic = 80
critical = 78

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (15).

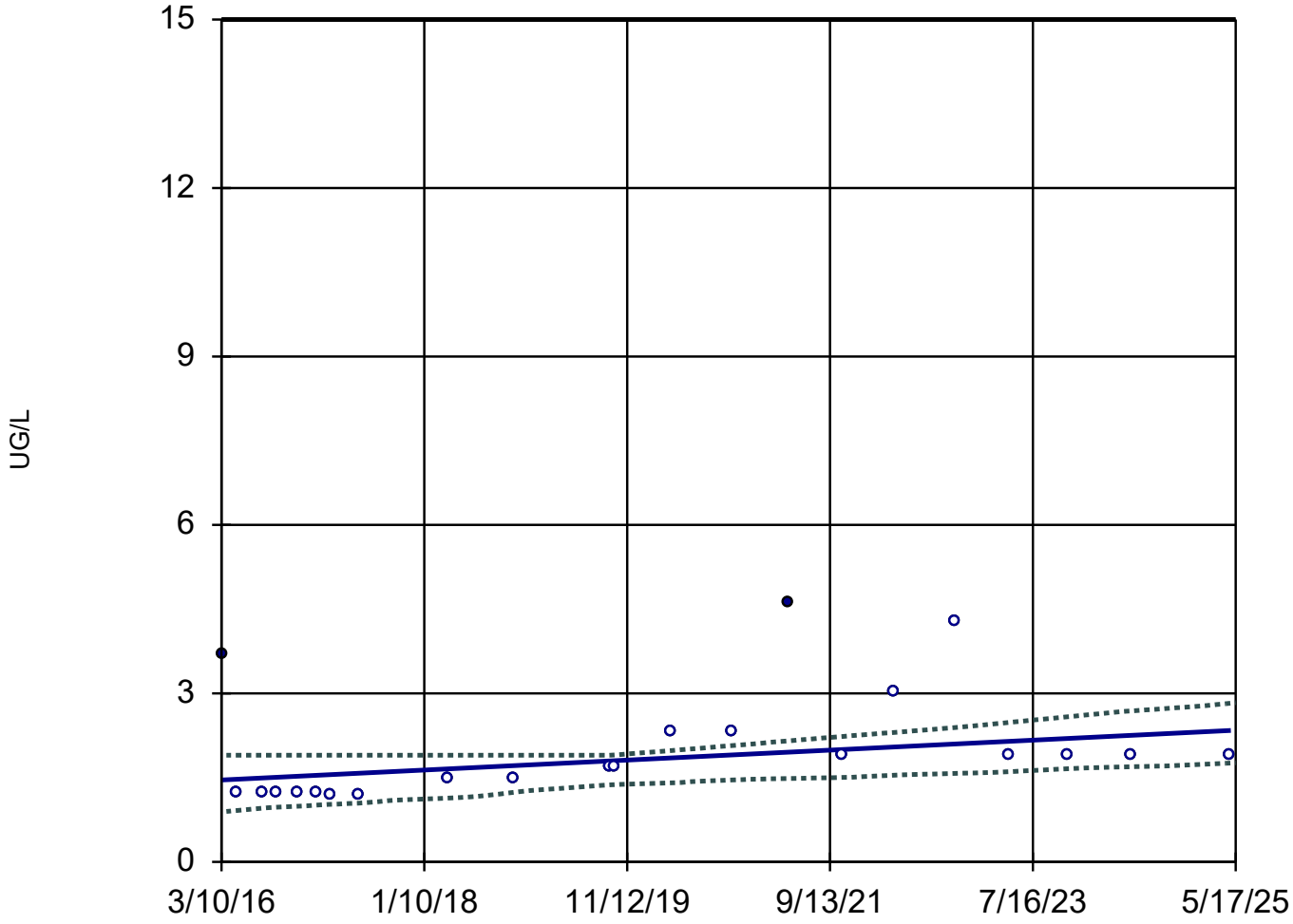
Constituent: LEAD, TOTAL Analysis Run 8/28/2025 10:24 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-7



n = 22

Slope = 0.09631 units per year.

Mann-Kendall statistic = 99
critical = 84

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

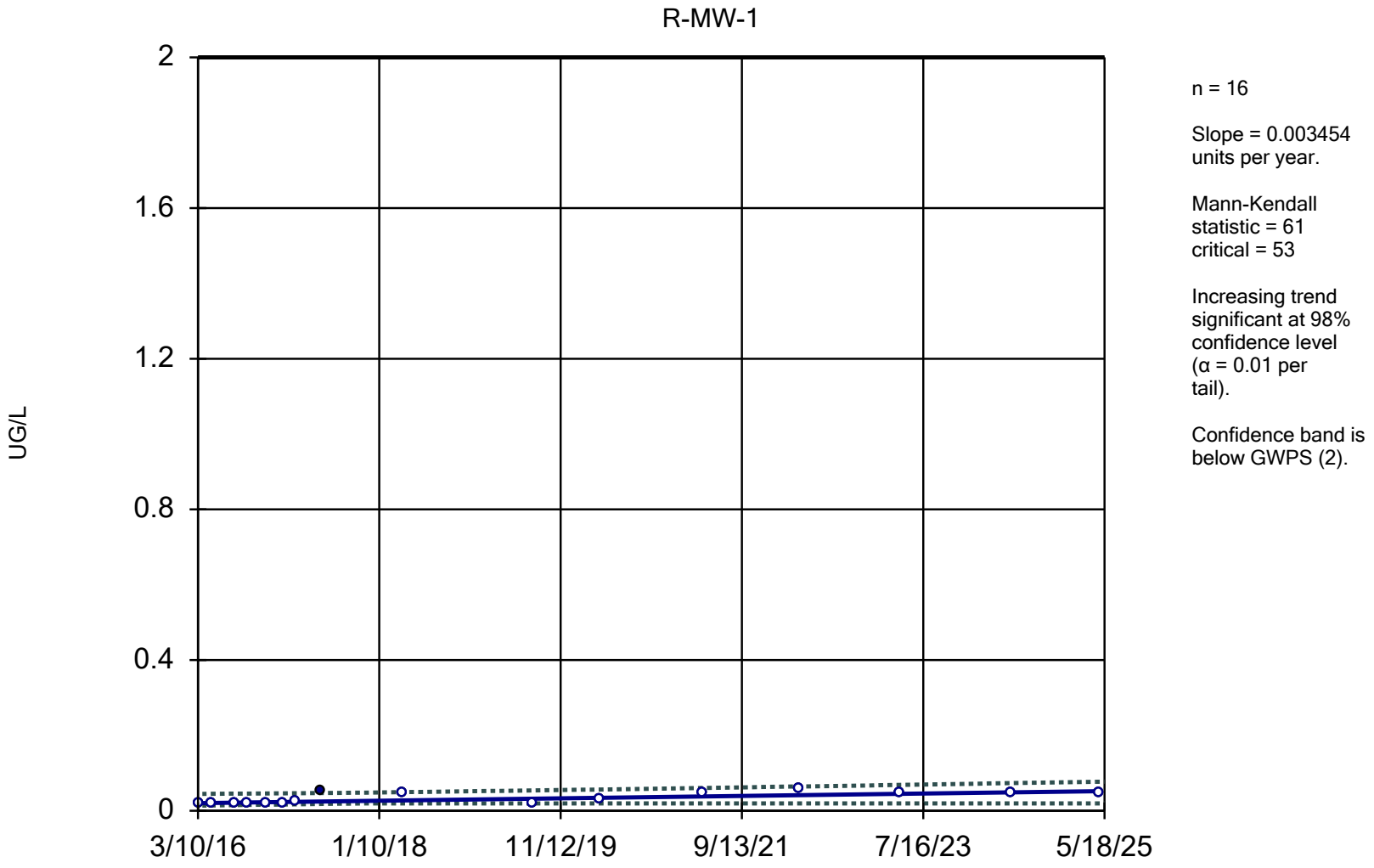
Confidence band is below GWPS (15).

Constituent: LEAD, TOTAL Analysis Run 8/28/2025 10:24 AM View: SSL All Data

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Sen's Slope and 95% Confidence Band



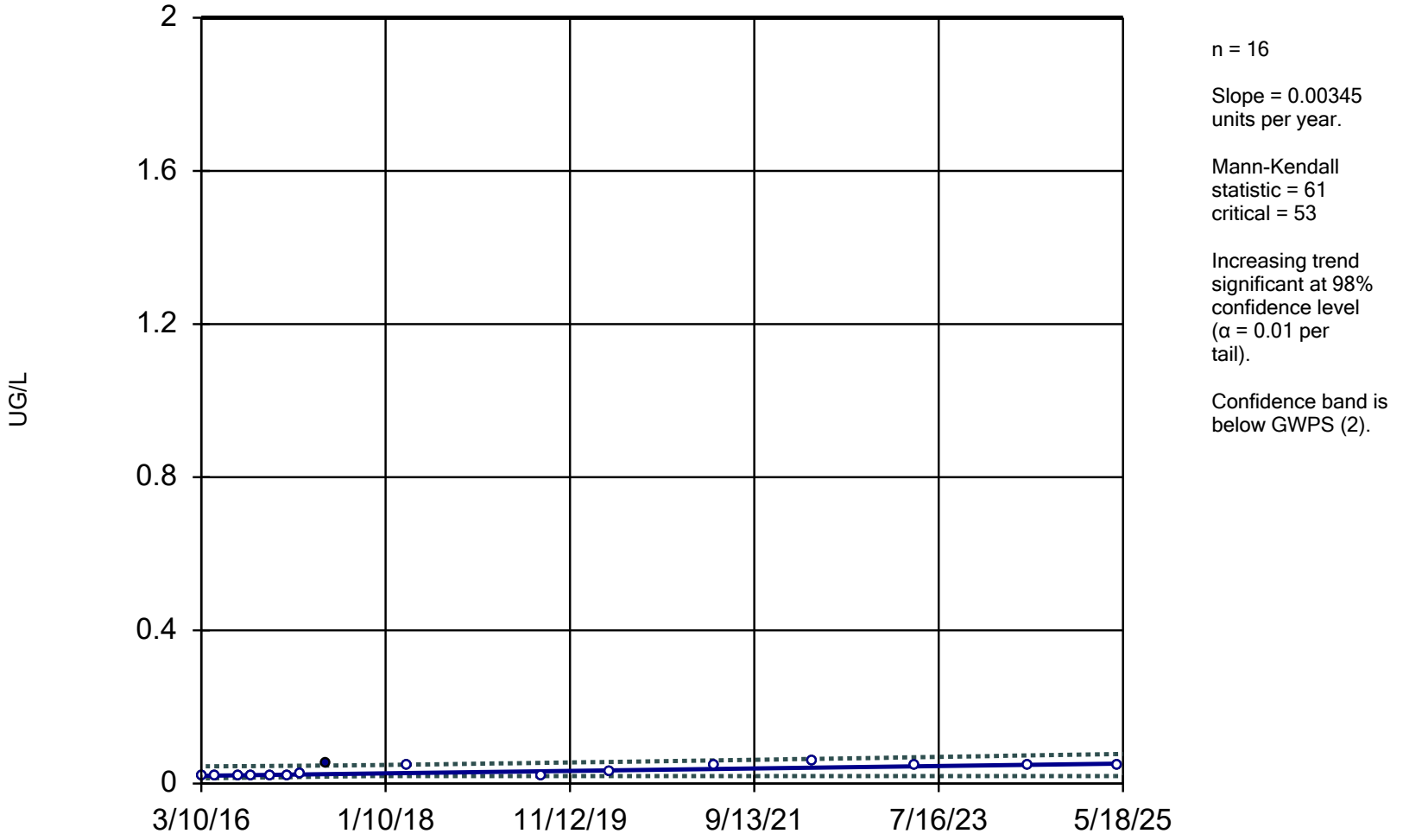
Constituent: MERCURY, TOTAL Analysis Run 8/28/2025 10:24 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-2



n = 16

Slope = 0.00345 units per year.

Mann-Kendall statistic = 61
critical = 53

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2).

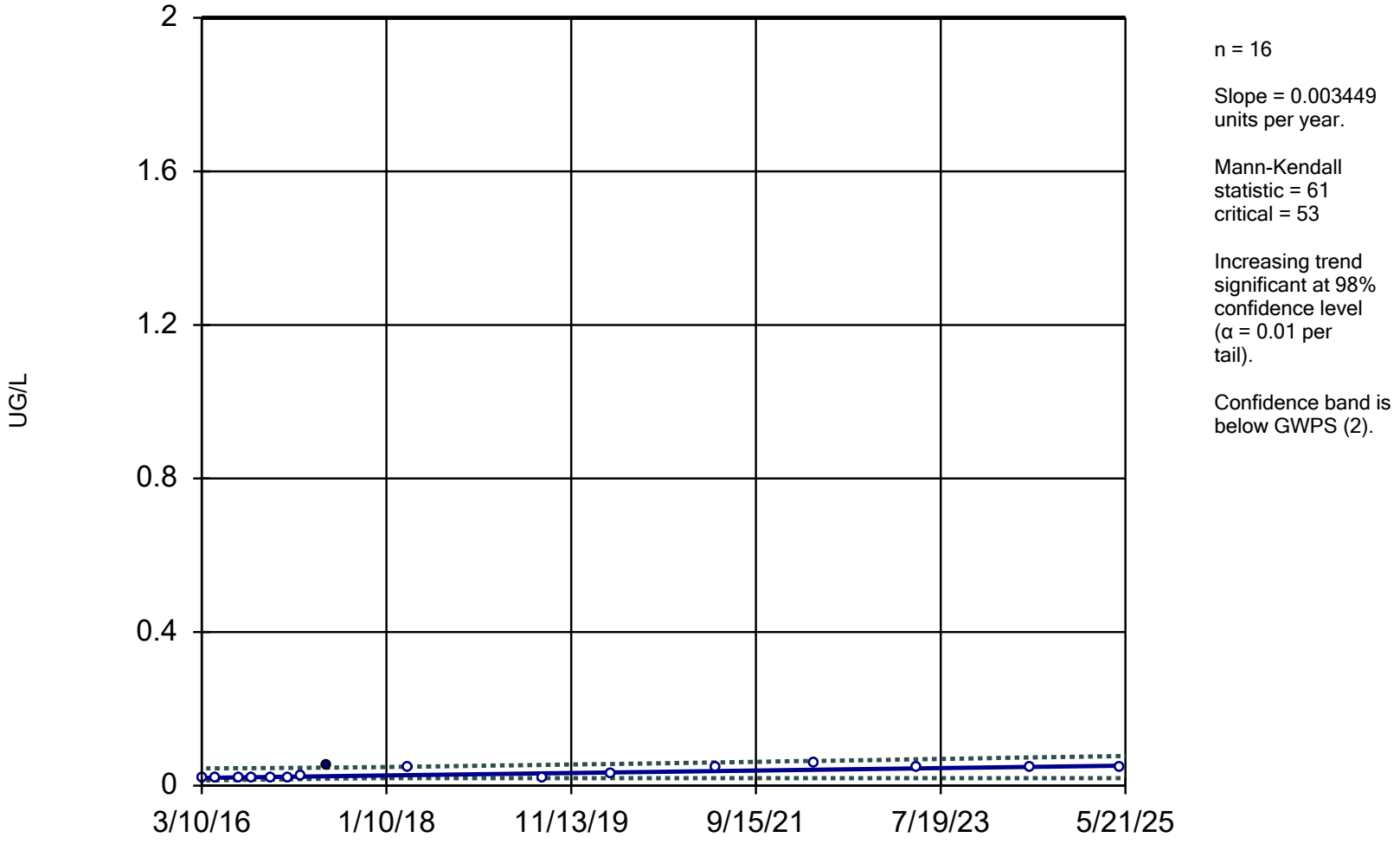
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-3



n = 16

Slope = 0.003449 units per year.

Mann-Kendall statistic = 61
critical = 53

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2).

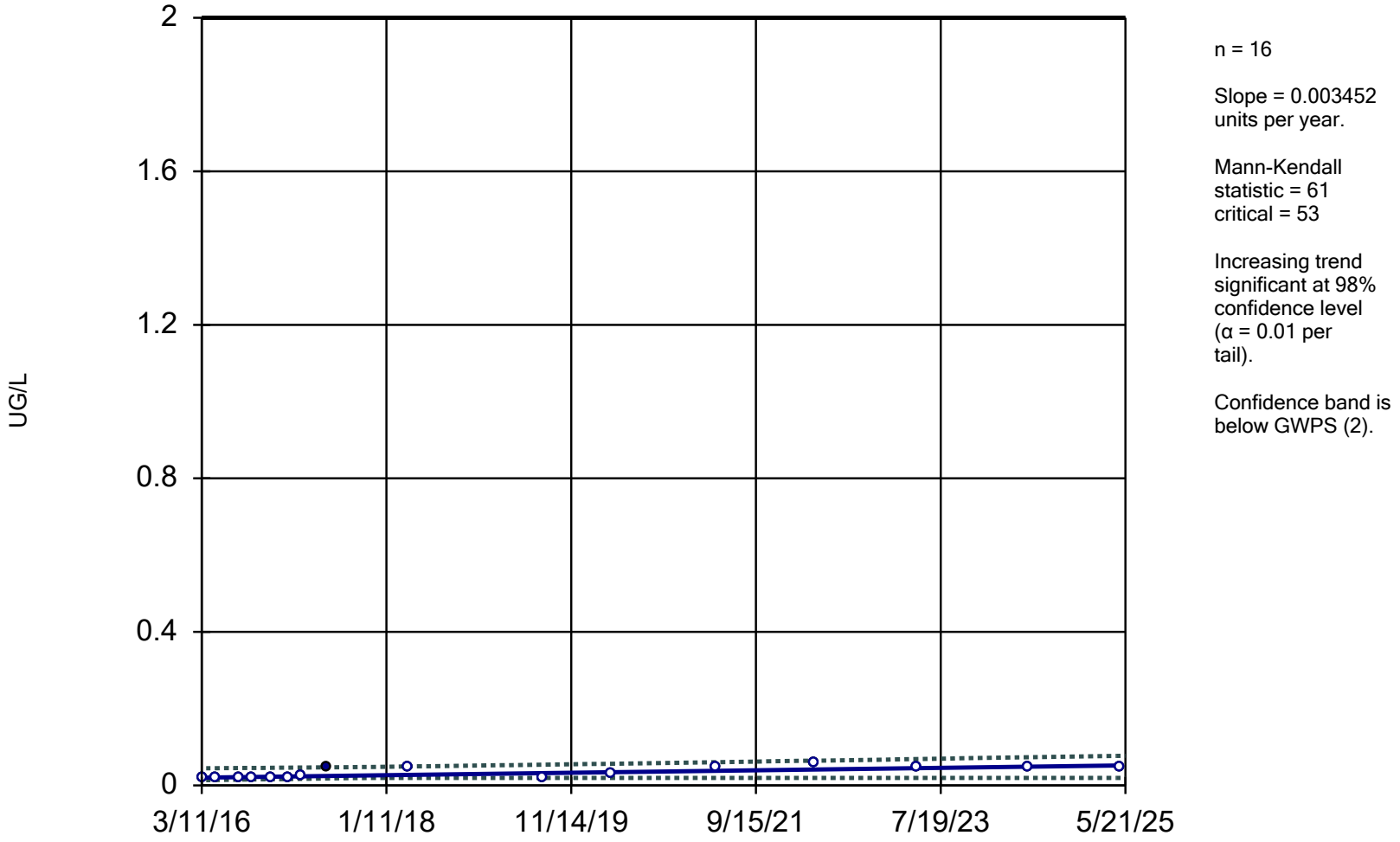
Constituent: MERCURY, TOTAL Analysis Run 8/28/2025 10:24 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-4



n = 16

Slope = 0.003452 units per year.

Mann-Kendall statistic = 61
critical = 53

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

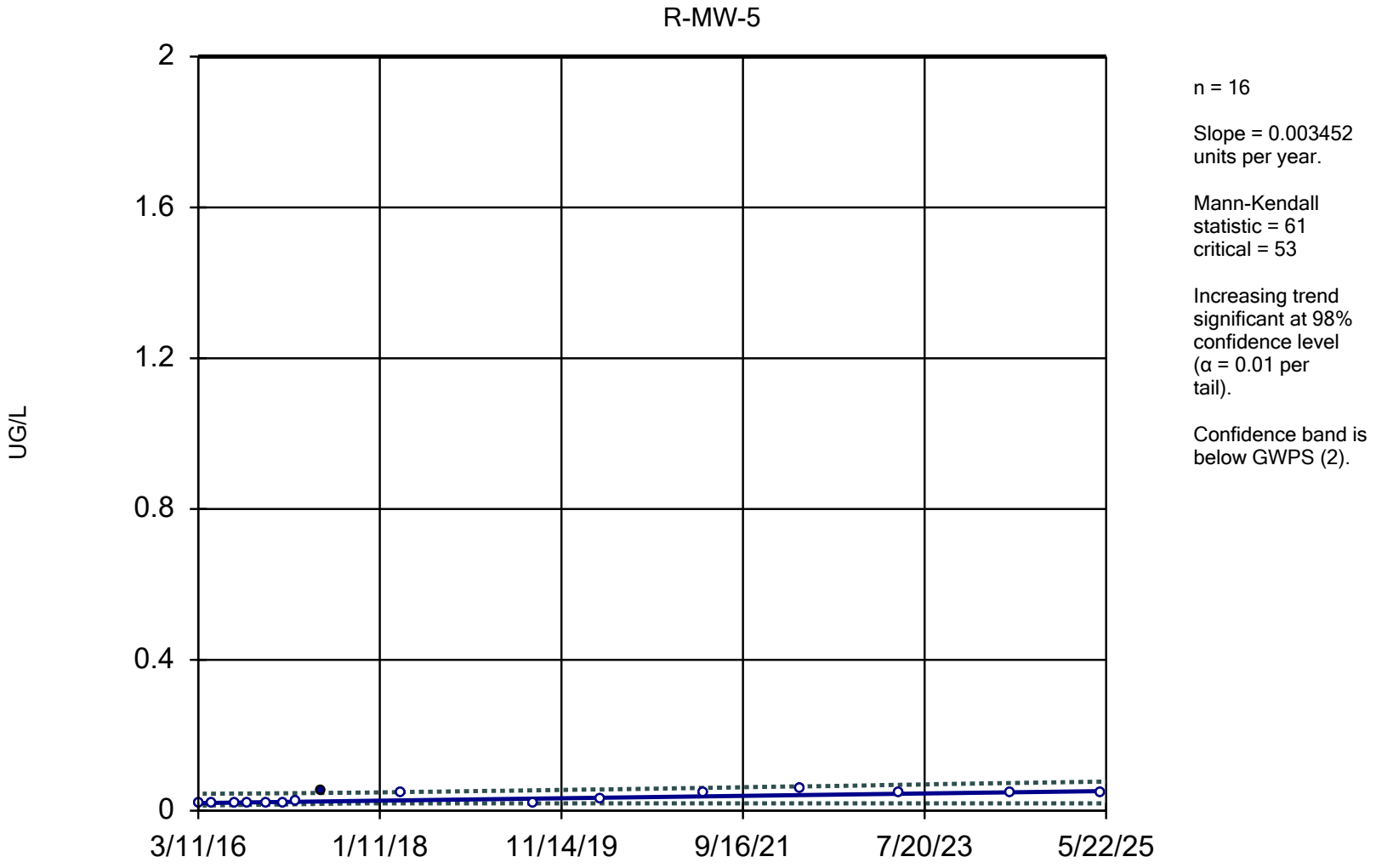
Confidence band is below GWPS (2).

Constituent: MERCURY, TOTAL Analysis Run 8/28/2025 10:24 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

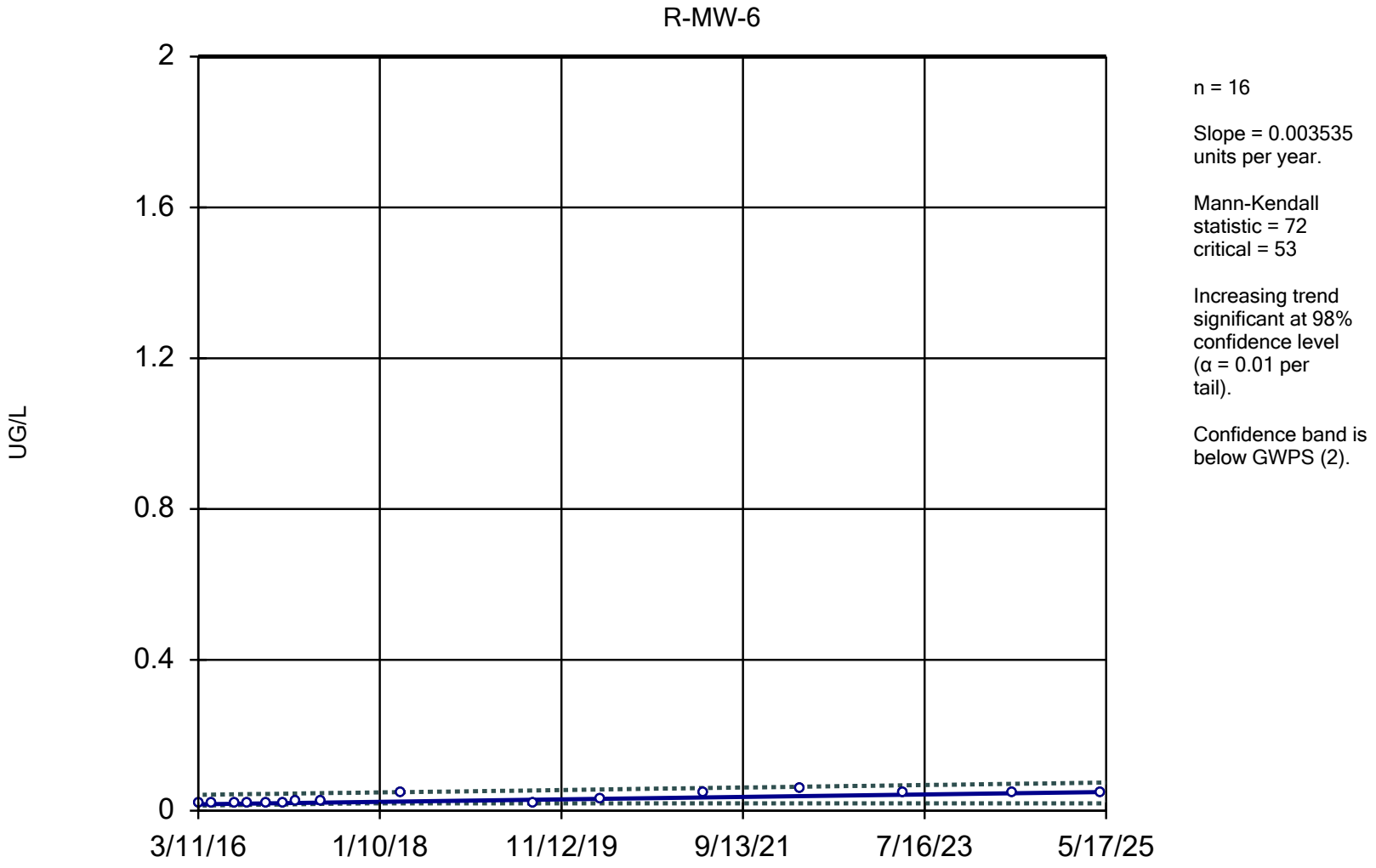


Constituent: MERCURY, TOTAL Analysis Run 8/28/2025 10:24 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

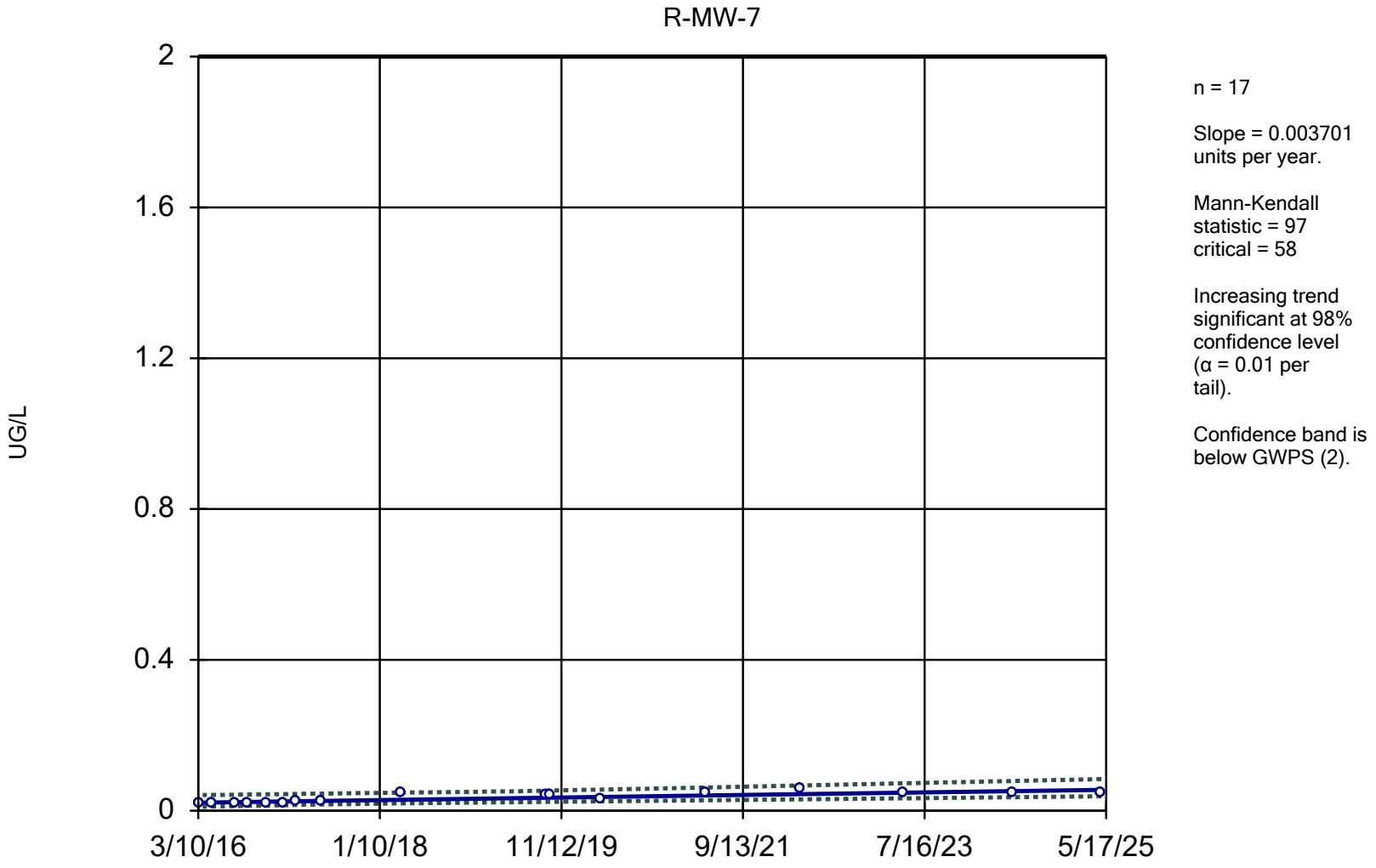


Constituent: MERCURY, TOTAL Analysis Run 8/28/2025 10:24 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



Constituent: MERCURY, TOTAL Analysis Run 8/28/2025 10:24 AM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Trend Test

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 8/28/2025, 10:25 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
ANTIMONY, TOTAL (UG/L)	R-MW-3	-0.00...	-55	-95	No	24	58.33	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	**R-MW-4**	**0.004**	**153**	**89**	**Yes**	**23**	**86.96**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	**R-MW-5**	**0.004441**	**180**	**89**	**Yes**	**23**	**91.3**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	R-MW-6	0.001698	38	95	No	24	70.83	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	**R-MW-7**	**0.003941**	**111**	**95**	**Yes**	**24**	**87.5**	**n/a**	**n/a**	**0.02**	**NP**
ARSENIC, TOTAL (UG/L)	R-MW-2	0.477	7	95	No	24	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-MW-6	0.0235	28	73	No	20	15	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-MW-2	-0.1986	-34	-89	No	23	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-MW-6	0.7404	13	89	No	23	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-MW-7	-2.231	-30	-95	No	24	0	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	**R-MW-1**	**-0.00...**	**-66**	**-63**	**Yes**	**18**	**100**	**n/a**	**n/a**	**0.02**	**NP**
BERYLLIUM, TOTAL (UG/L)	R-MW-2	-0.00...	-52	-63	No	18	100	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	R-MW-3	0	-12	-58	No	17	88.24	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	R-MW-4	-0.00...	-27	-63	No	18	94.44	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	R-MW-5	-0.00...	-52	-63	No	18	100	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	R-MW-6	-0.00...	-46	-63	No	18	94.44	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	R-MW-7	0	-13	-68	No	19	84.21	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-MW-1	0.001969	44	68	No	19	78.95	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-MW-2	0.02308	57	73	No	20	15	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	**R-MW-3**	**0.02864**	**88**	**73**	**Yes**	**20**	**40**	**n/a**	**n/a**	**0.02**	**NP**
CADMIUM, TOTAL (UG/L)	R-MW-4	0.001301	41	73	No	20	80	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-MW-5	0.001431	73	73	No	20	100	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-MW-6	0.00131	65	68	No	19	100	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-MW-7	0.0014	56	78	No	21	80.95	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-1	0.005601	11	84	No	22	50	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-2	-0.03598	-58	-68	No	19	10.53	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-3	-0.05882	-56	-68	No	19	10.53	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-4	-0.02481	-44	-78	No	21	42.86	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-5	-0.01267	-45	-78	No	21	23.81	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-6	0.01859	25	73	No	20	50	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-7	-0.00...	-20	-89	No	23	52.17	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	**R-MW-1**	**0.02773**	**70**	**63**	**Yes**	**18**	**88.89**	**n/a**	**n/a**	**0.02**	**NP**
COBALT, TOTAL (UG/L)	**R-MW-2**	**0.02668**	**100**	**63**	**Yes**	**18**	**100**	**n/a**	**n/a**	**0.02**	**NP**
COBALT, TOTAL (UG/L)	**R-MW-3**	**0.02961**	**106**	**63**	**Yes**	**18**	**94.44**	**n/a**	**n/a**	**0.02**	**NP**
COBALT, TOTAL (UG/L)	R-MW-4	0.02422	56	63	No	18	83.33	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	R-MW-5	0.02219	47	63	No	18	88.89	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	**R-MW-6**	**0.02718**	**72**	**58**	**Yes**	**17**	**94.12**	**n/a**	**n/a**	**0.02**	**NP**
COBALT, TOTAL (UG/L)	**R-MW-7**	**0.03051**	**87**	**68**	**Yes**	**19**	**78.95**	**n/a**	**n/a**	**0.02**	**NP**
FLUORIDE, TOTAL (MG/L)	R-MW-2	-0.01585	-44	-119	No	28	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-MW-5	0	-9	-106	No	26	19.23	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	**R-MW-1**	**0.0959**	**100**	**78**	**Yes**	**21**	**100**	**n/a**	**n/a**	**0.02**	**NP**
LEAD, TOTAL (UG/L)	R-MW-2	-0.1155	-11	-84	No	22	9.091	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	**R-MW-3**	**-0.296**	**-90**	**-84**	**Yes**	**22**	**45.45**	**n/a**	**n/a**	**0.02**	**NP**
LEAD, TOTAL (UG/L)	**R-MW-4**	**0.08933**	**80**	**78**	**Yes**	**21**	**95.24**	**n/a**	**n/a**	**0.02**	**NP**
LEAD, TOTAL (UG/L)	R-MW-5	0.08933	75	78	No	21	85.71	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-MW-6	0.08932	61	78	No	21	80.95	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	**R-MW-7**	**0.09631**	**99**	**84**	**Yes**	**22**	**90.91**	**n/a**	**n/a**	**0.02**	**NP**
LITHIUM, TOTAL (UG/L)	R-MW-1	0.05229	33	95	No	24	87.5	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-MW-2	0.1245	65	95	No	24	75	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-MW-5	0.1767	48	95	No	24	41.67	n/a	n/a	0.02	NP

Trend Test

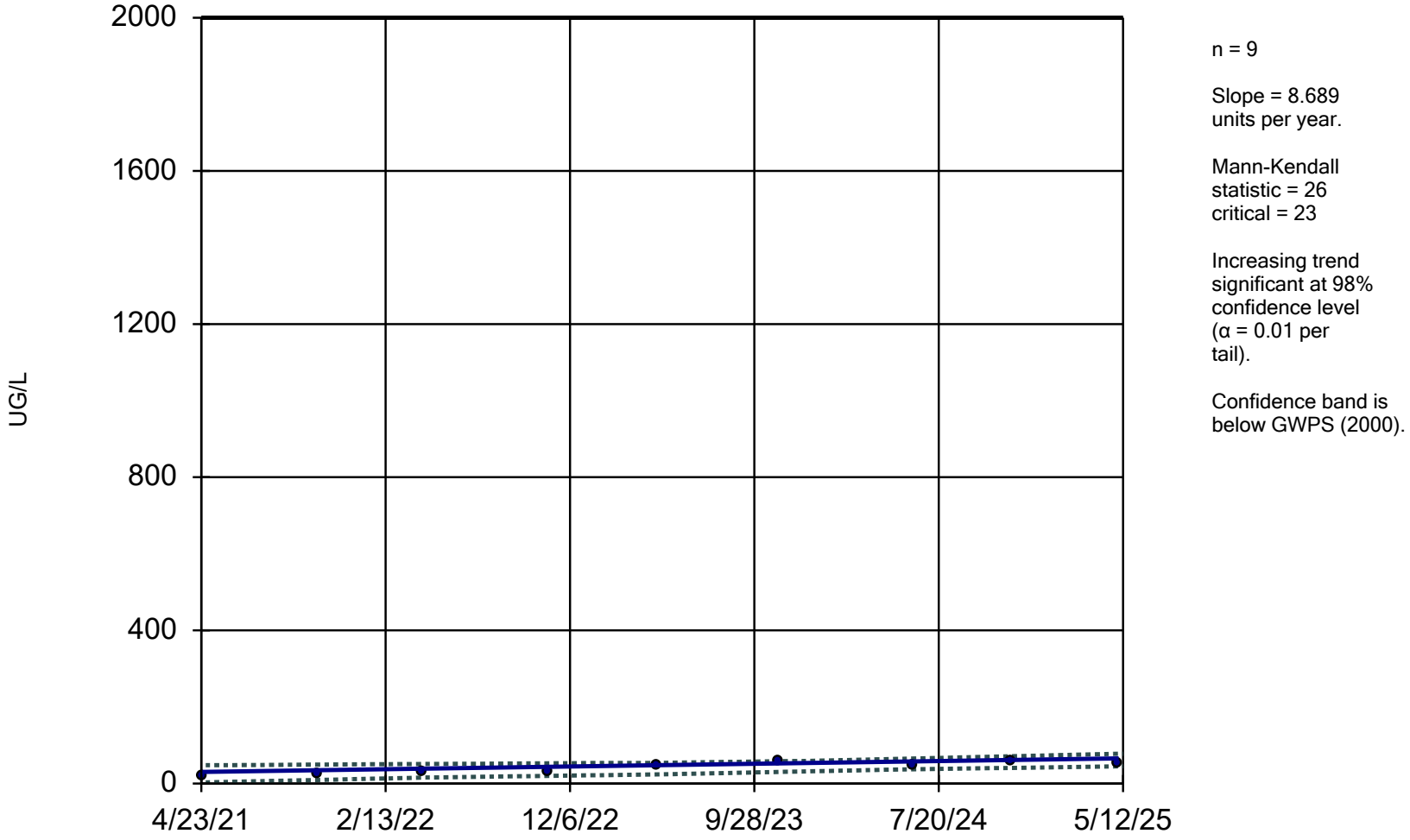
Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 8/28/2025, 10:25 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
LITHIUM, TOTAL (UG/L)	R-MW-6	0.248	69	89	No	23	60.87	n/a	n/a	0.02	NP
MERCURY, TOTAL (UG/L)	**R-MW-1**	**0.003454**	**61**	**53**	**Yes**	**16**	**93.75**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-2**	**0.00345**	**61**	**53**	**Yes**	**16**	**93.75**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-3**	**0.003449**	**61**	**53**	**Yes**	**16**	**93.75**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-4**	**0.003452**	**61**	**53**	**Yes**	**16**	**93.75**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-5**	**0.003452**	**61**	**53**	**Yes**	**16**	**93.75**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-6**	**0.003535**	**72**	**53**	**Yes**	**16**	**100**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-7**	**0.003701**	**97**	**58**	**Yes**	**17**	**100**	**n/a**	**n/a**	**0.02**	**NP**
MOLYBDENUM, TOTAL (UG/L)	R-MW-1	6.133	88	95	No	24	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-MW-2	-5.971	-48	-95	No	24	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-MW-3	-12.21	-48	-95	No	24	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-MW-5	0	-2	-95	No	24	83.33	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-MW-6	0.03216	22	95	No	24	37.5	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-1	0.03677	67	95	No	24	95.83	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-3	0.01969	41	89	No	23	95.65	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-4	0.01854	57	95	No	24	83.33	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-5	0.01354	38	95	No	24	83.33	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-6	0.006824	22	95	No	24	79.17	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-7	0.01377	59	89	No	23	100	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-2	-0.02679	-23	-95	No	24	0	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-3	-0.01993	-87	-89	No	23	0	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-4	0	-50	-95	No	24	70.83	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-5	0	22	95	No	24	100	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-6	-0.00...	-6	-89	No	23	13.04	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-7	0	1	101	No	25	84	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-1	-0.00...	-37	-58	No	17	94.12	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-2	-0.00...	-20	-63	No	18	100	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-3	-0.00...	-21	-58	No	17	100	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-4	-0.00154	-21	-58	No	17	100	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-5	-0.00...	-21	-58	No	17	100	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-6	-0.00...	-37	-58	No	17	94.12	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-7	-0.00...	-30	-63	No	18	94.44	n/a	n/a	0.02	NP

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Sen's Slope and 95% Confidence Band

R-MW-3



n = 9

Slope = 8.689 units per year.

Mann-Kendall statistic = 26
critical = 23

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2000).

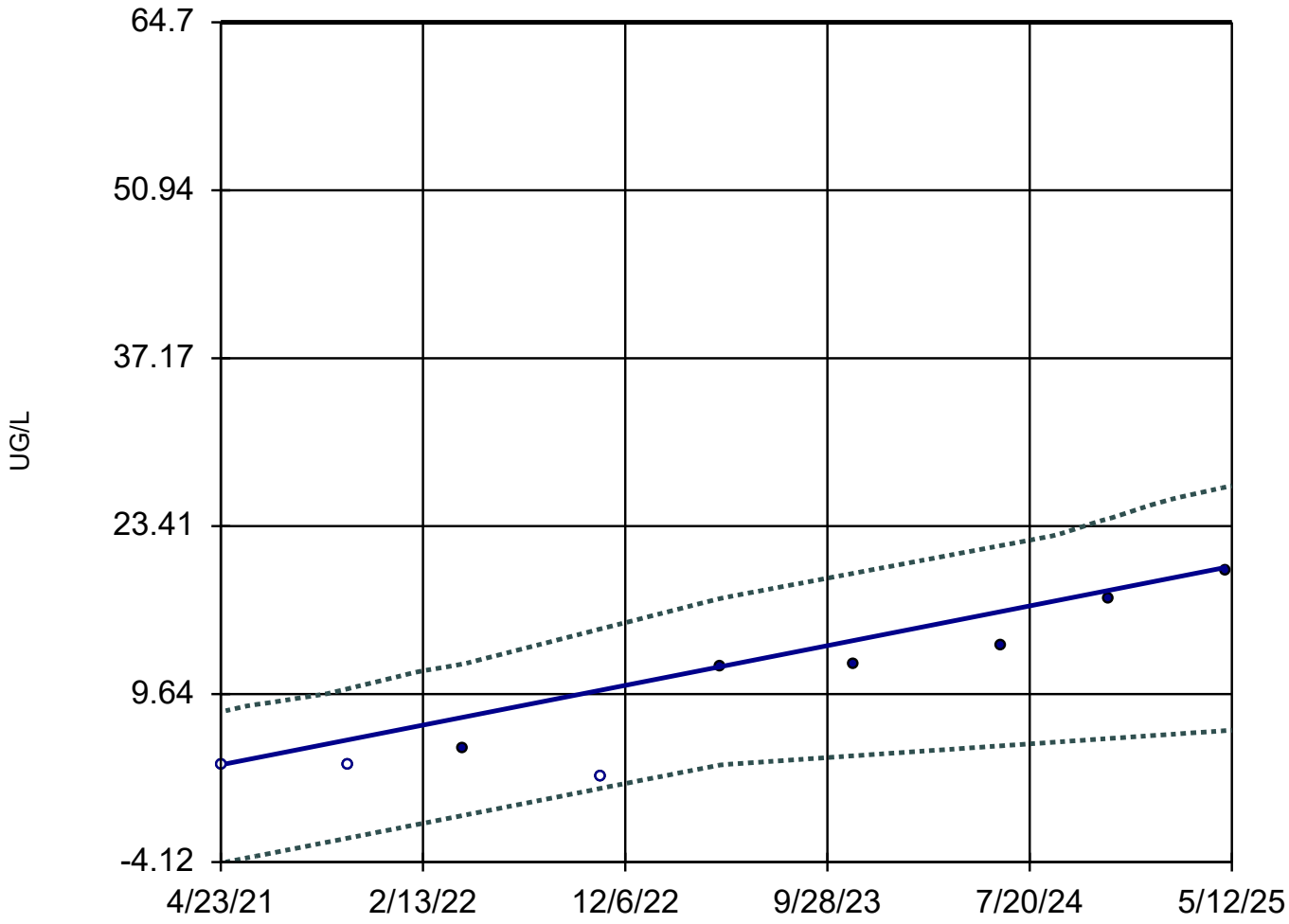
Constituent: BARIUM, TOTAL Analysis Run 8/28/2025 10:29 AM View: SSL Post-Closure

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-3



n = 9

Slope = 4.014 units per year.

Mann-Kendall statistic = 29
critical = 23

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (64.7).

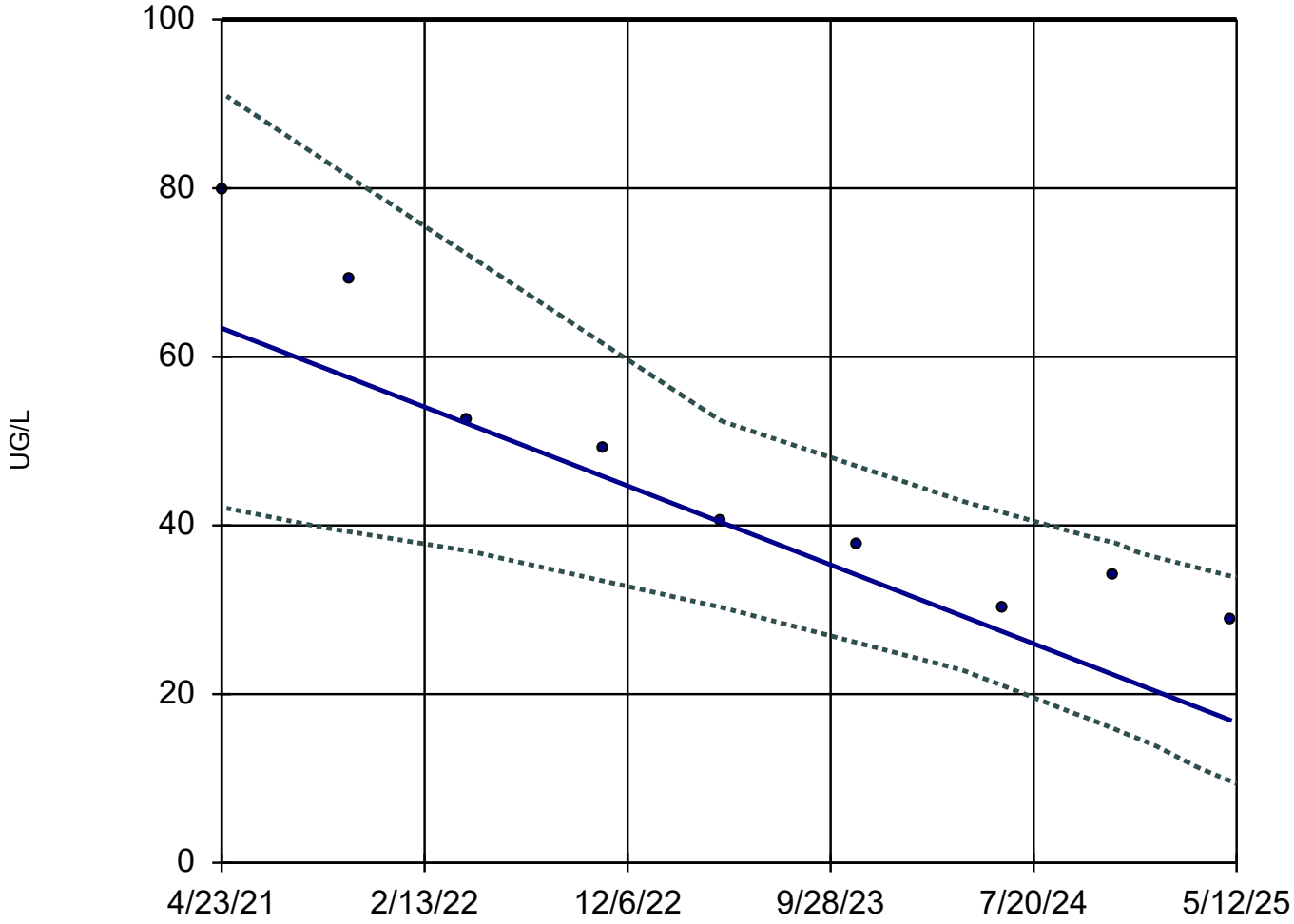
Constituent: LITHIUM, TOTAL Analysis Run 8/28/2025 10:29 AM View: SSL Post-Closure

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-MW-4



n = 9

Slope = -11.54 units per year.

Mann-Kendall statistic = -34
critical = -23

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (100).

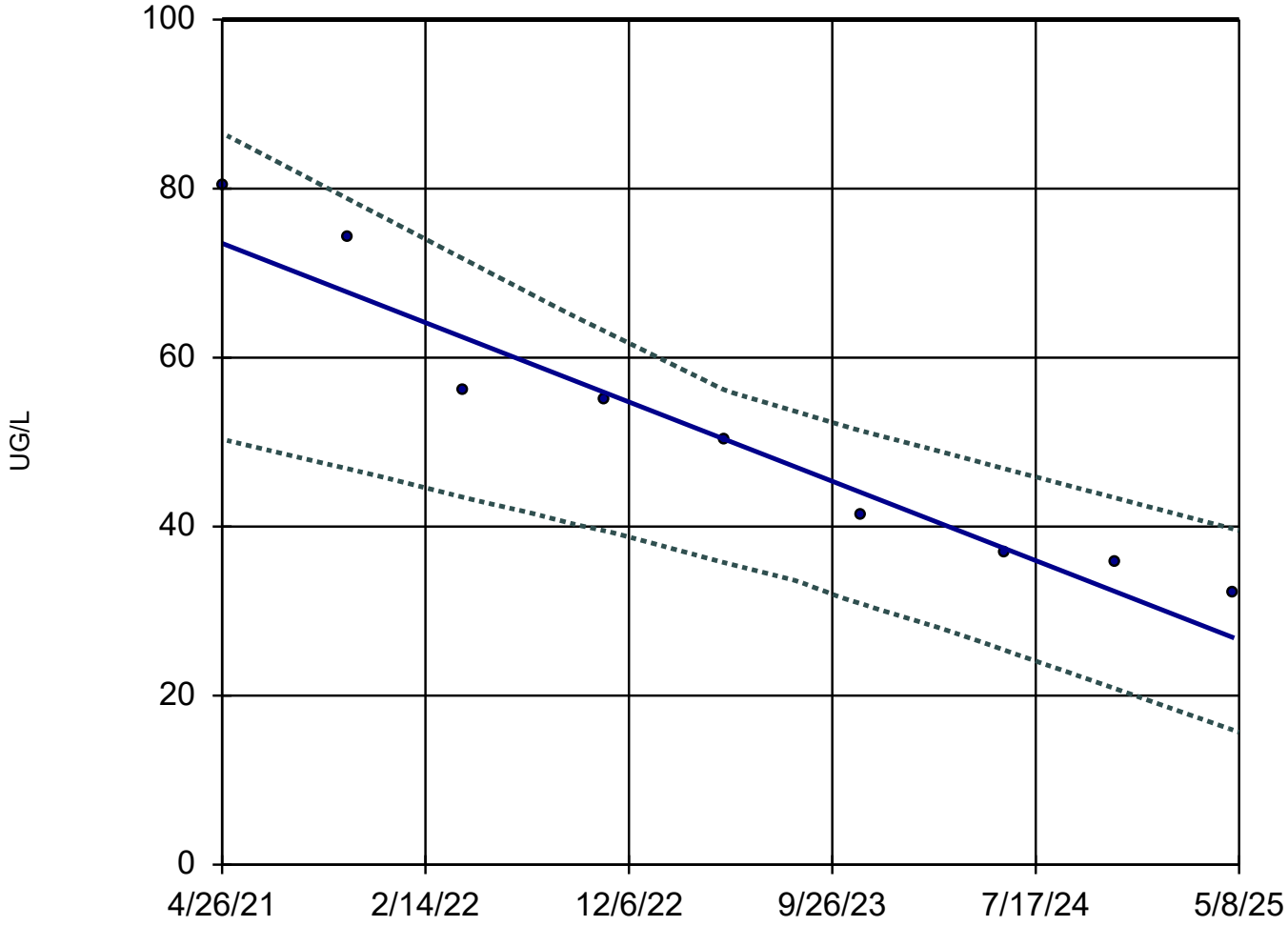
Constituent: MOLYBDENUM, TOTAL Analysis Run 8/28/2025 10:29 AM View: SSL Post-Closure

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Sen's Slope and 95% Confidence Band

R-MW-7



n = 9

Slope = -11.62 units per year.

Mann-Kendall statistic = -36
critical = -23

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (100).

Constituent: MOLYBDENUM, TOTAL Analysis Run 8/28/2025 10:29 AM View: SSL Post-Closure

Rush Island E.C. Client: Ameren Data: RIEC DATA

Trend Test

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 8/28/2025, 10:30 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
ANTIMONY, TOTAL (UG/L)	R-MW-1	-0.00...	-14	-23	No	9	11.11	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	R-MW-2	-0.2286	-10	-23	No	9	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-MW-1	0.2637	11	23	No	9	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-MW-3	0.7161	10	23	No	9	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-MW-4	-1.479	-18	-23	No	9	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-MW-5	-0.1191	-23	-23	No	9	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-MW-7	-1.671	-9	-23	No	9	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-MW-1	-3.352	-10	-23	No	9	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	**R-MW-3**	**8.689**	**26**	**23**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.02**	**NP**
BARIUM, TOTAL (UG/L)	R-MW-4	16.24	18	23	No	9	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-MW-5	6.264	8	23	No	9	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-MW-1	0	4	44	No	14	50	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-MW-3	-0.02635	-8	-23	No	9	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-MW-4	-0.07741	-24	-27	No	10	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-MW-6	0	-2	-35	No	12	16.67	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-MW-7	0	-1	-27	No	10	50	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	**R-MW-3**	**4.014**	**29**	**23**	**Yes**	**9**	**33.33**	**n/a**	**n/a**	**0.02**	**NP**
LITHIUM, TOTAL (UG/L)	R-MW-4	-1.17	-16	-23	No	9	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-MW-7	0.2117	4	23	No	9	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	**R-MW-4**	**-11.54**	**-34**	**-23**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.02**	**NP**
MOLYBDENUM, TOTAL (UG/L)	**R-MW-7**	**-11.62**	**-36**	**-23**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.02**	**NP**
RADIUM [226 + 228] (PCI/L)	R-MW-2	-0.1356	-10	-23	No	9	100	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-1	0	6	23	No	9	88.89	n/a	n/a	0.02	NP

Trend Test

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 8/28/2025, 10:30 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
ANTIMONY, TOTAL (UG/L)	R-MW-1	-0.00...	-14	-23	No	9	11.11	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	R-MW-2	-0.2286	-10	-23	No	9	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-MW-1	0.2637	11	23	No	9	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-MW-3	0.7161	10	23	No	9	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-MW-4	-1.479	-18	-23	No	9	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-MW-5	-0.1191	-23	-23	No	9	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-MW-7	-1.671	-9	-23	No	9	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-MW-1	-3.352	-10	-23	No	9	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	**R-MW-3**	**8.689**	**26**	**23**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.02**	**NP**
BARIUM, TOTAL (UG/L)	R-MW-4	16.24	18	23	No	9	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-MW-5	6.264	8	23	No	9	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-MW-1	0	4	44	No	14	50	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-MW-3	-0.02635	-8	-23	No	9	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-MW-4	-0.07741	-24	-27	No	10	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-MW-6	0	-2	-35	No	12	16.67	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-MW-7	0	-1	-27	No	10	50	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	**R-MW-3**	**4.014**	**29**	**23**	**Yes**	**9**	**33.33**	**n/a**	**n/a**	**0.02**	**NP**
LITHIUM, TOTAL (UG/L)	R-MW-4	-1.17	-16	-23	No	9	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-MW-7	0.2117	4	23	No	9	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	**R-MW-4**	**-11.54**	**-34**	**-23**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.02**	**NP**
MOLYBDENUM, TOTAL (UG/L)	**R-MW-7**	**-11.62**	**-36**	**-23**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.02**	**NP**
RADIUM [226 + 228] (PCI/L)	R-MW-2	-0.1356	-10	-23	No	9	100	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-1	0	6	23	No	9	88.89	n/a	n/a	0.02	NP

Appendix D

October 2025 Assessment Monitoring Statistical Evaluation

Memorandum
January 31, 2026

To:	Ameren Missouri – Lisa Meyer	**Project Number:**	23008-25
CC:	Ameren Missouri - Susan Knowles, Craig Giesmann, Bill Kutosky, Austin Nieman		
From:	Rocksmith Geoengineering - Mark Haddock, P.E., Jeff Ingram, R.G., Grant Morey, R.G.	**Email:**	jeff.ingram@rocksmithgeo.com
RE:	**Assessment Monitoring Statistical Evaluation, RCPA Surface Impoundment Rush Island Energy Center, Jefferson County, Missouri**		

This Technical Memorandum provides the results of the Assessment Monitoring Statistical Evaluation for the October 2025 sampling event at the RCPA Surface Impoundment at the Rush Island Energy Center located in Jefferson County, Missouri. Included in the memorandum is a summary of constituents that are present at a Statistically Significant Level (SSL), a list of site-specific Groundwater Protection Standards (**Table 1**), and the Sanitas Technologies™ (Sanitas) statistical software output for each of the Appendix IV parameters.

The Appendix IV constituents were evaluated for SSLs using the methods and procedures outlined in the Statistical Analysis Plan (SAP). As with previous statistical evaluations, an analysis was conducted to identify new outliers in the dataset with the inclusion of data collected in October 2025. No new outliers were removed from the dataset prior to subsequent statistical testing.

An analysis of the outliers removed from the dataset to-date was completed. Two previously identified outliers were added back into the dataset prior to subsequent statistical analysis:

- Radium 226 + 228
    - R-MW-7 at 1.426 and 1.278 picocuries per liter (pCi/L) on 11/2/2018 and 9/30/2019: removed during the statistical evaluation for the November 2024 sampling event because the results were statistically higher than other radium results at the same monitoring well. Based on subsequent sampling results, these higher results were confirmed, and the results are no longer outliers.

Assessment monitoring data for the RCPA has been collected since March 2016, prior to closure of the unit and the initiation of the groundwater treatment system. Closure of the RCPA was initiated in August 2019 and substantially completed on December 15, 2020. A pilot groundwater treatment system was installed in 2021, and the full-scale treatment system was installed and has been fully operational since February 2022. Previous statistical evaluations for the RCPA incorporated all available assessment monitoring data (except outliers) into the calculation of confidence intervals and trends for SSL determination. The United States Environmental Protection Agency (USEPA) Unified Guidance (Chapter 7, USEPA, 2009) offers guidance on accounting for temporal shifts in compliance point (well) data. In instances where data is shifted (such as the result of remedial measures), older data may not accurately represent present conditions and may incorrectly bias calculated confidence limits used for new SSL determination. By constraining statistical testing to data collected after an identified shift, the statistical power of the tests improves.

To account for potential shifts in constituent concentrations because of closure activities, Mann-Whitney tests were conducted to compare data collected prior to closure (2016 – 2020) and post-closure (2021 – present). Mann-Whitney test outputs are included in **Appendix A** and results are summarized in **Table 2**. For well-constituent pairs identified as having a statistically significant dissimilarity (alpha=0.05) in concentrations pre- and post-closure, confidence intervals (**Appendix B**) and trends (**Appendix C**) were calculated using only the data collected post-closure (2021 – present). Confidence intervals and trends were calculated using all available data (except outliers) for well-constituent pairs having no statistical dissimilarity between pre- and post-closure data or when all available data are below the practical quantitation limit (PQL).

Based on the results from the confidence interval and trend analysis, molybdenum at R-MW-2 is no longer an SSL as of the October 2025 sampling event. The lower limit of the confidence interval is now lower than the site GWPS for molybdenum. Other SSLs identified in the previous statistical evaluation remain, and SSLs at the RCPA Surface Impoundment as of October 2025 are:

- Arsenic at R-MW-2, R-MW-3, and R-MW-7/R-MW-7(R)
- Molybdenum at R-MW-3

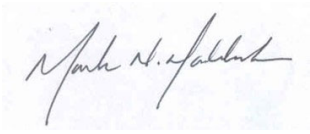
Rocksmith appreciates this opportunity to provide hydrogeological and engineering support services to Ameren. If you have any questions or comments regarding the information provided, please contact the undersigned.

Sincerely,

Rocksmith Geoengineering, LLC



Jeff Ingram, R.G.
Senior Geologist, Partner



Mark Haddock, P.E., R.G.
Principal Engineer, Senior Partner

Attachments

Tables

Table 1 – RCPA Groundwater Protection Standards

Table 2 – Intrawell Mann-Whitney Analysis

Appendices

Appendix A – Sanitas Mann-Whitney Analysis Outputs

Appendix B – Sanitas Confidence Interval Statistical Outputs

Appendix C – Sanitas Trending Confidence Bands Statistical Outputs

Tables

Table 3 - RCPA Groundwater Protection Standards
RCPA Surface Impoundment
Rush Island Energy Center

Parameter	Units	MCL or Health Based GWPS	Site GWPS	Value to Return to Detection Monitoring [6]
Antimony	µg/L	6	6	DQR
Arsenic	µg/L	10	30	30
Barium	µg/L	2000	2000	554.8
Beryllium	µg/L	4	4	DQR
Cadmium	µg/L	5	5	DQR
Chromium	µg/L	100	100	1.909
Cobalt	µg/L	6	6	DQR
Fluoride	mg/L	4	4	0.2515
Lead	µg/L	15	15	DQR
Lithium	µg/L	40	64.7	64.7
Mercury	µg/L	2	2	DQR
Molybdenum	µg/L	100	100	DQR
Radium 226 + 228	pCi/L	5	5	2.297
Selenium	µg/L	50	50	DQR
Thallium	µg/L	2	2	DQR

Notes:

1. µg/L - micrograms per liter

2. mg/L - milligrams per liter

3. pCi/L - picocuries per liter

4. MCL - Maximum Contaminant Level. MCLs from United States Environmental Protection Agency (USEPA) National Primary Drinking Water Regulations. Updated December 12, 2024 at https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations

5. Health Based Groundwater Protection Standards (GWPS) were adoped for Appendix IV parameters without an MCL (i.e. cobalt, lithium, molybdenum, and lead). Information available at https://www.epa.gov/coalash/coal-ash-rule.

6. Values were calculated using statistical methods outlined for Detection Monitoring and are used for returning to Detection Monitoring based on available data to date.

7. DQR - Double Quantification Rule. If all baseline data are less than the Practical Quantitation Limit (PQL), then the DQR will be used. More information on the DQR is provided in the Statistical Analysis Plan.

8. Site GWPS is either the MCL/Health Based GWPS or based on background levels (calculated as described in the Statistical Analysis Plan for Assessment Monitoring), whichever is higher.

9. GWPS and background values calculated using results through May 2025 from monitoring wells MW-B1 and MW-B2.

ROCKSMITH GEOENGINEERING

Prepared by: JTR
Checked by: GTM
Reviewed by: JSI

Table 2 - Intrawell Mann-Whitney Analysis
RCPA Surface Impoundment
Rush Island Energy Center

Constituent Name	Monitoring Well						
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7(R)
	Significant Dissimilarity (Alpha=0.05)						
ANTIMONY, TOTAL	Yes	Yes	<PQL	<PQL	<PQL	<PQL	<PQL
ARSENIC, TOTAL	Yes	No	Yes	Yes	Yes	No	Yes
BARIUM, TOTAL	Yes	No	Yes	Yes	Yes	No	No
BERYLLIUM, TOTAL	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL	No
CADMIUM, TOTAL	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
CHROMIUM, TOTAL	No	No	No	<PQL	No	No	No
COBALT, TOTAL	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
FLUORIDE, TOTAL	Yes	No	Yes	Yes	No	Yes	Yes
LEAD, TOTAL	<PQL	No	<PQL	<PQL	<PQL	<PQL	<PQL
LITHIUM, TOTAL	<PQL	<PQL	Yes	Yes	<PQL	<PQL	Yes
MERCURY, TOTAL	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
MOLYBDENUM, TOTAL	No	Yes	No	Yes	<PQL	<PQL	Yes
RADIUM 226 + 228	No	Yes	No	No	No	No	No
SELENIUM, TOTAL	Yes	No	<PQL	<PQL	<PQL	<PQL	<PQL
THALLIUM, TOTAL	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL

Notes:
1) Mann-Whitney tests performed for each Appendix IV constituent at each monitoring well comparing data collected before closure of the RCPA CCR Unit (2016 - 2020) and post-closure (2021 - Present).
2) Yellow highlighted "Yes" indicates a statistical dissimilarity at the alpha 0.05 level between results collected before closure and post-closure. Data collected post-closure (excluding outliers) is used to calculate confidence intervals and
3) "No" indicates no statistical dissimilarity at the alpha 0.05 level between results collected before closure and post-closure. All available data (excluding outliers) is used to calculate confidence intervals and trends.
4) "<PQL" indicates all available results (excluding outliers) are below the Practical Quantitation Limit (PQL). All available data (excluding outliers) is used to calculate confidence intervals and trends.
5) NA - not applicable. Radium 226 + 228 is not reported with a PQL but rather an MDC.

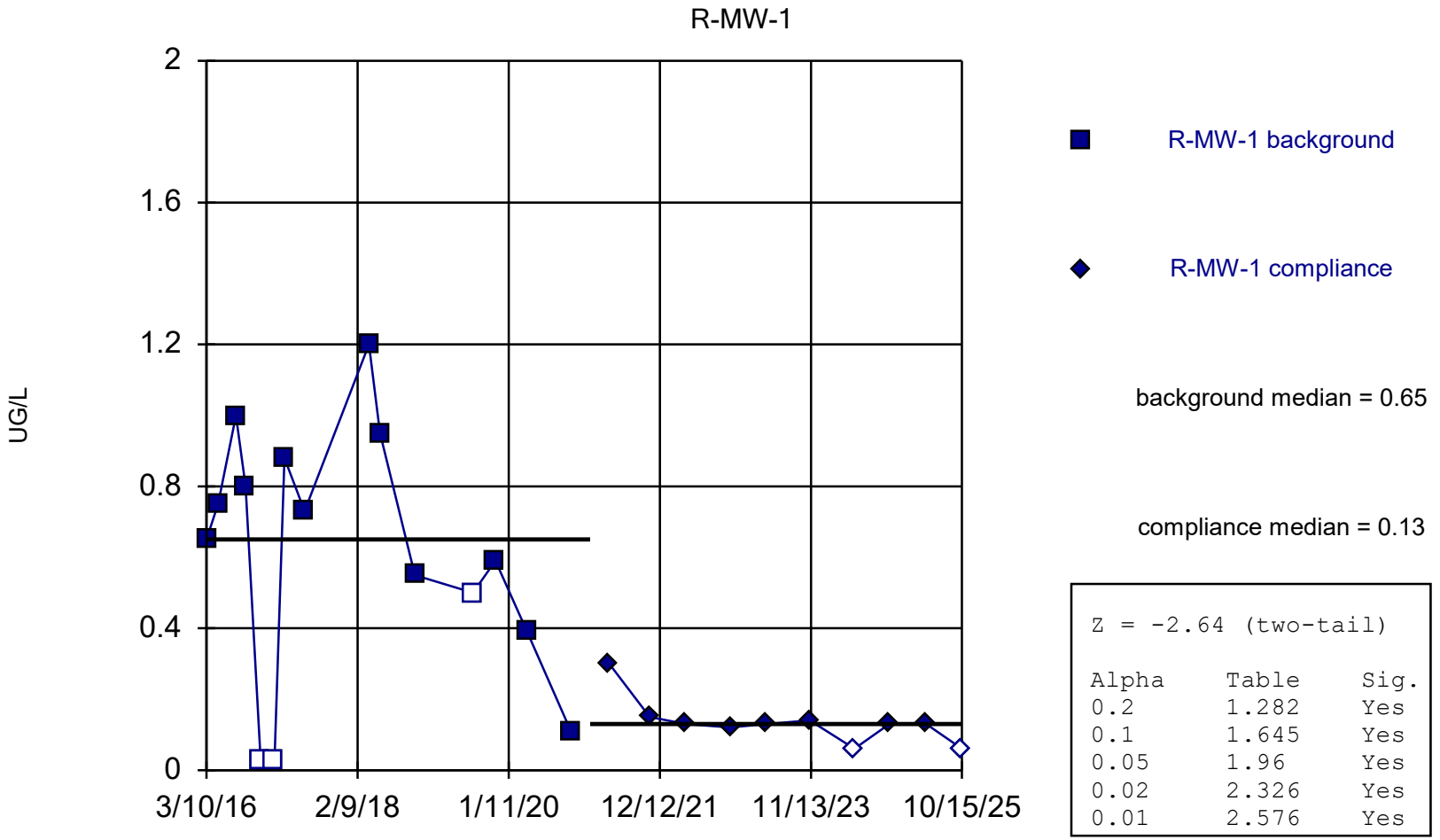
ROCKSMITH GEOENGINEERING

Prepared by: JTR
Checked by: GTM
Reviewed by: JSI

Appendix A
Sanitas Mann-Whitney Analysis Outputs

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -2.64 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

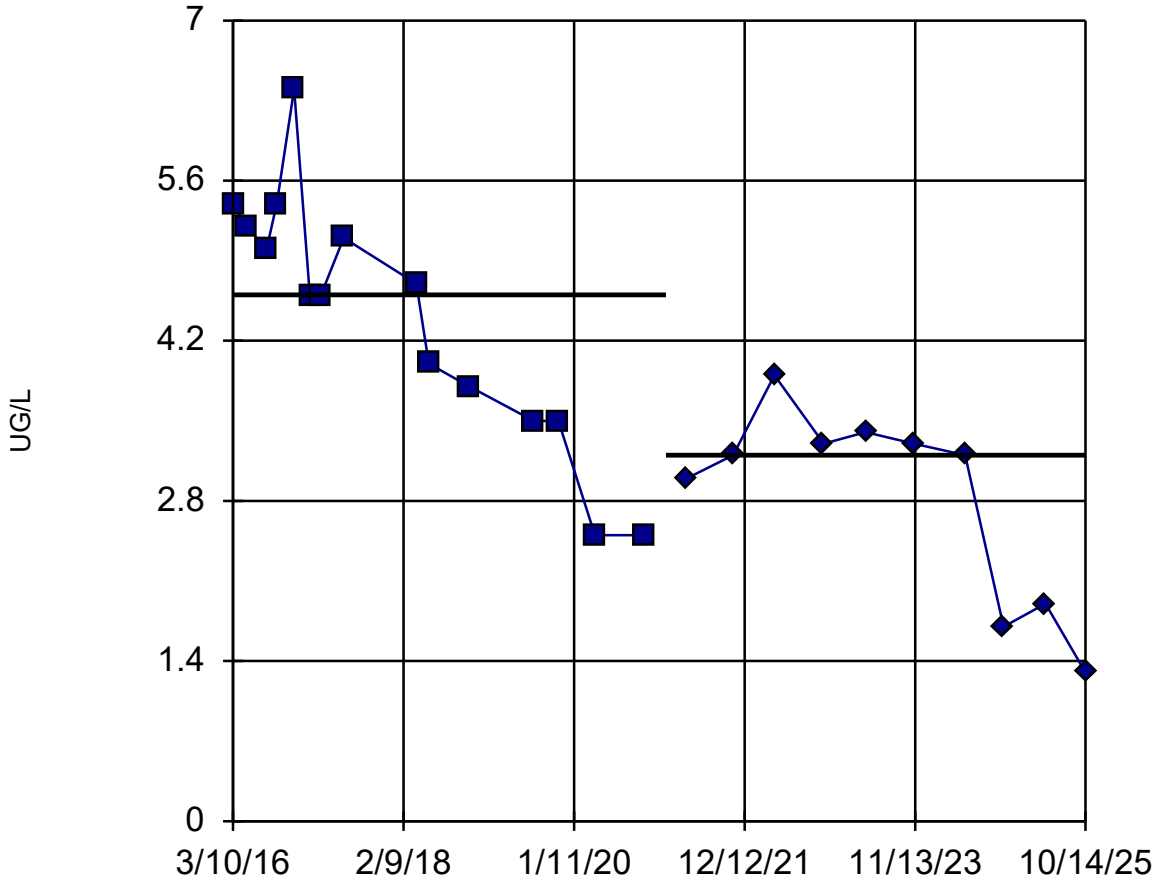
Constituent: ANTIMONY, TOTAL Analysis Run 1/5/2026 2:04 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-2



R-MW-2 background

R-MW-2 compliance

background median = 4.6

compliance median = 3.2

Z = -3.249 (two-tail)

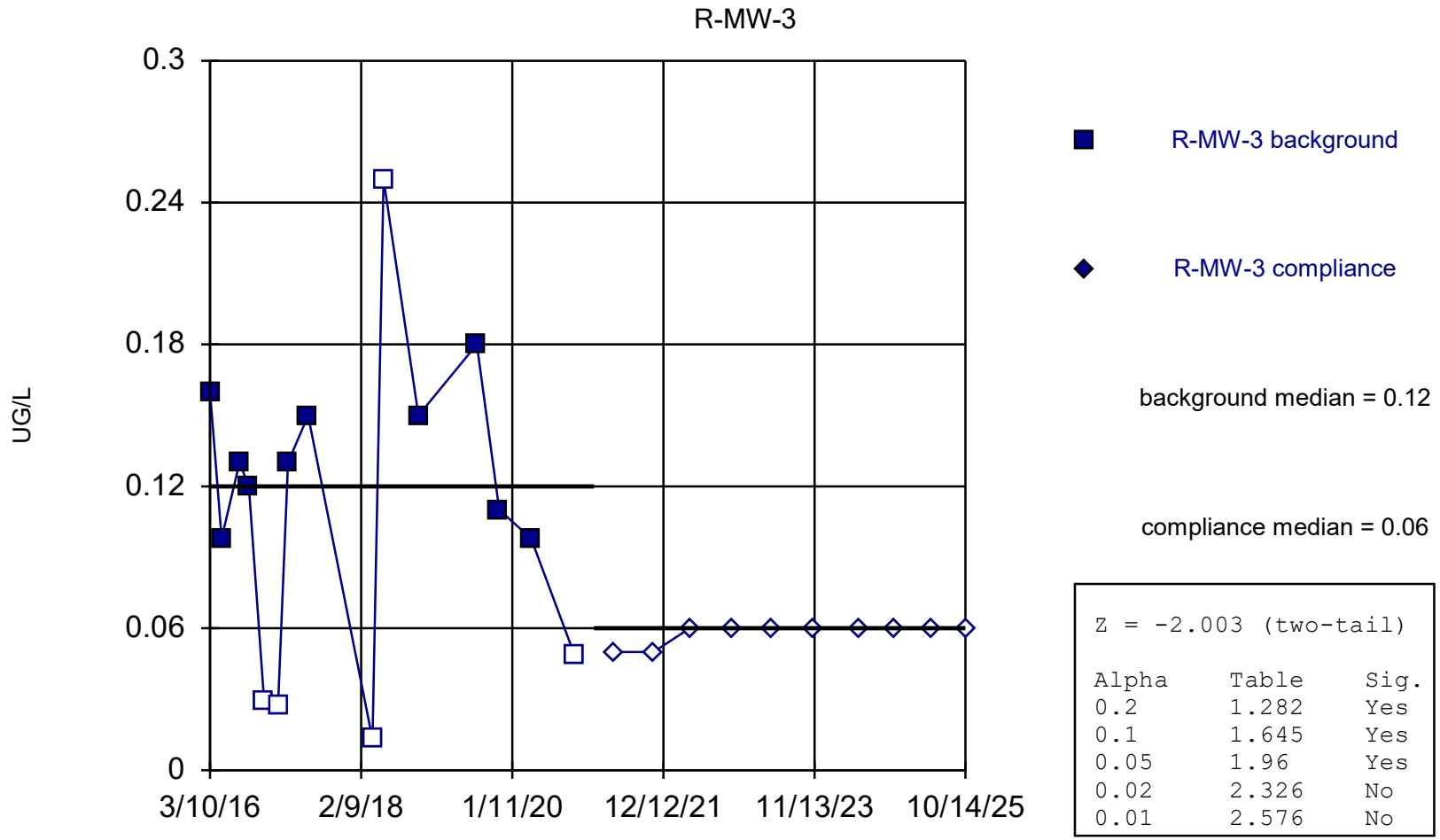
Alpha	Table	Sig.
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0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: ANTIMONY, TOTAL Analysis Run 1/5/2026 2:04 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -2.003 (two-tail)

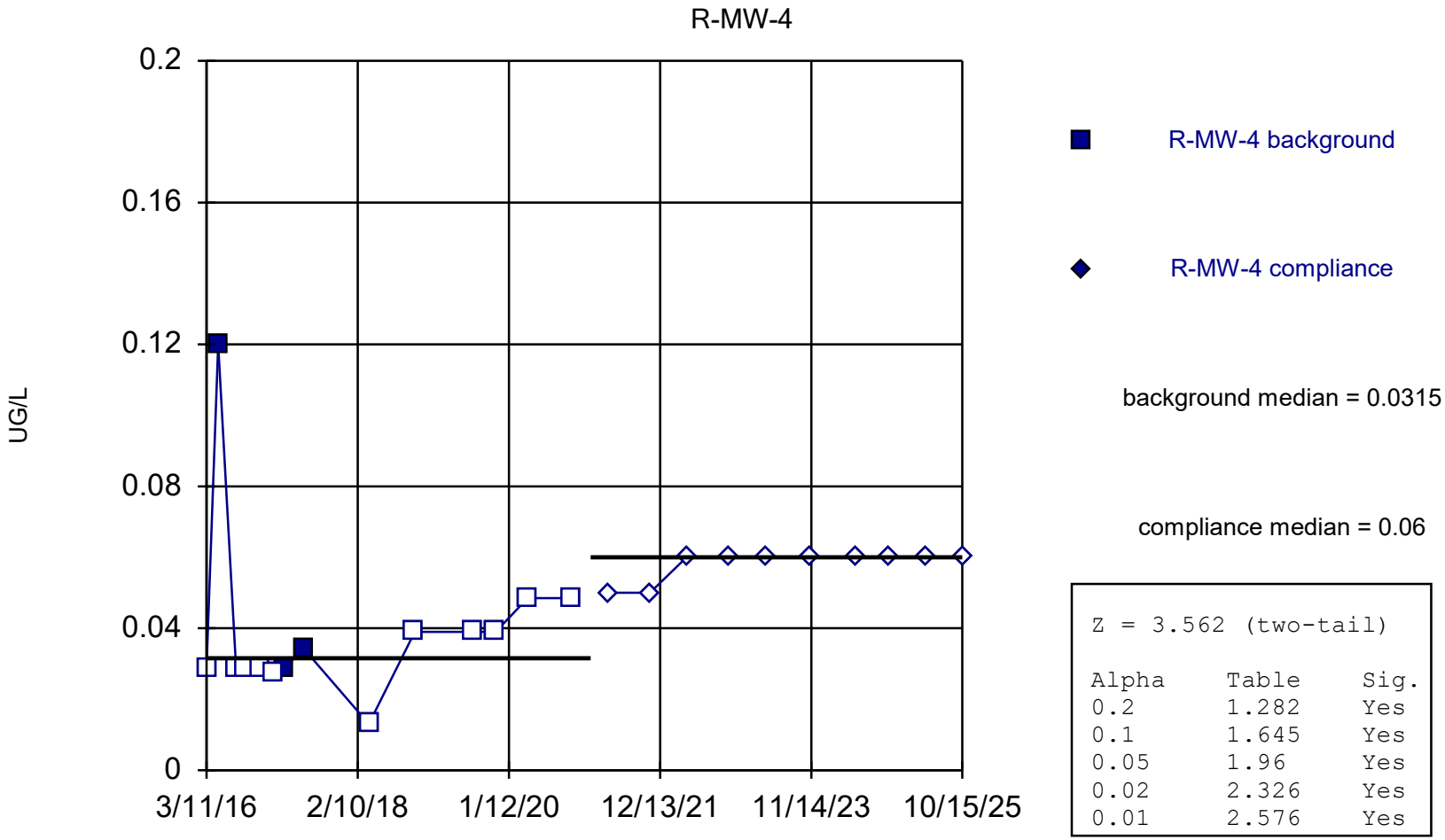
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: ANTIMONY, TOTAL Analysis Run 1/5/2026 2:04 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 3.562 (two-tail)

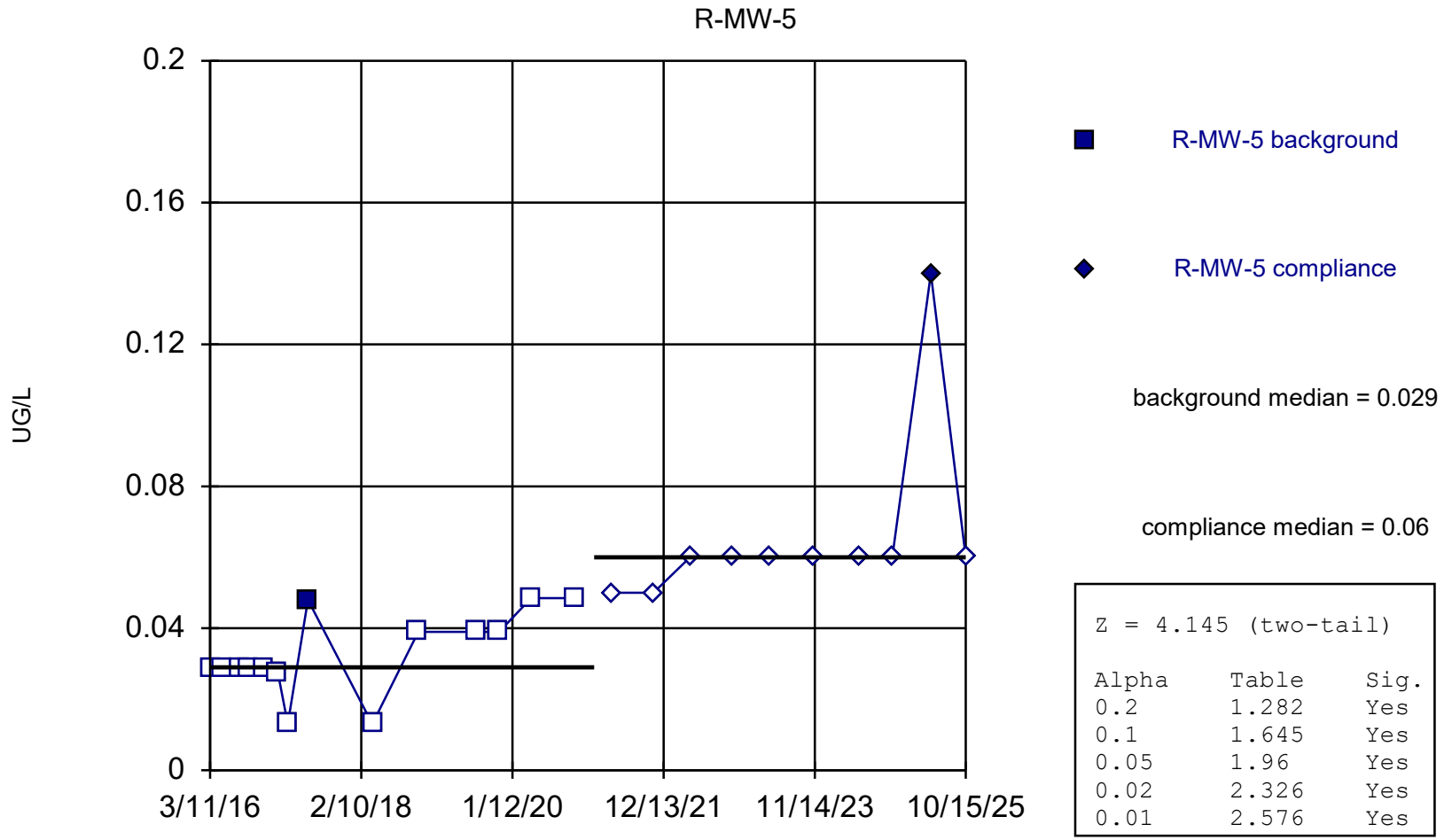
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: ANTIMONY, TOTAL Analysis Run 1/5/2026 2:04 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 4.145 (two-tail)

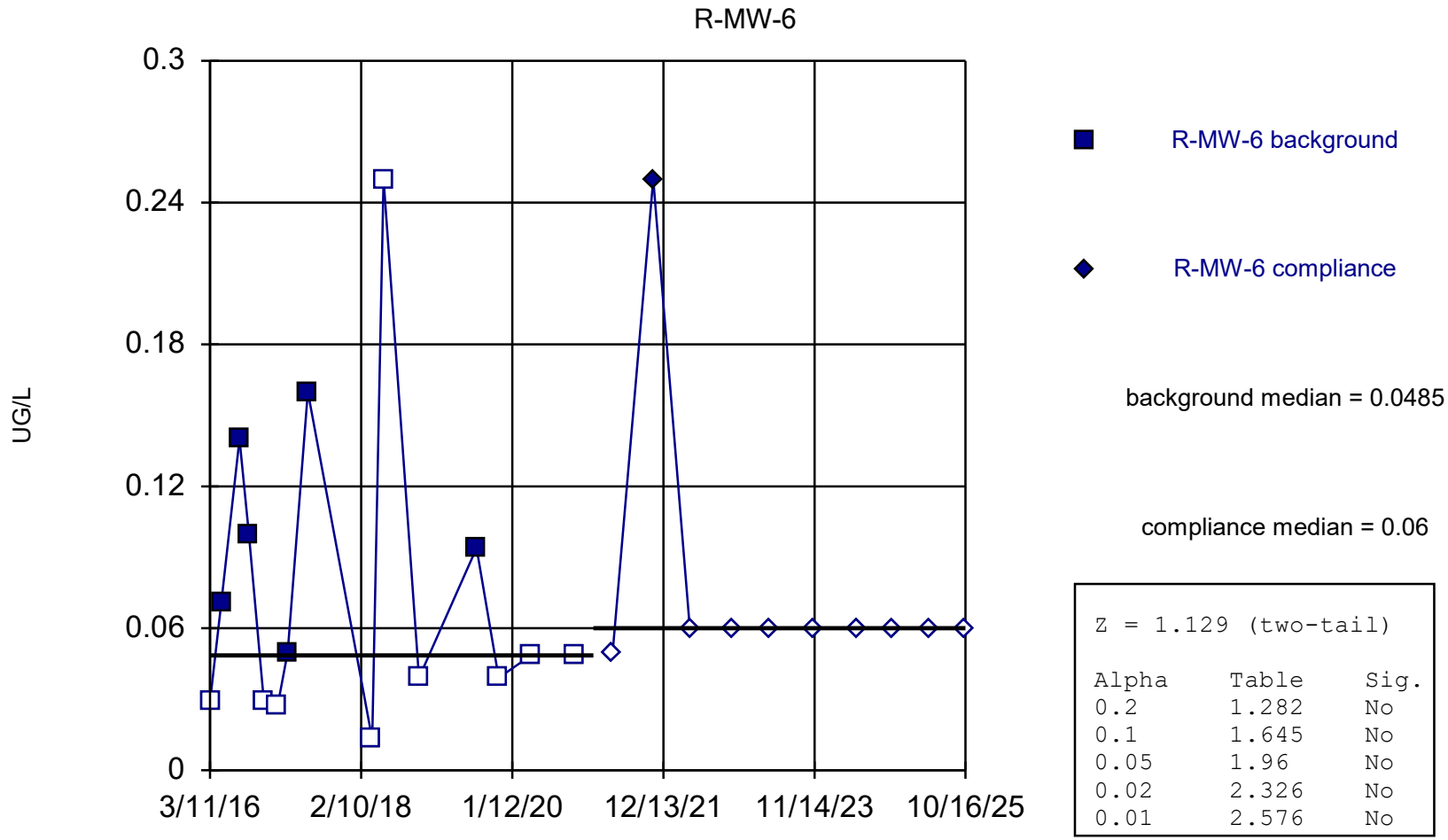
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: ANTIMONY, TOTAL Analysis Run 1/5/2026 2:04 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.129 (two-tail)

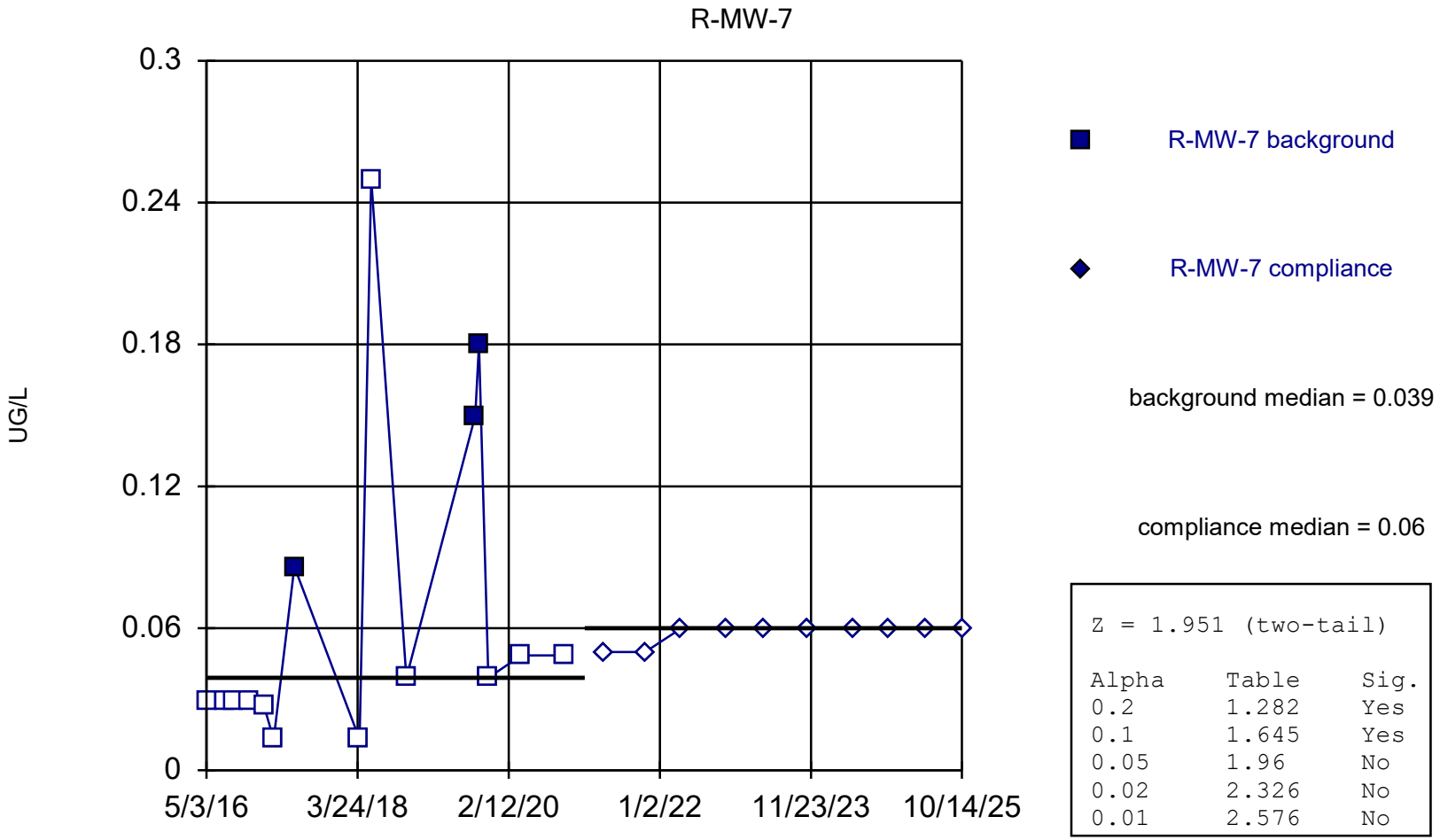
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: ANTIMONY, TOTAL Analysis Run 1/5/2026 2:04 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

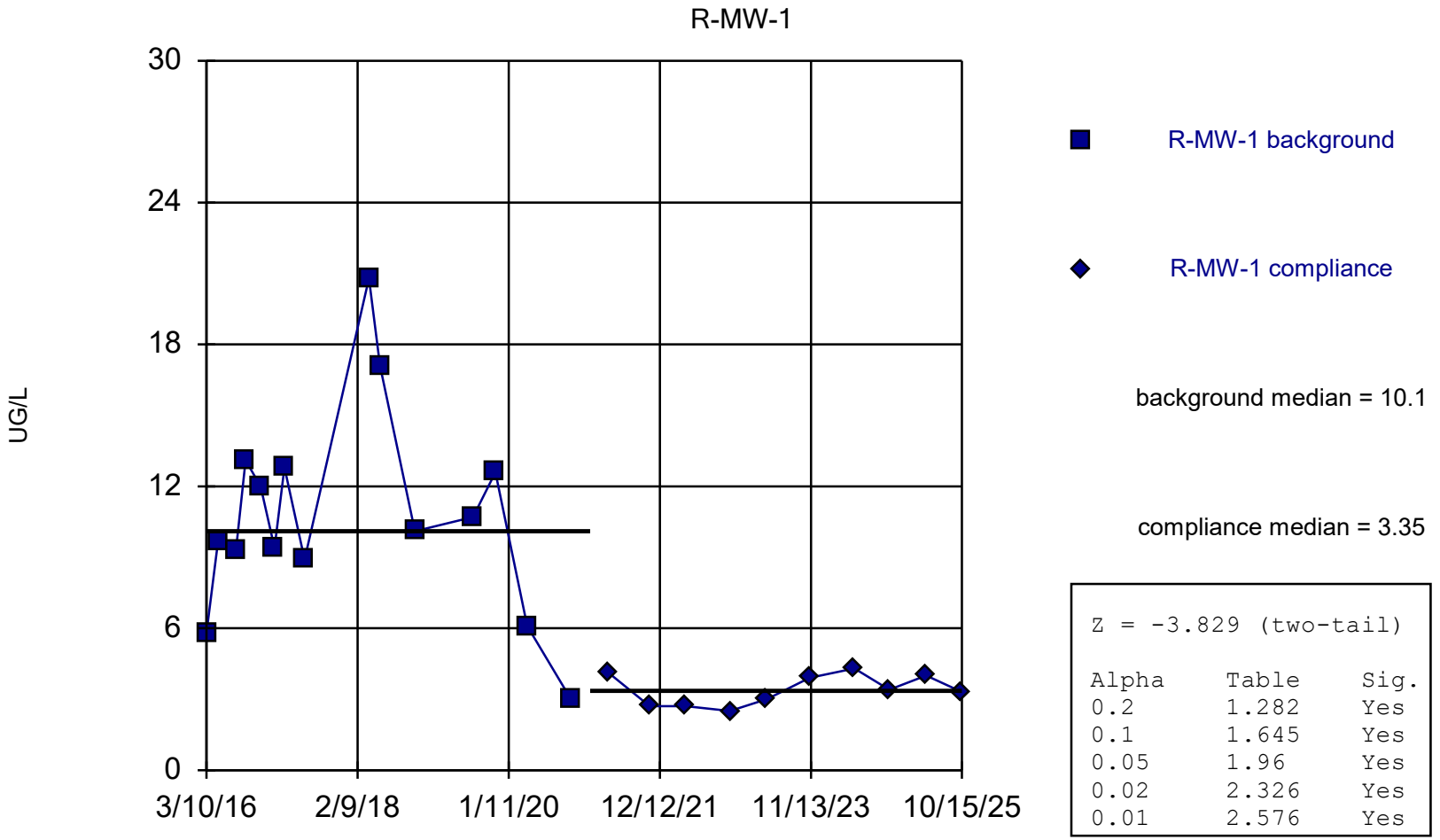


Constituent: ANTIMONY, TOTAL Analysis Run 1/5/2026 2:04 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = -3.829 (two-tail)

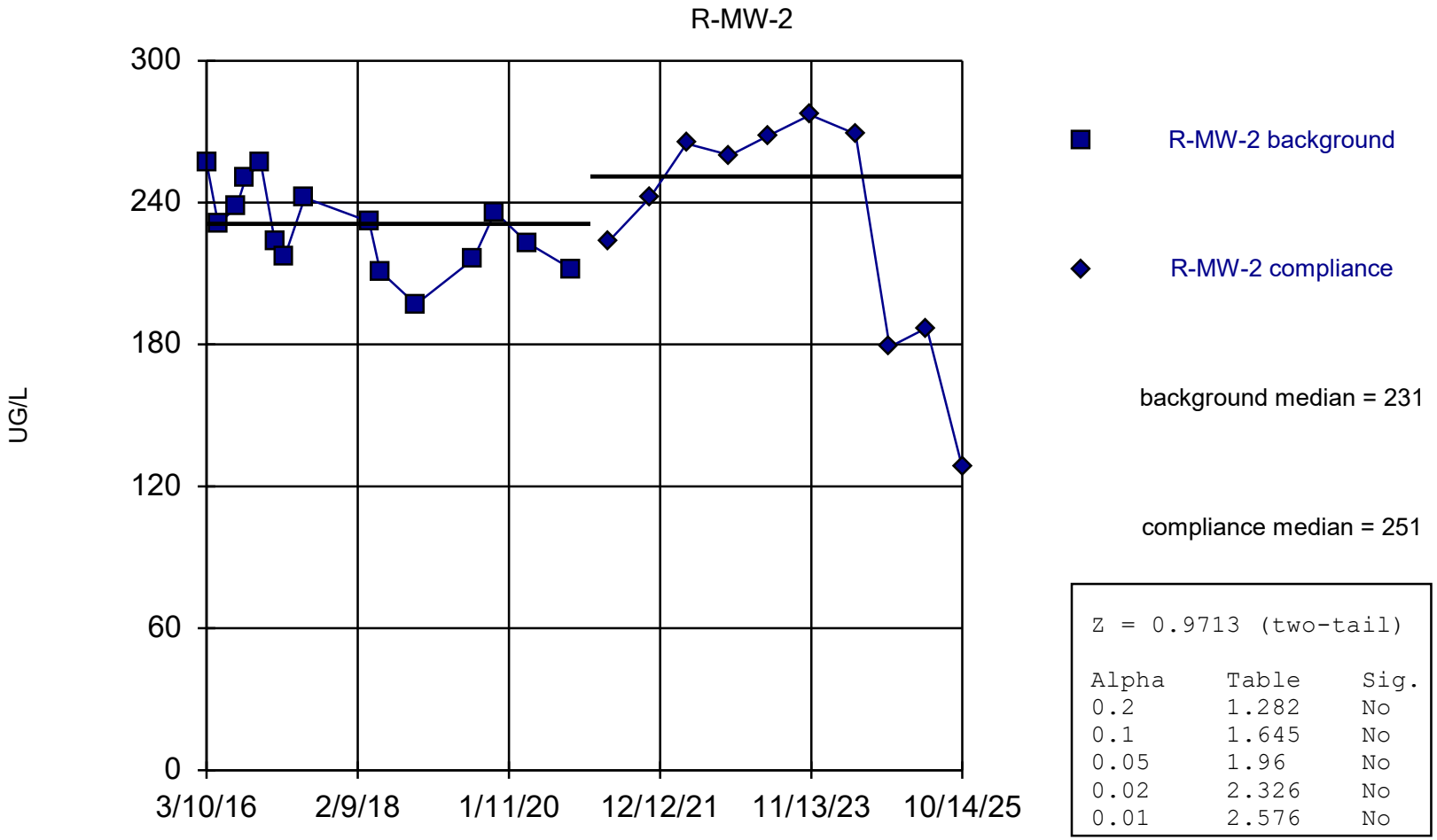
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: ARSENIC, TOTAL Analysis Run 1/5/2026 2:04 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.9713 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

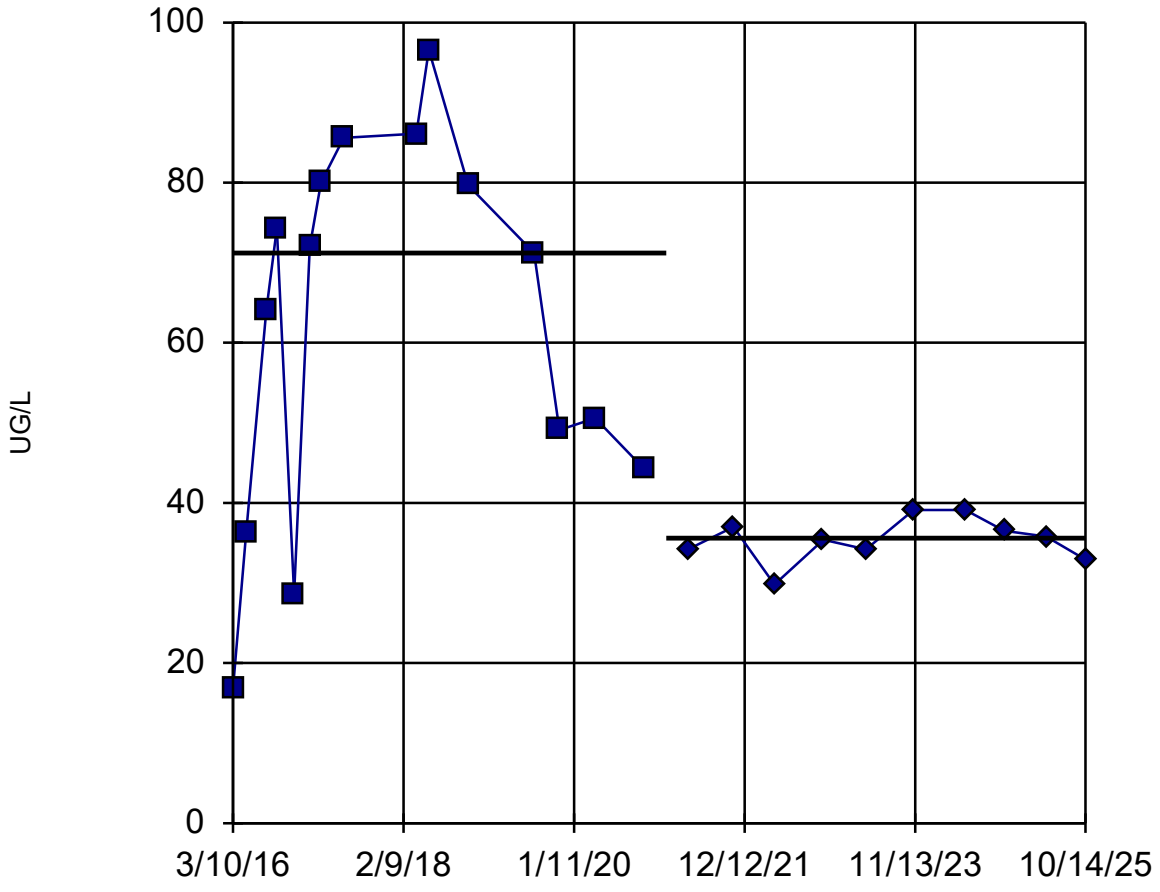
Constituent: ARSENIC, TOTAL Analysis Run 1/5/2026 2:04 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-3



R-MW-3 background

R-MW-3 compliance

background median = 71.2

compliance median = 35.6

Z = -2.858 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

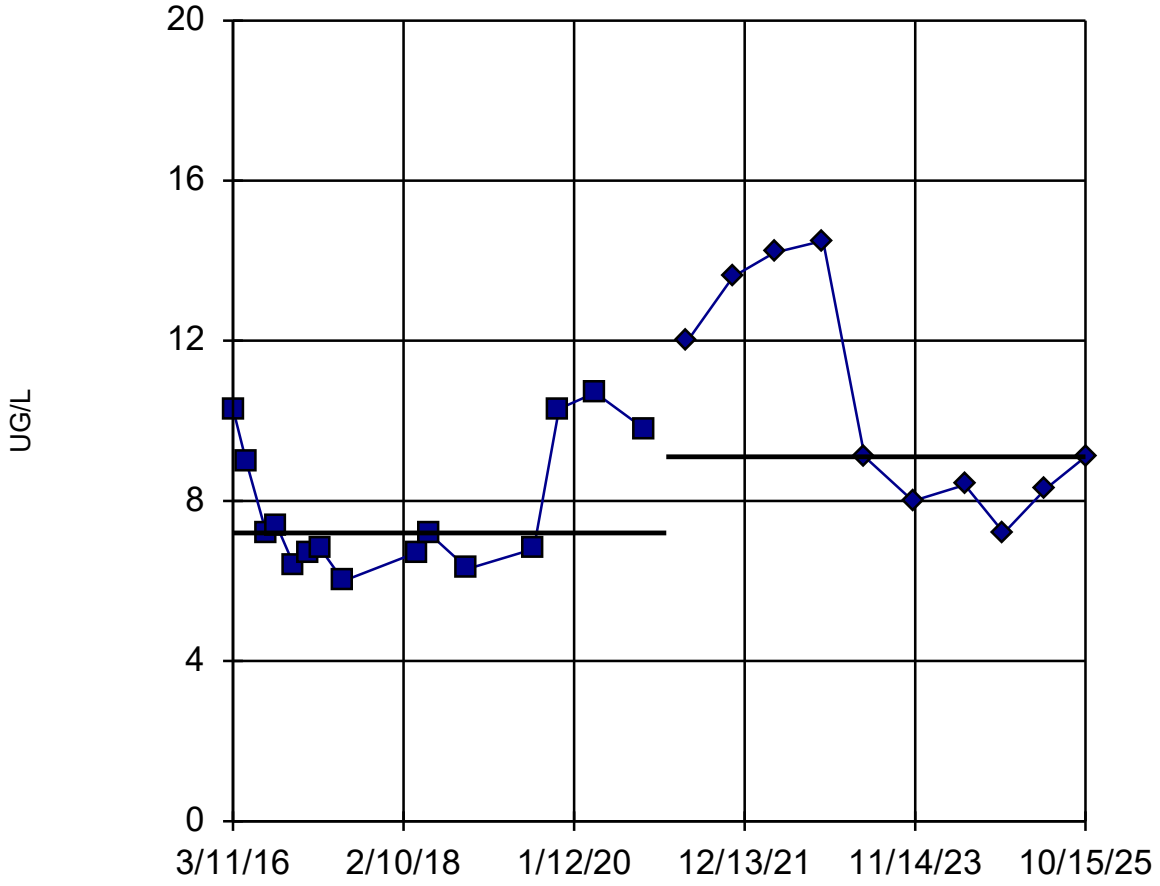
Constituent: ARSENIC, TOTAL Analysis Run 1/5/2026 2:04 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-4



R-MW-4 background

R-MW-4 compliance

background median = 7.2

compliance median = 9.1

Z = 2.472 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	No

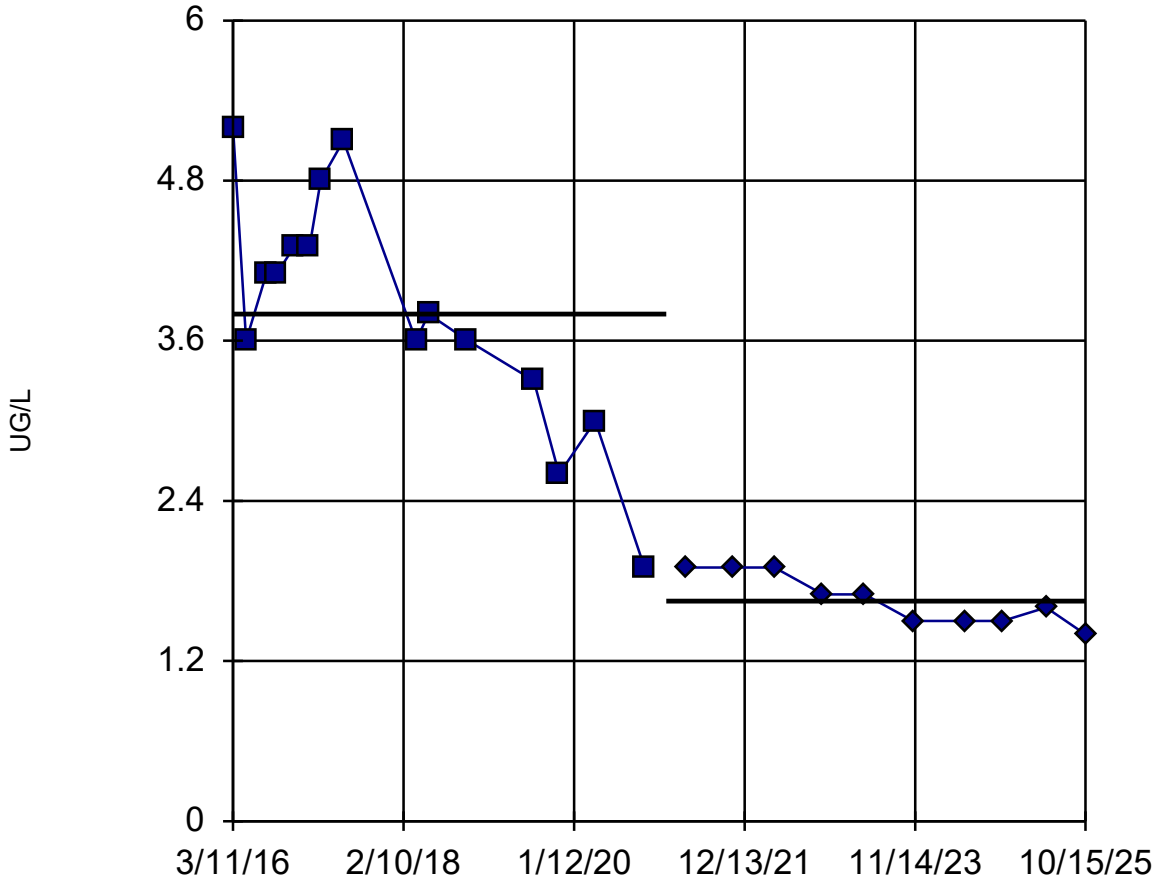
Constituent: ARSENIC, TOTAL Analysis Run 1/5/2026 2:04 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Mann-Whitney (Wilcoxon Rank Sum)

R-MW-5



R-MW-5 background

R-MW-5 compliance

background median = 3.8

compliance median = 1.65

Z = -4.121 (two-tail)

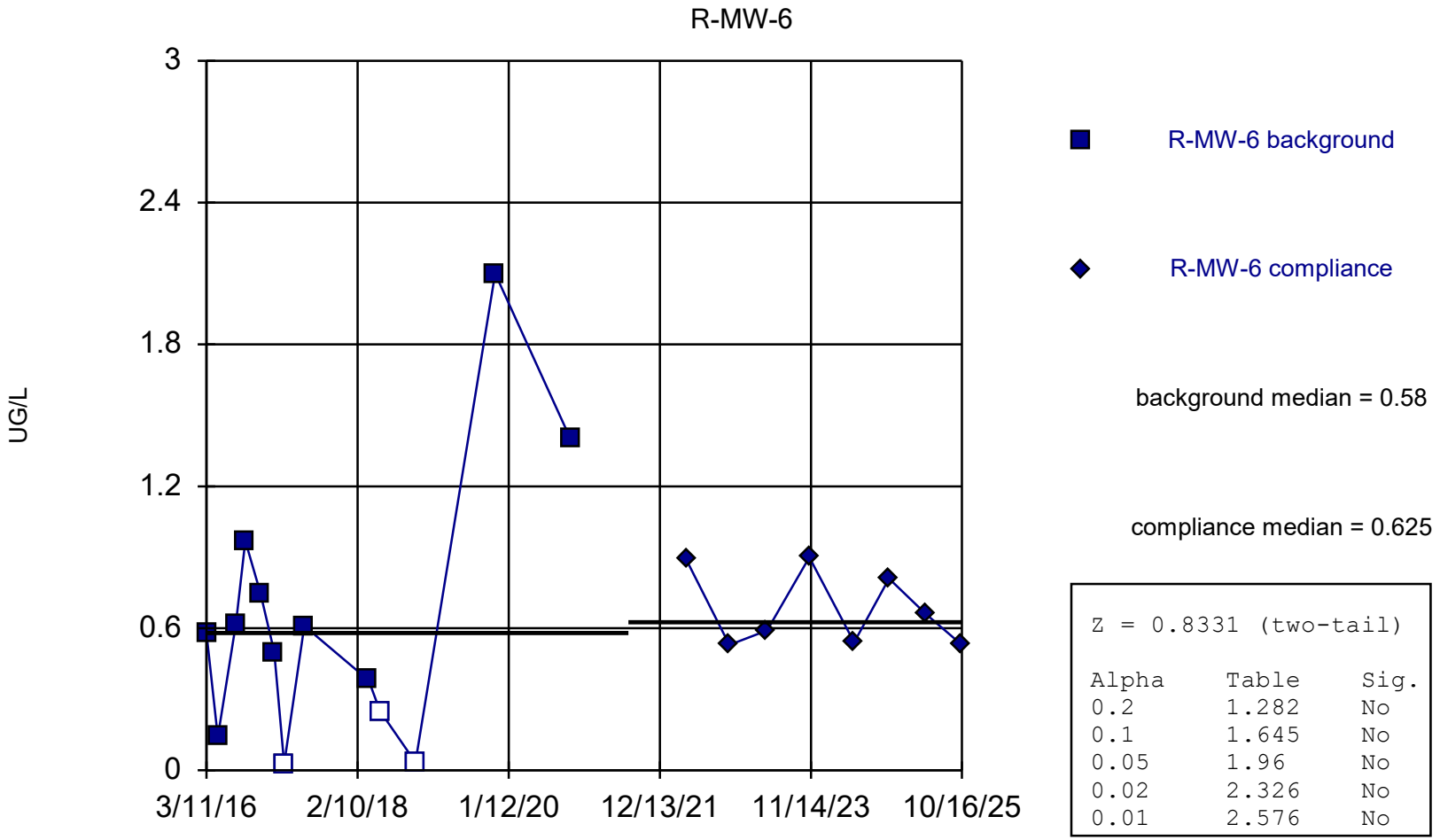
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: ARSENIC, TOTAL Analysis Run 1/5/2026 2:04 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.8331 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

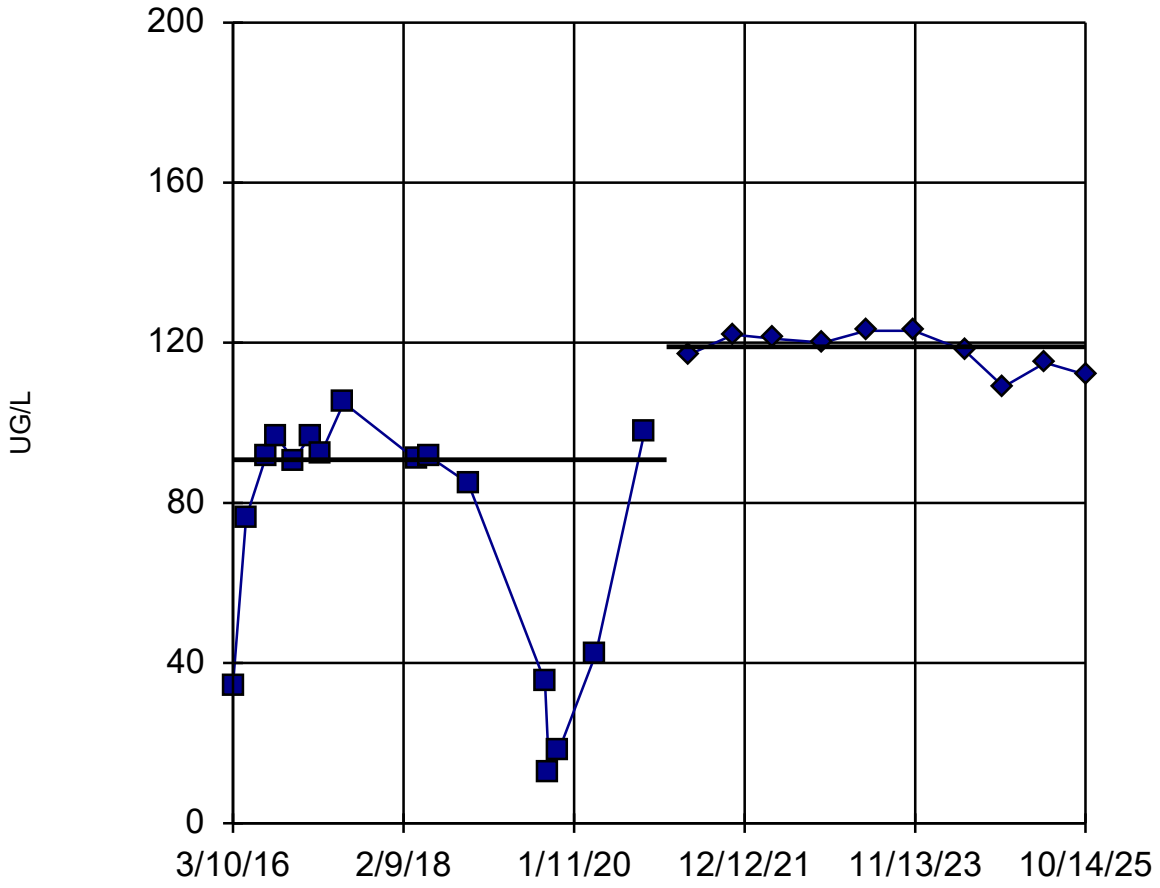
Constituent: ARSENIC, TOTAL Analysis Run 1/5/2026 2:04 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-7



R-MW-7 background

R-MW-7 compliance

background median = 90.75

compliance median = 119

Z = 4.191 (two-tail)

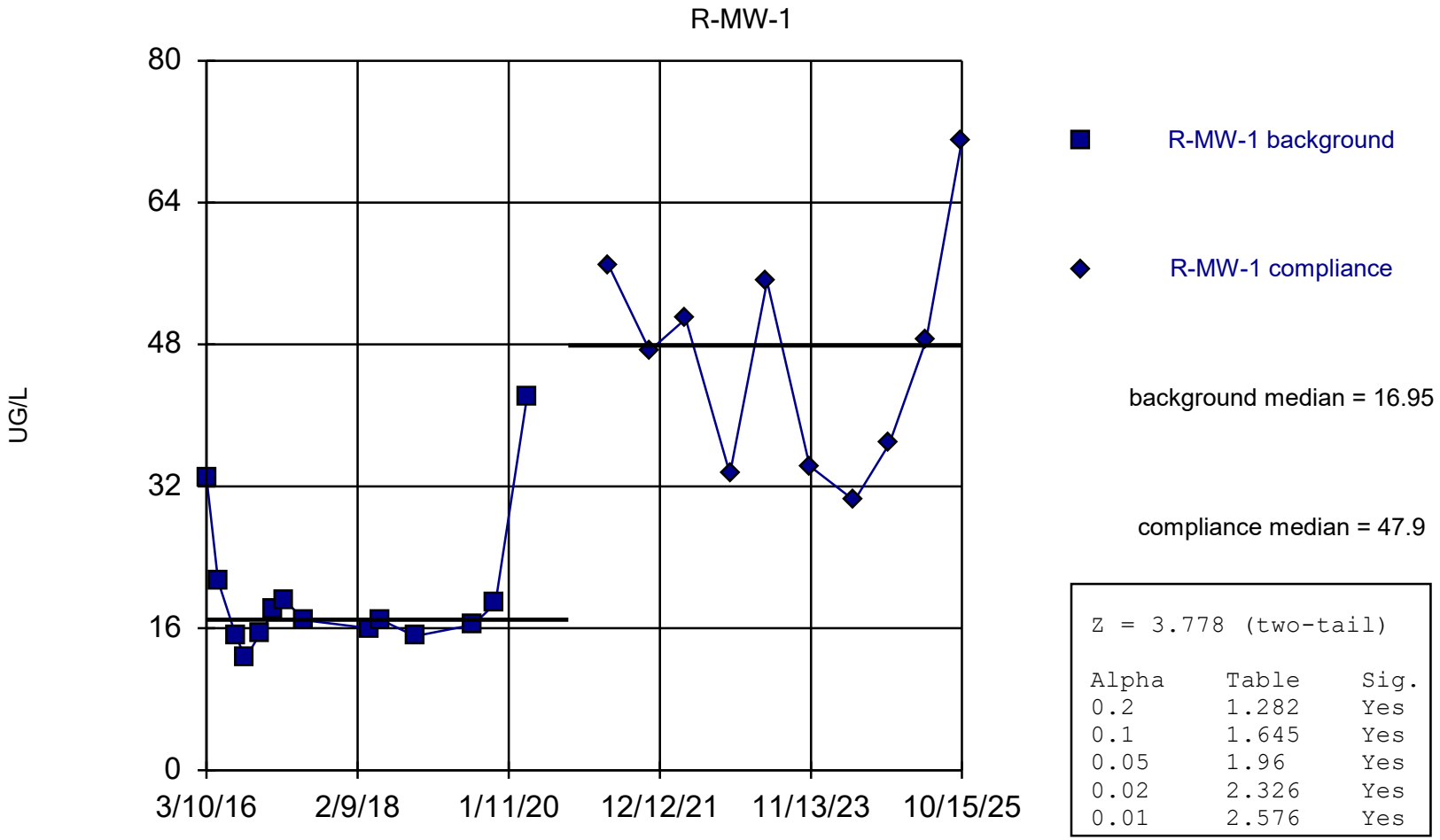
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: ARSENIC, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



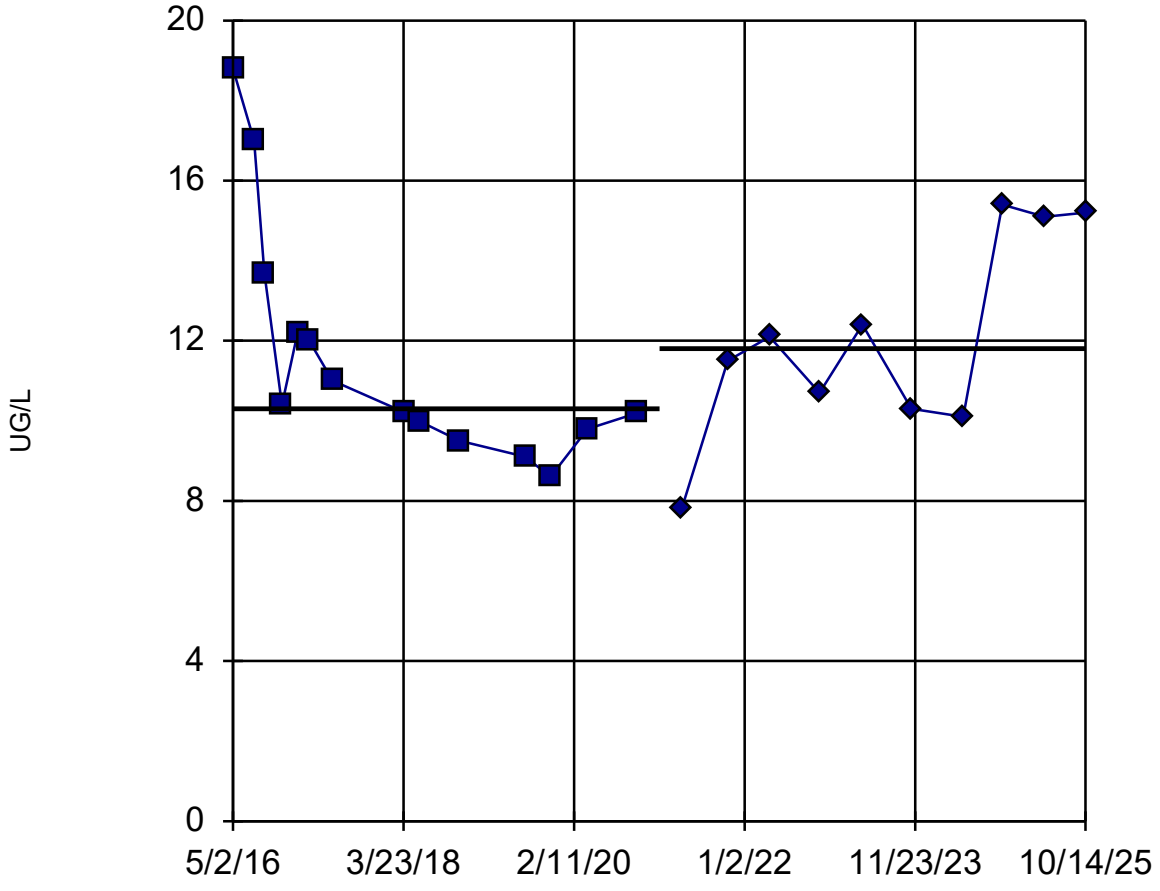
Constituent: BARIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-2



R-MW-2 background

R-MW-2 compliance

background median = 10.3

compliance median = 11.8

Z = 0.9078 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

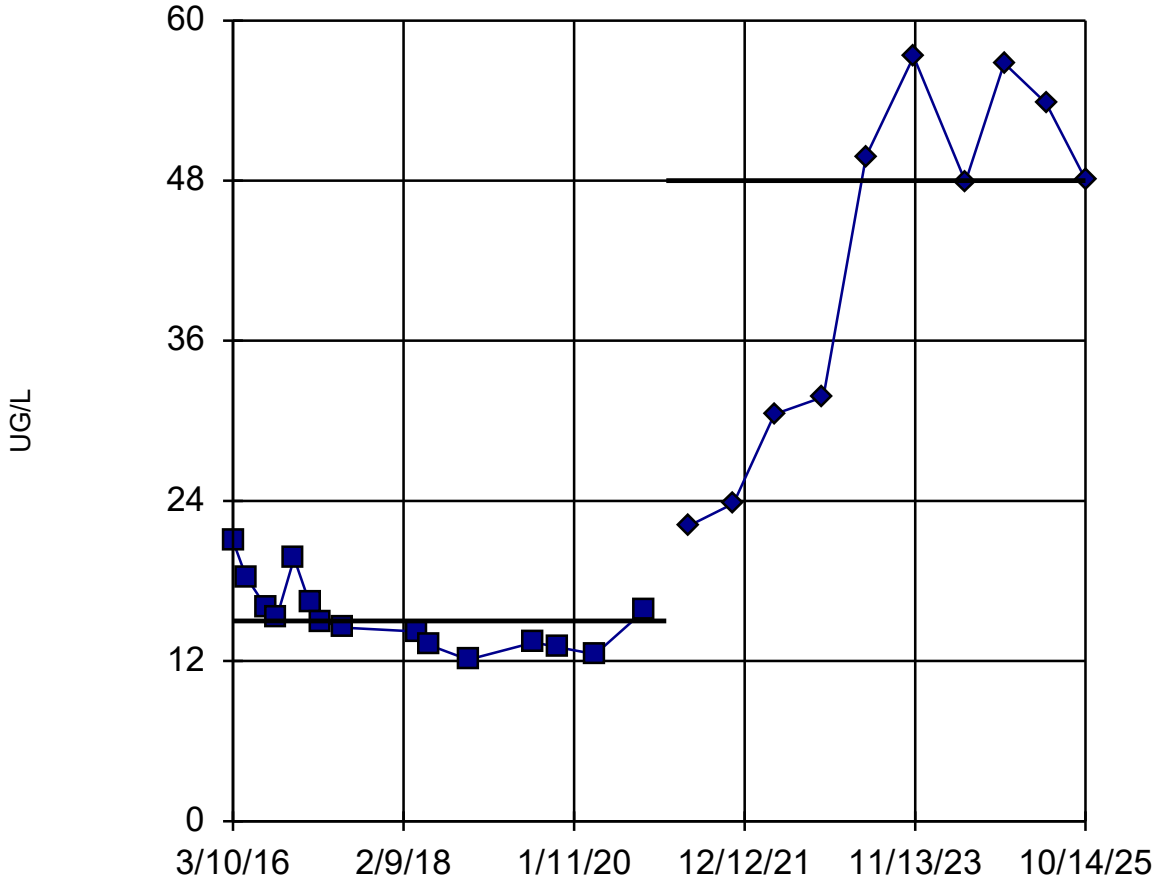
Constituent: BARIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-3



R-MW-3 background

R-MW-3 compliance

background median = 15

compliance median = 48

Z = 4.133 (two-tail)

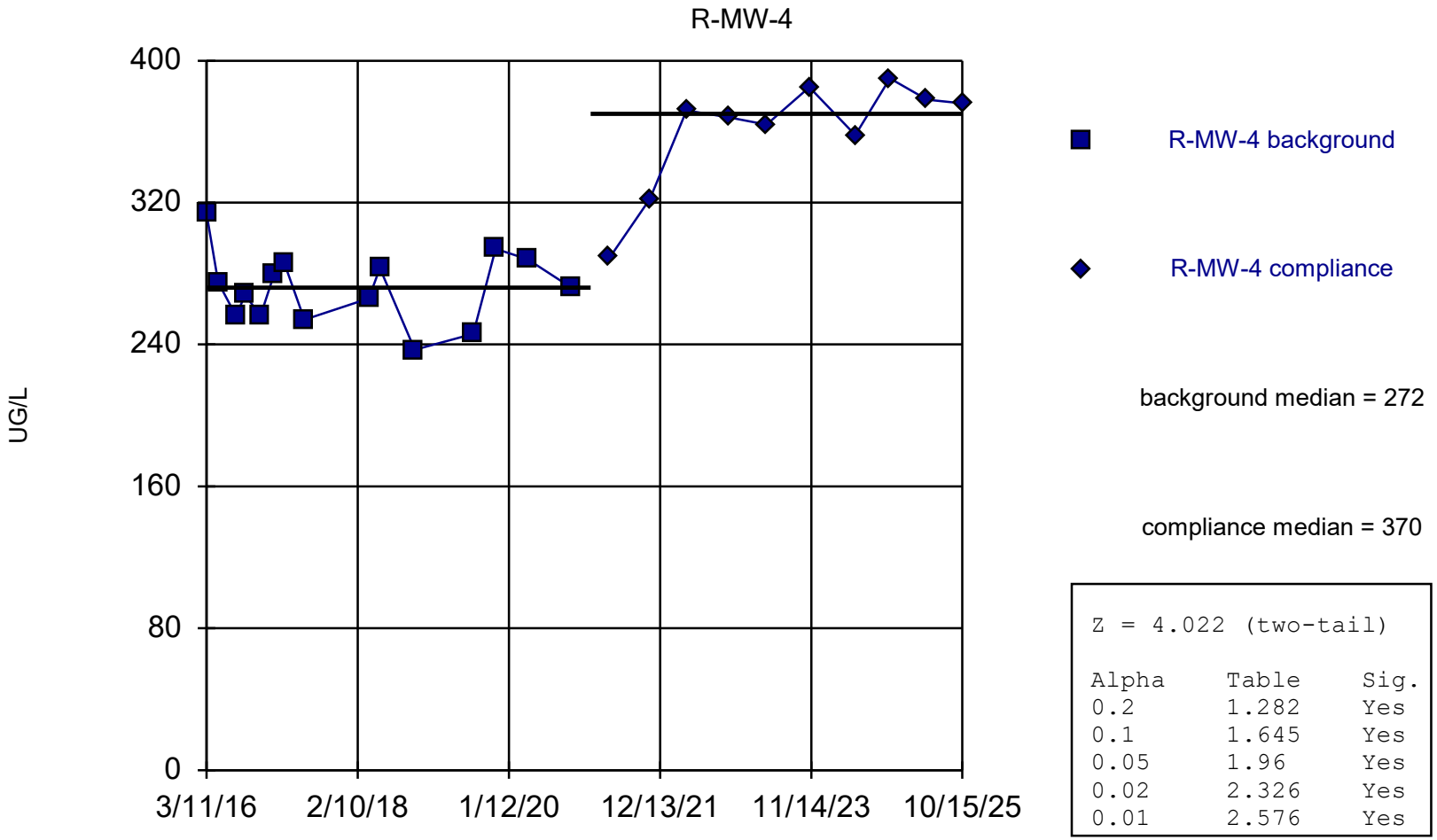
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: BARIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = 4.022 (two-tail)

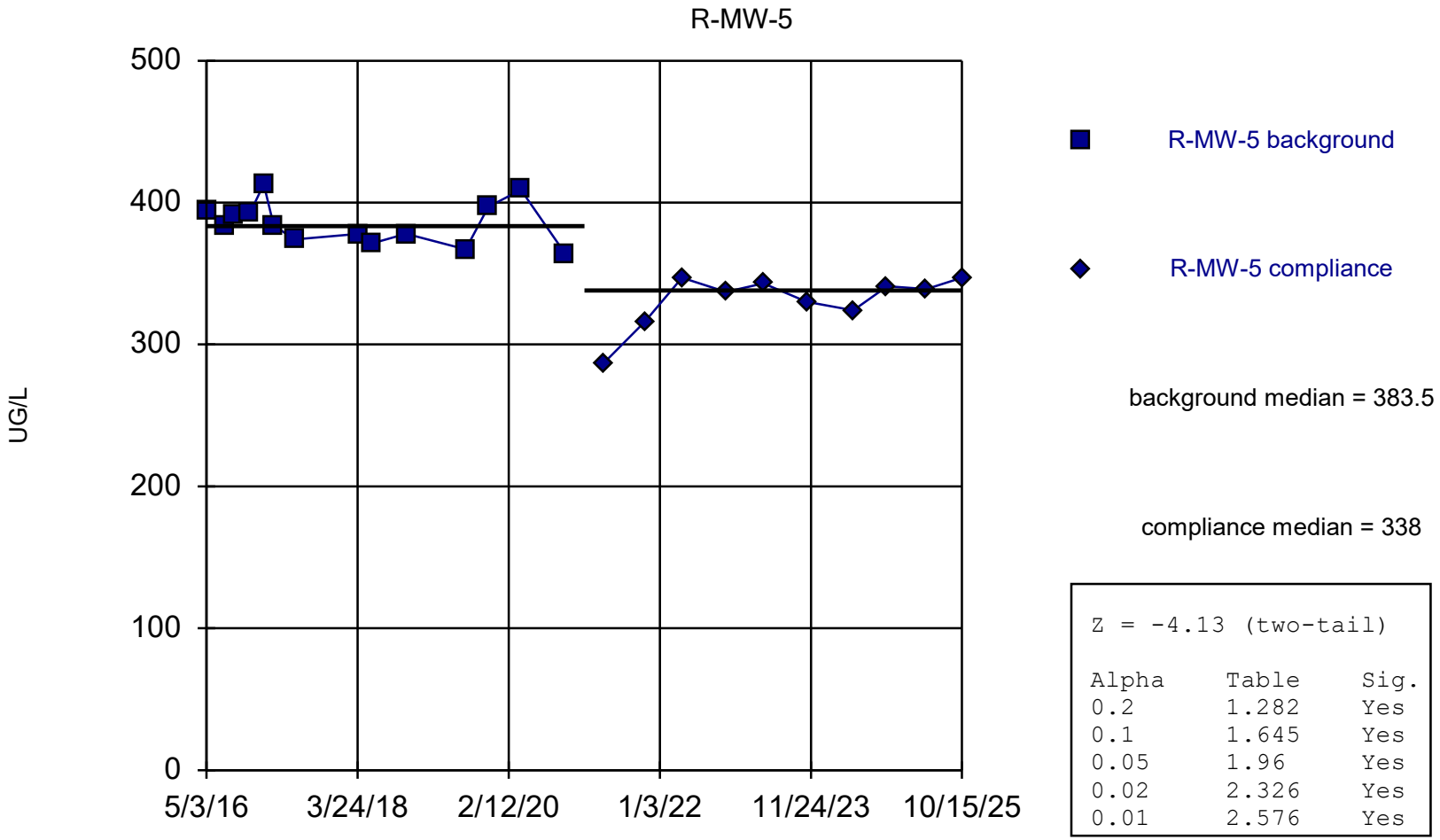
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: BARIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Mann-Whitney (Wilcoxon Rank Sum)



background median = 383.5

compliance median = 338

Z = -4.13 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

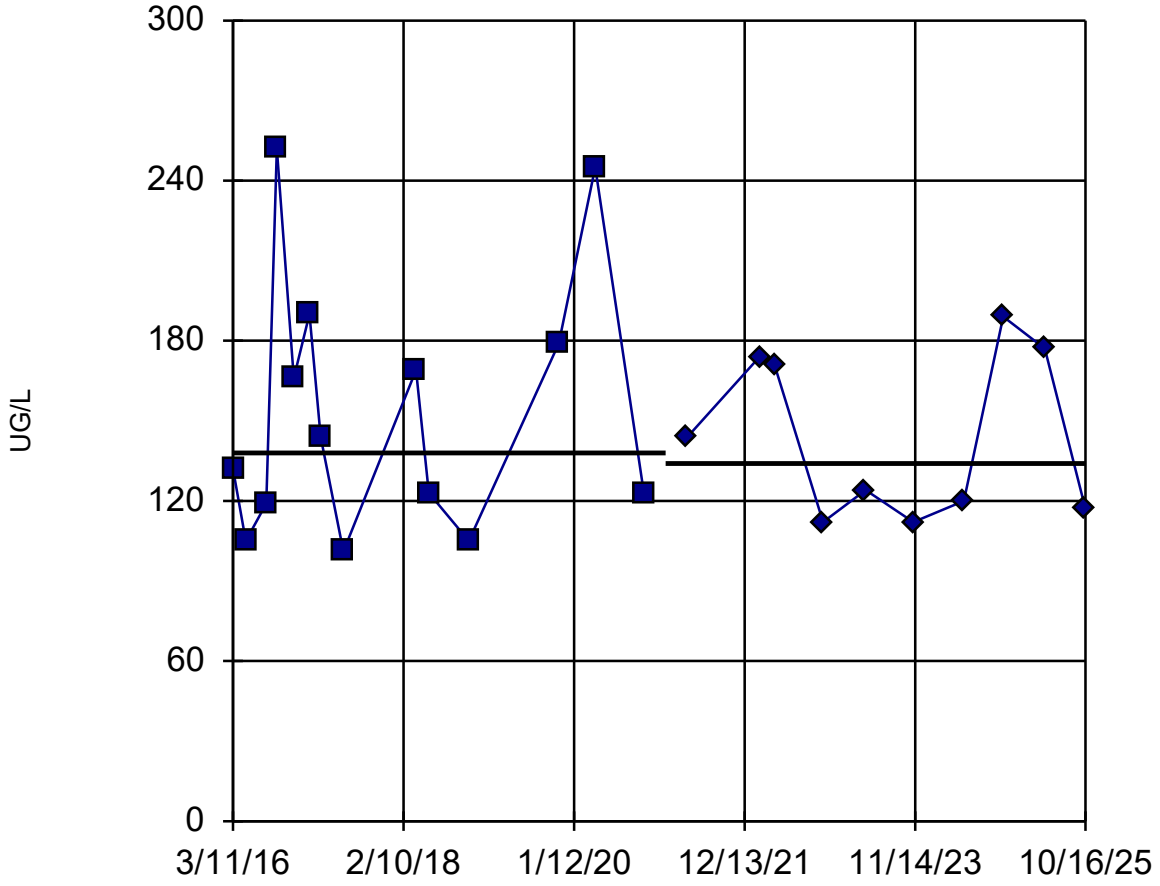
Constituent: BARIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-6



R-MW-6 background

R-MW-6 compliance

background median = 138

compliance median = 134

Z = -0.1758 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

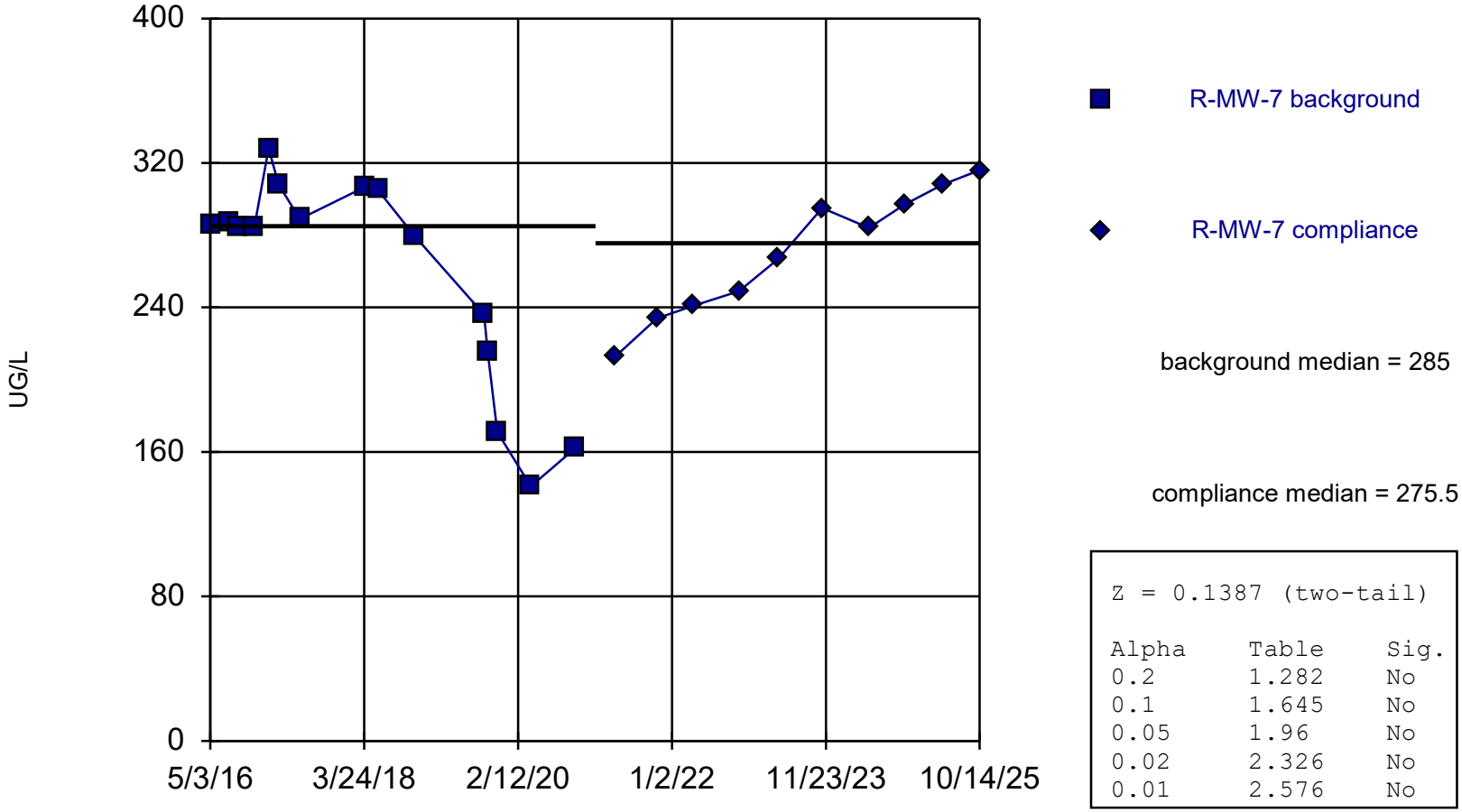
Constituent: BARIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-7



Z = 0.1387 (two-tail)

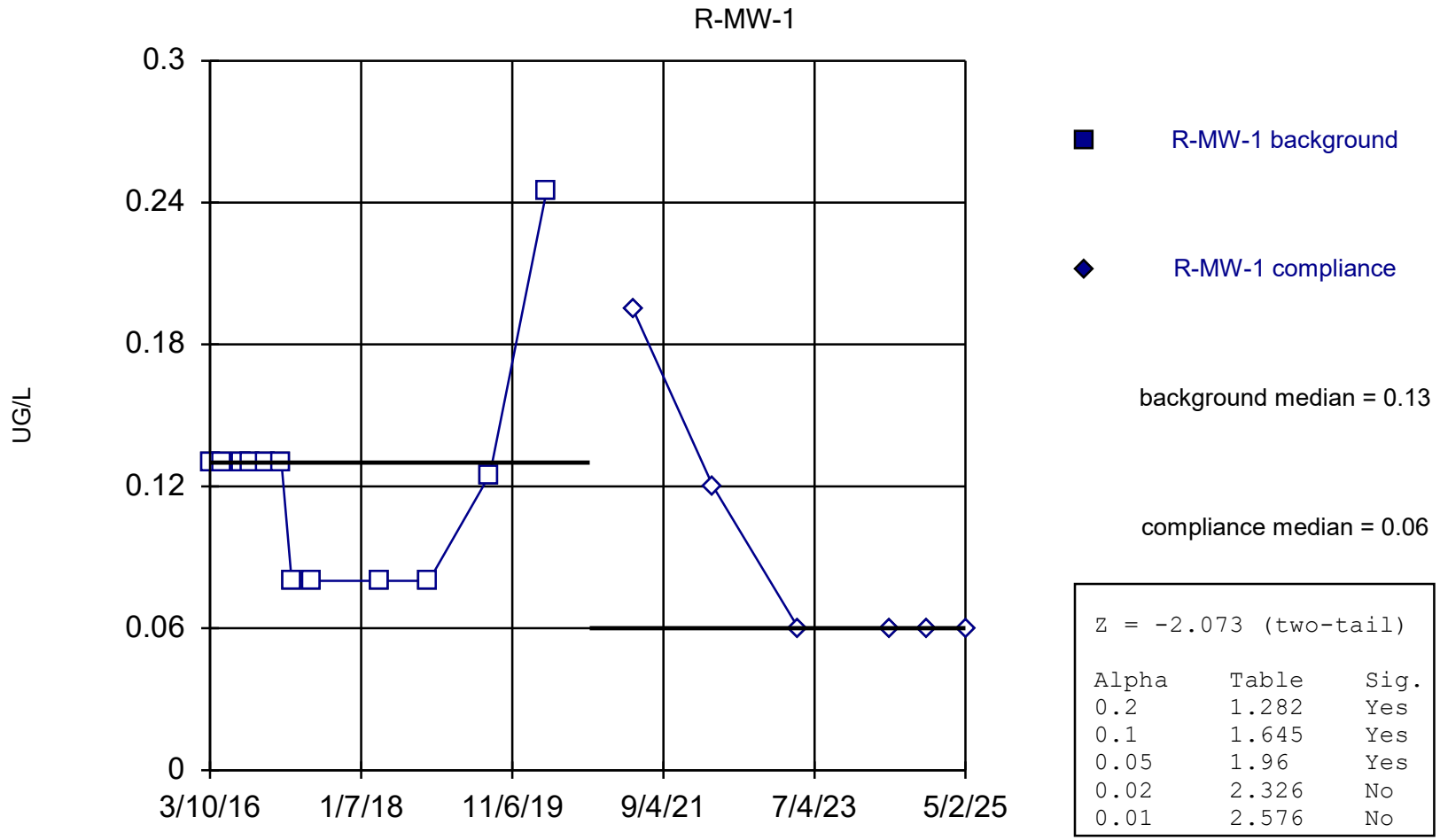
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: BARIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -2.073 (two-tail)

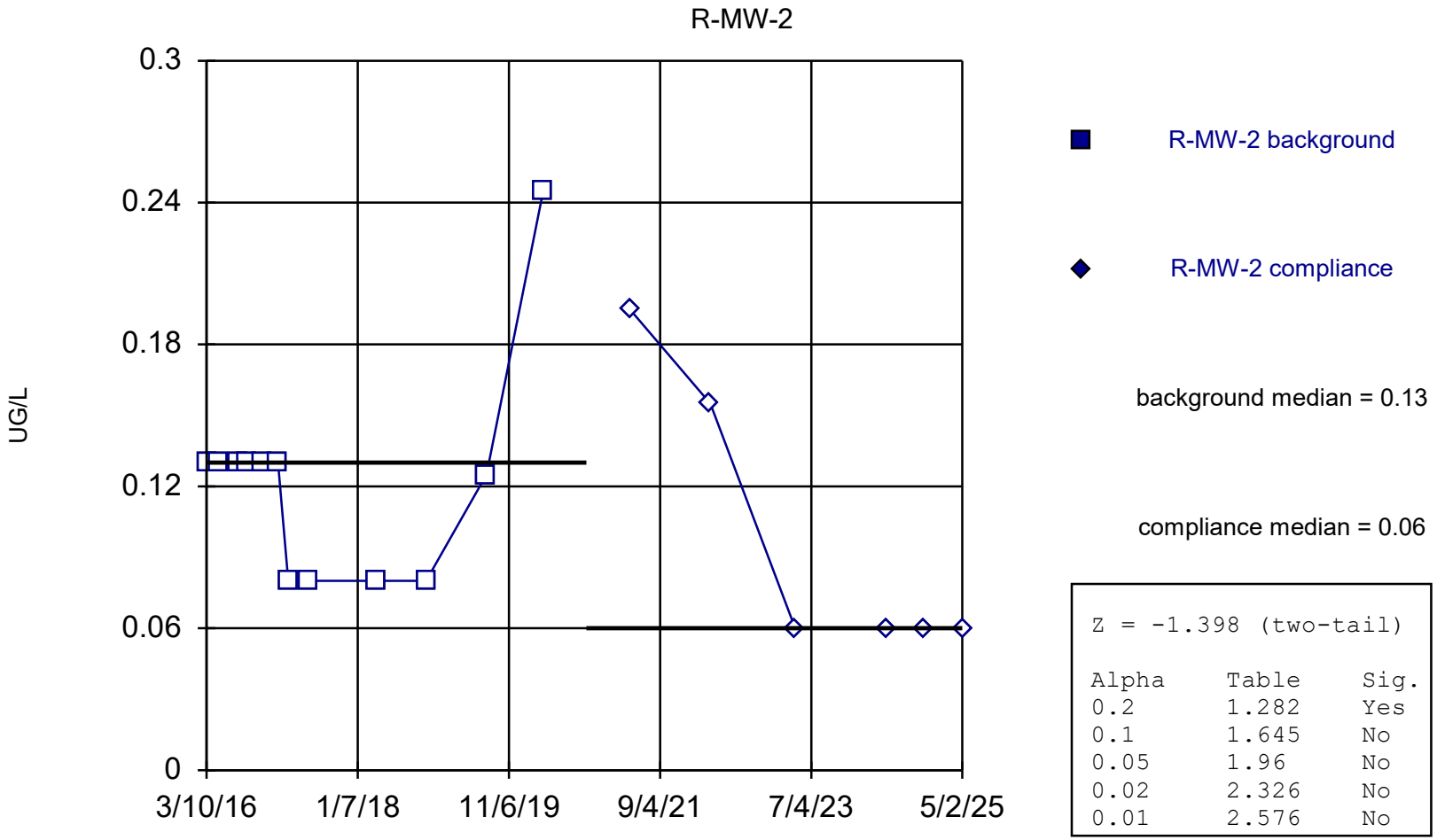
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: BERYLLIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -1.398 (two-tail)

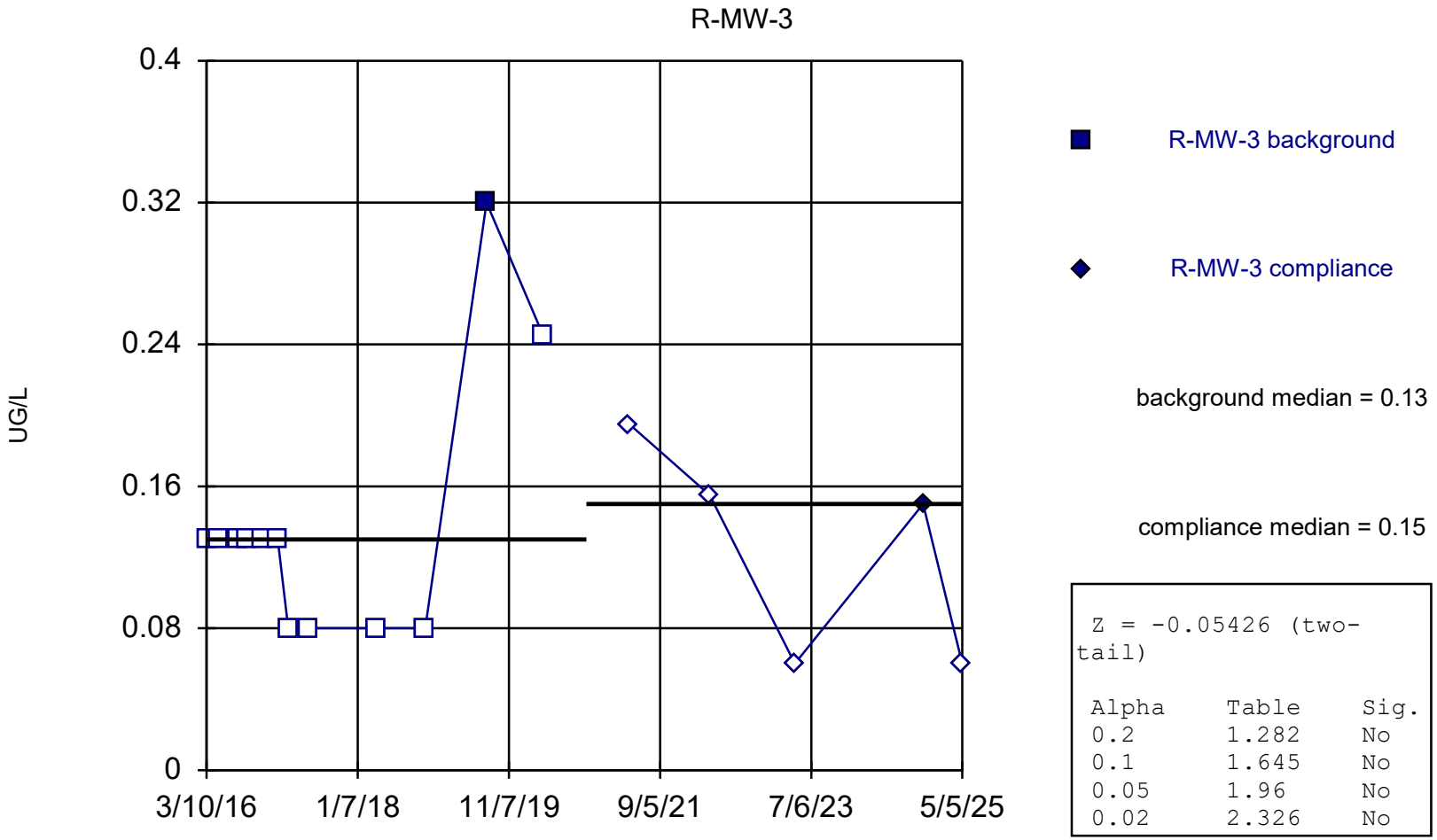
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: BERYLLIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.05426 (two-tail)

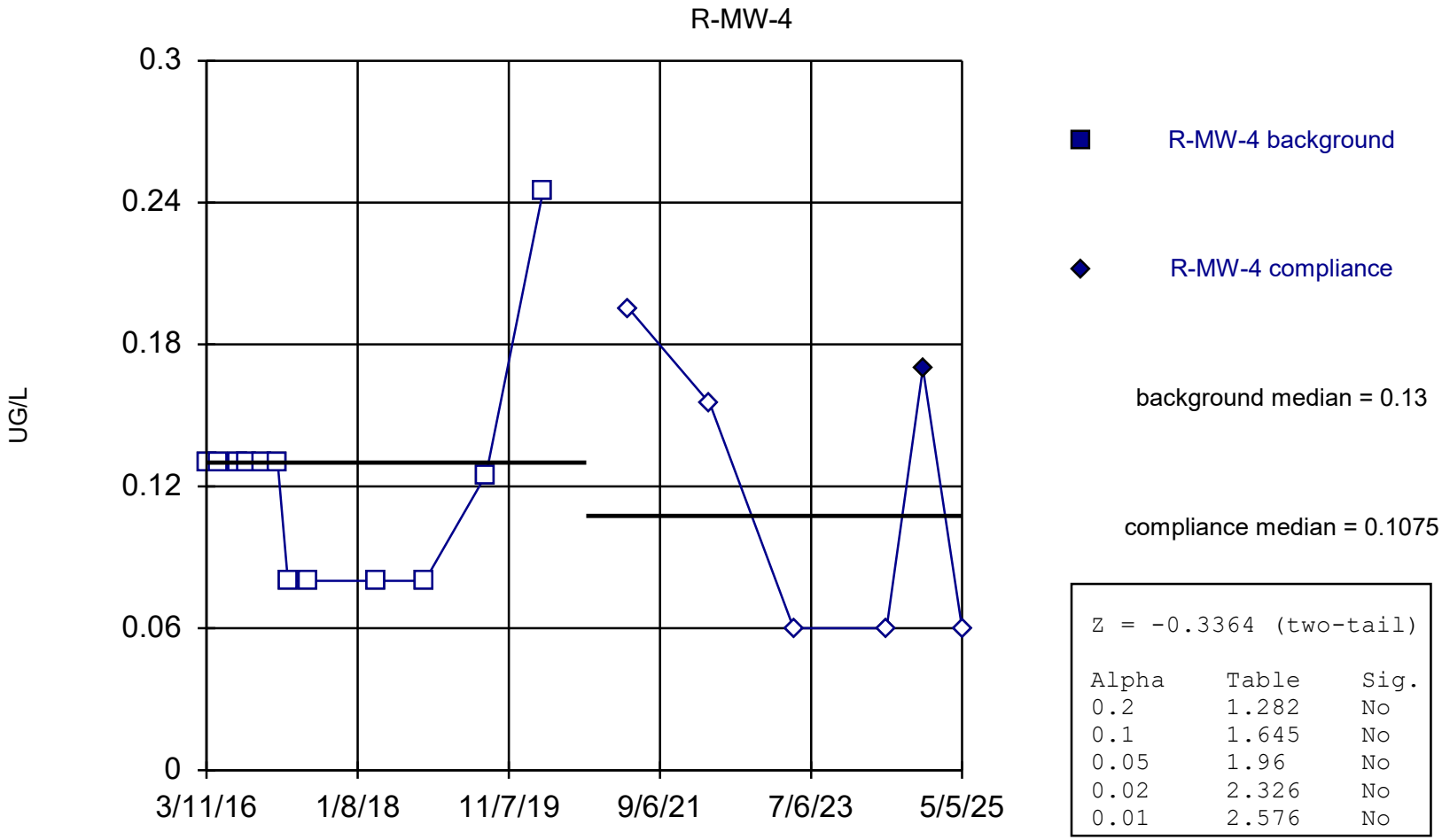
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No

Constituent: BERYLLIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.3364 (two-tail)

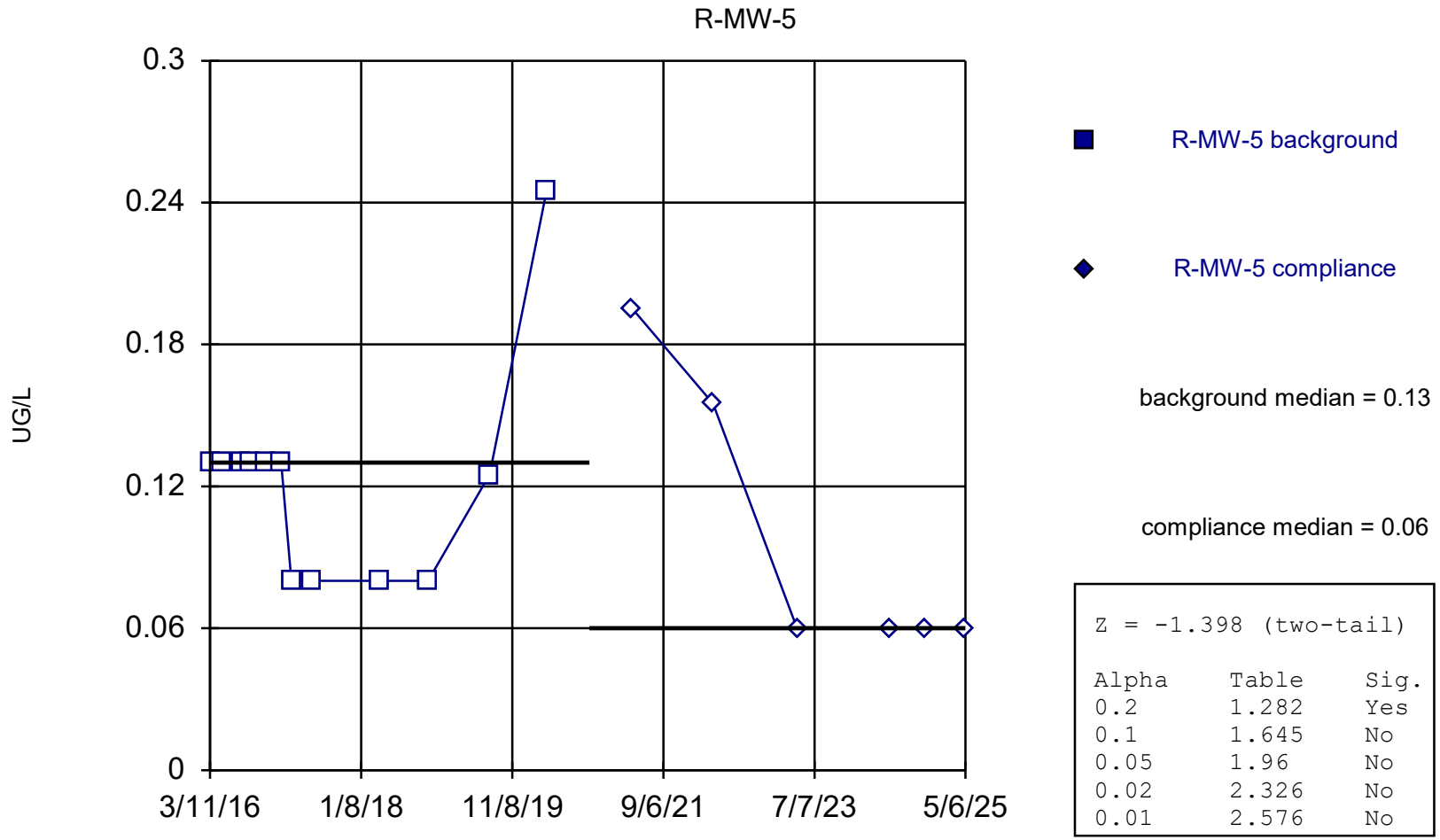
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: BERYLLIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -1.398 (two-tail)

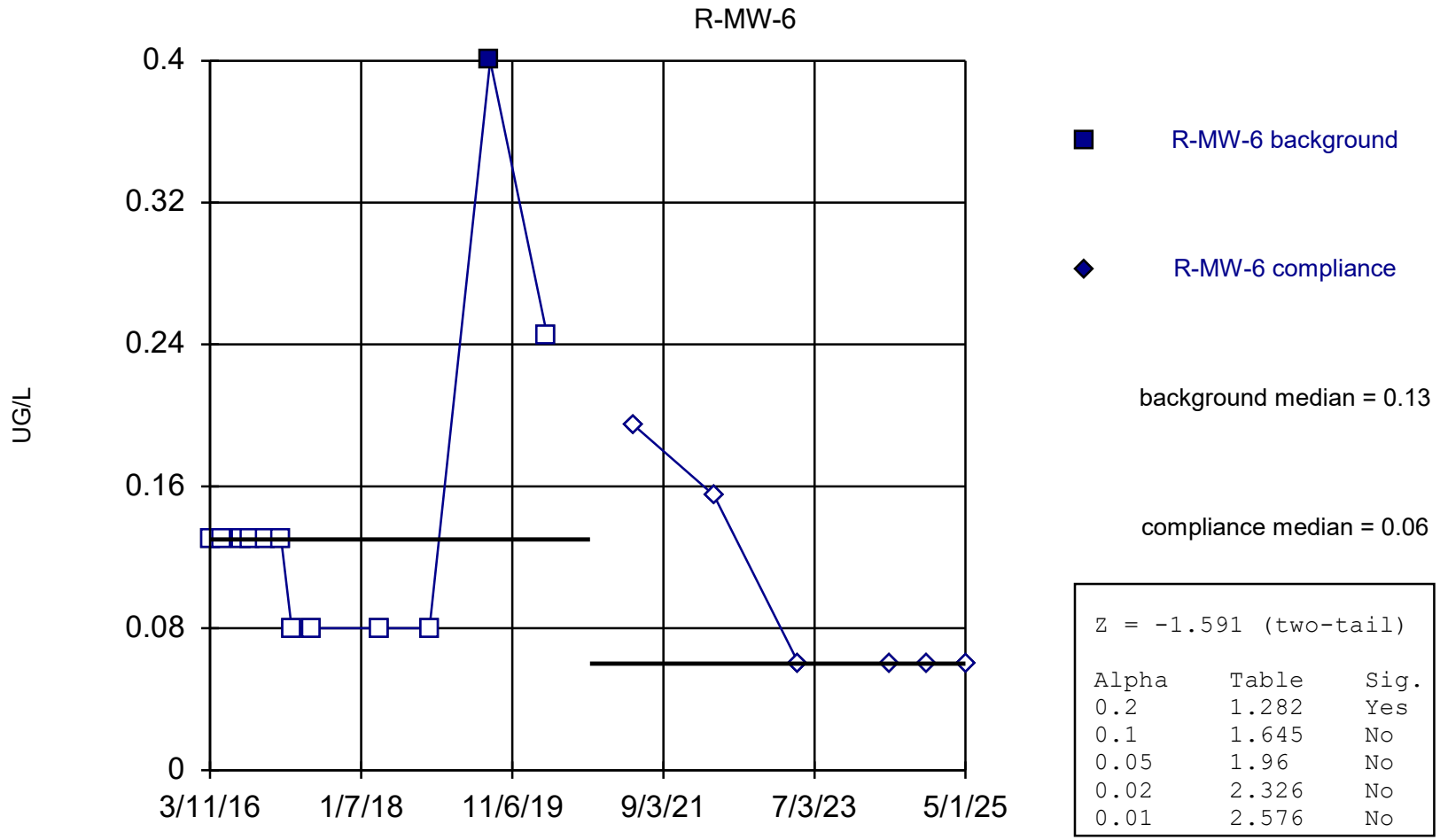
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: BERYLLIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -1.591 (two-tail)

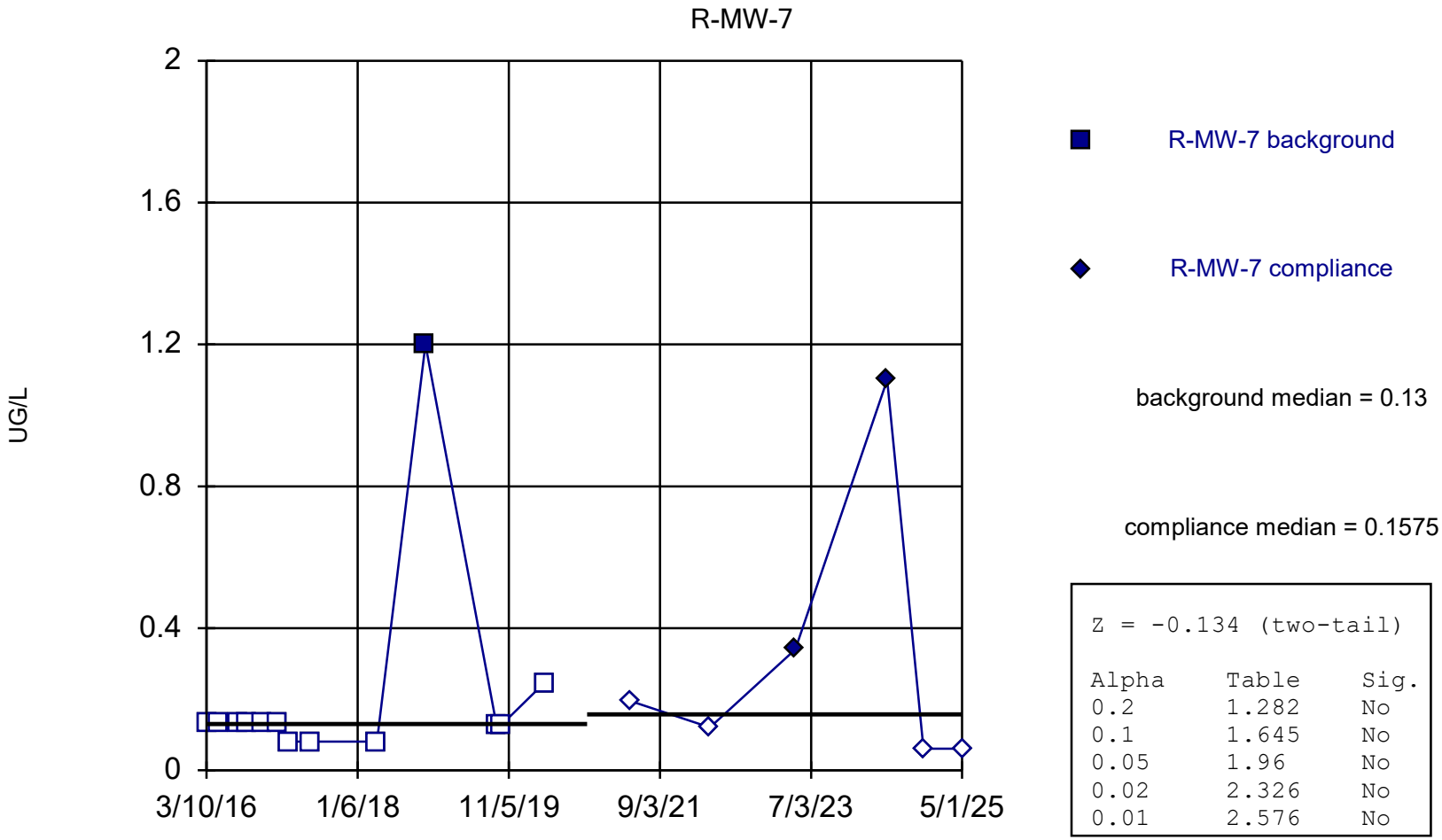
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: BERYLLIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.134 (two-tail)

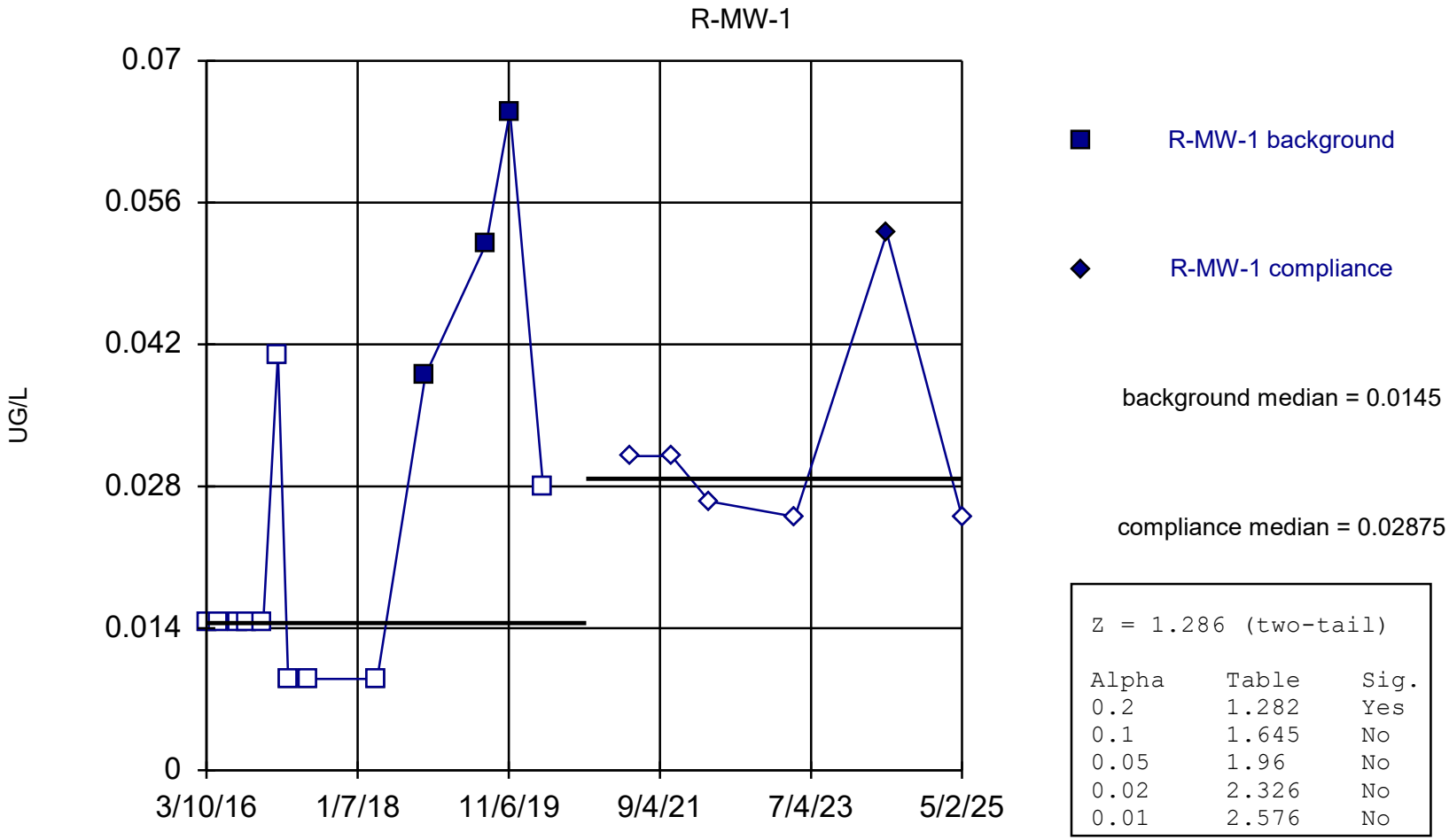
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: BERYLLIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.286 (two-tail)

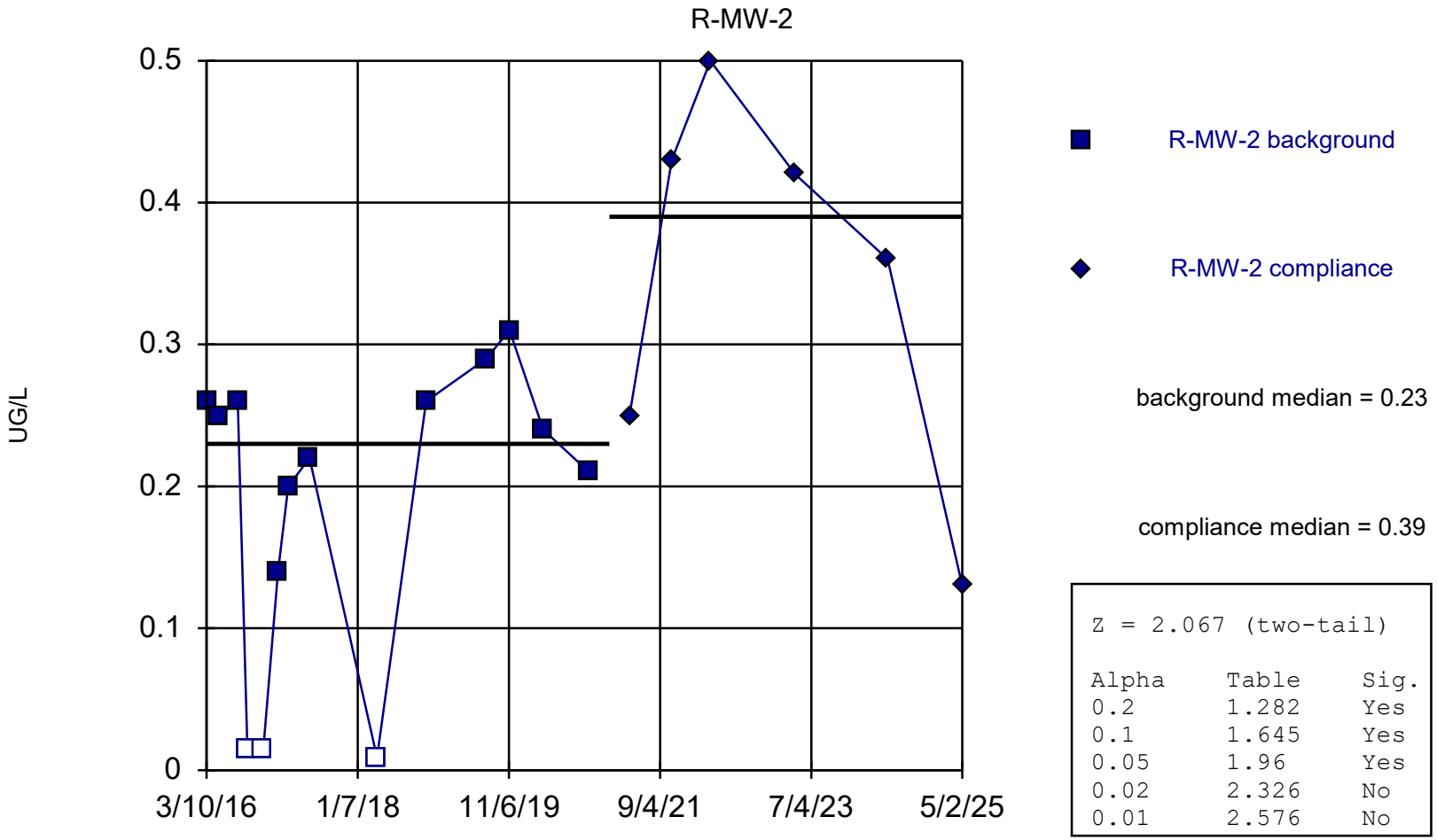
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CADMIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.067 (two-tail)

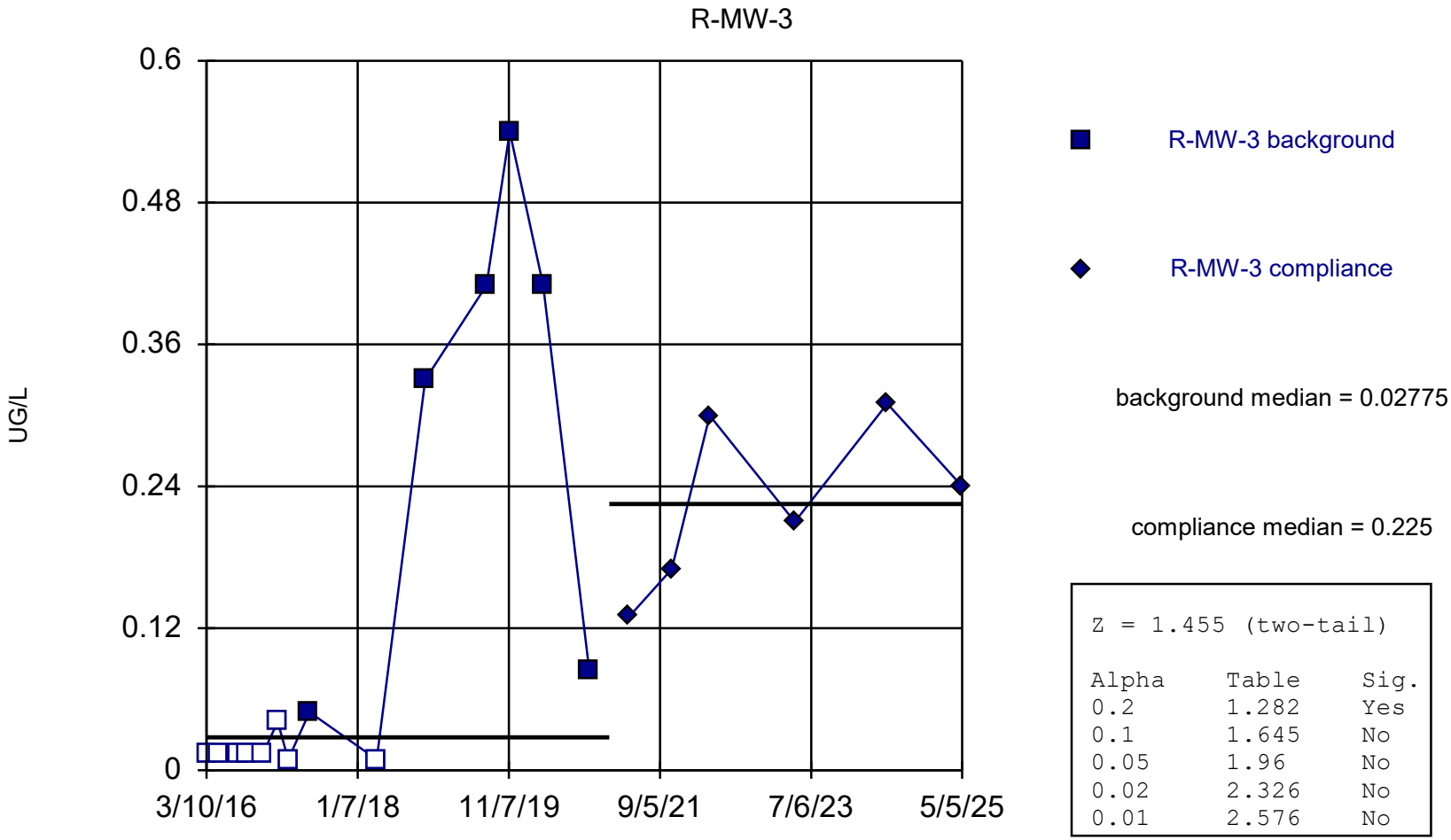
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: CADMIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.455 (two-tail)

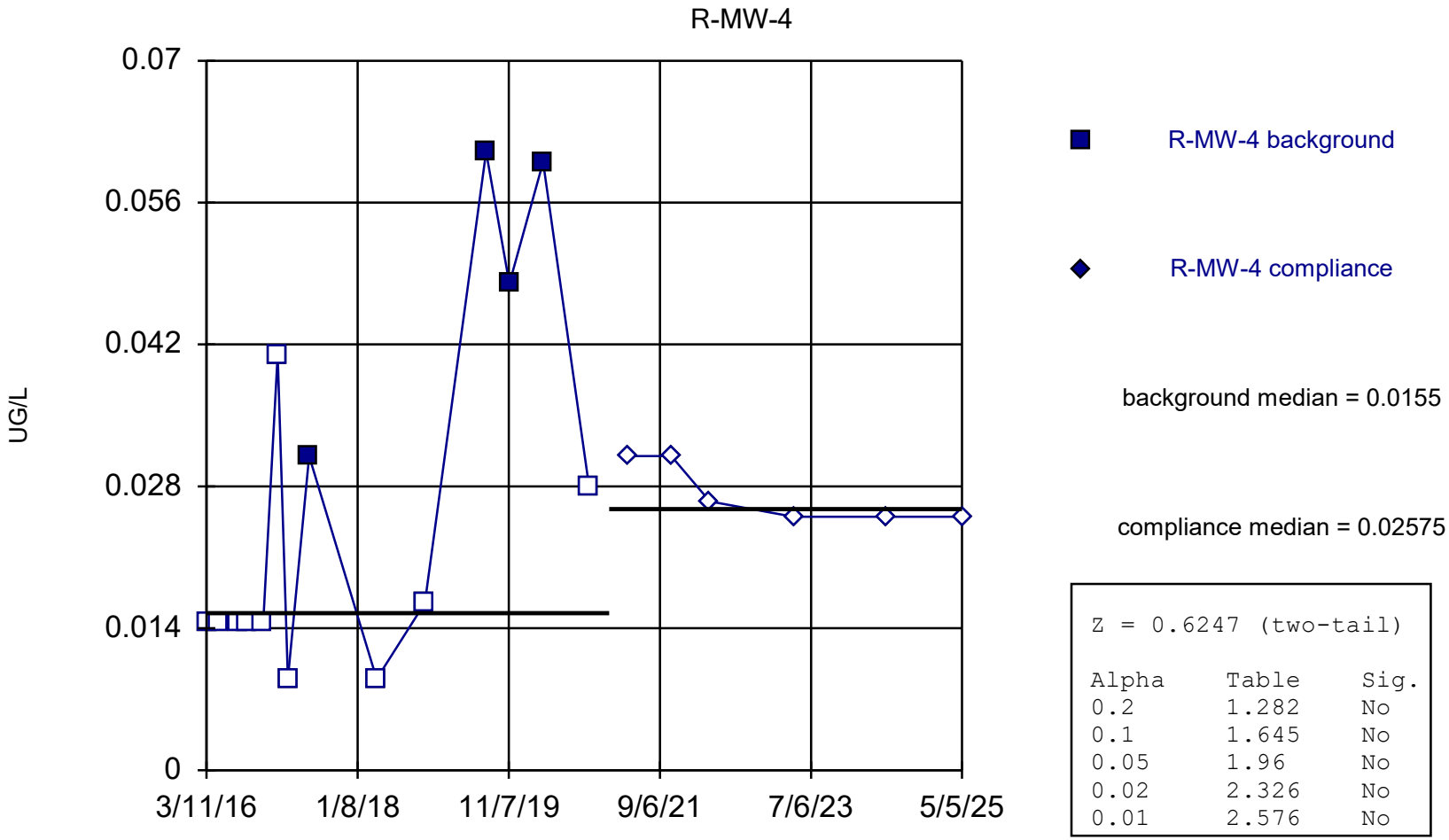
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CADMIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.6247 (two-tail)

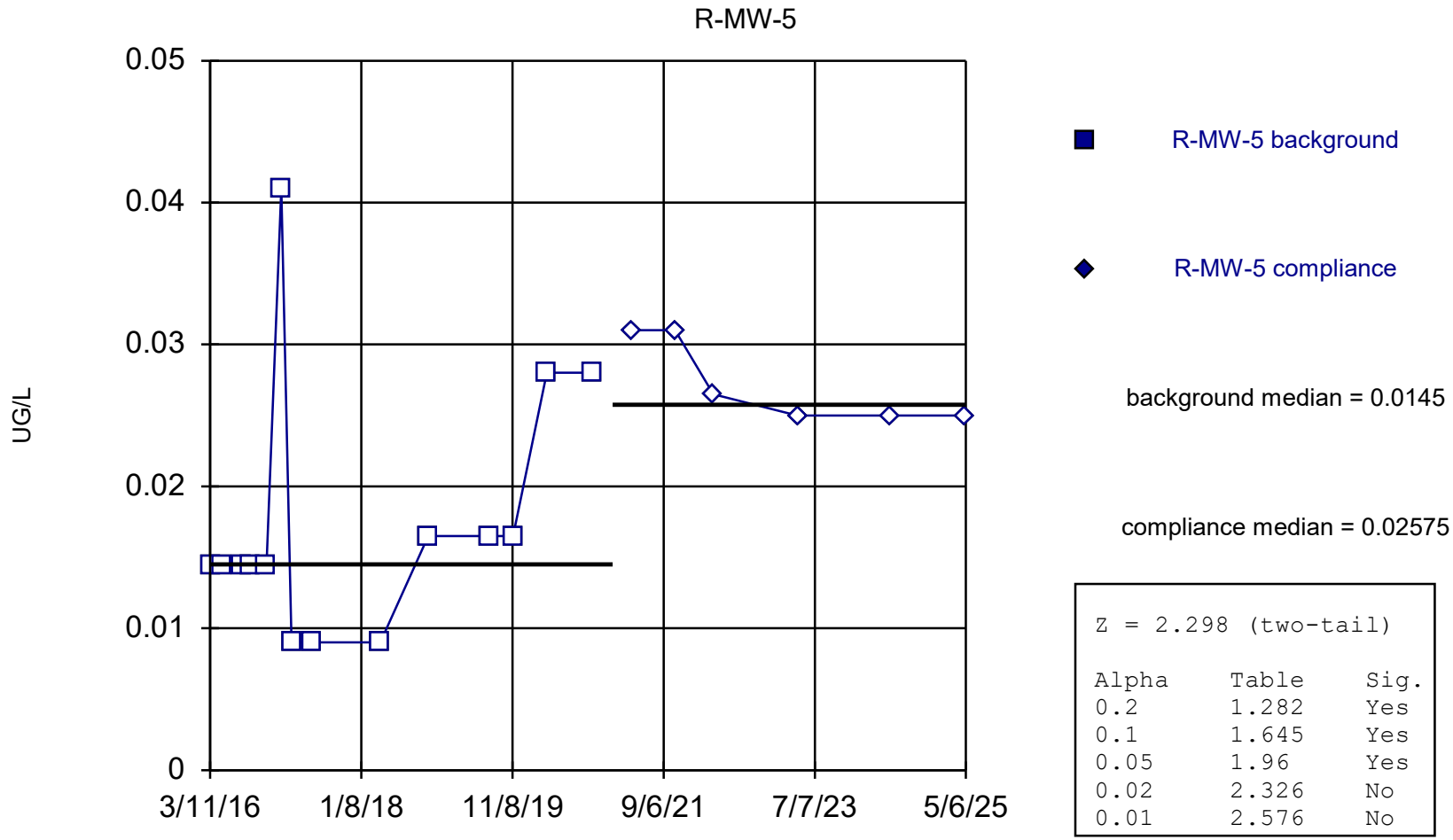
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CADMIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.298 (two-tail)

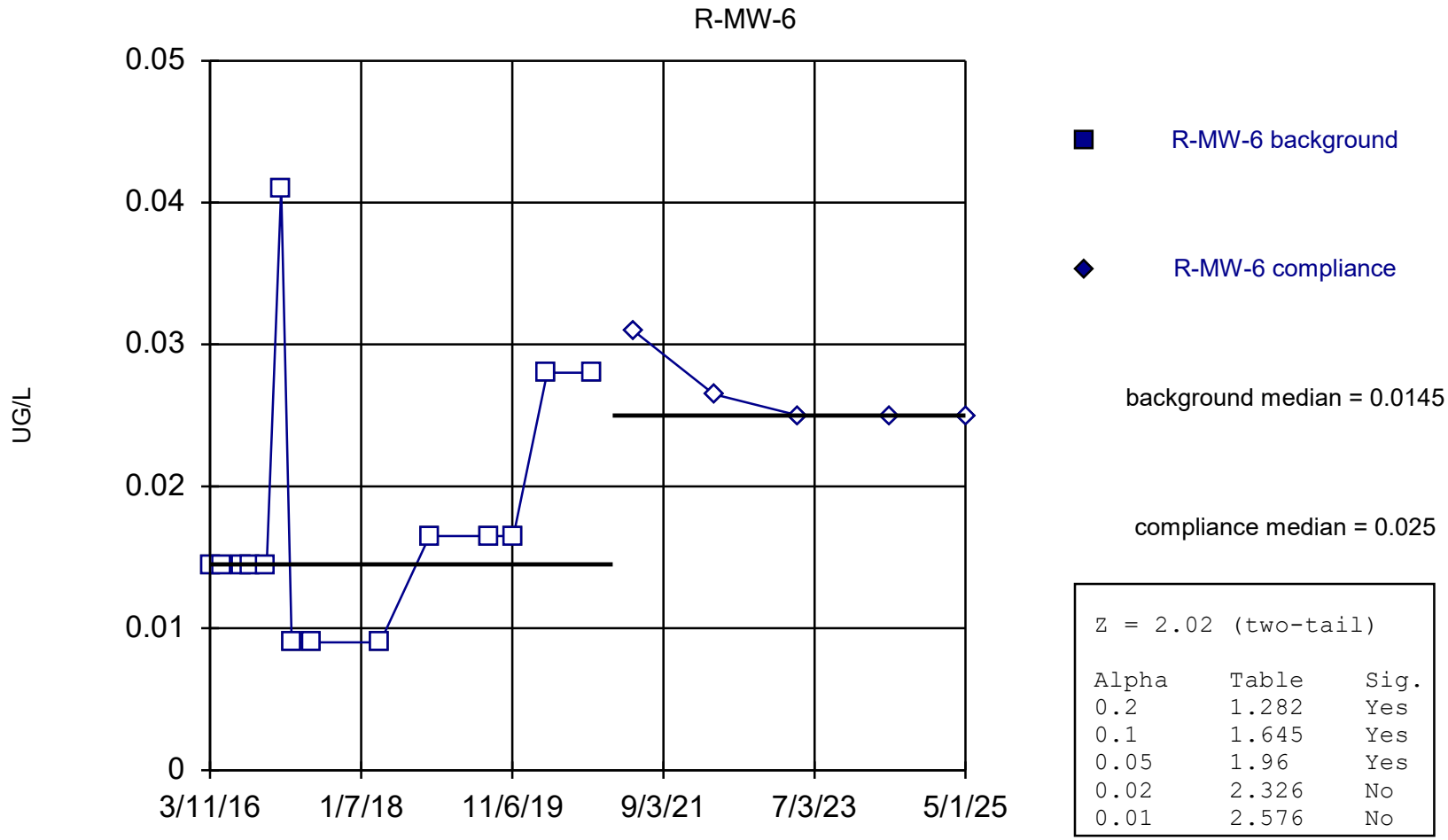
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: CADMIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.02 (two-tail)

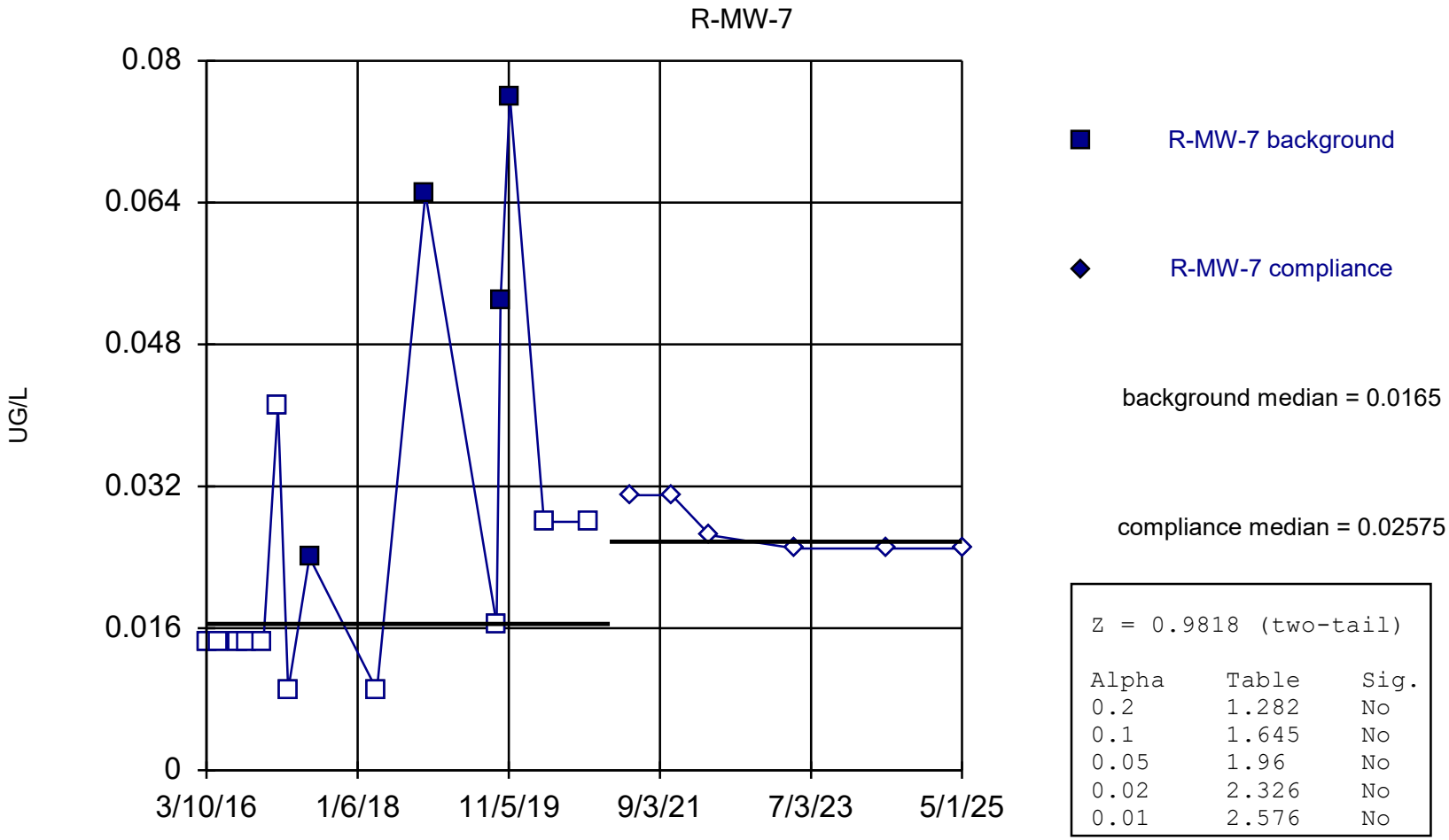
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: CADMIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.9818 (two-tail)

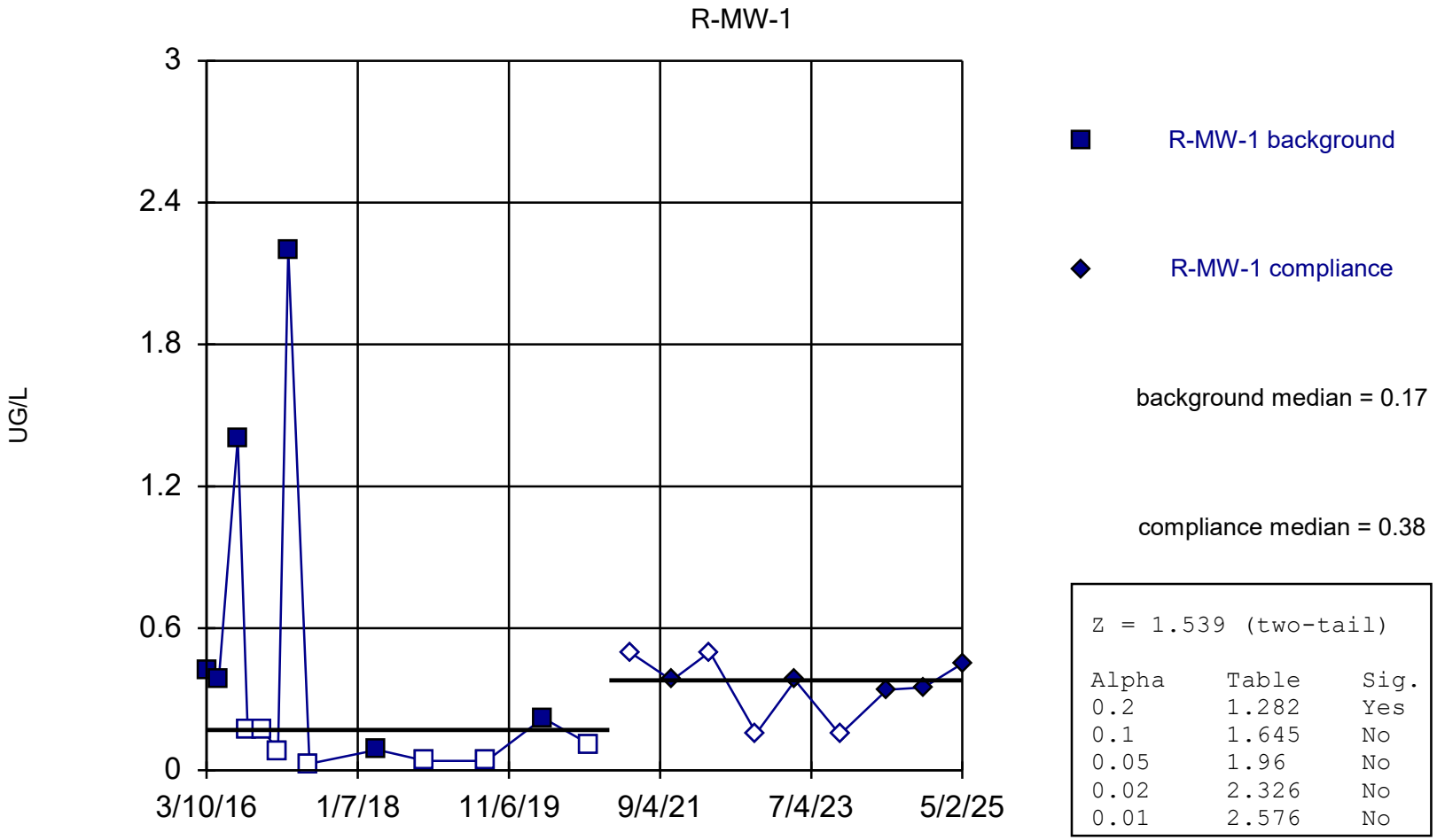
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CADMIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

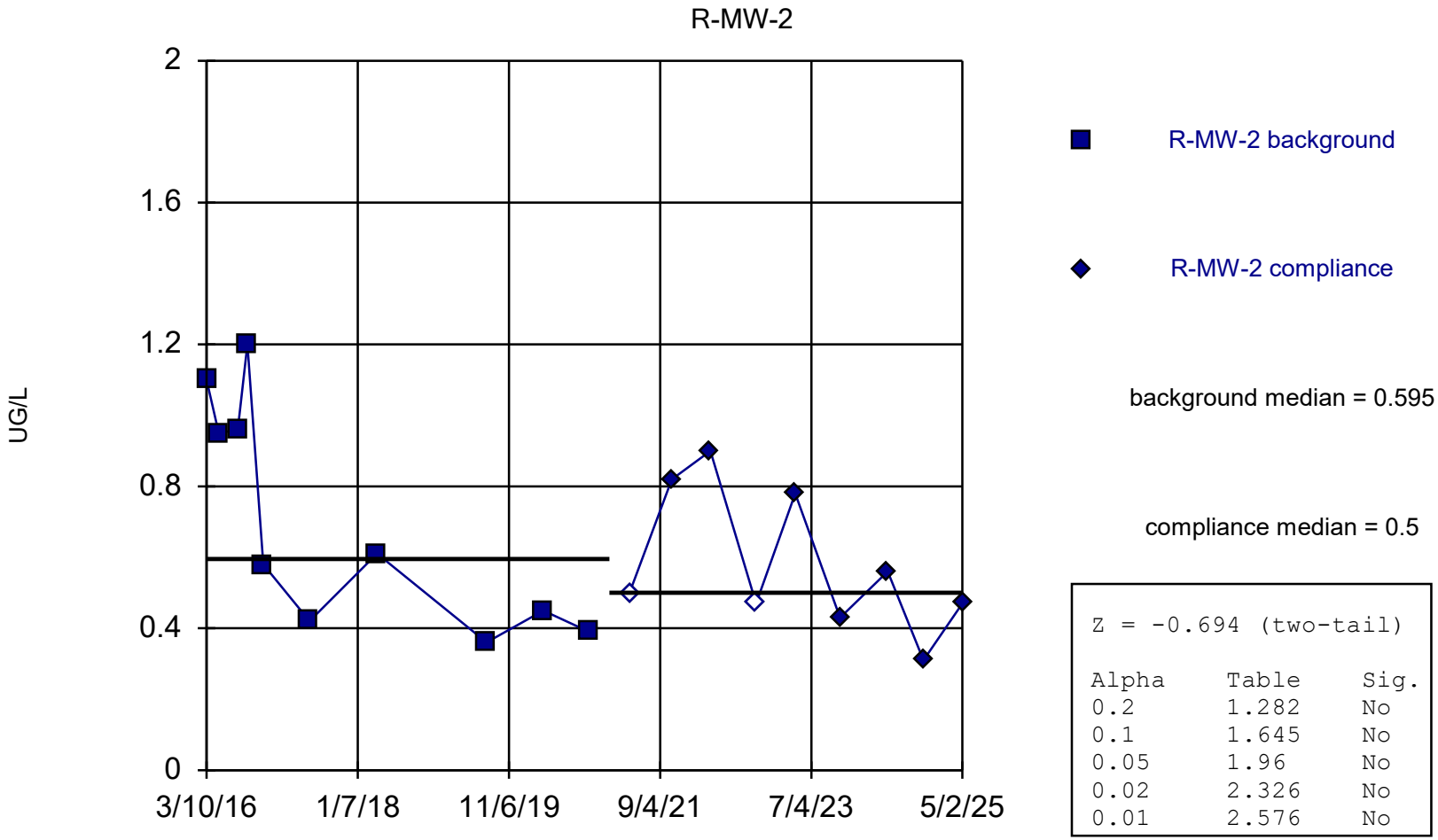


Constituent: CHROMIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.694 (two-tail)

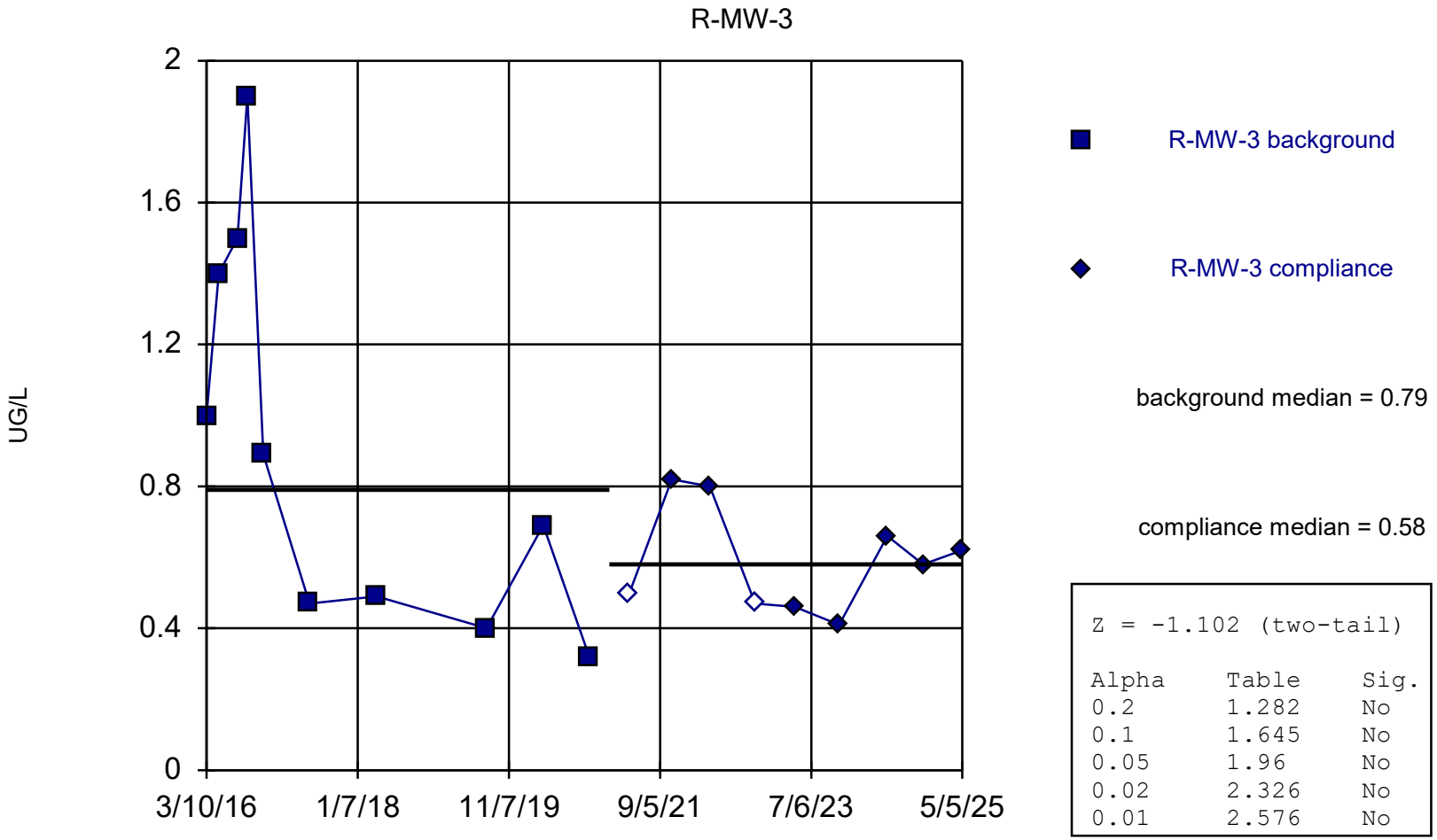
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CHROMIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -1.102 (two-tail)

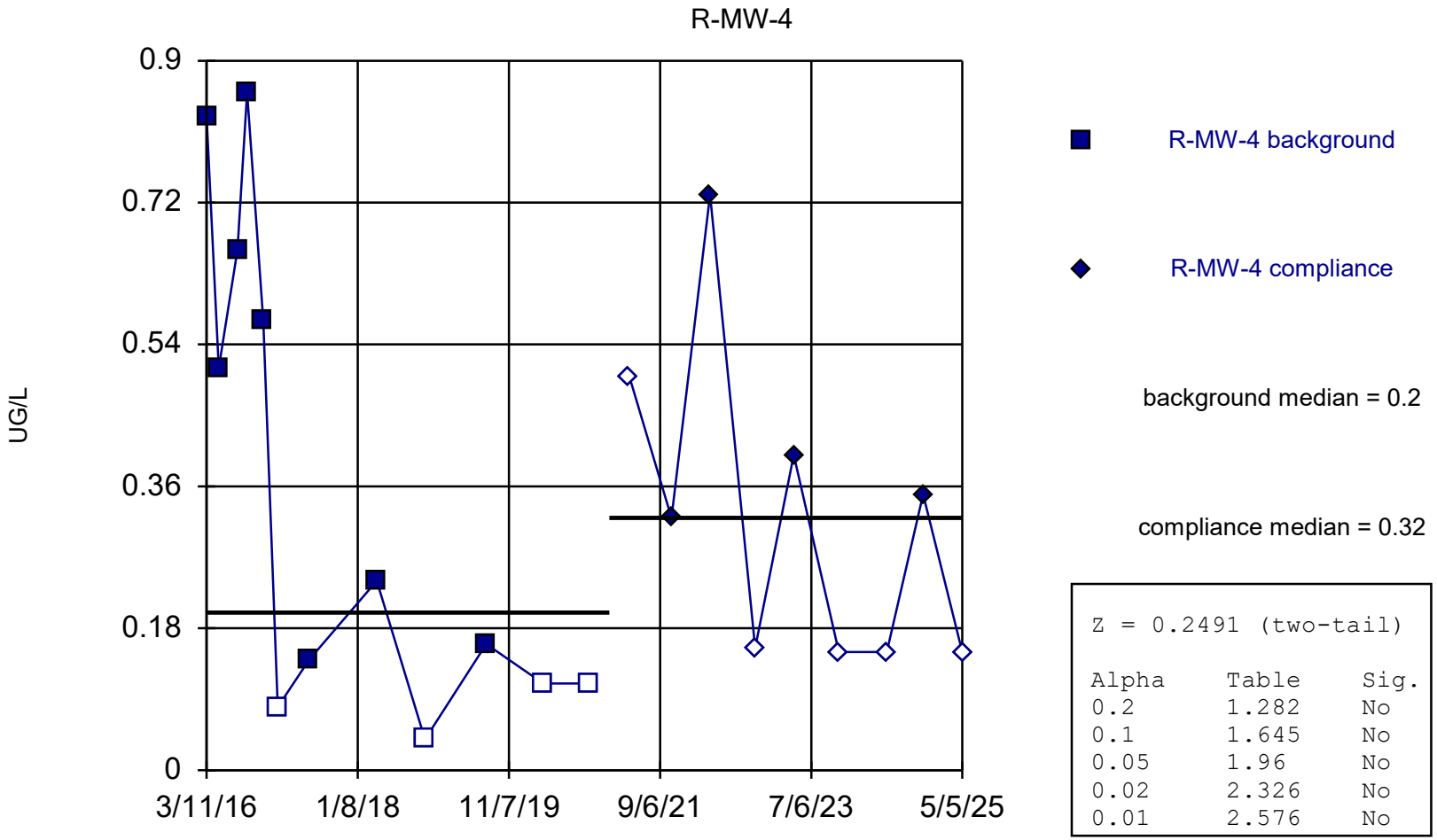
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CHROMIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.2491 (two-tail)

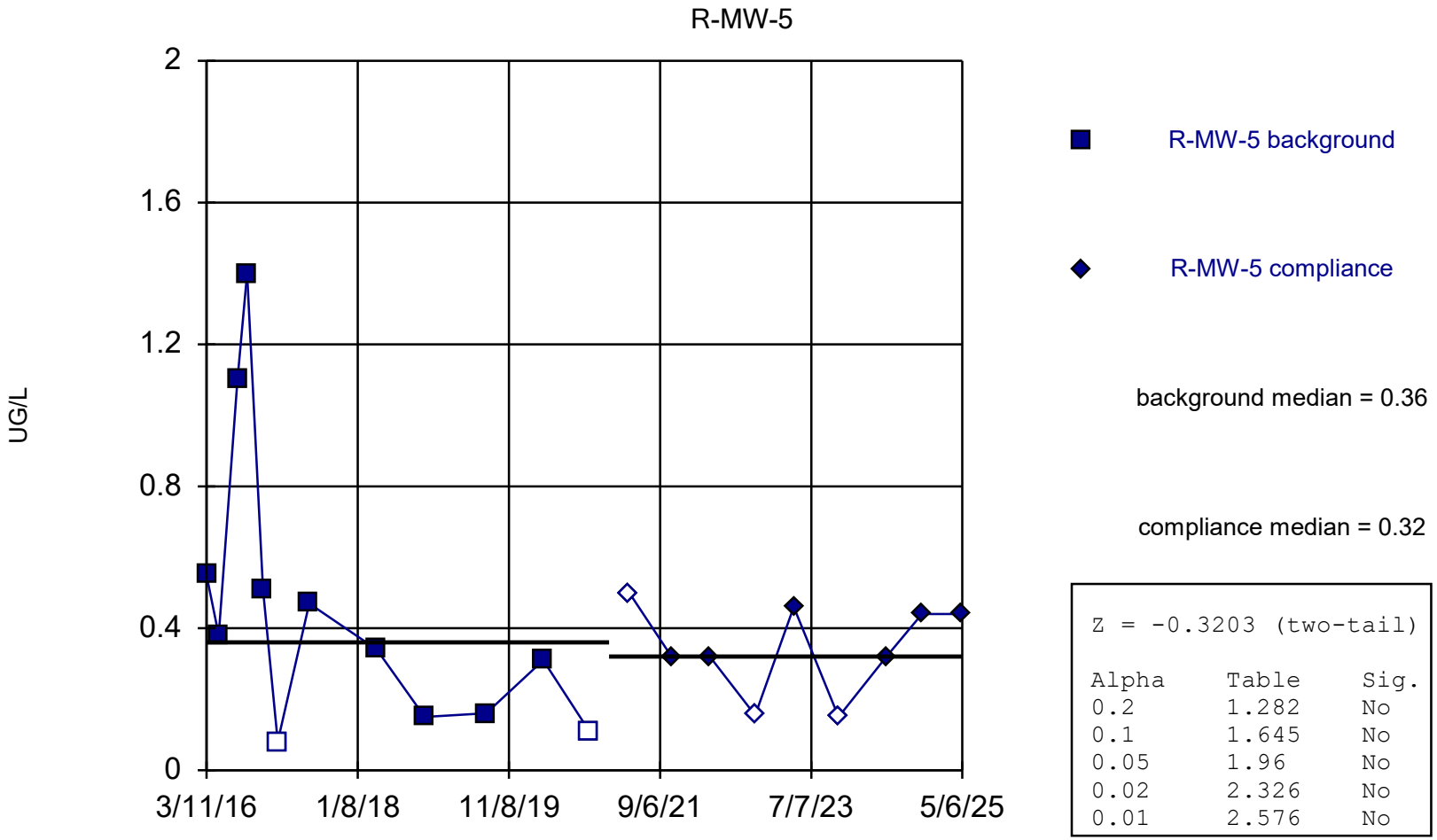
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CHROMIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.3203 (two-tail)

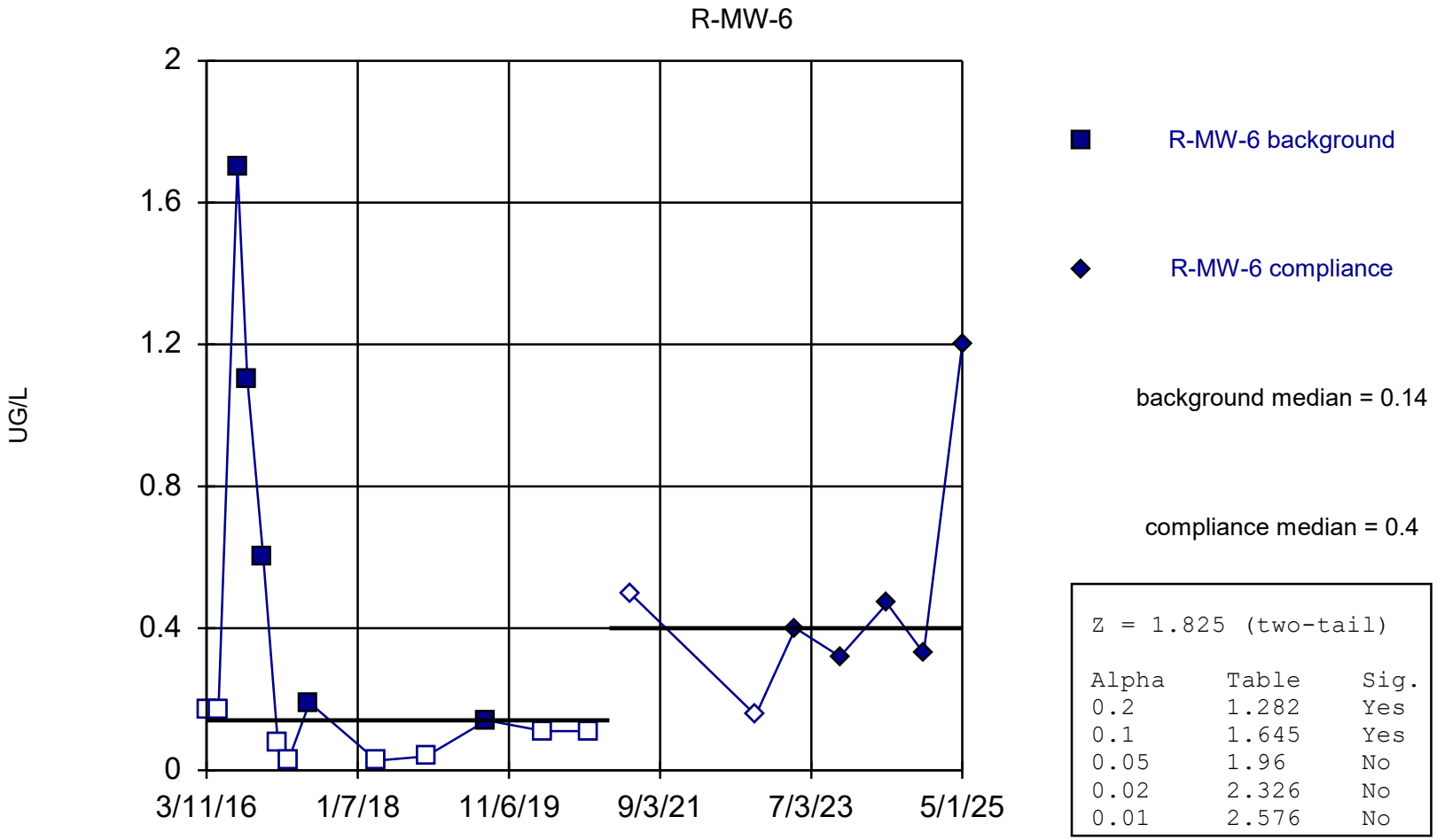
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CHROMIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

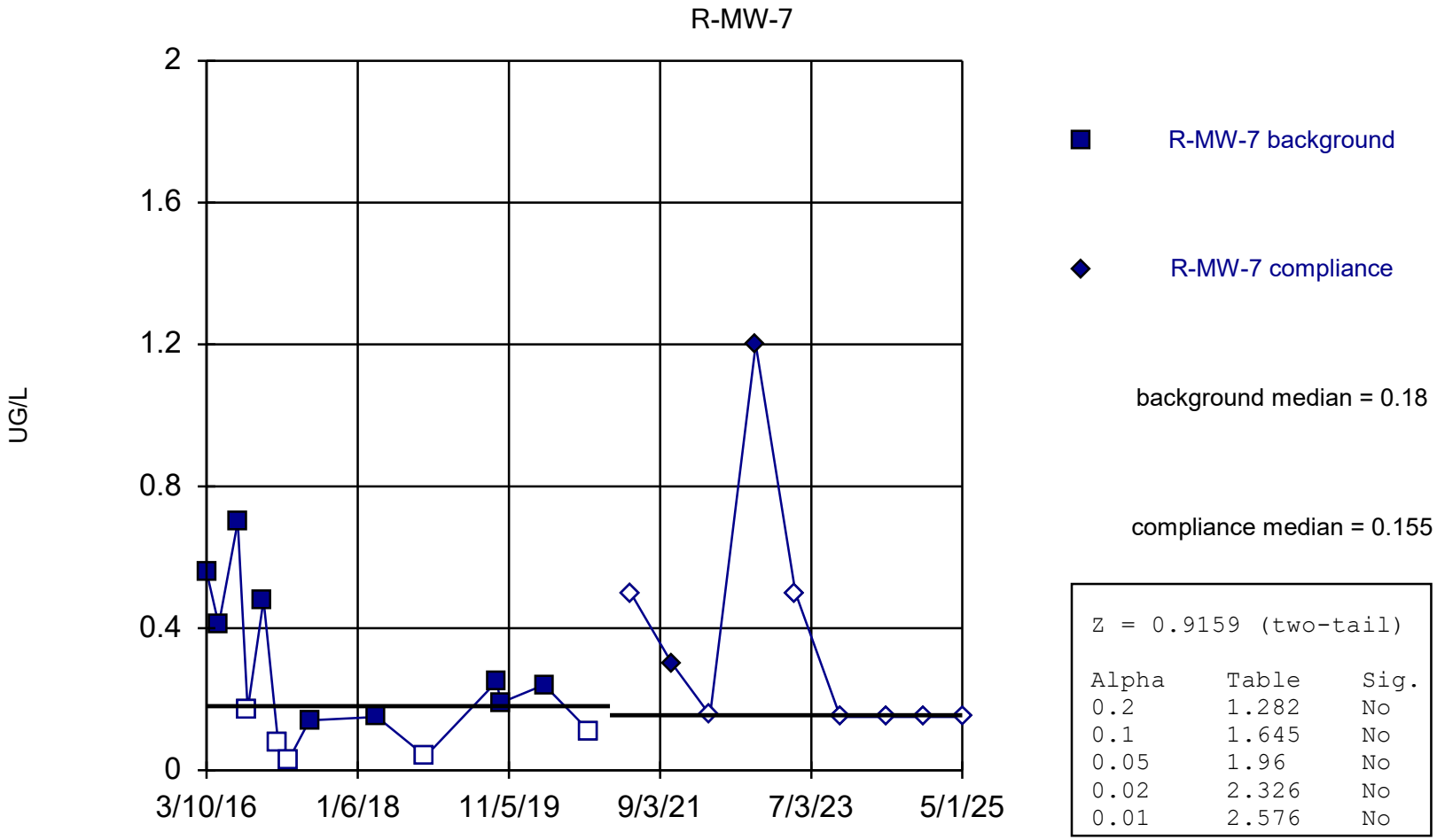


Constituent: CHROMIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.9159 (two-tail)

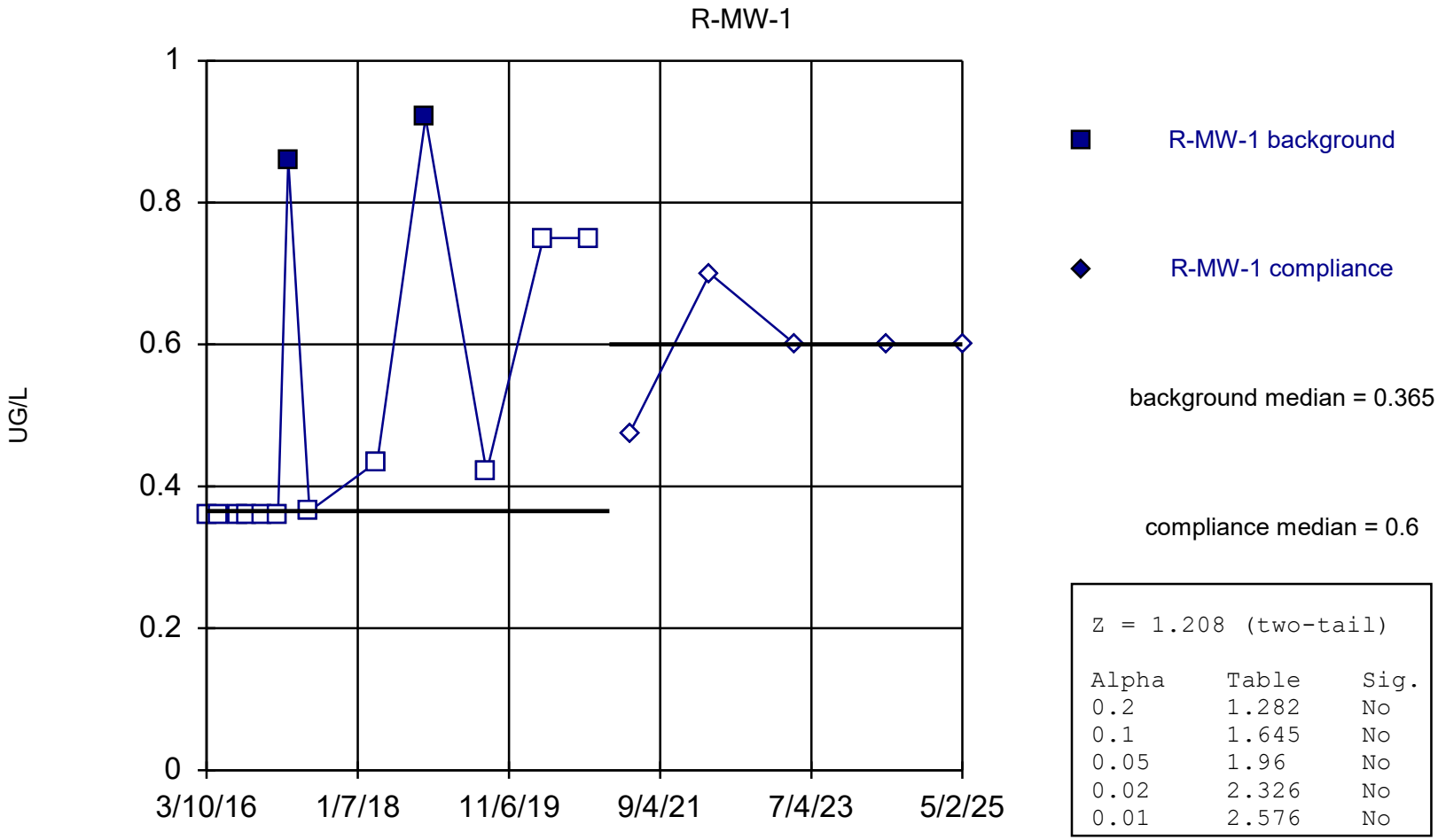
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: CHROMIUM, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.208 (two-tail)

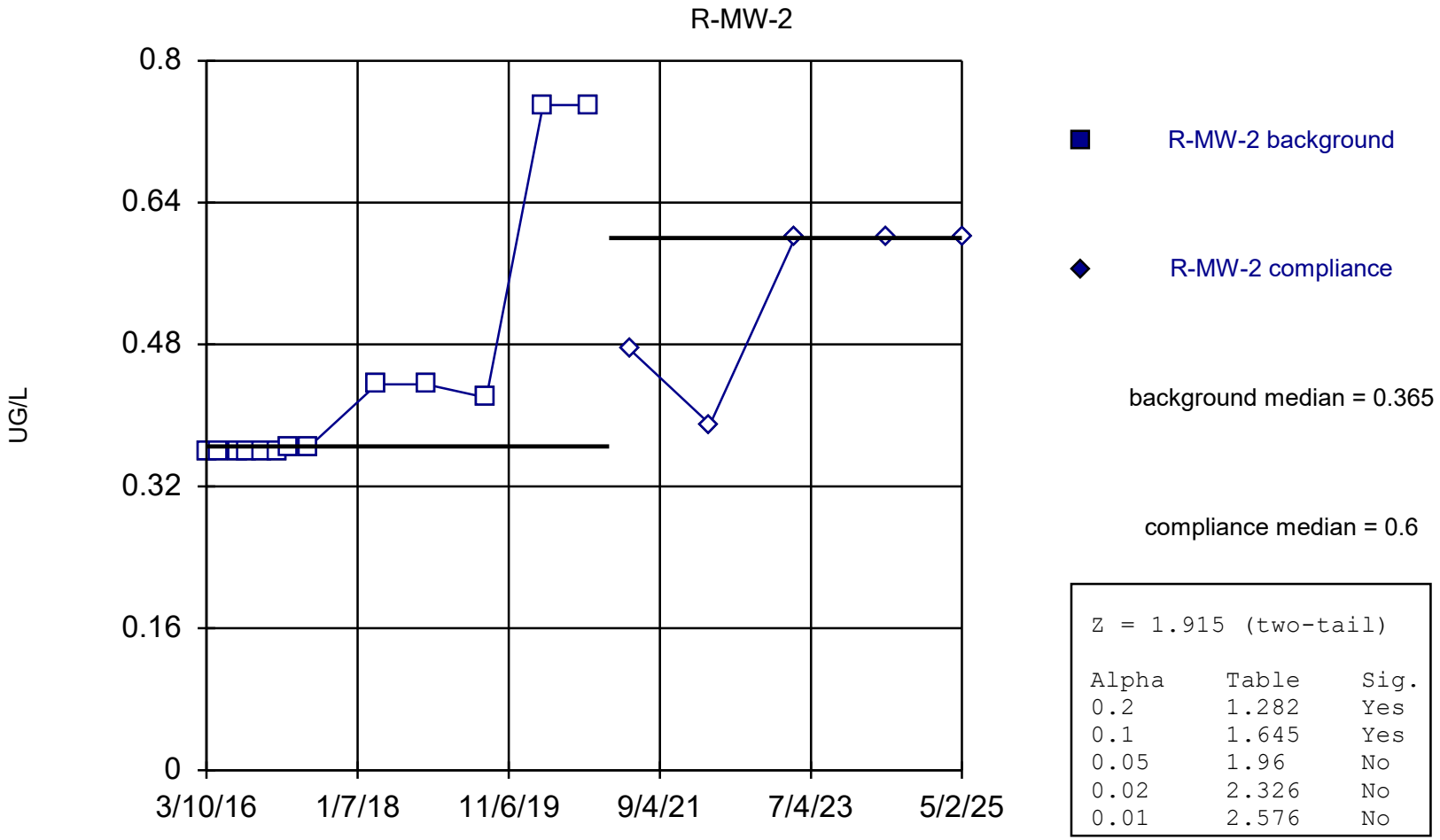
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: COBALT, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.915 (two-tail)

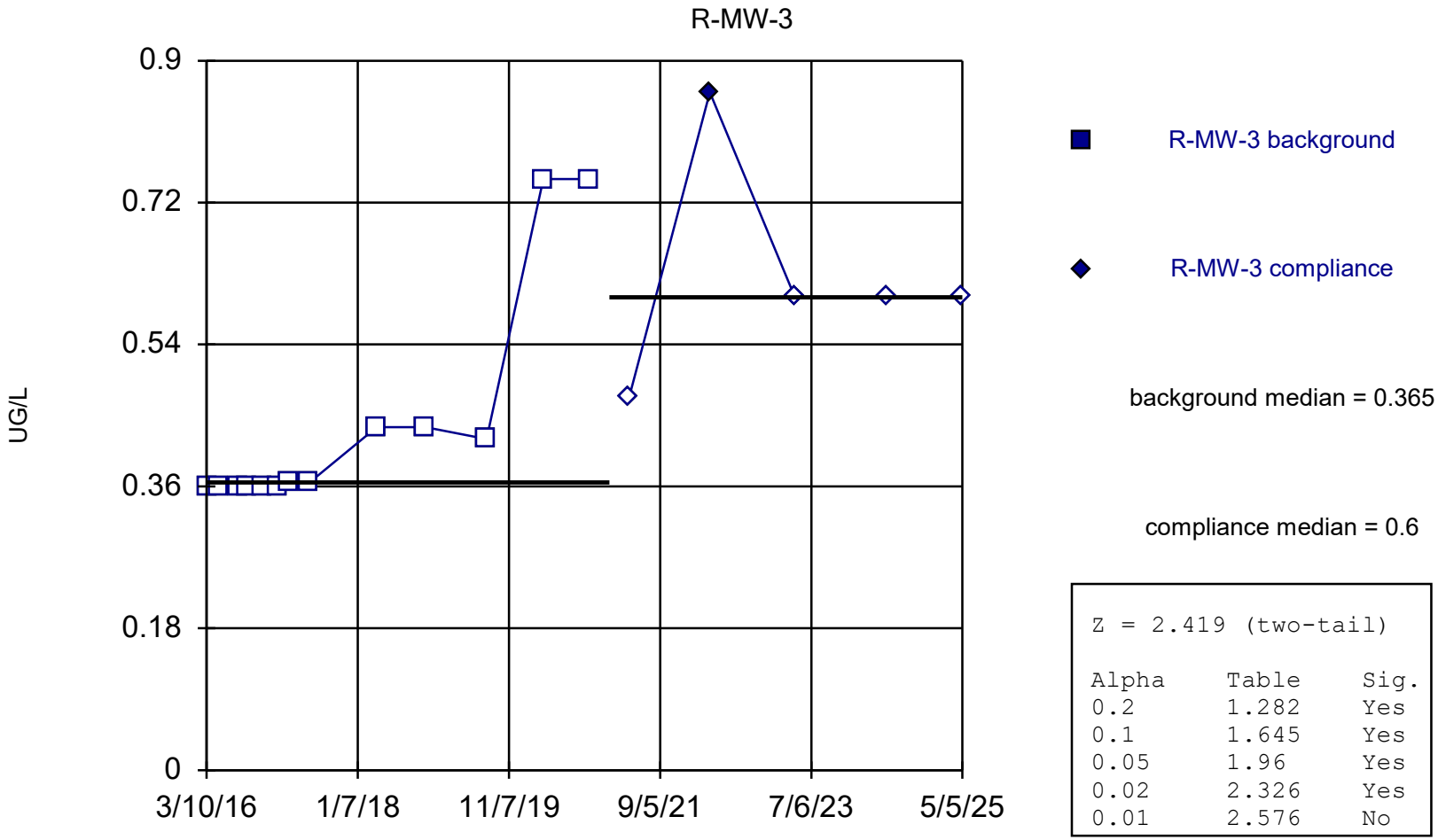
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: COBALT, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.419 (two-tail)

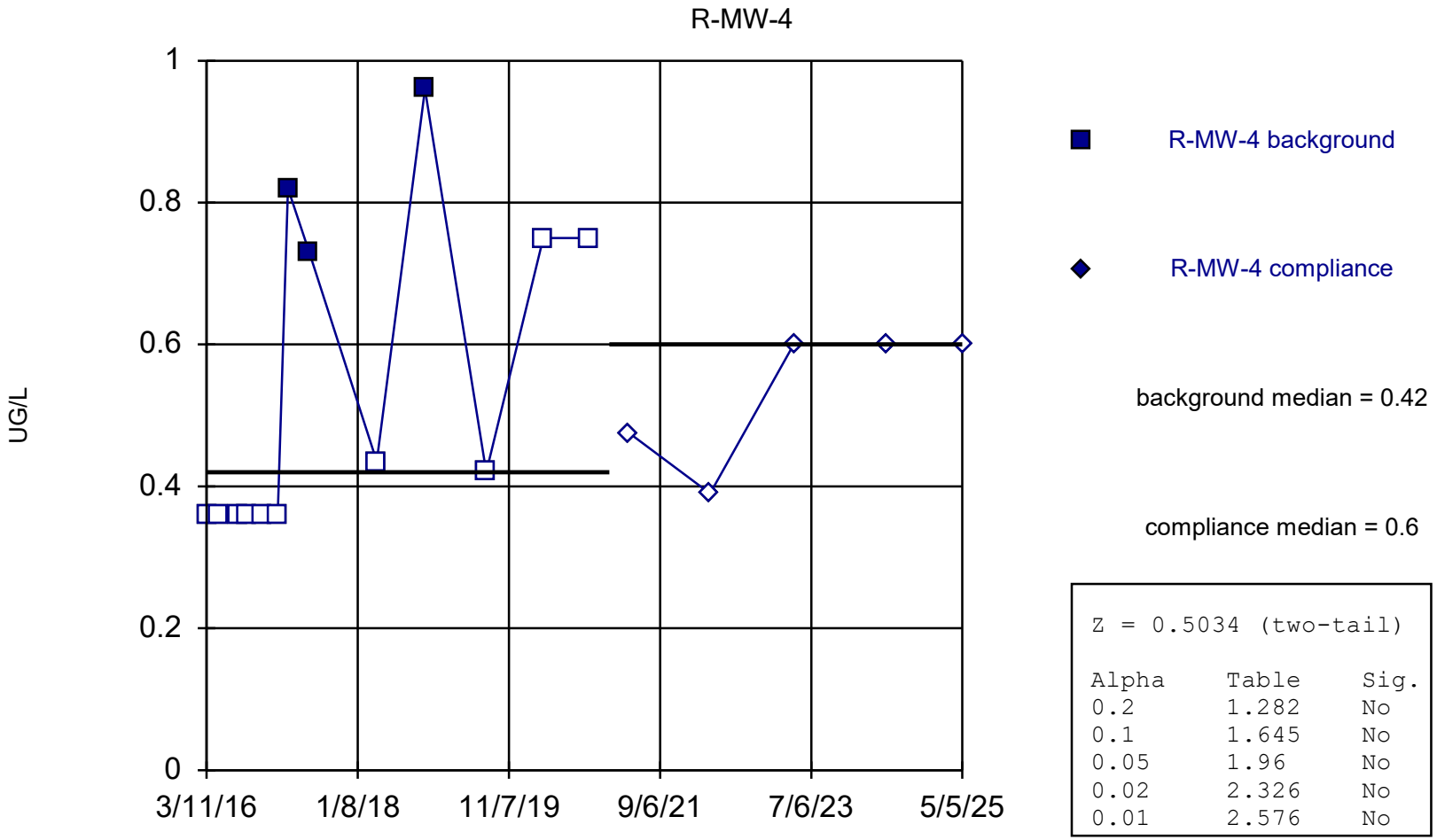
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	No

Constituent: COBALT, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.5034 (two-tail)

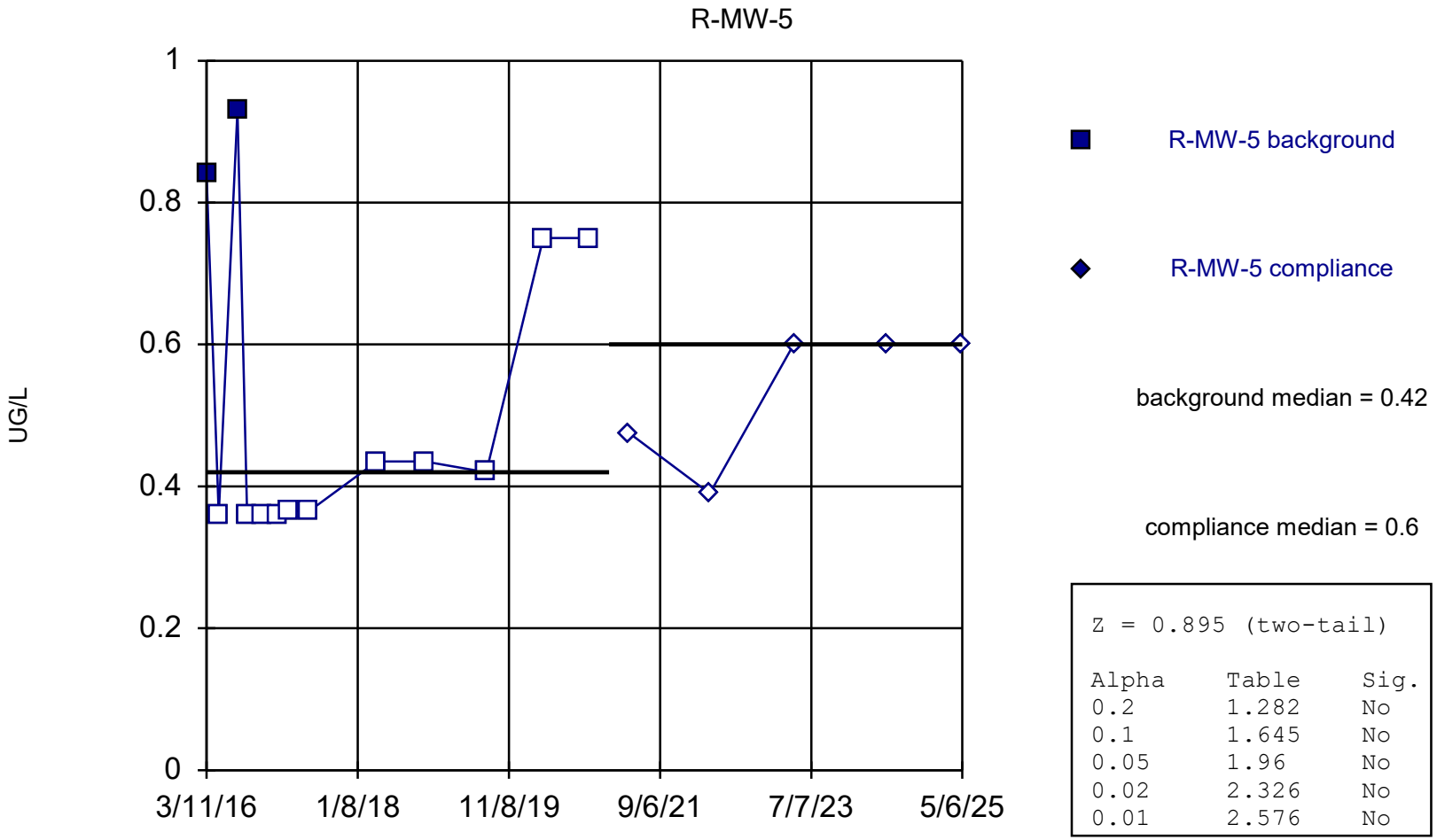
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: COBALT, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.895 (two-tail)

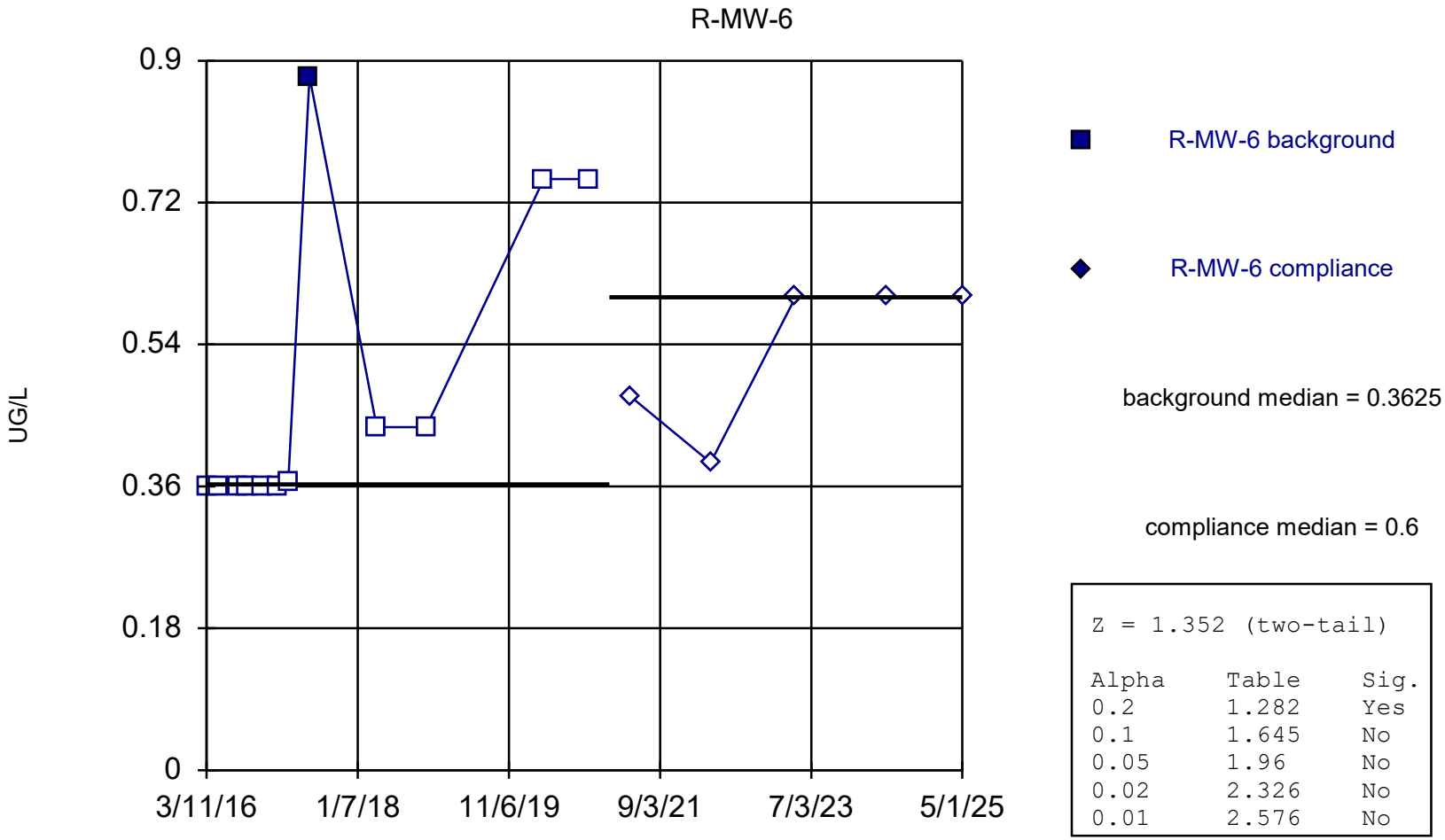
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: COBALT, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.352 (two-tail)

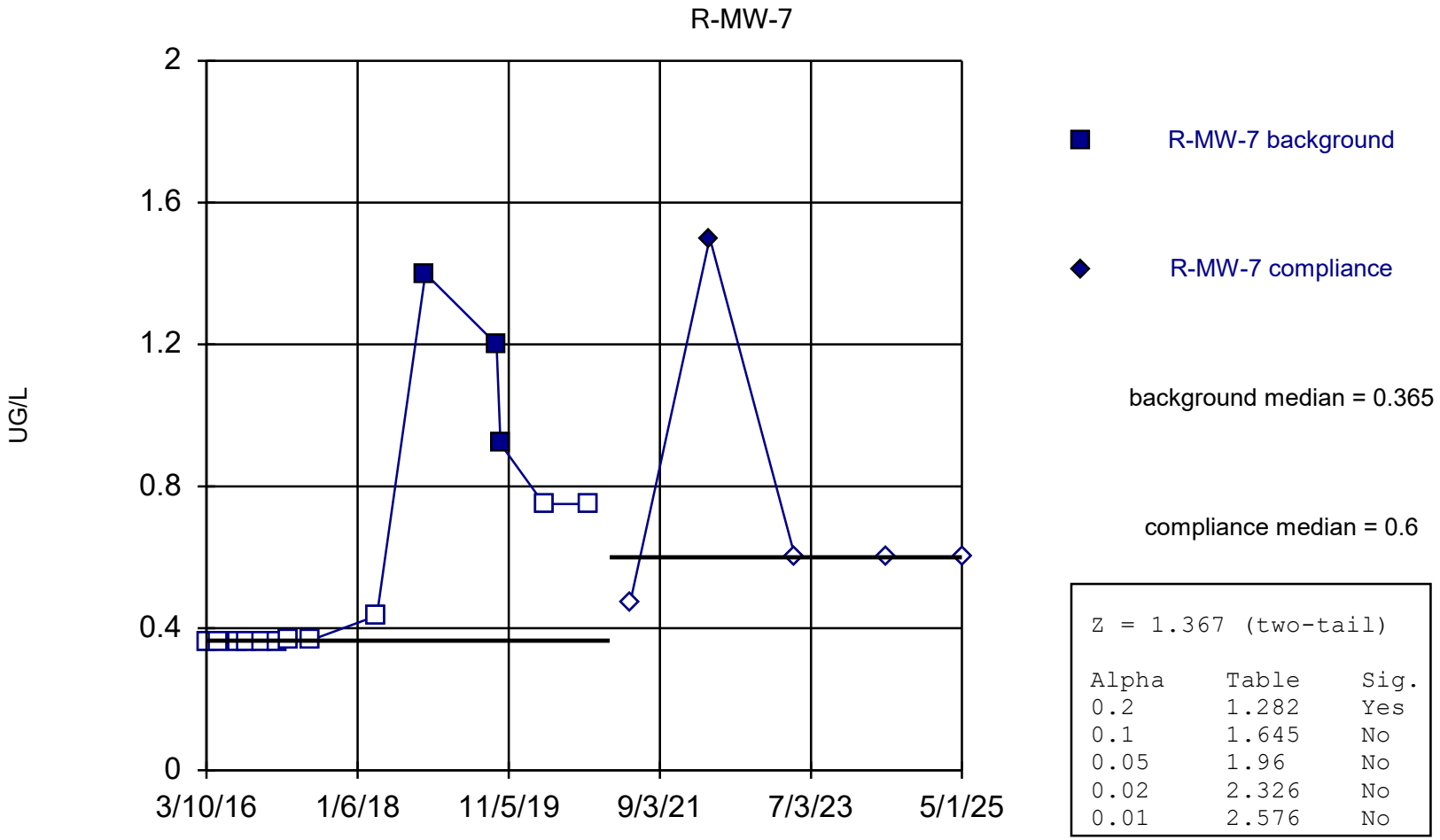
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: COBALT, TOTAL Analysis Run 1/5/2026 2:05 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.367 (two-tail)

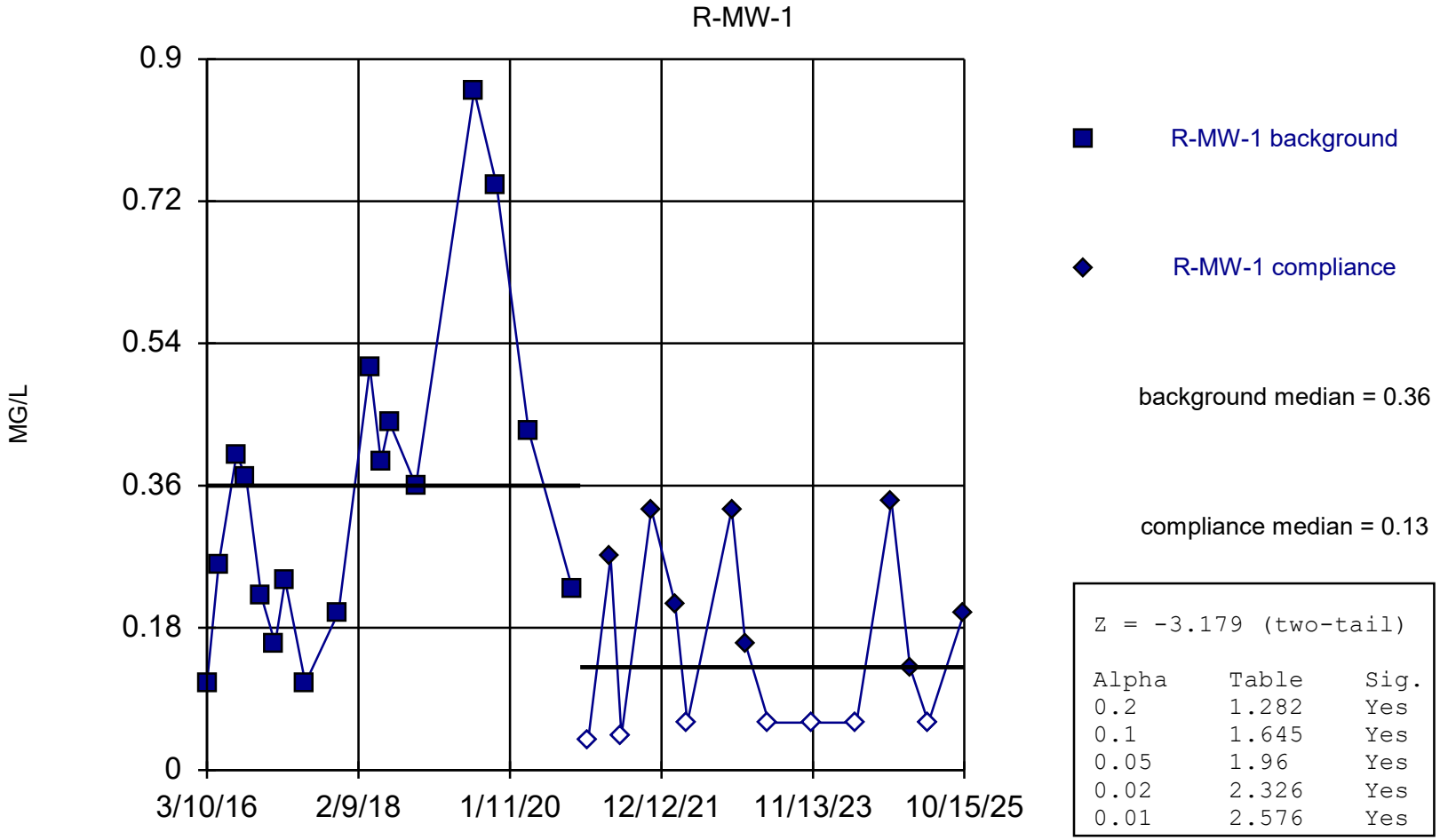
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: COBALT, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -3.179 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

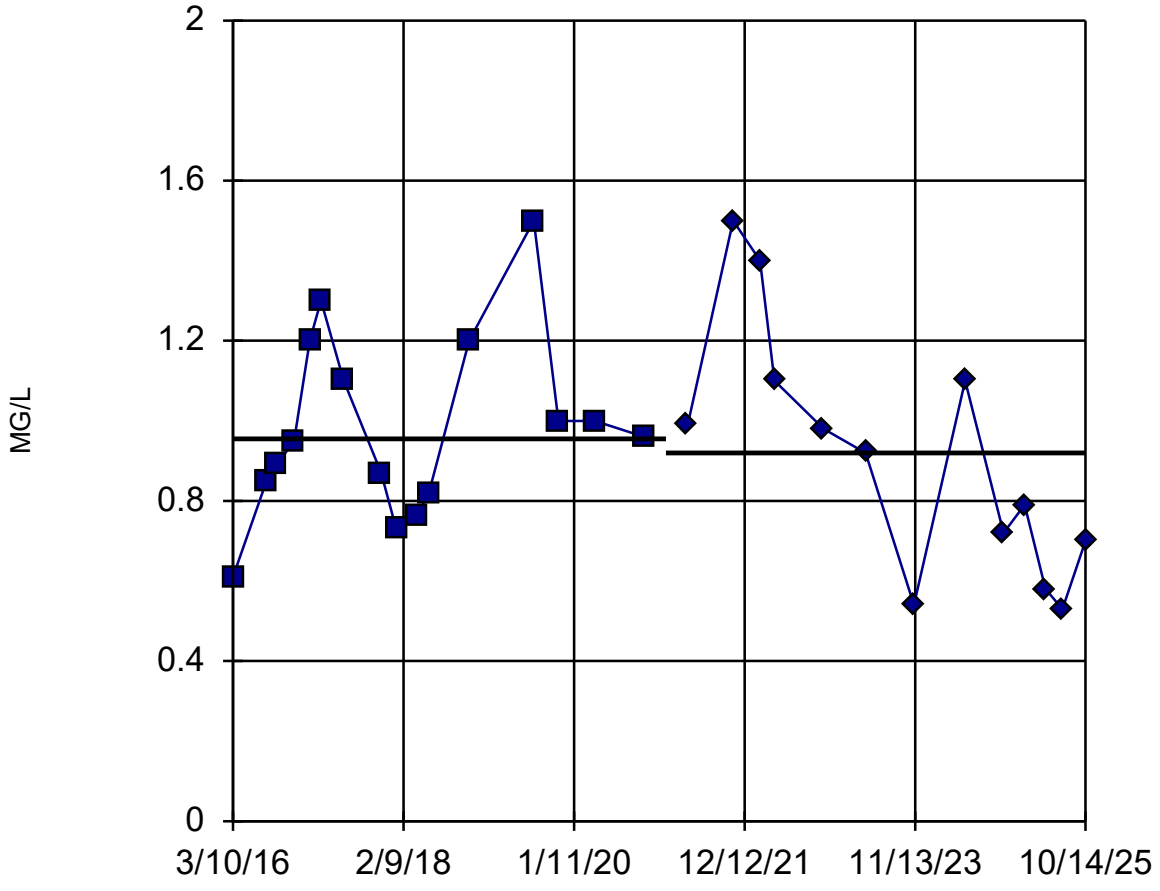
Constituent: FLUORIDE, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-2



R-MW-2 background

R-MW-2 compliance

background median = 0.955

compliance median = 0.92

Z = -0.9217 (two-tail)

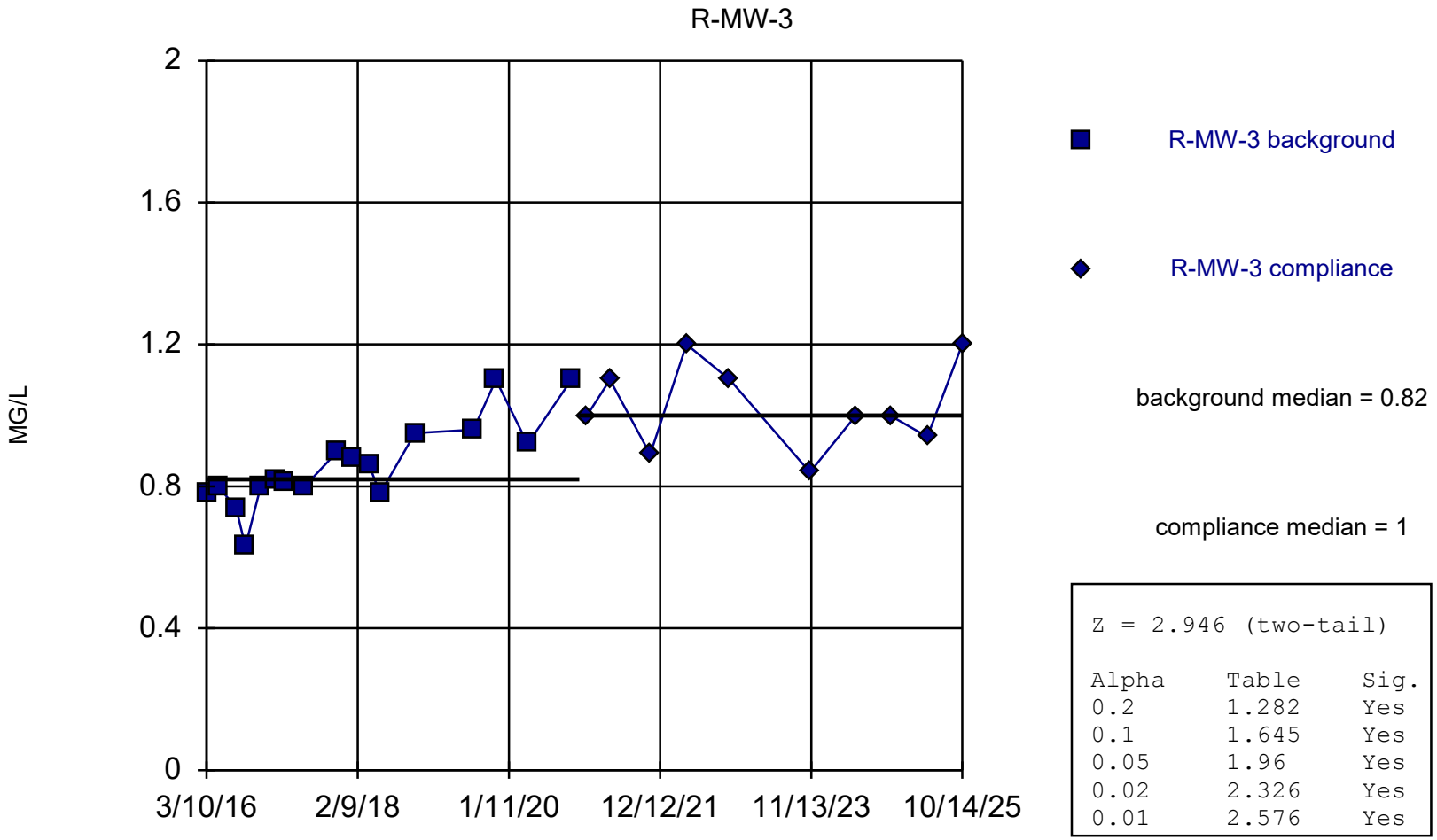
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: FLUORIDE, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.946 (two-tail)

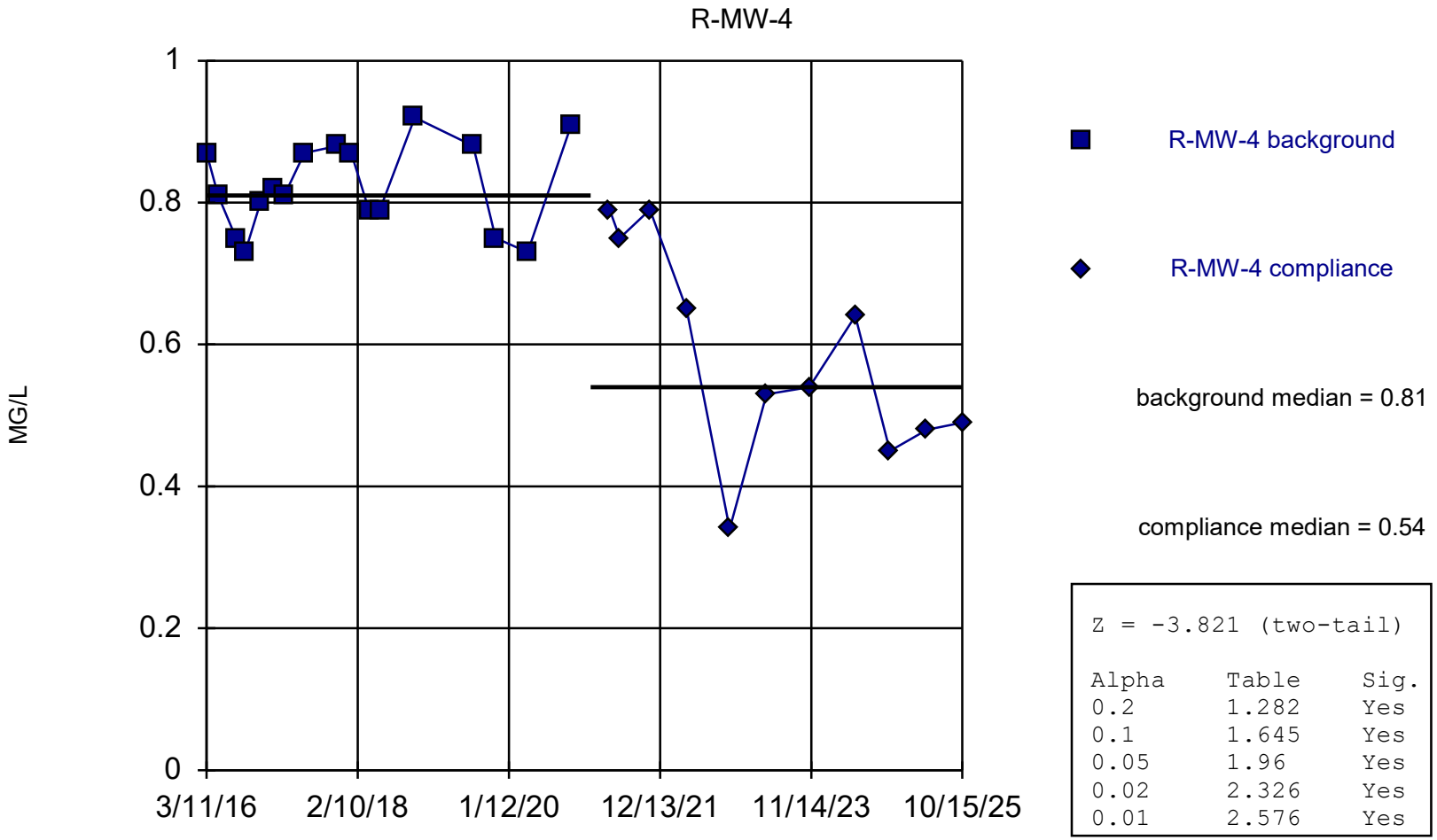
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: FLUORIDE, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = -3.821 (two-tail)

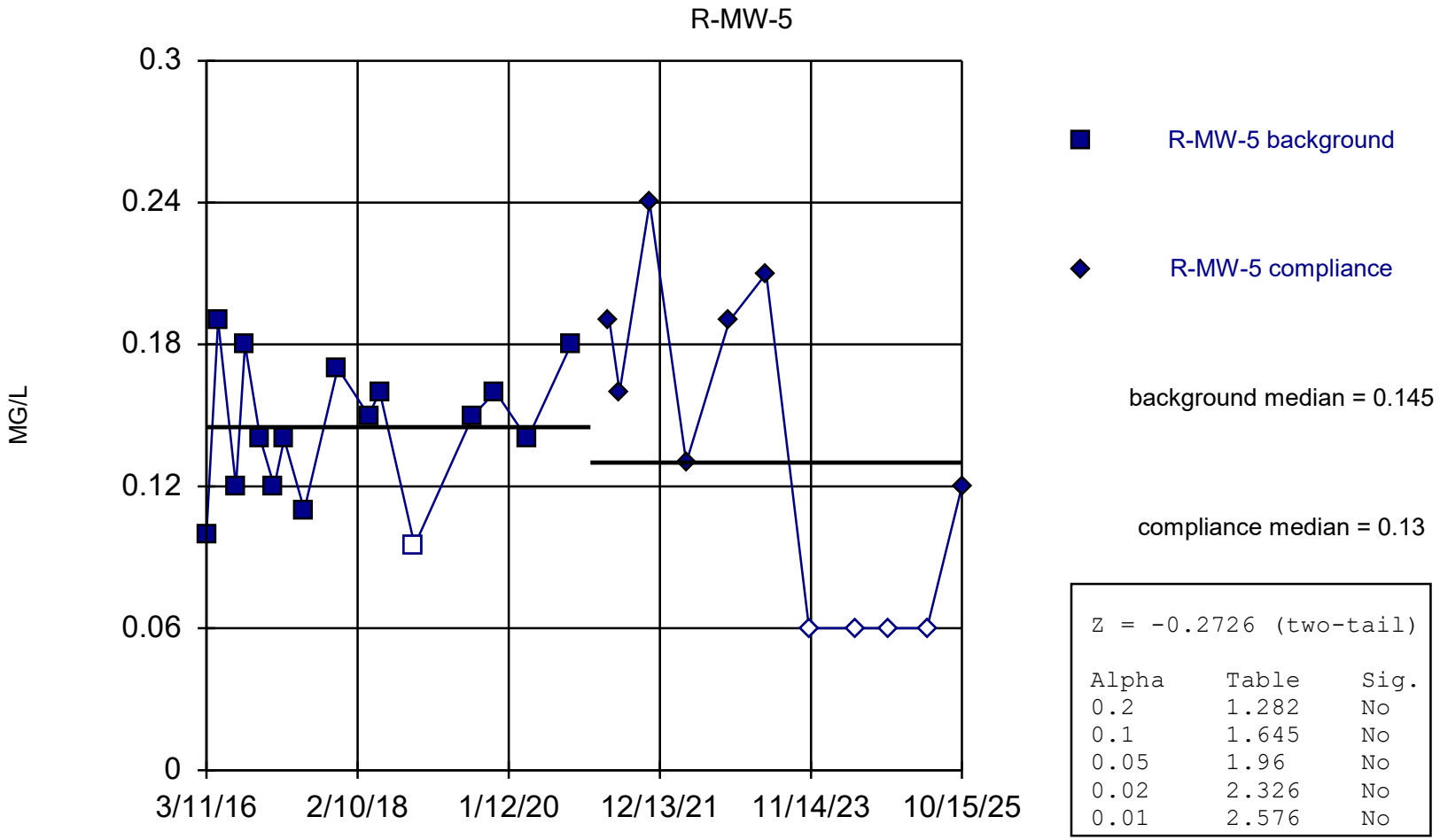
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: FLUORIDE, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.2726 (two-tail)

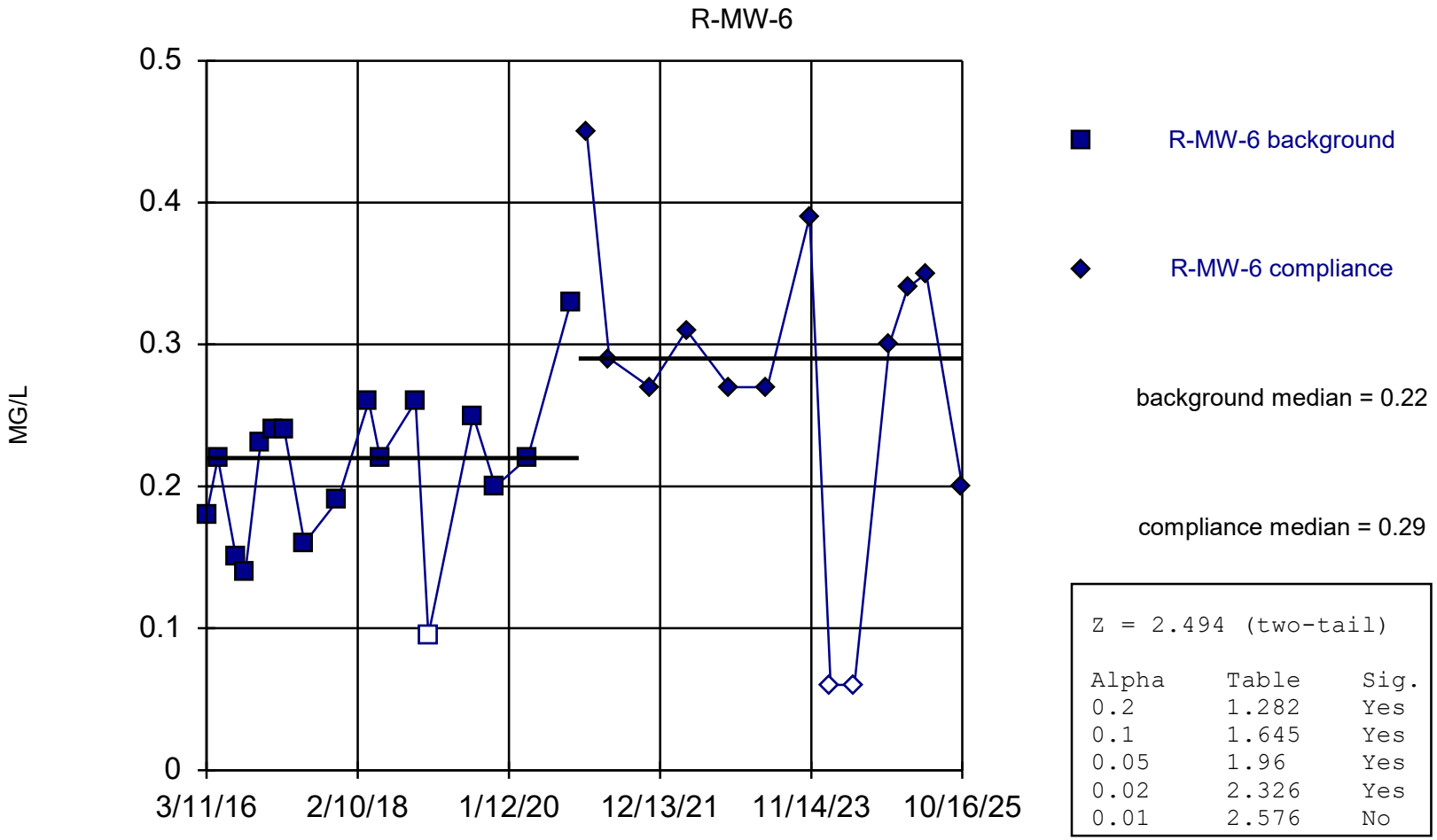
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: FLUORIDE, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.494 (two-tail)

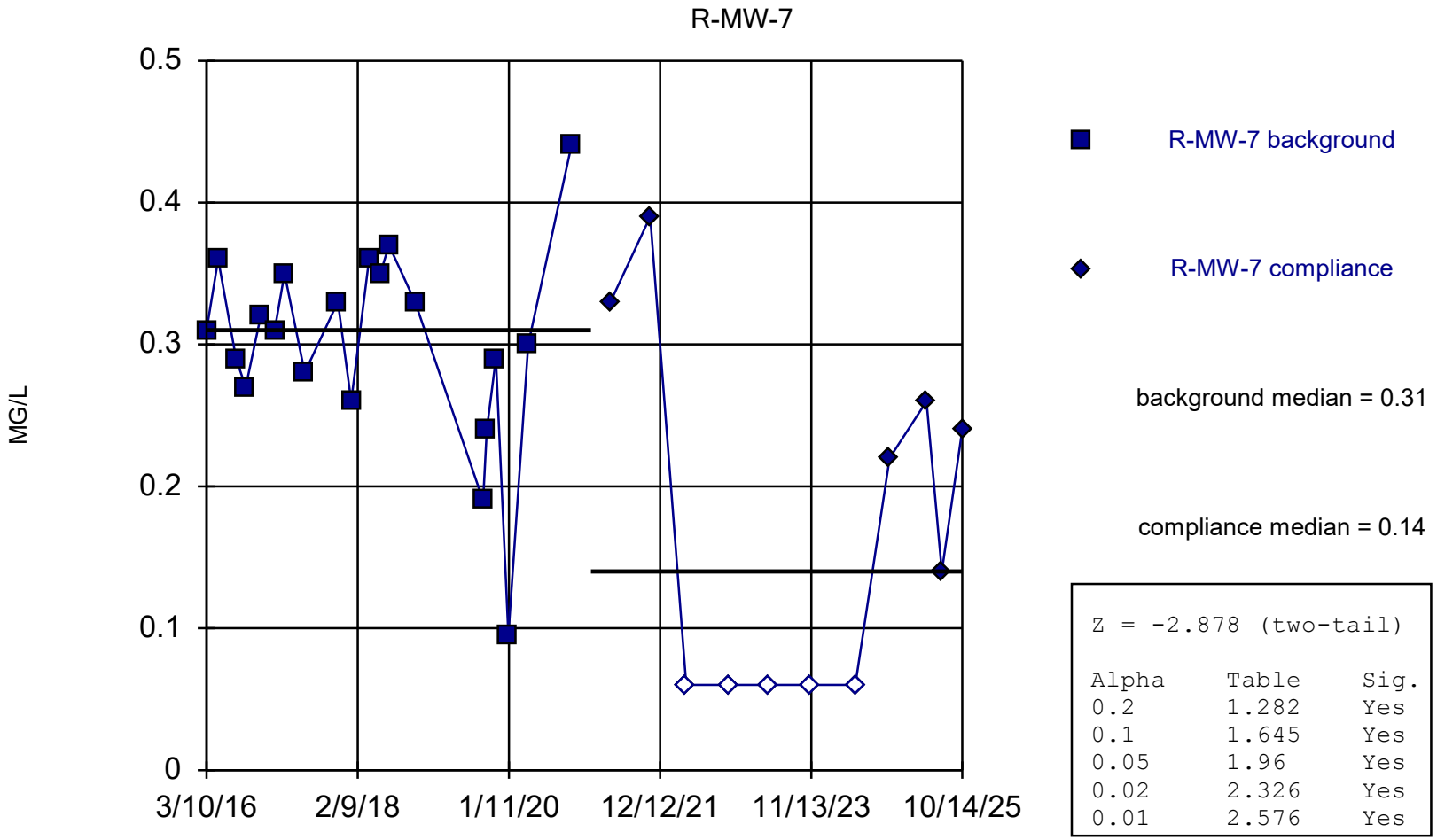
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	No

Constituent: FLUORIDE, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -2.878 (two-tail)

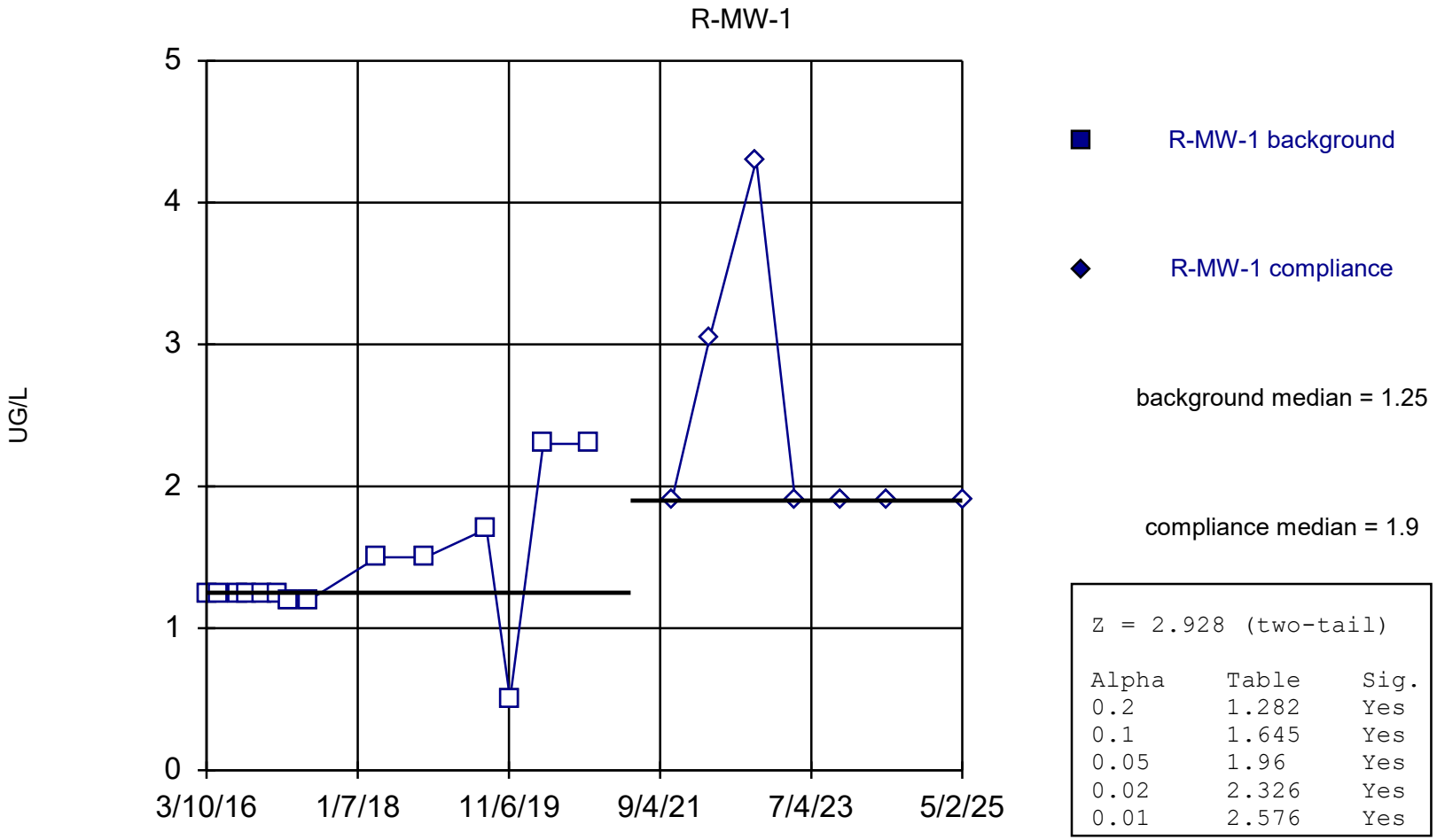
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: FLUORIDE, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

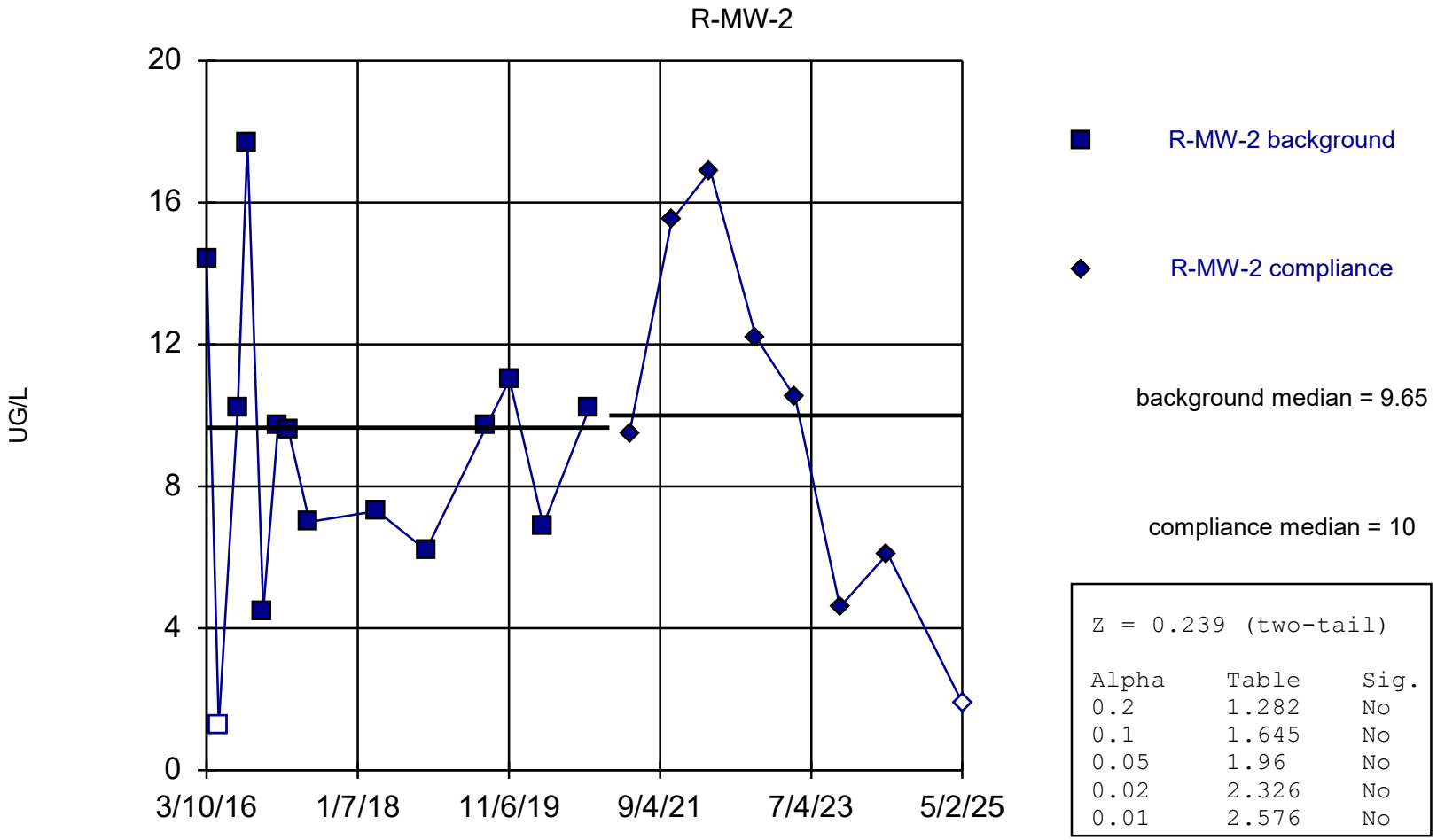


Constituent: LEAD, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.239 (two-tail)

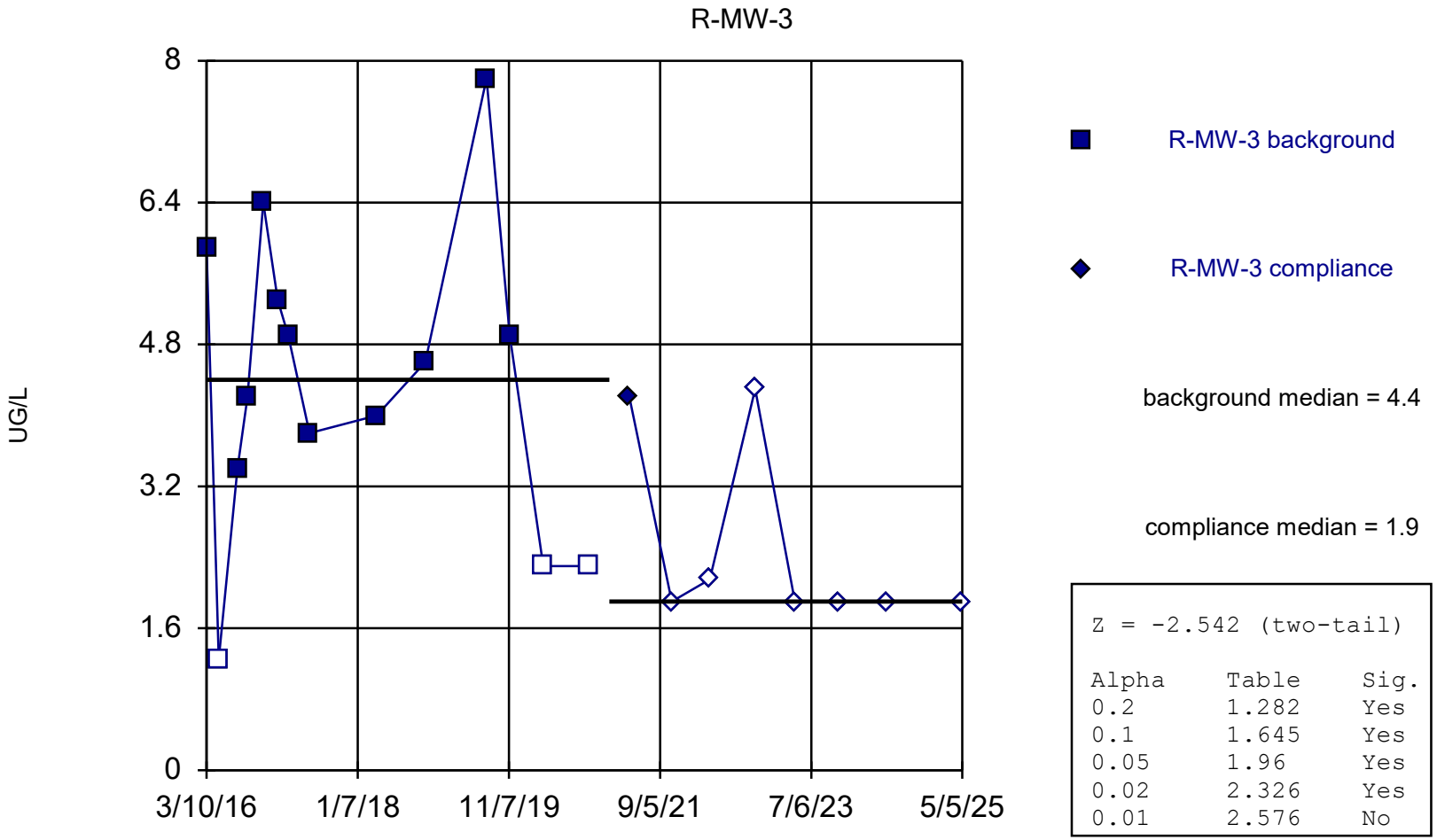
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: LEAD, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -2.542 (two-tail)

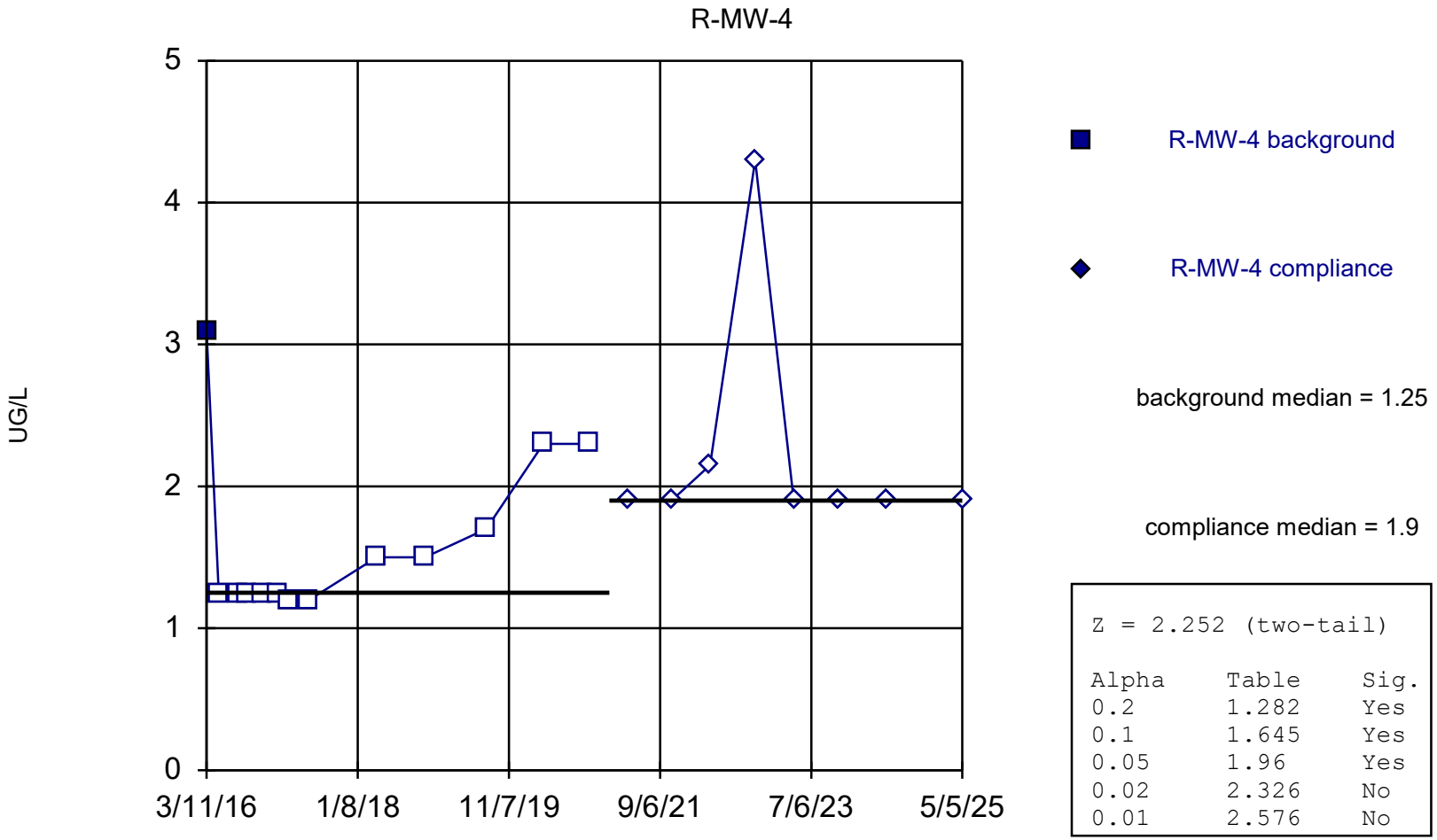
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	No

Constituent: LEAD, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.252 (two-tail)

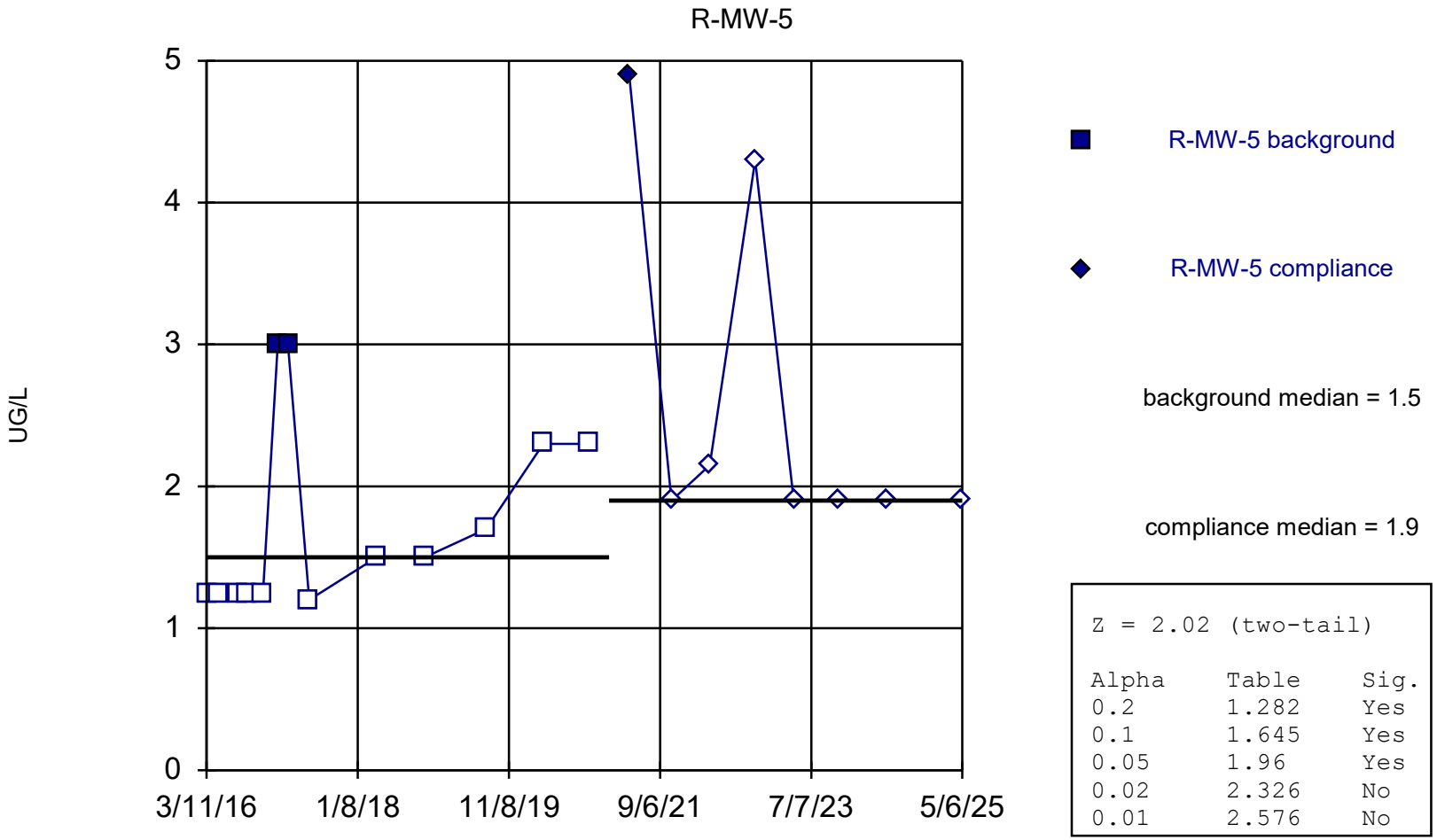
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: LEAD, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



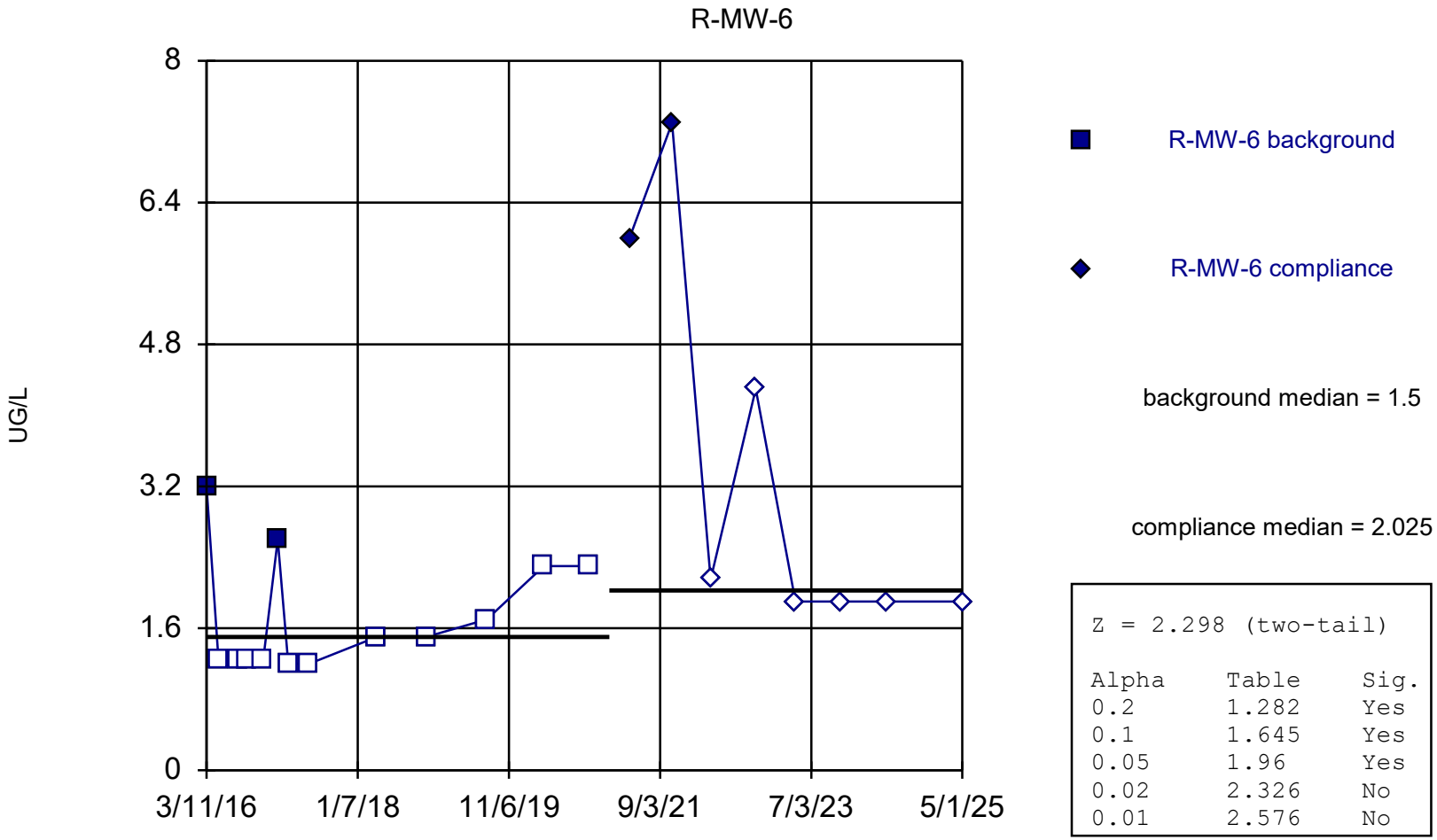
Z = 2.02 (two-tail)		
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: LEAD, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.298 (two-tail)

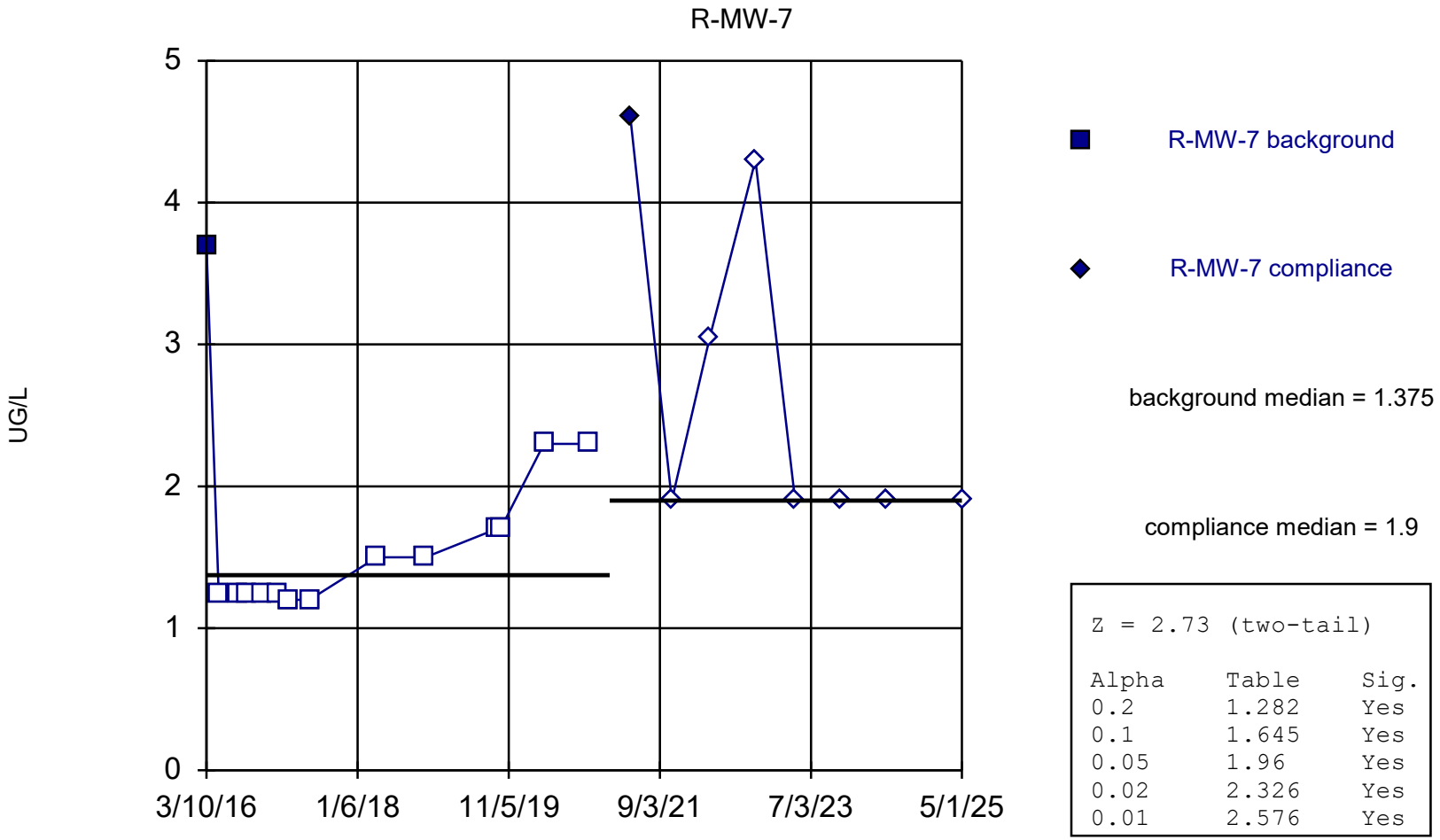
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: LEAD, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.73 (two-tail)

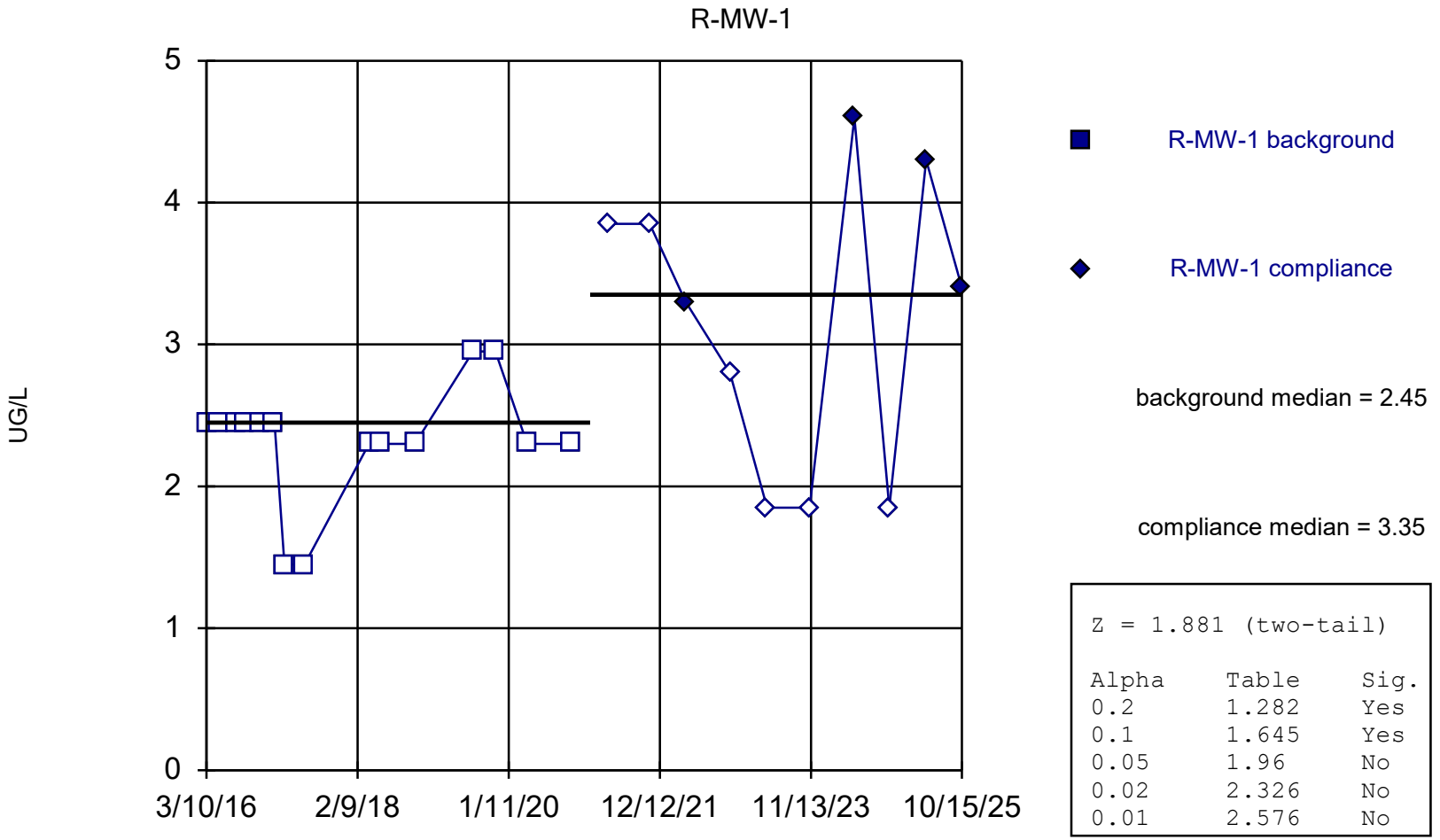
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: LEAD, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.881 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

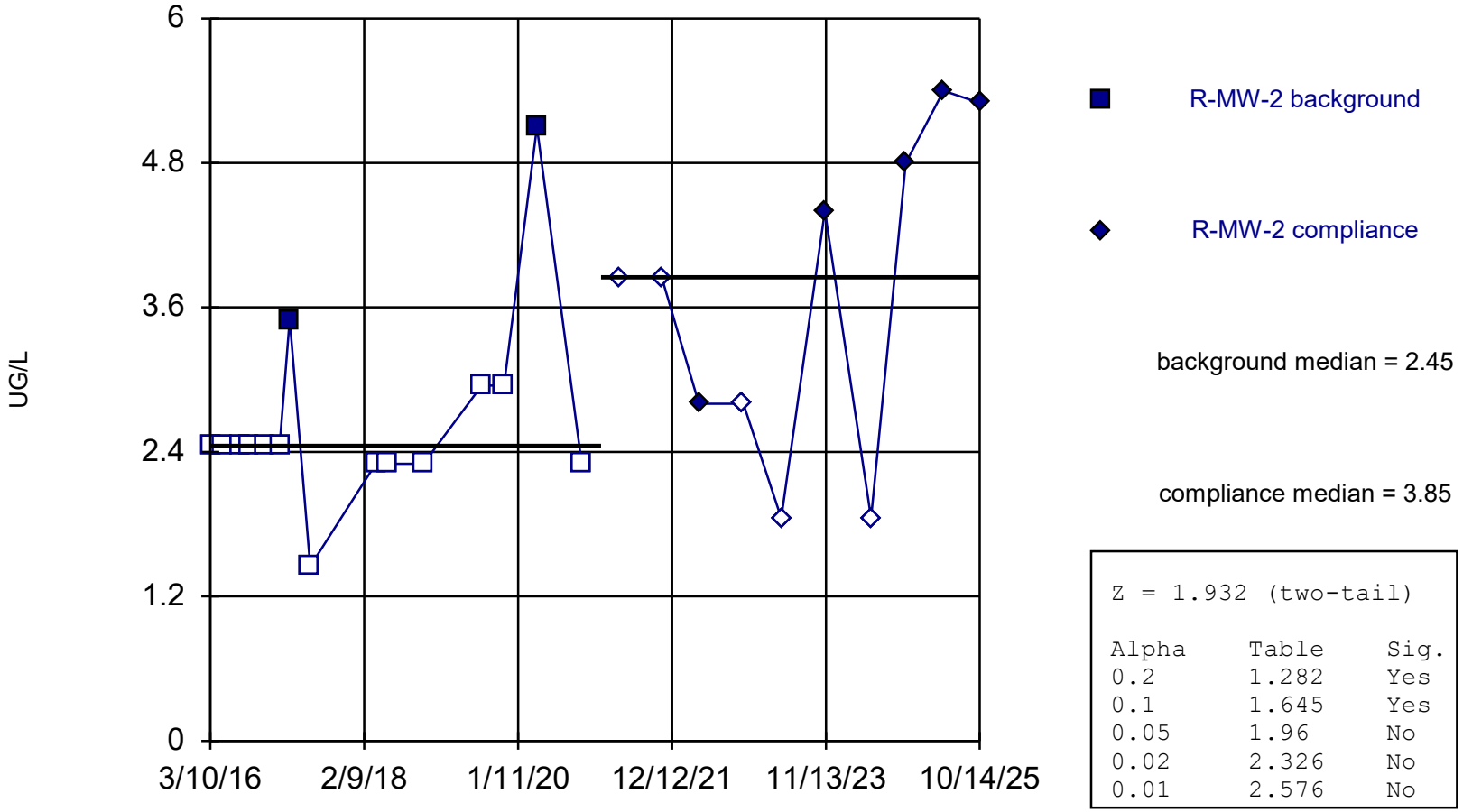
Constituent: LITHIUM, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-2



Z = 1.932 (two-tail)

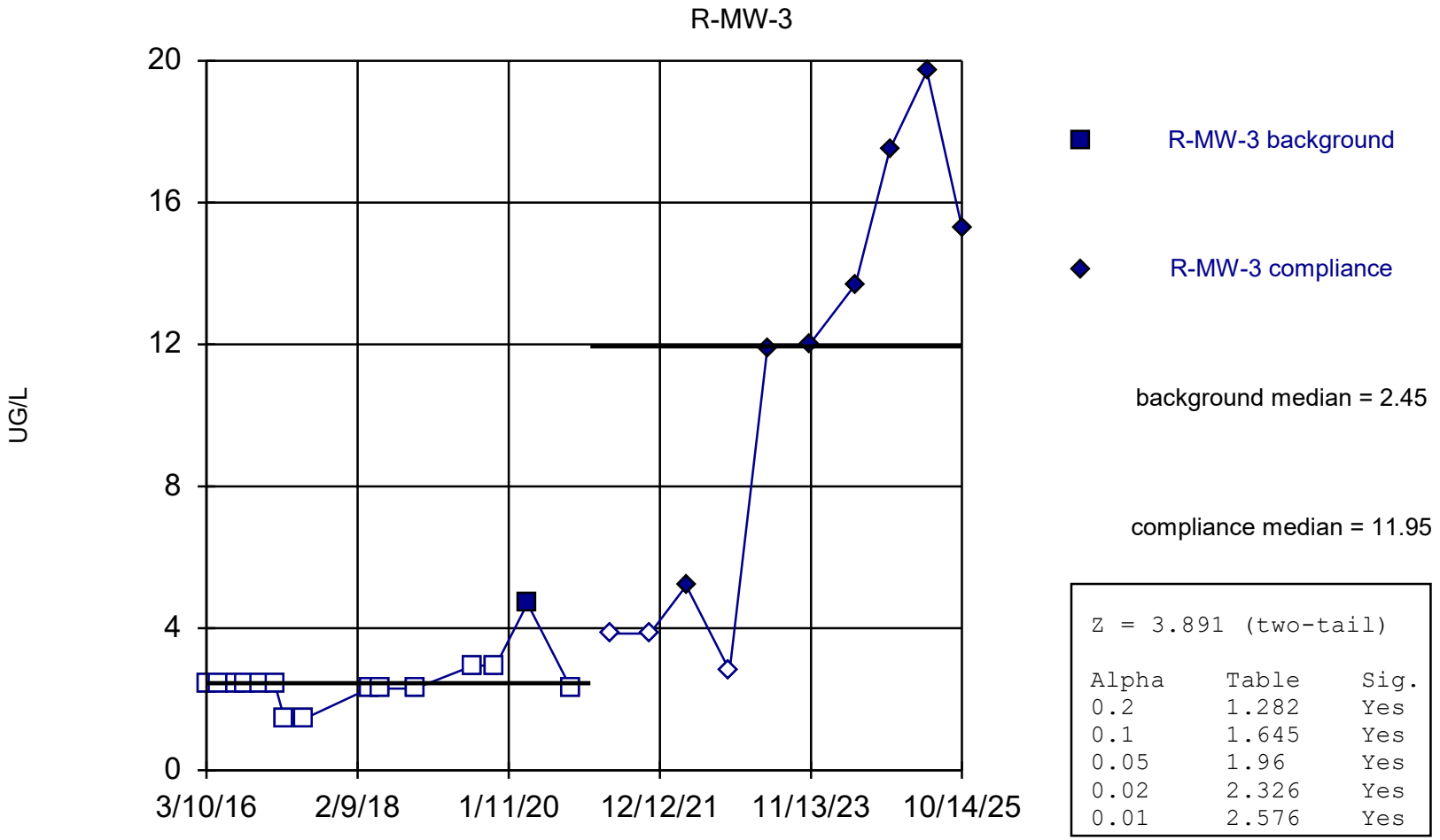
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: LITHIUM, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 3.891 (two-tail)

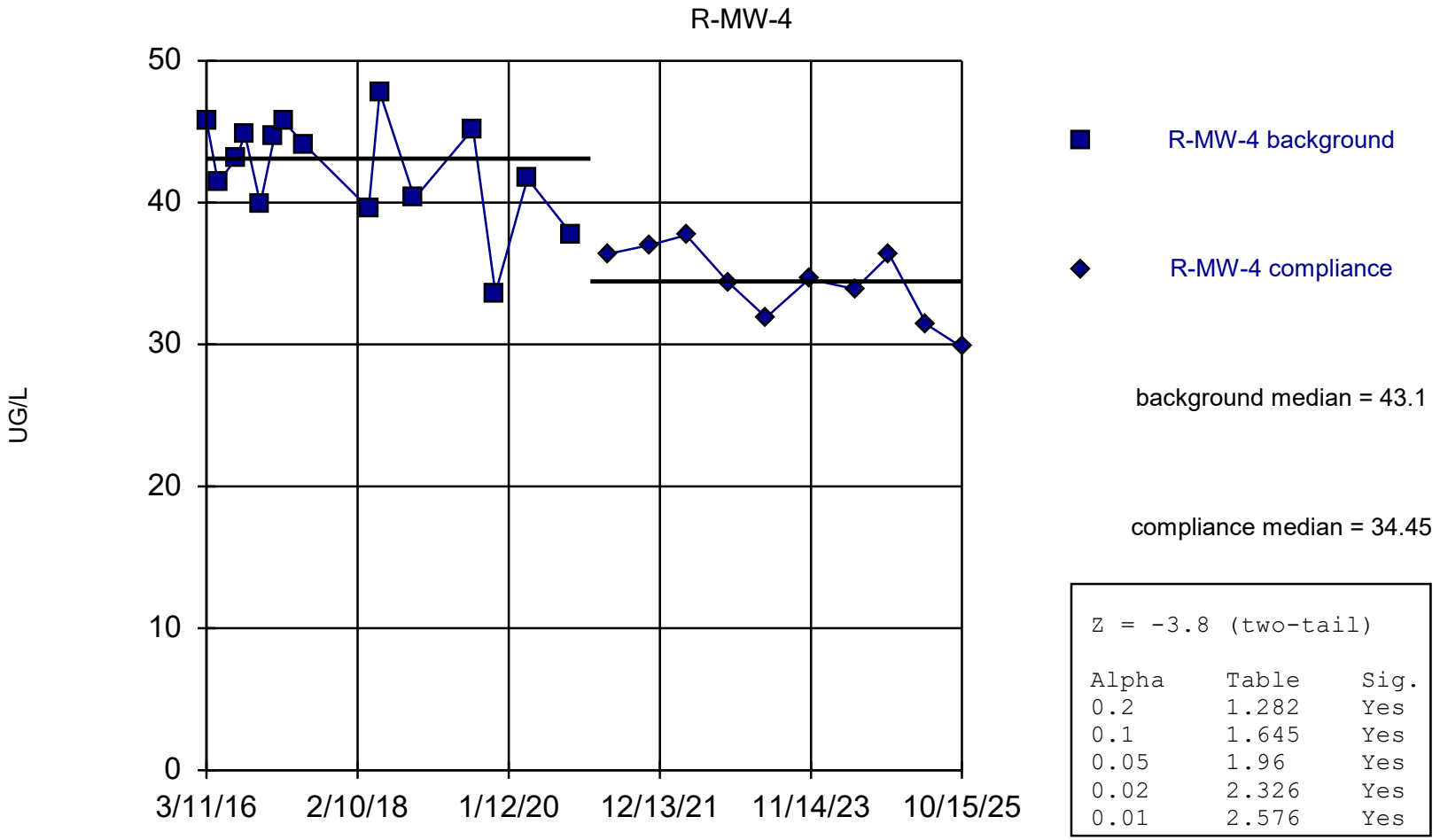
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: LITHIUM, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = -3.8 (two-tail)

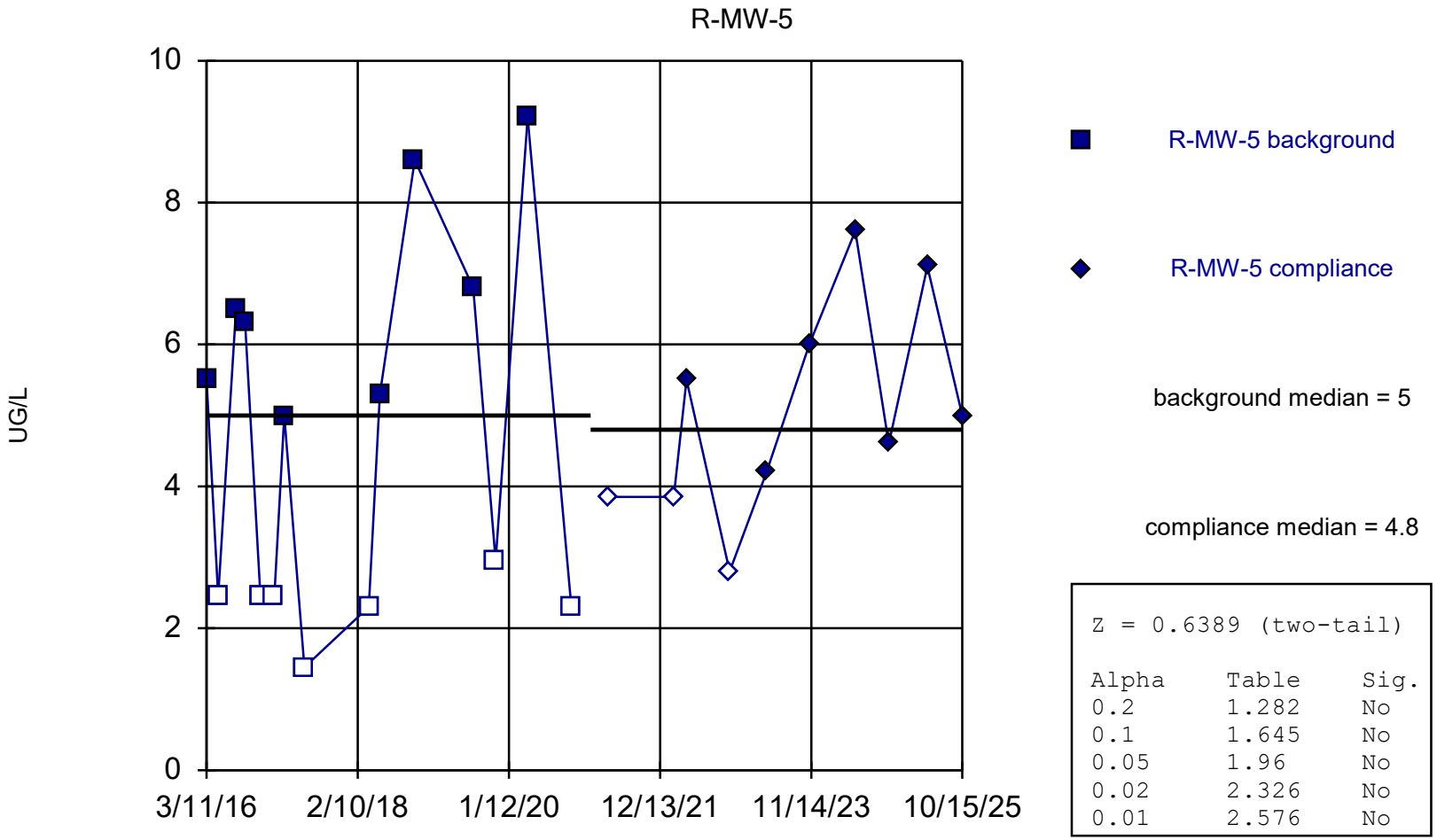
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: LITHIUM, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.6389 (two-tail)

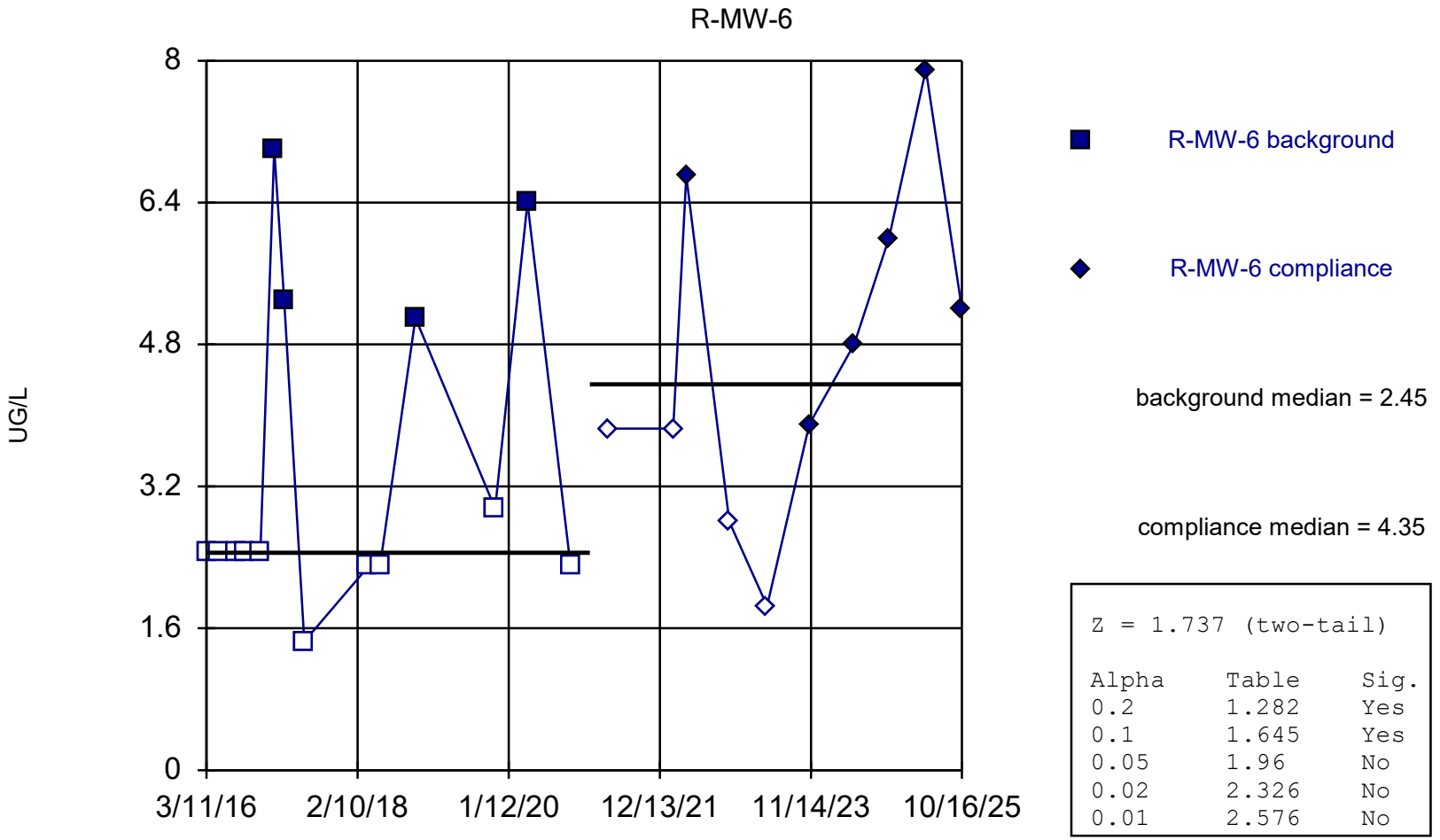
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: LITHIUM, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 1.737 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

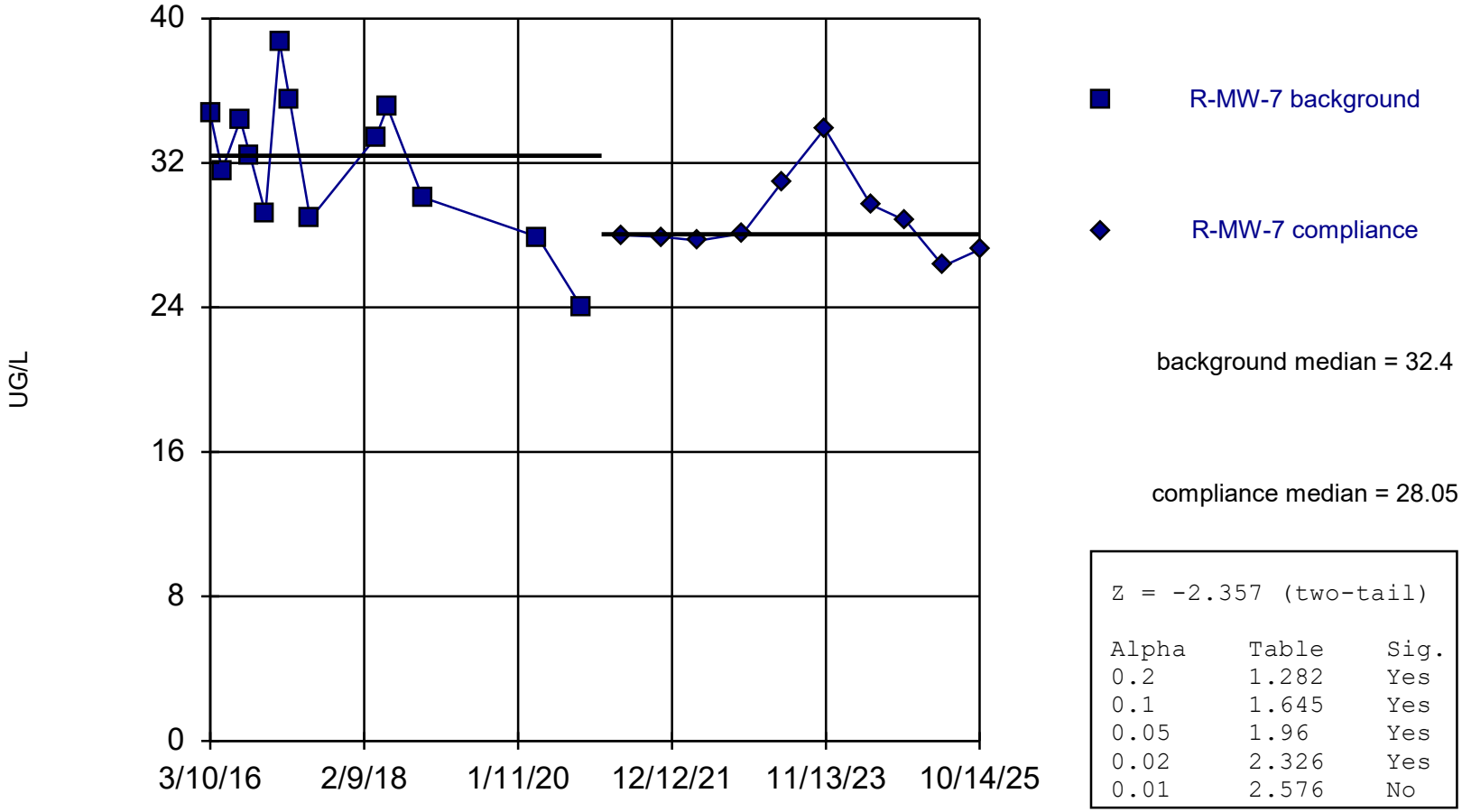
Constituent: LITHIUM, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-7



background median = 32.4

compliance median = 28.05

Z = -2.357 (two-tail)

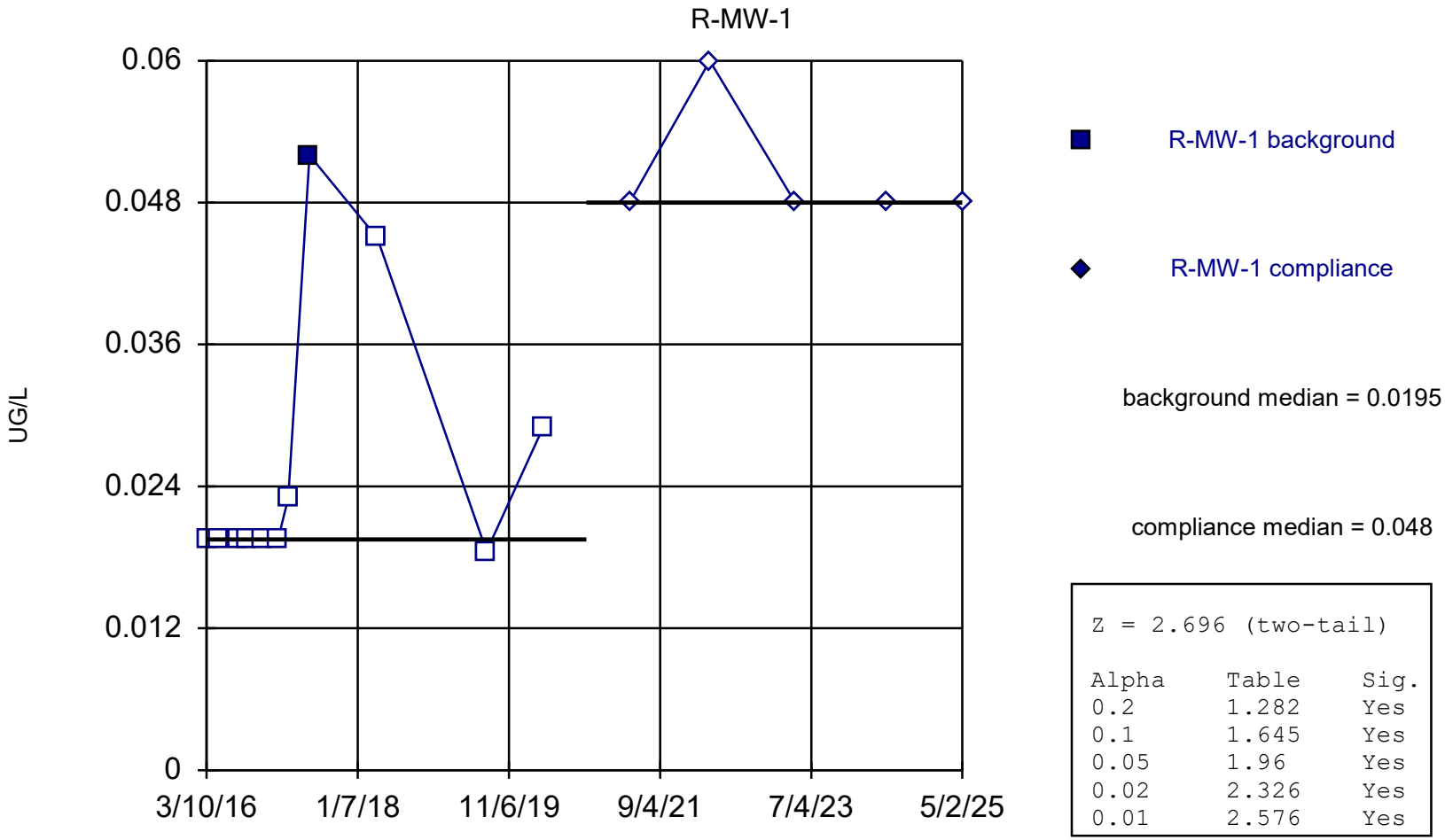
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	No

Constituent: LITHIUM, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



background median = 0.0195

compliance median = 0.048

Z = 2.696 (two-tail)

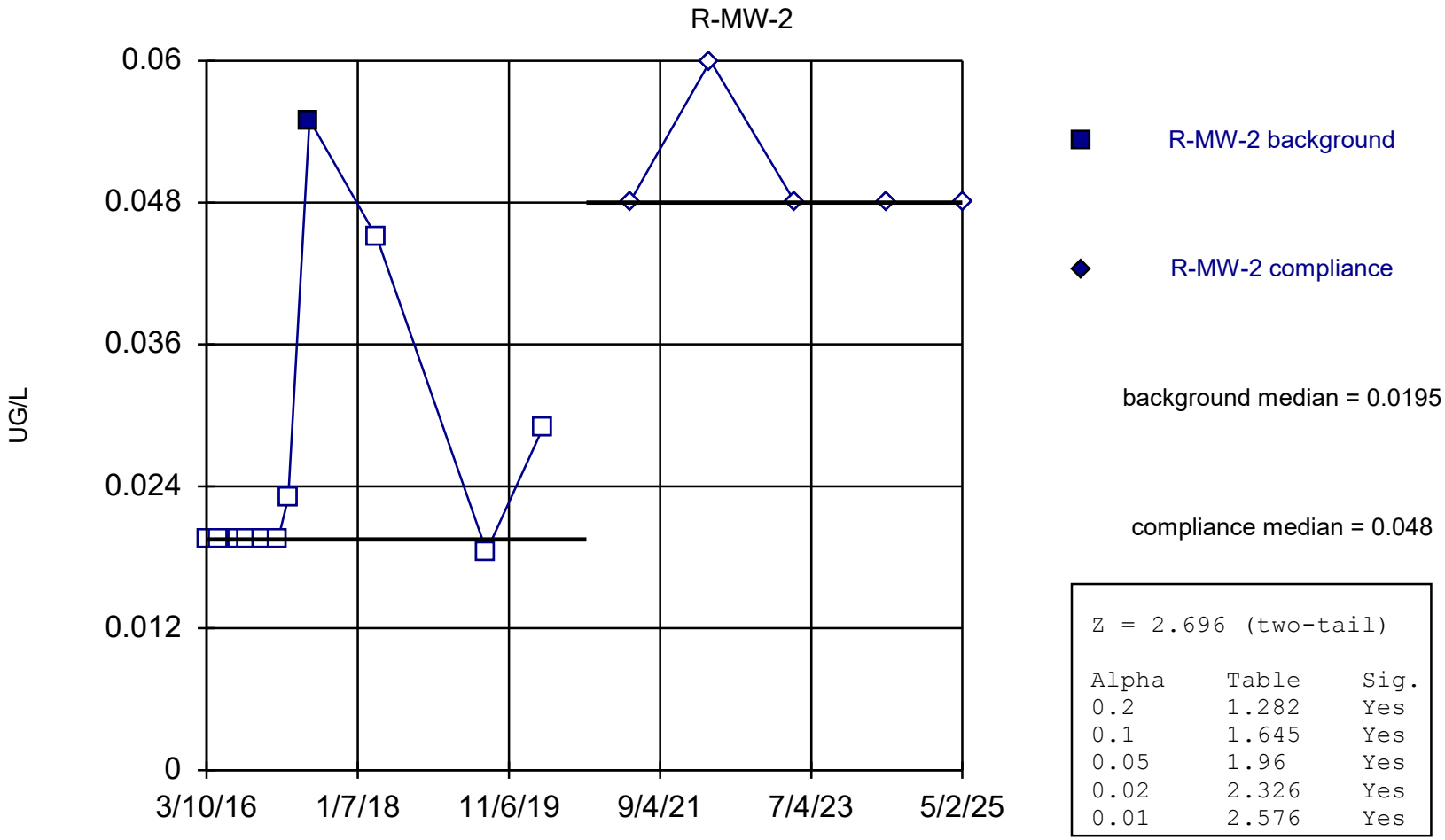
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: MERCURY, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



background median = 0.0195

compliance median = 0.048

Z = 2.696 (two-tail)

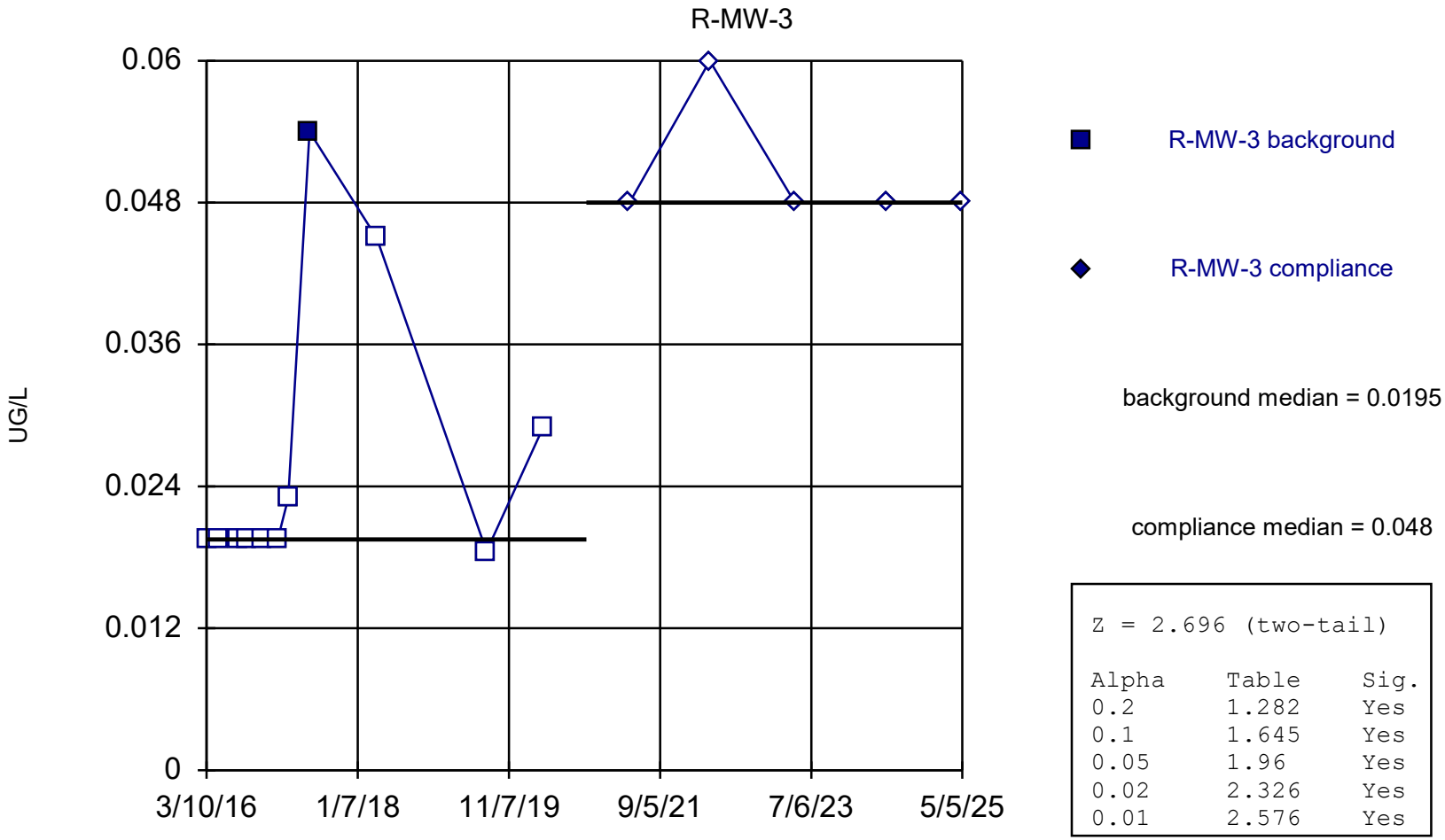
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: MERCURY, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



background median = 0.0195

compliance median = 0.048

Z = 2.696 (two-tail)

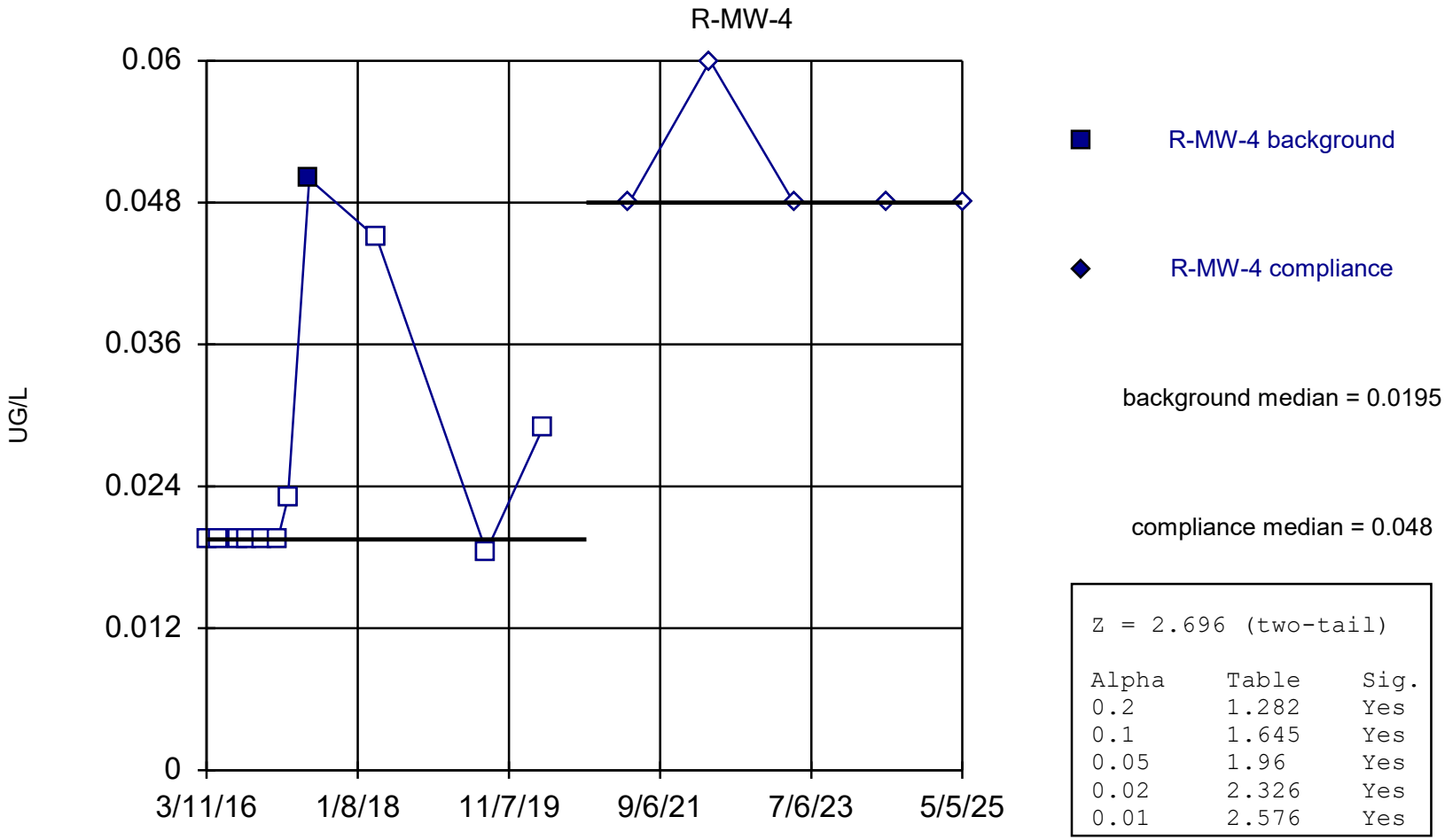
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: MERCURY, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



background median = 0.0195

compliance median = 0.048

Z = 2.696 (two-tail)

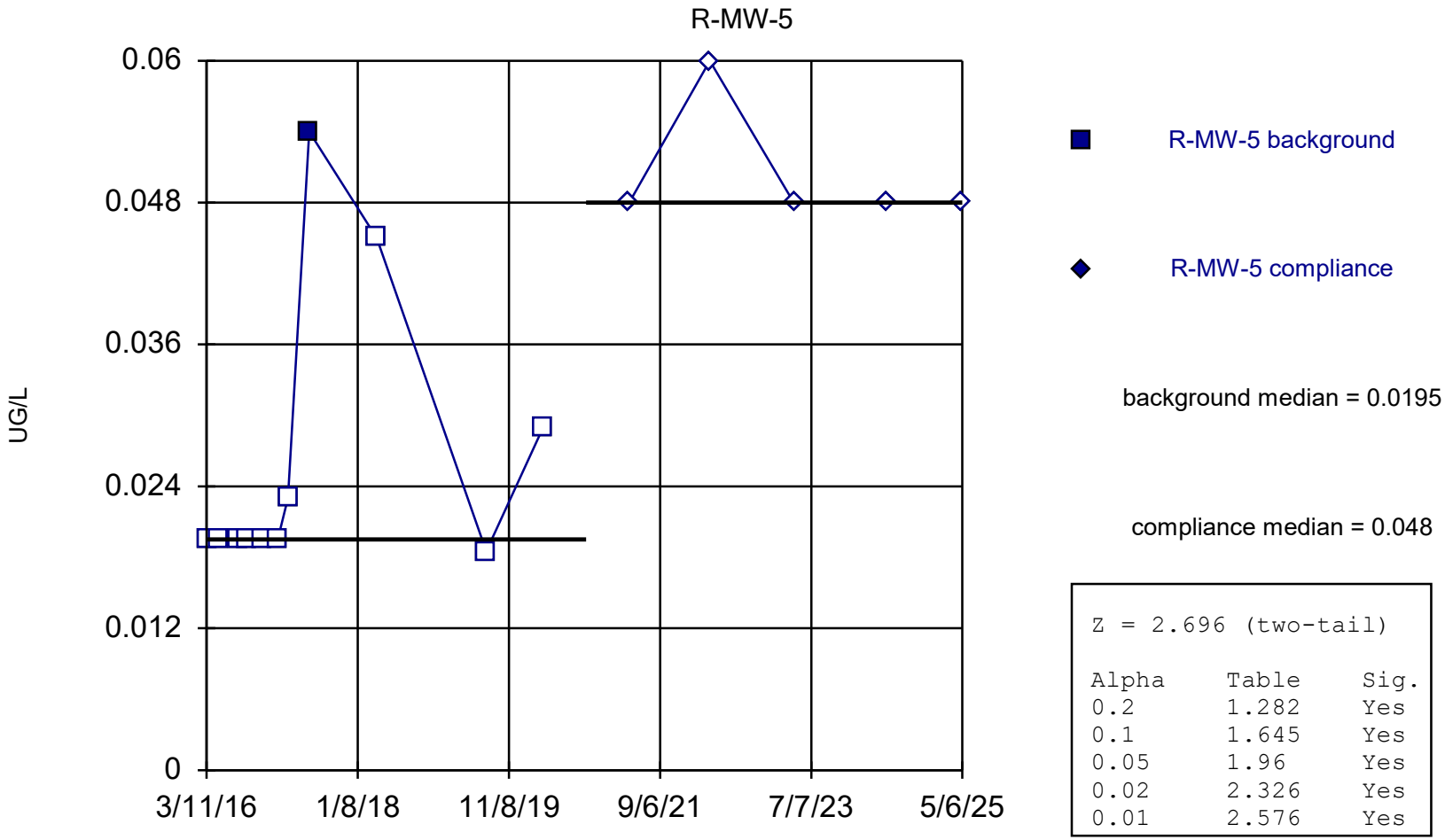
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: MERCURY, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.696 (two-tail)

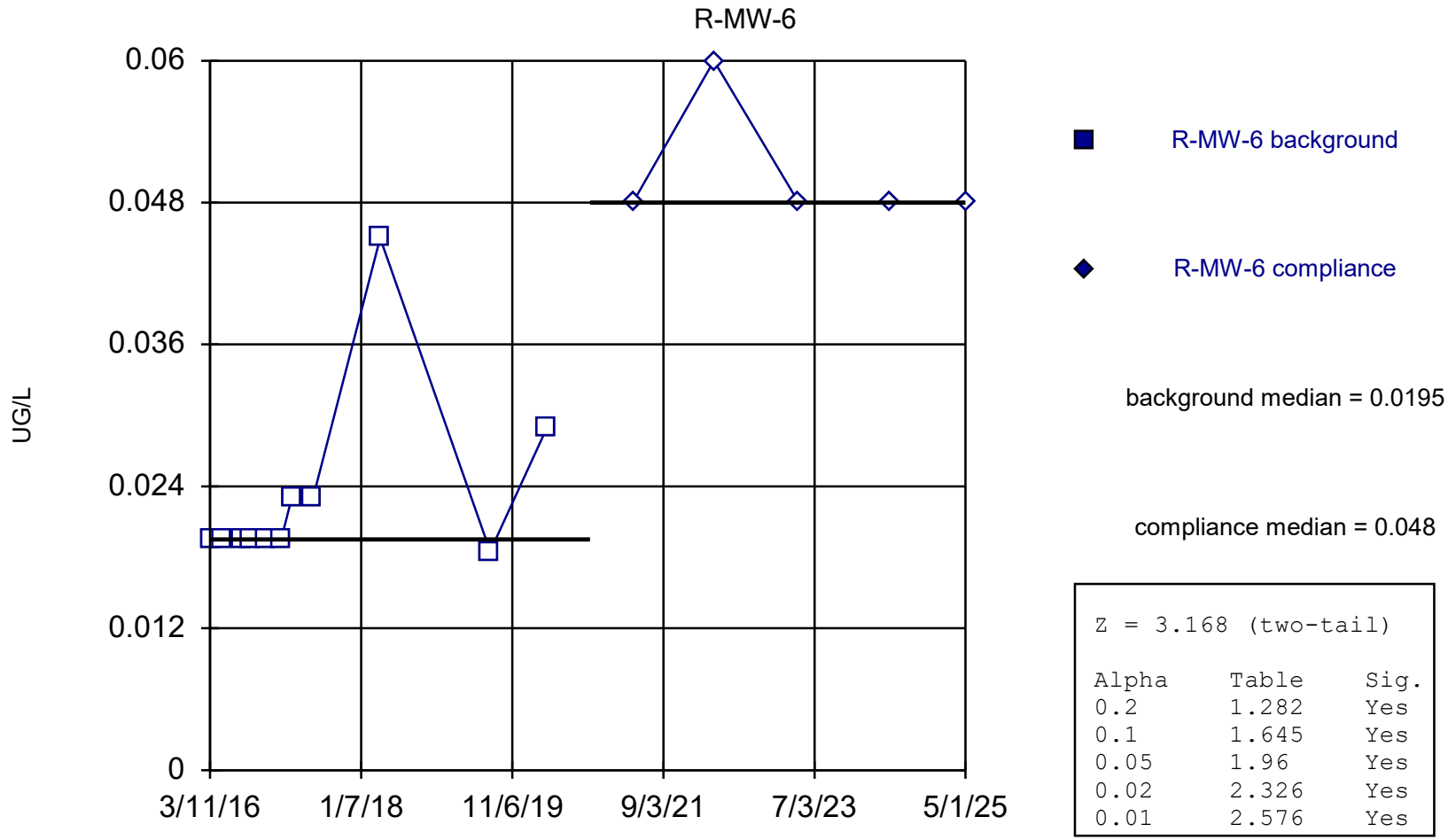
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: MERCURY, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 3.168 (two-tail)

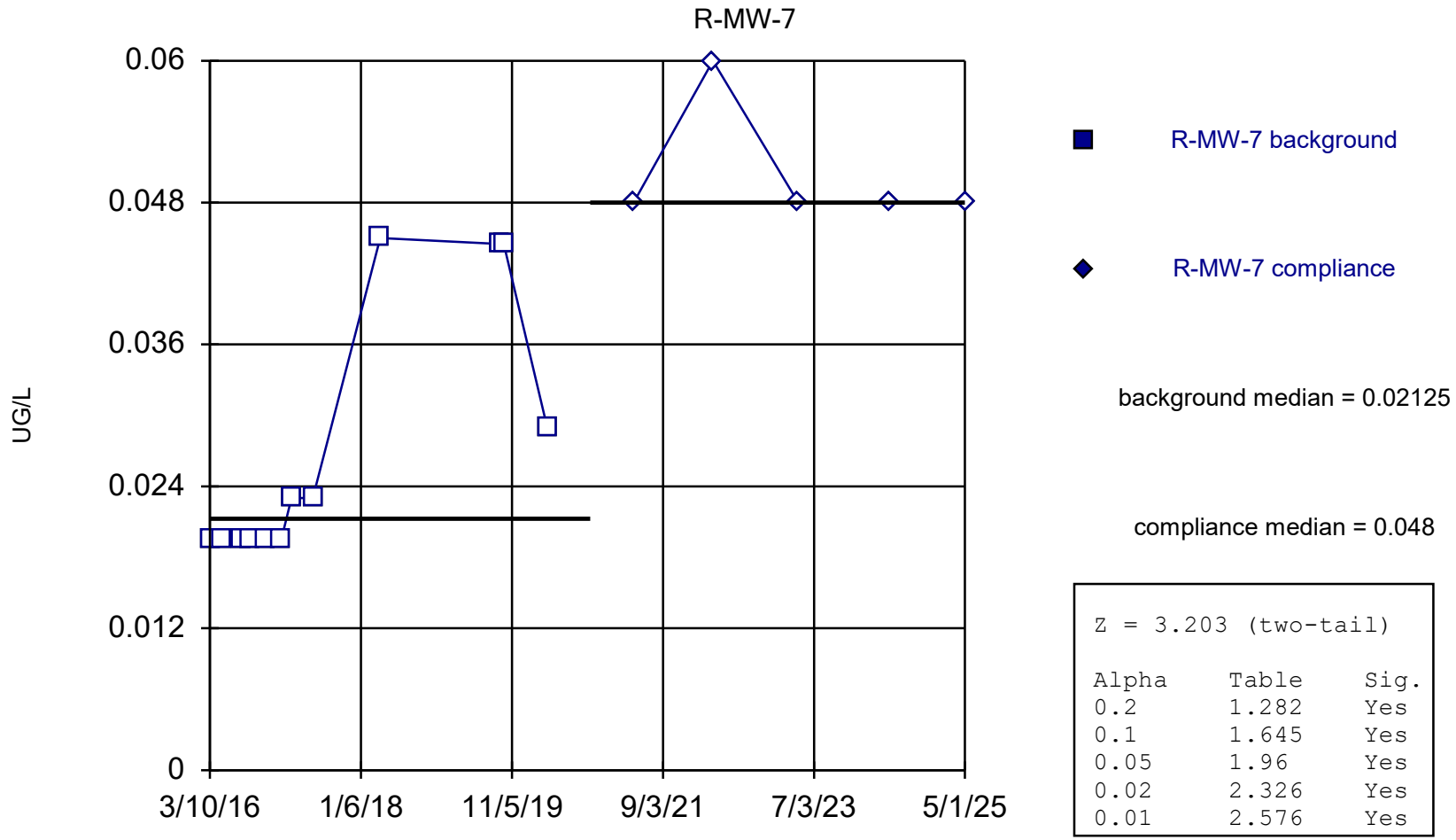
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: MERCURY, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



background median = 0.02125

compliance median = 0.048

Z = 3.203 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

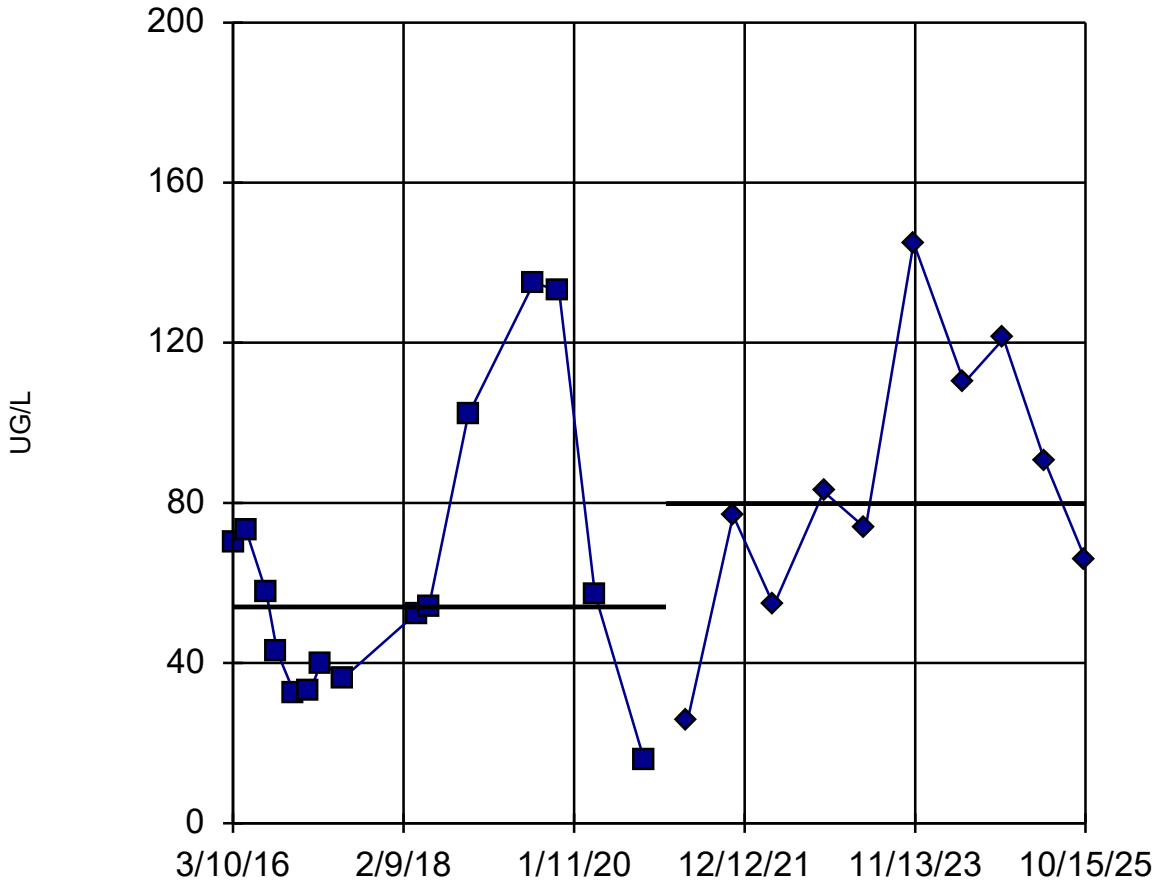
Constituent: MERCURY, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-1



R-MW-1 background

R-MW-1 compliance

background median = 54

compliance median = 79.85

Z = 1.803 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

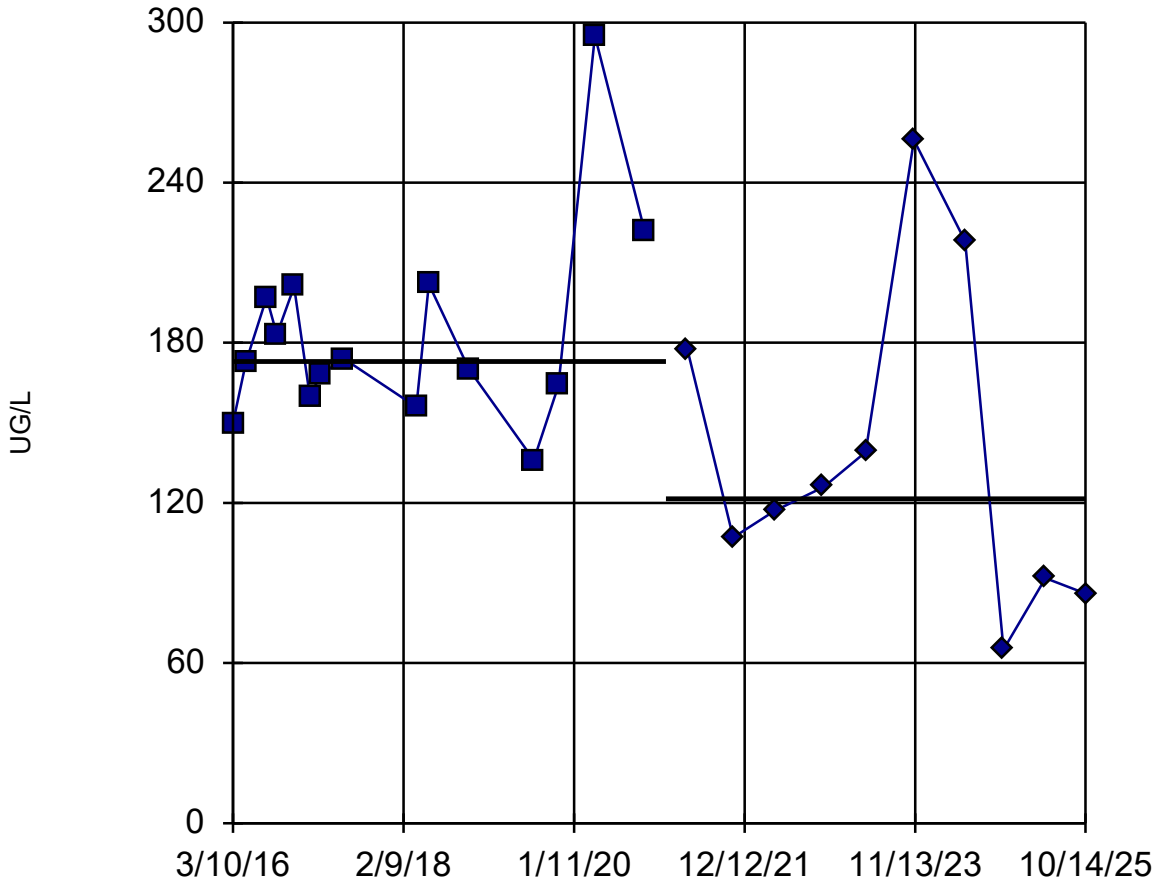
Constituent: MOLYBDENUM, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-2



R-MW-2 background

R-MW-2 compliance

background median = 173

compliance median = 121.5

Z = -2.136 (two-tail)

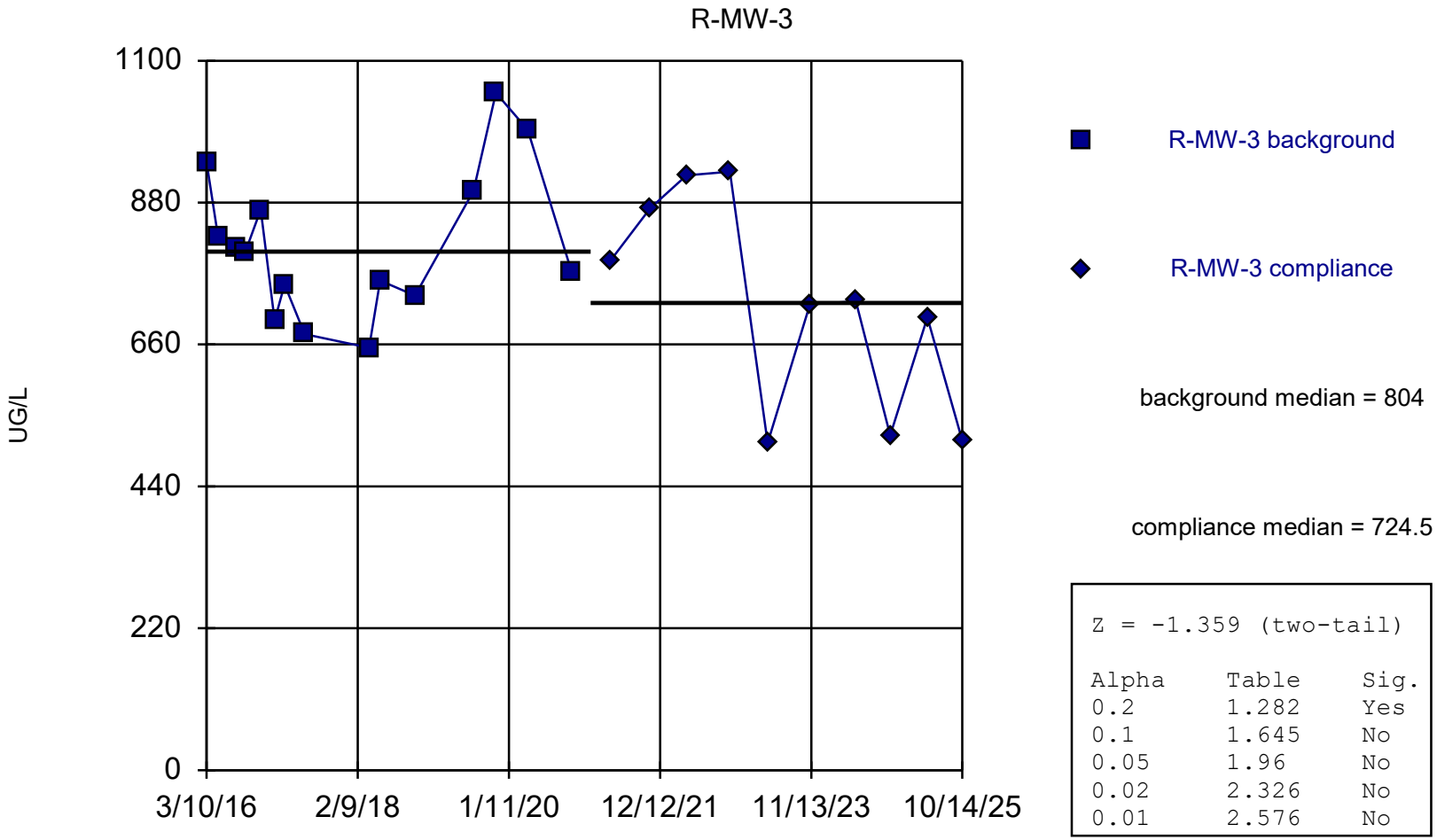
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: MOLYBDENUM, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



background median = 804

compliance median = 724.5

Z = -1.359 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

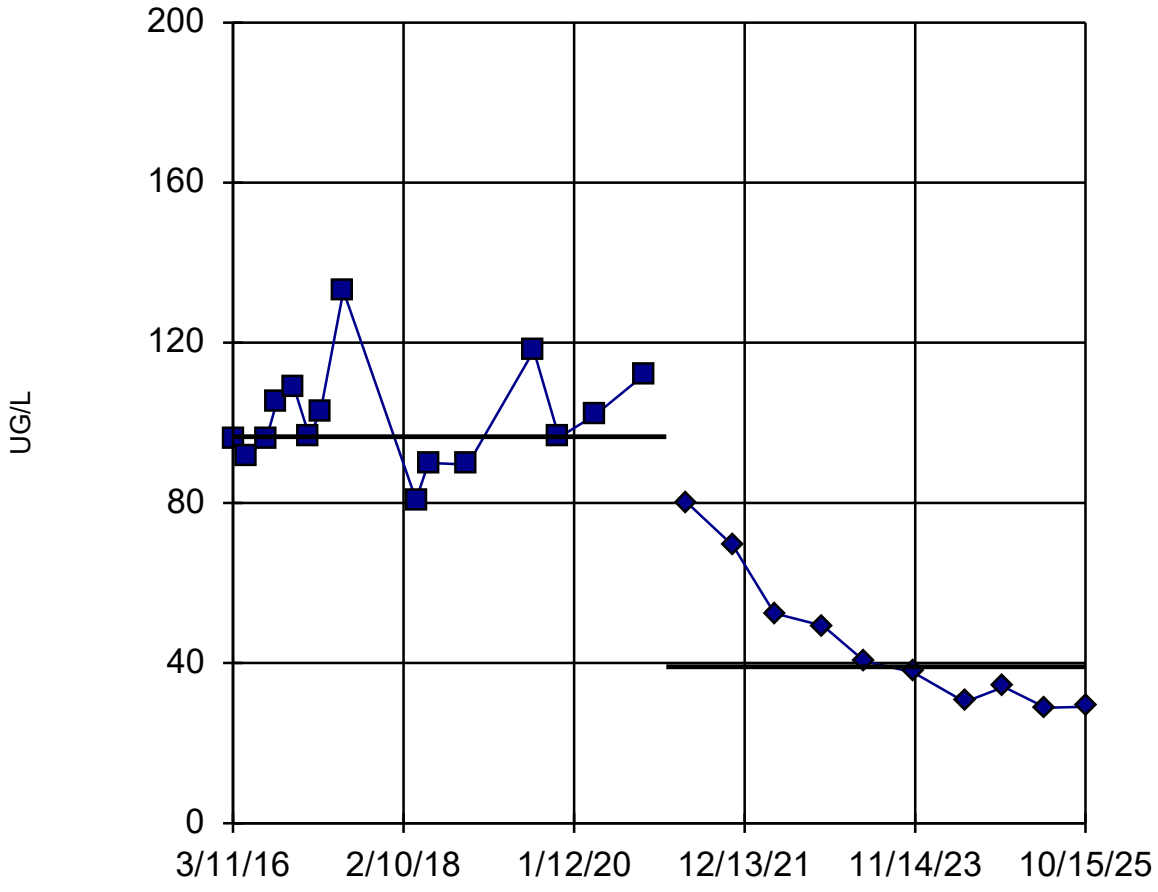
Constituent: MOLYBDENUM, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-4



R-MW-4 background

R-MW-4 compliance

background median = 96.5

compliance median = 39.05

Z = -4.188 (two-tail)

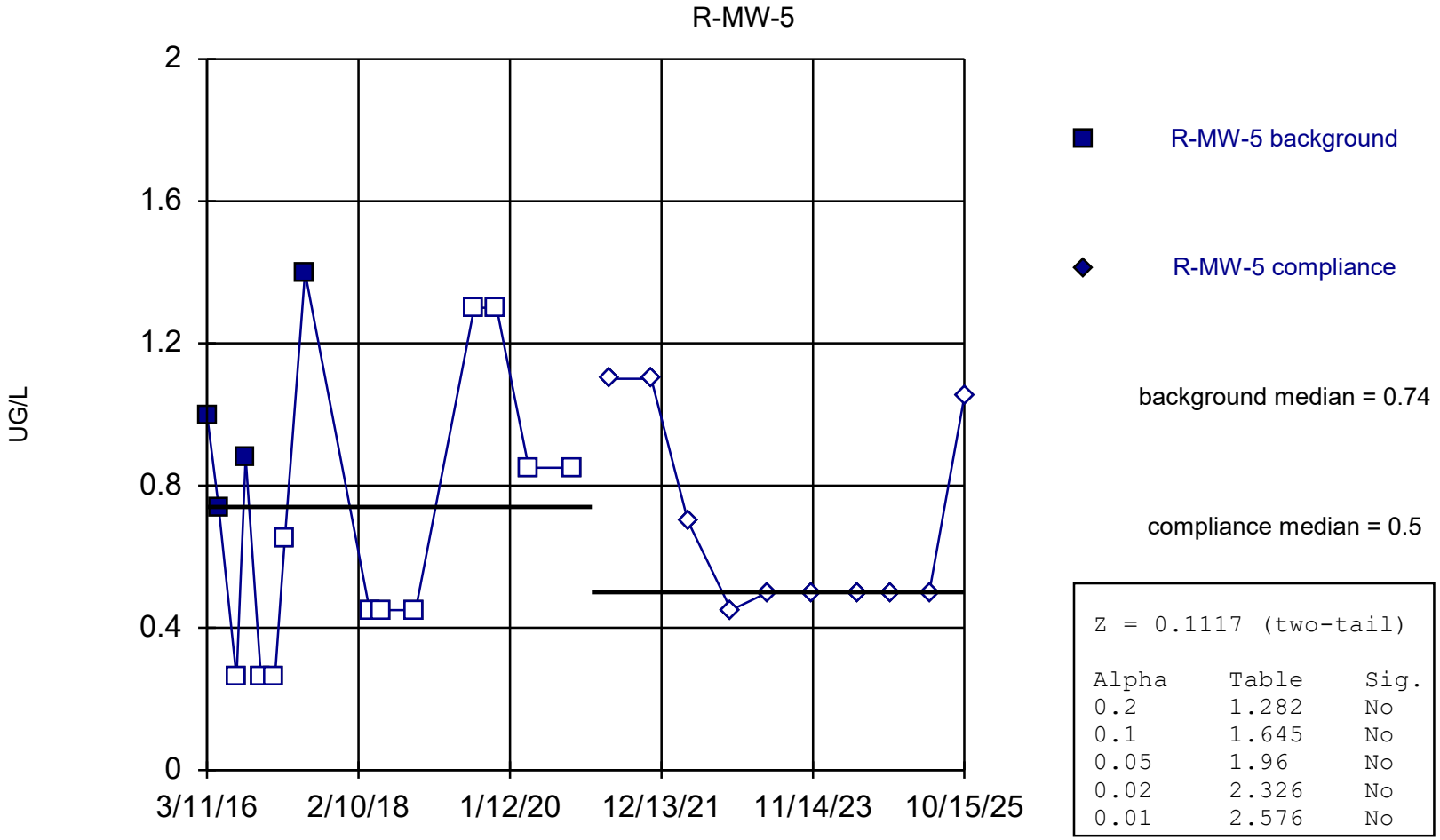
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: MOLYBDENUM, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.1117 (two-tail)

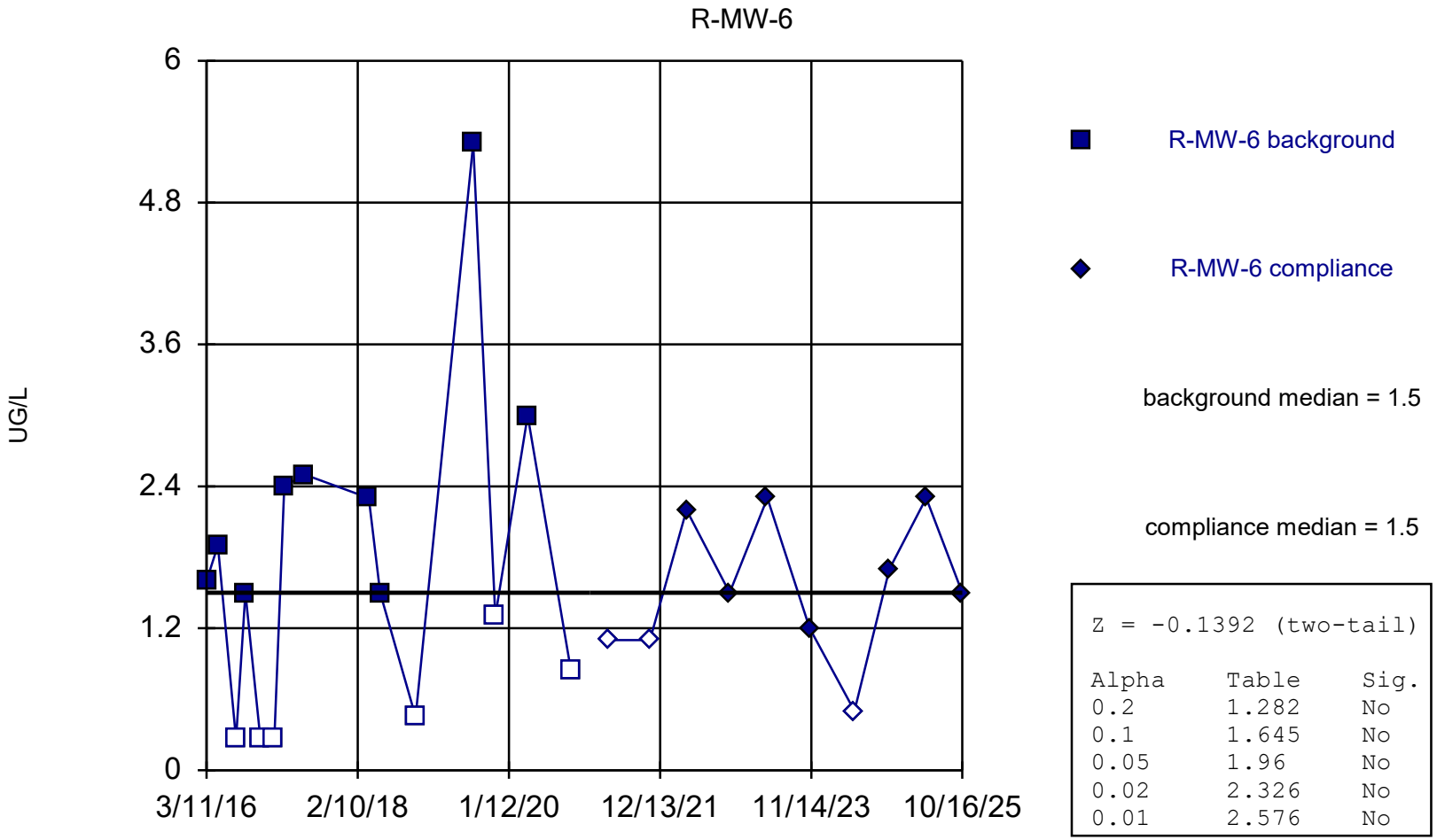
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: MOLYBDENUM, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.1392 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

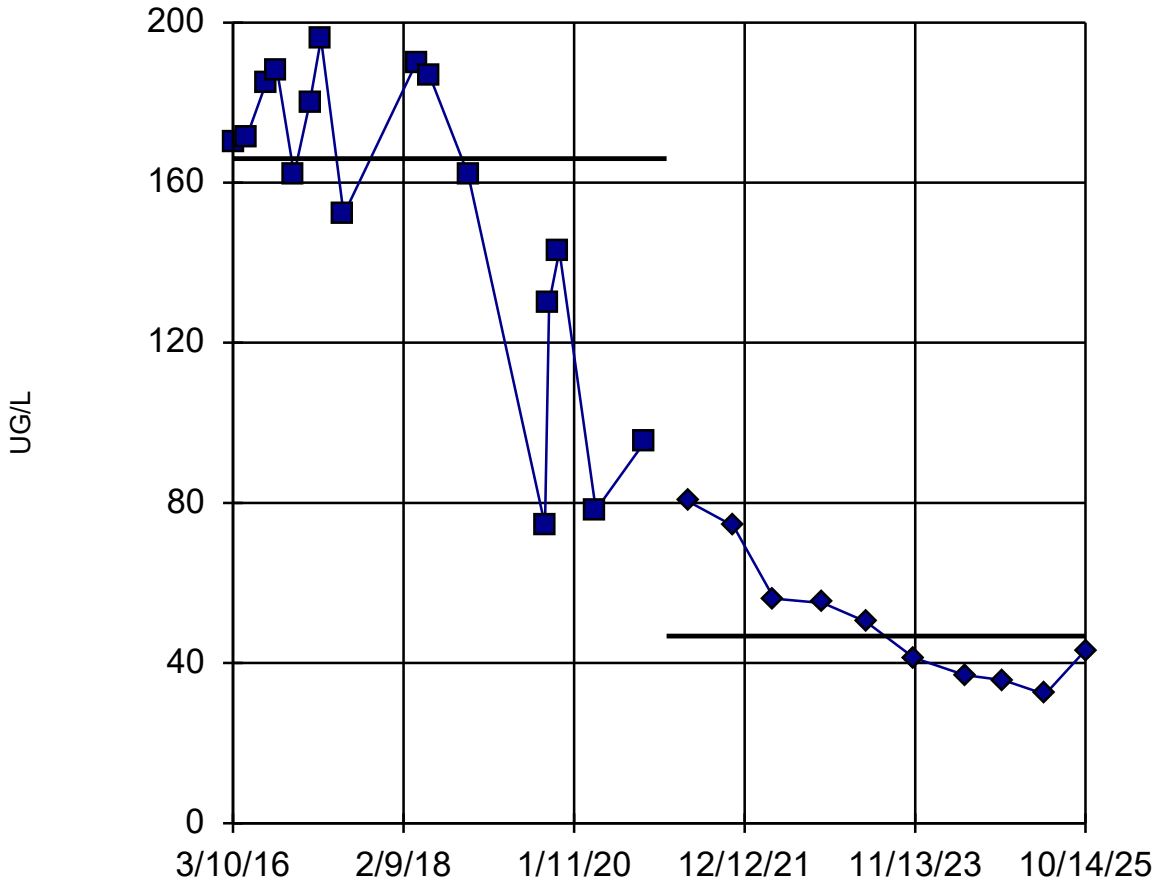
Constituent: MOLYBDENUM, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-7



■ R-MW-7 background

◆ R-MW-7 compliance

background median = 166

compliance median = 46.75

Z = -4.138 (two-tail)

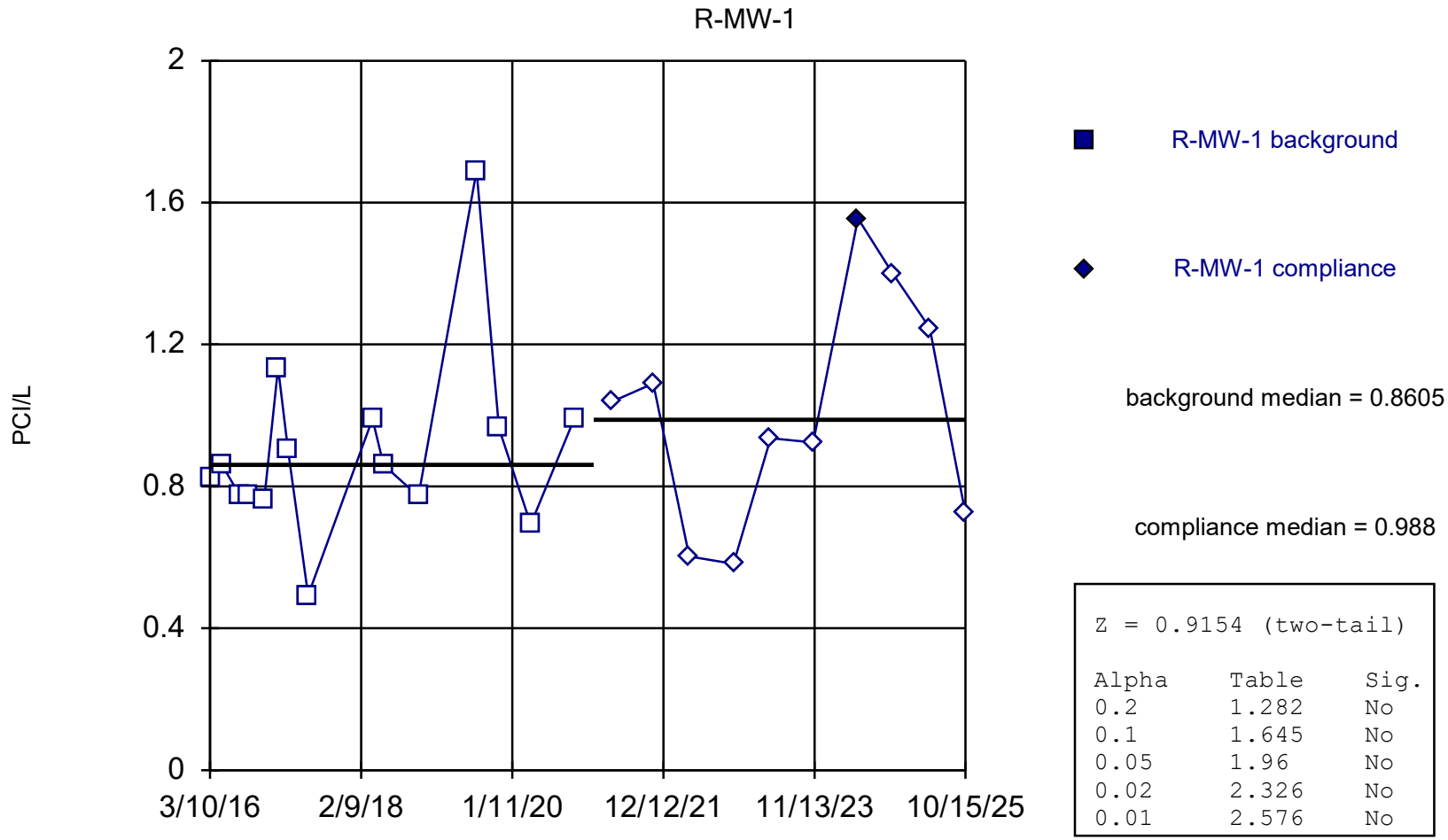
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: MOLYBDENUM, TOTAL Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.9154 (two-tail)

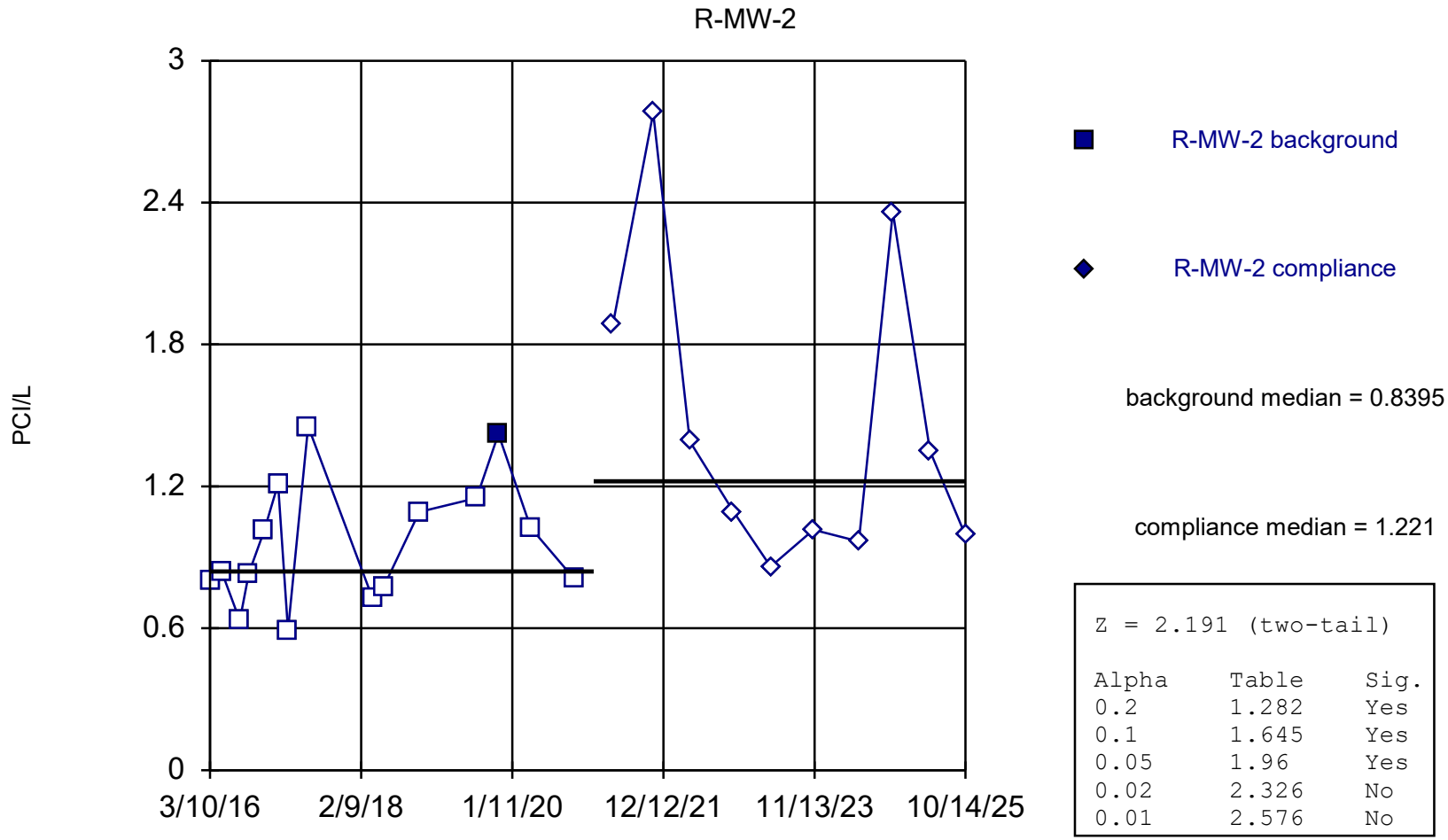
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: RADIUM [226 + 228] Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



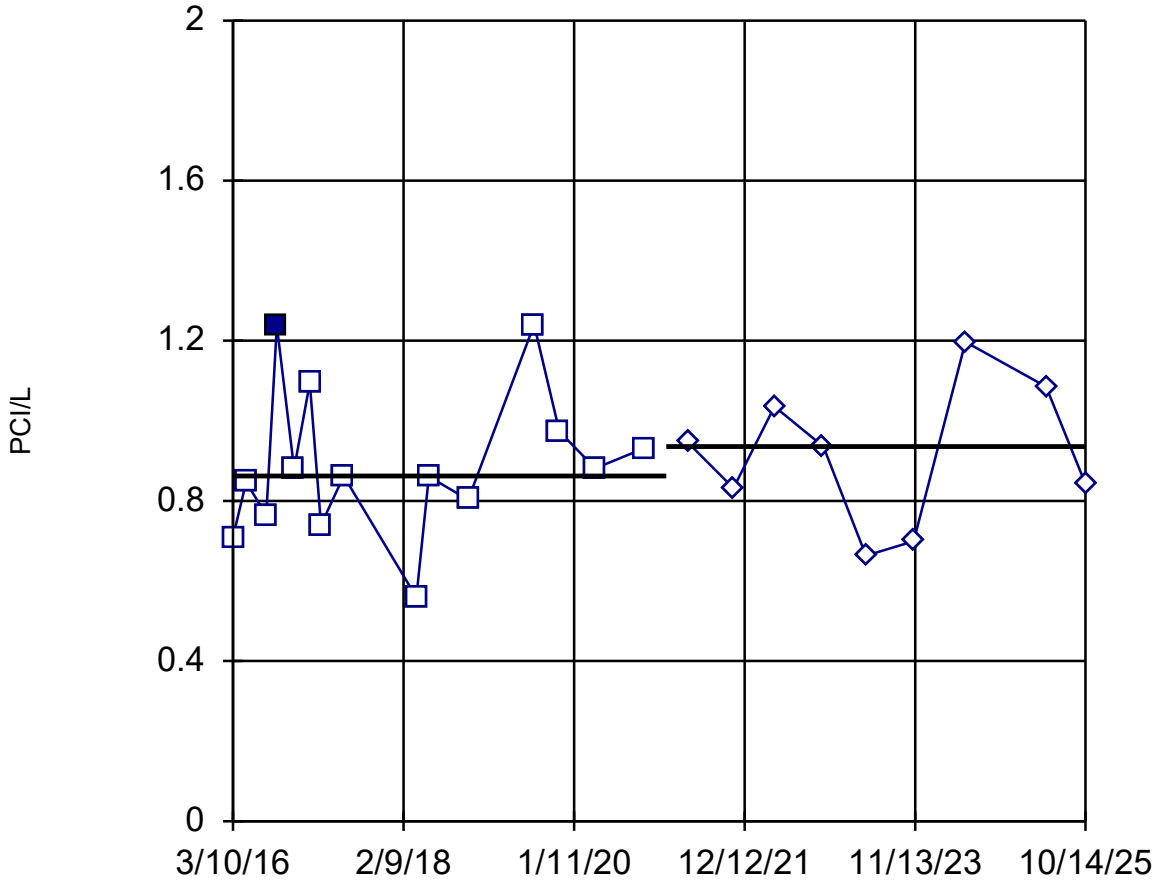
Constituent: RADIUM [226 + 228] Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-3



■ R-MW-3 background

◆ R-MW-3 compliance

background median = 0.862

compliance median = 0.9355

Z = 0.1789 (two-tail)

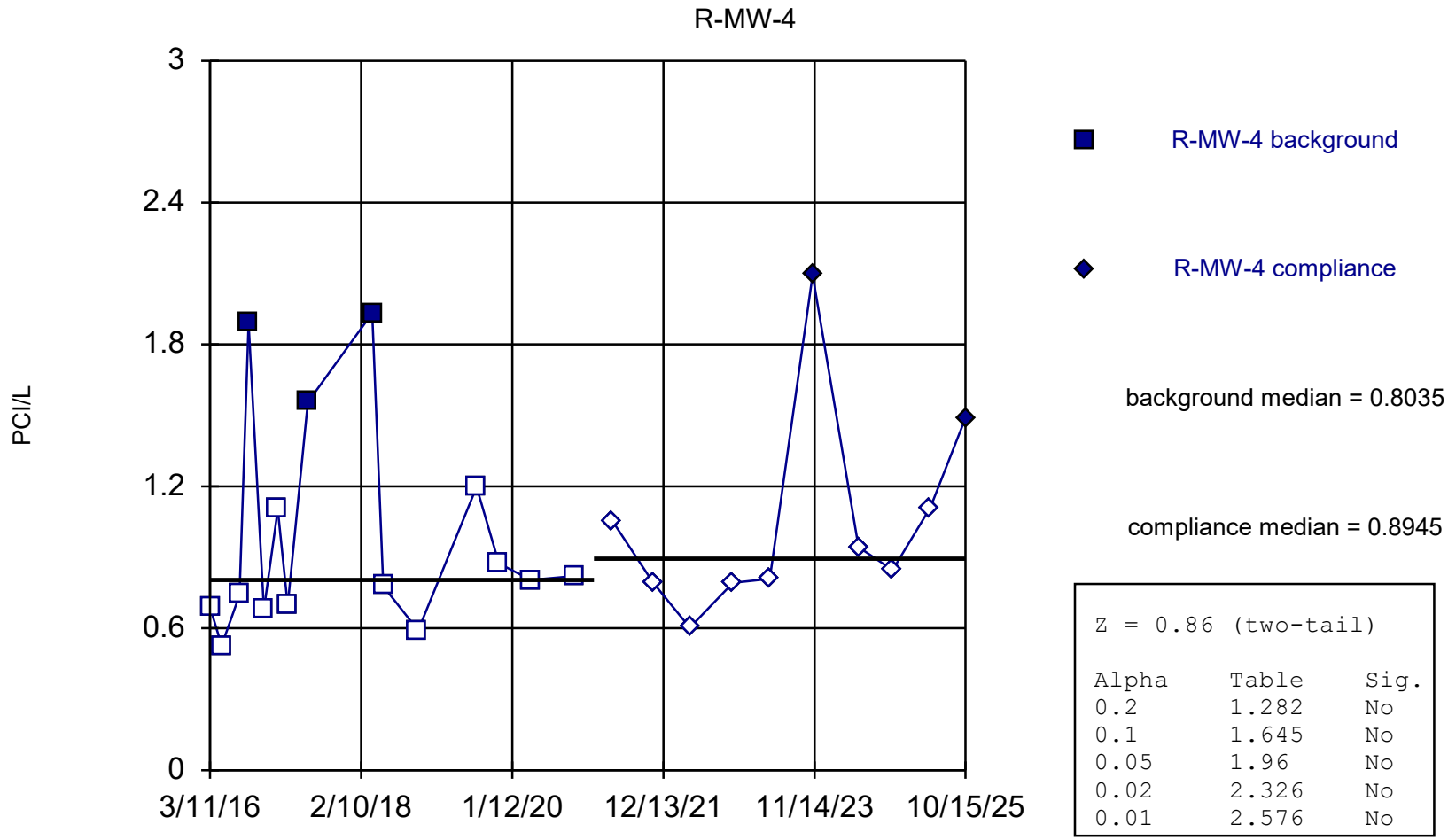
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: RADIUM [226 + 228] Analysis Run 1/5/2026 2:06 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.86 (two-tail)

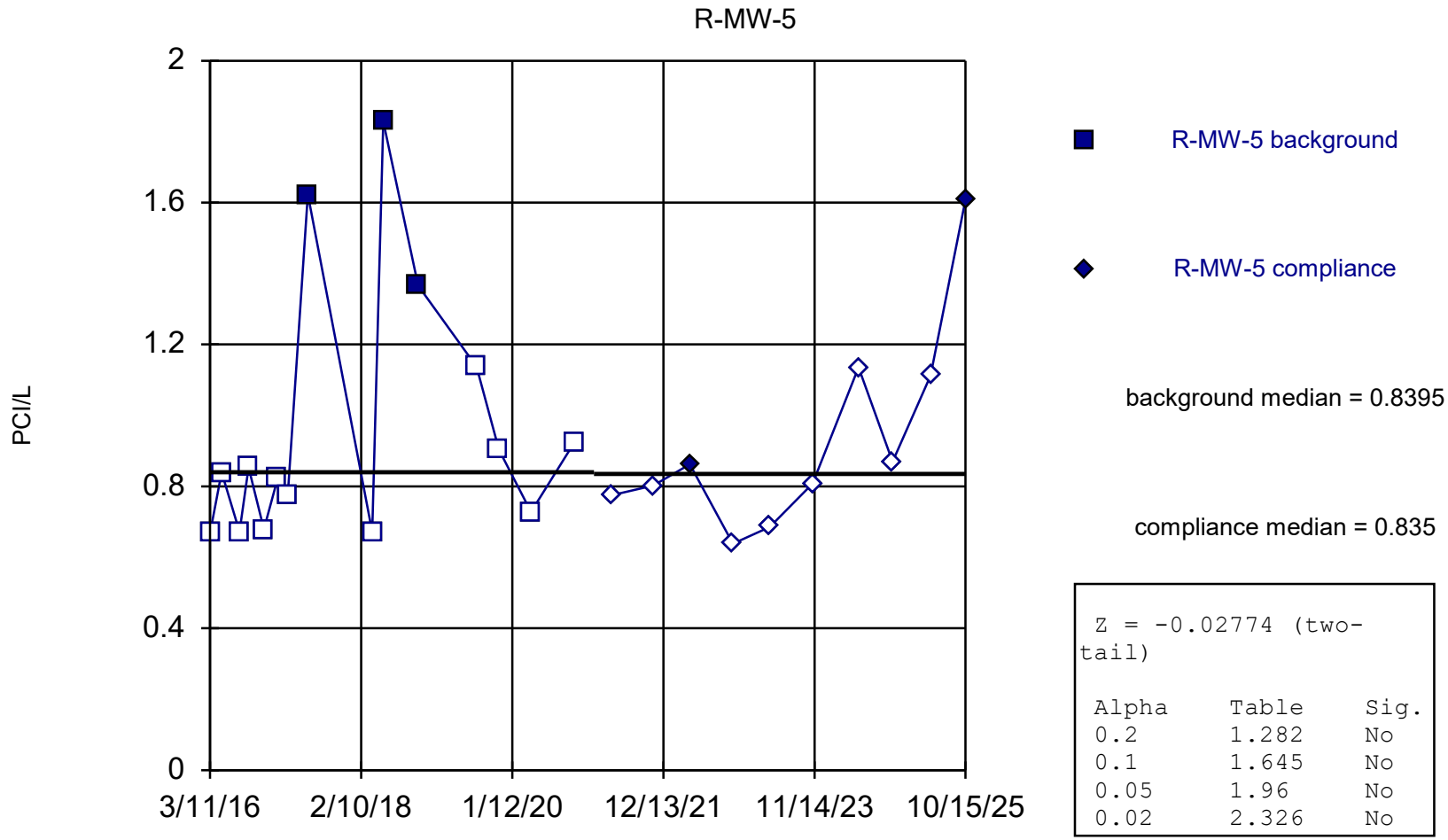
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: RADIUM [226 + 228] Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.02774 (two-tail)

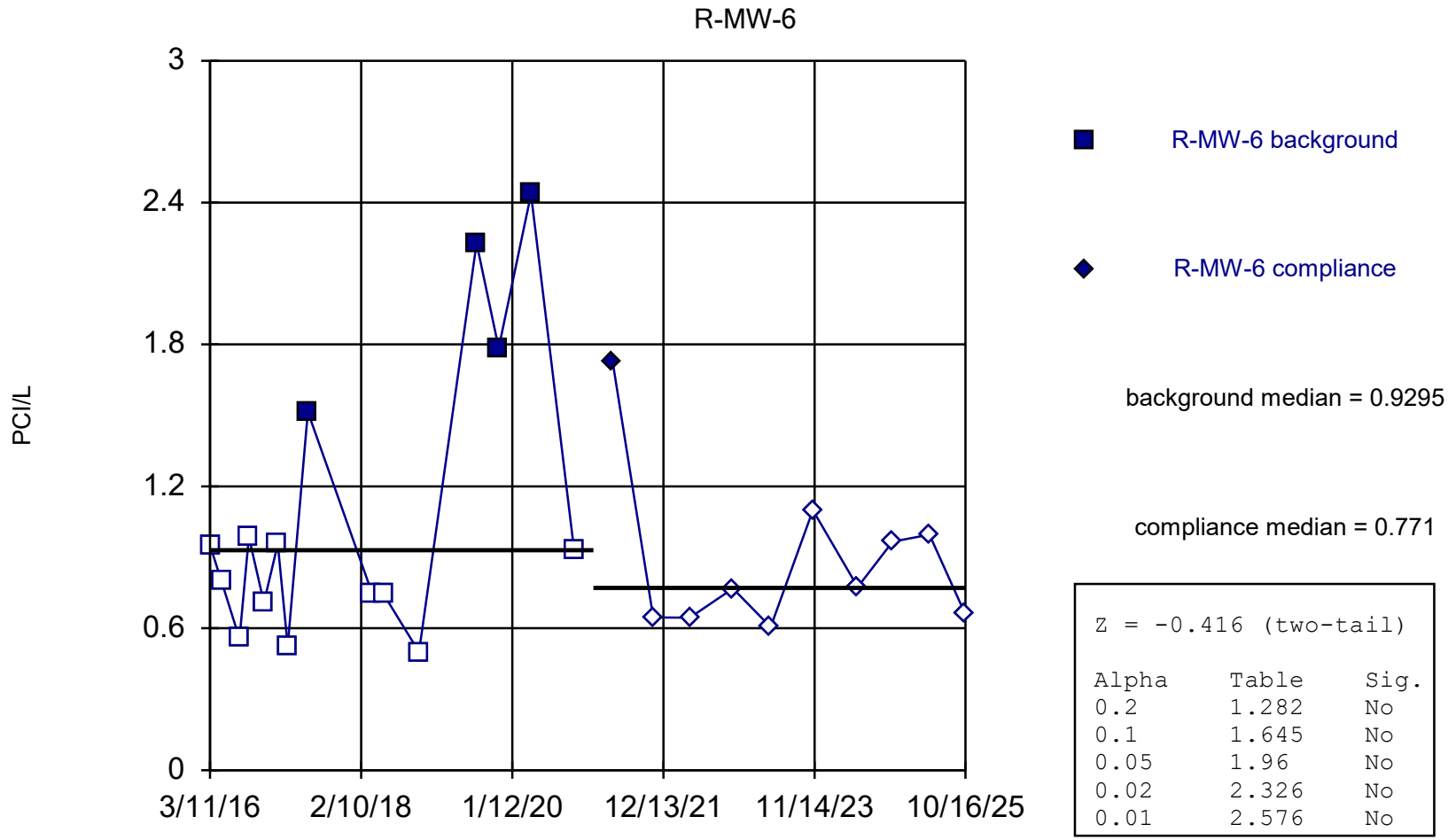
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No

Constituent: RADIUM [226 + 228] Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



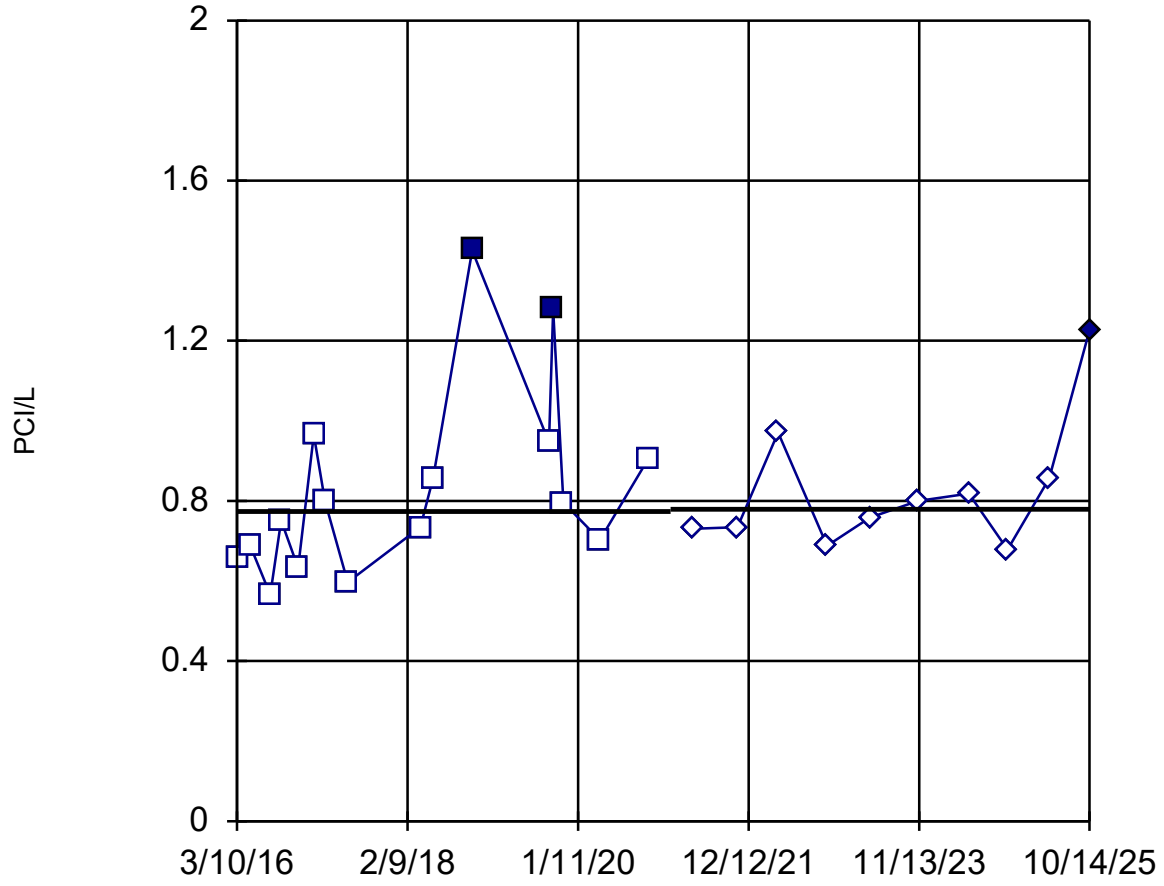
Constituent: RADIUM [226 + 228] Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-7



R-MW-7 background

R-MW-7 compliance

background median = 0.7732

compliance median = 0.779

Z = 0.3426 (two-tail)

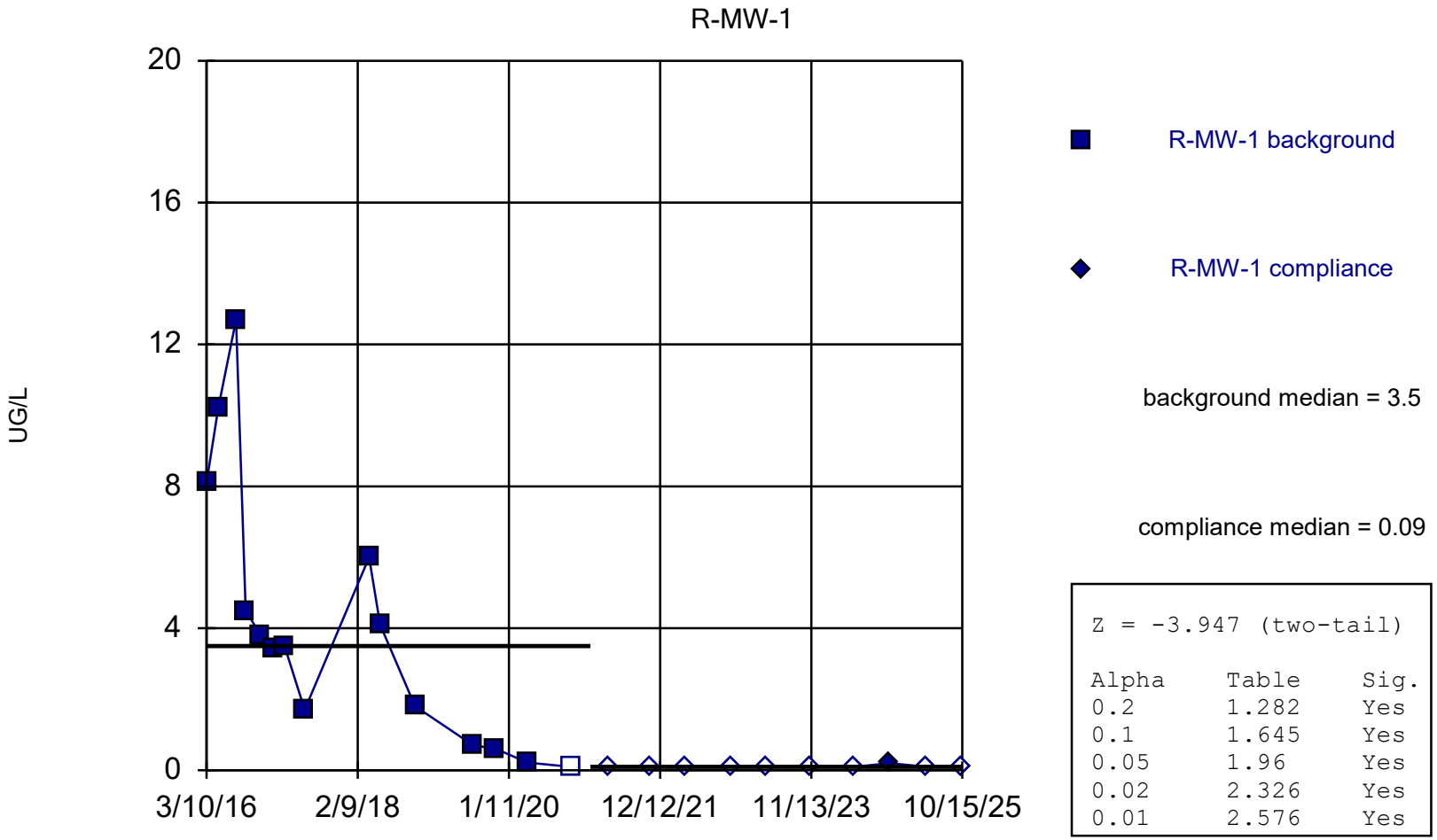
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: RADIUM [226 + 228] Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



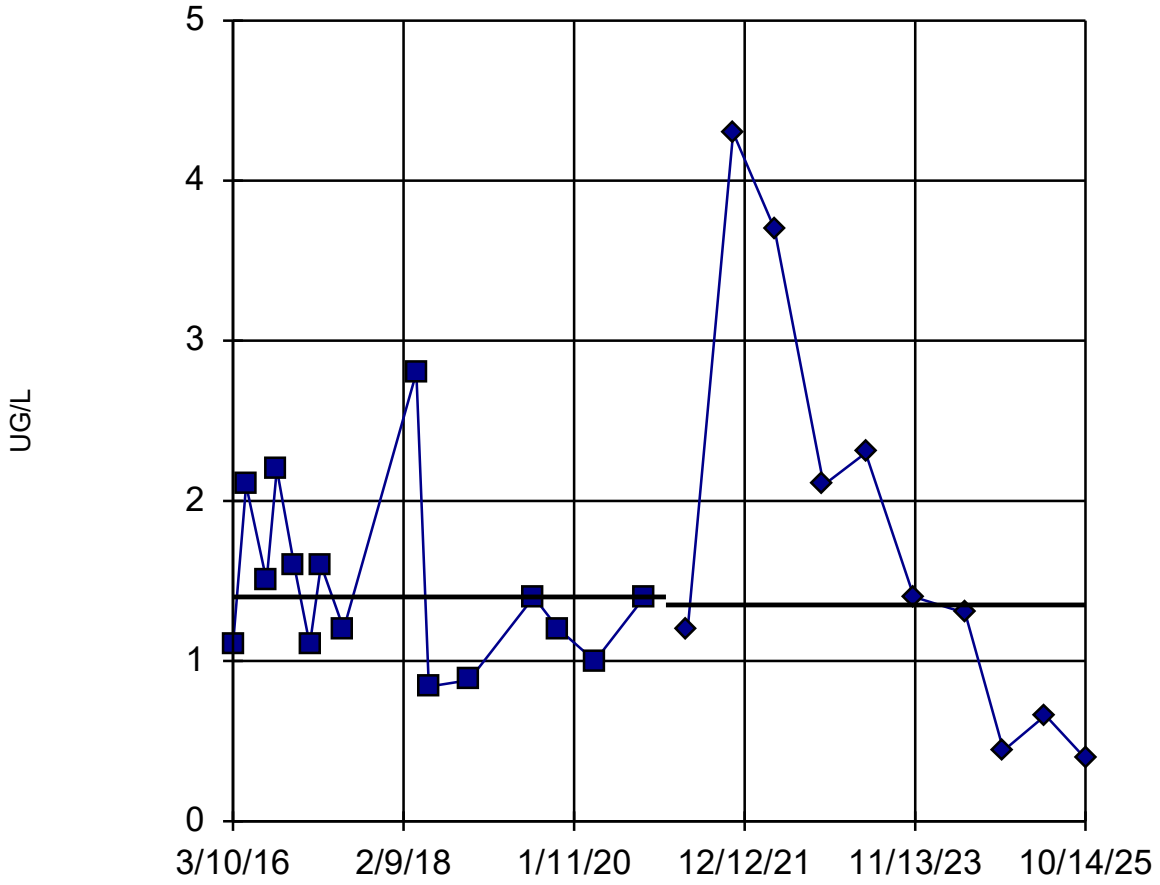
Constituent: SELENIUM, TOTAL Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)

R-MW-2



R-MW-2 background

R-MW-2 compliance

background median = 1.4

compliance median = 1.35

Z = 0.1112 (two-tail)

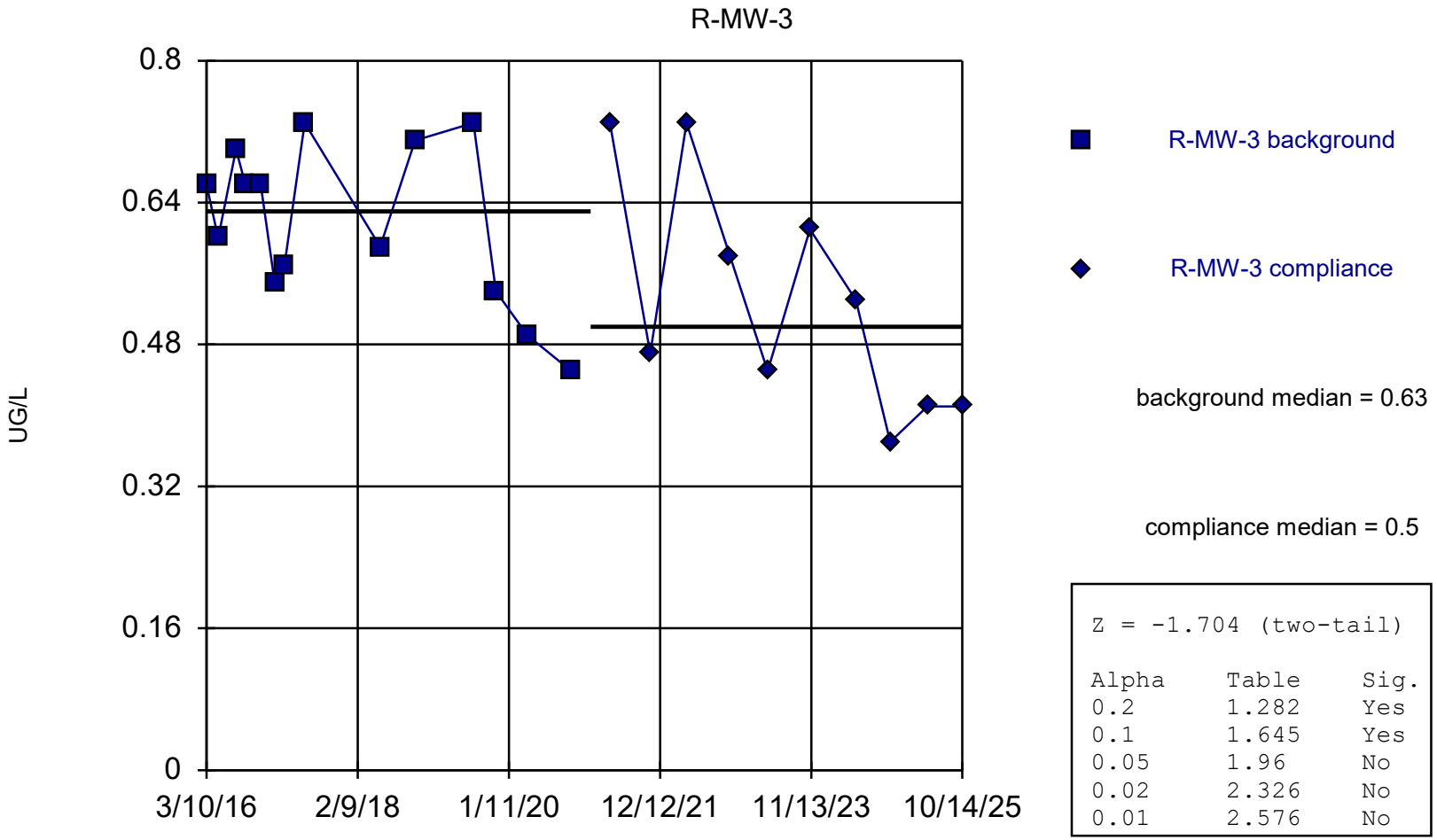
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: SELENIUM, TOTAL Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Mann-Whitney (Wilcoxon Rank Sum)



Z = -1.704 (two-tail)

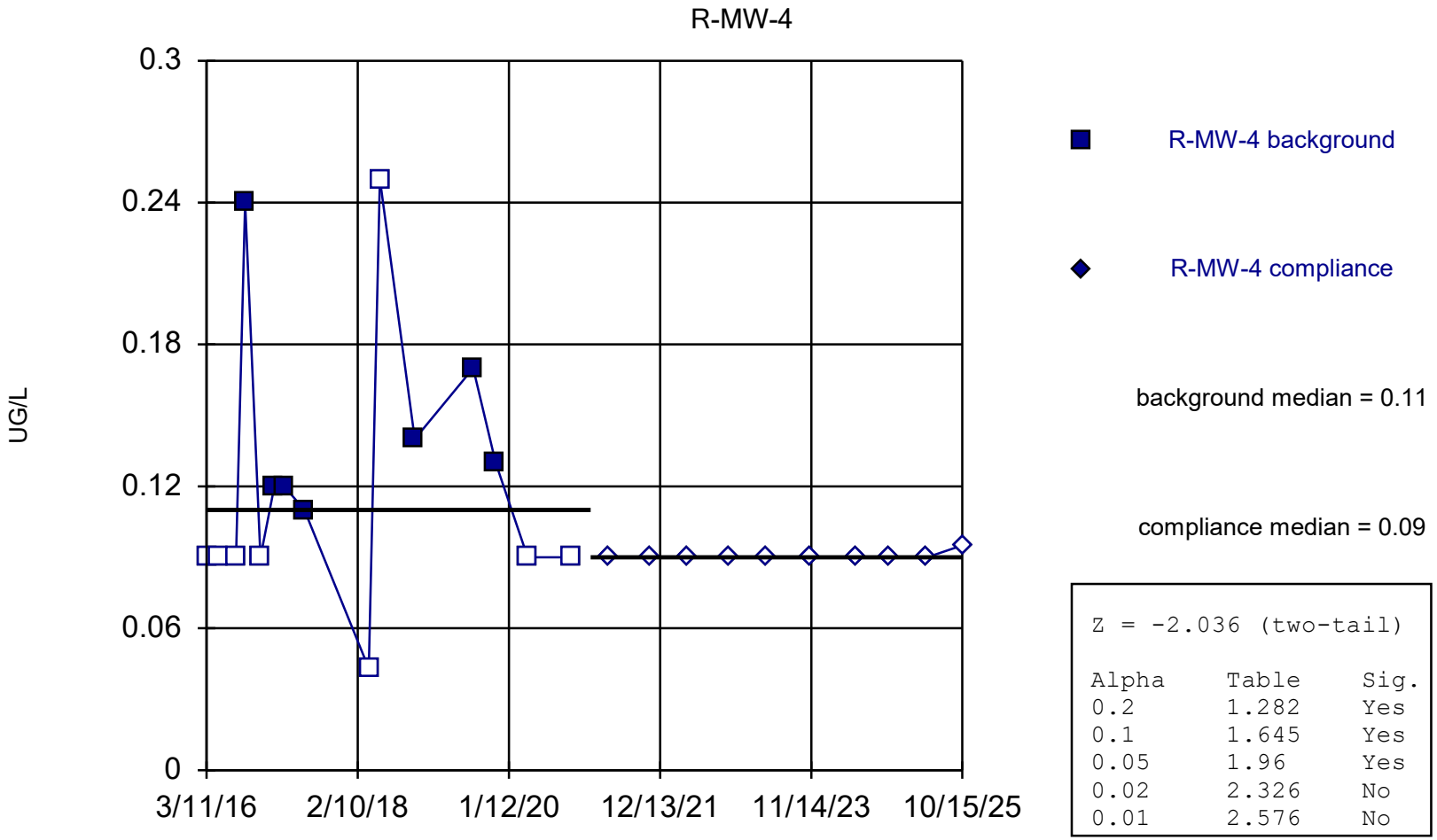
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: SELENIUM, TOTAL Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -2.036 (two-tail)

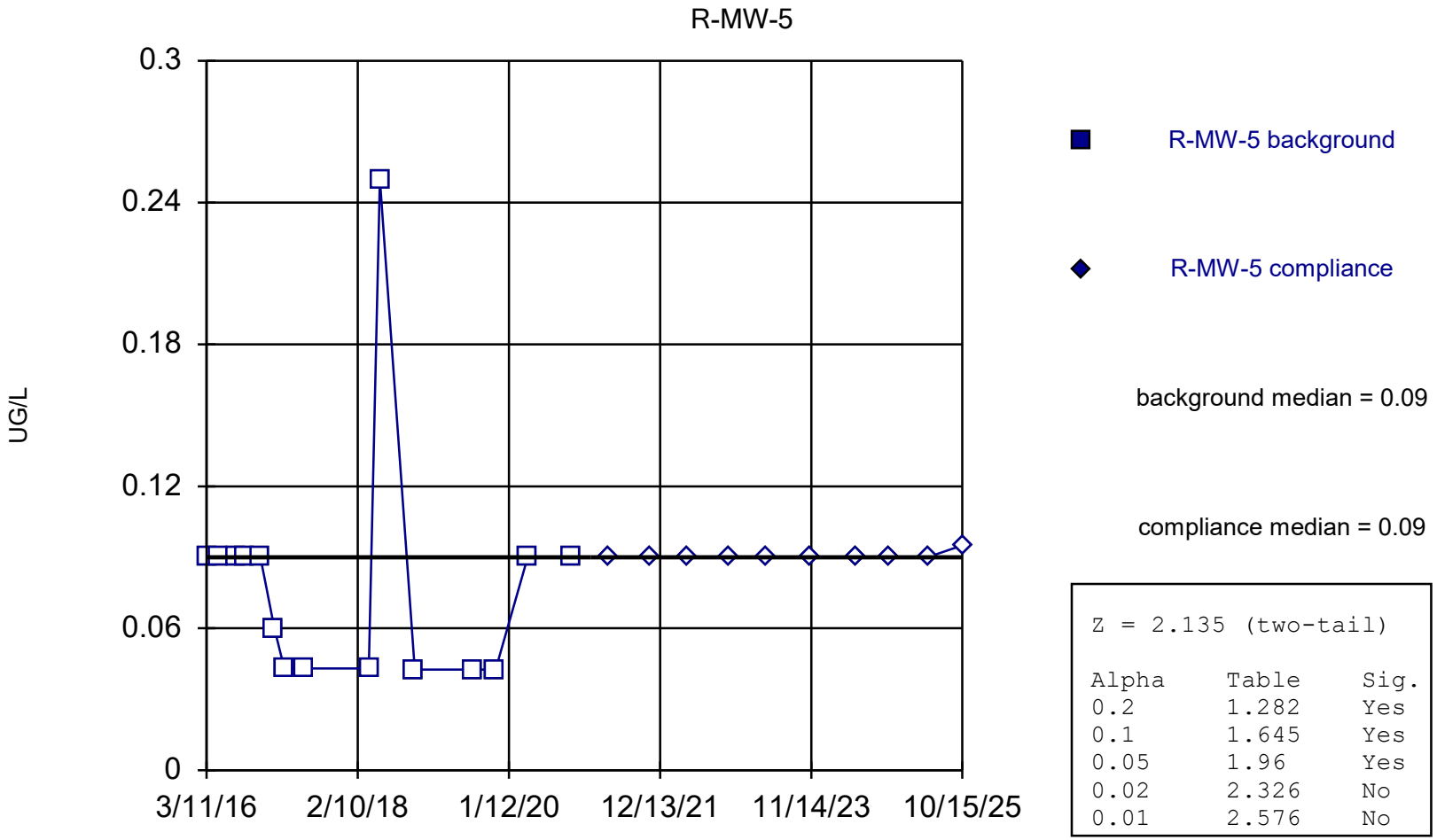
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: SELENIUM, TOTAL Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 2.135 (two-tail)

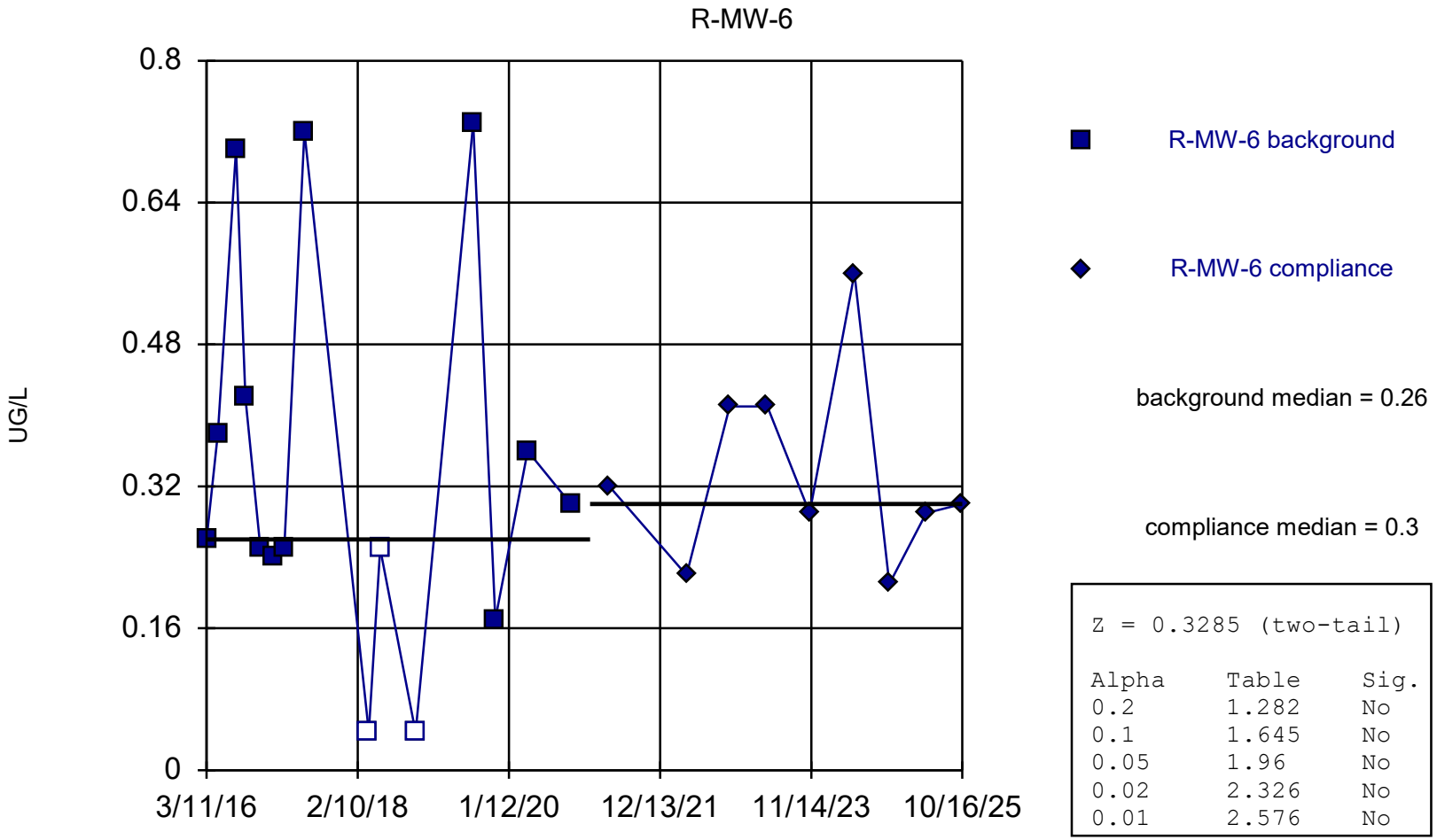
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: SELENIUM, TOTAL Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.3285 (two-tail)

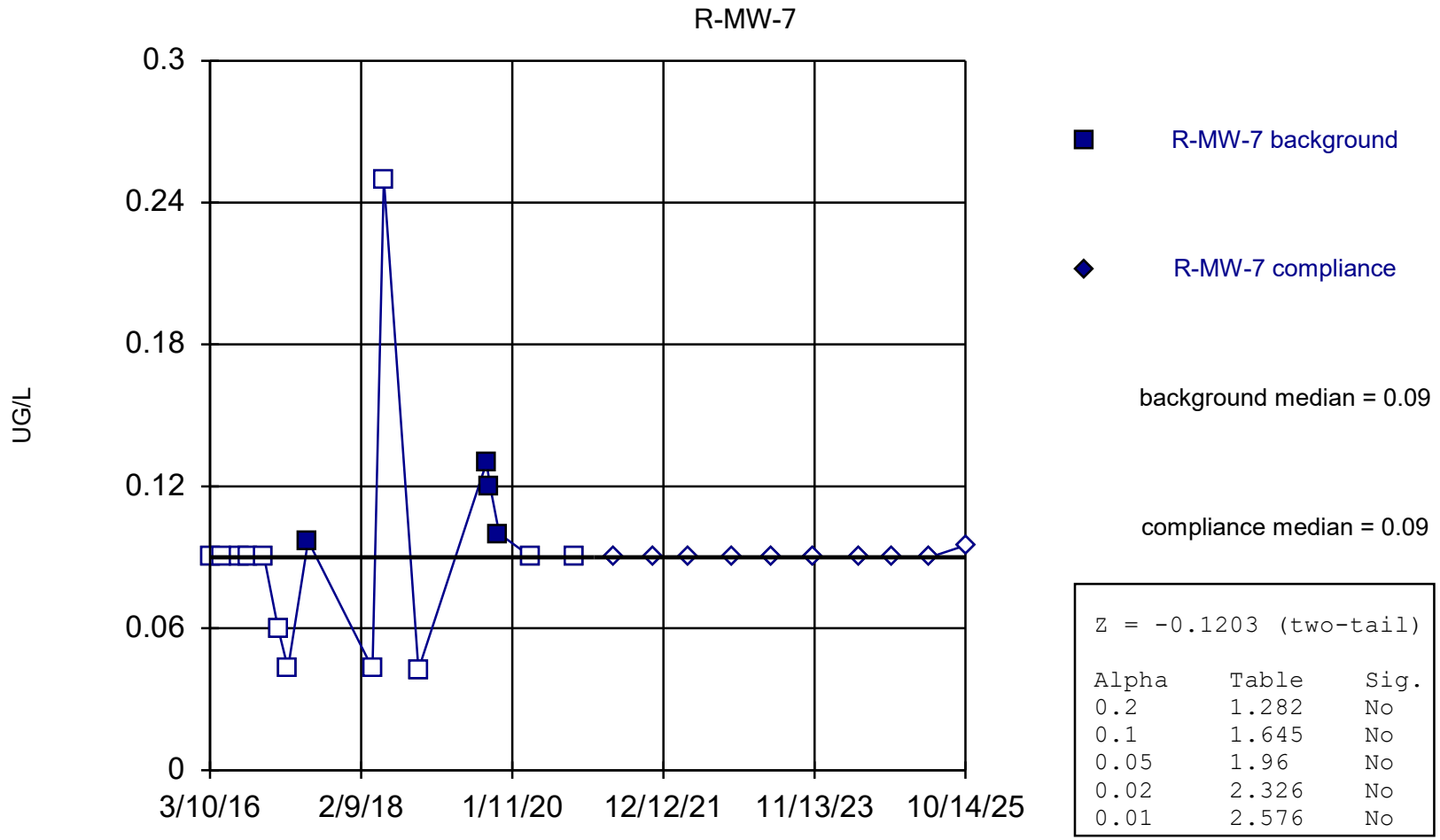
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: SELENIUM, TOTAL Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = -0.1203 (two-tail)

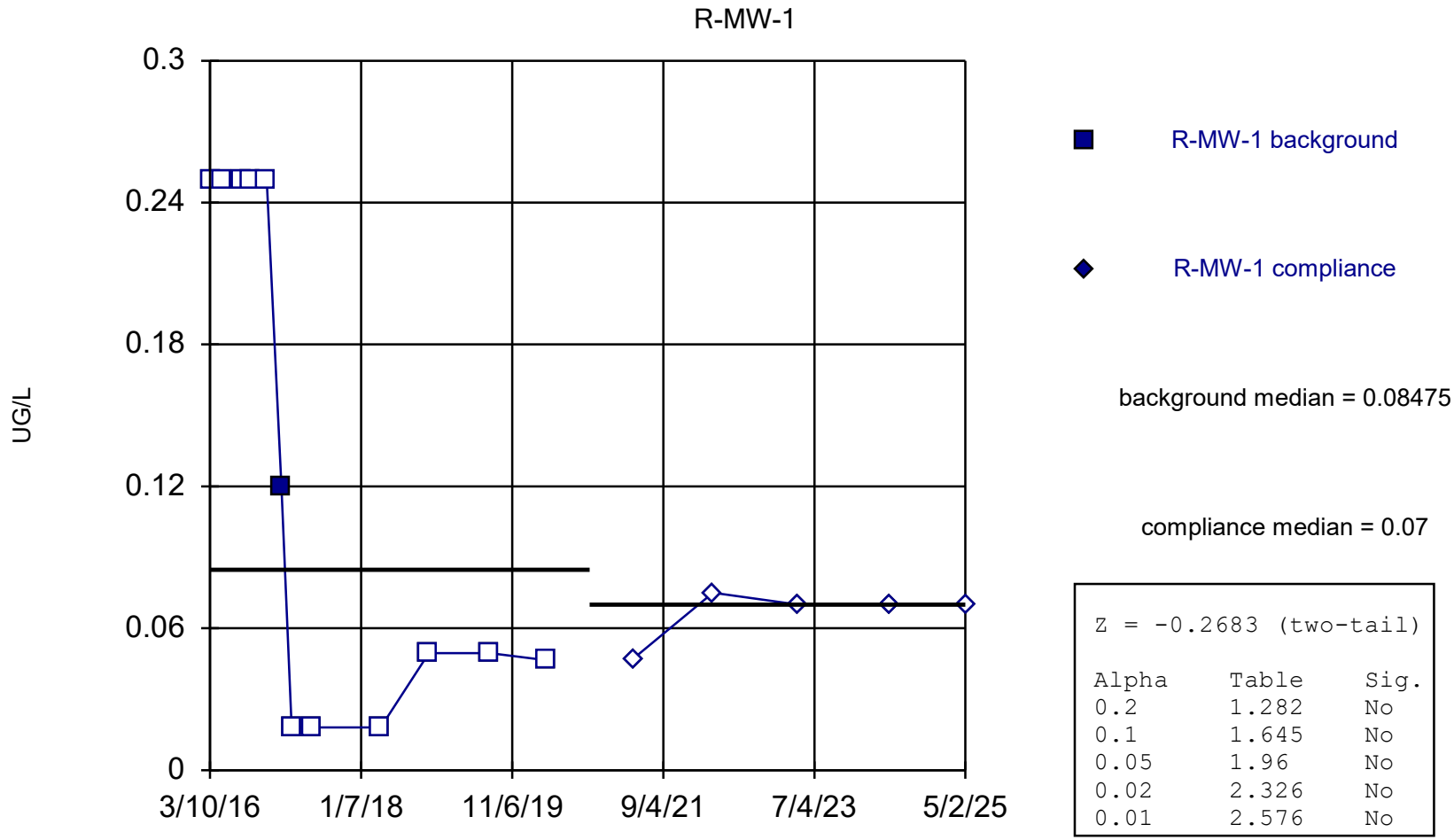
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: SELENIUM, TOTAL Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



background median = 0.08475

compliance median = 0.07

Z = -0.2683 (two-tail)

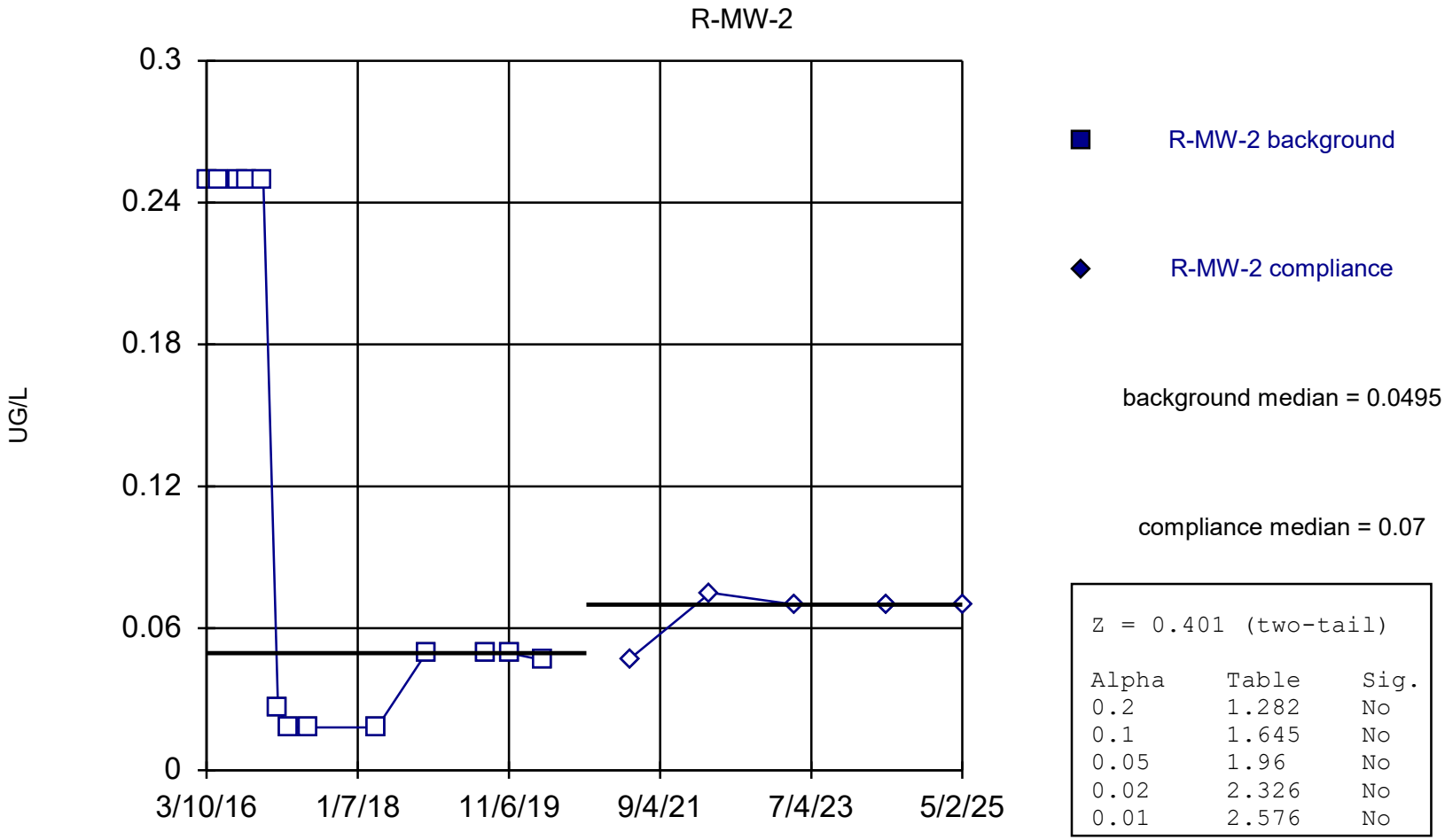
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: THALLIUM, TOTAL Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.401 (two-tail)

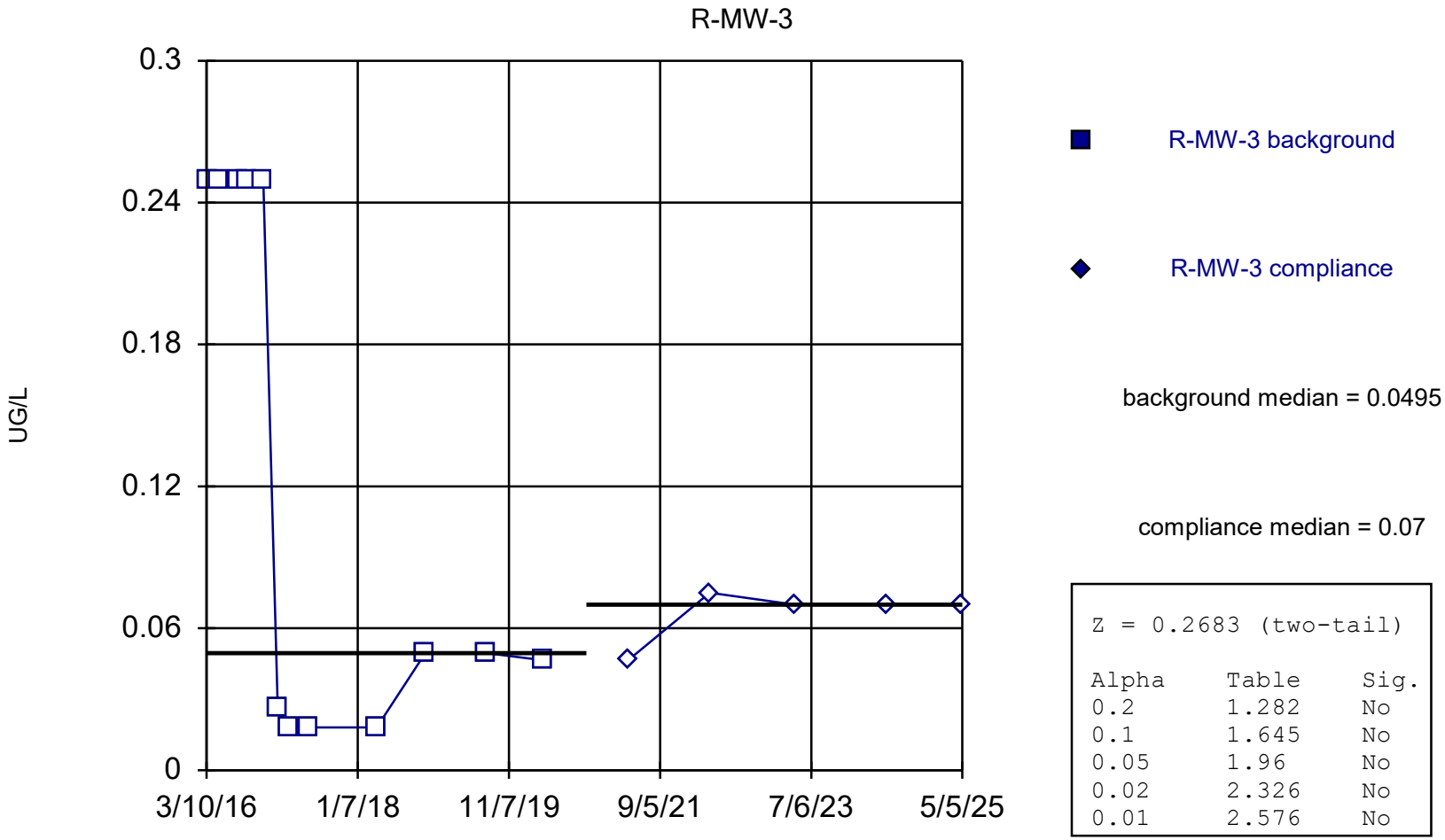
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: THALLIUM, TOTAL Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.2683 (two-tail)

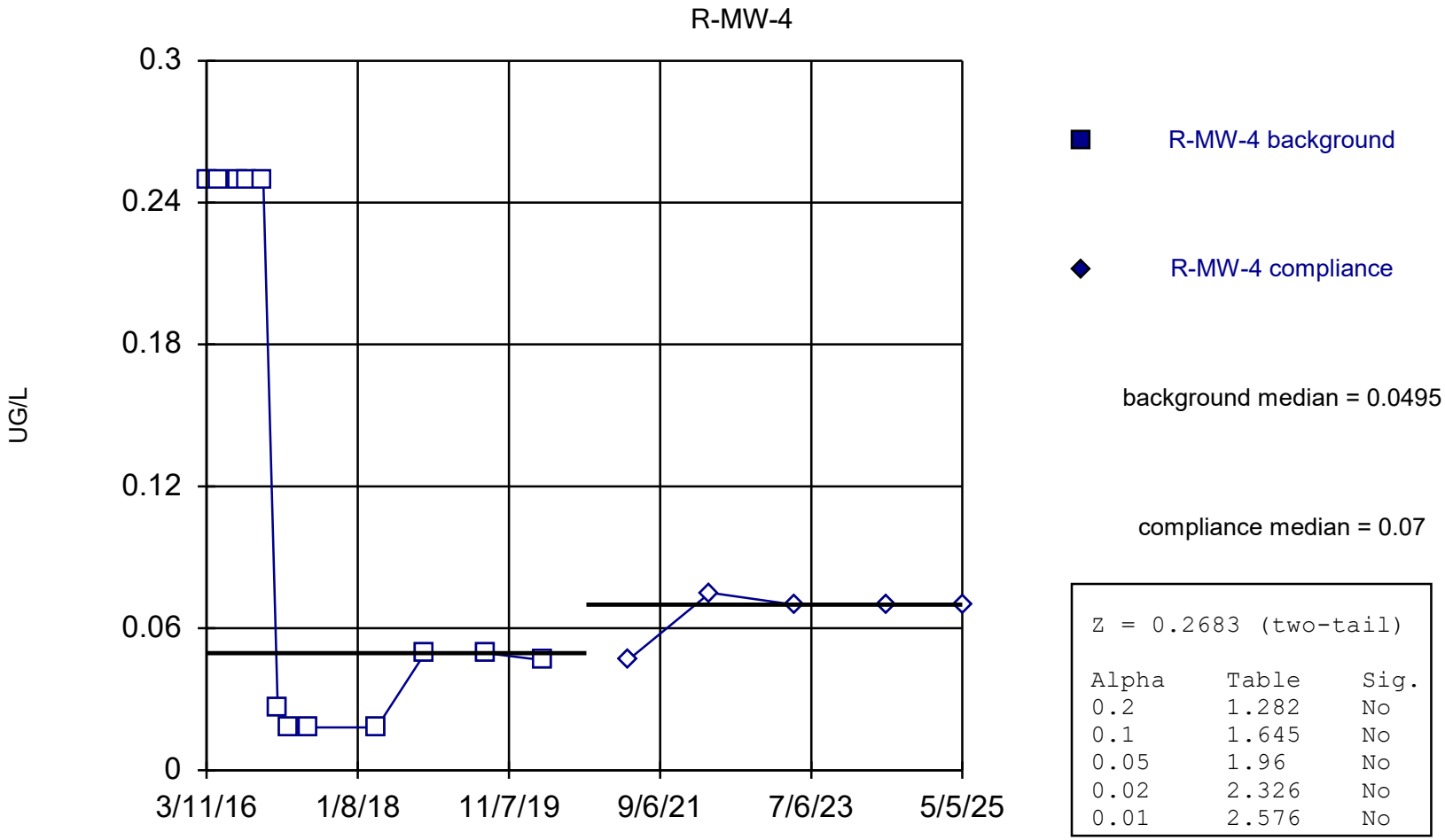
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: THALLIUM, TOTAL Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.2683 (two-tail)

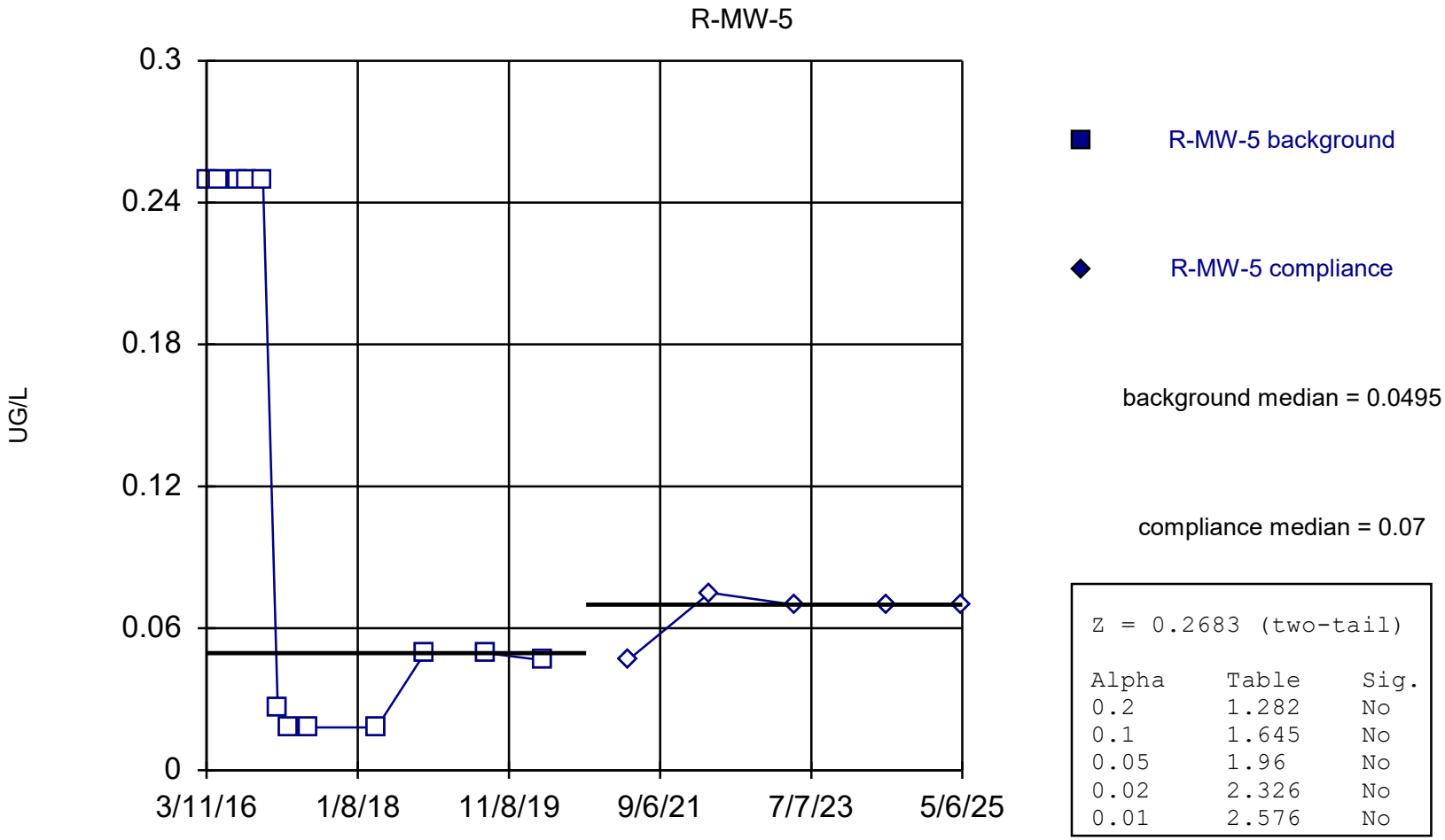
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: THALLIUM, TOTAL Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.2683 (two-tail)

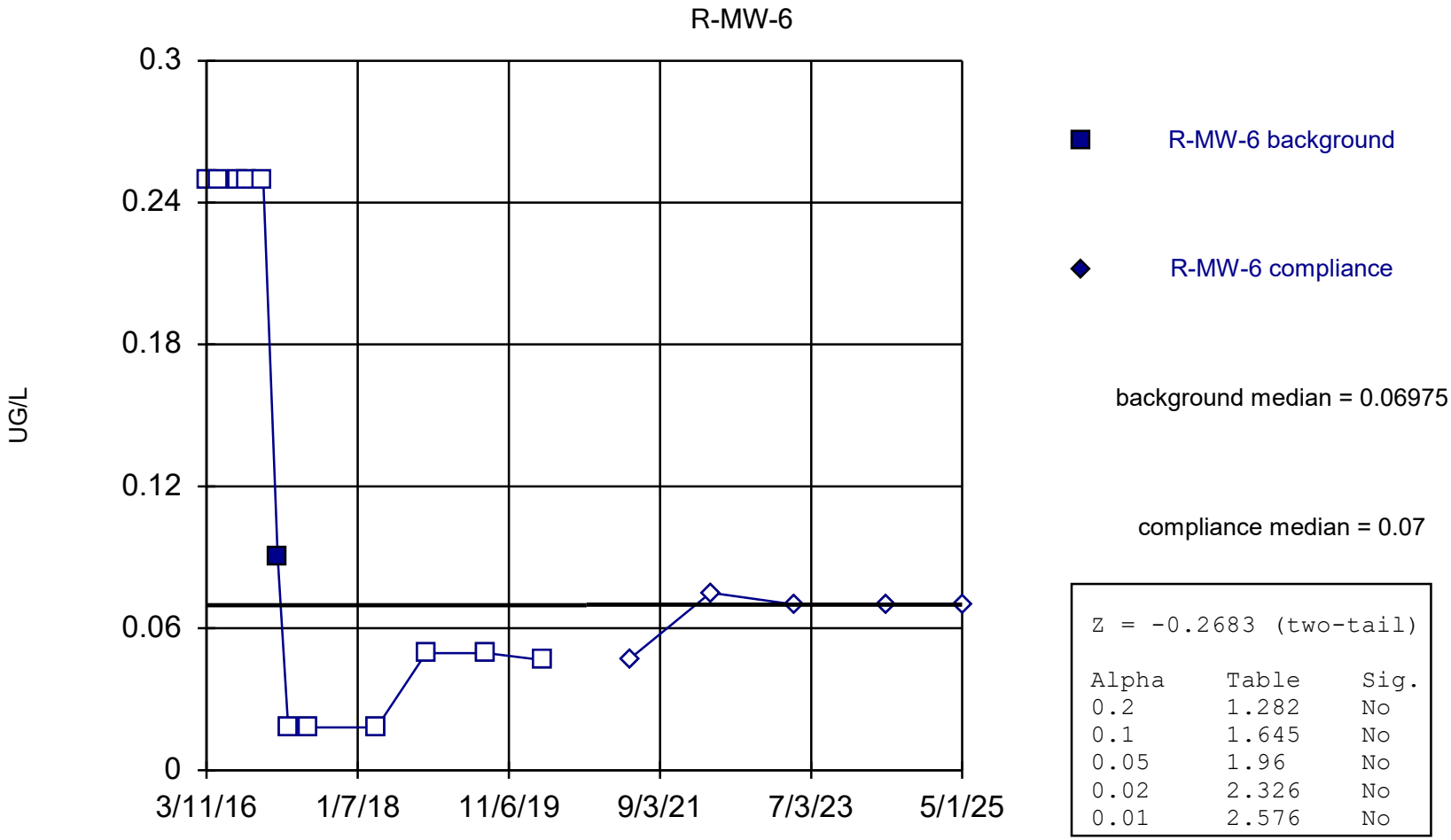
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: THALLIUM, TOTAL Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



background median = 0.06975

compliance median = 0.07

Z = -0.2683 (two-tail)

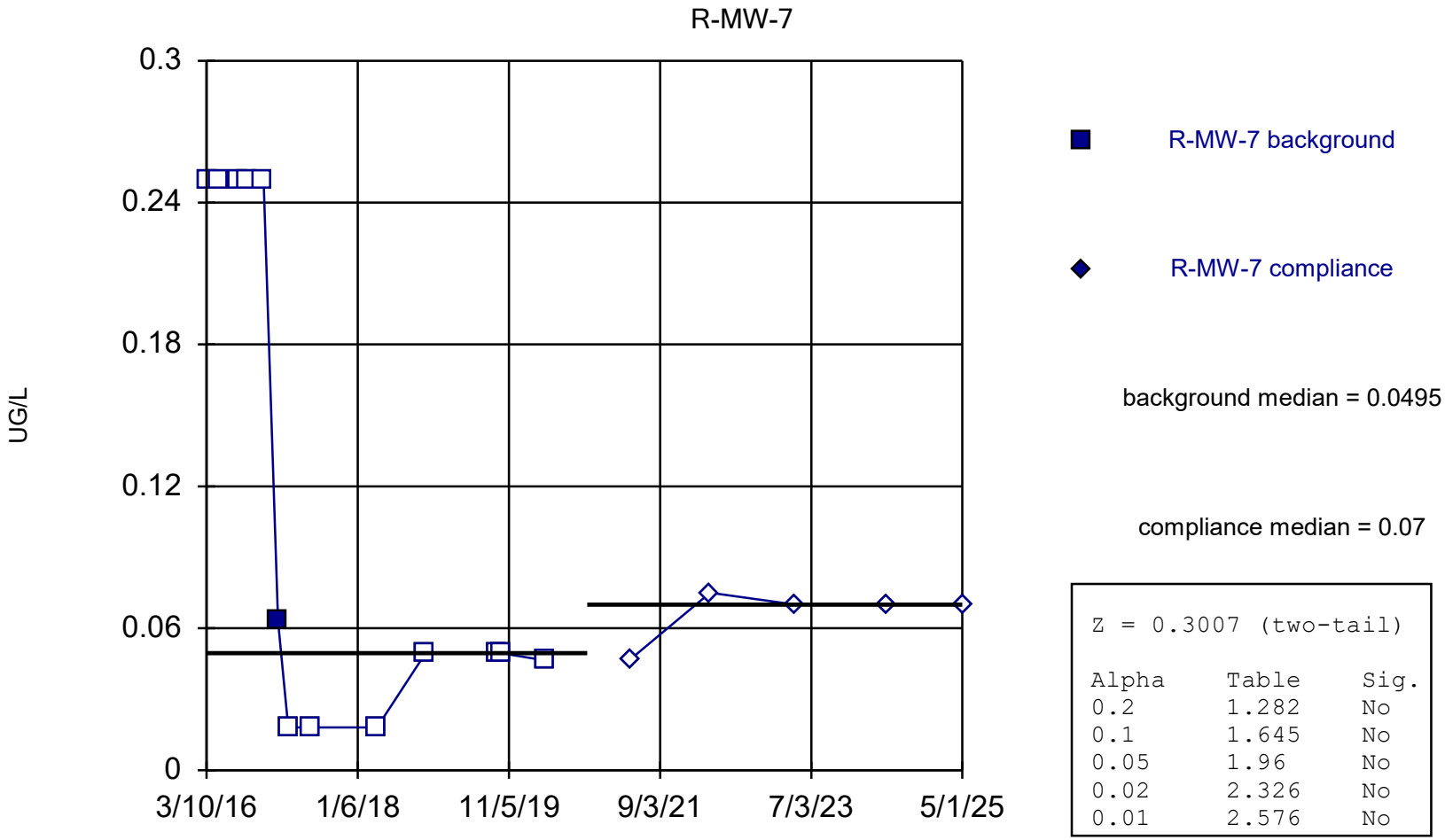
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: THALLIUM, TOTAL Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)



Z = 0.3007 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: THALLIUM, TOTAL Analysis Run 1/5/2026 2:07 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Welch's t-test/Mann-Whitney

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 1/5/2026, 2:10 PM

Constituent	Well	Calc.	0.1	0.05	0.025	0.01	Method
ANTIMONY, TOTAL (UG/L)	**R-MW-1**	**-2.64**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
ANTIMONY, TOTAL (UG/L)	**R-MW-2**	**-3.249**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
ANTIMONY, TOTAL (UG/L)	R-MW-3	-2.003	Yes	Yes	No	No	Mann-W
ANTIMONY, TOTAL (UG/L)	**R-MW-4**	**3.562**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
ANTIMONY, TOTAL (UG/L)	**R-MW-5**	**4.145**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
ANTIMONY, TOTAL (UG/L)	R-MW-6	1.129	No	No	No	No	Mann-W
ANTIMONY, TOTAL (UG/L)	R-MW-7	1.951	Yes	No	No	No	Mann-W
ARSENIC, TOTAL (UG/L)	**R-MW-1**	**-3.829**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
ARSENIC, TOTAL (UG/L)	R-MW-2	0.9713	No	No	No	No	Mann-W
ARSENIC, TOTAL (UG/L)	**R-MW-3**	**-2.858**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
ARSENIC, TOTAL (UG/L)	**R-MW-4**	**2.472**	**Yes**	**Yes**	**Yes**	**No**	**Mann-W**
ARSENIC, TOTAL (UG/L)	**R-MW-5**	**-4.121**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
ARSENIC, TOTAL (UG/L)	R-MW-6	0.8331	No	No	No	No	Mann-W
ARSENIC, TOTAL (UG/L)	**R-MW-7**	**4.191**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
BARIUM, TOTAL (UG/L)	**R-MW-1**	**3.778**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
BARIUM, TOTAL (UG/L)	R-MW-2	0.9078	No	No	No	No	Mann-W
BARIUM, TOTAL (UG/L)	**R-MW-3**	**4.133**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
BARIUM, TOTAL (UG/L)	**R-MW-4**	**4.022**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
BARIUM, TOTAL (UG/L)	**R-MW-5**	**-4.13**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
BARIUM, TOTAL (UG/L)	R-MW-6	-0....	No	No	No	No	Mann-W
BARIUM, TOTAL (UG/L)	R-MW-7	0.1387	No	No	No	No	Mann-W
BERYLLIUM, TOTAL (UG/L)	R-MW-1	-2.073	Yes	Yes	No	No	Mann-W
BERYLLIUM, TOTAL (UG/L)	R-MW-2	-1.398	No	No	No	No	Mann-W
BERYLLIUM, TOTAL (UG/L)	R-MW-3	-0....	No	No	No	No	Mann-W
BERYLLIUM, TOTAL (UG/L)	R-MW-4	-0....	No	No	No	No	Mann-W
BERYLLIUM, TOTAL (UG/L)	R-MW-5	-1.398	No	No	No	No	Mann-W
BERYLLIUM, TOTAL (UG/L)	R-MW-6	-1.591	No	No	No	No	Mann-W
BERYLLIUM, TOTAL (UG/L)	R-MW-7	-0.134	No	No	No	No	Mann-W
CADMIUM, TOTAL (UG/L)	R-MW-1	1.286	No	No	No	No	Mann-W
CADMIUM, TOTAL (UG/L)	R-MW-2	2.067	Yes	Yes	No	No	Mann-W
CADMIUM, TOTAL (UG/L)	R-MW-3	1.455	No	No	No	No	Mann-W
CADMIUM, TOTAL (UG/L)	R-MW-4	0.6247	No	No	No	No	Mann-W
CADMIUM, TOTAL (UG/L)	R-MW-5	2.298	Yes	Yes	No	No	Mann-W
CADMIUM, TOTAL (UG/L)	R-MW-6	2.02	Yes	Yes	No	No	Mann-W
CADMIUM, TOTAL (UG/L)	R-MW-7	0.9818	No	No	No	No	Mann-W
CHROMIUM, TOTAL (UG/L)	R-MW-1	1.539	No	No	No	No	Mann-W
CHROMIUM, TOTAL (UG/L)	R-MW-2	-0.694	No	No	No	No	Mann-W
CHROMIUM, TOTAL (UG/L)	R-MW-3	-1.102	No	No	No	No	Mann-W
CHROMIUM, TOTAL (UG/L)	R-MW-4	0.2491	No	No	No	No	Mann-W
CHROMIUM, TOTAL (UG/L)	R-MW-5	-0....	No	No	No	No	Mann-W
CHROMIUM, TOTAL (UG/L)	R-MW-6	1.825	Yes	No	No	No	Mann-W
CHROMIUM, TOTAL (UG/L)	R-MW-7	0.9159	No	No	No	No	Mann-W
COBALT, TOTAL (UG/L)	R-MW-1	1.208	No	No	No	No	Mann-W
COBALT, TOTAL (UG/L)	R-MW-2	1.915	Yes	No	No	No	Mann-W
COBALT, TOTAL (UG/L)	**R-MW-3**	**2.419**	**Yes**	**Yes**	**Yes**	**No**	**Mann-W**
COBALT, TOTAL (UG/L)	R-MW-4	0.5034	No	No	No	No	Mann-W
COBALT, TOTAL (UG/L)	R-MW-5	0.895	No	No	No	No	Mann-W
COBALT, TOTAL (UG/L)	R-MW-6	1.352	No	No	No	No	Mann-W
COBALT, TOTAL (UG/L)	R-MW-7	1.367	No	No	No	No	Mann-W
FLUORIDE, TOTAL (MG/L)	**R-MW-1**	**-3.179**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**

Welch's t-test/Mann-Whitney

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 1/5/2026, 2:10 PM

Constituent	Well	Calc.	0.1	0.05	0.025	0.01	Method
FLUORIDE, TOTAL (MG/L)	R-MW-2	-0....	No	No	No	No	Mann-W
FLUORIDE, TOTAL (MG/L)	**R-MW-3**	**2.946**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
FLUORIDE, TOTAL (MG/L)	**R-MW-4**	**-3.821**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
FLUORIDE, TOTAL (MG/L)	R-MW-5	-0....	No	No	No	No	Mann-W
FLUORIDE, TOTAL (MG/L)	**R-MW-6**	**2.494**	**Yes**	**Yes**	**Yes**	**No**	**Mann-W**
FLUORIDE, TOTAL (MG/L)	**R-MW-7**	**-2.878**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
LEAD, TOTAL (UG/L)	**R-MW-1**	**2.928**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
LEAD, TOTAL (UG/L)	R-MW-2	0.239	No	No	No	No	Mann-W
LEAD, TOTAL (UG/L)	**R-MW-3**	**-2.542**	**Yes**	**Yes**	**Yes**	**No**	**Mann-W**
LEAD, TOTAL (UG/L)	R-MW-4	2.252	Yes	Yes	No	No	Mann-W
LEAD, TOTAL (UG/L)	R-MW-5	2.02	Yes	Yes	No	No	Mann-W
LEAD, TOTAL (UG/L)	R-MW-6	2.298	Yes	Yes	No	No	Mann-W
LEAD, TOTAL (UG/L)	**R-MW-7**	**2.73**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
LITHIUM, TOTAL (UG/L)	R-MW-1	1.881	Yes	No	No	No	Mann-W
LITHIUM, TOTAL (UG/L)	R-MW-2	1.932	Yes	No	No	No	Mann-W
LITHIUM, TOTAL (UG/L)	**R-MW-3**	**3.891**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
LITHIUM, TOTAL (UG/L)	**R-MW-4**	**-3.8**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
LITHIUM, TOTAL (UG/L)	R-MW-5	0.6389	No	No	No	No	Mann-W
LITHIUM, TOTAL (UG/L)	R-MW-6	1.737	Yes	No	No	No	Mann-W
LITHIUM, TOTAL (UG/L)	**R-MW-7**	**-2.357**	**Yes**	**Yes**	**Yes**	**No**	**Mann-W**
MERCURY, TOTAL (UG/L)	**R-MW-1**	**2.696**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
MERCURY, TOTAL (UG/L)	**R-MW-2**	**2.696**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
MERCURY, TOTAL (UG/L)	**R-MW-3**	**2.696**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
MERCURY, TOTAL (UG/L)	**R-MW-4**	**2.696**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
MERCURY, TOTAL (UG/L)	**R-MW-5**	**2.696**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
MERCURY, TOTAL (UG/L)	**R-MW-6**	**3.168**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
MERCURY, TOTAL (UG/L)	**R-MW-7**	**3.203**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
MOLYBDENUM, TOTAL (UG/L)	R-MW-1	1.803	Yes	No	No	No	Mann-W
MOLYBDENUM, TOTAL (UG/L)	R-MW-2	-2.136	Yes	Yes	No	No	Mann-W
MOLYBDENUM, TOTAL (UG/L)	R-MW-3	-1.359	No	No	No	No	Mann-W
MOLYBDENUM, TOTAL (UG/L)	**R-MW-4**	**-4.188**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
MOLYBDENUM, TOTAL (UG/L)	R-MW-5	0.1117	No	No	No	No	Mann-W
MOLYBDENUM, TOTAL (UG/L)	R-MW-6	-0....	No	No	No	No	Mann-W
MOLYBDENUM, TOTAL (UG/L)	**R-MW-7**	**-4.138**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
RADIUM [226 + 228] (PCI/L)	R-MW-1	0.9154	No	No	No	No	Mann-W
RADIUM [226 + 228] (PCI/L)	R-MW-2	2.191	Yes	Yes	No	No	Mann-W
RADIUM [226 + 228] (PCI/L)	R-MW-3	0.1789	No	No	No	No	Mann-W
RADIUM [226 + 228] (PCI/L)	R-MW-4	0.86	No	No	No	No	Mann-W
RADIUM [226 + 228] (PCI/L)	R-MW-5	-0....	No	No	No	No	Mann-W
RADIUM [226 + 228] (PCI/L)	R-MW-6	-0.416	No	No	No	No	Mann-W
RADIUM [226 + 228] (PCI/L)	R-MW-7	0.3426	No	No	No	No	Mann-W
SELENIUM, TOTAL (UG/L)	**R-MW-1**	**-3.947**	**Yes**	**Yes**	**Yes**	**Yes**	**Mann-W**
SELENIUM, TOTAL (UG/L)	R-MW-2	0.1112	No	No	No	No	Mann-W
SELENIUM, TOTAL (UG/L)	R-MW-3	-1.704	Yes	No	No	No	Mann-W
SELENIUM, TOTAL (UG/L)	R-MW-4	-2.036	Yes	Yes	No	No	Mann-W
SELENIUM, TOTAL (UG/L)	R-MW-5	2.135	Yes	Yes	No	No	Mann-W
SELENIUM, TOTAL (UG/L)	R-MW-6	0.3285	No	No	No	No	Mann-W
SELENIUM, TOTAL (UG/L)	R-MW-7	-0....	No	No	No	No	Mann-W
THALLIUM, TOTAL (UG/L)	R-MW-1	-0....	No	No	No	No	Mann-W
THALLIUM, TOTAL (UG/L)	R-MW-2	0.401	No	No	No	No	Mann-W

Welch's t-test/Mann-Whitney

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 1/5/2026, 2:10 PM

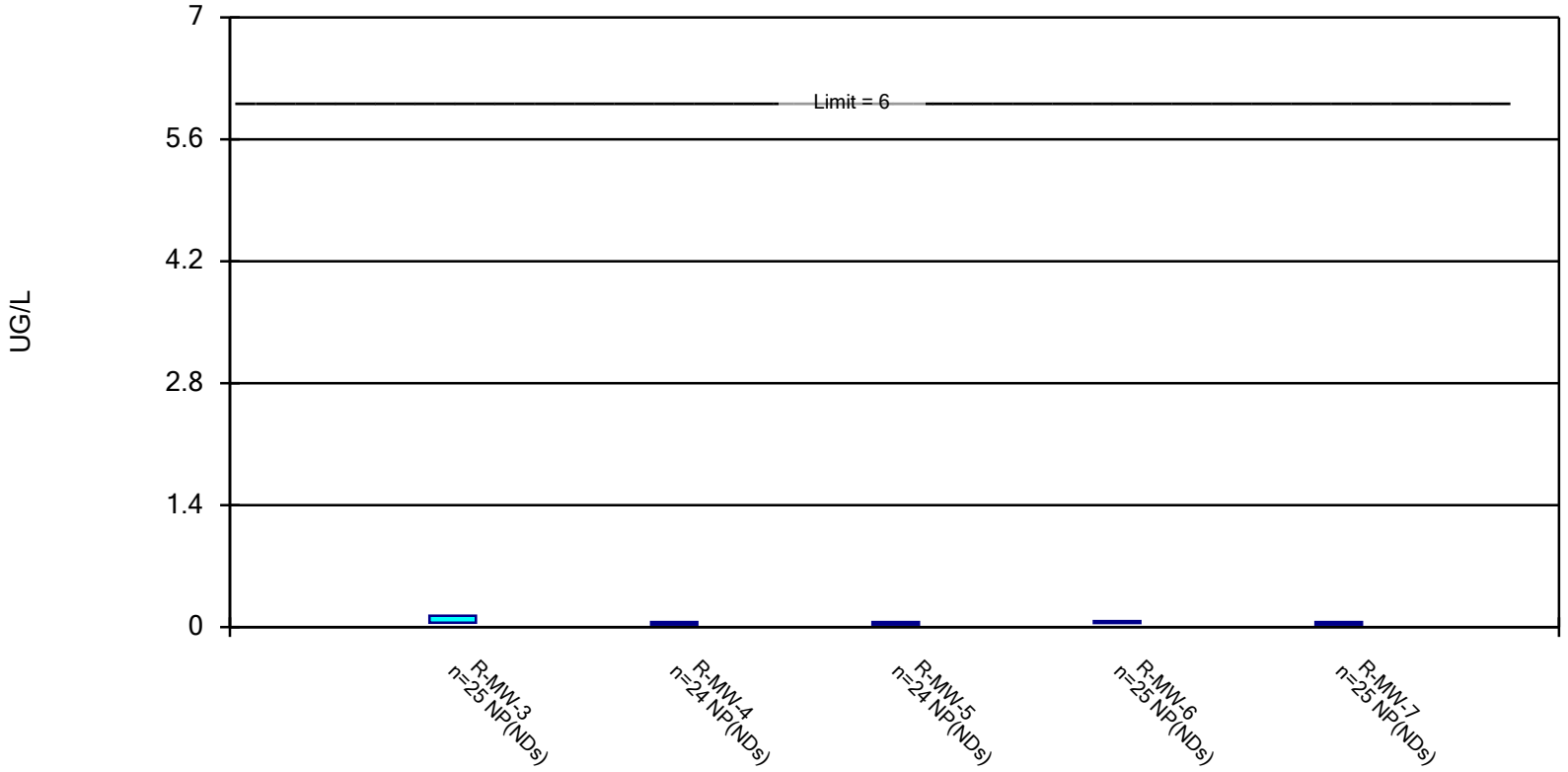
Constituent	Well	Calc.	0.1	0.05	0.025	0.01	Method
THALLIUM, TOTAL (UG/L)	R-MW-3	0.2683	No	No	No	No	Mann-W
THALLIUM, TOTAL (UG/L)	R-MW-4	0.2683	No	No	No	No	Mann-W
THALLIUM, TOTAL (UG/L)	R-MW-5	0.2683	No	No	No	No	Mann-W
THALLIUM, TOTAL (UG/L)	R-MW-6	-0....	No	No	No	No	Mann-W
THALLIUM, TOTAL (UG/L)	R-MW-7	0.3007	No	No	No	No	Mann-W

Appendix B
Sanitas Confidence Interval Statistical Output

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



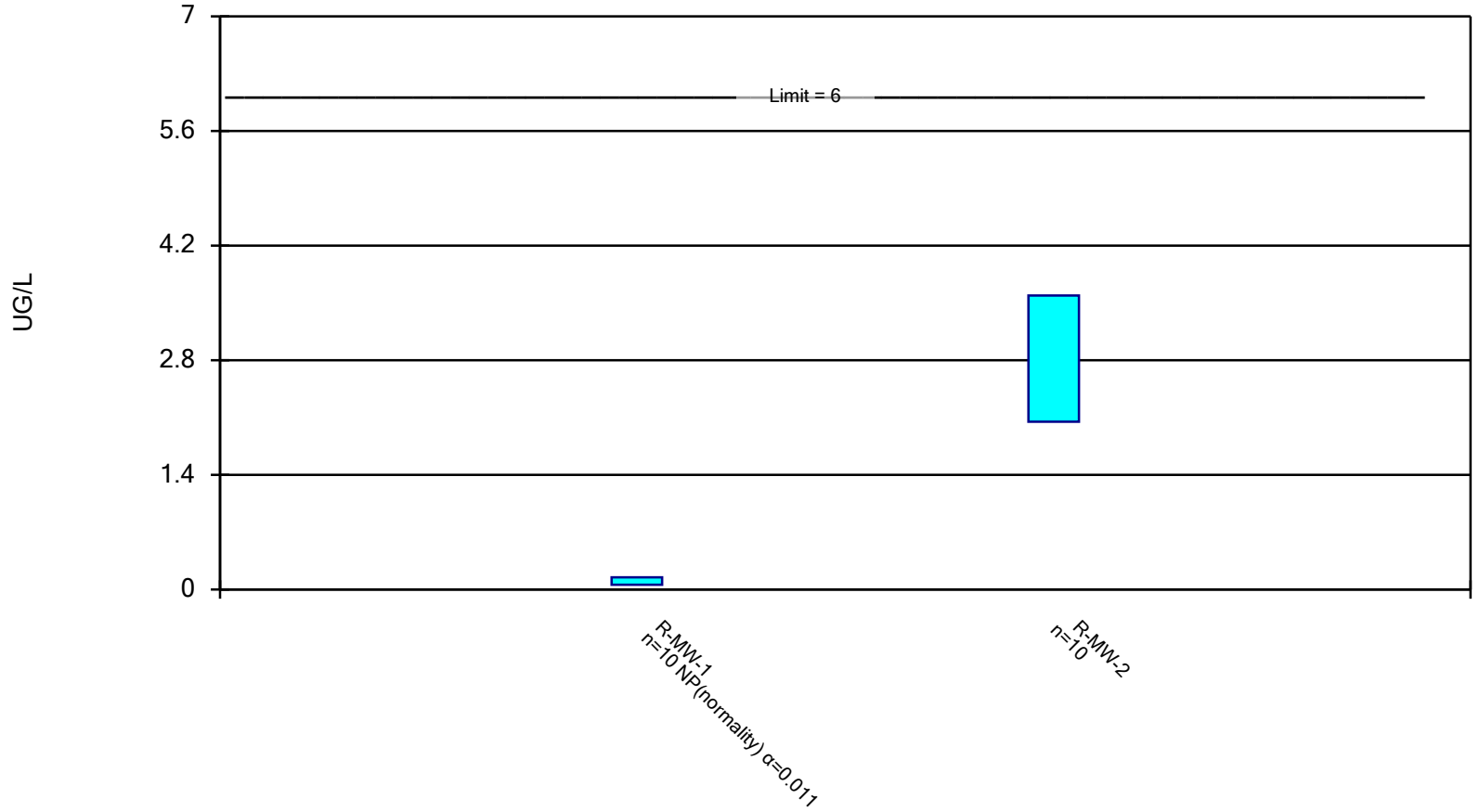
Constituent: ANTIMONY, TOTAL Analysis Run 1/5/2026 2:56 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



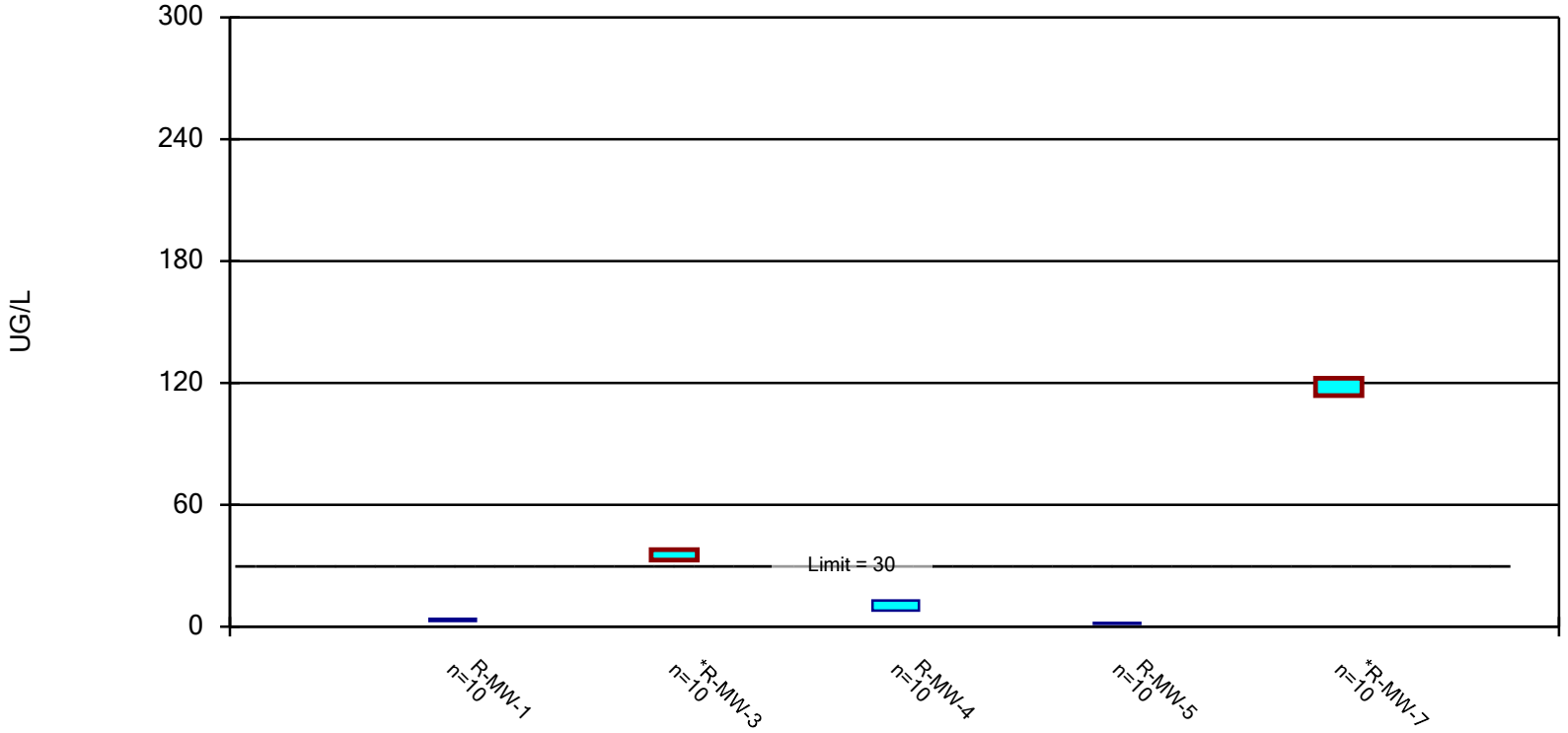
Constituent: ANTIMONY, TOTAL Analysis Run 1/5/2026 2:43 PM View: SSL Post-Closure

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

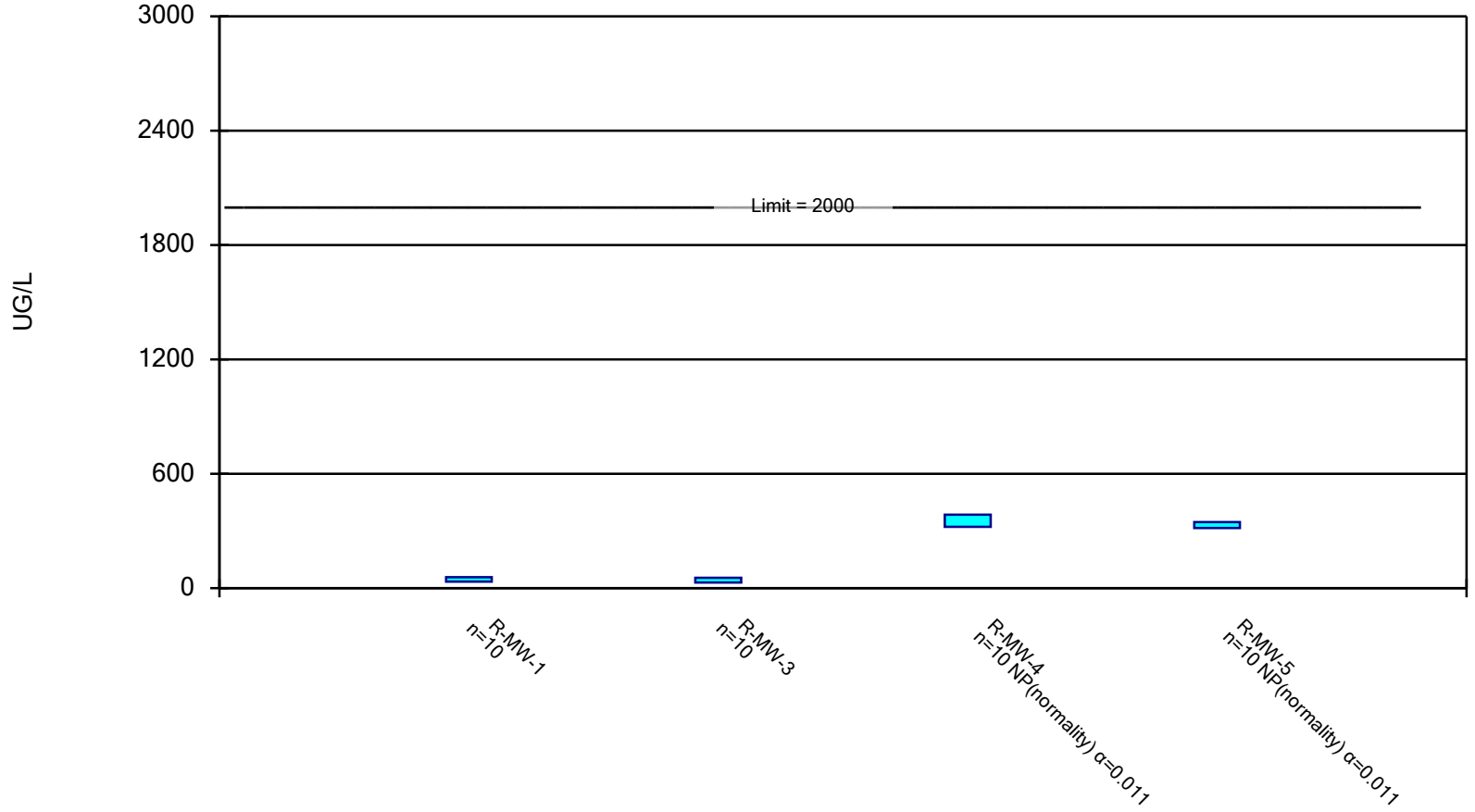


Constituent: ARSENIC, TOTAL Analysis Run 1/5/2026 2:43 PM View: SSL Post-Closure

Rush Island E.C. Client: Ameren Data: RIEC DATA

Parametric and Non-Parametric (NP) Confidence Interval

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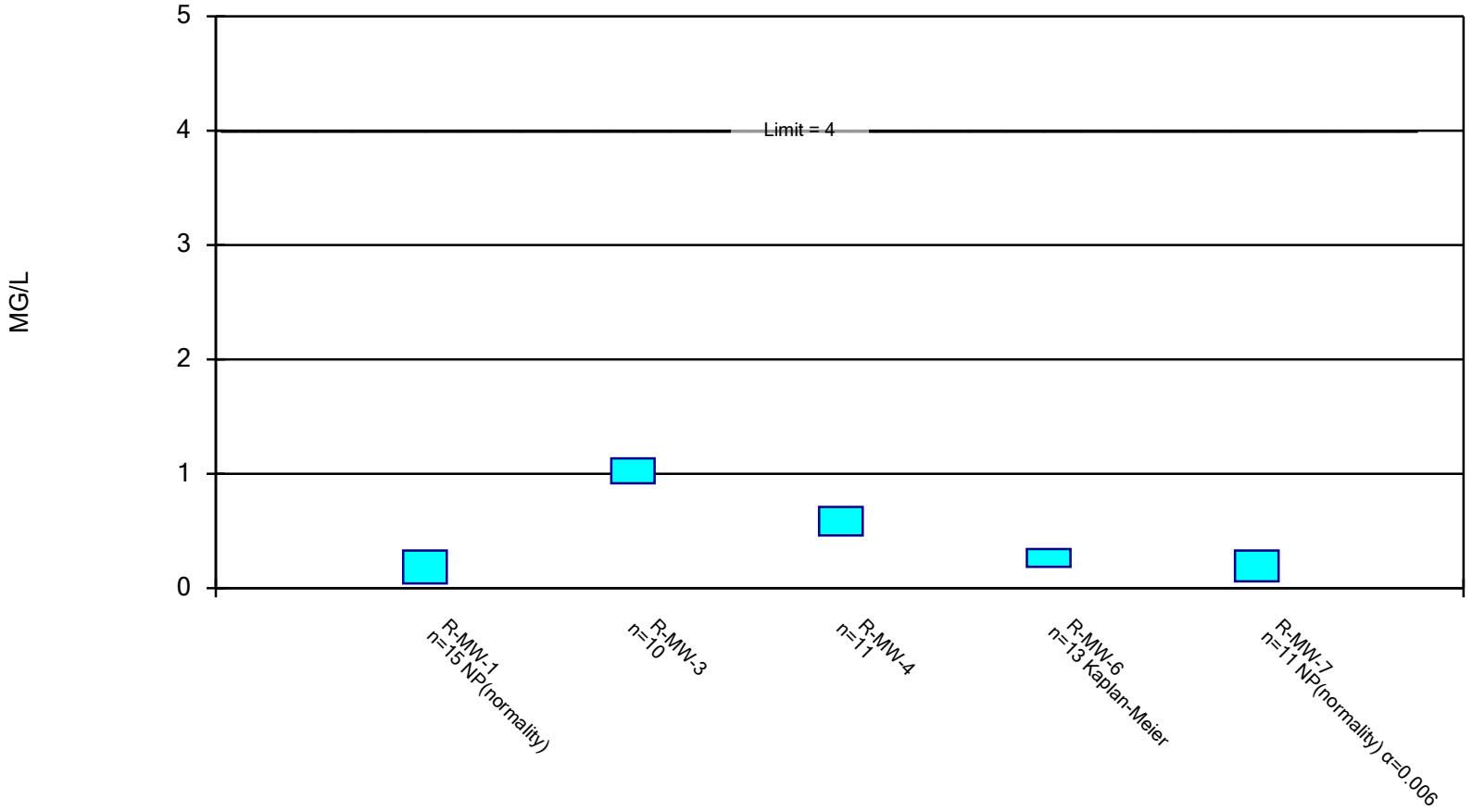
Constituent: BARIUM, TOTAL Analysis Run 1/5/2026 2:43 PM View: SSL Post-Closure

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



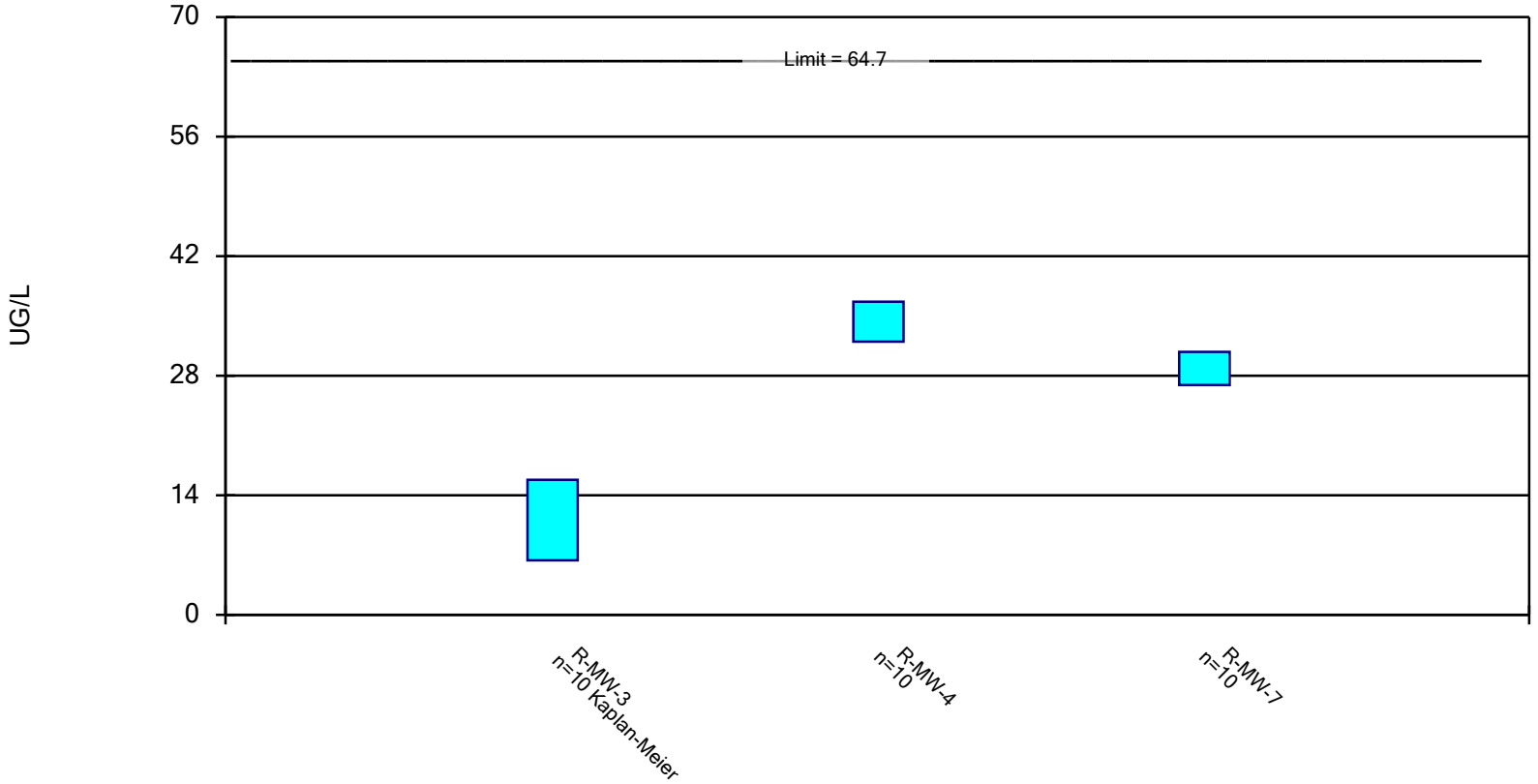
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



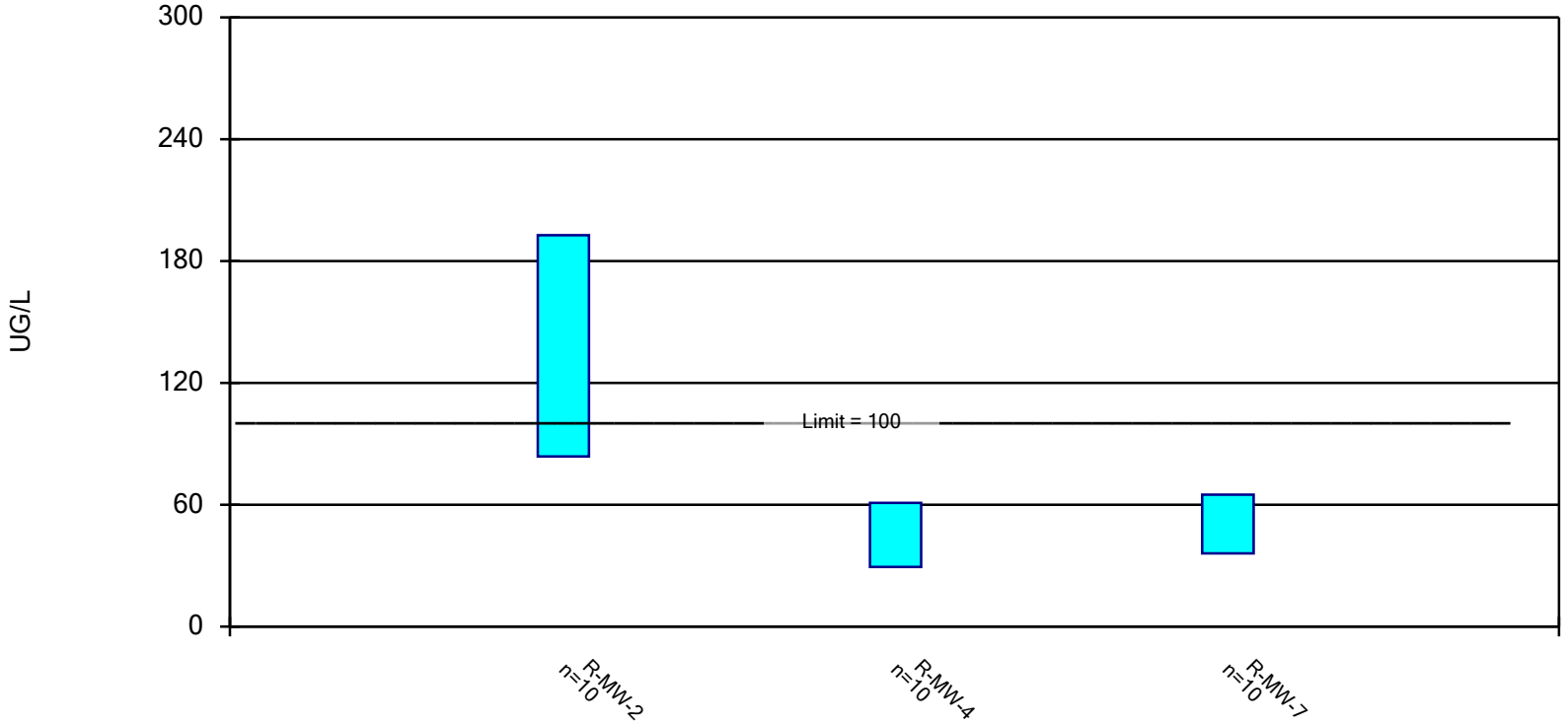
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



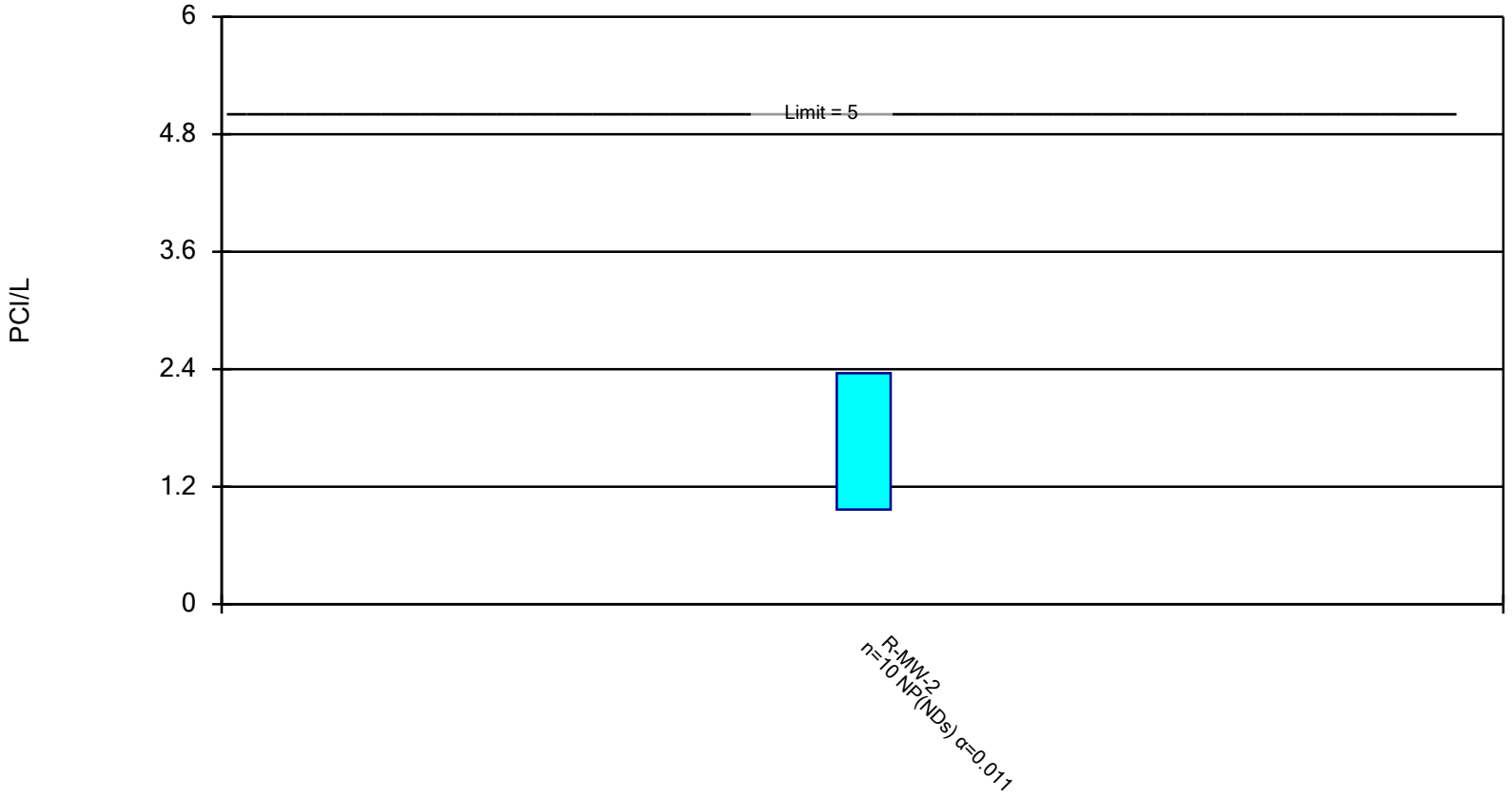
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



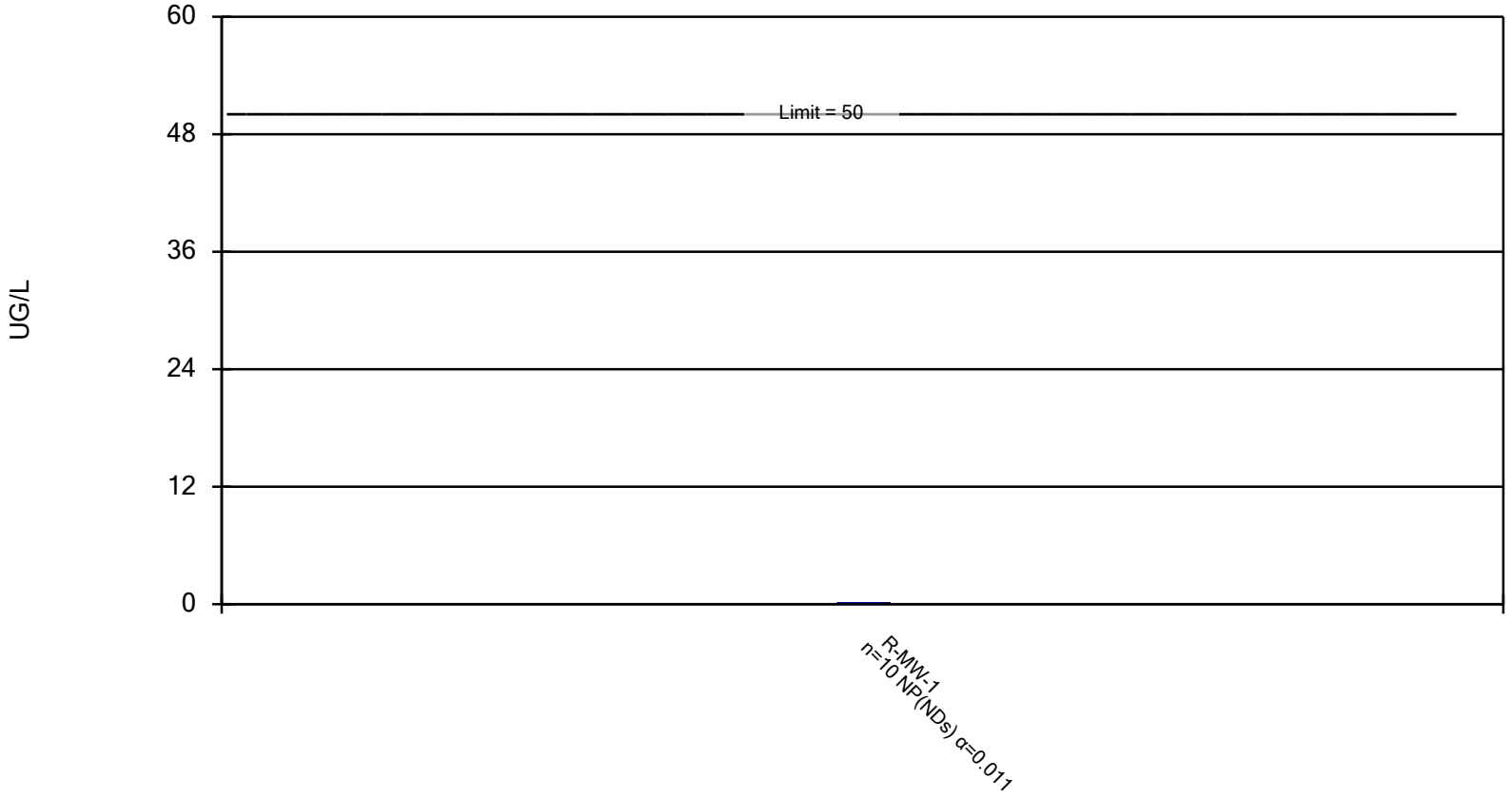
Constituent: RADIUM [226 + 228] Analysis Run 1/5/2026 2:43 PM View: SSL Post-Closure

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: SELENIUM, TOTAL Analysis Run 1/5/2026 2:44 PM View: SSL Post-Closure

Rush Island E.C. Client: Ameren Data: RIEC DATA

Confidence Interval

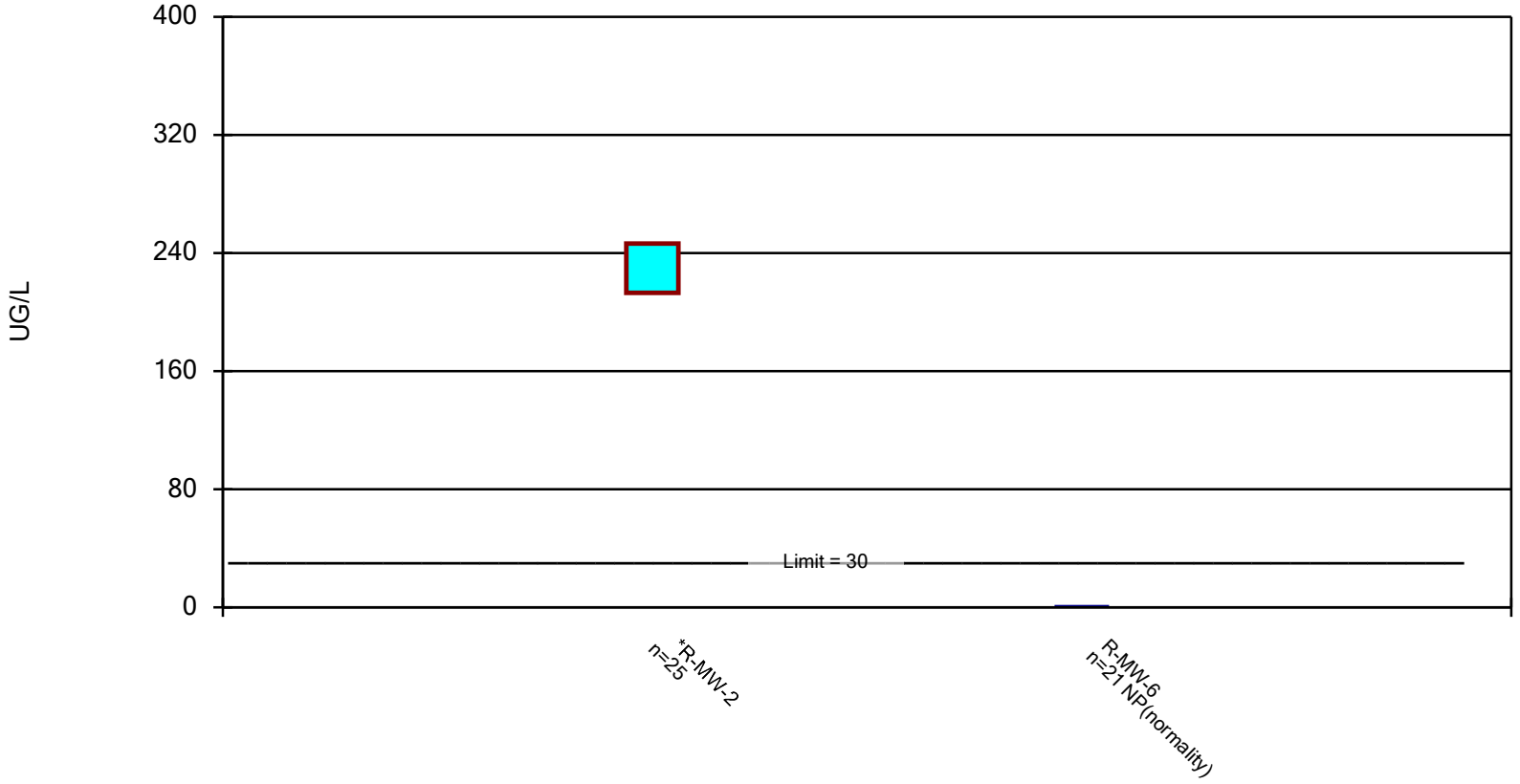
Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 1/5/2026, 2:44 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
ANTIMONY, TOTAL (UG/L)	R-MW-1	0.15	0.06	6	No	10	20	No	0.011	NP (normality)
ANTIMONY, TOTAL (UG/L)	R-MW-2	3.59	2.05	6	No	10	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-MW-1	3.975	2.805	30	No	10	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	**R-MW-3**	**37.92**	**32.88**	**30**	**Yes**	**10**	**0**	**No**	**0.01**	**Param.**
ARSENIC, TOTAL (UG/L)	R-MW-4	12.96	7.92	30	No	10	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-MW-5	1.829	1.491	30	No	10	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	**R-MW-7**	**122.3**	**113.7**	**30**	**Yes**	**10**	**0**	**No**	**0.01**	**Param.**
BARIUM, TOTAL (UG/L)	R-MW-1	57.88	35.02	2000	No	10	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-MW-3	54.41	29.97	2000	No	10	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-MW-4	385	322	2000	No	10	0	No	0.011	NP (normality)
BARIUM, TOTAL (UG/L)	R-MW-5	347	316	2000	No	10	0	No	0.011	NP (normality)
FLUORIDE, TOTAL (MG/L)	R-MW-1	0.33	0.043	4	No	15	46.67	No	0.01	NP (normality)
FLUORIDE, TOTAL (MG/L)	R-MW-3	1.136	0.9181	4	No	10	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-MW-4	0.7105	0.4622	4	No	11	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-MW-6	0.3423	0.1859	4	No	13	15.38	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-MW-7	0.33	0.06	4	No	11	45.45	No	0.006	NP (normality)
LITHIUM, TOTAL (UG/L)	R-MW-3	15.81	6.369	64.7	No	10	30	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-MW-4	36.67	31.99	64.7	No	10	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-MW-7	30.8	26.9	64.7	No	10	0	No	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	R-MW-2	192.8	83.82	100	No	10	0	No	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	R-MW-4	60.88	29.36	100	No	10	0	No	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	R-MW-7	65.03	36.03	100	No	10	0	No	0.01	Param.
RADIUM [226 + 228] (PCI/L)	R-MW-2	2.36	0.967	5	No	10	100	No	0.011	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-MW-1	0.095	0.09	50	No	10	90	No	0.011	NP (NDs)

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



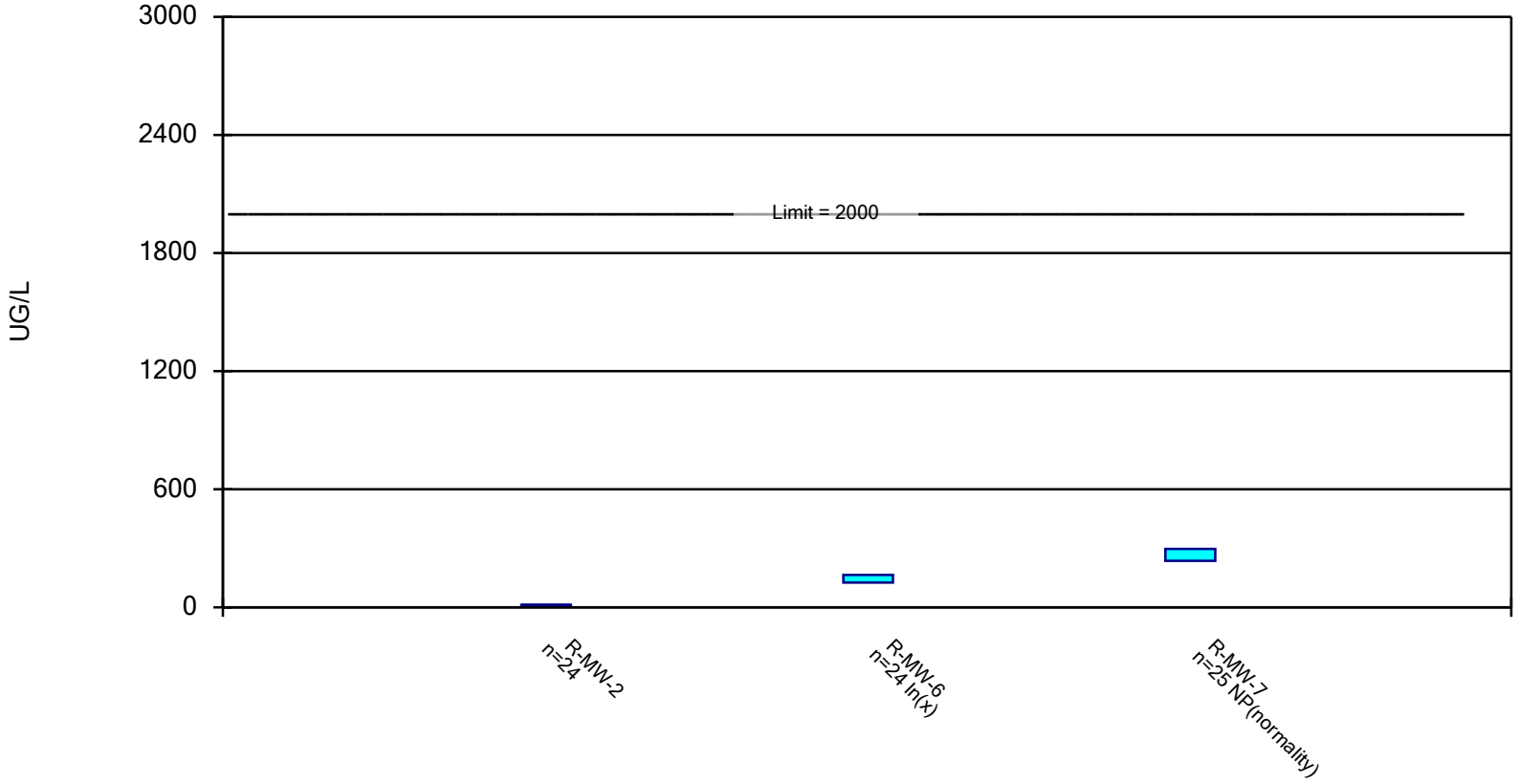
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



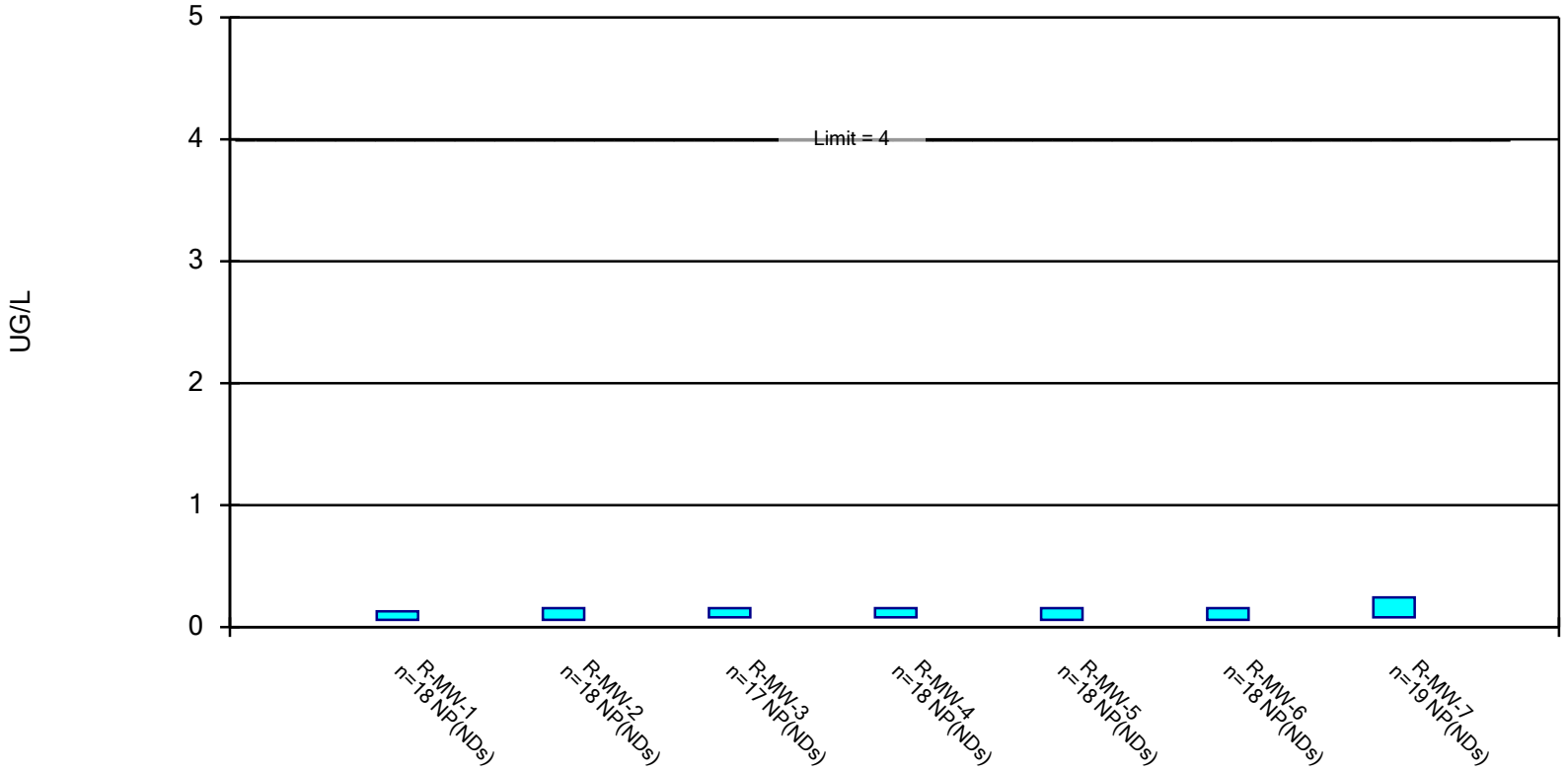
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



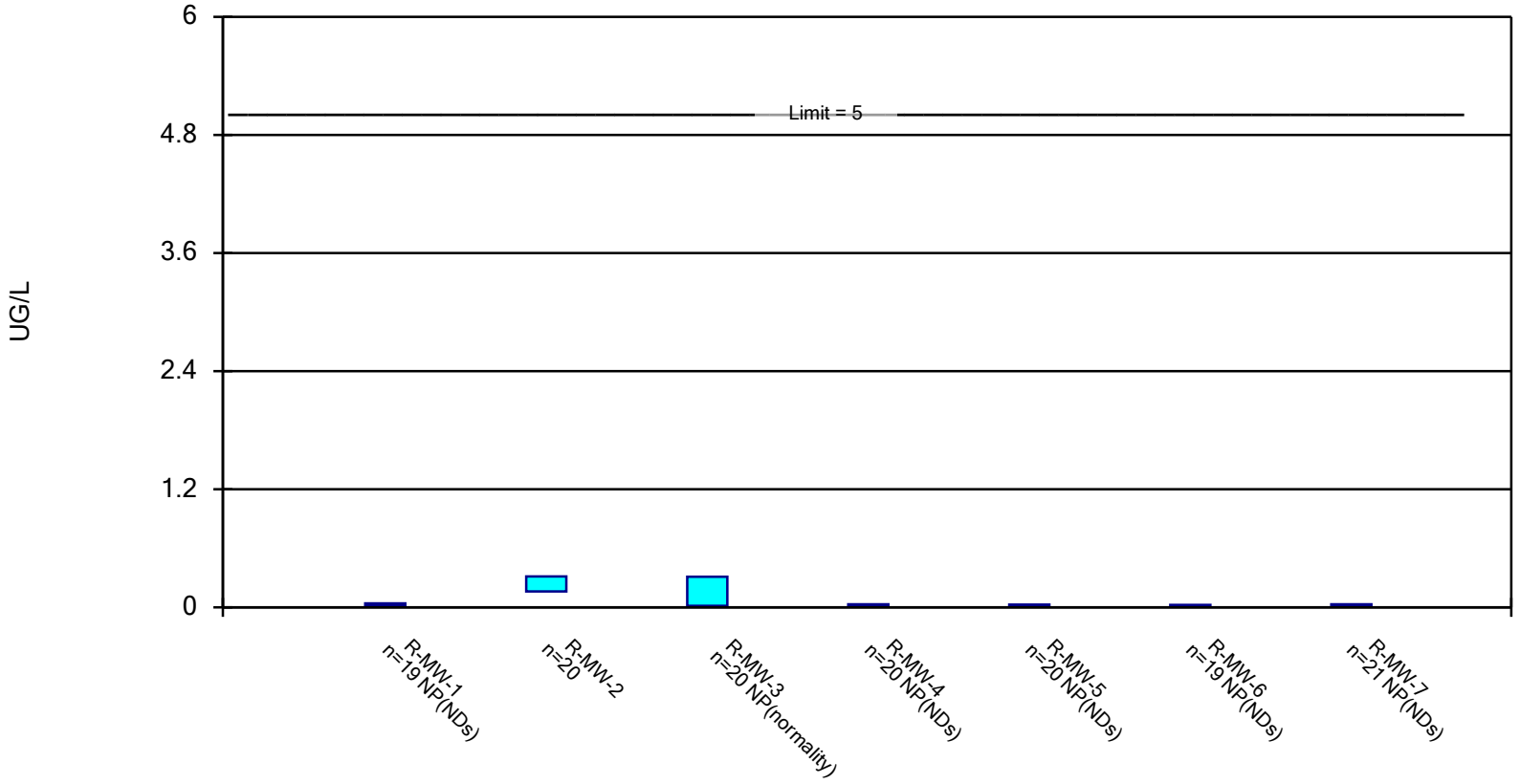
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



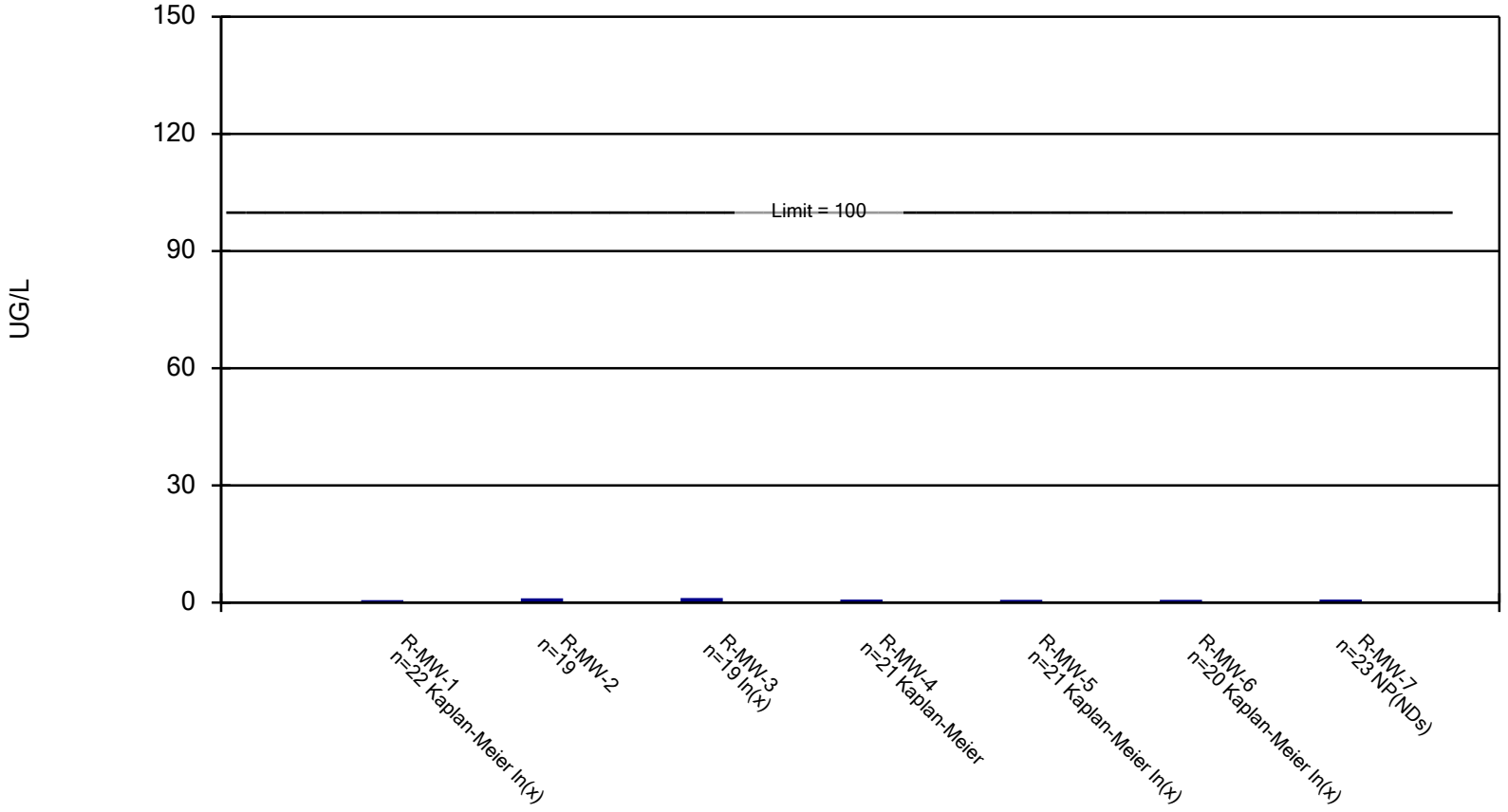
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



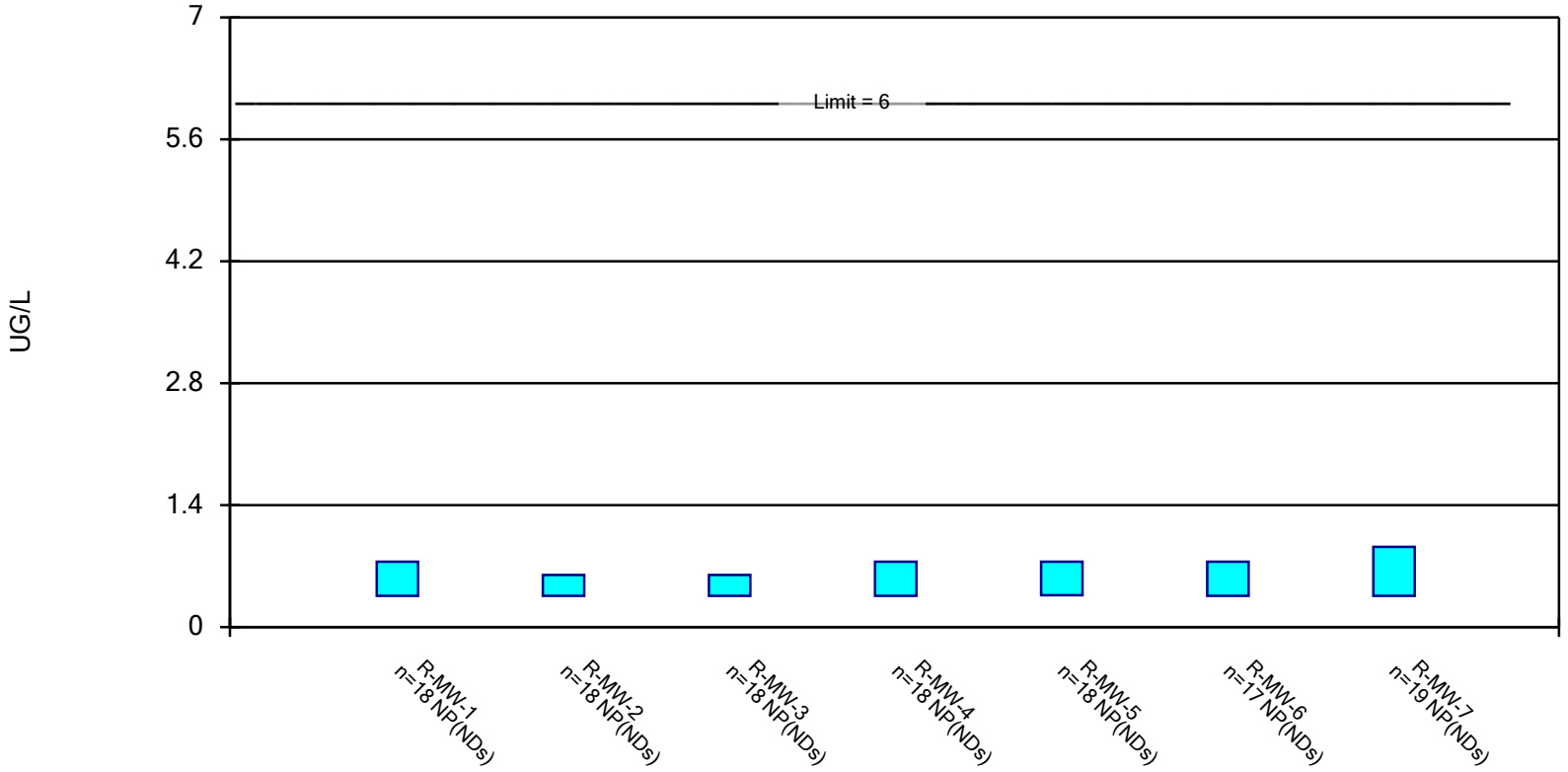
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



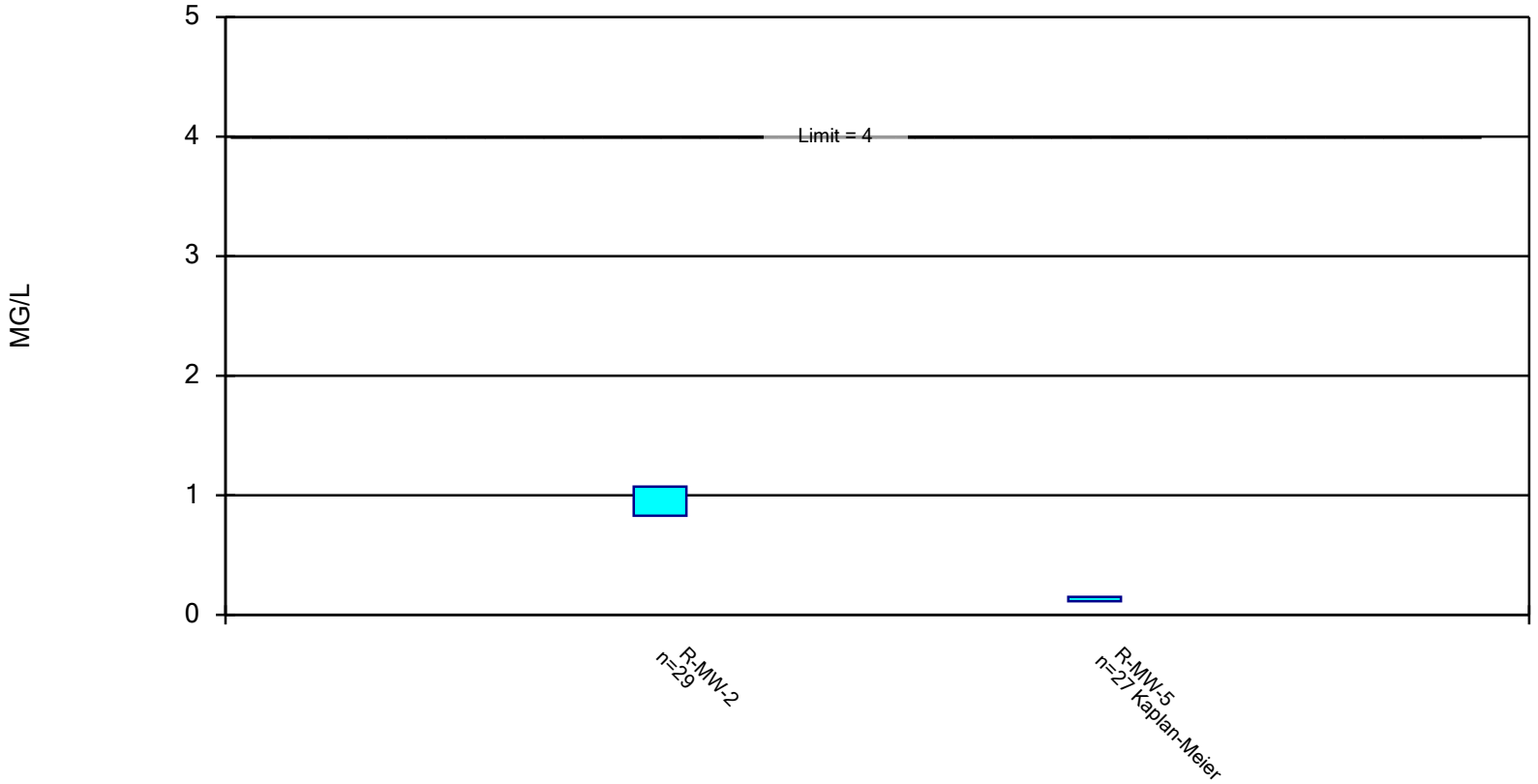
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



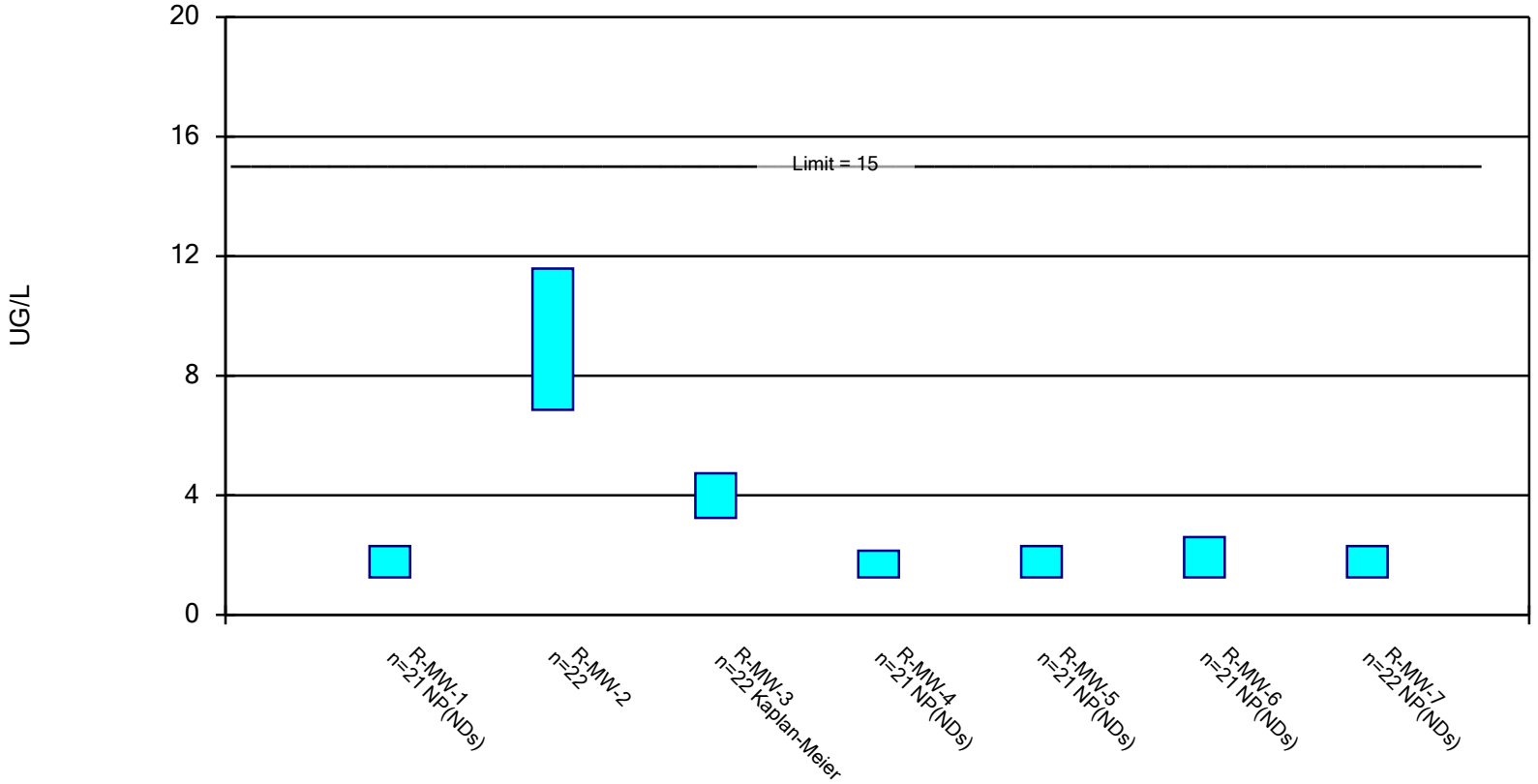
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



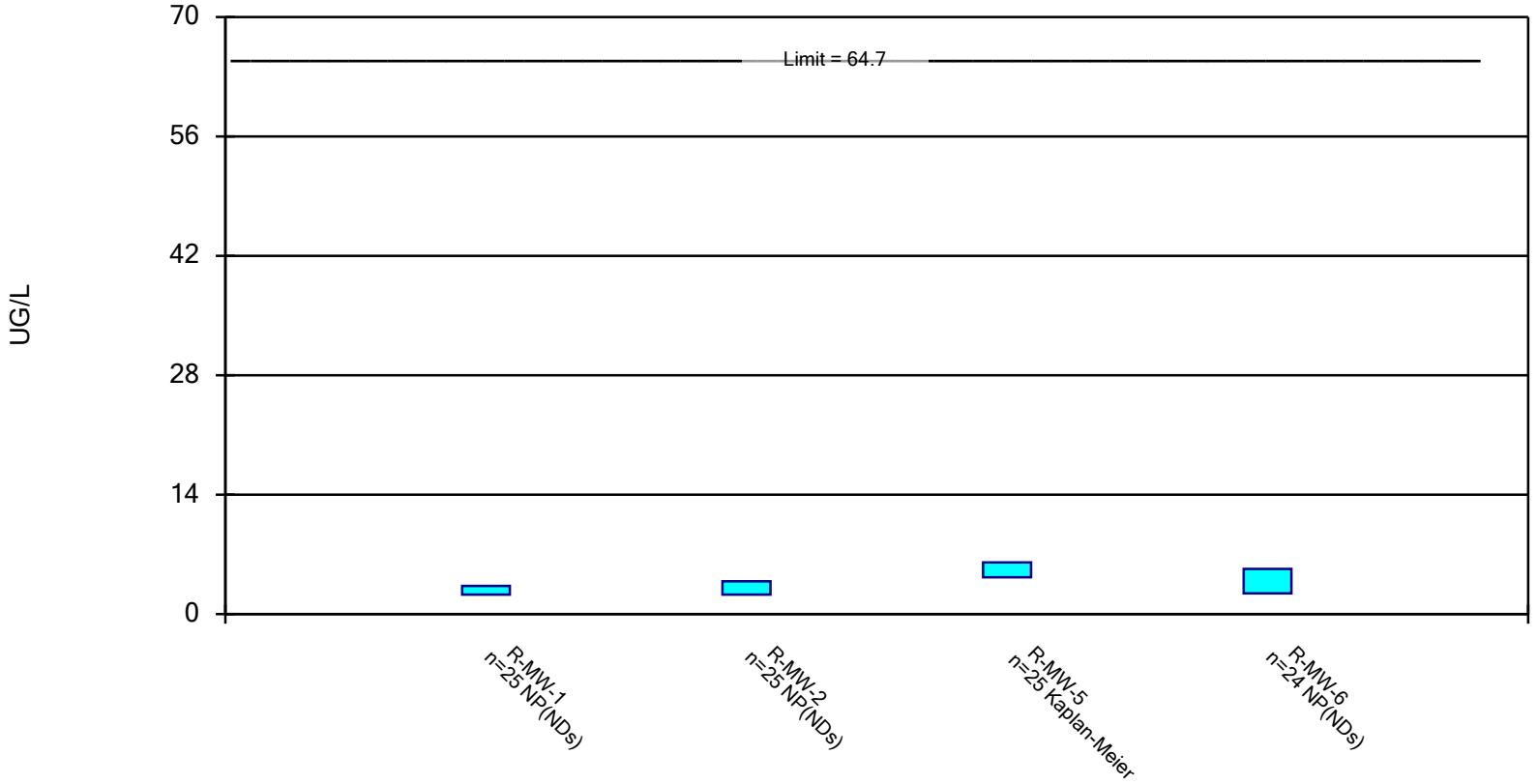
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



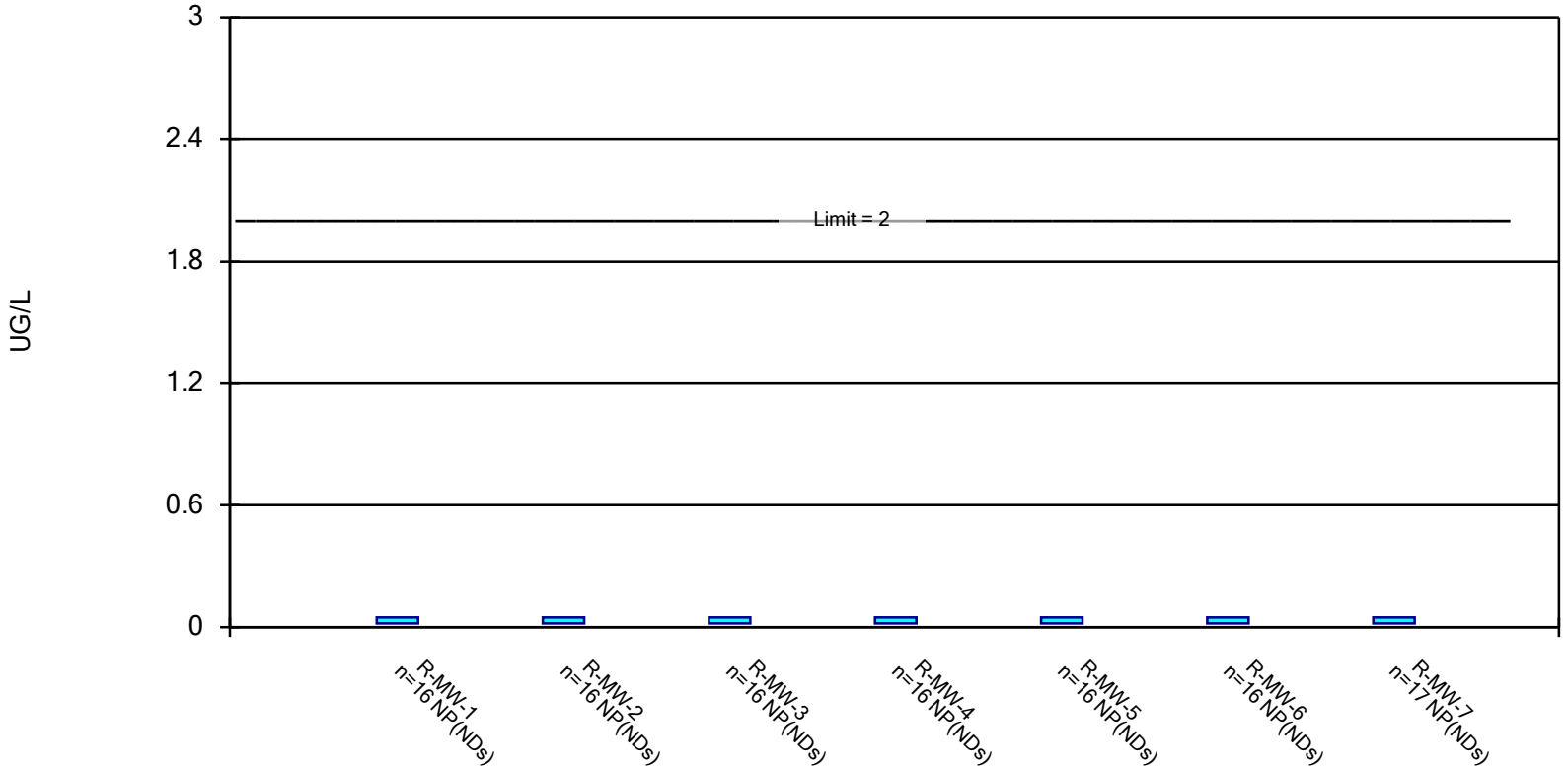
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



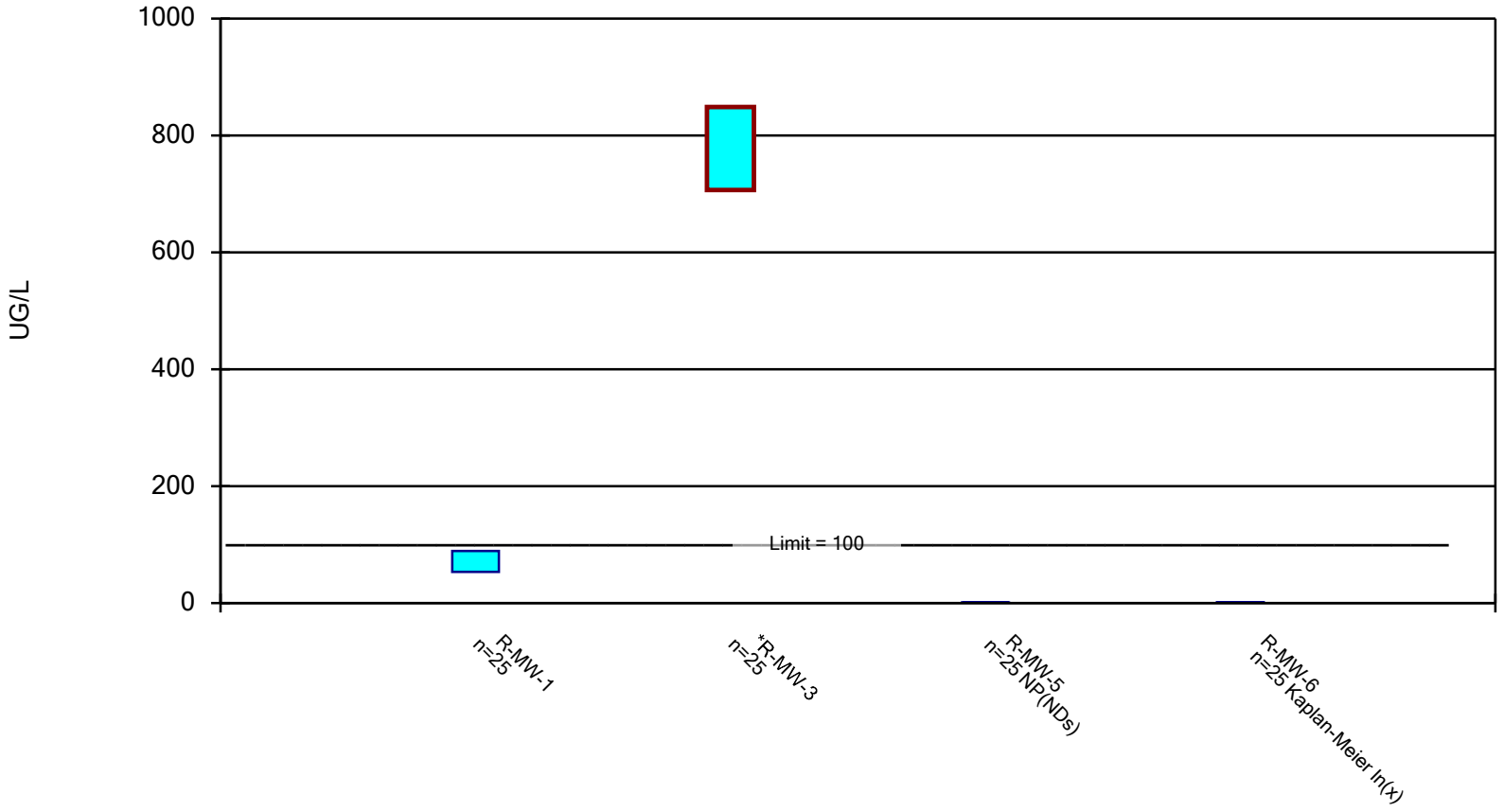
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



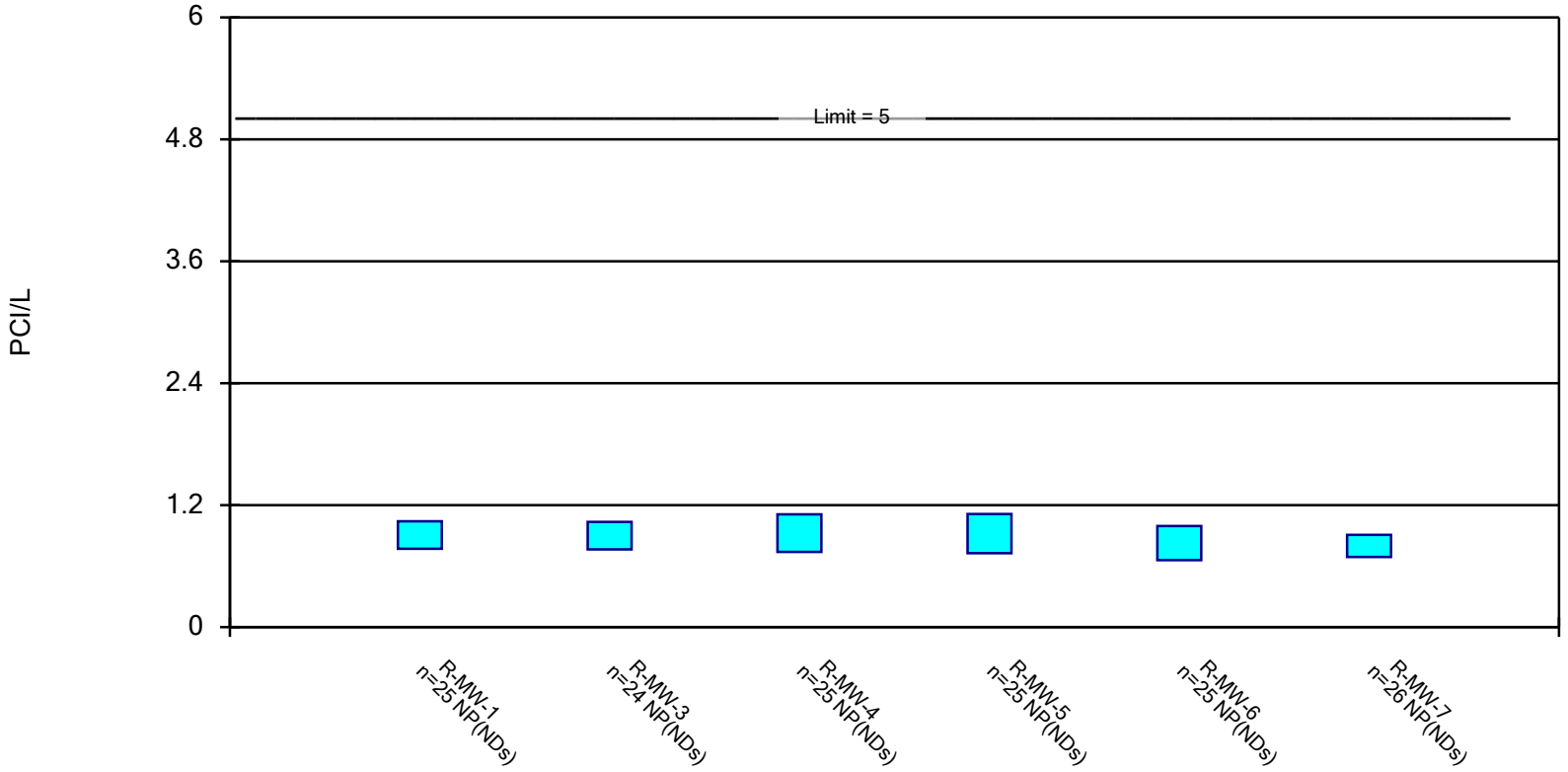
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



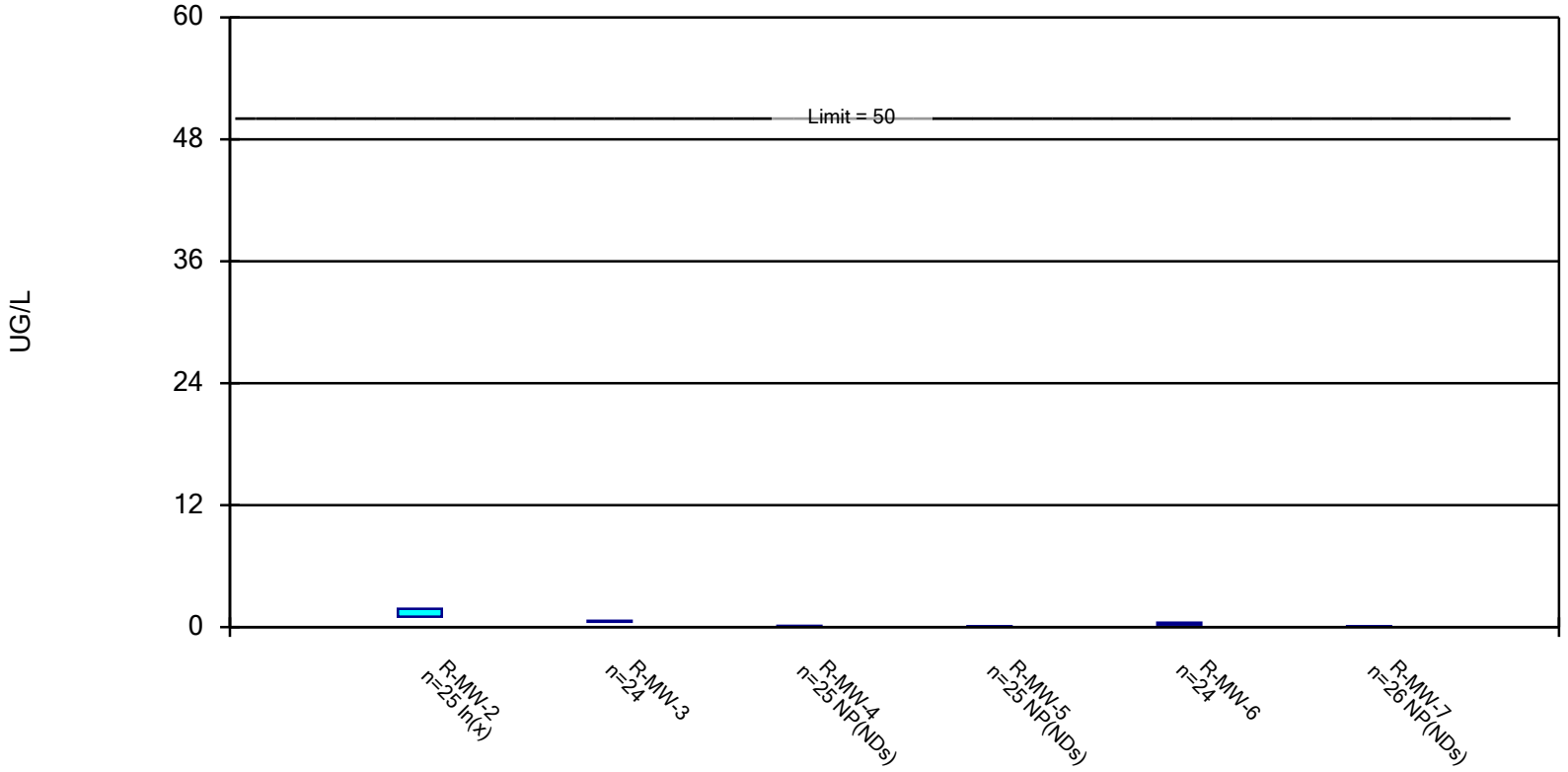
Constituent: RADIUM [226 + 228] Analysis Run 1/5/2026 2:56 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



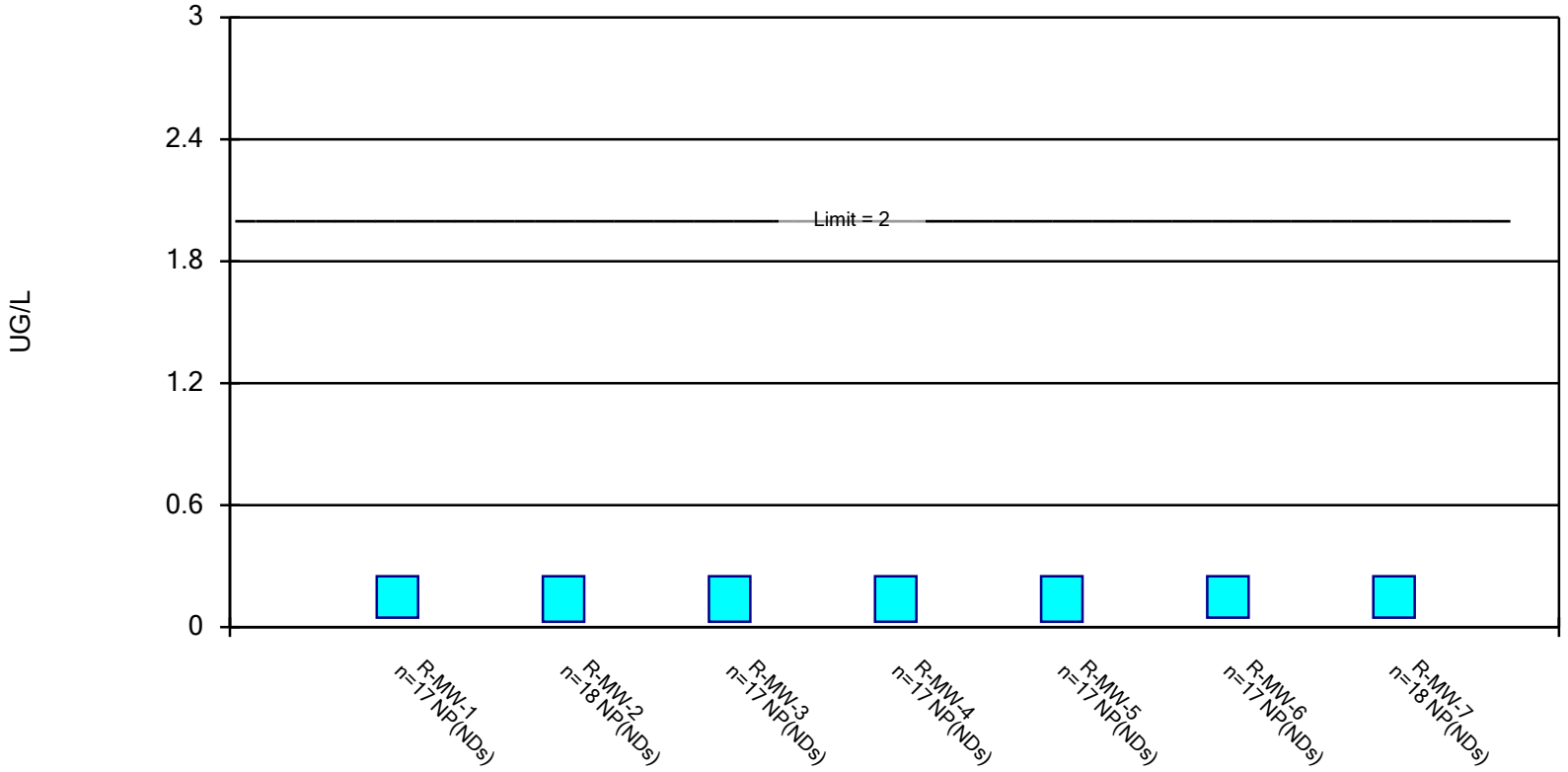
Constituent: SELENIUM, TOTAL Analysis Run 1/5/2026 2:56 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: THALLIUM, TOTAL Analysis Run 1/5/2026 2:56 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Confidence Interval

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 1/5/2026, 2:58 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
ANTIMONY, TOTAL (UG/L)	R-MW-3	0.13	0.05	6	No	25	60	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-MW-4	0.06	0.029	6	No	24	87.5	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-MW-5	0.06	0.029	6	No	24	91.67	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-MW-6	0.071	0.0485	6	No	25	72	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-MW-7	0.06	0.029	6	No	25	88	No	0.01	NP (NDs)
ARSENIC, TOTAL (UG/L)	**R-MW-2**	**246.3**	**213.1**	**30**	**Yes**	**25**	**0**	**No**	**0.01**	**Param.**
ARSENIC, TOTAL (UG/L)	R-MW-6	0.89	0.38	30	No	21	14.29	No	0.01	NP (normality)
BARIUM, TOTAL (UG/L)	R-MW-2	13.21	10.38	2000	No	24	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-MW-6	165.4	126.5	2000	No	24	0	ln(x)	0.01	Param.
BARIUM, TOTAL (UG/L)	R-MW-7	297	236	2000	No	25	0	No	0.01	NP (normality)
BERYLLIUM, TOTAL (UG/L)	R-MW-1	0.13	0.06	4	No	18	100	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-2	0.155	0.06	4	No	18	100	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-3	0.155	0.08	4	No	17	88.24	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-4	0.155	0.08	4	No	18	94.44	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-5	0.155	0.06	4	No	18	100	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-6	0.155	0.06	4	No	18	94.44	No	0.01	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-MW-7	0.245	0.08	4	No	19	84.21	No	0.01	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-MW-1	0.041	0.0145	5	No	19	78.95	No	0.01	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-MW-2	0.3143	0.1625	5	No	20	15	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-MW-3	0.31	0.0145	5	No	20	40	No	0.01	NP (normality)
CADMIUM, TOTAL (UG/L)	R-MW-4	0.031	0.0145	5	No	20	80	No	0.01	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-MW-5	0.028	0.0145	5	No	20	100	No	0.01	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-MW-6	0.0265	0.0145	5	No	19	100	No	0.01	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-MW-7	0.031	0.0145	5	No	21	80.95	No	0.01	NP (NDs)
CHROMIUM, TOTAL (UG/L)	R-MW-1	0.2837	0.08432	100	No	22	50	ln(x)	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-MW-2	0.8032	0.4873	100	No	19	10.53	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-MW-3	0.8908	0.5042	100	No	19	10.53	ln(x)	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-MW-4	0.4799	0.1957	100	No	21	42.86	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-MW-5	0.436	0.2095	100	No	21	23.81	ln(x)	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-MW-6	0.3736	0.1017	100	No	20	50	ln(x)	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-MW-7	0.48	0.15	100	No	23	52.17	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-1	0.75	0.36	6	No	18	88.89	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-2	0.6	0.36	6	No	18	100	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-3	0.6	0.36	6	No	18	94.44	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-4	0.75	0.36	6	No	18	83.33	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-5	0.75	0.365	6	No	18	88.89	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-6	0.75	0.36	6	No	17	94.12	No	0.01	NP (NDs)
COBALT, TOTAL (UG/L)	R-MW-7	0.92	0.36	6	No	19	78.95	No	0.01	NP (NDs)
FLUORIDE, TOTAL (MG/L)	R-MW-2	1.074	0.8292	4	No	29	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-MW-5	0.1502	0.1145	4	No	27	18.52	No	0.01	Param.
LEAD, TOTAL (UG/L)	R-MW-1	2.3	1.25	15	No	21	100	No	0.01	NP (NDs)
LEAD, TOTAL (UG/L)	R-MW-2	11.58	6.857	15	No	22	9.091	No	0.01	Param.
LEAD, TOTAL (UG/L)	R-MW-3	4.738	3.245	15	No	22	45.45	No	0.01	Param.
LEAD, TOTAL (UG/L)	R-MW-4	2.15	1.25	15	No	21	95.24	No	0.01	NP (NDs)
LEAD, TOTAL (UG/L)	R-MW-5	2.3	1.25	15	No	21	85.71	No	0.01	NP (NDs)
LEAD, TOTAL (UG/L)	R-MW-6	2.6	1.25	15	No	21	80.95	No	0.01	NP (NDs)
LEAD, TOTAL (UG/L)	R-MW-7	2.3	1.25	15	No	22	90.91	No	0.01	NP (NDs)
LITHIUM, TOTAL (UG/L)	R-MW-1	3.3	2.3	64.7	No	25	84	No	0.01	NP (NDs)
LITHIUM, TOTAL (UG/L)	R-MW-2	3.85	2.3	64.7	No	25	72	No	0.01	NP (NDs)
LITHIUM, TOTAL (UG/L)	R-MW-5	6.063	4.316	64.7	No	25	40	No	0.01	Param.

Confidence Interval

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 1/5/2026, 2:58 PM

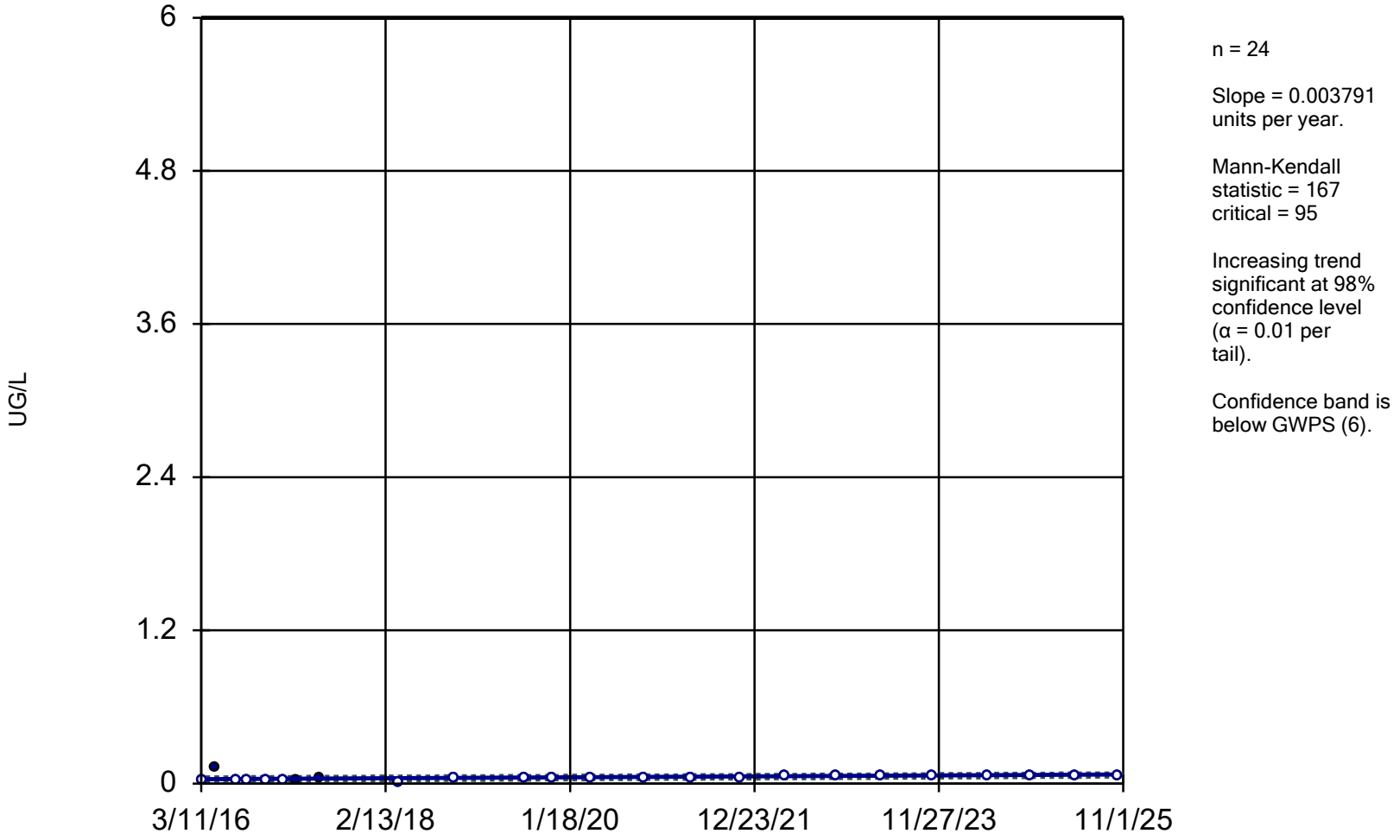
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
LITHIUM, TOTAL (UG/L)	R-MW-6	5.3	2.45	64.7	No	24	58.33	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-1	0.048	0.0195	2	No	16	93.75	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-2	0.048	0.0195	2	No	16	93.75	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-3	0.048	0.0195	2	No	16	93.75	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-4	0.048	0.0195	2	No	16	93.75	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-5	0.048	0.0195	2	No	16	93.75	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-6	0.048	0.0195	2	No	16	100	No	0.01	NP (NDs)
MERCURY, TOTAL (UG/L)	R-MW-7	0.048	0.0195	2	No	17	100	No	0.01	NP (NDs)
MOLYBDENUM, TOTAL (UG/L)	R-MW-1	89.19	53.21	100	No	25	0	No	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	**R-MW-3**	**848.5**	**706.9**	**100**	**Yes**	**25**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	R-MW-5	1	0.45	100	No	25	84	No	0.01	NP (NDs)
MOLYBDENUM, TOTAL (UG/L)	R-MW-6	1.603	0.7792	100	No	25	36	ln(x)	0.01	Param.
RADIUM [226 + 228] (PCI/L)	R-MW-1	1.04	0.772	5	No	25	96	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-MW-3	1.036	0.765	5	No	24	95.83	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-MW-4	1.11	0.741	5	No	25	80	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-MW-5	1.112	0.7275	5	No	25	80	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-MW-6	0.996	0.658	5	No	25	80	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-MW-7	0.9065	0.689	5	No	26	88.46	No	0.01	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-MW-2	1.814	1.027	50	No	25	0	ln(x)	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-MW-3	0.639	0.5219	50	No	24	0	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-MW-4	0.12	0.09	50	No	25	72	No	0.01	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-MW-5	0.09	0.06	50	No	25	100	No	0.01	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-MW-6	0.4325	0.2447	50	No	24	12.5	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-MW-7	0.095	0.06	50	No	26	84.62	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-1	0.25	0.0465	2	No	17	94.12	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-2	0.25	0.026	2	No	18	100	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-3	0.25	0.026	2	No	17	100	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-4	0.25	0.026	2	No	17	100	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-5	0.25	0.026	2	No	17	100	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-6	0.25	0.0465	2	No	17	94.12	No	0.01	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-MW-7	0.25	0.0465	2	No	18	94.44	No	0.01	NP (NDs)

Appendix C
Sanitas Trending Confidence Bands Statistical Output

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-4



n = 24

Slope = 0.003791 units per year.

Mann-Kendall statistic = 167
critical = 95

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

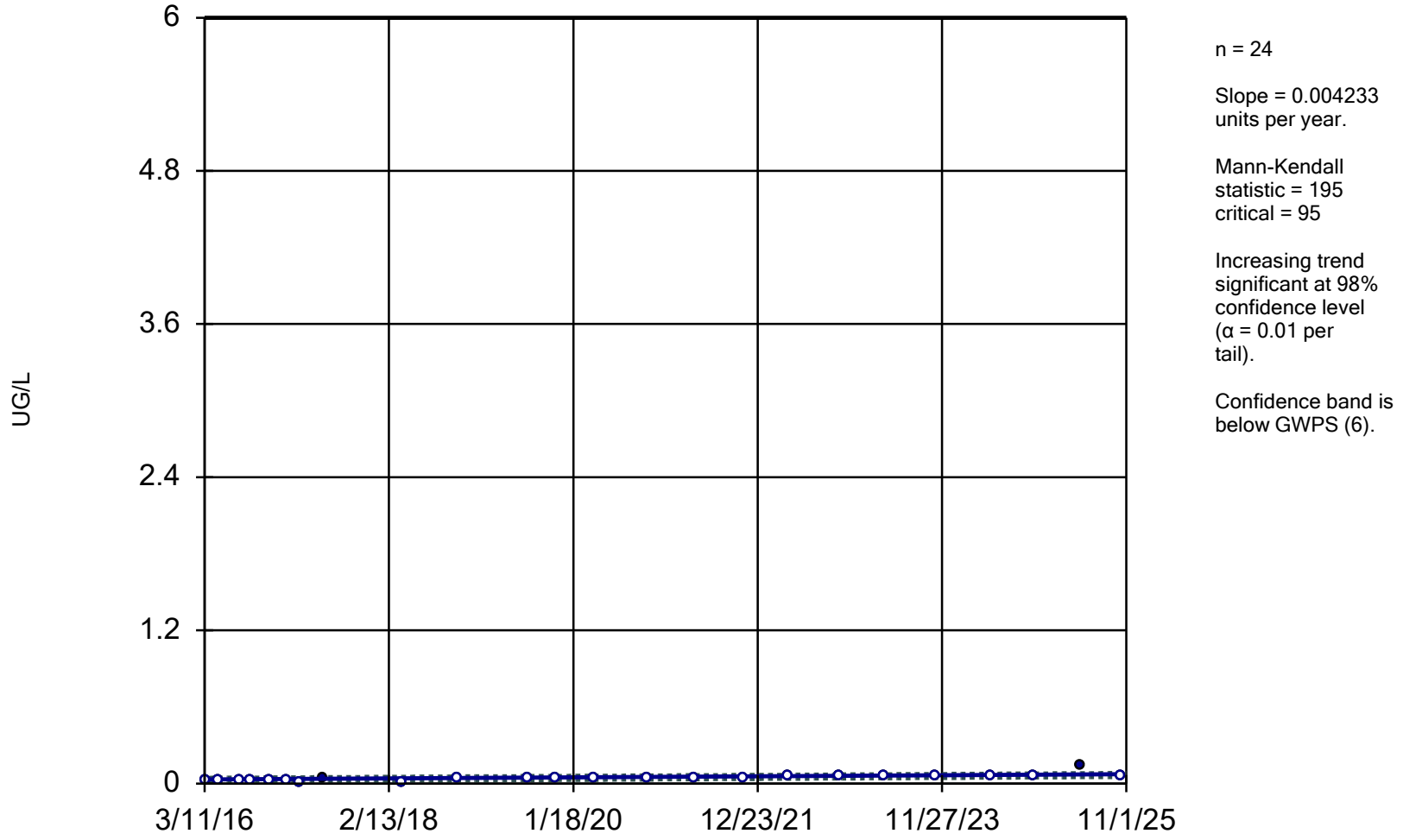
Constituent: ANTIMONY, TOTAL Analysis Run 1/5/2026 2:59 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-5



n = 24

Slope = 0.004233 units per year.

Mann-Kendall statistic = 195
critical = 95

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

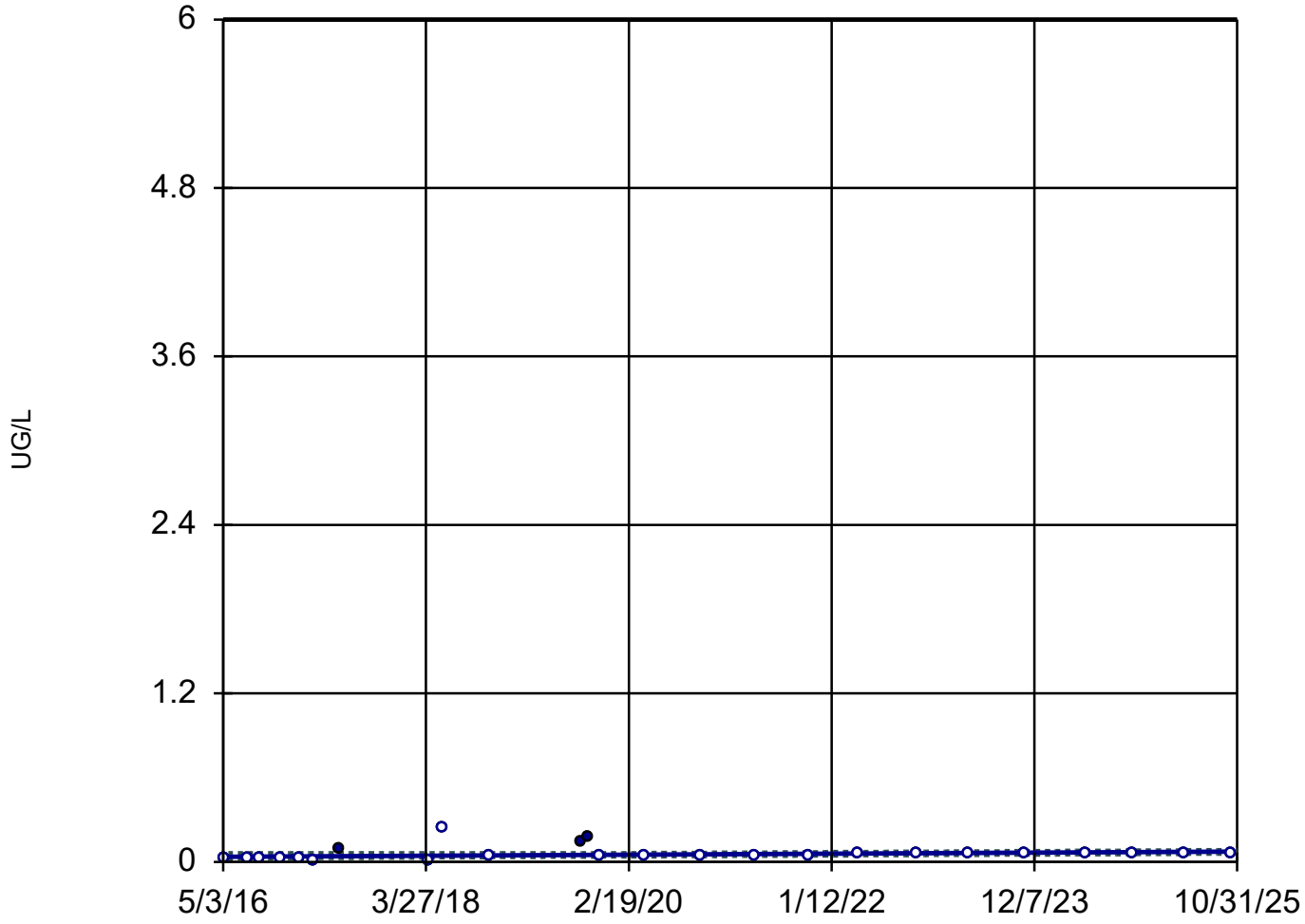
Constituent: ANTIMONY, TOTAL Analysis Run 1/5/2026 2:59 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-7



n = 25

Slope = 0.003767 units per year.

Mann-Kendall statistic = 120
critical = 101

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

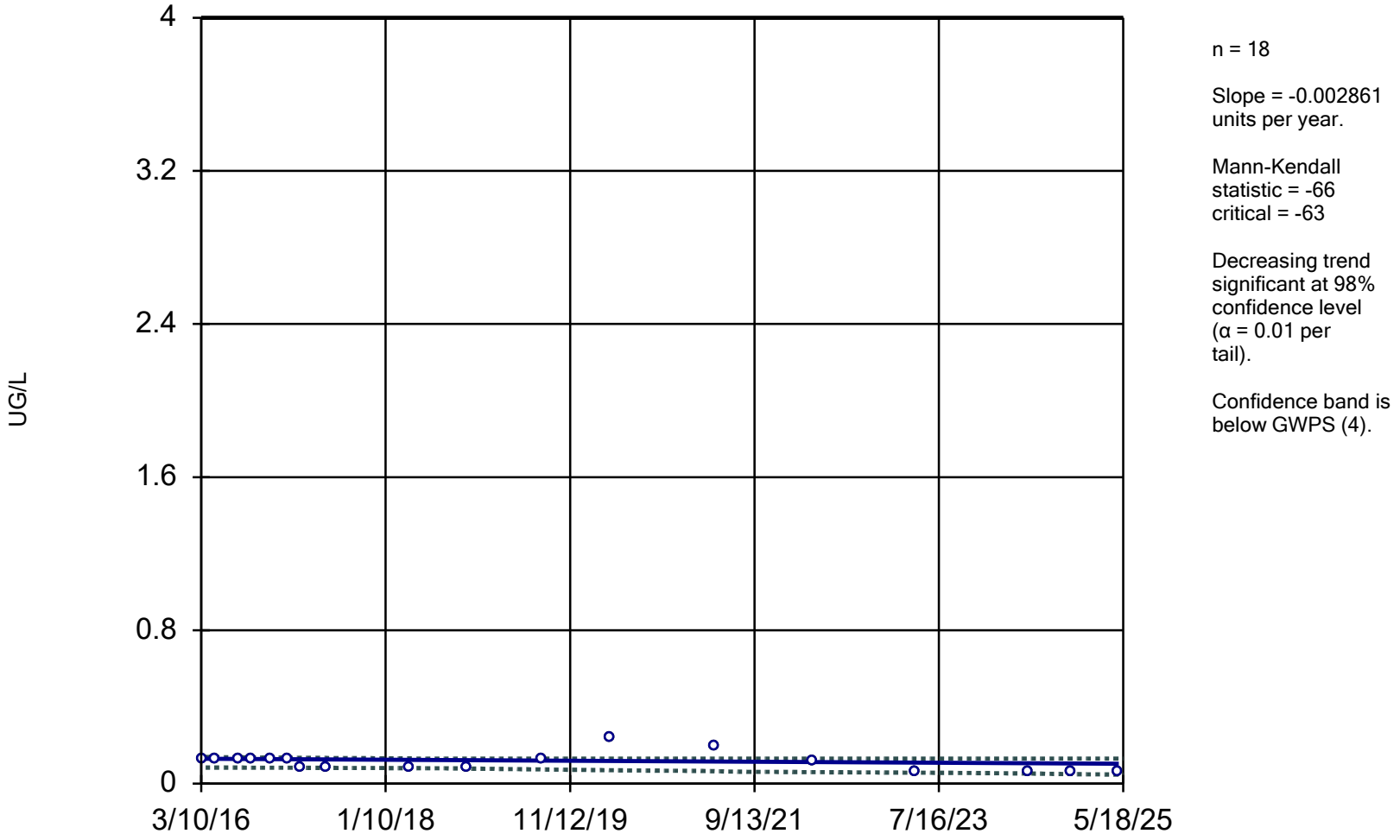
Constituent: ANTIMONY, TOTAL Analysis Run 1/5/2026 2:59 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-1



n = 18

Slope = -0.002861 units per year.

Mann-Kendall statistic = -66
critical = -63

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (4).

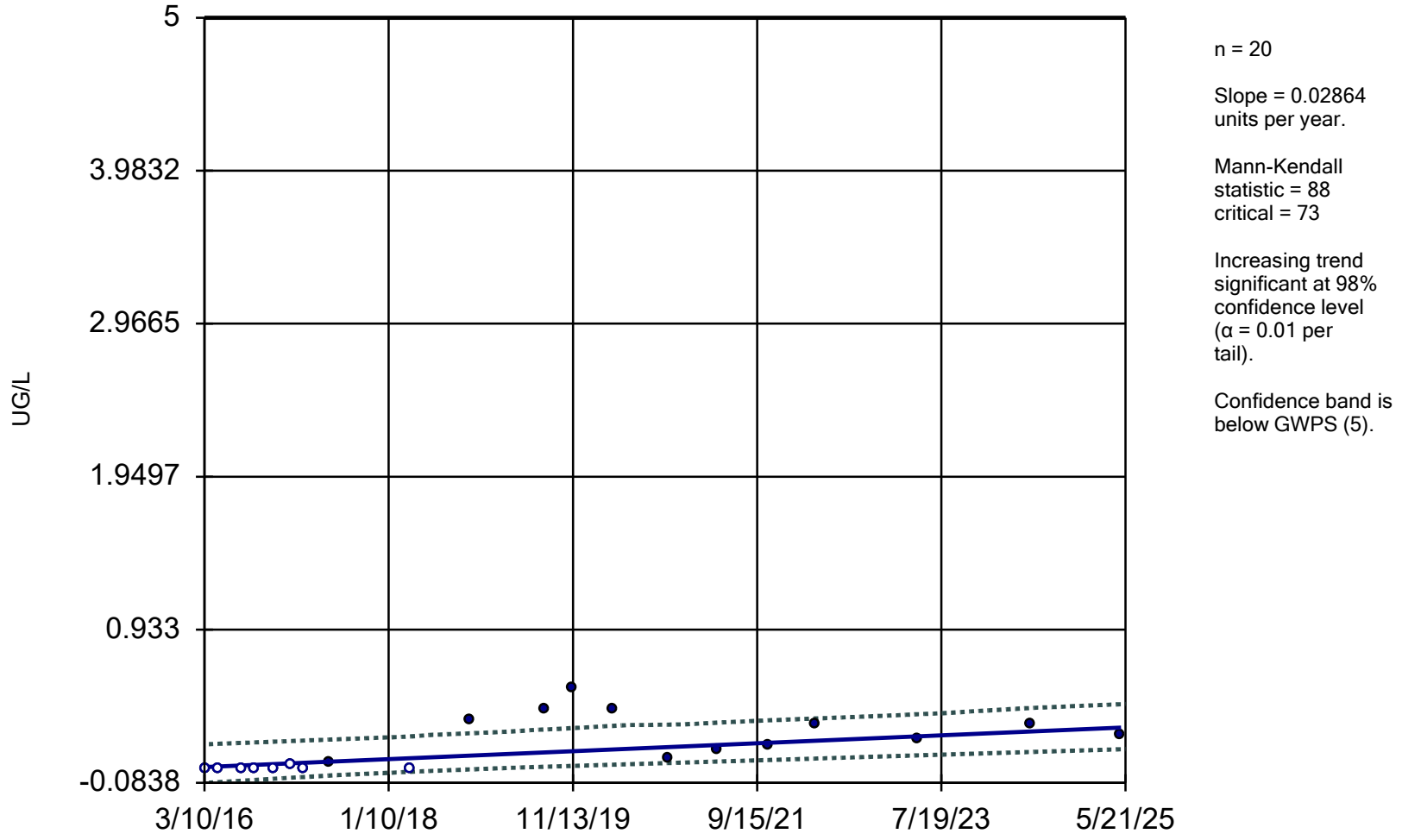
Constituent: BERYLLIUM, TOTAL Analysis Run 1/5/2026 2:59 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-3



n = 20

Slope = 0.02864 units per year.

Mann-Kendall statistic = 88
critical = 73

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (5).

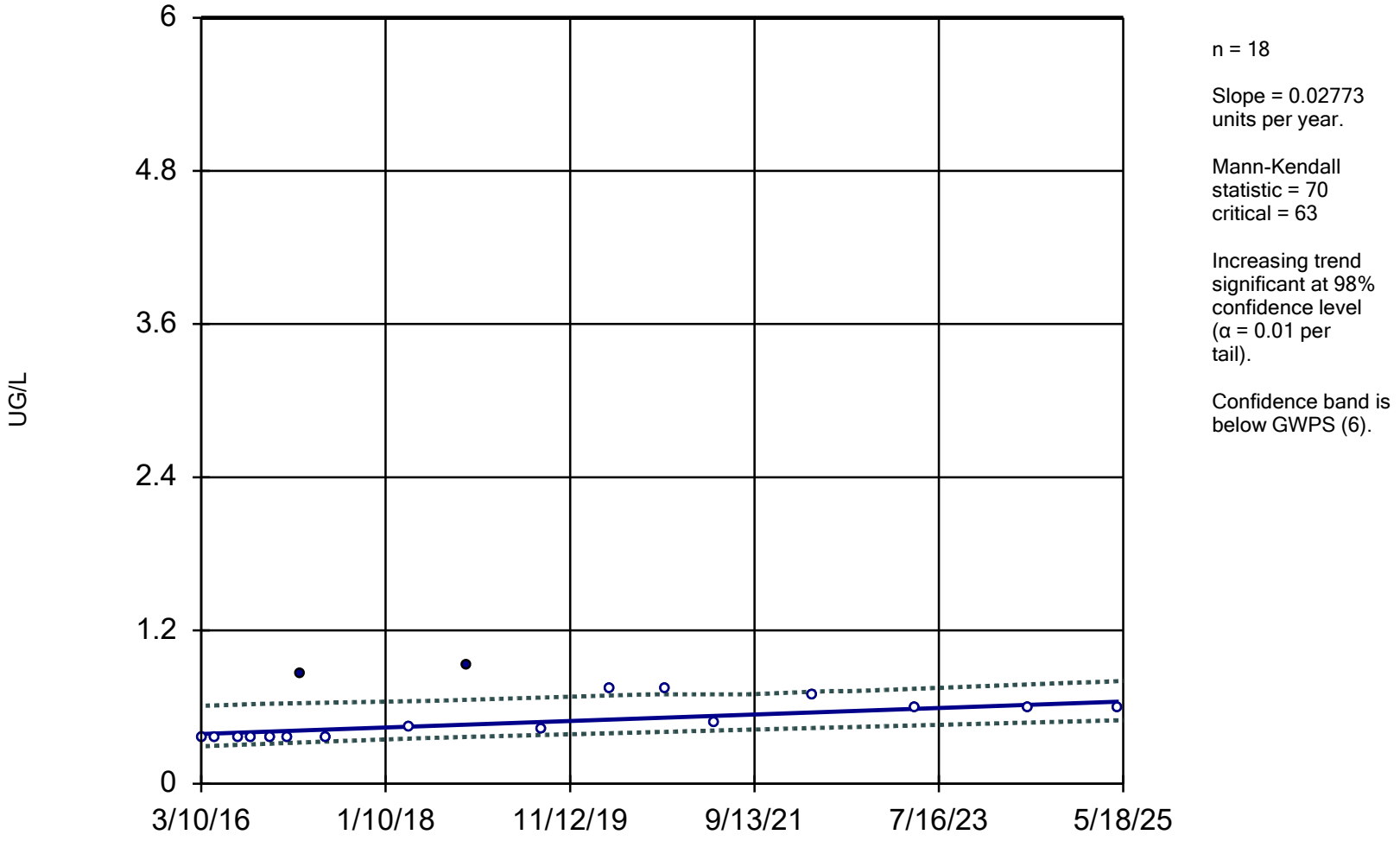
Constituent: CADMIUM, TOTAL Analysis Run 1/5/2026 2:59 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-1



n = 18

Slope = 0.02773 units per year.

Mann-Kendall statistic = 70
critical = 63

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

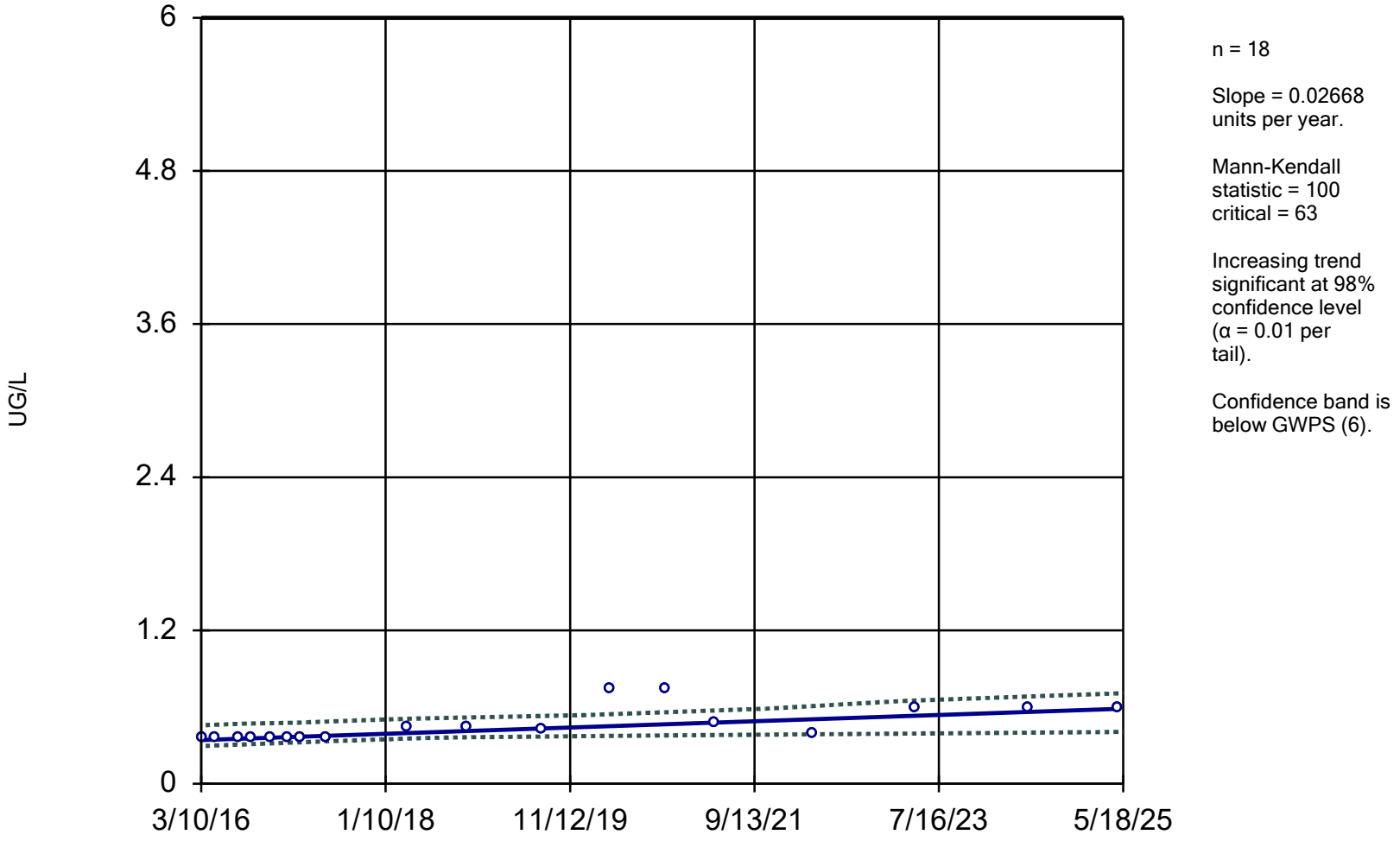
Constituent: COBALT, TOTAL Analysis Run 1/5/2026 2:59 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-2



n = 18

Slope = 0.02668 units per year.

Mann-Kendall statistic = 100
critical = 63

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

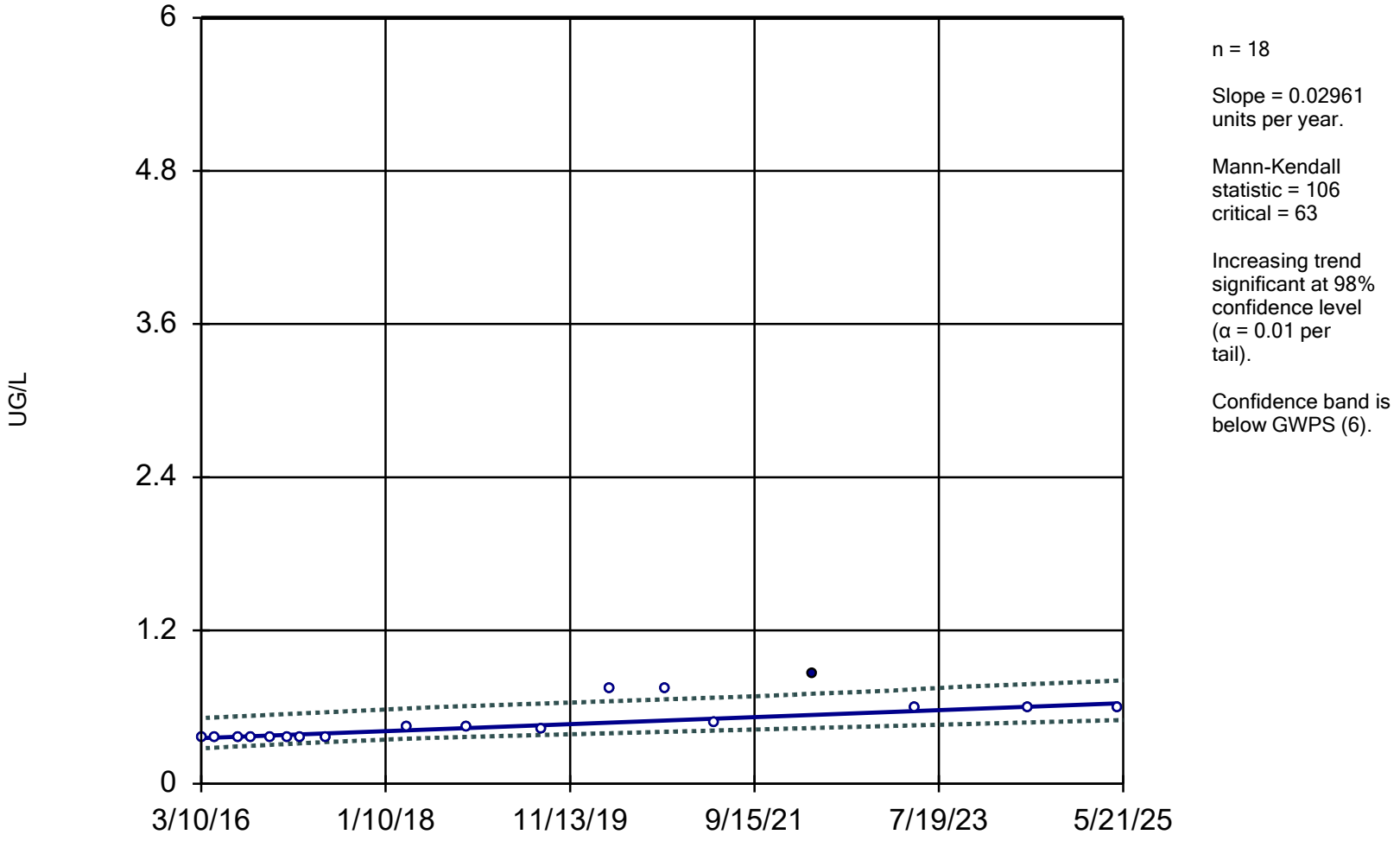
Constituent: COBALT, TOTAL Analysis Run 1/5/2026 2:59 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-3



n = 18

Slope = 0.02961 units per year.

Mann-Kendall statistic = 106
critical = 63

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

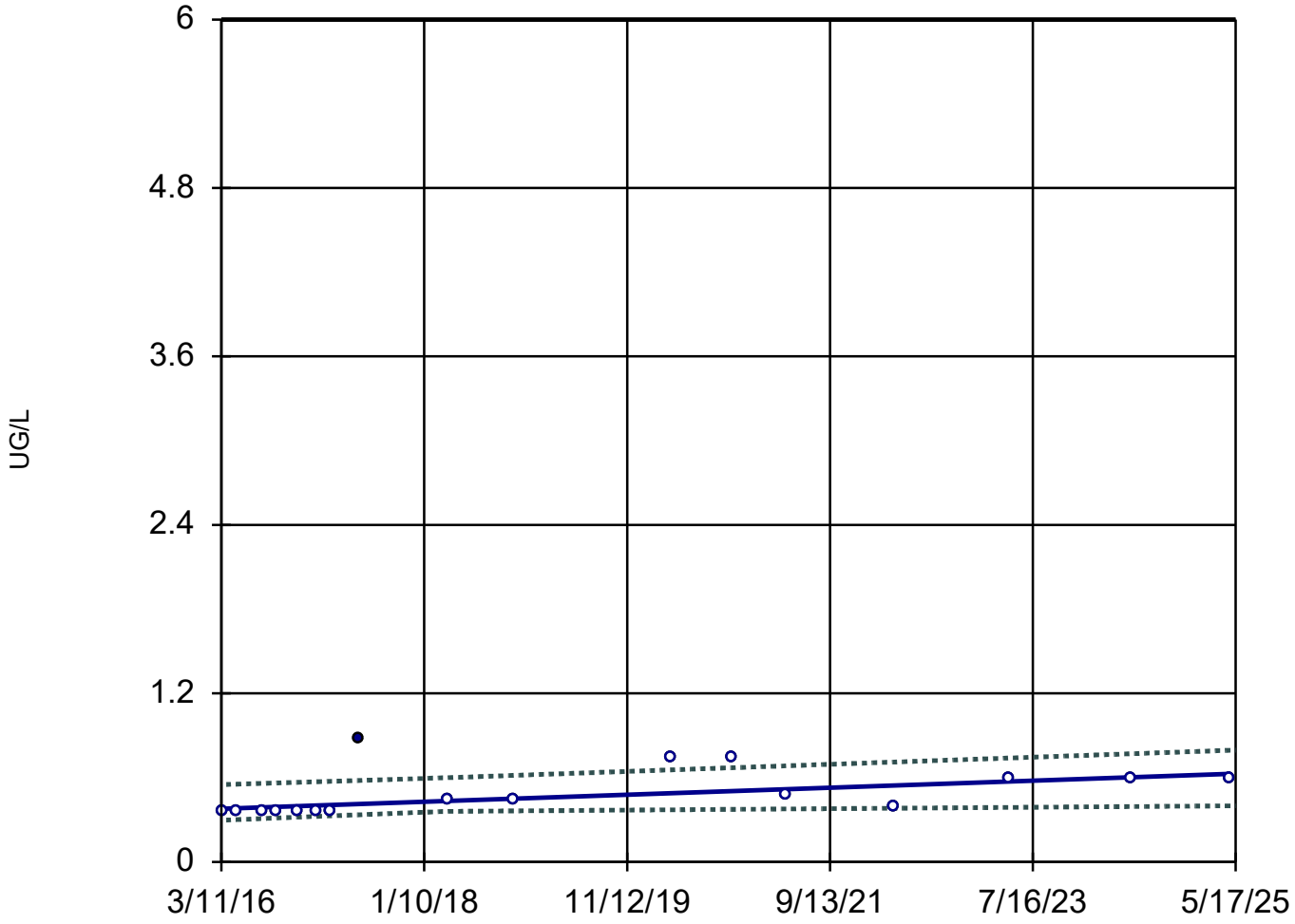
Constituent: COBALT, TOTAL Analysis Run 1/5/2026 2:59 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-6



n = 17

Slope = 0.02718 units per year.

Mann-Kendall statistic = 72
critical = 58

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

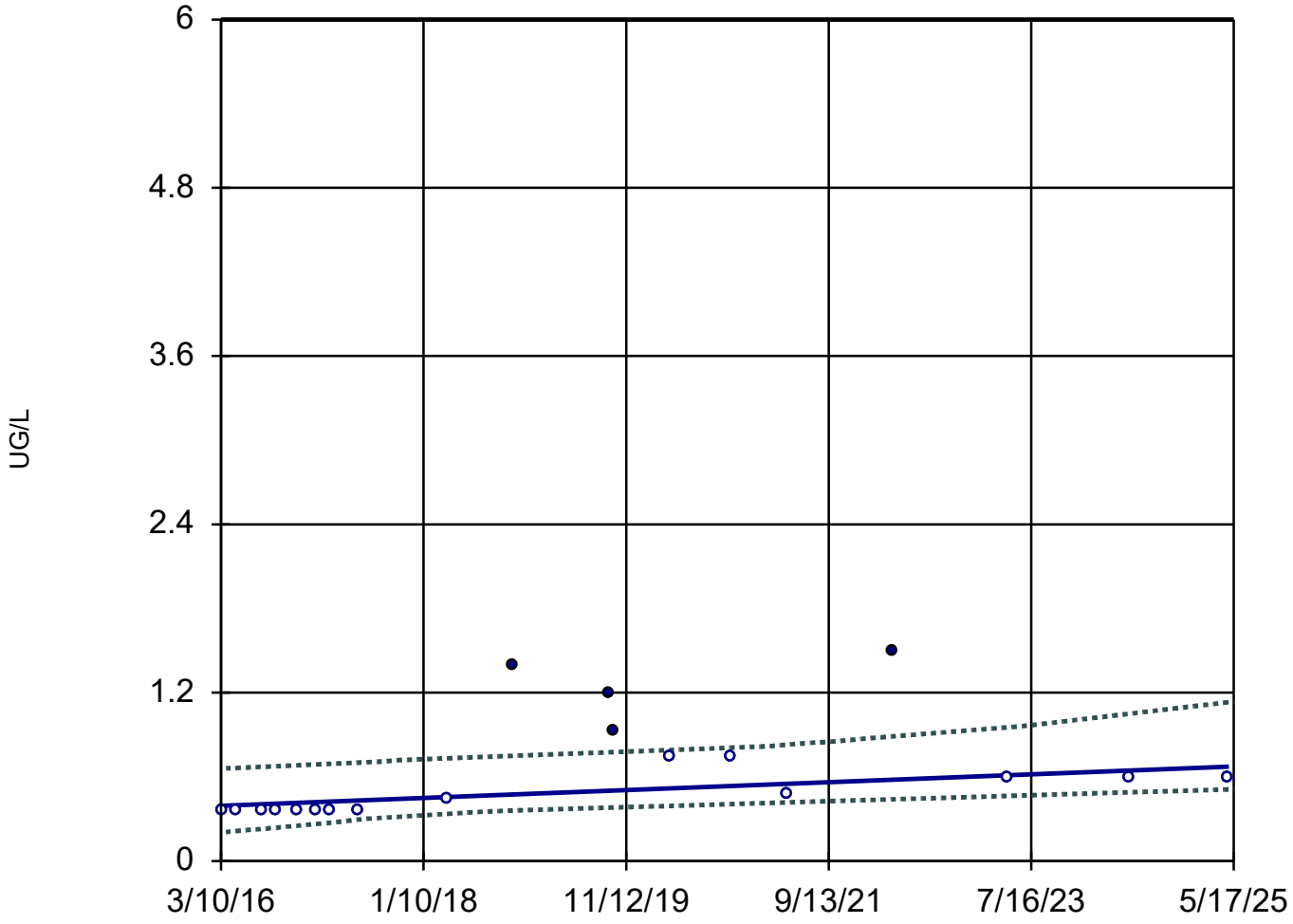
Constituent: COBALT, TOTAL Analysis Run 1/5/2026 2:59 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-7



n = 19

Slope = 0.03051 units per year.

Mann-Kendall statistic = 87
critical = 68

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

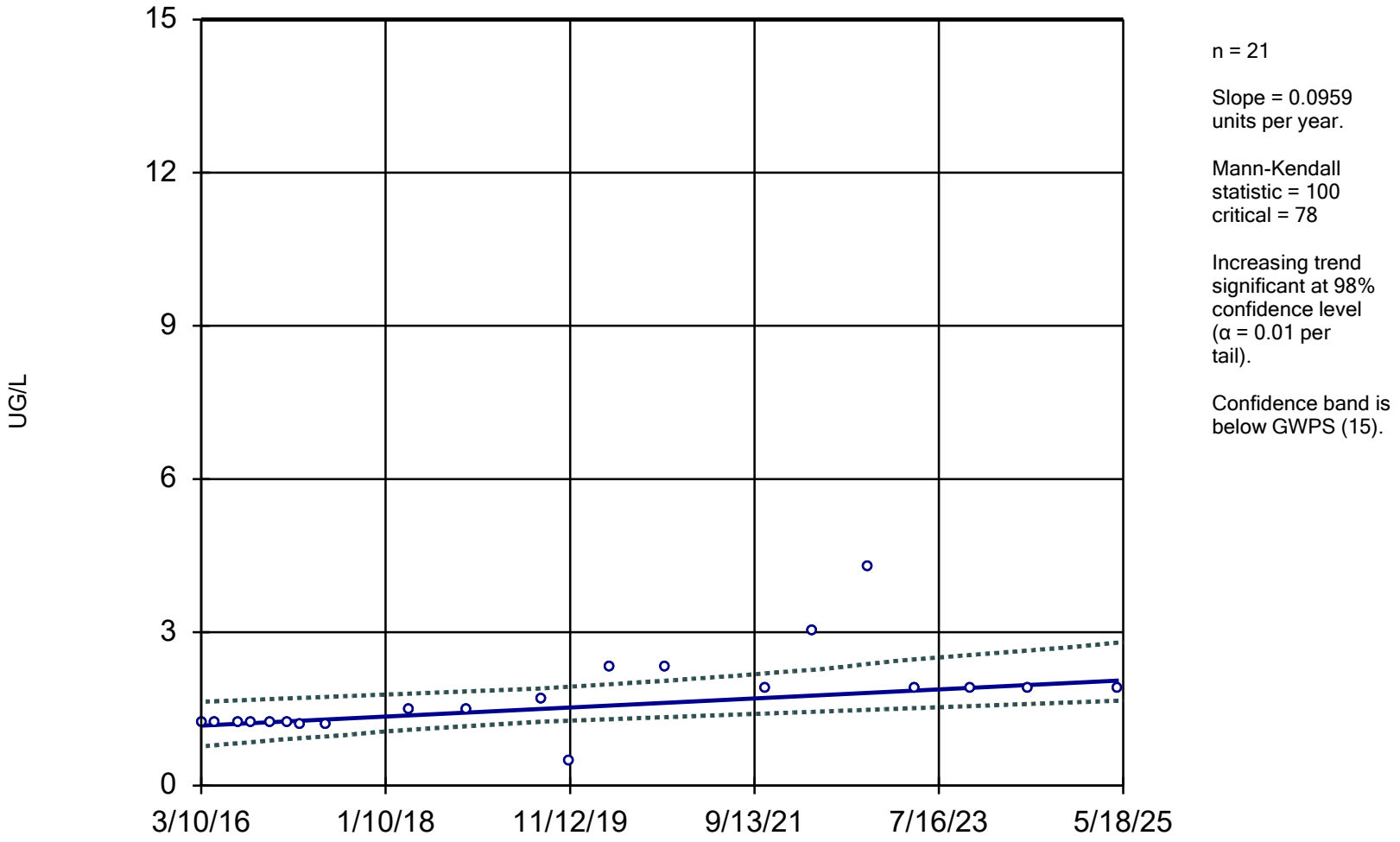
Constituent: COBALT, TOTAL Analysis Run 1/5/2026 2:59 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-1



n = 21

Slope = 0.0959 units per year.

Mann-Kendall statistic = 100
critical = 78

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (15).

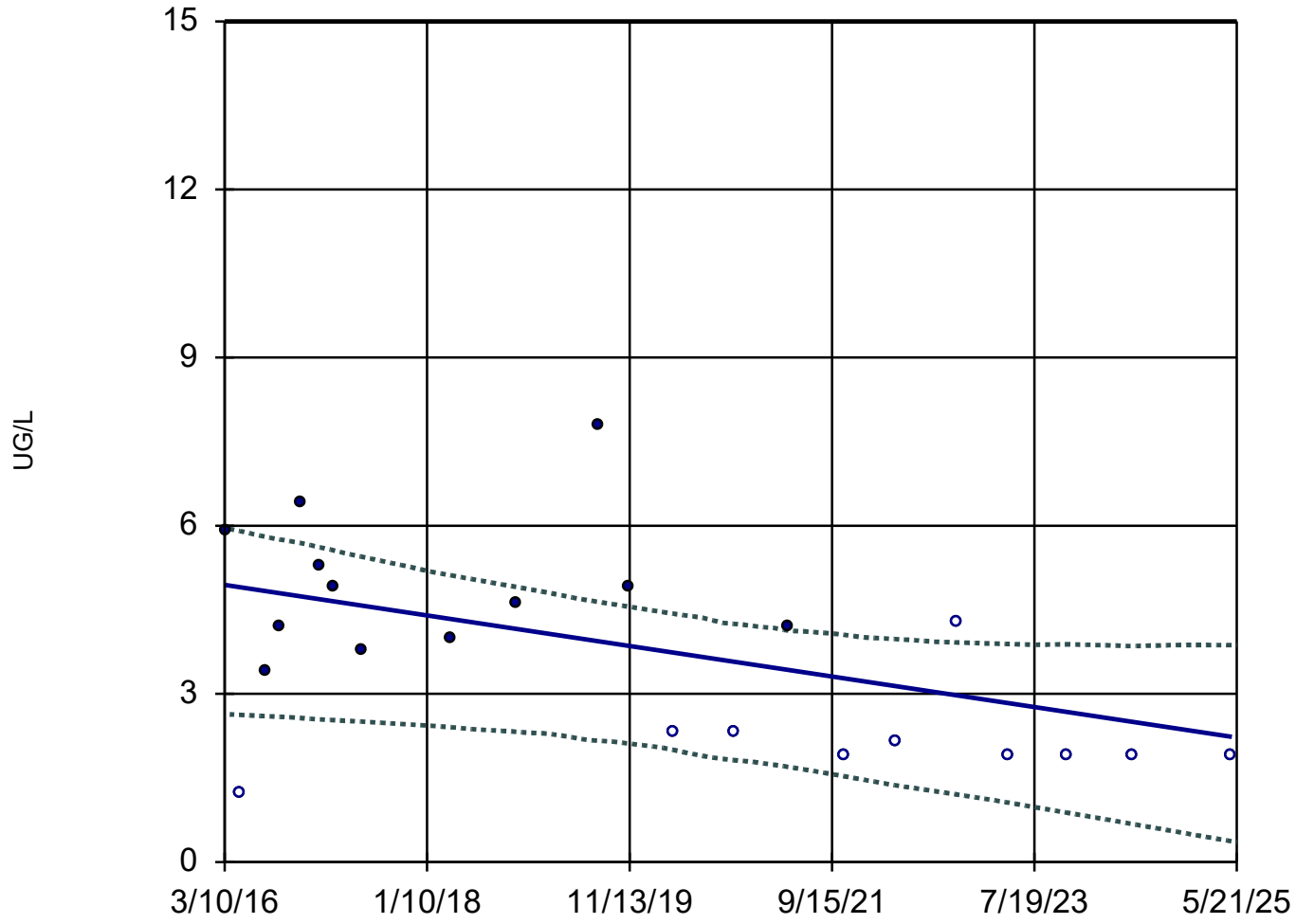
Constituent: LEAD, TOTAL Analysis Run 1/5/2026 2:59 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-3



n = 22

Slope = -0.296 units per year.

Mann-Kendall statistic = -90 critical = -84

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (15).

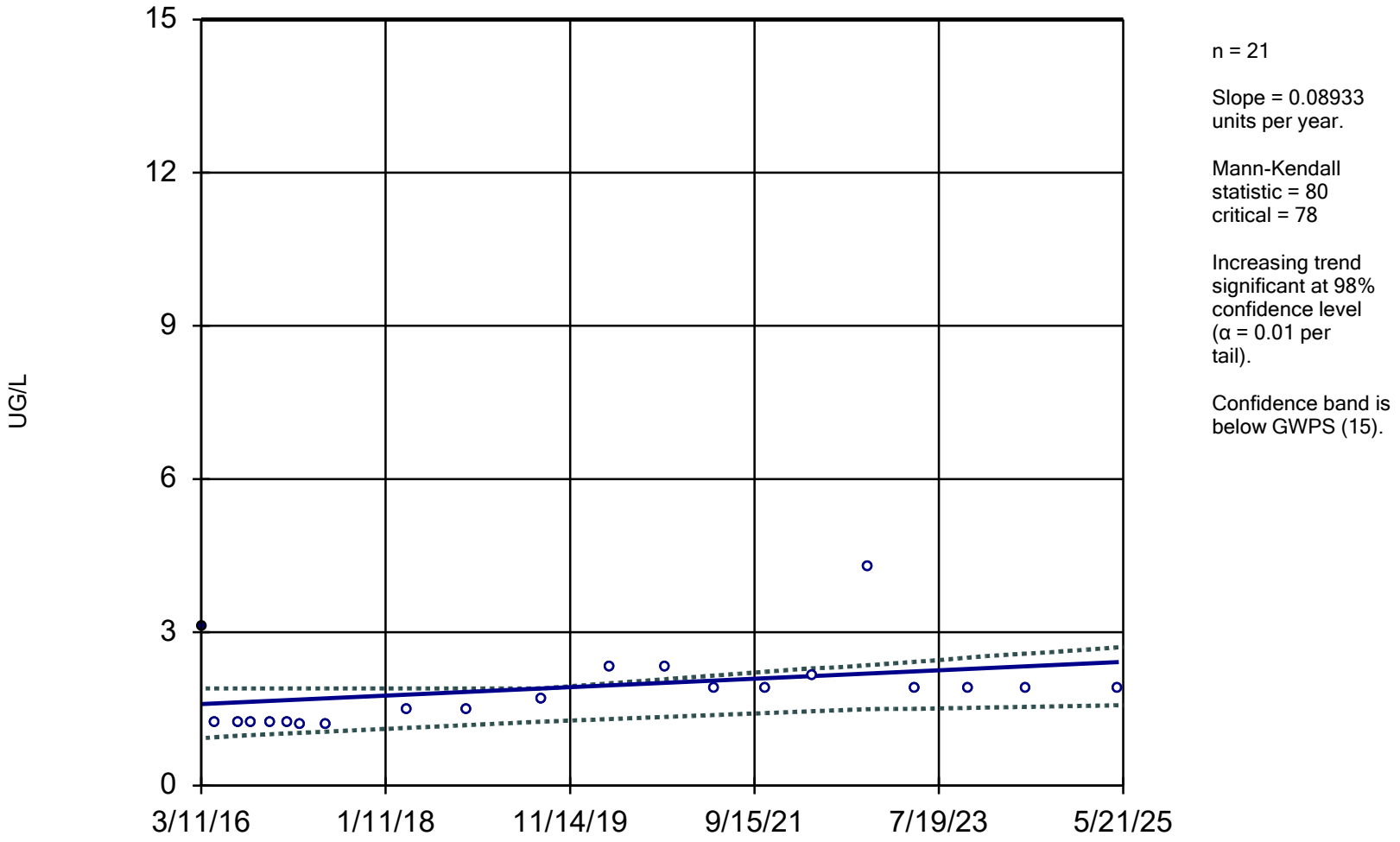
Constituent: LEAD, TOTAL Analysis Run 1/5/2026 2:59 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-4



n = 21

Slope = 0.08933 units per year.

Mann-Kendall statistic = 80
critical = 78

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (15).

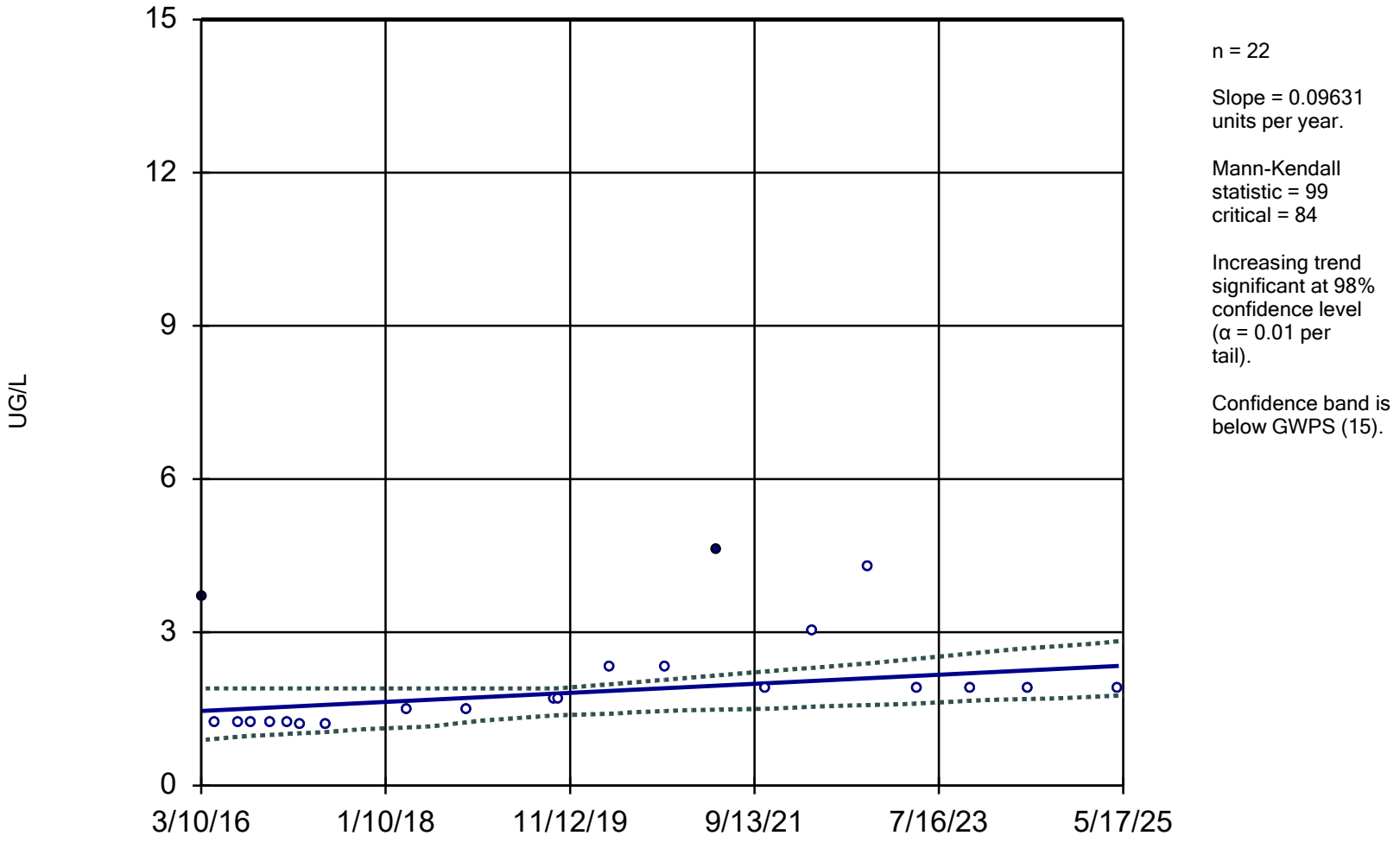
Constituent: LEAD, TOTAL Analysis Run 1/5/2026 2:59 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-7



n = 22

Slope = 0.09631 units per year.

Mann-Kendall statistic = 99
critical = 84

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (15).

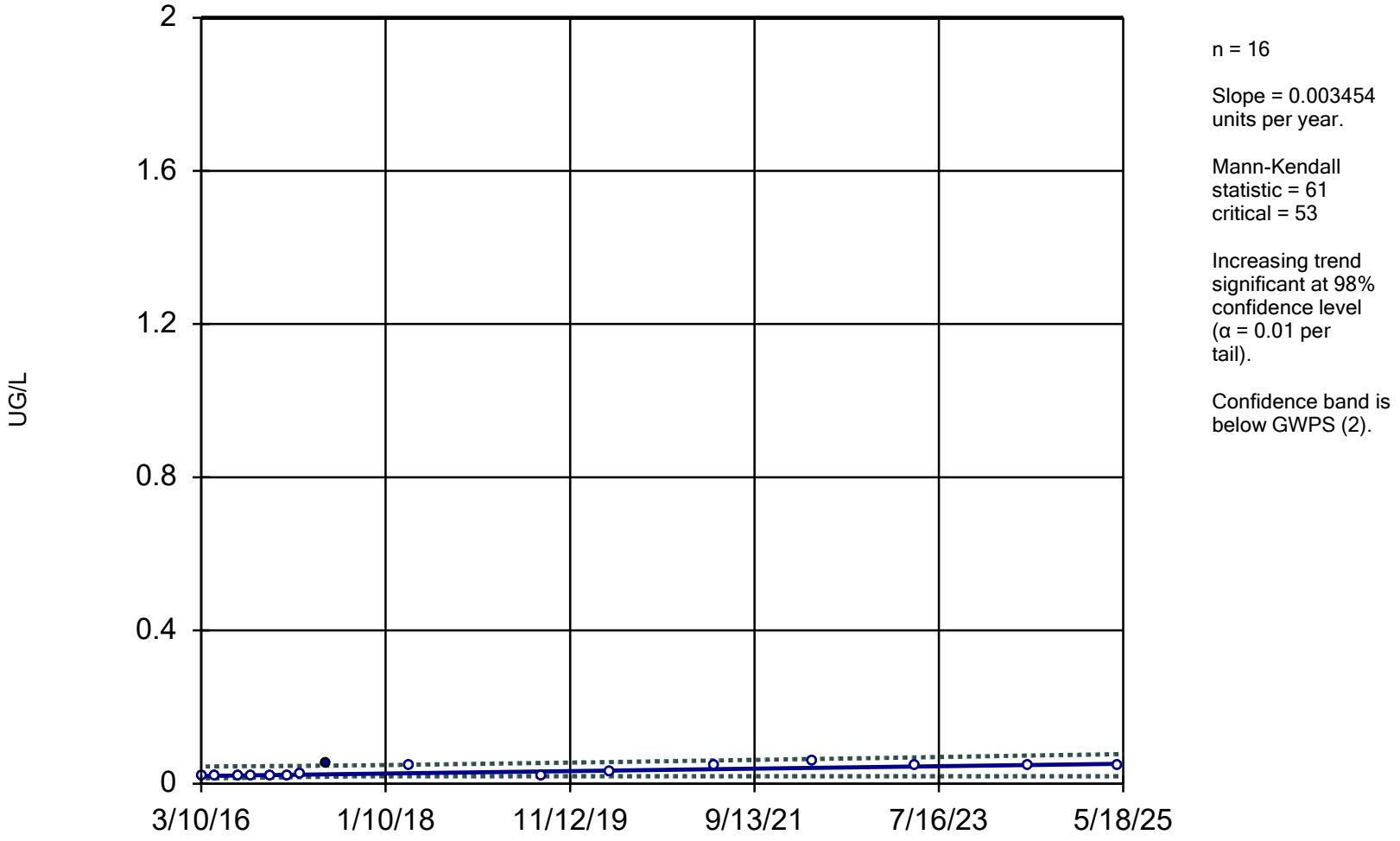
Constituent: LEAD, TOTAL Analysis Run 1/5/2026 2:59 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-1



n = 16

Slope = 0.003454 units per year.

Mann-Kendall statistic = 61
critical = 53

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2).

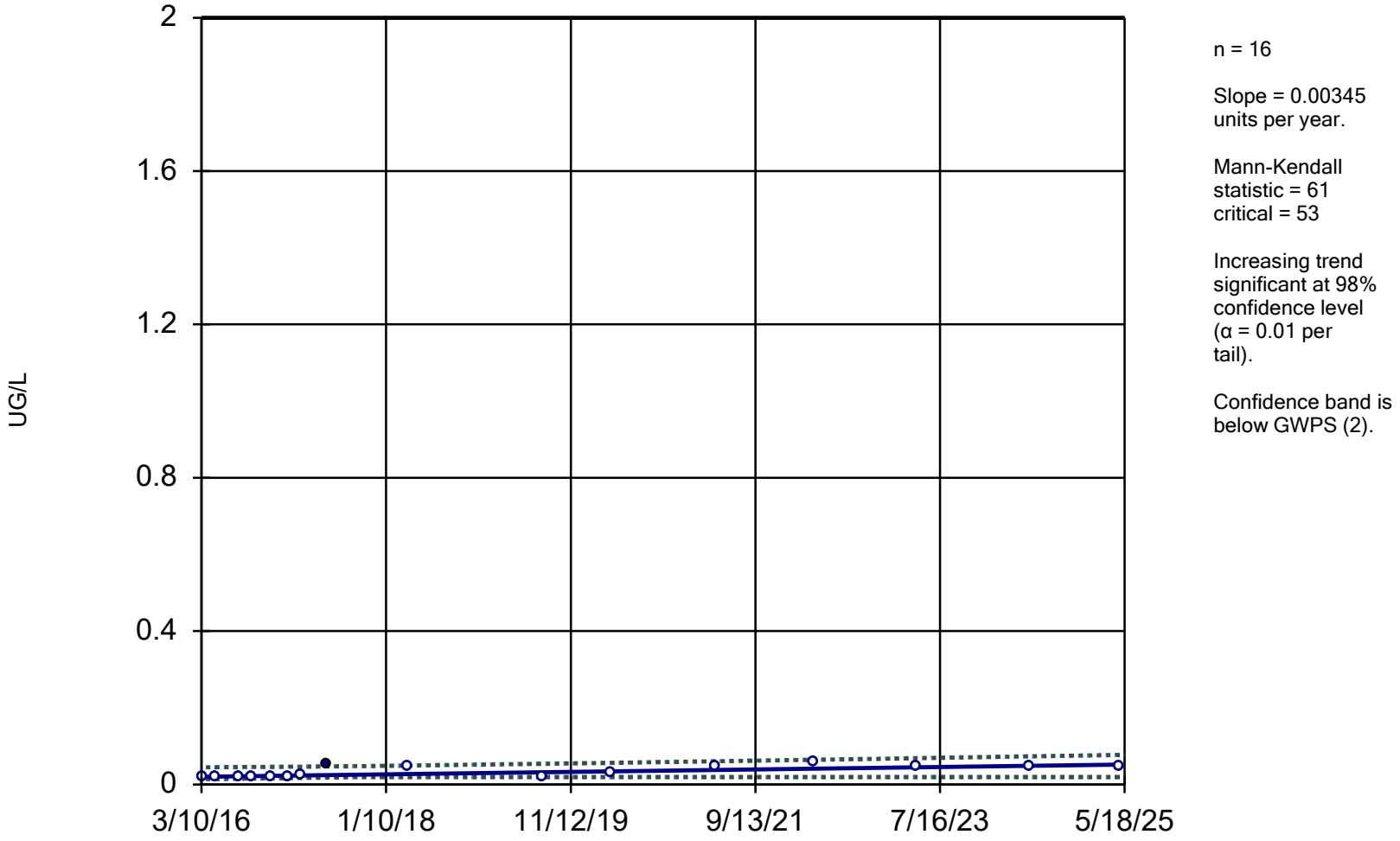
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-2



n = 16

Slope = 0.00345 units per year.

Mann-Kendall statistic = 61
critical = 53

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2).

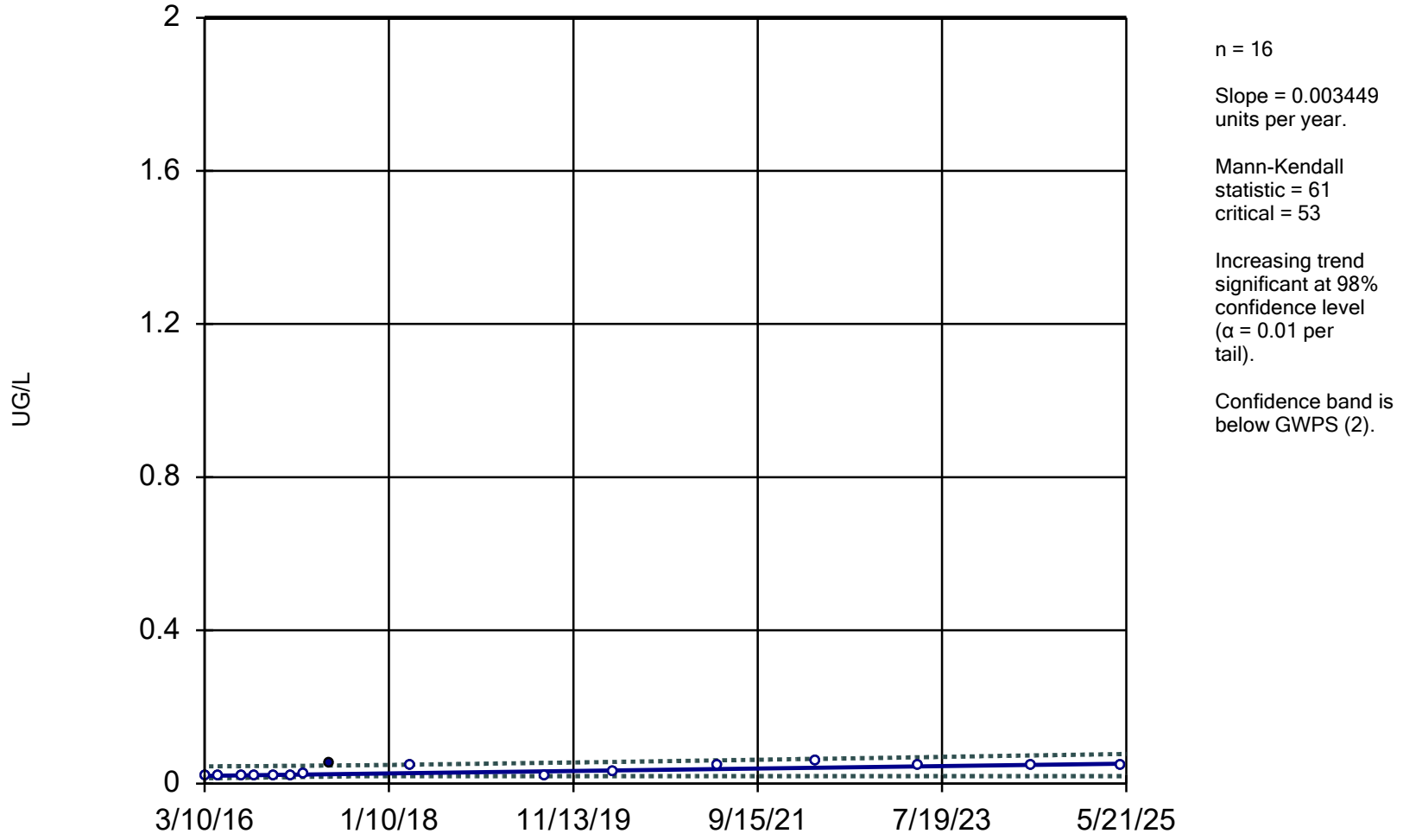
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-3



n = 16

Slope = 0.003449 units per year.

Mann-Kendall statistic = 61
critical = 53

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2).

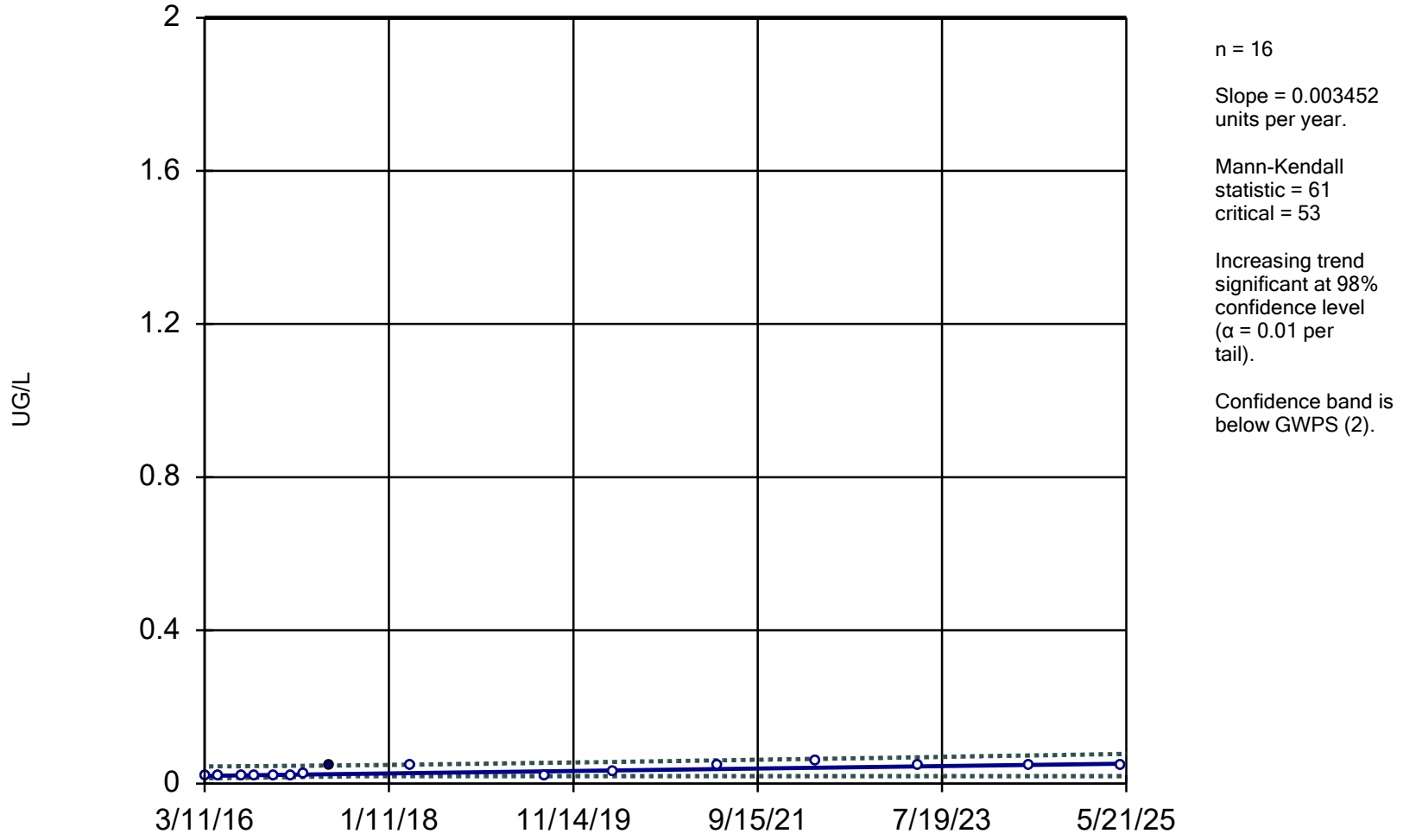
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-4



n = 16

Slope = 0.003452 units per year.

Mann-Kendall statistic = 61
critical = 53

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2).

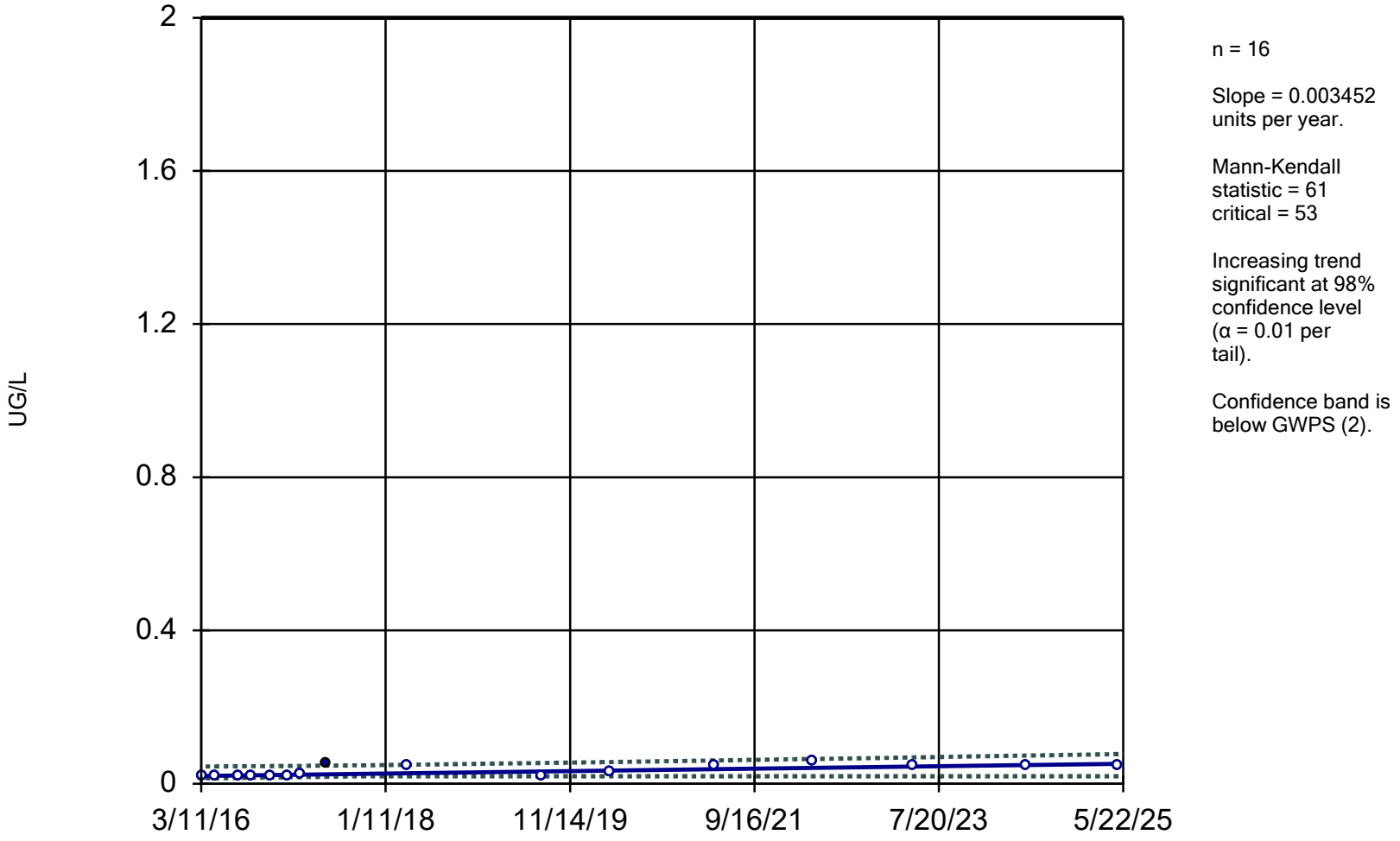
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-5



n = 16

Slope = 0.003452 units per year.

Mann-Kendall statistic = 61
critical = 53

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2).

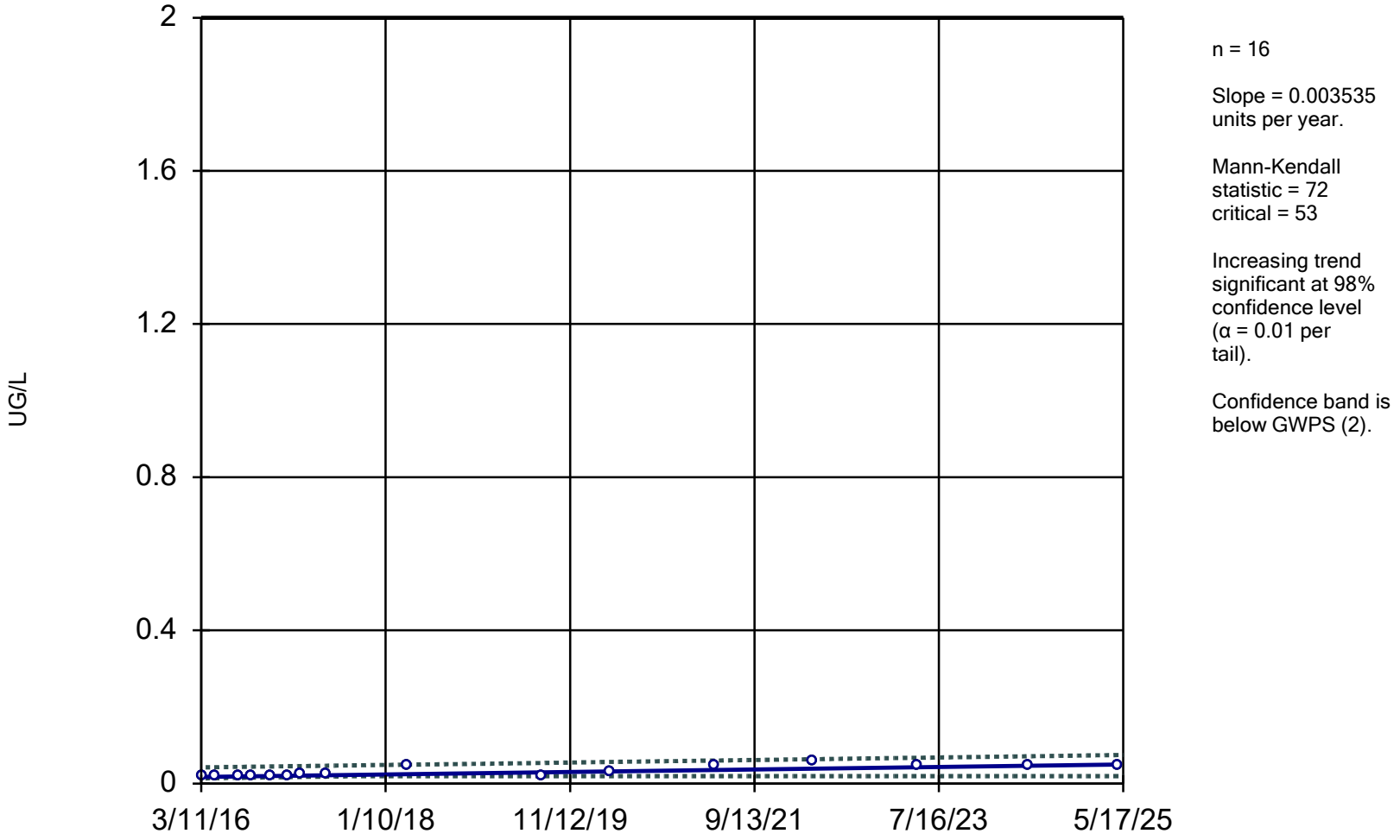
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-6



n = 16

Slope = 0.003535 units per year.

Mann-Kendall statistic = 72
critical = 53

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2).

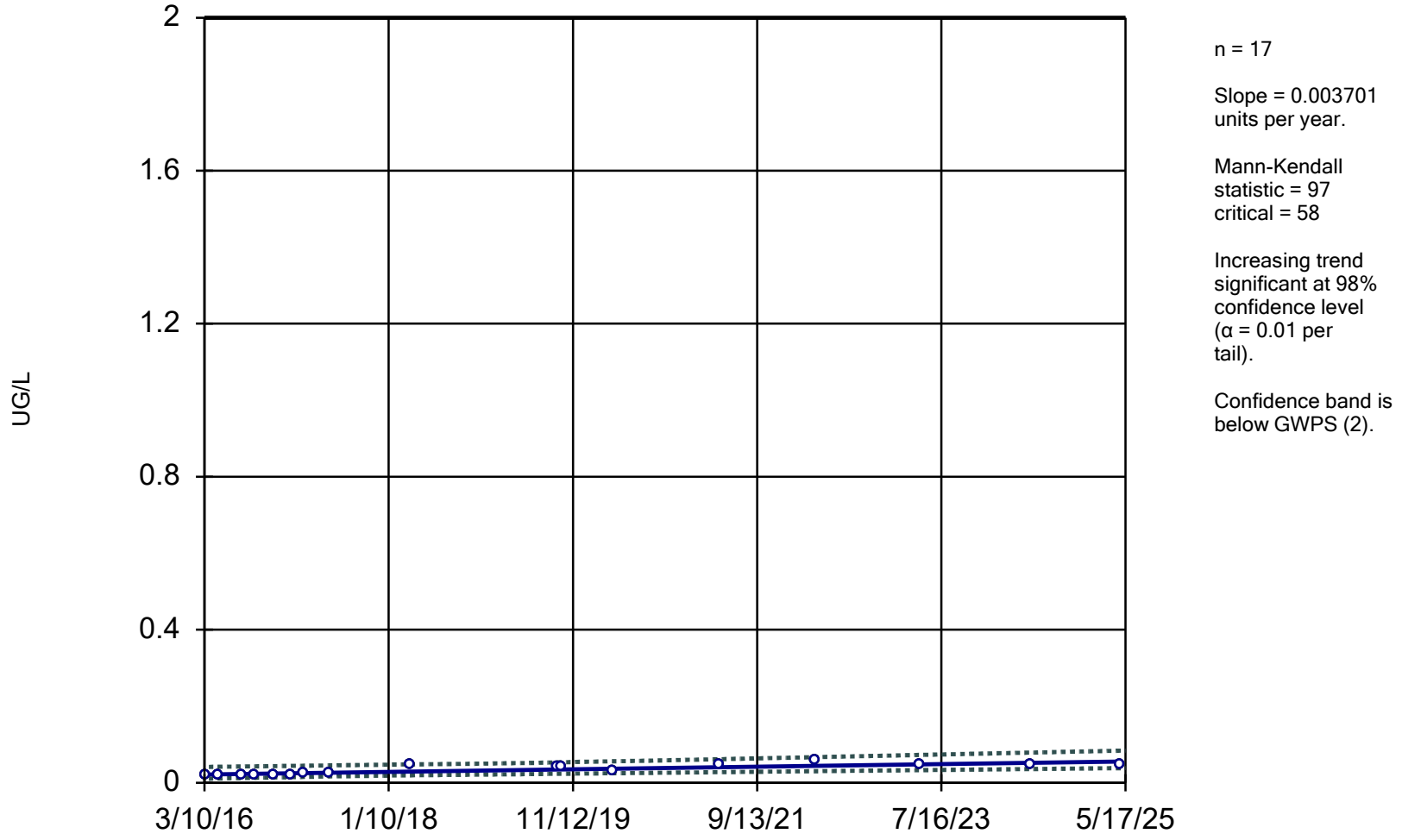
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-7



n = 17

Slope = 0.003701 units per year.

Mann-Kendall statistic = 97
critical = 58

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2).

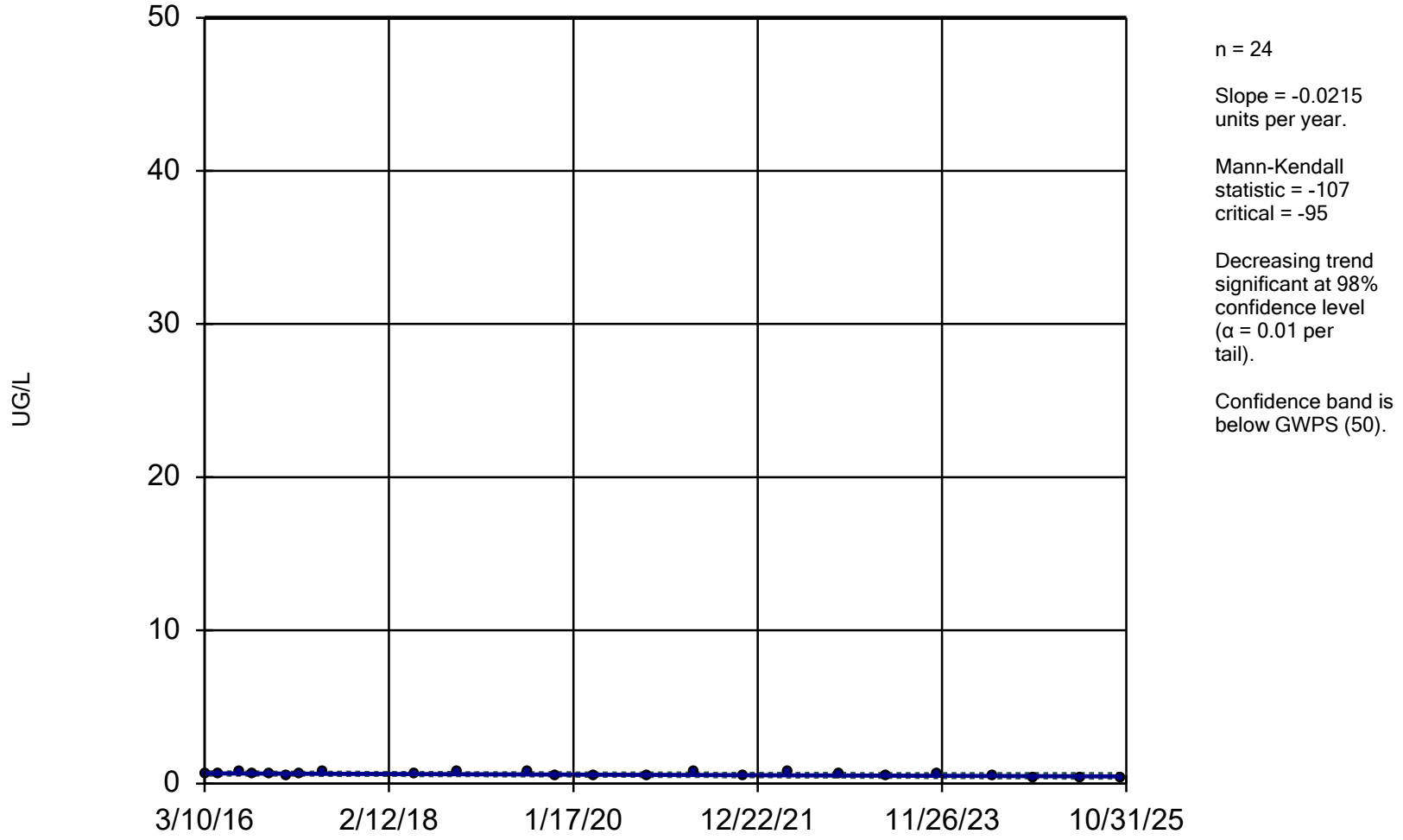
Constituent: MERCURY, TOTAL Analysis Run 1/5/2026 3:00 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-MW-3



n = 24

Slope = -0.0215 units per year.

Mann-Kendall statistic = -107 critical = -95

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (50).

Constituent: SELENIUM, TOTAL Analysis Run 1/5/2026 3:00 PM View: SSL All Data

Rush Island E.C. Client: Ameren Data: RIEC DATA

Trend Test

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 1/5/2026, 3:01 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
ANTIMONY, TOTAL (UG/L)	R-MW-3	-0.00...	-60	-101	No	25	60	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	**R-MW-4**	**0.003791**	**167**	**95**	**Yes**	**24**	**87.5**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	**R-MW-5**	**0.004233**	**195**	**95**	**Yes**	**24**	**91.67**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	R-MW-6	0.001414	41	101	No	25	72	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	**R-MW-7**	**0.003767**	**120**	**101**	**Yes**	**25**	**88**	**n/a**	**n/a**	**0.02**	**NP**
ARSENIC, TOTAL (UG/L)	R-MW-2	-1.796	-17	-101	No	25	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-MW-6	0.008128	21	78	No	21	14.29	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-MW-2	-0.1073	-17	-95	No	24	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-MW-6	0	0	95	No	24	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-MW-7	-0.5481	-8	-101	No	25	0	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	**R-MW-1**	**-0.00...**	**-66**	**-63**	**Yes**	**18**	**100**	**n/a**	**n/a**	**0.02**	**NP**
BERYLLIUM, TOTAL (UG/L)	R-MW-2	-0.00...	-52	-63	No	18	100	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	R-MW-3	0	-12	-58	No	17	88.24	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	R-MW-4	-0.00...	-27	-63	No	18	94.44	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	R-MW-5	-0.00...	-52	-63	No	18	100	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	R-MW-6	-0.00...	-46	-63	No	18	94.44	n/a	n/a	0.02	NP
BERYLLIUM, TOTAL (UG/L)	R-MW-7	0	-13	-68	No	19	84.21	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-MW-1	0.001969	44	68	No	19	78.95	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-MW-2	0.02308	57	73	No	20	15	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	**R-MW-3**	**0.02864**	**88**	**73**	**Yes**	**20**	**40**	**n/a**	**n/a**	**0.02**	**NP**
CADMIUM, TOTAL (UG/L)	R-MW-4	0.001301	41	73	No	20	80	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-MW-5	0.001431	73	73	No	20	100	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-MW-6	0.00131	65	68	No	19	100	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-MW-7	0.0014	56	78	No	21	80.95	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-1	0.005601	11	84	No	22	50	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-2	-0.03598	-58	-68	No	19	10.53	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-3	-0.05882	-56	-68	No	19	10.53	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-4	-0.02481	-44	-78	No	21	42.86	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-5	-0.01267	-45	-78	No	21	23.81	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-6	0.01859	25	73	No	20	50	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-MW-7	-0.00...	-20	-89	No	23	52.17	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	**R-MW-1**	**0.02773**	**70**	**63**	**Yes**	**18**	**88.89**	**n/a**	**n/a**	**0.02**	**NP**
COBALT, TOTAL (UG/L)	**R-MW-2**	**0.02668**	**100**	**63**	**Yes**	**18**	**100**	**n/a**	**n/a**	**0.02**	**NP**
COBALT, TOTAL (UG/L)	**R-MW-3**	**0.02961**	**106**	**63**	**Yes**	**18**	**94.44**	**n/a**	**n/a**	**0.02**	**NP**
COBALT, TOTAL (UG/L)	R-MW-4	0.02422	56	63	No	18	83.33	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	R-MW-5	0.02219	47	63	No	18	88.89	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	**R-MW-6**	**0.02718**	**72**	**58**	**Yes**	**17**	**94.12**	**n/a**	**n/a**	**0.02**	**NP**
COBALT, TOTAL (UG/L)	**R-MW-7**	**0.03051**	**87**	**68**	**Yes**	**19**	**78.95**	**n/a**	**n/a**	**0.02**	**NP**
FLUORIDE, TOTAL (MG/L)	R-MW-2	-0.01998	-64	-125	No	29	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-MW-5	0	-19	-112	No	27	18.52	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	**R-MW-1**	**0.0959**	**100**	**78**	**Yes**	**21**	**100**	**n/a**	**n/a**	**0.02**	**NP**
LEAD, TOTAL (UG/L)	R-MW-2	-0.1155	-11	-84	No	22	9.091	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	**R-MW-3**	**-0.296**	**-90**	**-84**	**Yes**	**22**	**45.45**	**n/a**	**n/a**	**0.02**	**NP**
LEAD, TOTAL (UG/L)	**R-MW-4**	**0.08933**	**80**	**78**	**Yes**	**21**	**95.24**	**n/a**	**n/a**	**0.02**	**NP**
LEAD, TOTAL (UG/L)	R-MW-5	0.08933	75	78	No	21	85.71	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-MW-6	0.08932	61	78	No	21	80.95	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	**R-MW-7**	**0.09631**	**99**	**84**	**Yes**	**22**	**90.91**	**n/a**	**n/a**	**0.02**	**NP**
LITHIUM, TOTAL (UG/L)	R-MW-1	0.06016	49	101	No	25	84	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-MW-2	0.1618	87	101	No	25	72	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-MW-5	0.1767	49	101	No	25	40	n/a	n/a	0.02	NP

Trend Test

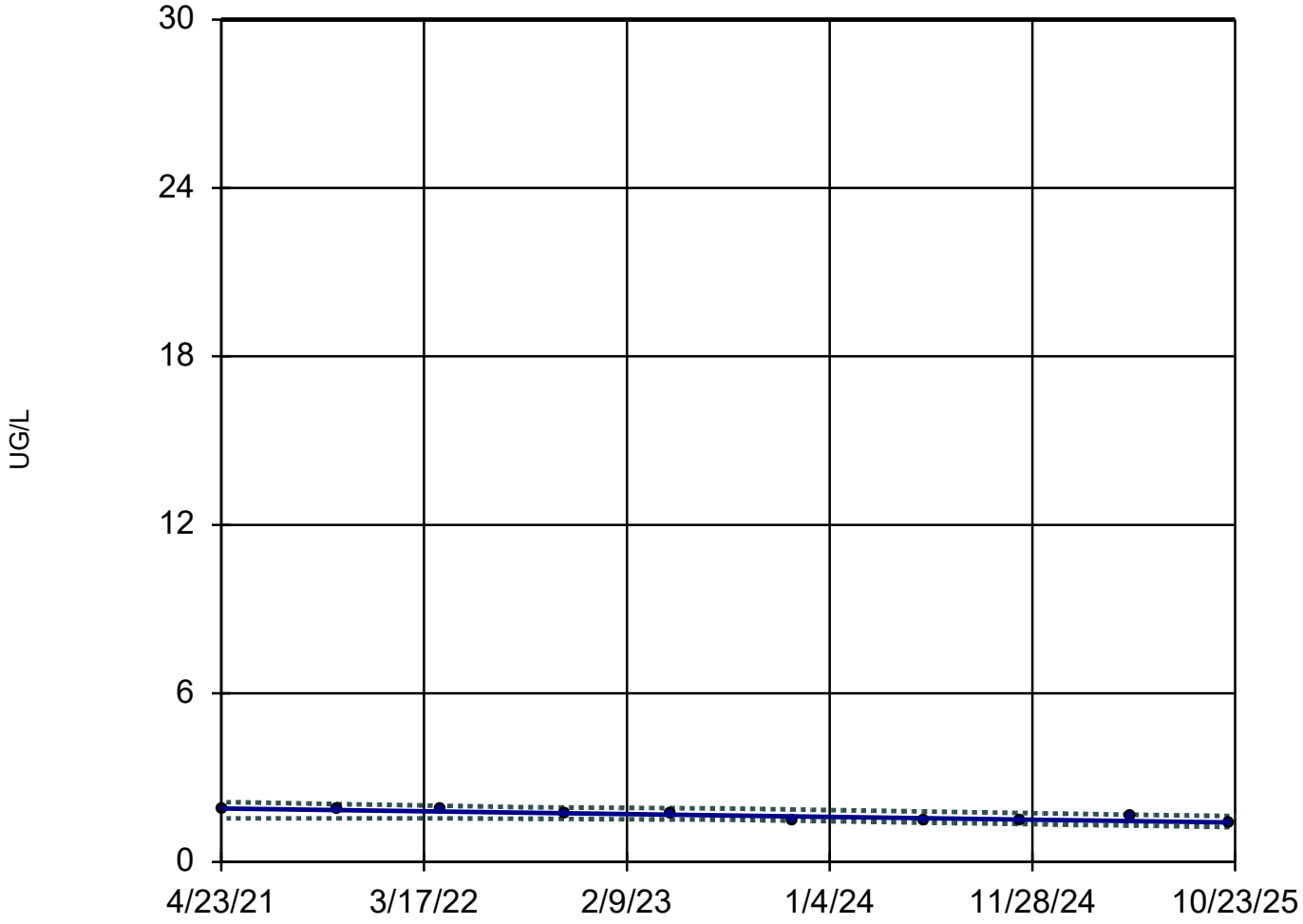
Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 1/5/2026, 3:01 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
LITHIUM, TOTAL (UG/L)	R-MW-6	0.262	80	95	No	24	58.33	n/a	n/a	0.02	NP
MERCURY, TOTAL (UG/L)	**R-MW-1**	**0.003454**	**61**	**53**	**Yes**	**16**	**93.75**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-2**	**0.00345**	**61**	**53**	**Yes**	**16**	**93.75**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-3**	**0.003449**	**61**	**53**	**Yes**	**16**	**93.75**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-4**	**0.003452**	**61**	**53**	**Yes**	**16**	**93.75**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-5**	**0.003452**	**61**	**53**	**Yes**	**16**	**93.75**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-6**	**0.003535**	**72**	**53**	**Yes**	**16**	**100**	**n/a**	**n/a**	**0.02**	**NP**
MERCURY, TOTAL (UG/L)	**R-MW-7**	**0.003701**	**97**	**58**	**Yes**	**17**	**100**	**n/a**	**n/a**	**0.02**	**NP**
MOLYBDENUM, TOTAL (UG/L)	R-MW-1	5.046	88	101	No	25	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-MW-3	-17.6	-70	-101	No	25	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-MW-5	0	12	101	No	25	84	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-MW-6	0.03071	21	101	No	25	36	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-1	0.02777	51	101	No	25	96	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-3	0.01361	34	95	No	24	95.83	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-4	0.02321	73	101	No	25	80	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-5	0.01858	58	101	No	25	80	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-6	0.004056	10	101	No	25	80	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-MW-7	0.01715	75	106	No	26	88.46	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-2	-0.05452	-47	-101	No	25	0	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	**R-MW-3**	**-0.0215**	**-107**	**-95**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.02**	**NP**
SELENIUM, TOTAL (UG/L)	R-MW-4	0	-42	-101	No	25	72	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-5	0	44	101	No	25	100	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-6	0	-4	-95	No	24	12.5	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-7	0	16	106	No	26	84.62	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-1	-0.00...	-37	-58	No	17	94.12	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-2	-0.00...	-20	-63	No	18	100	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-3	-0.00...	-21	-58	No	17	100	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-4	-0.00154	-21	-58	No	17	100	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-5	-0.00...	-21	-58	No	17	100	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-6	-0.00...	-37	-58	No	17	94.12	n/a	n/a	0.02	NP
THALLIUM, TOTAL (UG/L)	R-MW-7	-0.00...	-30	-63	No	18	94.44	n/a	n/a	0.02	NP

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Sen's Slope and 95% Confidence Band

R-MW-5



n = 10

Slope = -0.1127 units per year.

Mann-Kendall statistic = -32
critical = -27

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (30).

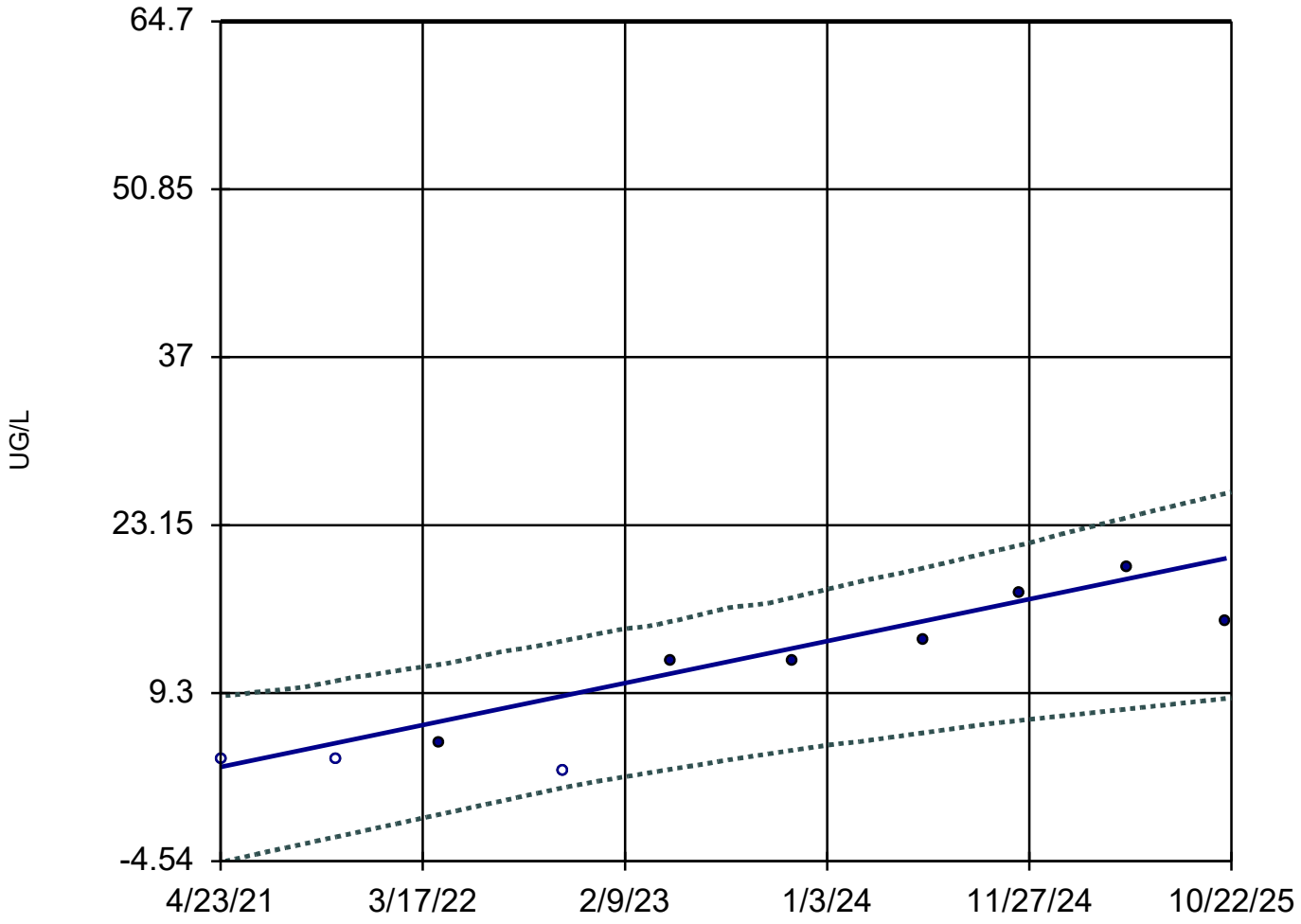
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.1.03a Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-MW-3



n = 10

Slope = 3.842 units per year.

Mann-Kendall statistic = 34
critical = 27

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (64.7).

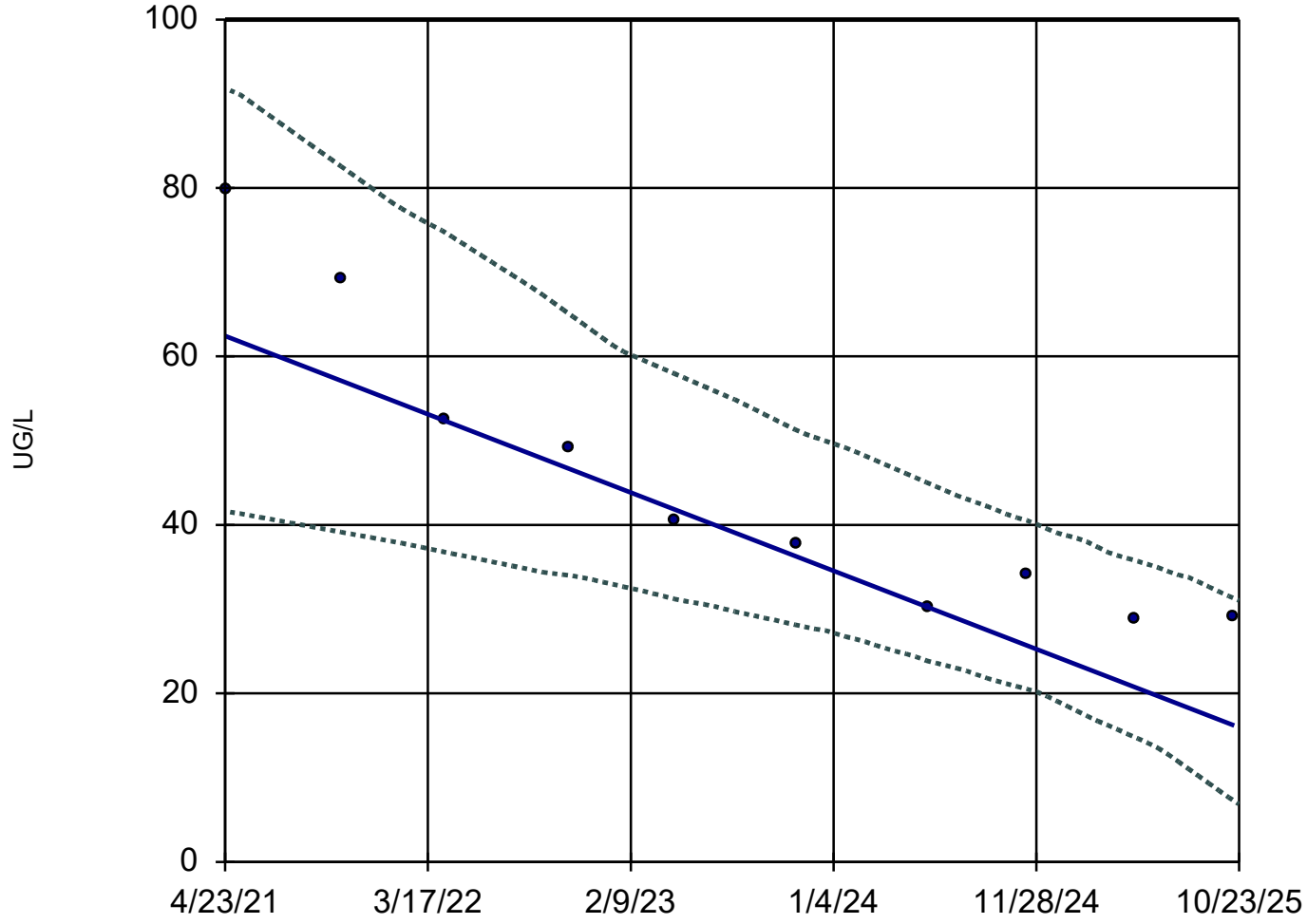
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Sen's Slope and 95% Confidence Band

R-MW-4



n = 10

Slope = -10.32 units per year.

Mann-Kendall statistic = -41
critical = -27

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (100).

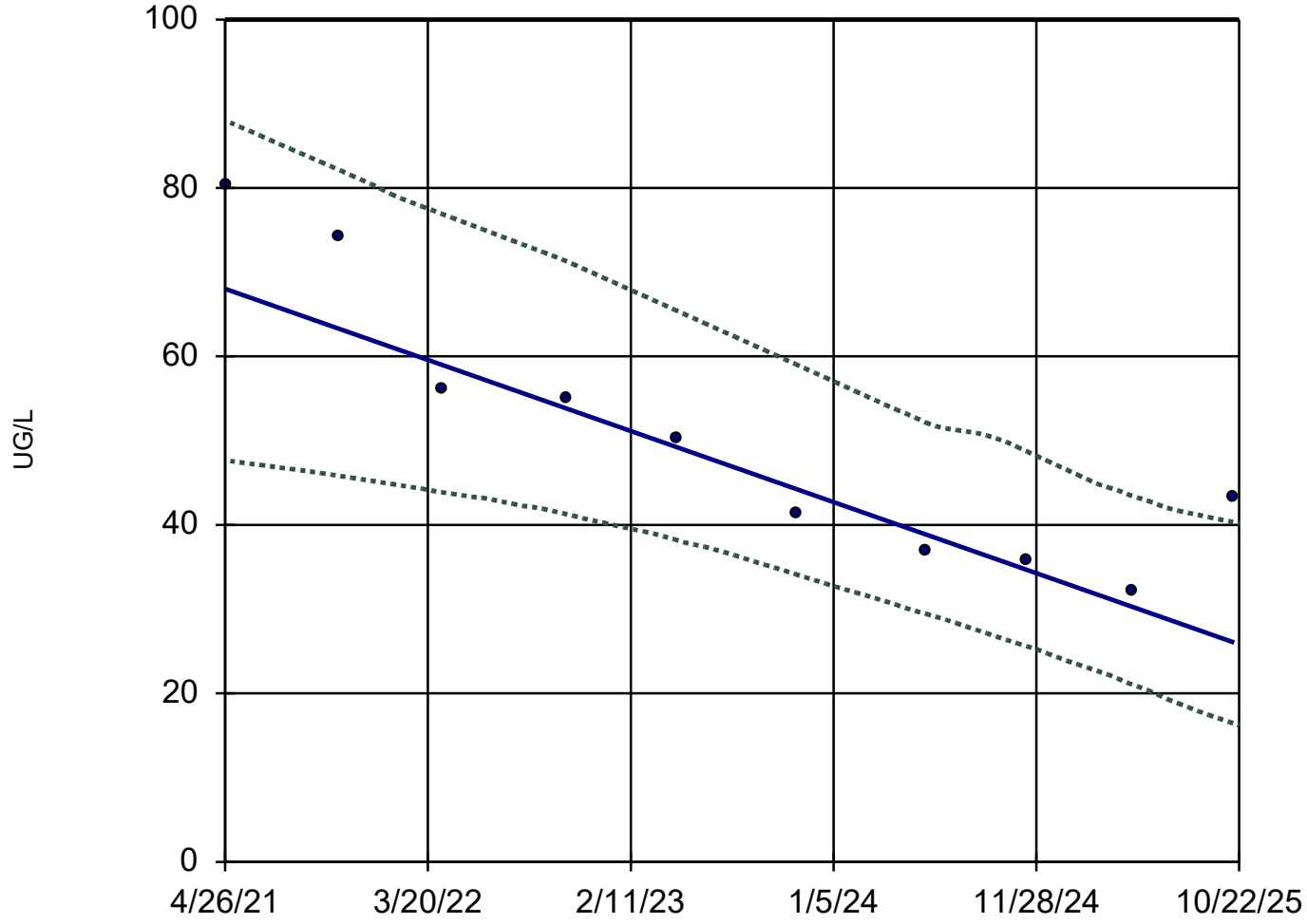
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Sen's Slope and 95% Confidence Band

R-MW-7



n = 10

Slope = -9.395 units per year.

Mann-Kendall statistic = -37
critical = -27

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (100).

Constituent: MOLYBDENUM, TOTAL Analysis Run 1/5/2026 2:45 PM View: SSL Post-Closure

Rush Island E.C. Client: Ameren Data: RIEC DATA

Trend Test

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 1/5/2026, 2:45 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
ANTIMONY, TOTAL (UG/L)	R-MW-1	-0.01993	-22	-27	No	10	20	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	R-MW-2	-0.3793	-19	-27	No	10	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-MW-1	0.1708	10	27	No	10	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-MW-3	0.1594	3	27	No	10	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-MW-4	-1.212	-18	-27	No	10	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	**R-MW-5**	**-0.1127**	**-32**	**-27**	**Yes**	**10**	**0**	**n/a**	**n/a**	**0.02**	**NP**
ARSENIC, TOTAL (UG/L)	R-MW-7	-1.978	-16	-27	No	10	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-MW-1	-0.7849	-1	-27	No	10	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-MW-3	7.892	27	27	No	10	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-MW-4	13.22	21	27	No	10	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-MW-5	6.523	16	27	No	10	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-MW-1	0	8	48	No	15	46.67	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-MW-3	0	0	27	No	10	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-MW-4	-0.06916	-28	-31	No	11	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-MW-6	-0.01535	-10	-39	No	13	15.38	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-MW-7	0	3	31	No	11	45.45	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	**R-MW-3**	**3.842**	**34**	**27**	**Yes**	**10**	**30**	**n/a**	**n/a**	**0.02**	**NP**
LITHIUM, TOTAL (UG/L)	R-MW-4	-1.239	-25	-27	No	10	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-MW-7	-0.1765	-3	-27	No	10	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-MW-2	-12.83	-9	-27	No	10	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	**R-MW-4**	**-10.32**	**-41**	**-27**	**Yes**	**10**	**0**	**n/a**	**n/a**	**0.02**	**NP**
MOLYBDENUM, TOTAL (UG/L)	**R-MW-7**	**-9.395**	**-37**	**-27**	**Yes**	**10**	**0**	**n/a**	**n/a**	**0.02**	**NP**
RADIUM [226 + 228] (PCI/L)	R-MW-2	-0.1332	-15	-27	No	10	100	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-MW-1	0	13	27	No	10	90	n/a	n/a	0.02	NP

Appendix E

November 2024 Corrective Action Statistical Evaluation

Memorandum

March 12, 2025

To:	Lisa Meyer – Ameren Missouri	**Project Number:**	23008-24
CC:	Ameren Missouri - Susan Knowles, Craig Giesmann, Bill Kutosky, Austin Nieman		
From:	Rocksmith Geoengineering - Mark Haddock, P.E., Jeff Ingram, R.G., Grant Morey, Amanda Derhake, PhD, P.E.	**Email:**	jeff.ingram@rocksmithgeo.com
RE:	**Corrective Action Statistical Evaluation, RCPA Surface Impoundment, Rush Island Energy Center, Jefferson County, Missouri**		

1.0 INTRODUCTION

This Technical Memorandum provides the results of the Corrective Action Monitoring statistical analysis from the November 2024 sampling event for the RCPA Surface Impoundment at the Rush Island Energy Center (RIEC) located in Jefferson County, Missouri. As outlined in the remedy selection report for the RCPA, Corrective Action at the RCPA consists of two phases, as follows:

1) Source control, stabilization, and containment of Coal Combustion Residuals (CCR) by installation of a low-permeability geomembrane cap.
2) Once source control is achieved, monitor the natural attenuation (MNA) of groundwater concentrations to address limited and localized CCR-related impacts. Ongoing monitoring and modeling evaluations will document that concentrations are decreasing as modelled. MNA occurs due to naturally occurring processes within the aquifer.

Phase 1 of Corrective Action commenced in August 2019, and was substantially completed on December 15, 2020, with the installation of a low permeability cover system. In addition to MNA (Phase 2 of Corrective Action) as a corrective measure, Ameren also initiated groundwater extraction, treatment, and re-injection using ex-situ treatment technologies with chemical precipitation and selective ion exchange as a supplemental corrective measure. This treatment system became fully operational in February 2022 and began achieving target flow rates in January 2023. In May 2024, Haley & Aldrich produced a Supplemental Remedy Selection Report for the RIEC, documenting that the corrective measures are effectively contributing to constituent mass reductions in groundwater near the RCPA. The corrective measures are ongoing.

The initial Corrective Action sampling event was completed in April 2020, and a total of 11 sampling events have been completed for the Corrective Action Program to date at the RIEC. This analysis uses results from data collected since the beginning of Corrective Action monitoring (April 2020) are analyzed and used to determine constituents exceeding groundwater protection standards (GWPSs). Data prior to this time were collected during active conditions of the RCPA, prior to the cessation of CCR disposal in the RCPA, and are not representative of groundwater conditions since the initiation of closure. Included in this memorandum is a summary of constituents

that are currently in exceedance of the GWPSs, a list of site-specific Groundwater Protection Standards (**Table 1**), and the Sanitas Technologies™ (Sanitas) statistical software output for each of the Appendix IV parameters (**Appendix A** and **Appendix B**).

Trend tests using the Sen's Slope/Mann Kendall method require a minimum of eight independent results, as outlined in the USEPA Unified Guidance. Therefore, trend tests were completed for the following Appendix IV constituents: antimony, arsenic, barium, cadmium, chromium, fluoride, lead, lithium, molybdenum, radium 226 + 228, and selenium.

Several constituents were reported at concentrations below the Practical Quantitation Limit (PQL) during the April 2020, 2021, 2022, 2023, and/or 2024 sampling events, including beryllium, cadmium, cobalt, mercury, and thallium. When these constituents were not detected during the initial Corrective Action sampling event, they were not re-sampled/tested during the subsequent semi-annual sampling events in each calendar year. As a result, there are fewer results available for these constituents.

2.0 STATISTICAL EVALUATION

The Appendix IV constituents were evaluated for exceedances above GWPSs using the methods and procedures outlined in the Corrective Action Groundwater Monitoring Plan (CAGMP) Statistical Analysis Plan (SAP). An outlier analysis was completed as the first step of the statistical evaluation. The outlier analysis was performed only on results collected as a part of the Corrective Action Monitoring Program. In addition to outliers noted in previous Corrective Action evaluations, the following outliers were removed prior to the calculation of confidence limits:

- Barium
    - R-P-16S at 32.9 micrograms per liter (µg/L) on 4/22/2021: result is statistically lower than other barium results at the same monitoring well. This lower result is not consistent with previous or subsequent barium results at the well and is an outlier.
- Fluoride
    - R-P-05S at non-detect (<0.12 µg/L) on 6/5/2024: result is statistically lower than other fluoride results at the same monitoring well. This lower result is not consistent with previous or subsequent fluoride results at the well and is an outlier.
    - R-P-17I at non-detect (<0.12 µg/L) on 6/6/2024: result is statistically lower than other fluoride results at the same monitoring well. This lower result is not consistent with previous or subsequent fluoride results at the well and is an outlier.
- Lithium
    - R-P-31S at non-detect (<4.6 µg/L) and non-detect (<7.7 µg/L) on 11/23/2020 and 10/28/2021: results are statistically lower than other lithium results at the same monitoring well. These lower results are not consistent with previous or subsequent lithium results at the well and are outliers.

An analysis of the outliers removed to date was completed and two statistical outliers that were previously removed were added back into the dataset prior to the calculation of confidence limits:

- Barium
    - R-P-17I at 30.1 µg/L on 11/2/2022: removed during the statistical evaluation for the June 2024 sampling event because the result was statistically higher than other barium results at the same

monitoring well. Based on subsequent sampling results, the higher result was confirmed, and the result is no longer an outlier.

- Lithium
    - R-P-30S at 47.5 µg/L on 11/8/2023: removed during the statistical evaluation for the June 2024 sampling event because the result was statistically higher than other lithium results at the same monitoring well. Based on subsequent sampling results, the higher result was confirmed, and the result is no longer an outlier.

Following the outlier analysis, the second step in the statistical analysis was to calculate confidence intervals and compare those to site-specific GWPSs (**Appendix A**). Confidence interval evaluation was supplemented with Sen's Slope/Mann Kendall Analyses on constituents that have eight independent sampling results at a given well, per the USEPA Unified Guidance (**Appendix B**). The Sen's Slope/Mann-Kendall Analysis identifies well-analyte pairs that have statistically significant trends and calculates confidence bands that vary with time. The upper confidence band, in relation to the GWPS for a given constituent, is used to determine exceedances, as outlined in the site CAGMP. As discussed previously, beryllium, cobalt, mercury, and thallium do not have the requisite quantity of results to perform Sen's Slope/Mann Kendall Analysis, so only confidence intervals were produced for those constituents.

Using these corrective action statistical methods, as of November 2024, the wells with constituents exceeding GWPSs are as follows:

- Arsenic at R-P-05S, R-P-17I[1], R-P-17S[2], R-P-19I[2], and R-P-21S[2]
- Lithium at R-P-19I and R-P-21D
- Molybdenum at R-P-17D[2], R-P-17I, R-P-19D[2], R-P-19I[2], P-P-21D, R-P-21I, and R-P-22D[2]

Molybdenum at R-P-10S is no longer an exceedance as there is a statistically significant decreasing trend, and both upper and lower confidence bands are now below the GWPS. The other arsenic, lithium, and molybdenum exceedances previously identified in the statistical evaluation of the June 2024 sampling event currently remain. Variability initial constituent concentrations after the closure of the RCPA is expected, especially at wells nearest the CCR unit, where closure grading and disturbance activities were greatest. The groundwater concentrations in many of these wells with exceedances are trending downward, as indicated. The concentrations reported in these results following closure are expected to be variable but are expected to decrease over time as stabilization occurs and supplemental corrective measures are continued or put into service, such as the groundwater treatment system.

3.0 CLOSING

Rocksmith appreciates this opportunity to provide hydrogeological and engineering support services to Ameren. If you have any questions or comments regarding the information provided, please contact the undersigned.

[1] Arsenic results at R-P-17I are trending downward in a statistically significant manner, and the upper confidence band is approaching the GWPS.

[2]These results display an overall downward trend since April 2020 that is not statistically significant at the 98% confidence level.

Sincerely,

Rocksmith Geoengineering, LLC



Jeff Ingram, R.G.
Senior Geologist, Partner



Amanda Derhake, PhD, P.E.
Principal Engineer, Senior Partner

Attachments

Tables

Table 1 – RCPA Groundwater Protection Standards

Appendices

Appendix A – Sanitas Confidence Interval Statistical Output

Appendix B – Sanitas Trending Confidence Bands Statistical Output

Tables

Table 1 - RCPA Groundwater Protection Standards
RCPA Surface Impoundment
Rush Island Energy Center

Parameter	Units	MCL or Health Based GWPS	Site GWPS	Value to Return to Detection Monitoring[6]
Antimony	µg/L	6	6	DQR
Arsenic	µg/L	10	30	30
Barium	µg/L	2000	2000	548.6
Beryllium	µg/L	4	4	DQR
Cadmium	µg/L	5	5	DQR
Chromium	µg/L	100	100	2.363
Cobalt	µg/L	6	6	DQR
Fluoride	mg/L	4	4	0.2896
Lead	µg/L	15	15	DQR
Lithium	µg/L	40	64.7	64.7
Mercury	µg/L	2	2	DQR
Molybdenum	µg/L	100	100	DQR
Radium 226 + 228	pCi/L	5	5	2.297
Selenium	µg/L	50	50	DQR
Thallium	µg/L	2	2	DQR

Notes:

1. µg/L - micrograms per liter
2. mg/L - milligrams per liter
3. pCi/L - picocuries per liter
4. MCL - Maximum Contaminant Level. MCLs from United States Environmental Protection Agency (USEPA) 2012 Edition of the Drinking Water Standards and Health Advisories. Updated January 9, 2023 at https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations.
5. Health Based Groundwater Protection Standards (GWPS) were adoped for Appendix IV parameters without an MCL (i.e. cobalt, lithium, molybdenum, and lead). Information available at https://www.epa.gov/coalash/coal-ash-rule.
6. Values were calculated using statistical methods outlined for Detection Monitoring and are used for returning to Detection Monitoring based on available data to date.
7. DQR - Double Quantification Rule. If all baseline data are less than the Practical Quantitation Limit (PQL), then the DQR will be used. More information on the DQR is provided in the Statistical Analysis Plan.
8. Site GWPS is either the MCL/Health Based GWPS or based on background levels (calculated as described in the Statistical Analysis Plan for Assessment Monitoring), whichever is higher.
9. GWPS and background values calculated using results up through April 2023 from monitoring wells MW-B1 and MW-B2.

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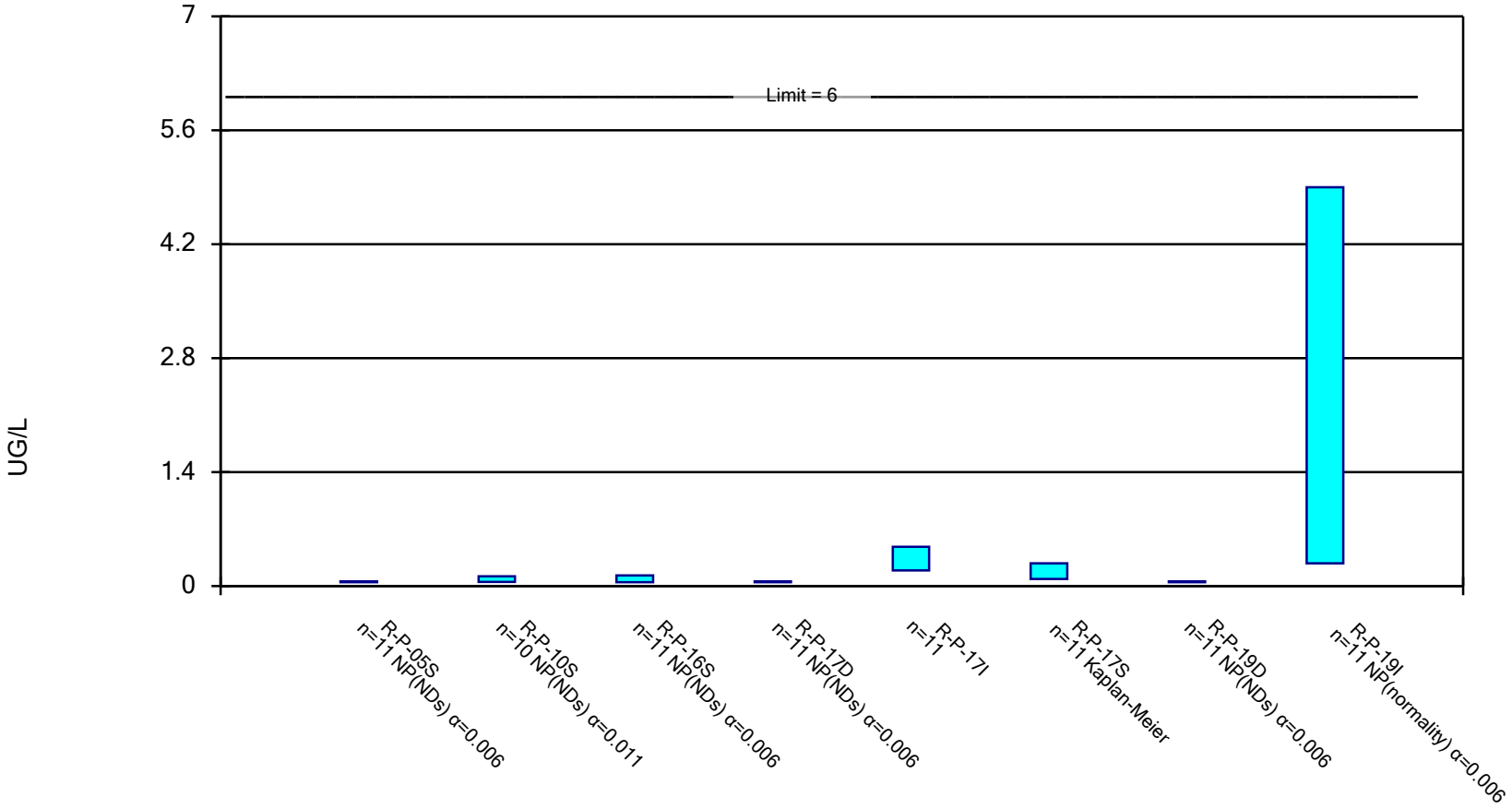
Prepared by: GTM
Checked by: JSI
Reviewed by: MNH

Appendix A
Sanitas Confidence Interval Statistical Output

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



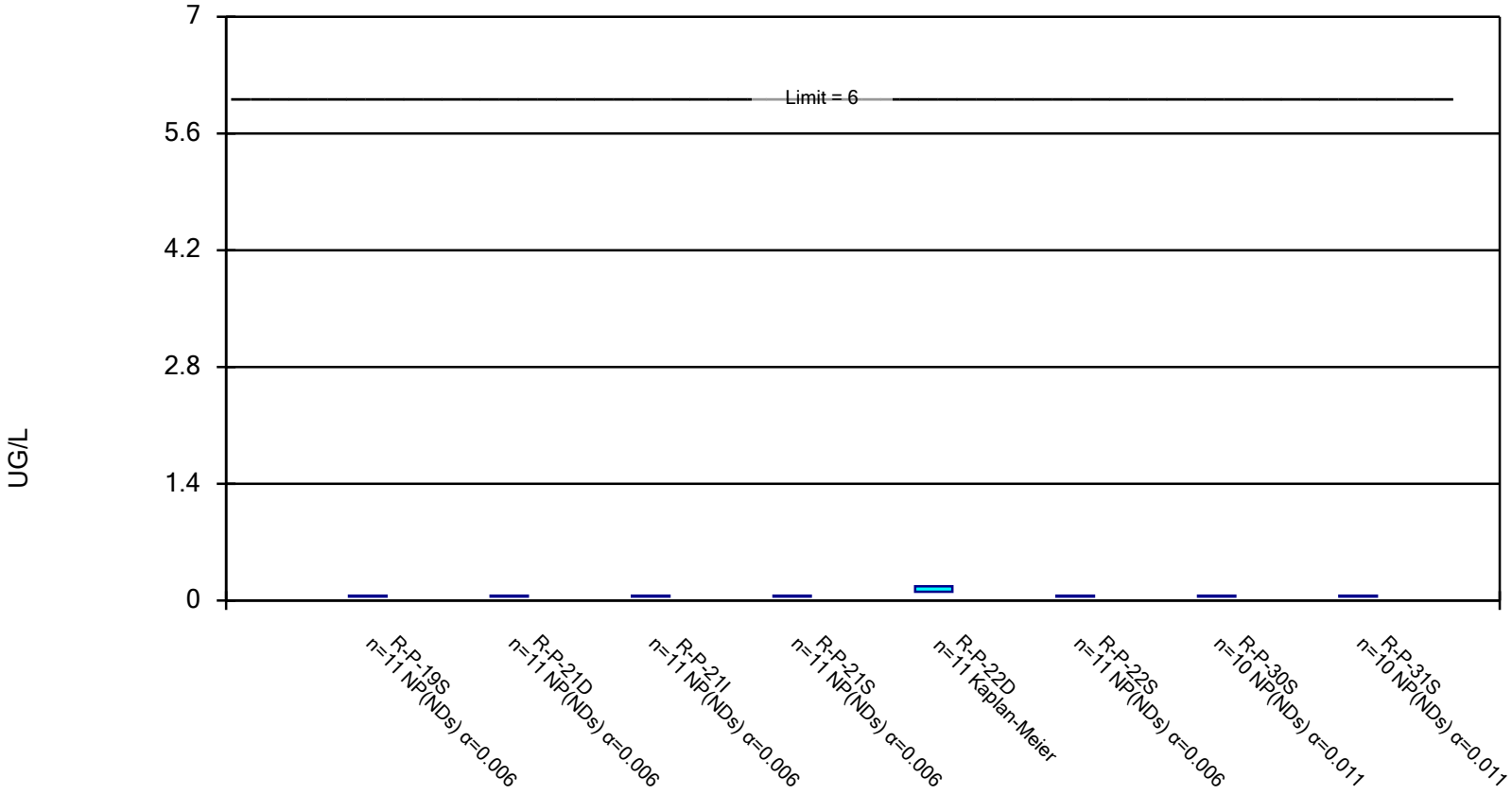
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



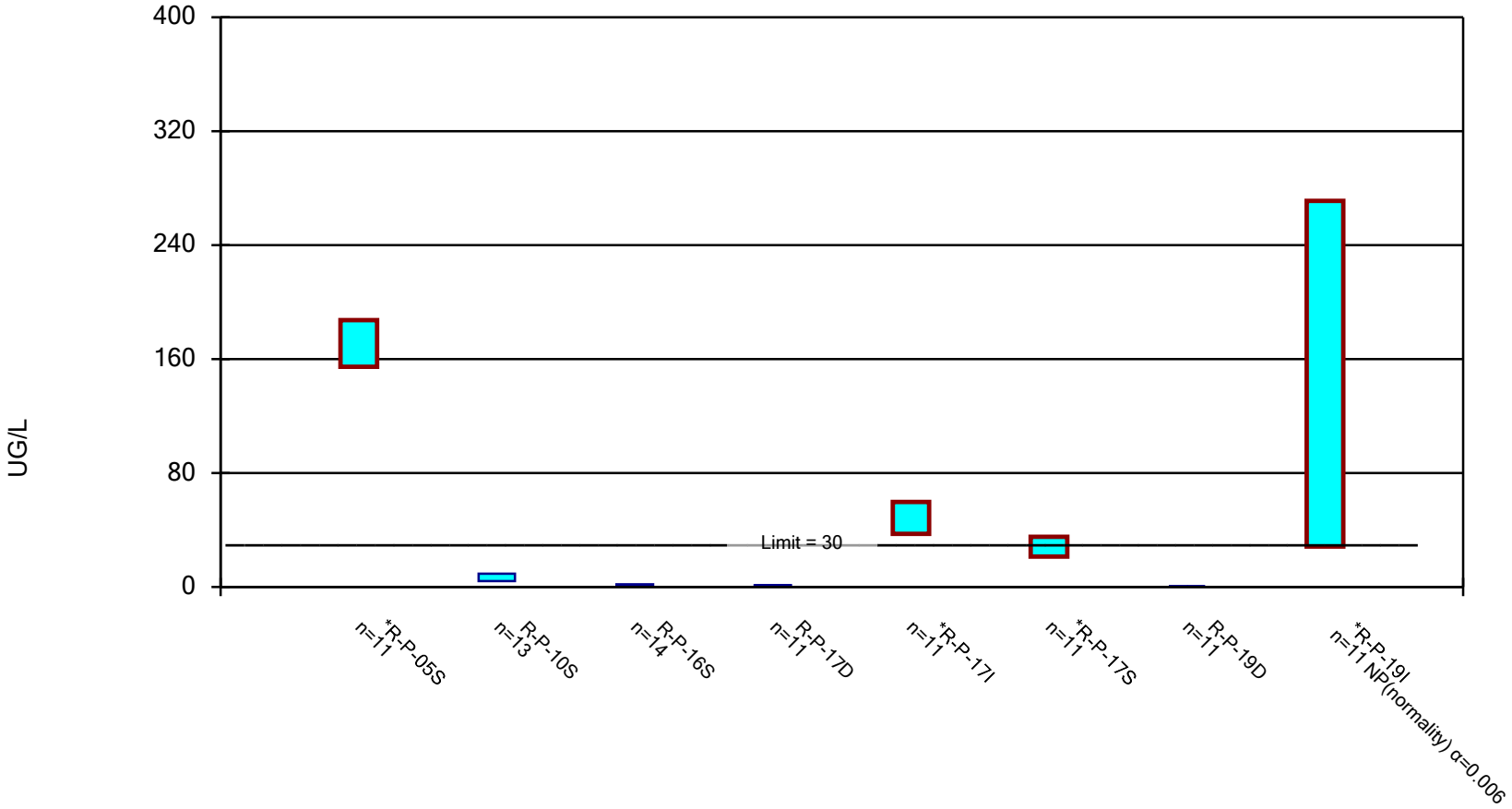
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



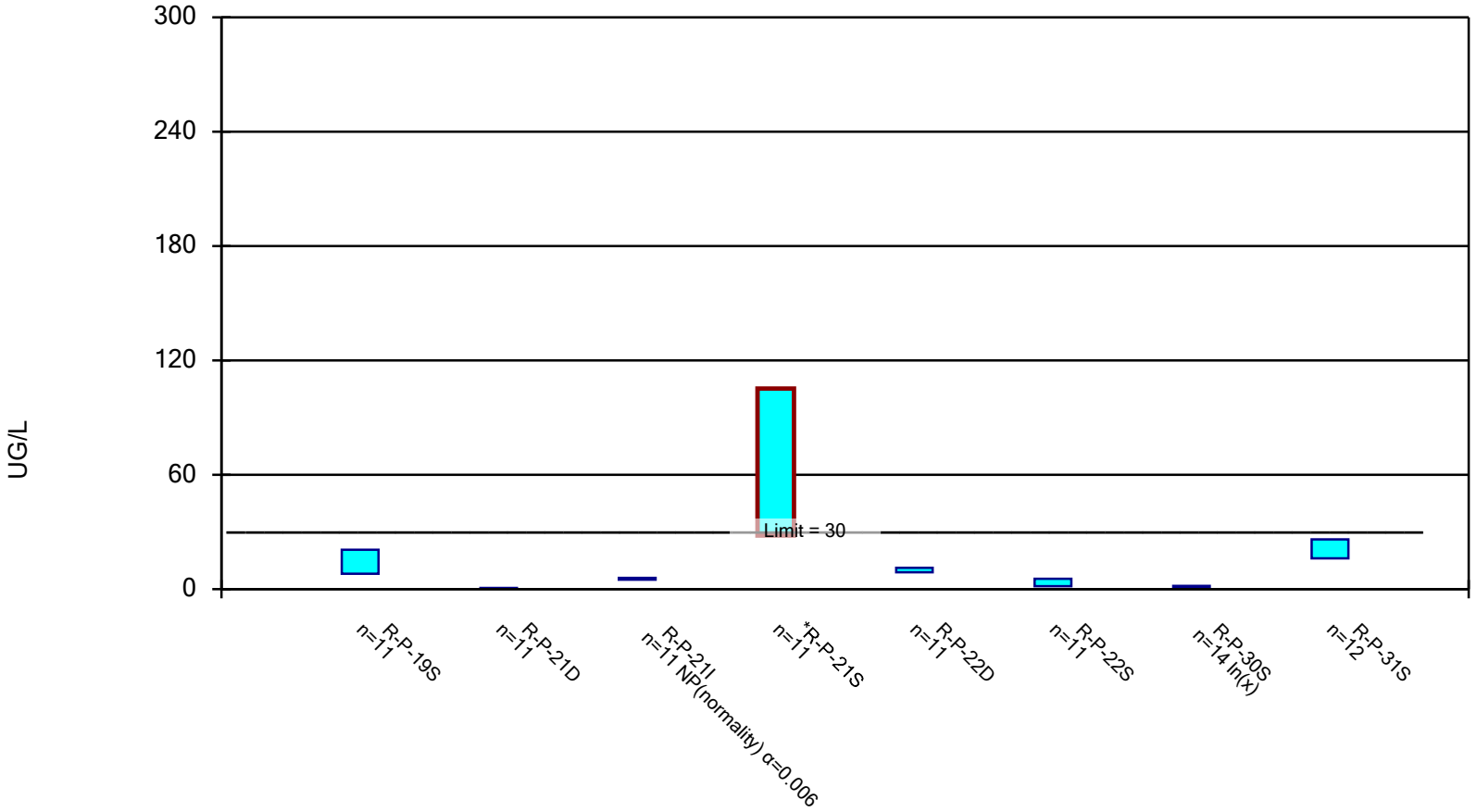
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



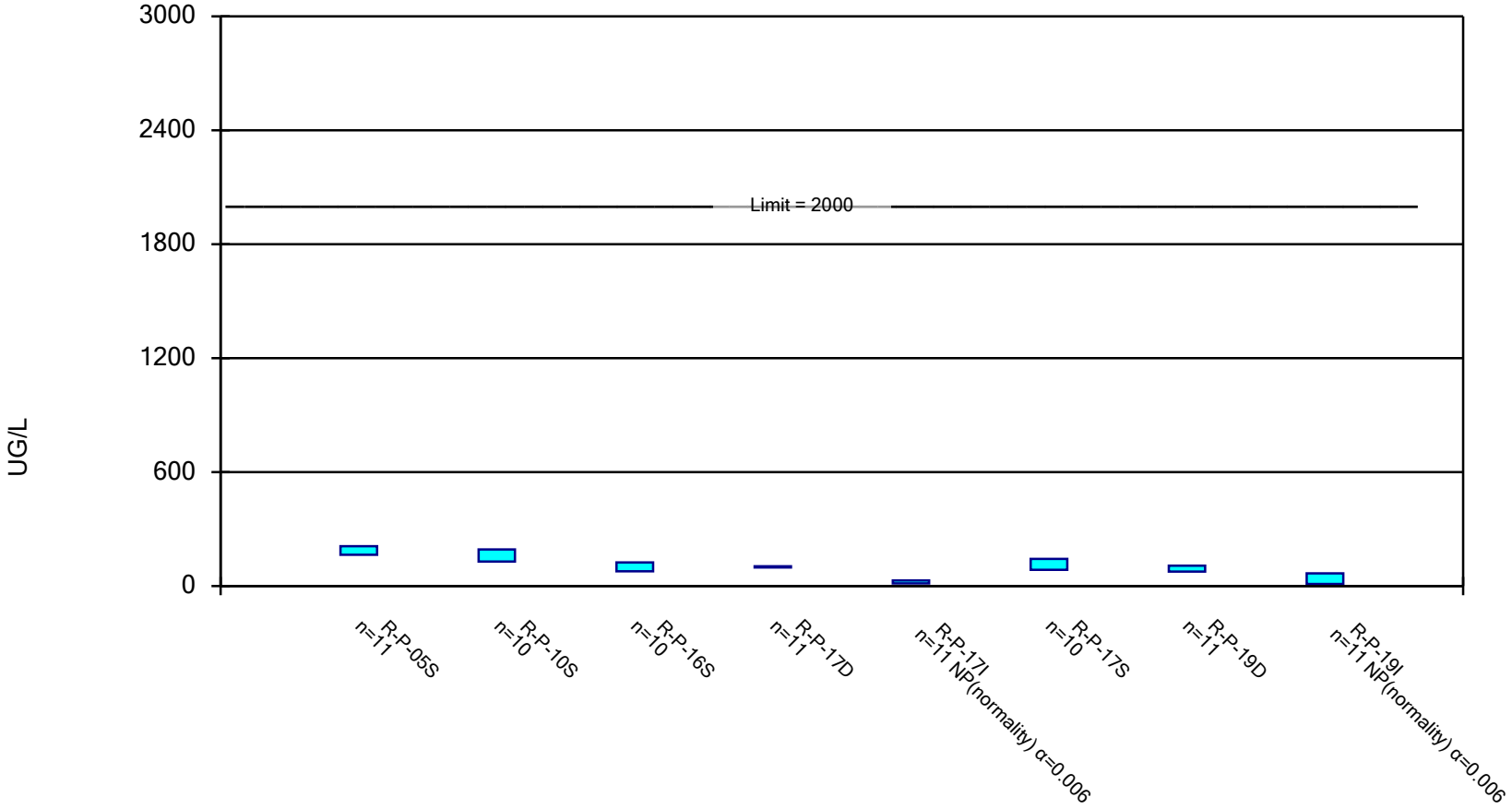
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

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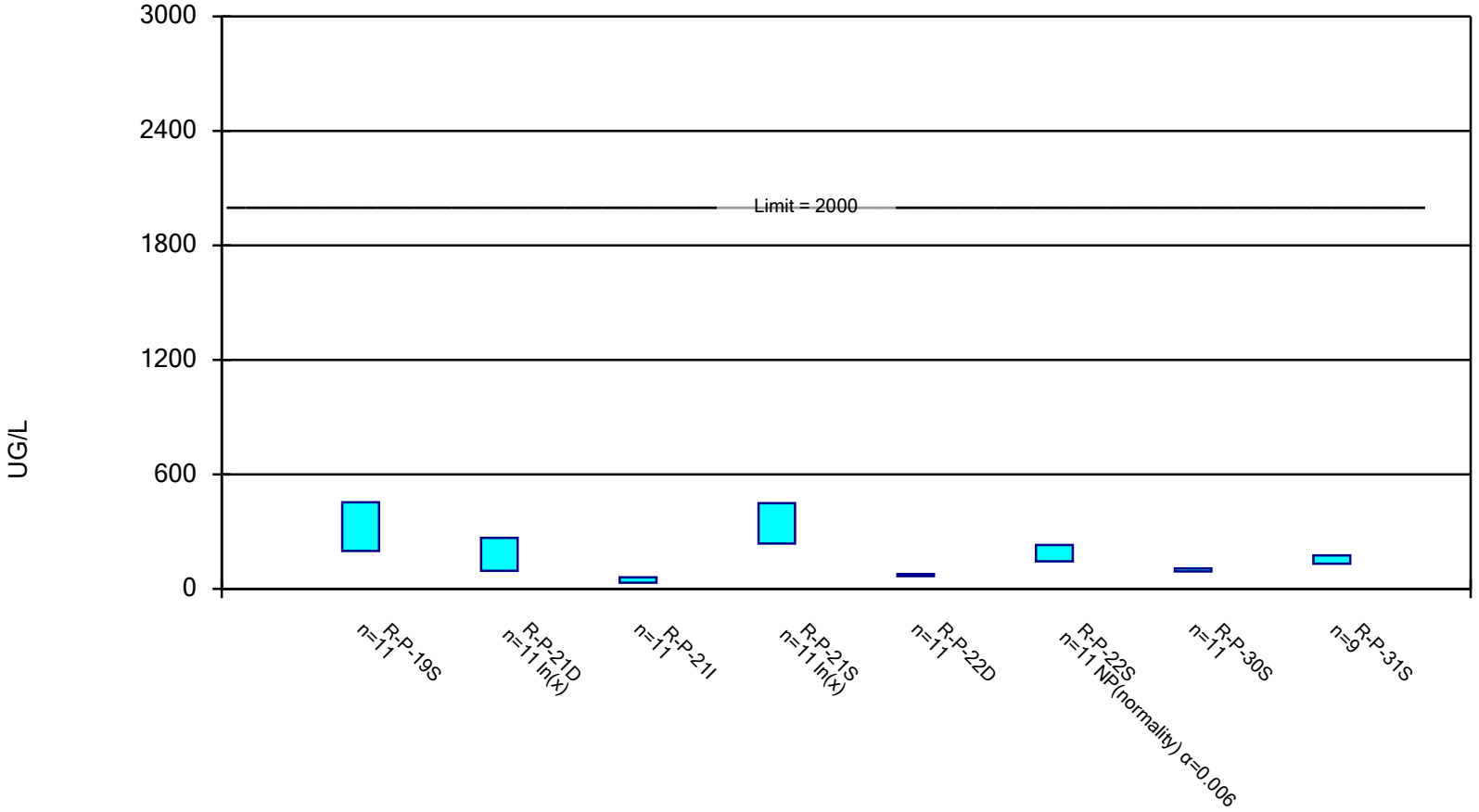


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Rush Island E.C. Client: Ameren Data: RIEC DATA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

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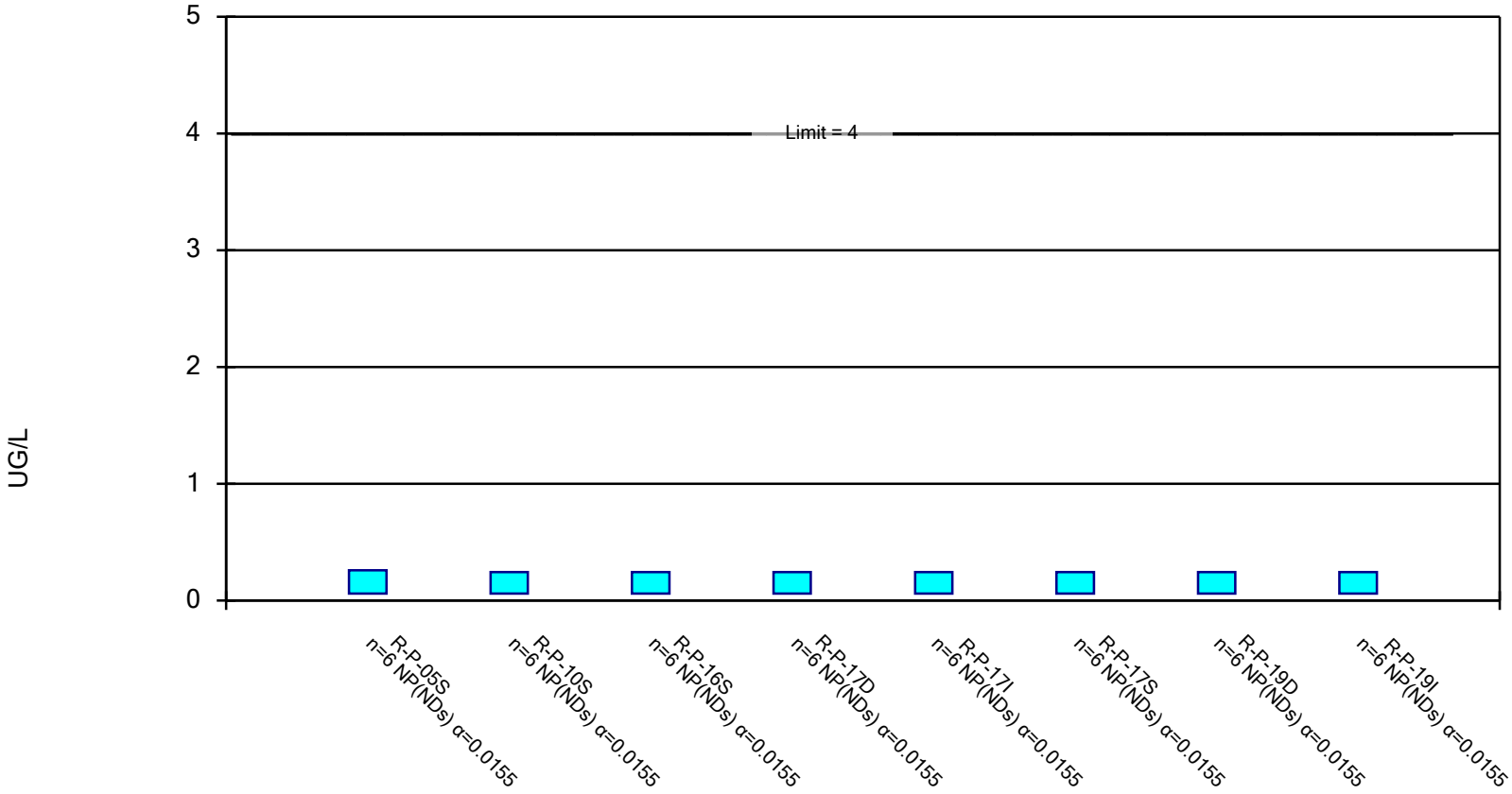


Constituent: BARIUM, TOTAL Analysis Run 3/10/2025 11:54 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Non-Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded.

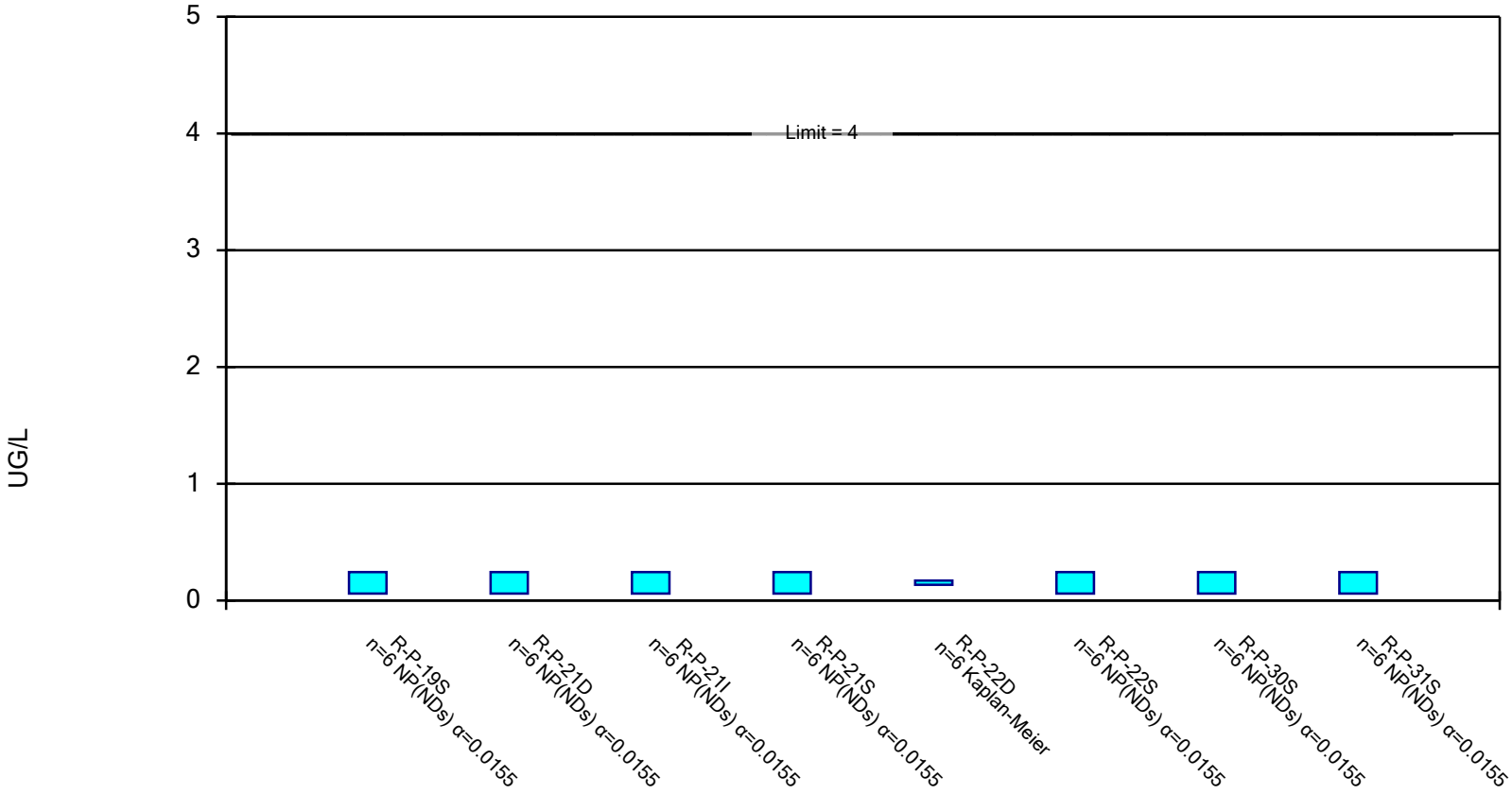


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Rush Island E.C. Client: Ameren Data: RIEC DATA

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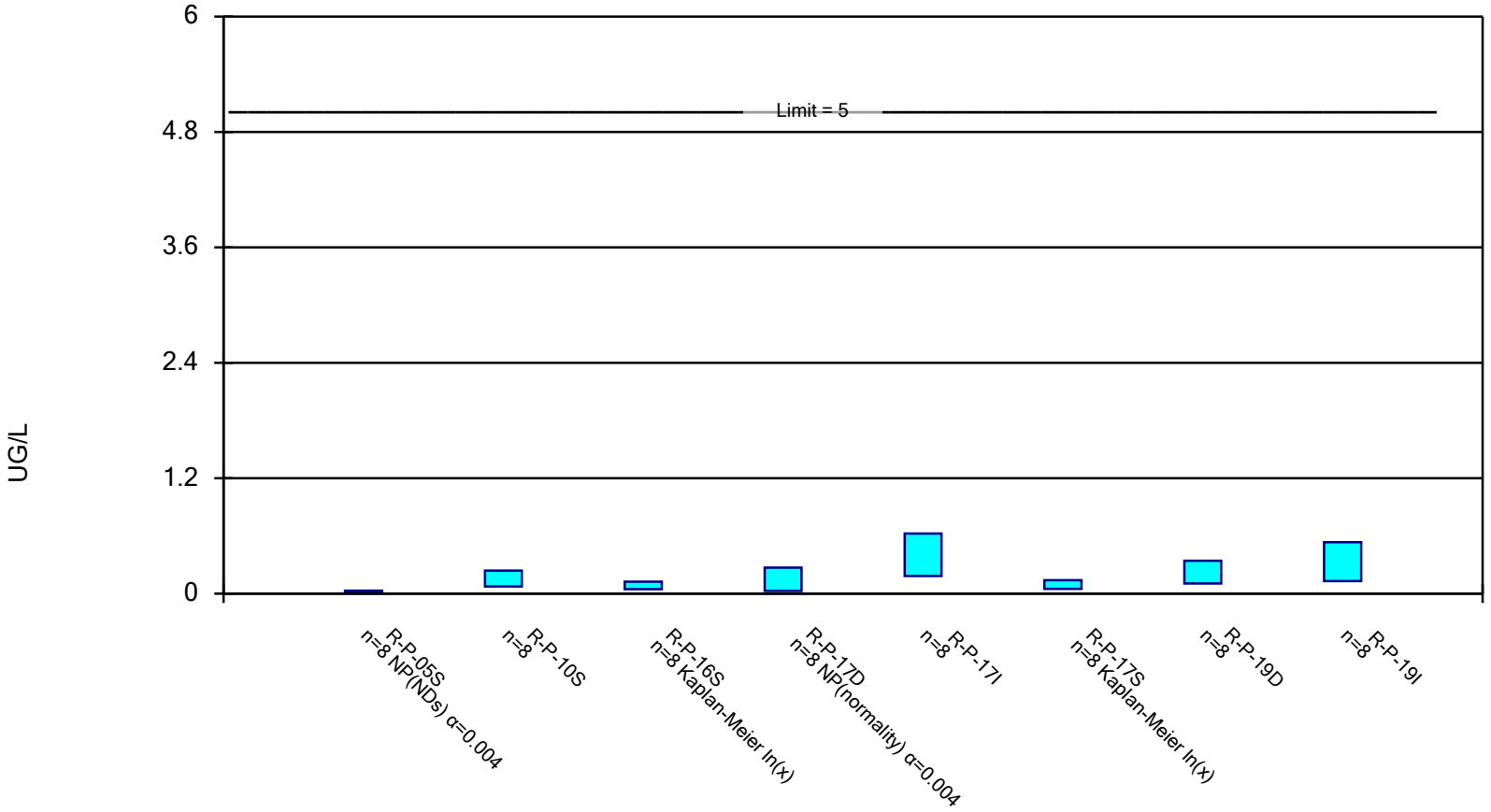
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



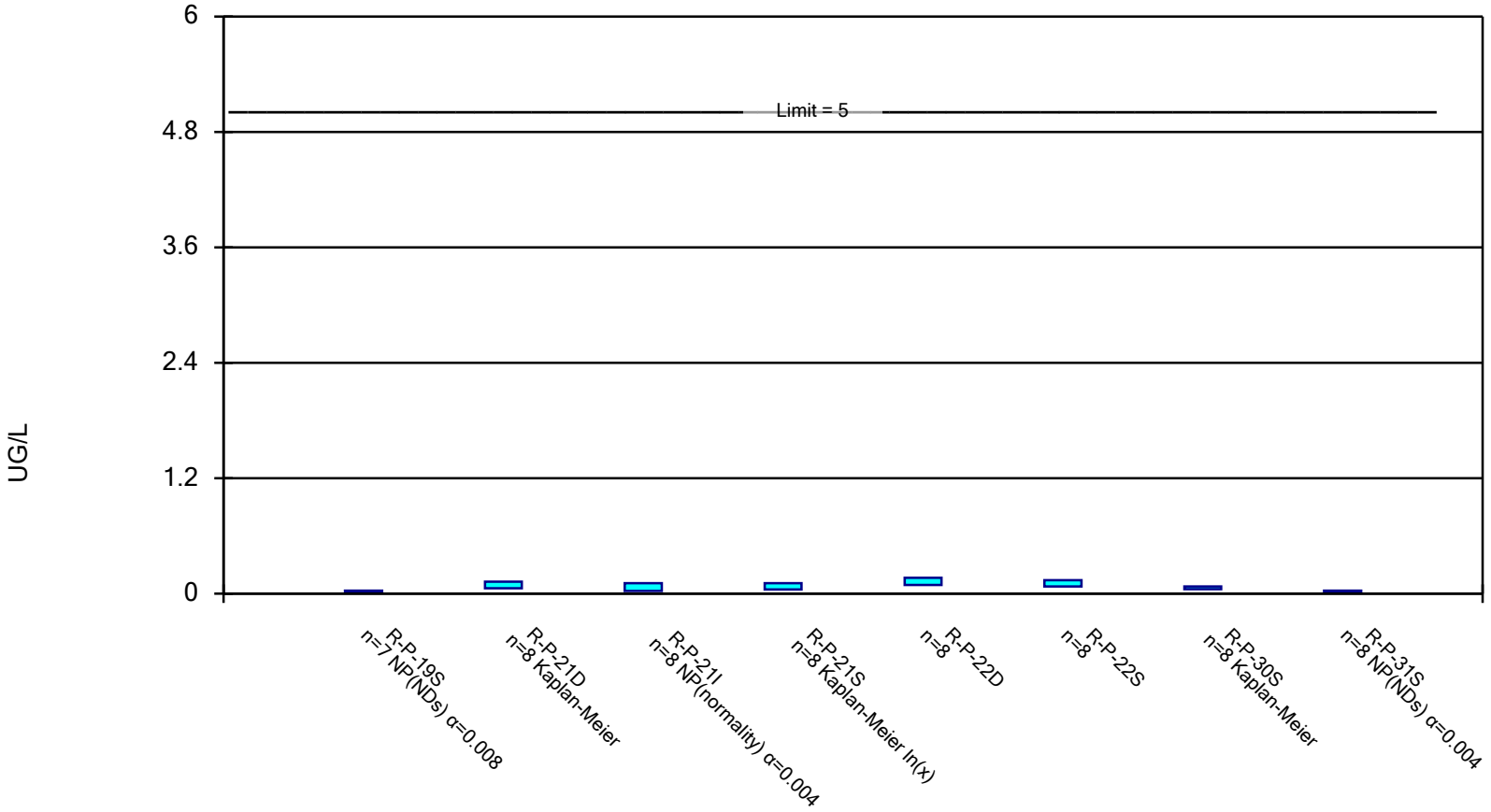
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

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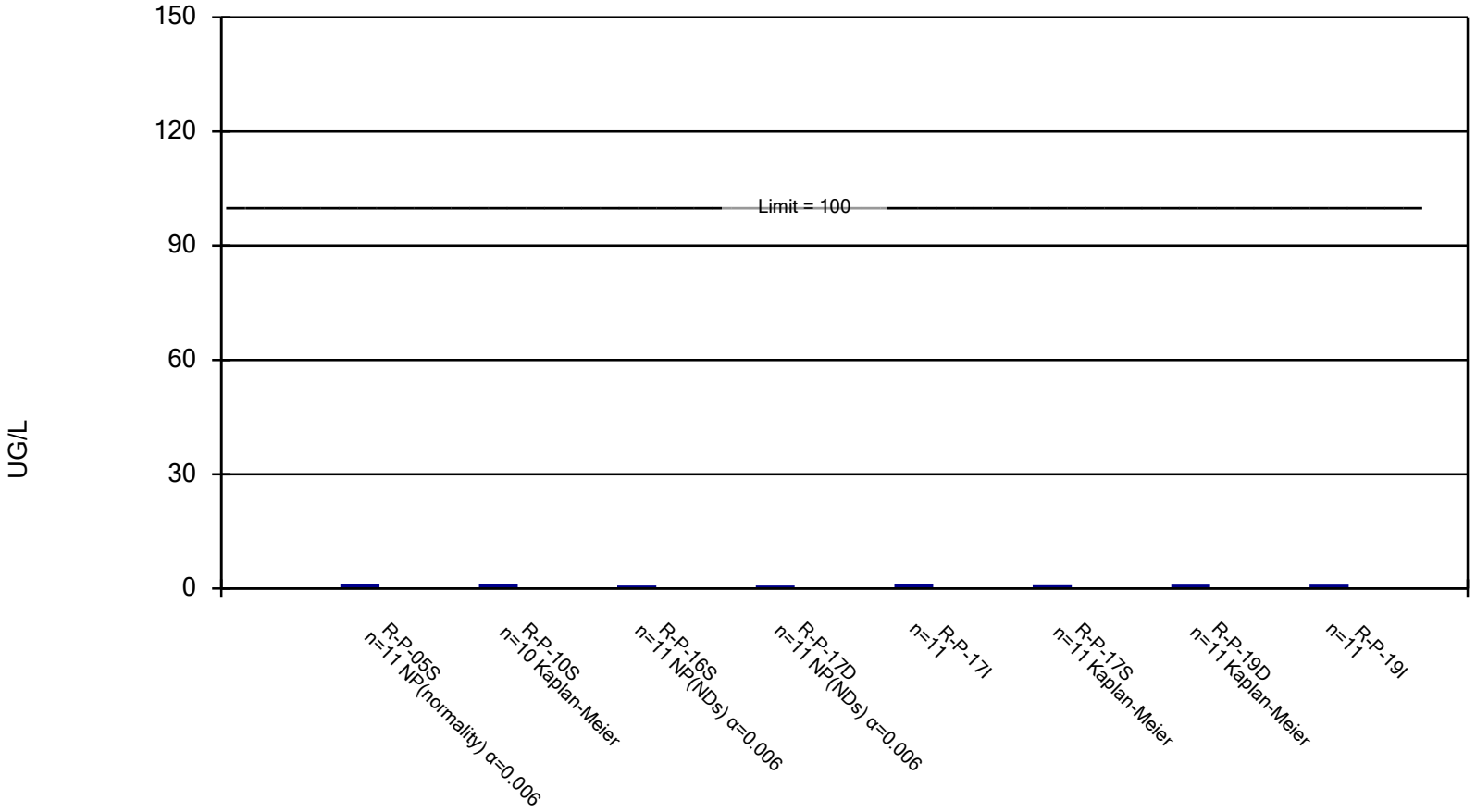


Constituent: CADMIUM, TOTAL Analysis Run 3/10/2025 11:54 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

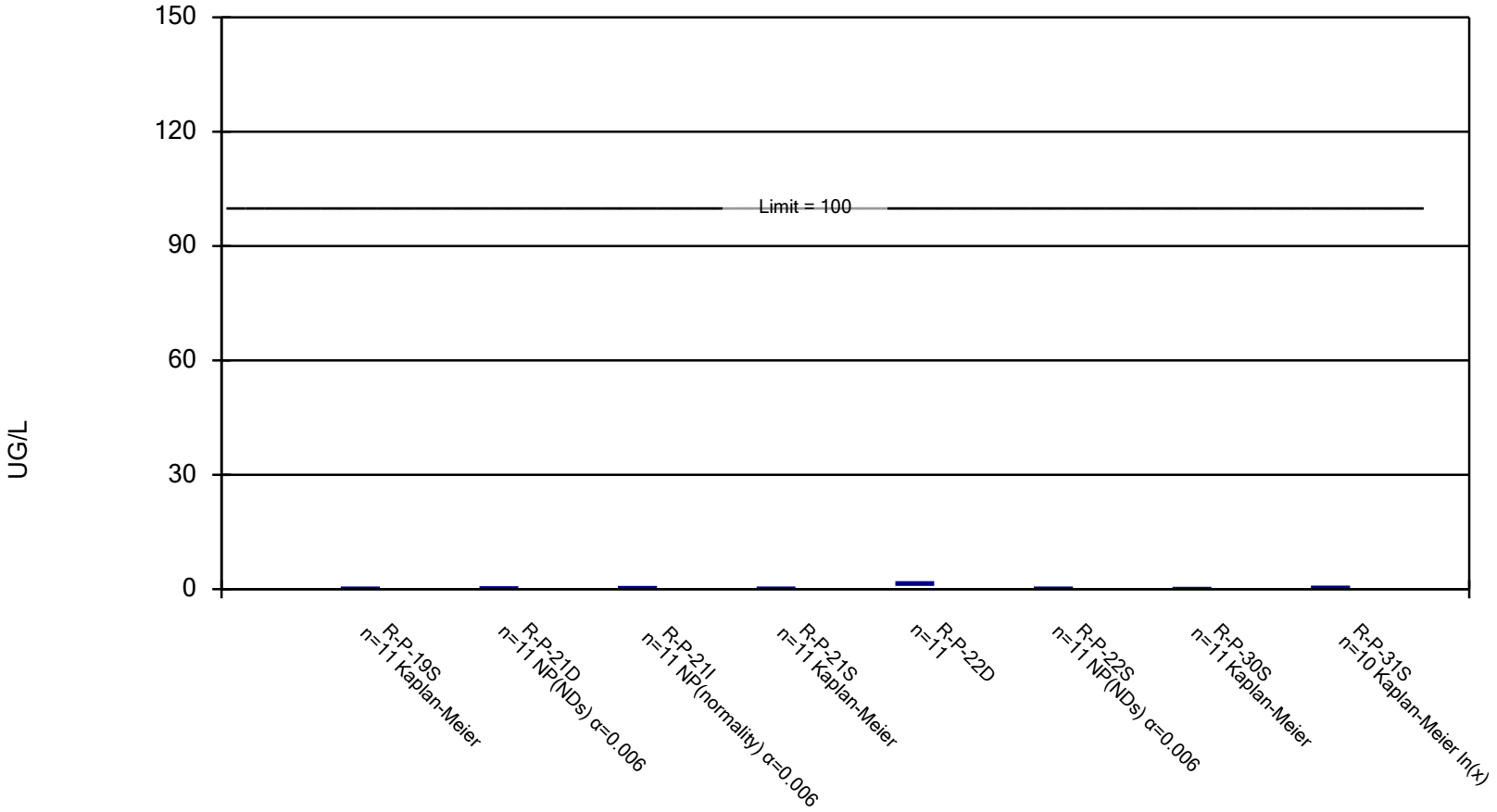


Constituent: CHROMIUM, TOTAL Analysis Run 3/10/2025 11:54 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



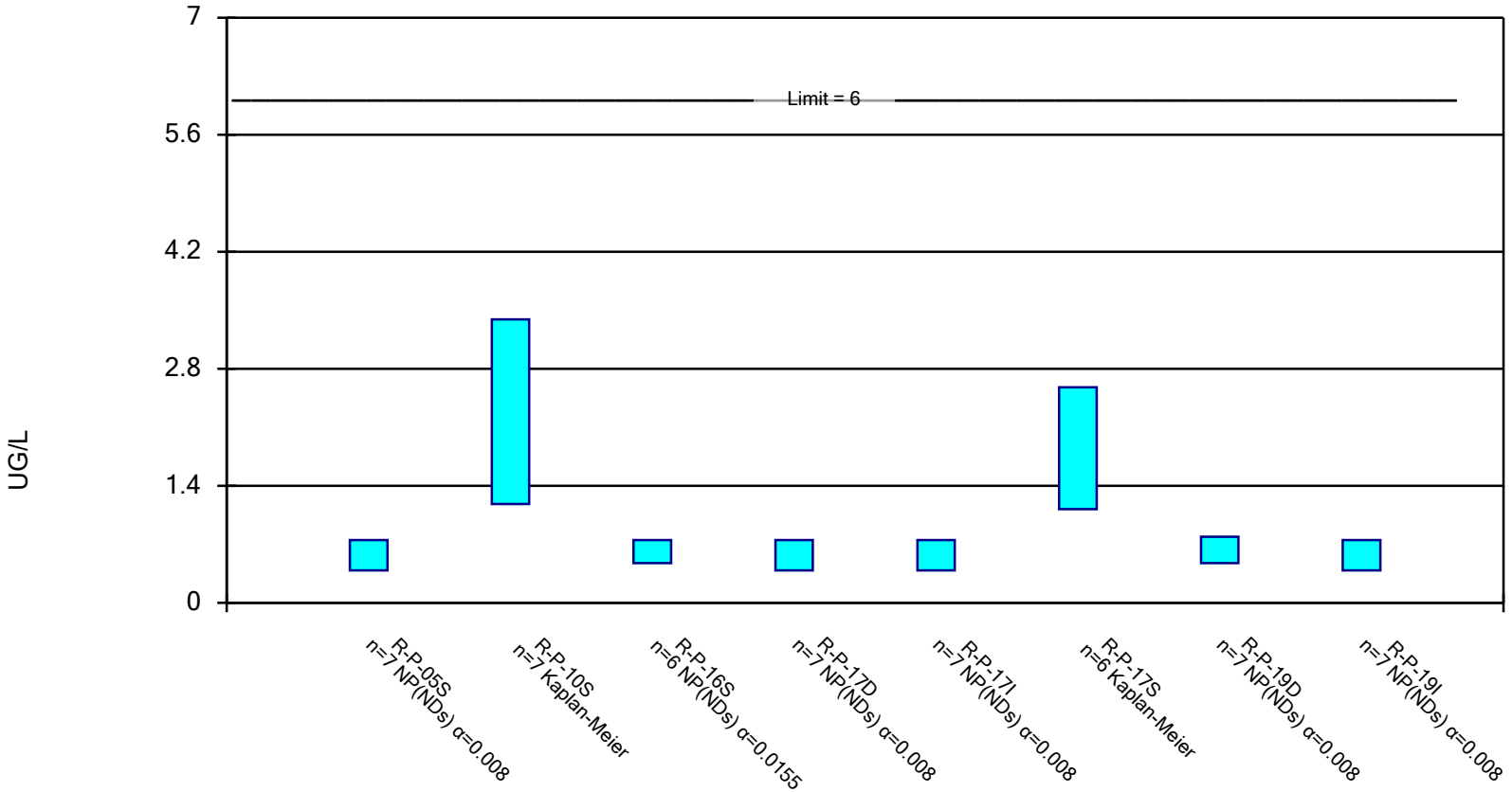
Constituent: CHROMIUM, TOTAL Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



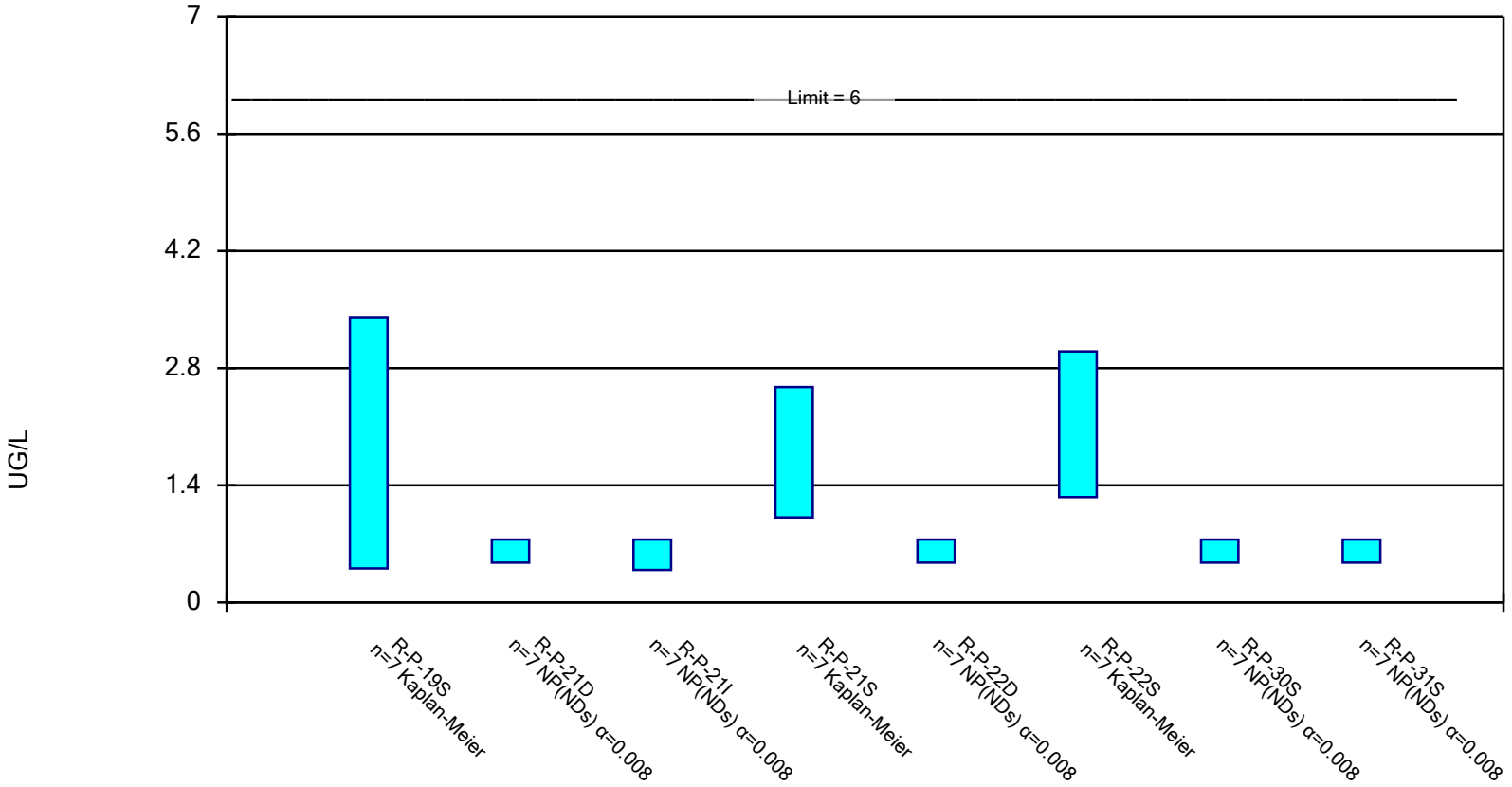
Constituent: COBALT, TOTAL Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



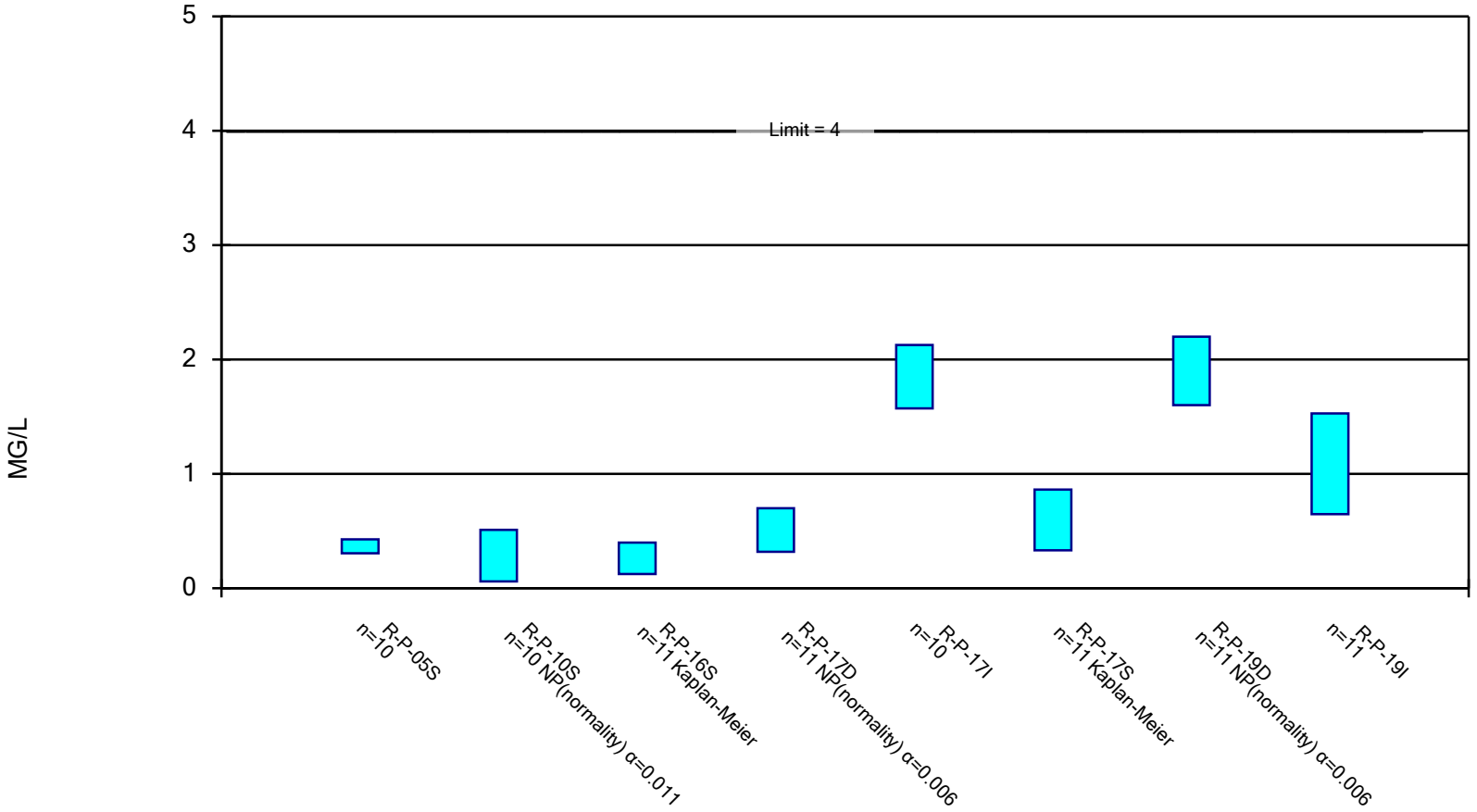
Constituent: COBALT, TOTAL Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



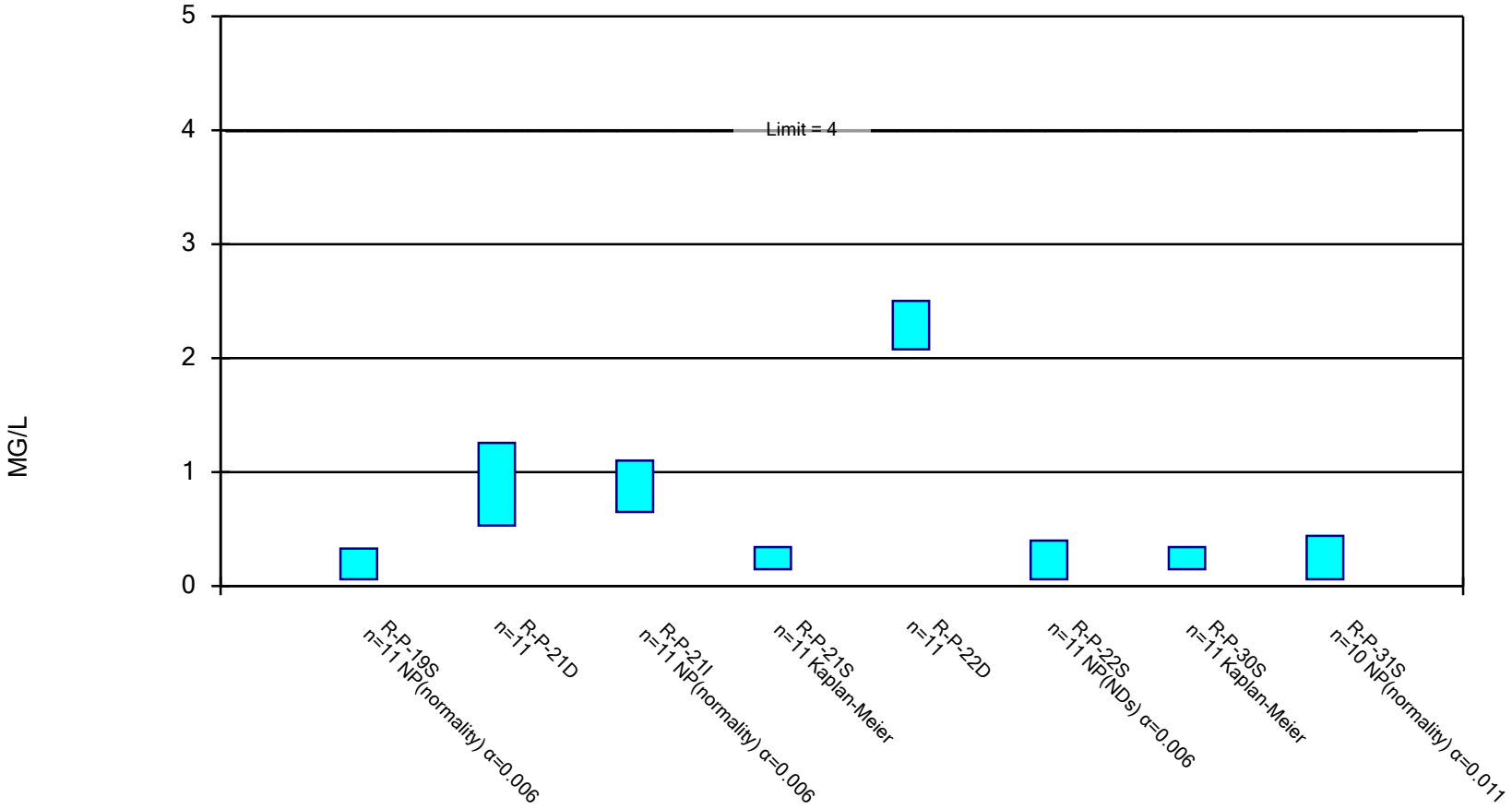
Constituent: FLUORIDE, TOTAL Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



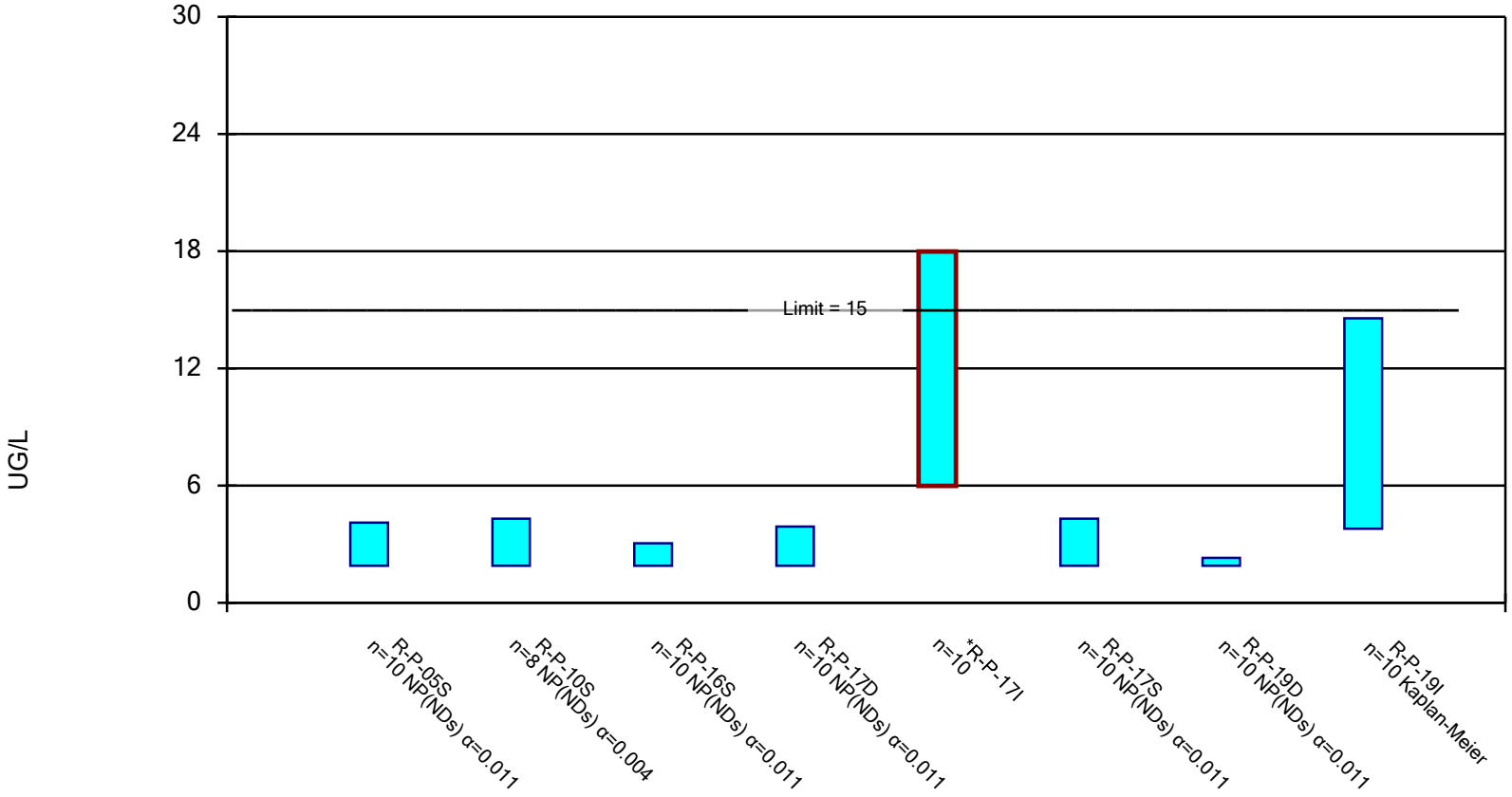
Constituent: FLUORIDE, TOTAL Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

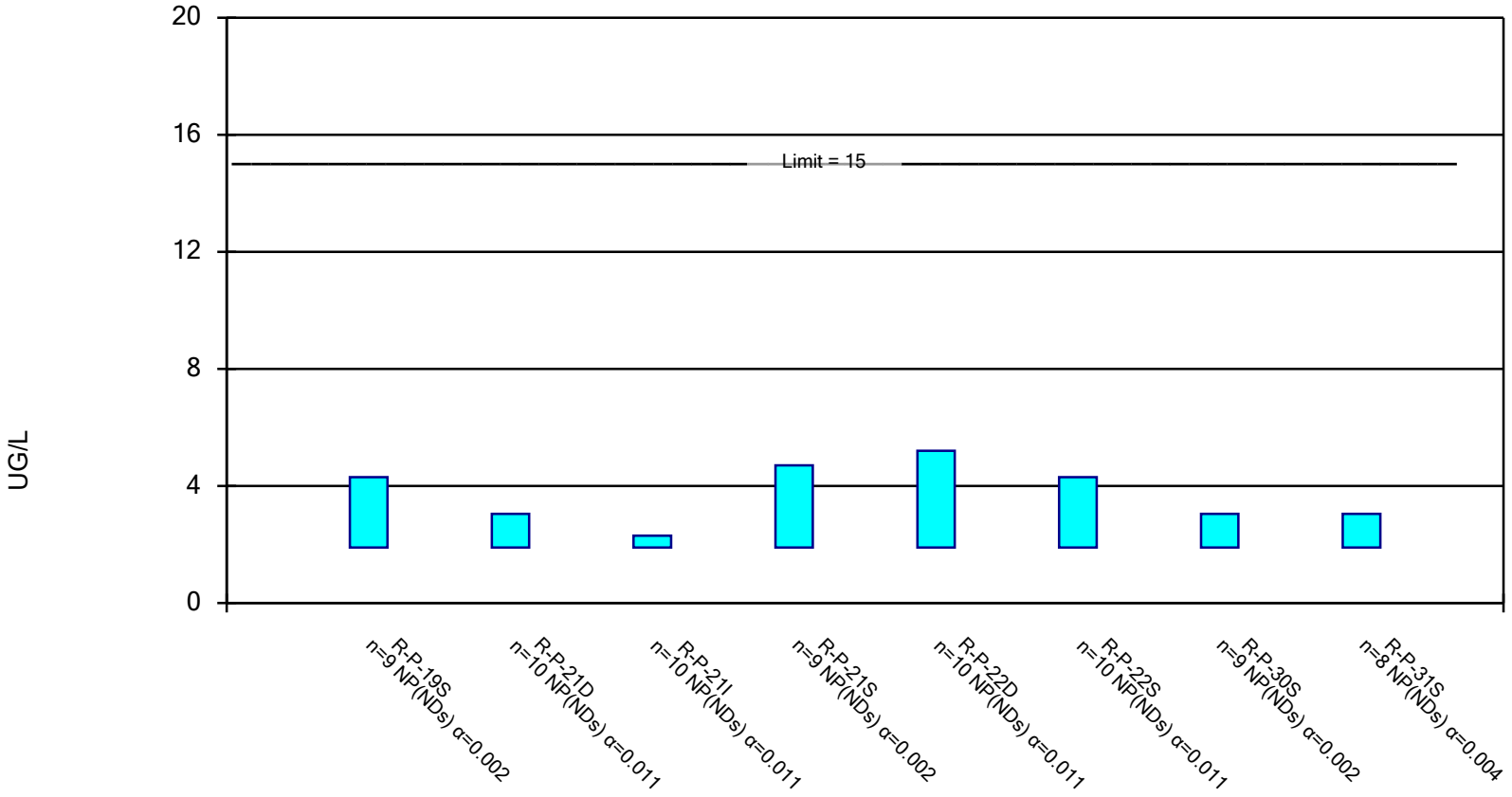


Constituent: LEAD, TOTAL Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Non-Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded.



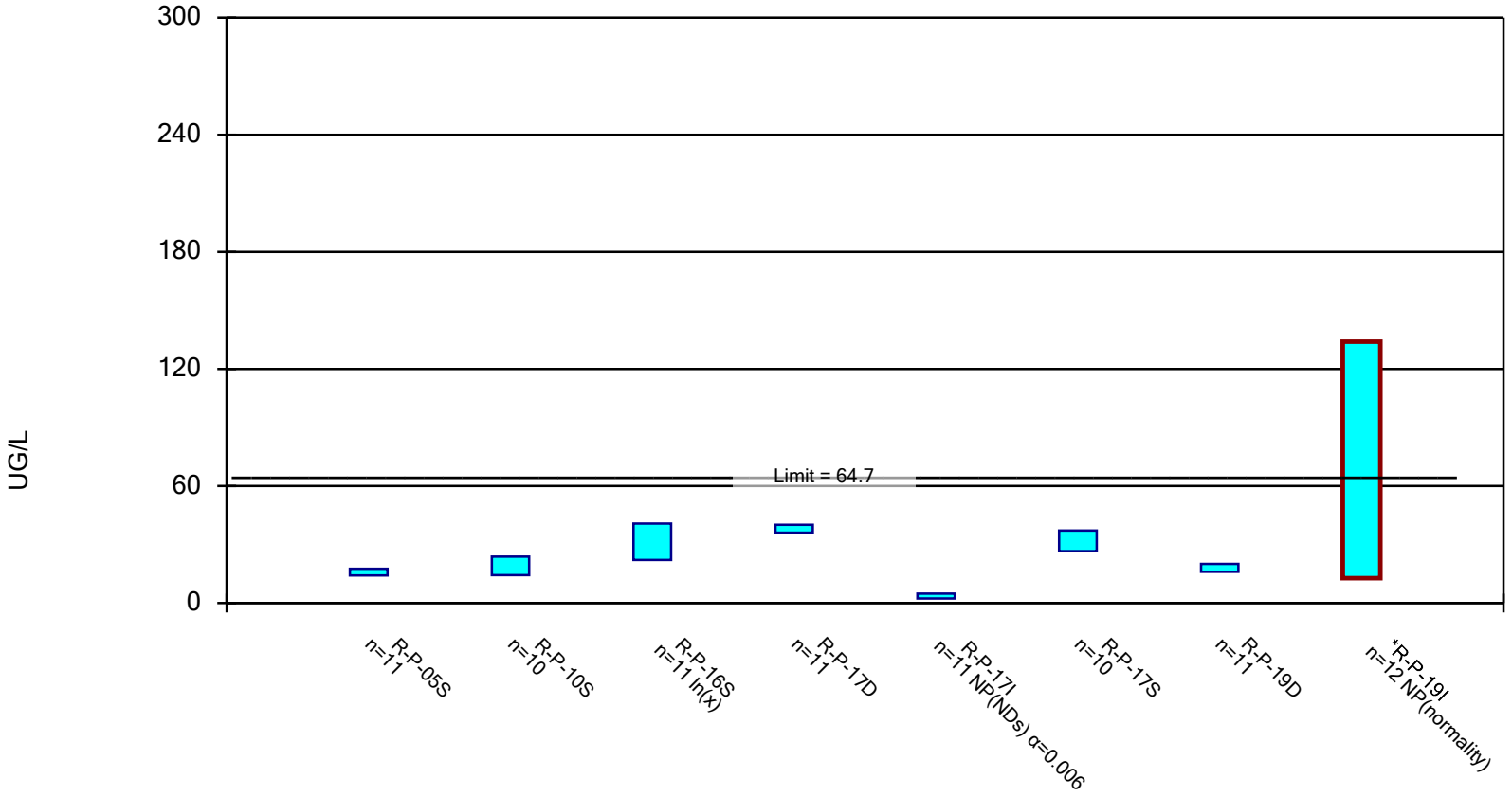
Constituent: LEAD, TOTAL Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



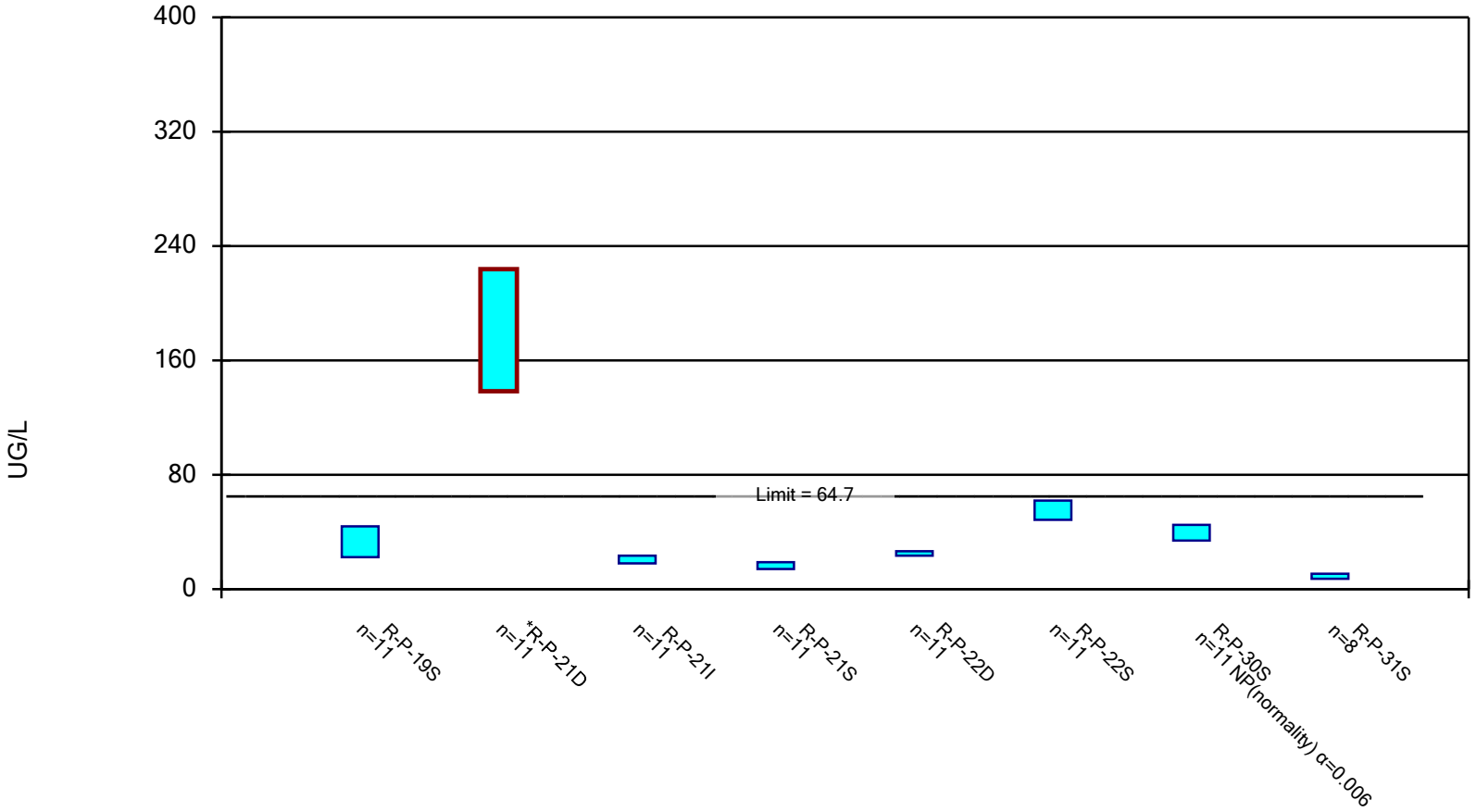
Constituent: LITHIUM, TOTAL Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

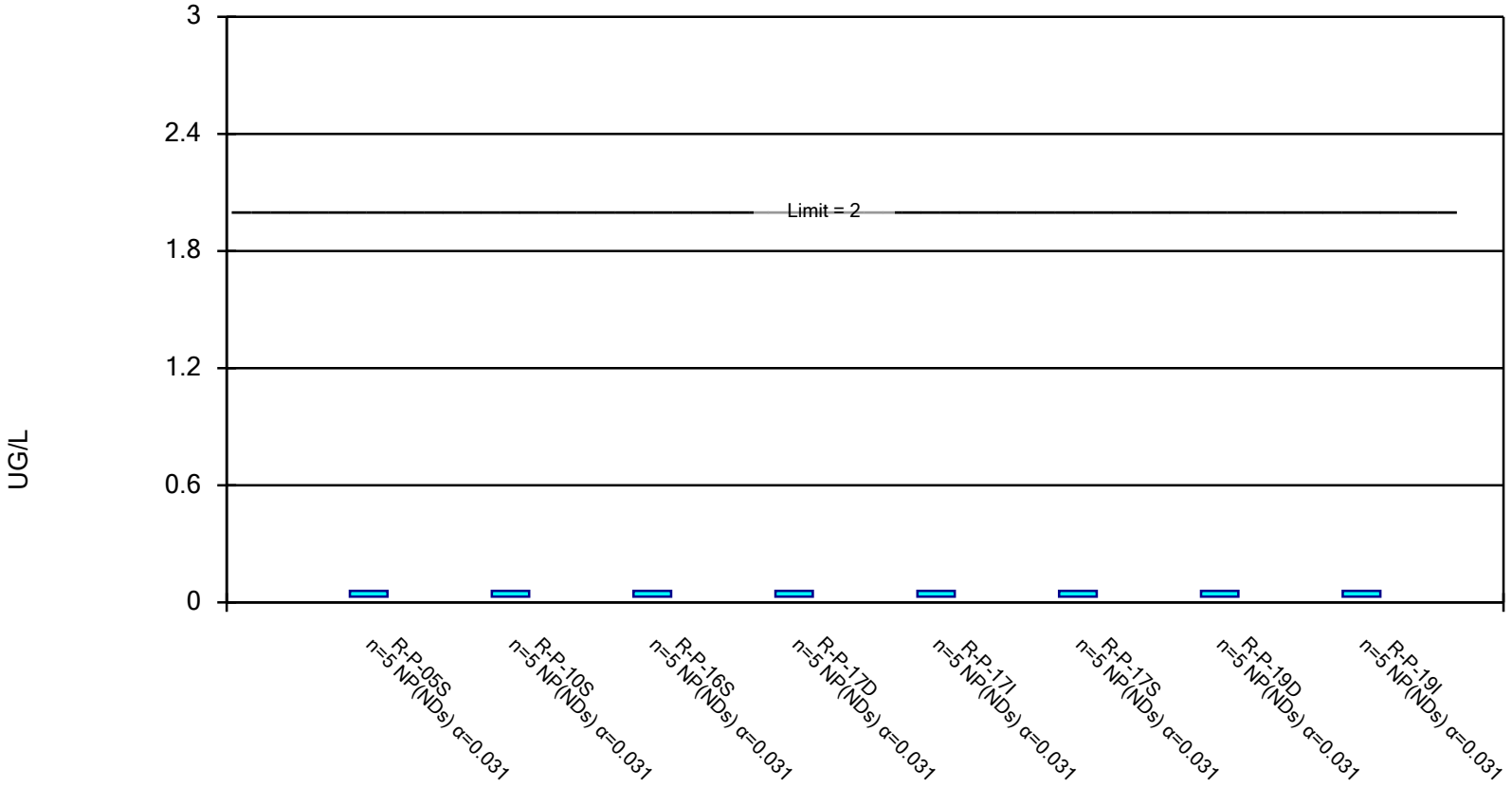


Constituent: LITHIUM, TOTAL Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Non-Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded.

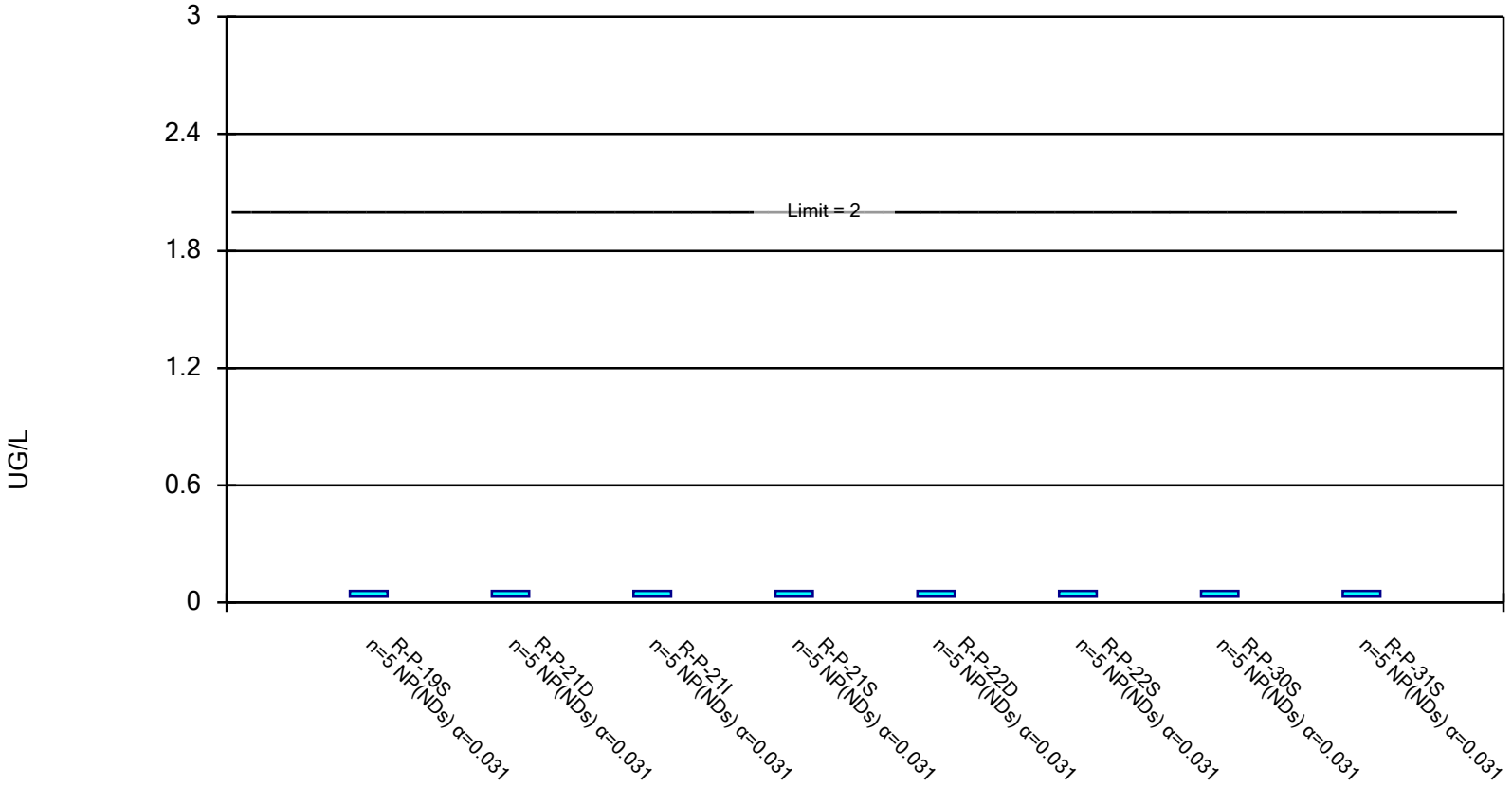


Constituent: MERCURY, TOTAL Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Non-Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded.



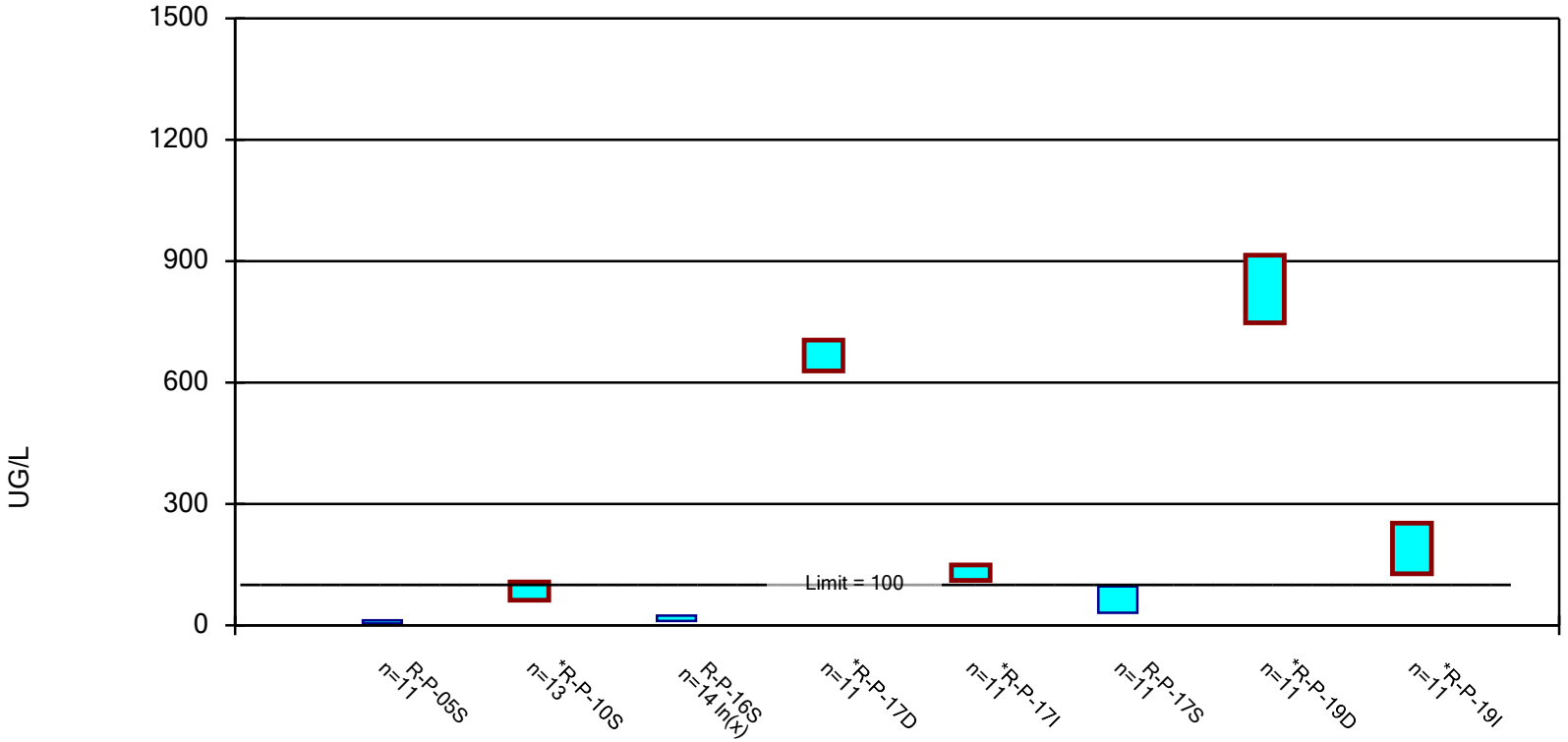
Constituent: MERCURY, TOTAL Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Parametric Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



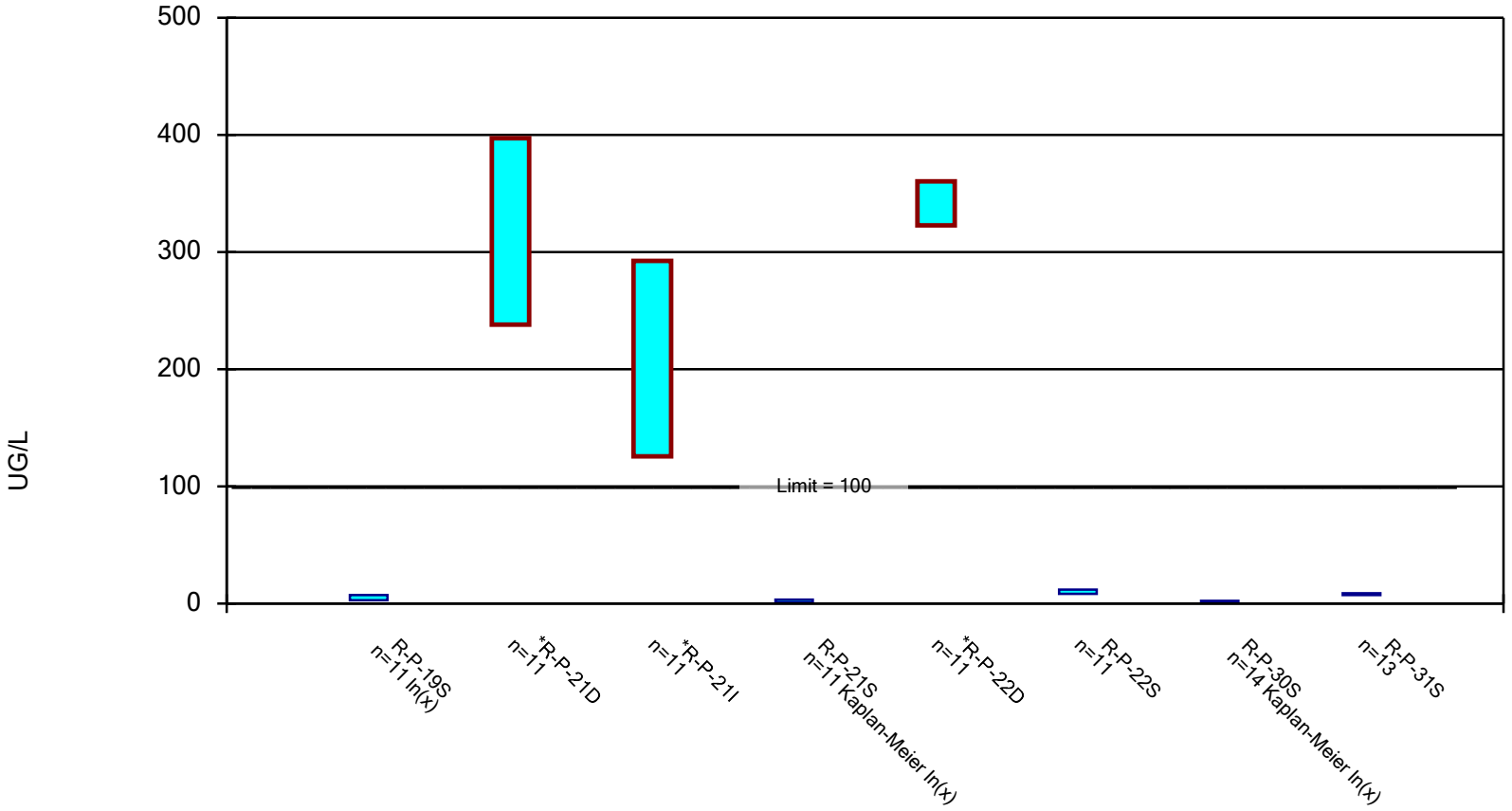
Constituent: MOLYBDENUM, TOTAL Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Parametric Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

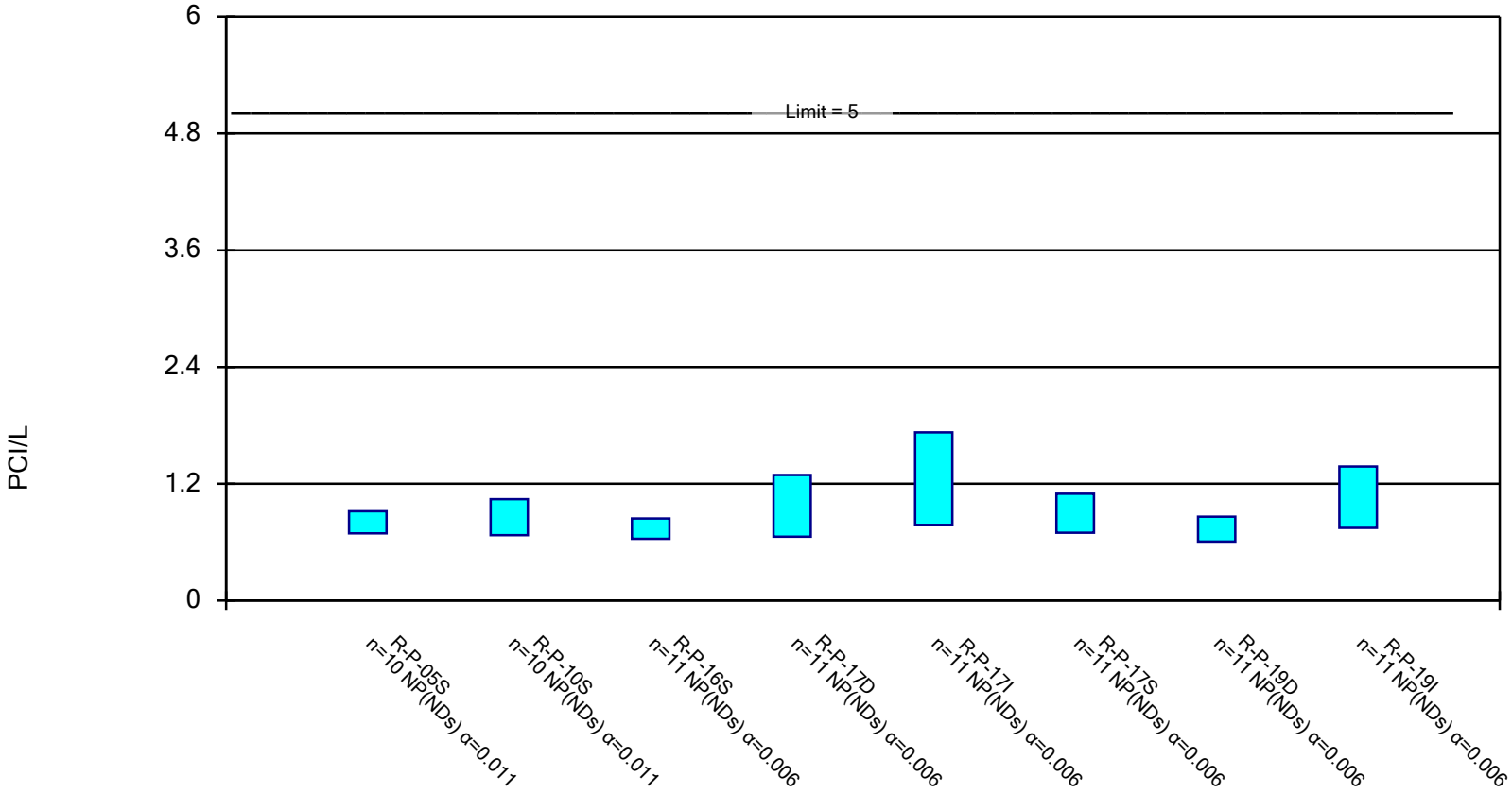


Constituent: MOLYBDENUM, TOTAL Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Non-Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded.

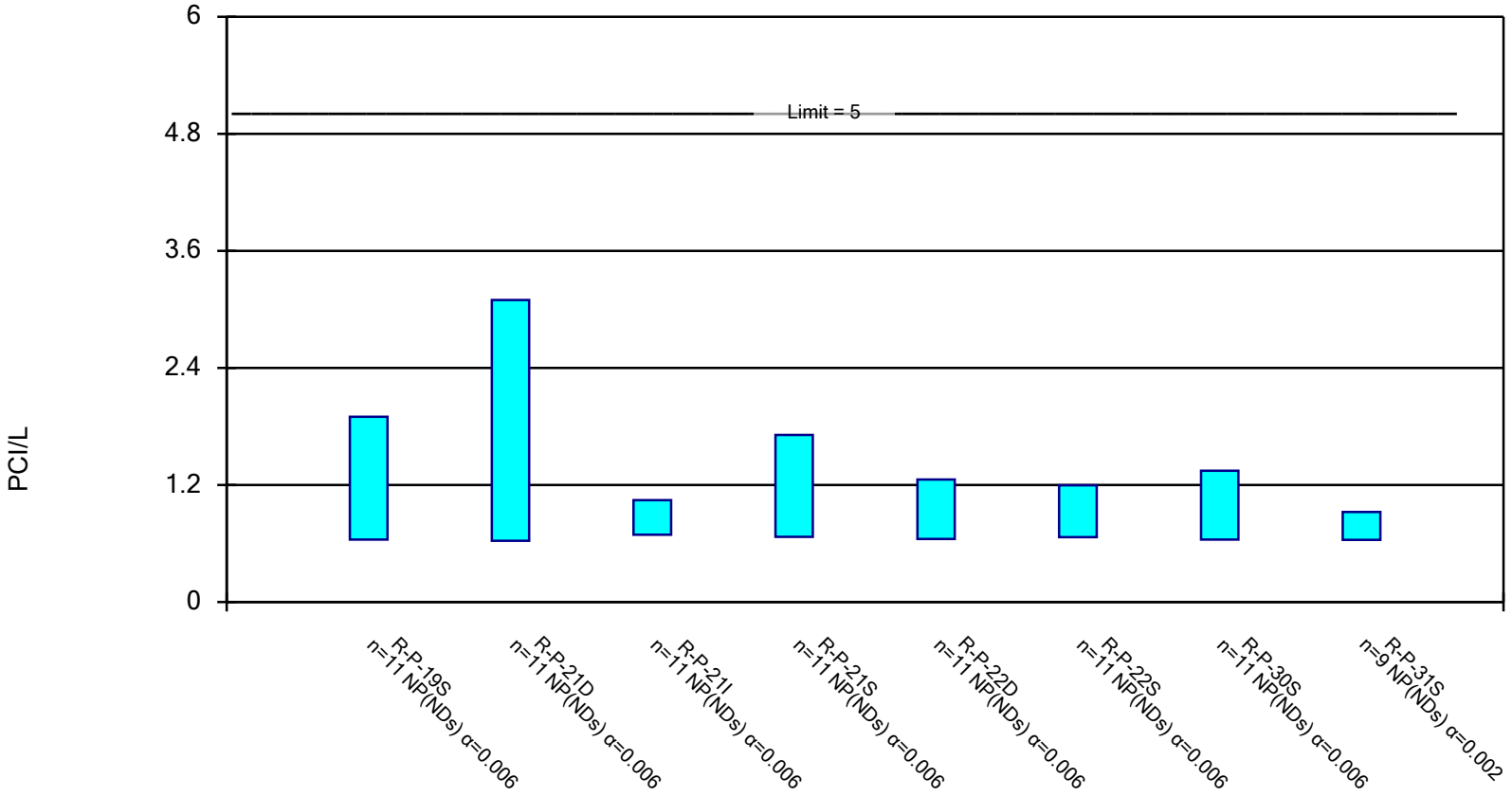


Constituent: RADIUM [226 + 228] Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Non-Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded.



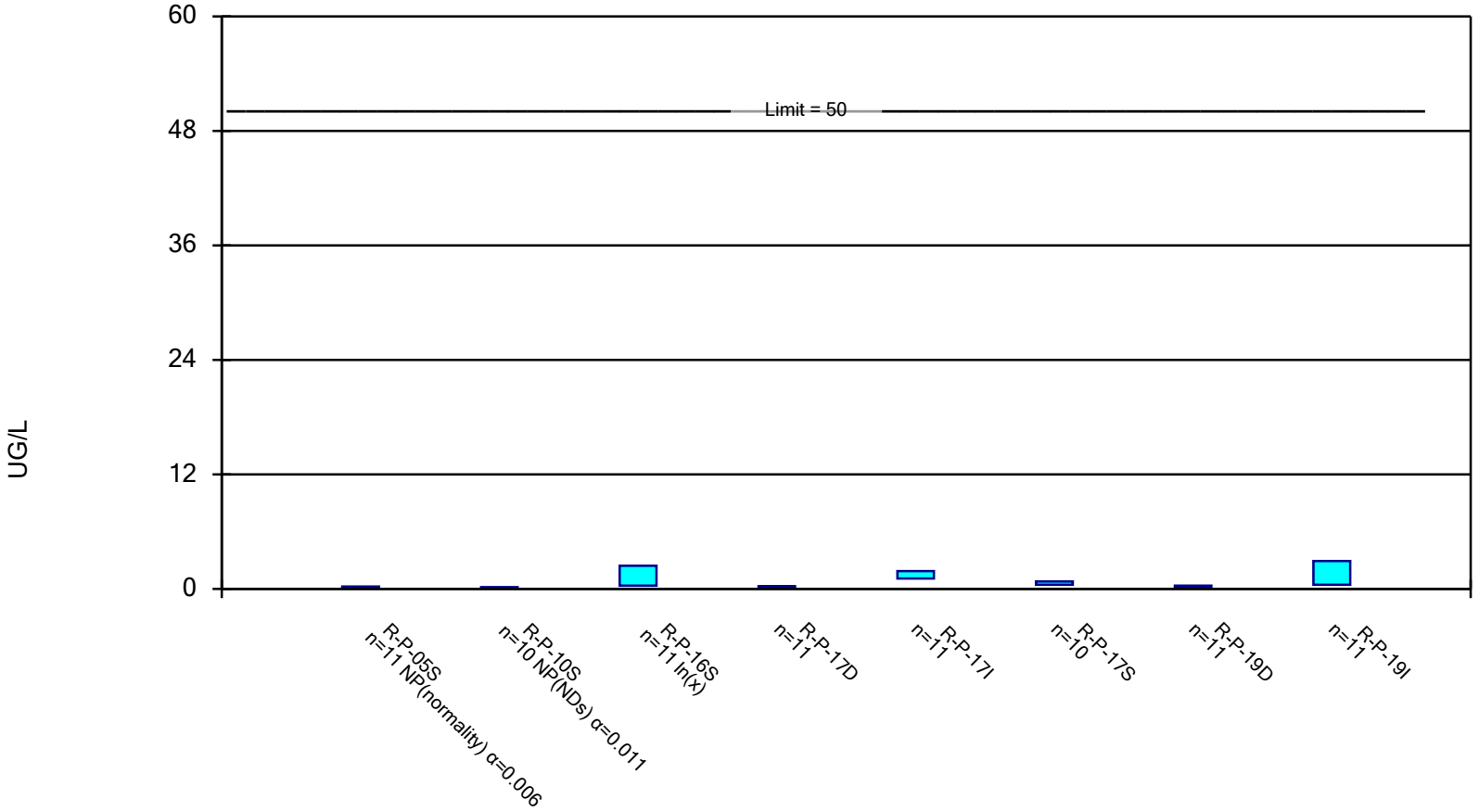
Constituent: RADIUM [226 + 228] Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

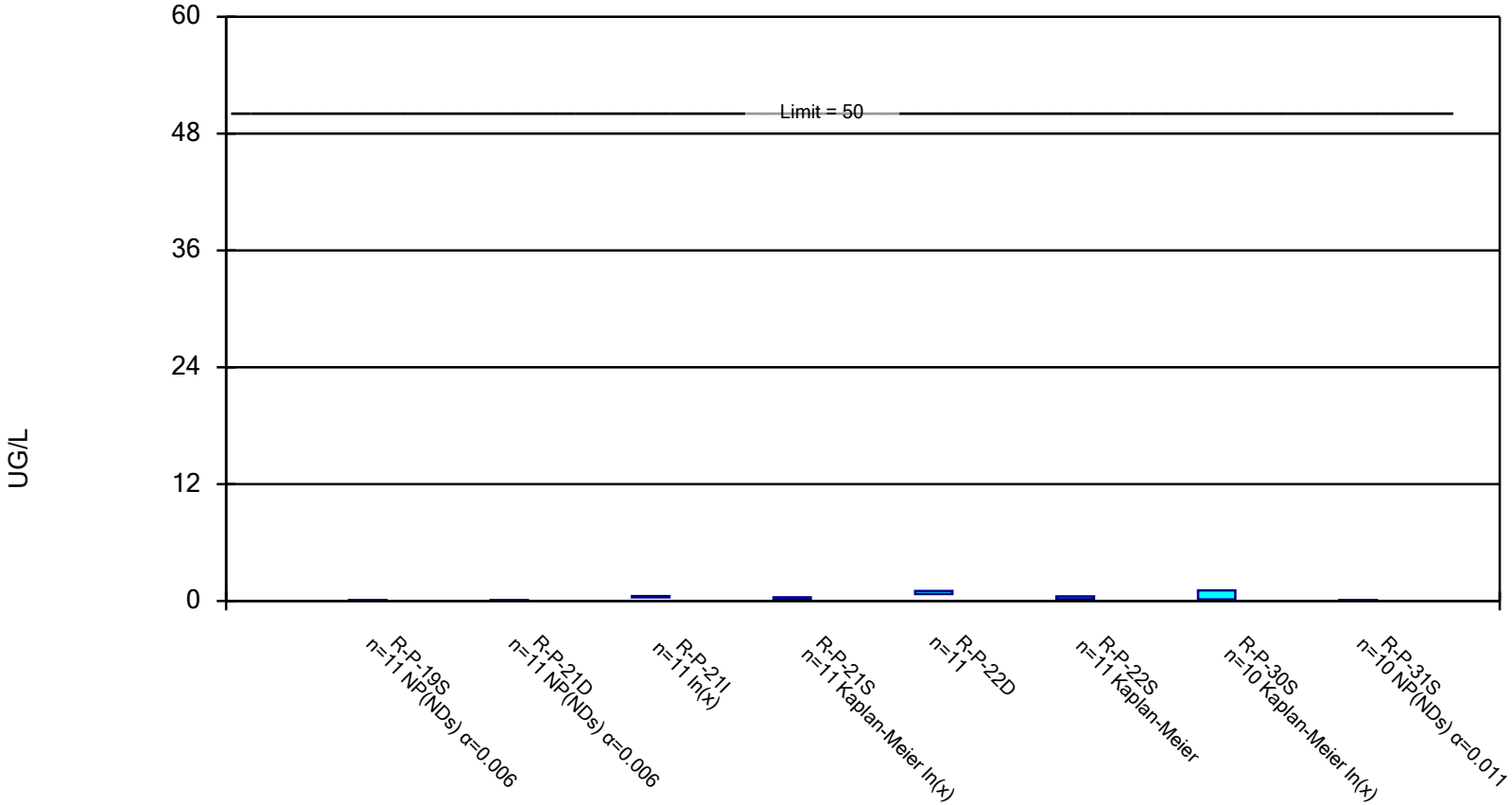


Constituent: SELENIUM, TOTAL Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



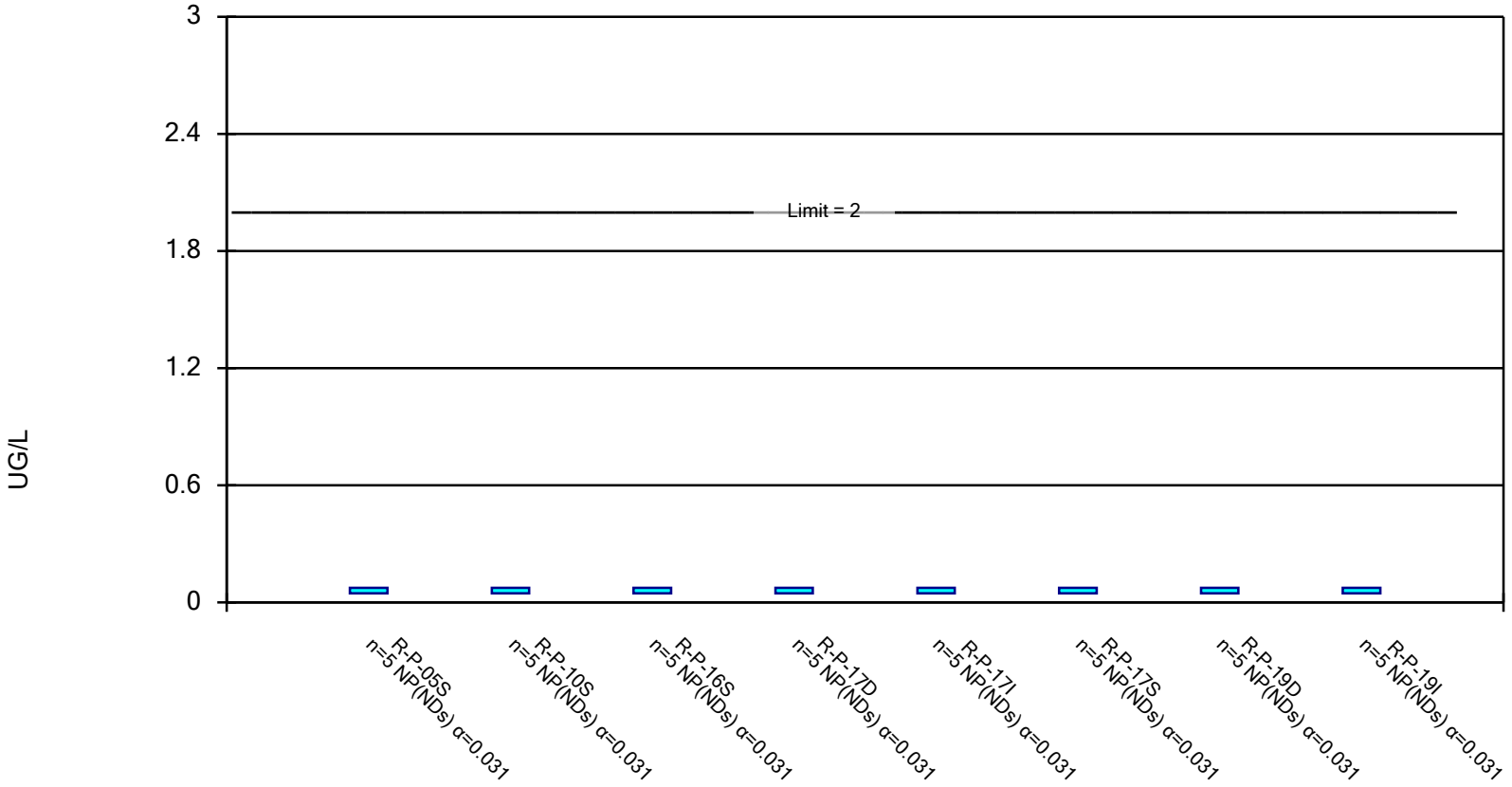
Constituent: SELENIUM, TOTAL Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Non-Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded.

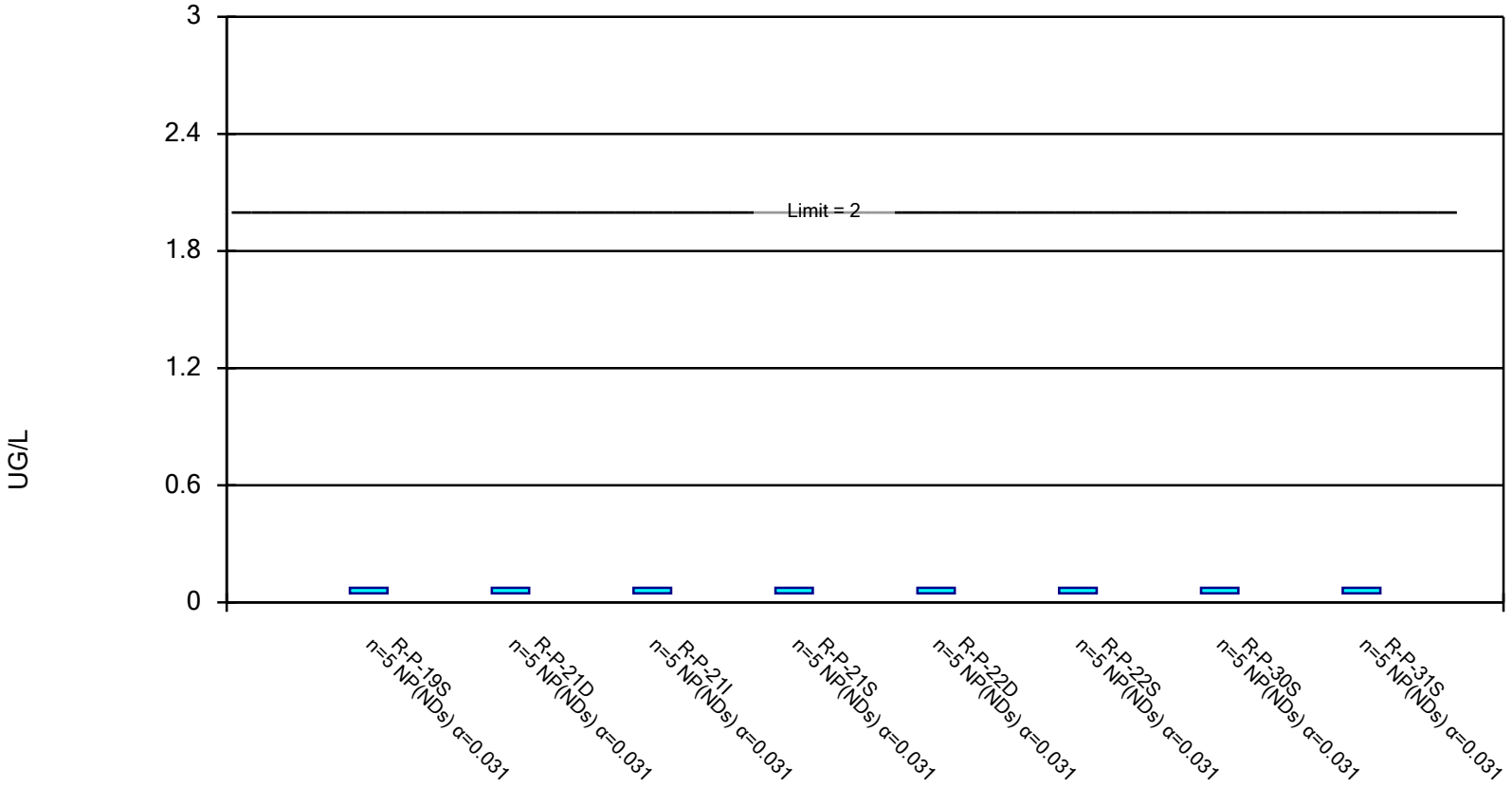


Constituent: THALLIUM, TOTAL Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Non-Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded.



Constituent: THALLIUM, TOTAL Analysis Run 3/10/2025 11:55 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Confidence Interval

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 3/10/2025, 11:59 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
ANTIMONY, TOTAL (UG/L)	R-P-05S	0.06	0.0485	6	No	11	100	No	0.006	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-10S	0.12	0.05	6	No	10	70	No	0.011	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-16S	0.13	0.0485	6	No	11	81.82	No	0.006	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-17D	0.06	0.0485	6	No	11	100	No	0.006	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-17I	0.4813	0.1914	6	No	11	9.091	No	0.01	Param.
ANTIMONY, TOTAL (UG/L)	R-P-17S	0.2805	0.087	6	No	11	36.36	No	0.01	Param.
ANTIMONY, TOTAL (UG/L)	R-P-19D	0.06	0.0485	6	No	11	100	No	0.006	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-19I	4.9	0.28	6	No	11	0	No	0.006	NP (normality)
ANTIMONY, TOTAL (UG/L)	R-P-19S	0.06	0.0485	6	No	11	90.91	No	0.006	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-21D	0.06	0.0485	6	No	11	100	No	0.006	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-21I	0.06	0.0485	6	No	11	100	No	0.006	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-21S	0.06	0.0485	6	No	11	90.91	No	0.006	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-22D	0.1725	0.1066	6	No	11	36.36	No	0.01	Param.
ANTIMONY, TOTAL (UG/L)	R-P-22S	0.06	0.0485	6	No	11	100	No	0.006	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-30S	0.06	0.0485	6	No	10	100	No	0.011	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-31S	0.06	0.0485	6	No	10	90	No	0.011	NP (NDs)
ARSENIC, TOTAL (UG/L)	**R-P-05S**	**187.4**	**154.6**	**30**	**Yes**	**11**	**0**	**No**	**0.01**	**Param.**
ARSENIC, TOTAL (UG/L)	R-P-10S	9.363	4.206	30	No	13	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-P-16S	1.932	1.211	30	No	14	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-P-17D	1.231	1.096	30	No	11	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	**R-P-17I**	**59.78**	**37.33**	**30**	**Yes**	**11**	**0**	**No**	**0.01**	**Param.**
ARSENIC, TOTAL (UG/L)	**R-P-17S**	**35.33**	**21.36**	**30**	**Yes**	**11**	**0**	**No**	**0.01**	**Param.**
ARSENIC, TOTAL (UG/L)	R-P-19D	0.7409	0.5845	30	No	11	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	**R-P-19I**	**271**	**28.5**	**30**	**Yes**	**11**	**0**	**No**	**0.006**	**NP (normality)**
ARSENIC, TOTAL (UG/L)	R-P-19S	20.66	8.063	30	No	11	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-P-21D	0.6219	0.4962	30	No	11	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-P-21I	6	5	30	No	11	0	No	0.006	NP (normality)
ARSENIC, TOTAL (UG/L)	**R-P-21S**	**105.2**	**28.11**	**30**	**Yes**	**11**	**0**	**No**	**0.01**	**Param.**
ARSENIC, TOTAL (UG/L)	R-P-22D	11.17	8.885	30	No	11	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-P-22S	5.437	1.563	30	No	11	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-P-30S	1.756	1.017	30	No	14	0	ln(x)	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-P-31S	26.15	16.24	30	No	12	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-05S	210.6	165.1	2000	No	11	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-10S	193.1	128.9	2000	No	10	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-16S	124.2	77.9	2000	No	10	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-17D	104.1	97.77	2000	No	11	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-17I	29.6	13.9	2000	No	11	0	No	0.006	NP (normality)
BARIUM, TOTAL (UG/L)	R-P-17S	143	85.28	2000	No	10	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-19D	108.1	75.9	2000	No	11	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-19I	66.8	11.2	2000	No	11	0	No	0.006	NP (normality)
BARIUM, TOTAL (UG/L)	R-P-19S	453.2	199.7	2000	No	11	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-21D	268.1	94.8	2000	No	11	0	ln(x)	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-21I	60.05	32.26	2000	No	11	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-21S	449.2	237.7	2000	No	11	0	ln(x)	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-22D	77.92	66.6	2000	No	11	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-22S	230	144	2000	No	11	0	No	0.006	NP (normality)
BARIUM, TOTAL (UG/L)	R-P-30S	107.3	91.33	2000	No	11	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-31S	175.4	132.4	2000	No	9	0	No	0.01	Param.
BERYLLIUM, TOTAL (UG/L)	R-P-05S	0.26	0.06	4	No	6	66.67	No	0.0155	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-10S	0.245	0.06	4	No	6	100	No	0.0155	NP (NDs)

Confidence Interval

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 3/10/2025, 11:59 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
BERYLLIUM, TOTAL (UG/L)	R-P-16S	0.245	0.06	4	No	6	100	No	0.0155	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-17D	0.245	0.06	4	No	6	100	No	0.0155	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-17I	0.245	0.06	4	No	6	100	No	0.0155	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-17S	0.245	0.06	4	No	6	100	No	0.0155	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-19D	0.245	0.06	4	No	6	100	No	0.0155	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-19I	0.245	0.06	4	No	6	100	No	0.0155	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-19S	0.245	0.06	4	No	6	83.33	No	0.0155	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-21D	0.245	0.06	4	No	6	100	No	0.0155	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-21I	0.245	0.06	4	No	6	100	No	0.0155	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-21S	0.245	0.06	4	No	6	100	No	0.0155	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-22D	0.1705	0.1362	4	No	6	50	No	0.01	Param.
BERYLLIUM, TOTAL (UG/L)	R-P-22S	0.245	0.06	4	No	6	100	No	0.0155	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-30S	0.245	0.06	4	No	6	100	No	0.0155	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-31S	0.245	0.06	4	No	6	83.33	No	0.0155	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-P-05S	0.031	0.025	5	No	8	100	No	0.004	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-P-10S	0.2402	0.07603	5	No	8	0	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-16S	0.1239	0.04554	5	No	8	25	ln(x)	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-17D	0.27	0.028	5	No	8	25	No	0.004	NP (normality)
CADMIUM, TOTAL (UG/L)	R-P-17I	0.6243	0.1827	5	No	8	0	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-17S	0.1396	0.04901	5	No	8	37.5	ln(x)	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-19D	0.3437	0.1056	5	No	8	0	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-19I	0.5336	0.1324	5	No	8	0	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-19S	0.031	0.025	5	No	7	100	No	0.008	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-P-21D	0.1245	0.05478	5	No	8	37.5	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-21I	0.11	0.028	5	No	8	37.5	No	0.004	NP (normality)
CADMIUM, TOTAL (UG/L)	R-P-21S	0.1076	0.04461	5	No	8	37.5	ln(x)	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-22D	0.1658	0.0902	5	No	8	0	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-22S	0.1397	0.07377	5	No	8	0	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-30S	0.07568	0.04725	5	No	8	50	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-31S	0.031	0.025	5	No	8	100	No	0.004	NP (NDs)
CHROMIUM, TOTAL (UG/L)	R-P-05S	0.82	0.34	100	No	11	9.091	No	0.006	NP (normality)
CHROMIUM, TOTAL (UG/L)	R-P-10S	0.7921	0.263	100	No	10	40	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-16S	0.5	0.11	100	No	11	81.82	No	0.006	NP (NDs)
CHROMIUM, TOTAL (UG/L)	R-P-17D	0.47	0.11	100	No	11	54.55	No	0.006	NP (NDs)
CHROMIUM, TOTAL (UG/L)	R-P-17I	0.98	0.6654	100	No	11	0	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-17S	0.5209	0.2711	100	No	11	18.18	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-19D	0.6965	0.3598	100	No	11	18.18	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-19I	0.7037	0.3418	100	No	11	0	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-19S	0.4303	0.2673	100	No	11	27.27	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-21D	0.5	0.11	100	No	11	63.64	No	0.006	NP (NDs)
CHROMIUM, TOTAL (UG/L)	R-P-21I	0.55	0.31	100	No	11	9.091	No	0.006	NP (normality)
CHROMIUM, TOTAL (UG/L)	R-P-21S	0.3648	0.2232	100	No	11	36.36	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-22D	1.827	1.171	100	No	11	0	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-22S	0.41	0.11	100	No	11	63.64	No	0.006	NP (NDs)
CHROMIUM, TOTAL (UG/L)	R-P-30S	0.3242	0.2295	100	No	11	45.45	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-31S	0.6254	0.1863	100	No	10	50	ln(x)	0.01	Param.
COBALT, TOTAL (UG/L)	R-P-05S	0.75	0.39	6	No	7	100	No	0.008	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-10S	3.39	1.182	6	No	7	28.57	No	0.01	Param.
COBALT, TOTAL (UG/L)	R-P-16S	0.75	0.475	6	No	6	100	No	0.0155	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-17D	0.75	0.39	6	No	7	100	No	0.008	NP (NDs)

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Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
COBALT, TOTAL (UG/L)	R-P-17I	0.75	0.39	6	No	7	100	No	0.008	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-17S	2.58	1.12	6	No	6	16.67	No	0.01	Param.
COBALT, TOTAL (UG/L)	R-P-19D	0.79	0.475	6	No	7	85.71	No	0.008	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-19I	0.75	0.39	6	No	7	100	No	0.008	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-19S	3.41	0.4075	6	No	7	42.86	No	0.01	Param.
COBALT, TOTAL (UG/L)	R-P-21D	0.75	0.475	6	No	7	100	No	0.008	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-21I	0.75	0.39	6	No	7	100	No	0.008	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-21S	2.576	1.015	6	No	7	42.86	No	0.01	Param.
COBALT, TOTAL (UG/L)	R-P-22D	0.75	0.475	6	No	7	100	No	0.008	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-22S	2.998	1.259	6	No	7	28.57	No	0.01	Param.
COBALT, TOTAL (UG/L)	R-P-30S	0.75	0.475	6	No	7	100	No	0.008	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-31S	0.75	0.475	6	No	7	100	No	0.008	NP (NDs)
FLUORIDE, TOTAL (MG/L)	R-P-05S	0.4269	0.3071	4	No	10	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-10S	0.51	0.06	4	No	10	30	No	0.011	NP (normality)
FLUORIDE, TOTAL (MG/L)	R-P-16S	0.4	0.1244	4	No	11	36.36	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-17D	0.7	0.32	4	No	11	0	No	0.006	NP (normality)
FLUORIDE, TOTAL (MG/L)	R-P-17I	2.127	1.573	4	No	10	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-17S	0.8635	0.3329	4	No	11	18.18	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-19D	2.2	1.6	4	No	11	0	No	0.006	NP (normality)
FLUORIDE, TOTAL (MG/L)	R-P-19I	1.527	0.6474	4	No	11	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-19S	0.33	0.06	4	No	11	18.18	No	0.006	NP (normality)
FLUORIDE, TOTAL (MG/L)	R-P-21D	1.257	0.5323	4	No	11	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-21I	1.1	0.65	4	No	11	0	No	0.006	NP (normality)
FLUORIDE, TOTAL (MG/L)	R-P-21S	0.3428	0.1484	4	No	11	27.27	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-22D	2.503	2.079	4	No	11	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-22S	0.4	0.06	4	No	11	54.55	No	0.006	NP (NDs)
FLUORIDE, TOTAL (MG/L)	R-P-30S	0.3423	0.149	4	No	11	27.27	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-31S	0.44	0.06	4	No	10	20	No	0.011	NP (normality)
LEAD, TOTAL (UG/L)	R-P-05S	4.1	1.9	15	No	10	90	No	0.011	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-10S	4.3	1.9	15	No	8	100	No	0.004	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-16S	3.05	1.9	15	No	10	100	No	0.011	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-17D	3.9	1.9	15	No	10	90	No	0.011	NP (NDs)
LEAD, TOTAL (UG/L)	**R-P-17I**	**17.98**	**5.984**	**15**	**Yes**	**10**	**10**	**No**	**0.01**	**Param.**
LEAD, TOTAL (UG/L)	R-P-17S	4.3	1.9	15	No	10	90	No	0.011	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-19D	2.3	1.9	15	No	10	100	No	0.011	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-19I	14.56	3.799	15	No	10	40	No	0.01	Param.
LEAD, TOTAL (UG/L)	R-P-19S	4.3	1.9	15	No	9	100	No	0.002	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-21D	3.05	1.9	15	No	10	100	No	0.011	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-21I	2.3	1.9	15	No	10	100	No	0.011	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-21S	4.7	1.9	15	No	9	88.89	No	0.002	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-22D	5.2	1.9	15	No	10	80	No	0.011	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-22S	4.3	1.9	15	No	10	90	No	0.011	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-30S	3.05	1.9	15	No	9	100	No	0.002	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-31S	3.05	1.9	15	No	8	100	No	0.004	NP (NDs)
LITHIUM, TOTAL (UG/L)	R-P-05S	17.63	14.23	64.7	No	11	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-10S	23.76	14.38	64.7	No	10	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-16S	40.76	22.07	64.7	No	11	0	ln(x)	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-17D	40.16	36.1	64.7	No	11	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-17I	4.8	2.3	64.7	No	11	54.55	No	0.006	NP (NDs)
LITHIUM, TOTAL (UG/L)	R-P-17S	37.09	26.59	64.7	No	10	0	No	0.01	Param.

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Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
LITHIUM, TOTAL (UG/L)	R-P-19D	20.05	16.08	64.7	No	11	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	**R-P-19I**	**134**	**12.8**	**64.7**	**Yes**	**12**	**0**	**No**	**0.01**	**NP (normality)**
LITHIUM, TOTAL (UG/L)	R-P-19S	43.92	22.48	64.7	No	11	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	**R-P-21D**	**223.8**	**138.4**	**64.7**	**Yes**	**11**	**0**	**No**	**0.01**	**Param.**
LITHIUM, TOTAL (UG/L)	R-P-21I	23.47	18.01	64.7	No	11	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-21S	18.89	14.2	64.7	No	11	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-22D	26.49	23.42	64.7	No	11	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-22S	62.08	48.47	64.7	No	11	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-30S	44.9	34.1	64.7	No	11	0	No	0.006	NP (normality)
LITHIUM, TOTAL (UG/L)	R-P-31S	10.79	7.189	64.7	No	8	0	No	0.01	Param.
MERCURY, TOTAL (UG/L)	R-P-05S	0.06	0.029	2	No	5	100	No	0.031	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-10S	0.06	0.029	2	No	5	100	No	0.031	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-16S	0.06	0.029	2	No	5	100	No	0.031	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-17D	0.06	0.029	2	No	5	100	No	0.031	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-17I	0.06	0.029	2	No	5	100	No	0.031	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-17S	0.06	0.029	2	No	5	100	No	0.031	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-19D	0.06	0.029	2	No	5	100	No	0.031	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-19I	0.06	0.029	2	No	5	100	No	0.031	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-19S	0.06	0.029	2	No	5	100	No	0.031	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-21D	0.06	0.029	2	No	5	100	No	0.031	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-21I	0.06	0.029	2	No	5	100	No	0.031	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-21S	0.06	0.029	2	No	5	100	No	0.031	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-22D	0.06	0.029	2	No	5	100	No	0.031	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-22S	0.06	0.029	2	No	5	100	No	0.031	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-30S	0.06	0.029	2	No	5	100	No	0.031	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-31S	0.06	0.029	2	No	5	100	No	0.031	NP (NDs)
MOLYBDENUM, TOTAL (UG/L)	R-P-05S	12.79	4.633	100	No	11	0	No	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	**R-P-10S**	**107**	**61.98**	**100**	**Yes**	**13**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	R-P-16S	24.07	10.83	100	No	14	0	ln(x)	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	**R-P-17D**	**705**	**628.8**	**100**	**Yes**	**11**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	**R-P-17I**	**148.9**	**110.9**	**100**	**Yes**	**11**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	R-P-17S	96.19	31.41	100	No	11	0	No	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	**R-P-19D**	**915**	**747.8**	**100**	**Yes**	**11**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	**R-P-19I**	**252.8**	**127.3**	**100**	**Yes**	**11**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	R-P-19S	7.246	2.811	100	No	11	0	ln(x)	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	**R-P-21D**	**397.2**	**238.1**	**100**	**Yes**	**11**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	**R-P-21I**	**292.6**	**125.7**	**100**	**Yes**	**11**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	R-P-21S	3.296	1.117	100	No	11	27.27	ln(x)	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	**R-P-22D**	**360.3**	**322.6**	**100**	**Yes**	**11**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	R-P-22S	11.89	8.367	100	No	11	0	No	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	R-P-30S	2.277	1.102	100	No	14	50	ln(x)	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	R-P-31S	8.926	7.213	100	No	13	7.692	No	0.01	Param.
RADIUM [226 + 228] (PCI/L)	R-P-05S	0.9175	0.691	5	No	10	100	No	0.011	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-10S	1.04	0.673	5	No	10	100	No	0.011	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-16S	0.8435	0.6335	5	No	11	100	No	0.006	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-17D	1.291	0.6555	5	No	11	90.91	No	0.006	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-17I	1.729	0.7765	5	No	11	100	No	0.006	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-17S	1.096	0.695	5	No	11	100	No	0.006	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-19D	0.861	0.6075	5	No	11	100	No	0.006	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-19I	1.377	0.7475	5	No	11	100	No	0.006	NP (NDs)

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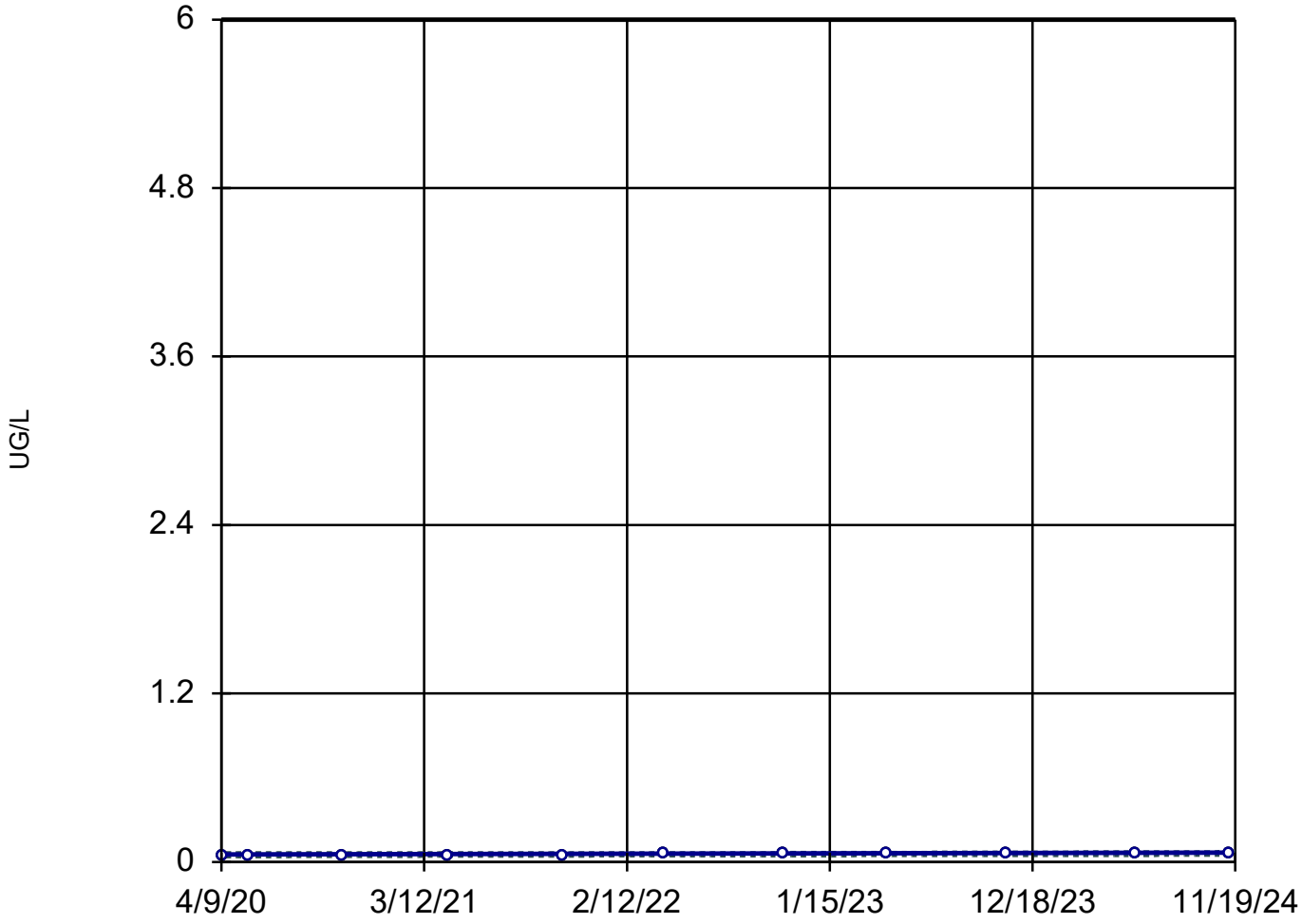
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
RADIUM [226 + 228] (PCI/L)	R-P-19S	1.899	0.6405	5	No	11	72.73	No	0.006	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-21D	3.097	0.6295	5	No	11	54.55	No	0.006	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-21I	1.045	0.6905	5	No	11	100	No	0.006	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-21S	1.712	0.67	5	No	11	90.91	No	0.006	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-22D	1.257	0.646	5	No	11	100	No	0.006	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-22S	1.196	0.665	5	No	11	90.91	No	0.006	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-30S	1.347	0.6415	5	No	11	90.91	No	0.006	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-31S	0.922	0.6385	5	No	9	100	No	0.002	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-P-05S	0.25	0.09	50	No	11	36.36	No	0.006	NP (normality)
SELENIUM, TOTAL (UG/L)	R-P-10S	0.2	0.09	50	No	10	70	No	0.011	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-P-16S	2.426	0.3478	50	No	11	0	ln(x)	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-17D	0.2832	0.2205	50	No	11	0	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-17I	1.857	1.085	50	No	11	0	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-17S	0.7785	0.4235	50	No	10	0	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-19D	0.3527	0.2601	50	No	11	0	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-19I	2.917	0.4344	50	No	11	0	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-19S	0.09	0.09	50	No	11	100	No	0.006	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-P-21D	0.09	0.09	50	No	11	90.91	No	0.006	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-P-21I	0.5064	0.3713	50	No	11	0	ln(x)	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-21S	0.3876	0.1886	50	No	11	27.27	ln(x)	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-22D	1.028	0.7197	50	No	11	0	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-22S	0.4578	0.1874	50	No	11	27.27	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-30S	1.102	0.17	50	No	10	30	ln(x)	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-31S	0.09	0.09	50	No	10	90	No	0.011	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-05S	0.075	0.0465	2	No	5	100	No	0.031	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-10S	0.075	0.0465	2	No	5	100	No	0.031	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-16S	0.075	0.0465	2	No	5	100	No	0.031	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-17D	0.075	0.0465	2	No	5	100	No	0.031	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-17I	0.075	0.0465	2	No	5	100	No	0.031	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-17S	0.075	0.0465	2	No	5	100	No	0.031	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-19D	0.075	0.0465	2	No	5	100	No	0.031	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-19I	0.075	0.0465	2	No	5	100	No	0.031	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-19S	0.075	0.0465	2	No	5	100	No	0.031	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-21D	0.075	0.0465	2	No	5	100	No	0.031	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-21I	0.075	0.0465	2	No	5	100	No	0.031	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-21S	0.075	0.0465	2	No	5	100	No	0.031	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-22D	0.075	0.0465	2	No	5	100	No	0.031	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-22S	0.075	0.0465	2	No	5	100	No	0.031	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-30S	0.075	0.0465	2	No	5	100	No	0.031	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-31S	0.075	0.0465	2	No	5	100	No	0.031	NP (NDs)

Appendix B
Sanitas Trending Confidence Bands Statistical Output

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-05S



n = 11

Slope = 0.00281 units per year.

Mann-Kendall statistic = 36
critical = 31

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

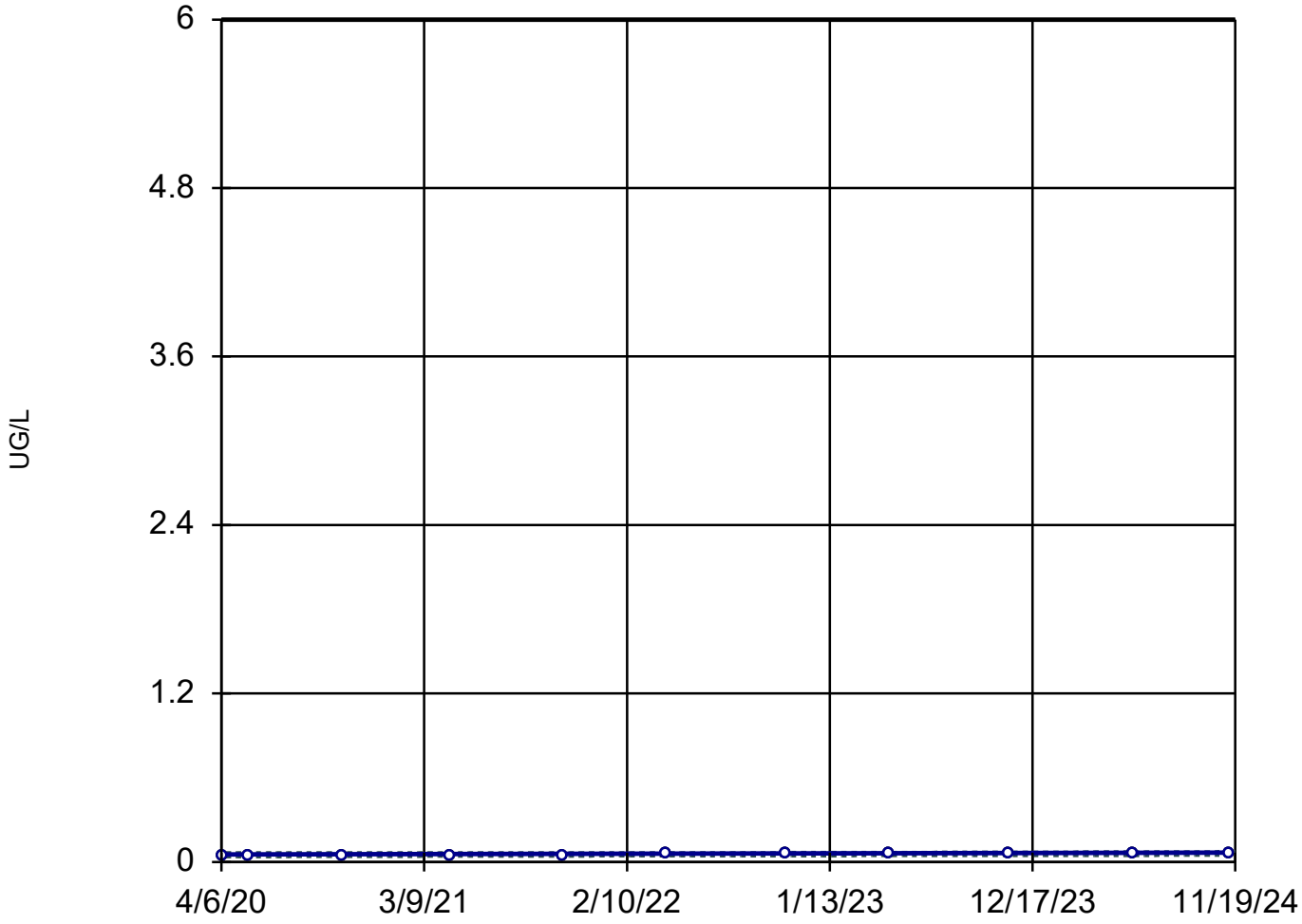
Constituent: ANTIMONY, TOTAL Analysis Run 3/10/2025 1:25 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-17D



n = 11

Slope = 0.00281 units per year.

Mann-Kendall statistic = 36
critical = 31

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

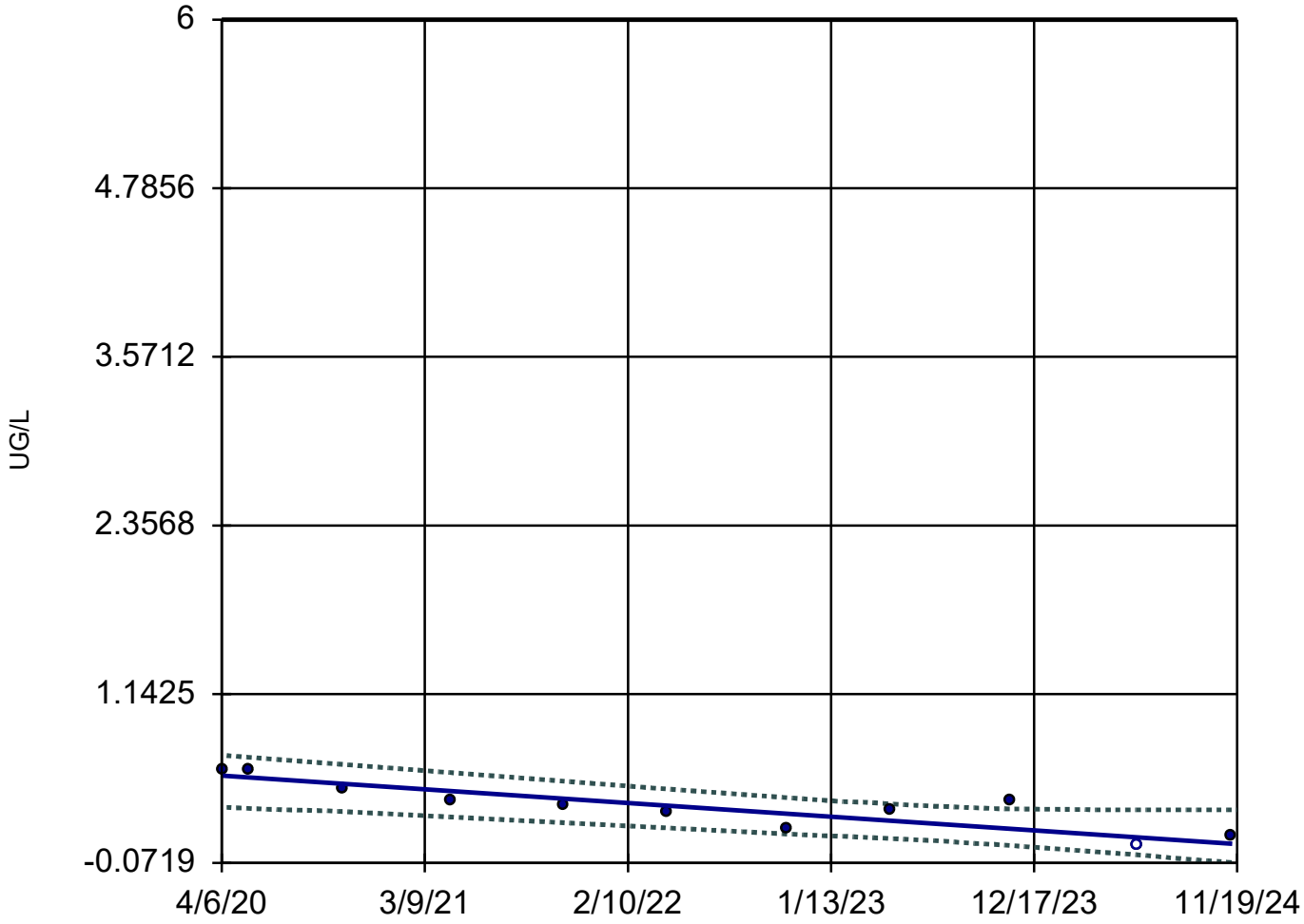
Constituent: ANTIMONY, TOTAL Analysis Run 3/10/2025 1:25 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-17I



n = 11

Slope = -0.1067 units per year.

Mann-Kendall statistic = -39
critical = -31

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

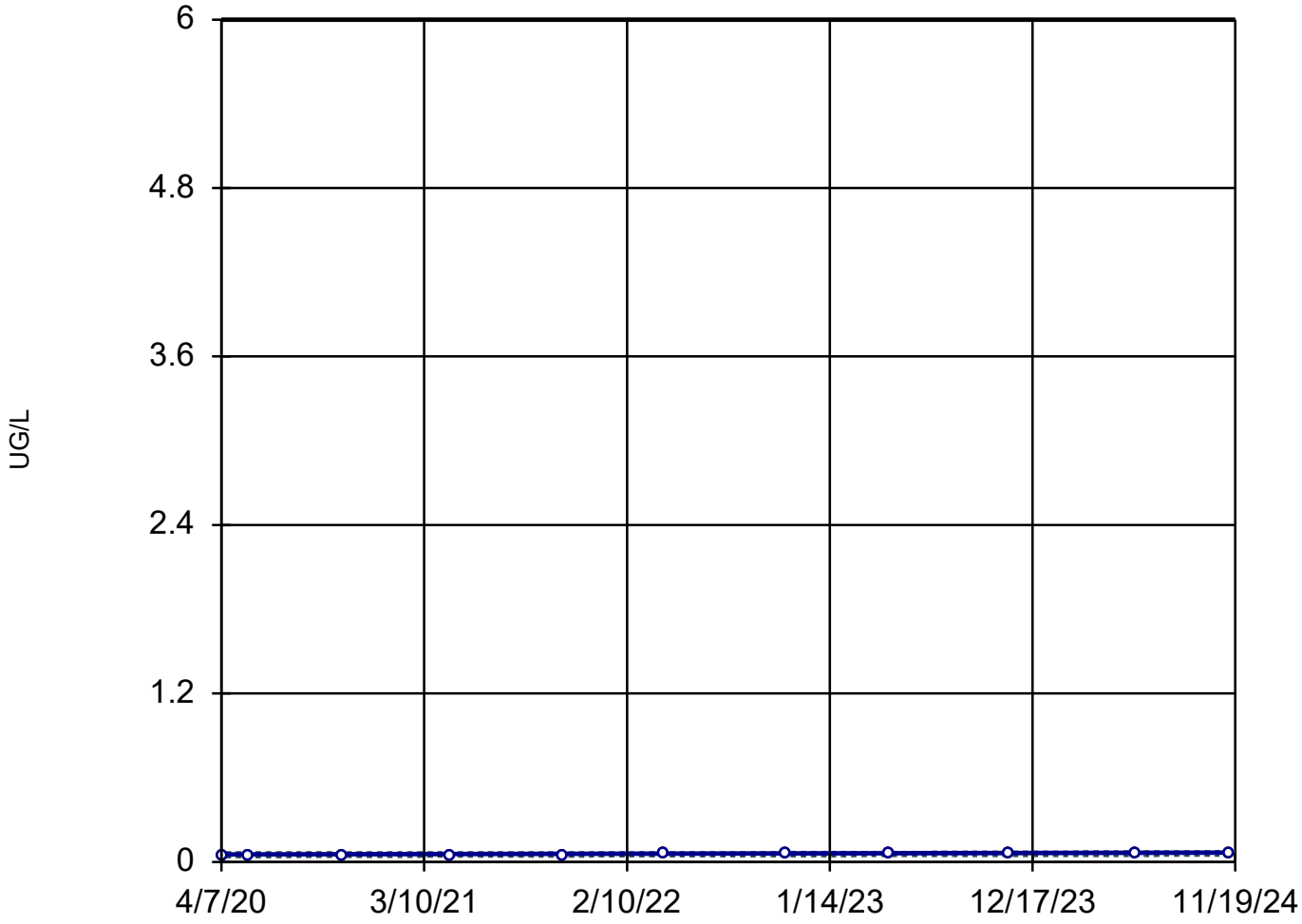
Constituent: ANTIMONY, TOTAL Analysis Run 3/10/2025 1:25 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-19D



n = 11

Slope = 0.00281 units per year.

Mann-Kendall statistic = 36
critical = 31

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

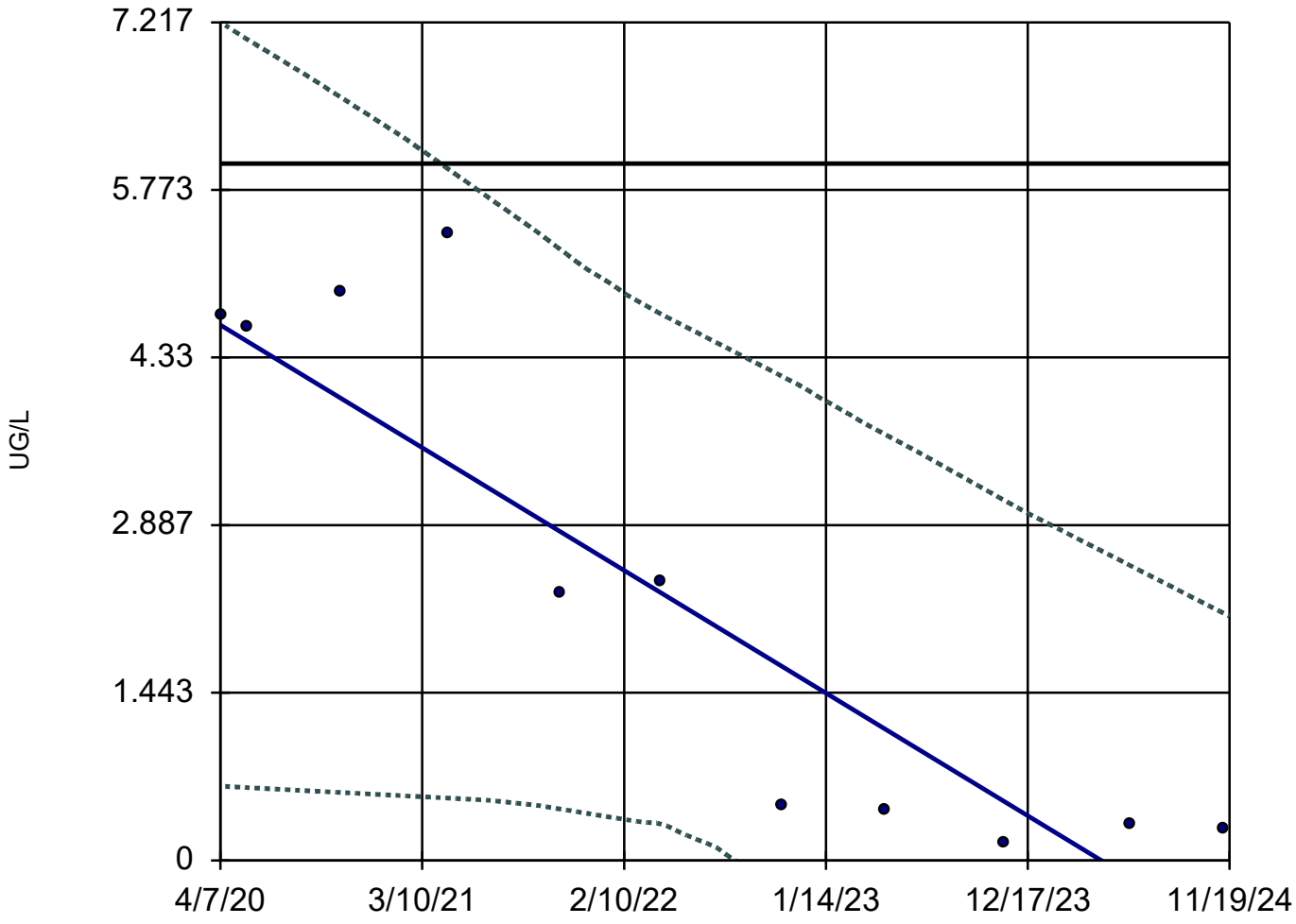
Constituent: ANTIMONY, TOTAL Analysis Run 3/10/2025 1:25 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-P-19I



n = 11

Slope = -1.142 units per year.

Mann-Kendall statistic = -39 critical = -31

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band intersects GWPS (6) on 04/19/21.

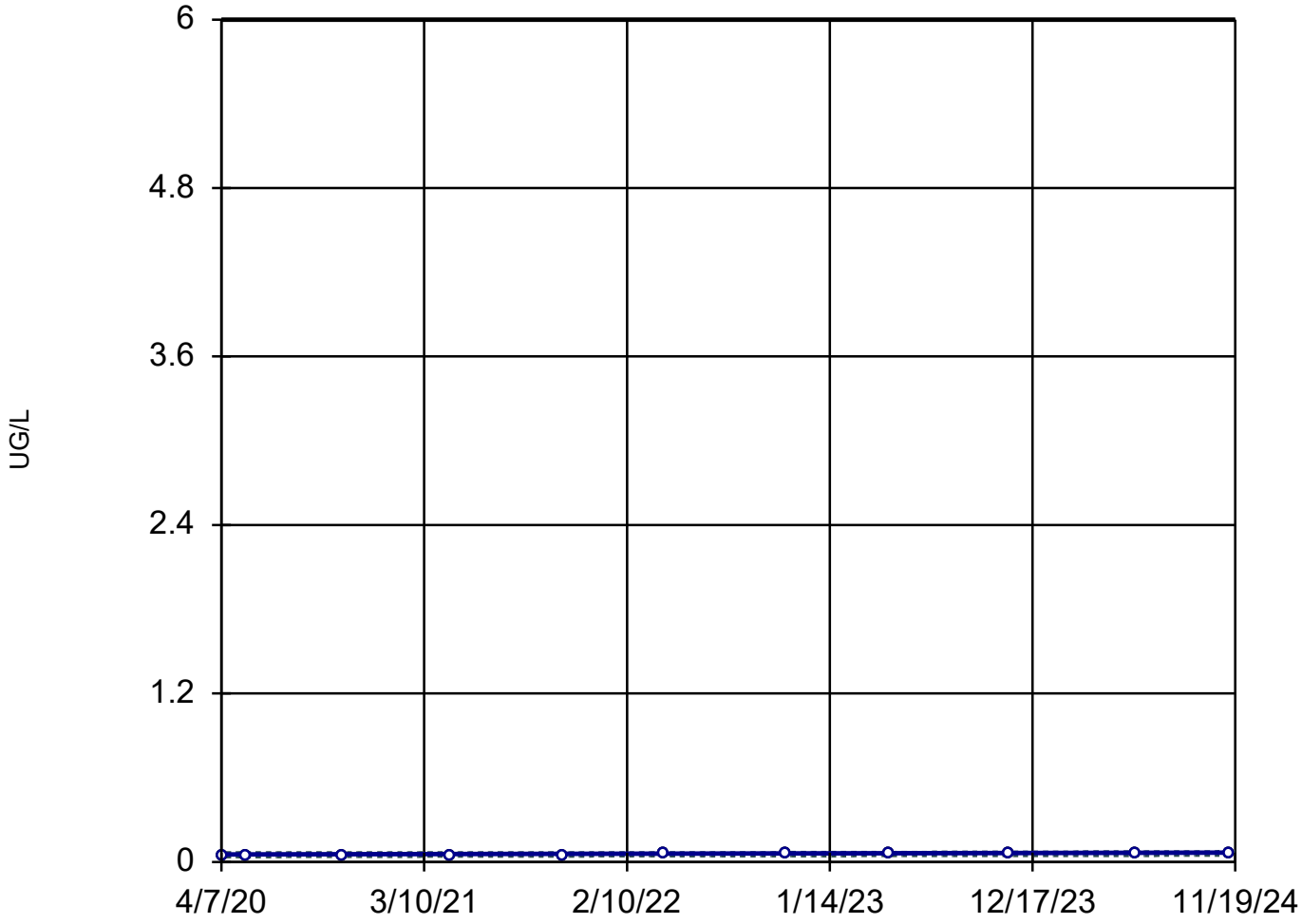
Constituent: ANTIMONY, TOTAL Analysis Run 3/10/2025 1:25 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-21D



n = 11

Slope = 0.002812 units per year.

Mann-Kendall statistic = 36
critical = 31

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

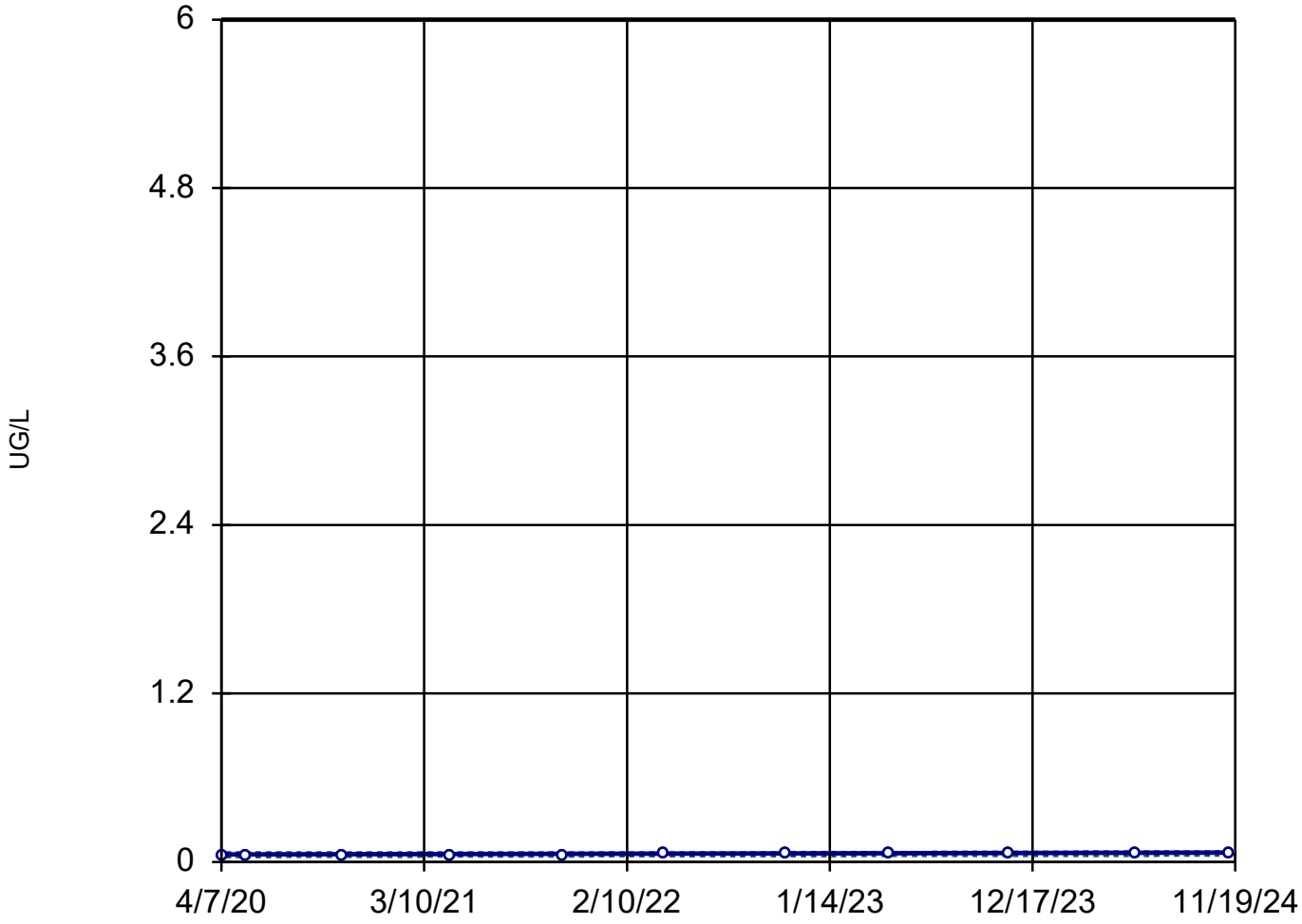
Constituent: ANTIMONY, TOTAL Analysis Run 3/10/2025 1:25 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-21I



n = 11

Slope = 0.002812 units per year.

Mann-Kendall statistic = 36
critical = 31

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

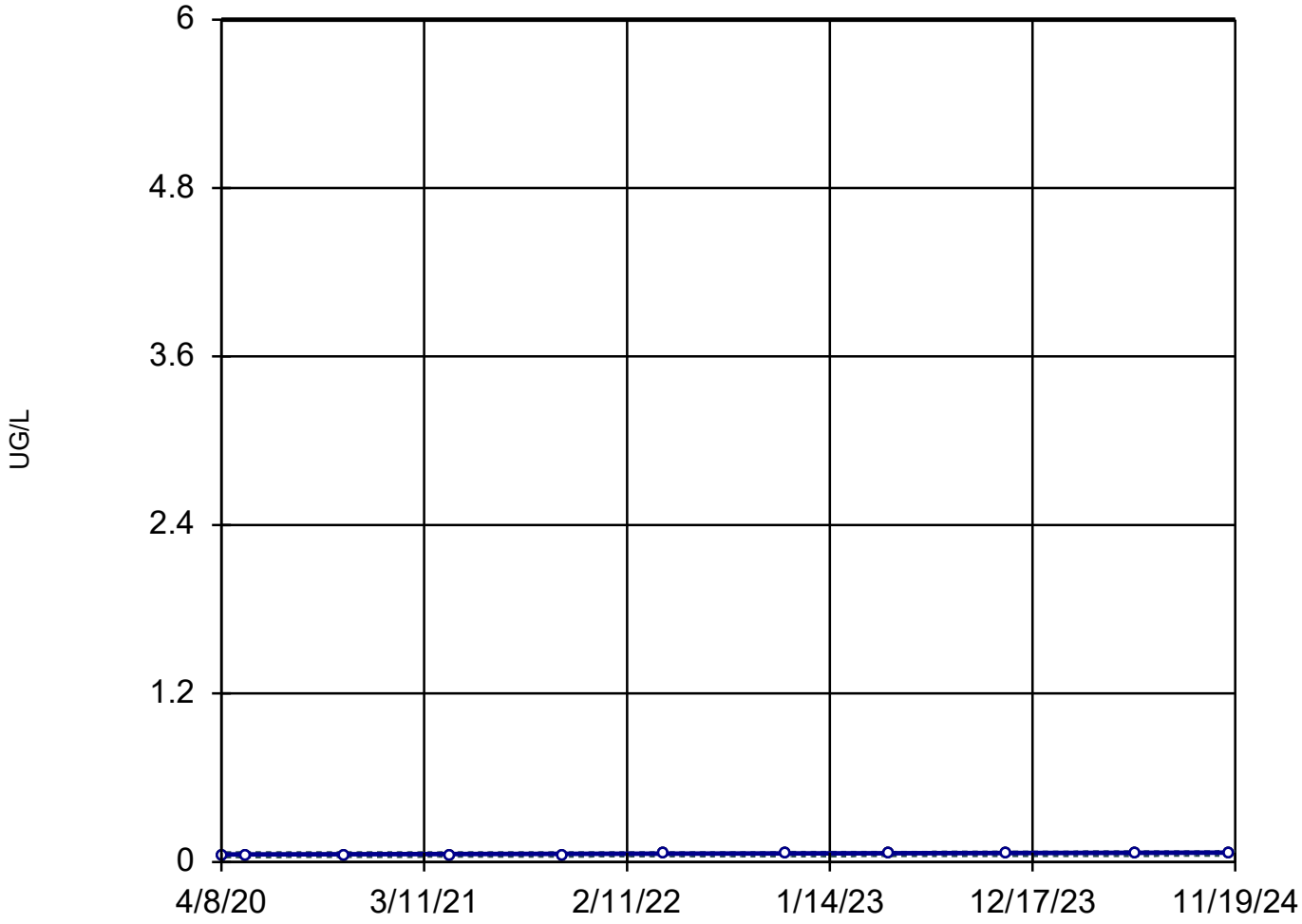
Constituent: ANTIMONY, TOTAL Analysis Run 3/10/2025 1:25 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-22S



n = 11

Slope = 0.00281 units per year.

Mann-Kendall statistic = 36
critical = 31

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

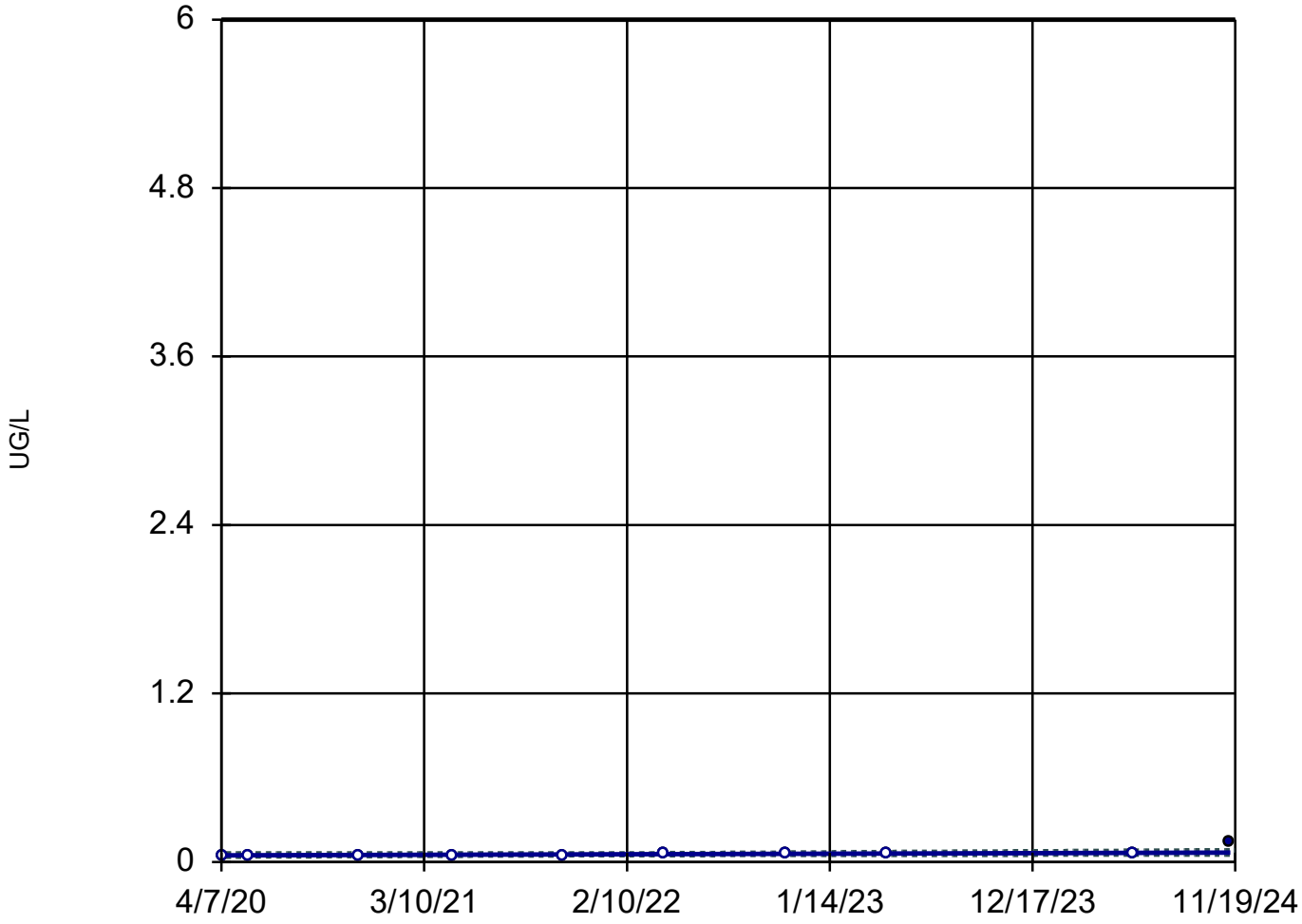
Constituent: ANTIMONY, TOTAL Analysis Run 3/10/2025 1:25 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-31S



n = 10

Slope = 0.003945 units per year.

Mann-Kendall statistic = 35
critical = 27

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

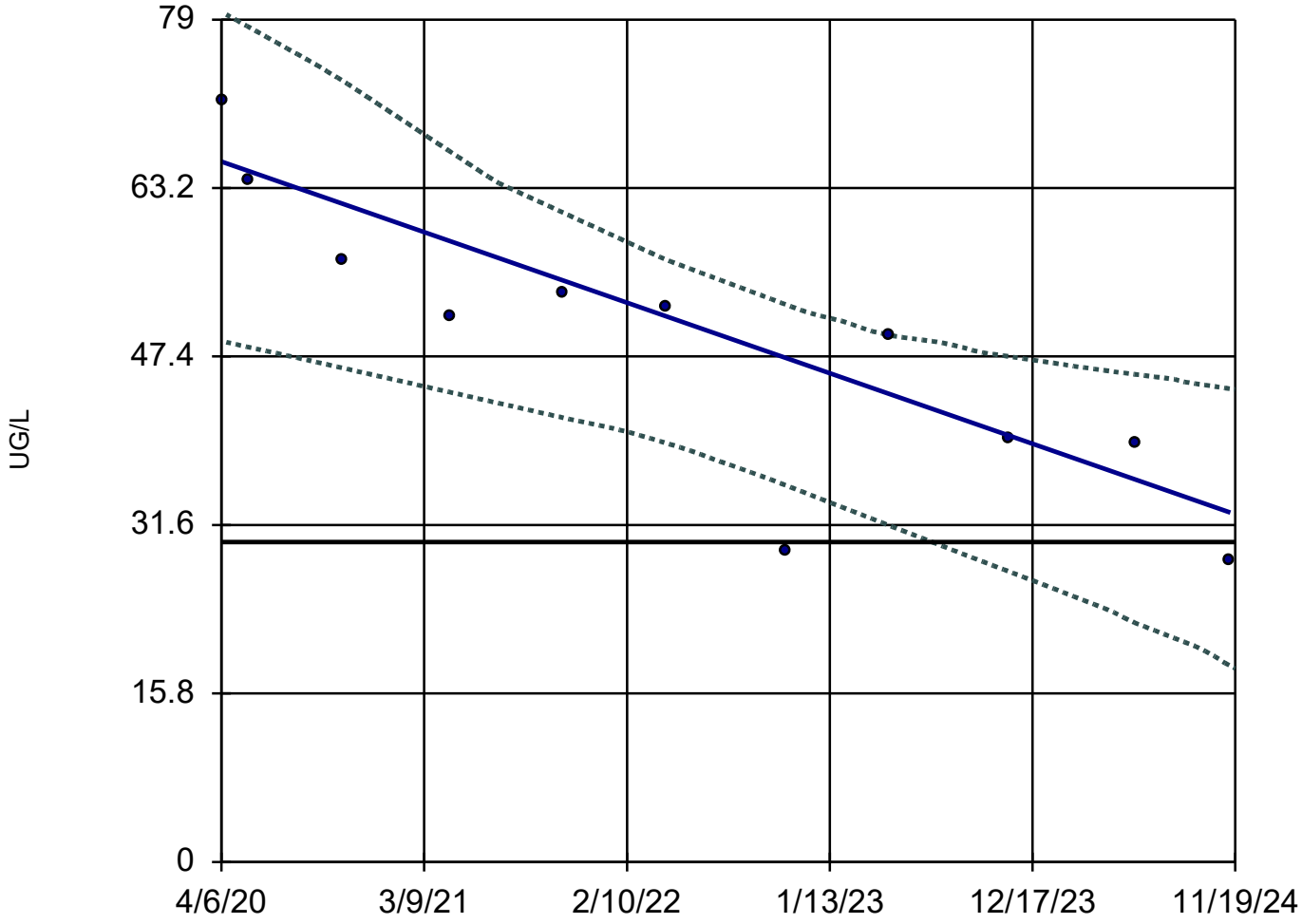
Confidence band is below GWPS (6).

Constituent: ANTIMONY, TOTAL Analysis Run 3/10/2025 1:25 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sen's Slope and 95% Confidence Band

R-P-17I



n = 11

Slope = -7.149 units per year.

Mann-Kendall statistic = -45 critical = -31

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

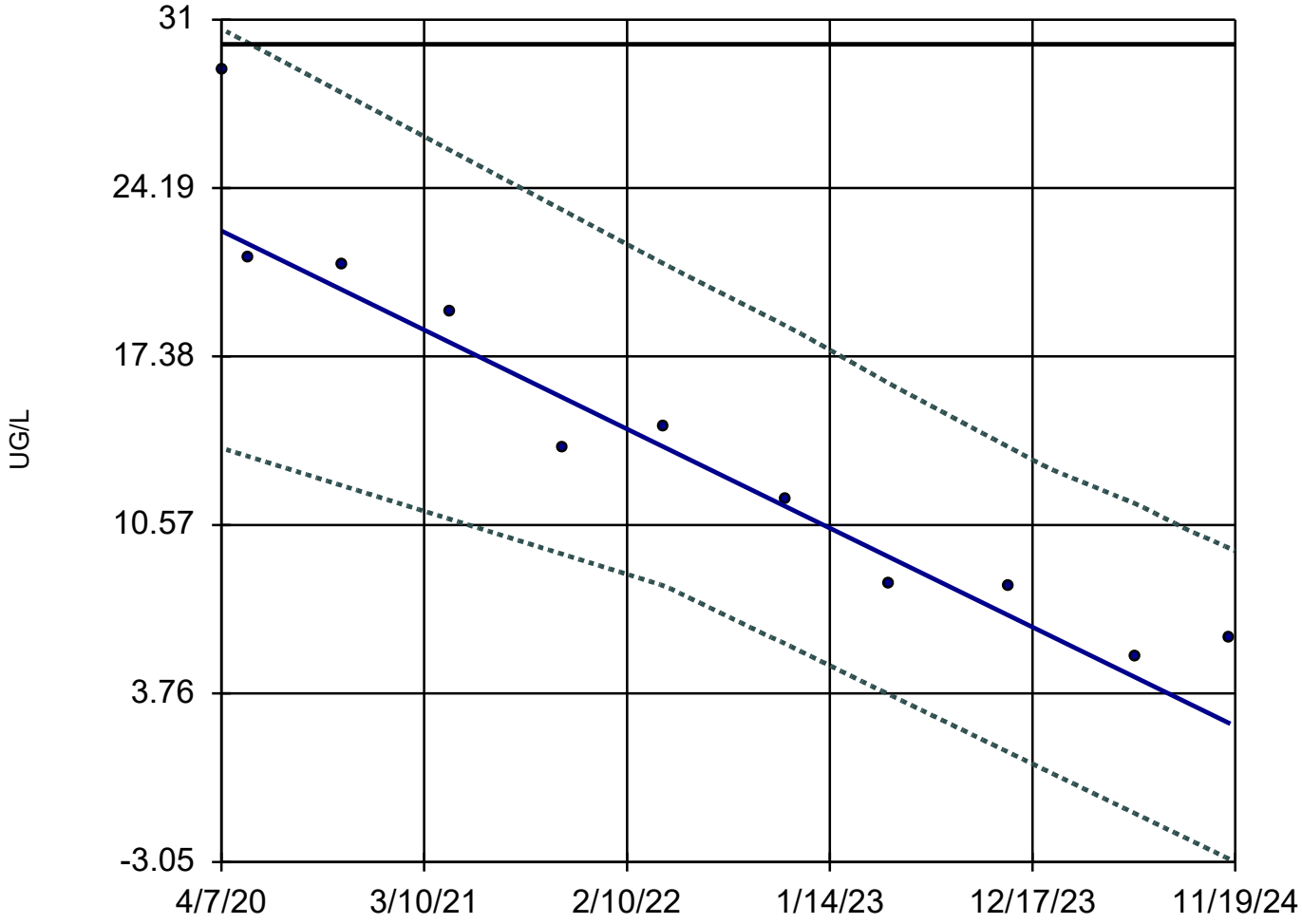
Confidence band intersects GWPS (30) on 07/04/23.

Constituent: ARSENIC, TOTAL Analysis Run 3/10/2025 1:25 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sen's Slope and 95% Confidence Band

R-P-19S



n = 11

Slope = -4.33
units per year.

Mann-Kendall
statistic = -51
critical = -31

Decreasing trend
significant at 98%
confidence level
(α = 0.01 per
tail).

Confidence band intersects
GWPS (30) on 06/04/20.

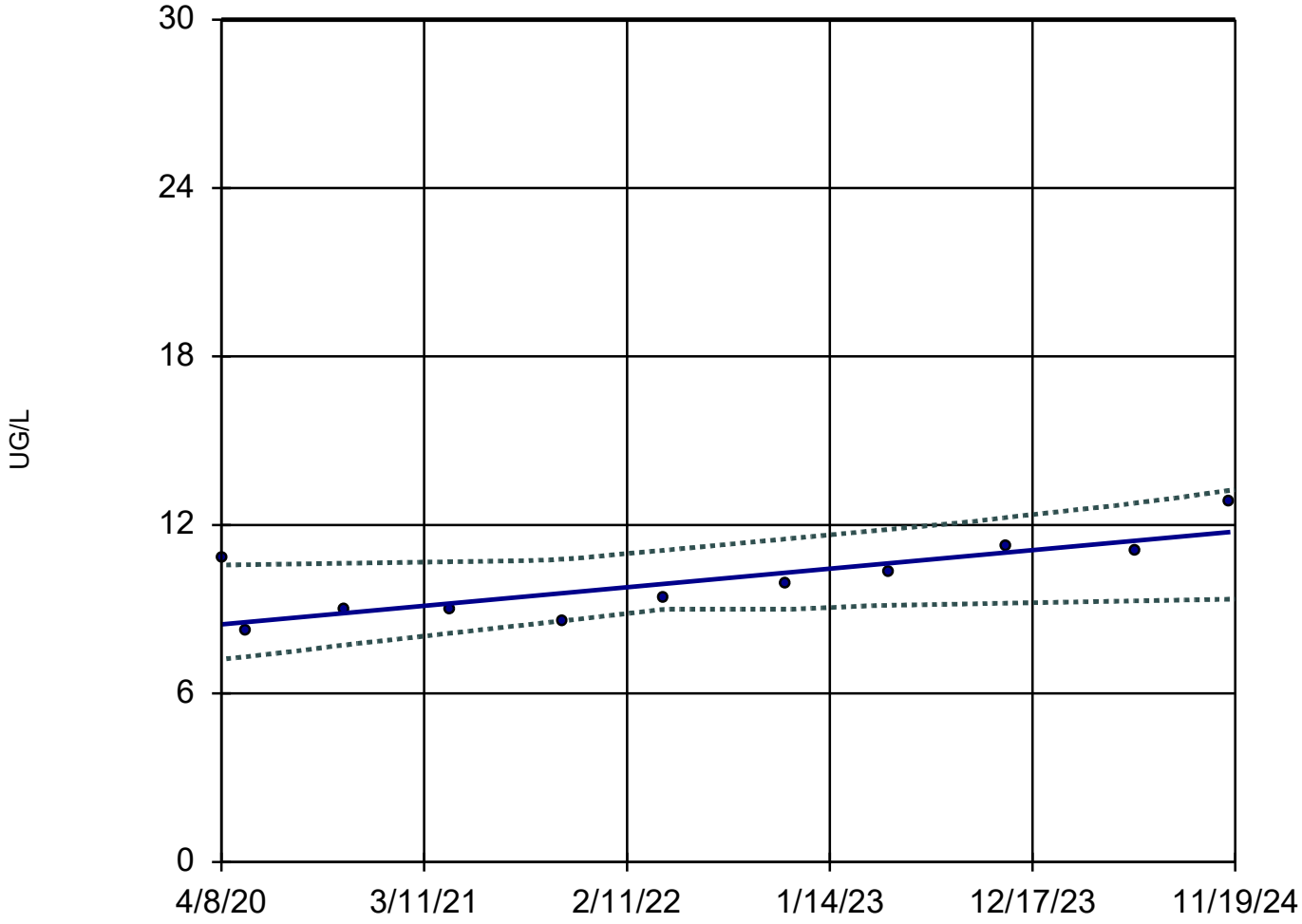
Constituent: ARSENIC, TOTAL Analysis Run 3/10/2025 1:26 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-P-22D



n = 11

Slope = 0.7164 units per year.

Mann-Kendall statistic = 34
critical = 31

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (30).

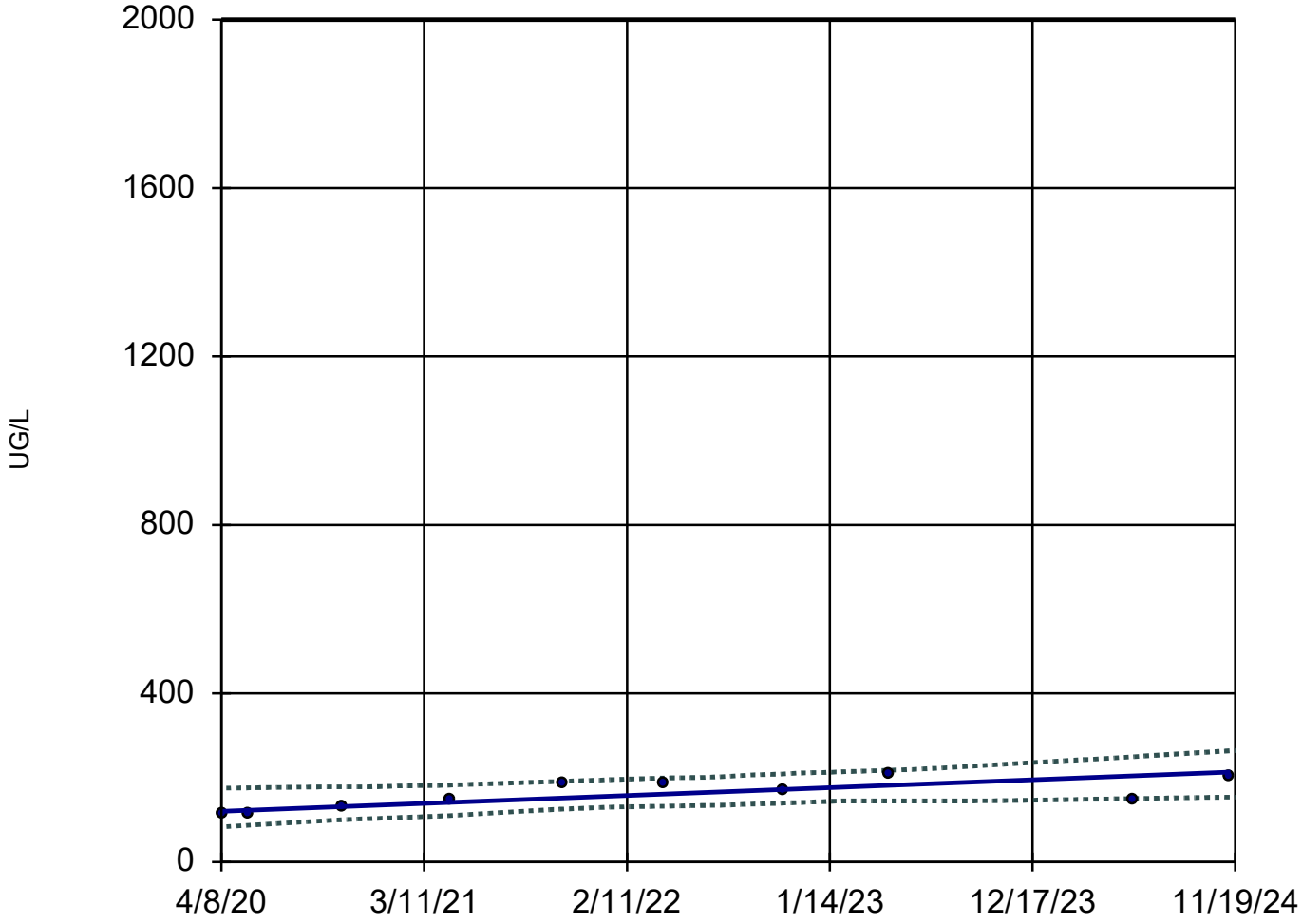
Constituent: ARSENIC, TOTAL Analysis Run 3/10/2025 1:26 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-P-10S



n = 10

Slope = 20.28 units per year.

Mann-Kendall statistic = 28
critical = 27

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2000).

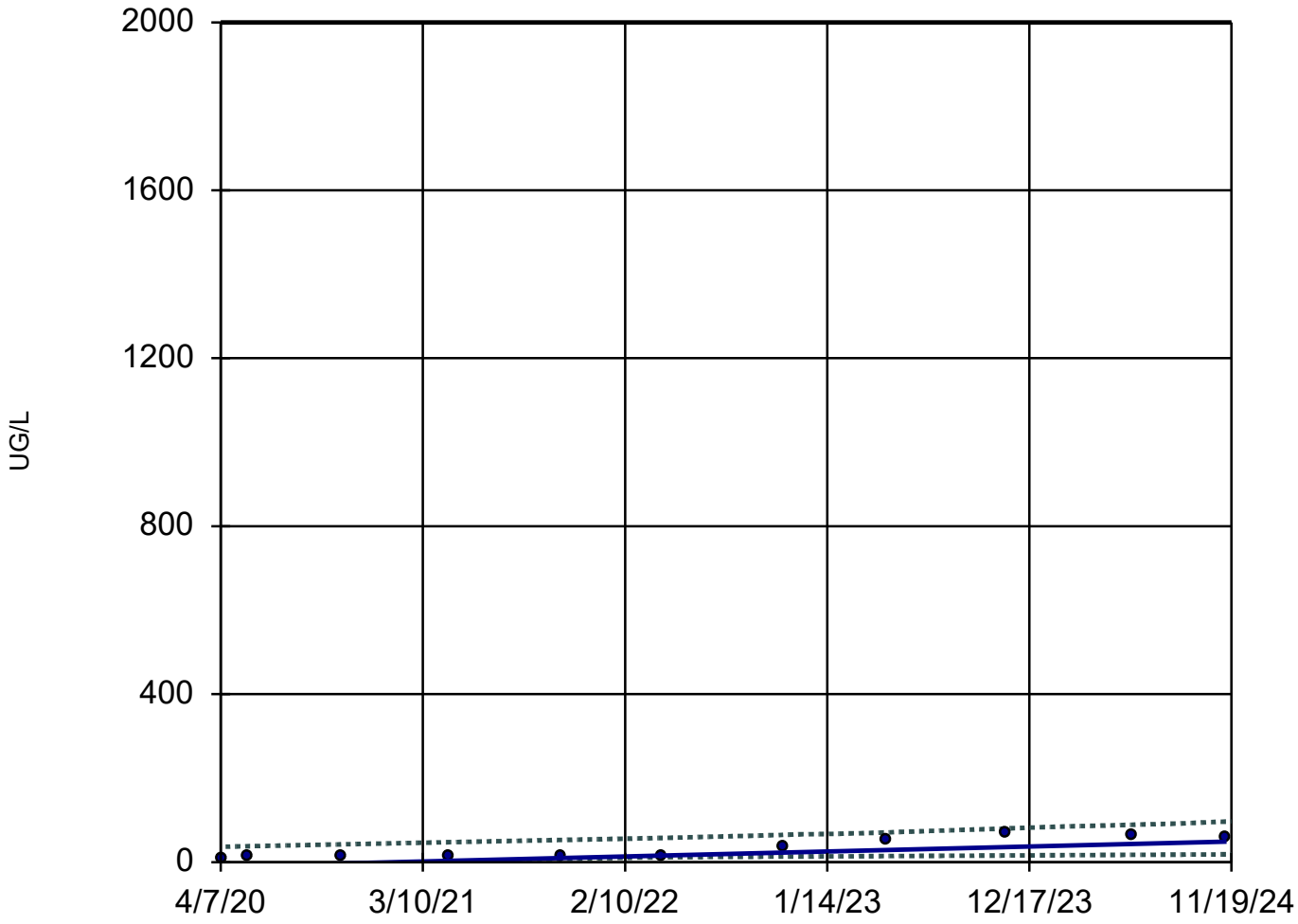
Constituent: BARIUM, TOTAL Analysis Run 3/10/2025 1:26 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-P-19I



n = 11

Slope = 12.94 units per year.

Mann-Kendall statistic = 49
critical = 31

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2000).

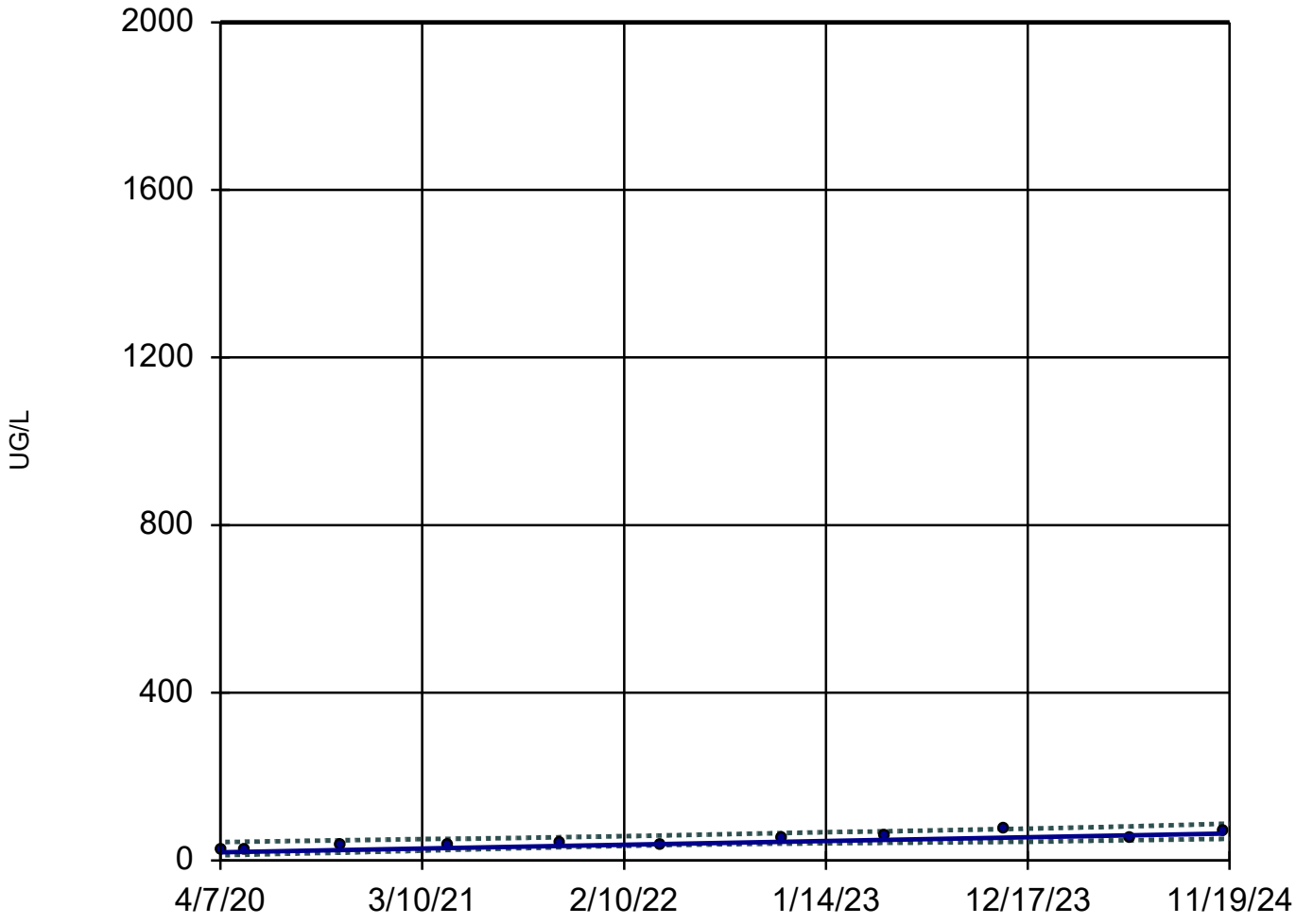
Constituent: BARIUM, TOTAL Analysis Run 3/10/2025 1:26 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-P-21I



n = 11

Slope = 9.716 units per year.

Mann-Kendall statistic = 45
critical = 31

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2000).

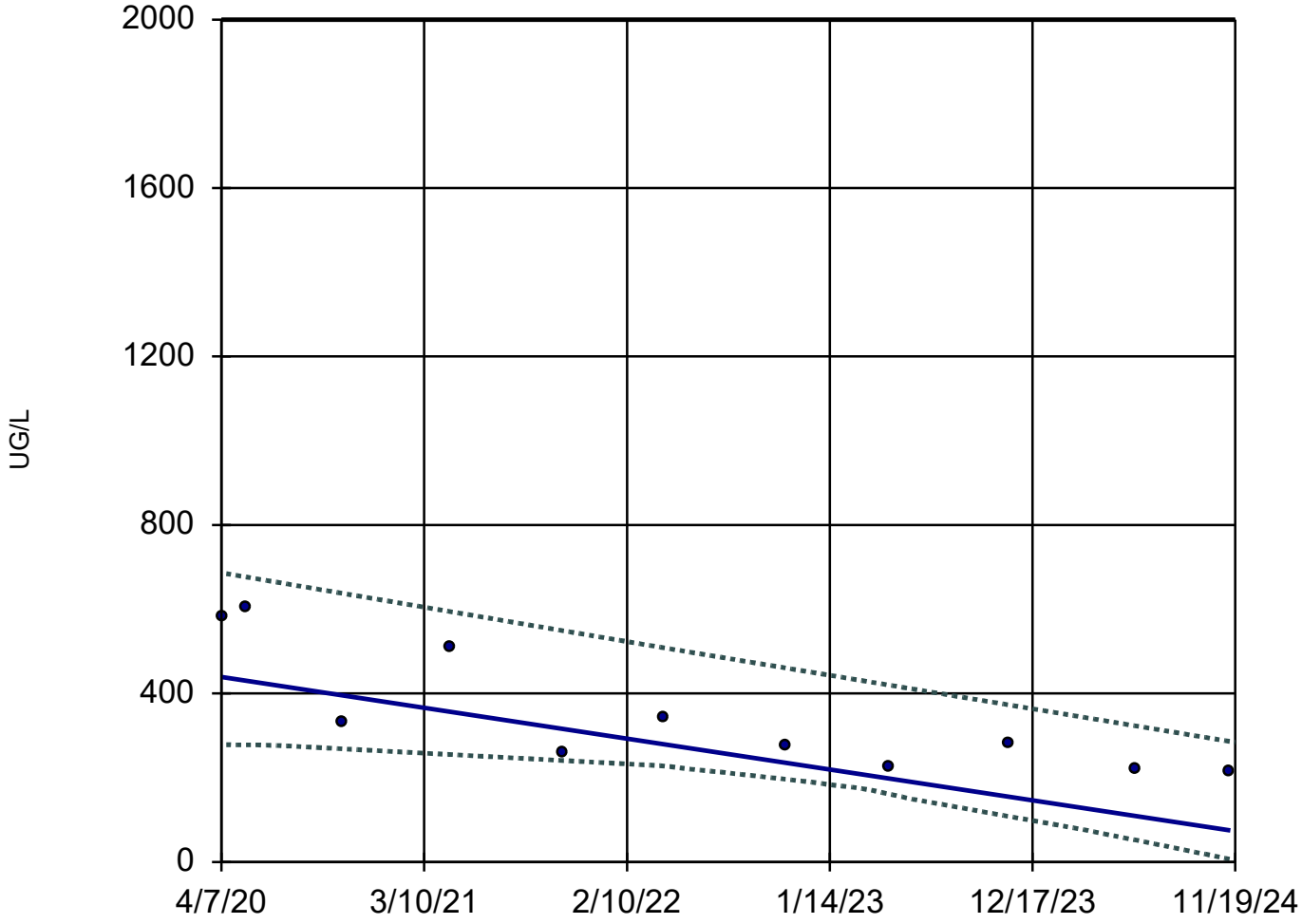
Constituent: BARIUM, TOTAL Analysis Run 3/10/2025 1:26 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-P-21S



n = 11

Slope = -79.13 units per year.

Mann-Kendall statistic = -39
critical = -31

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2000).

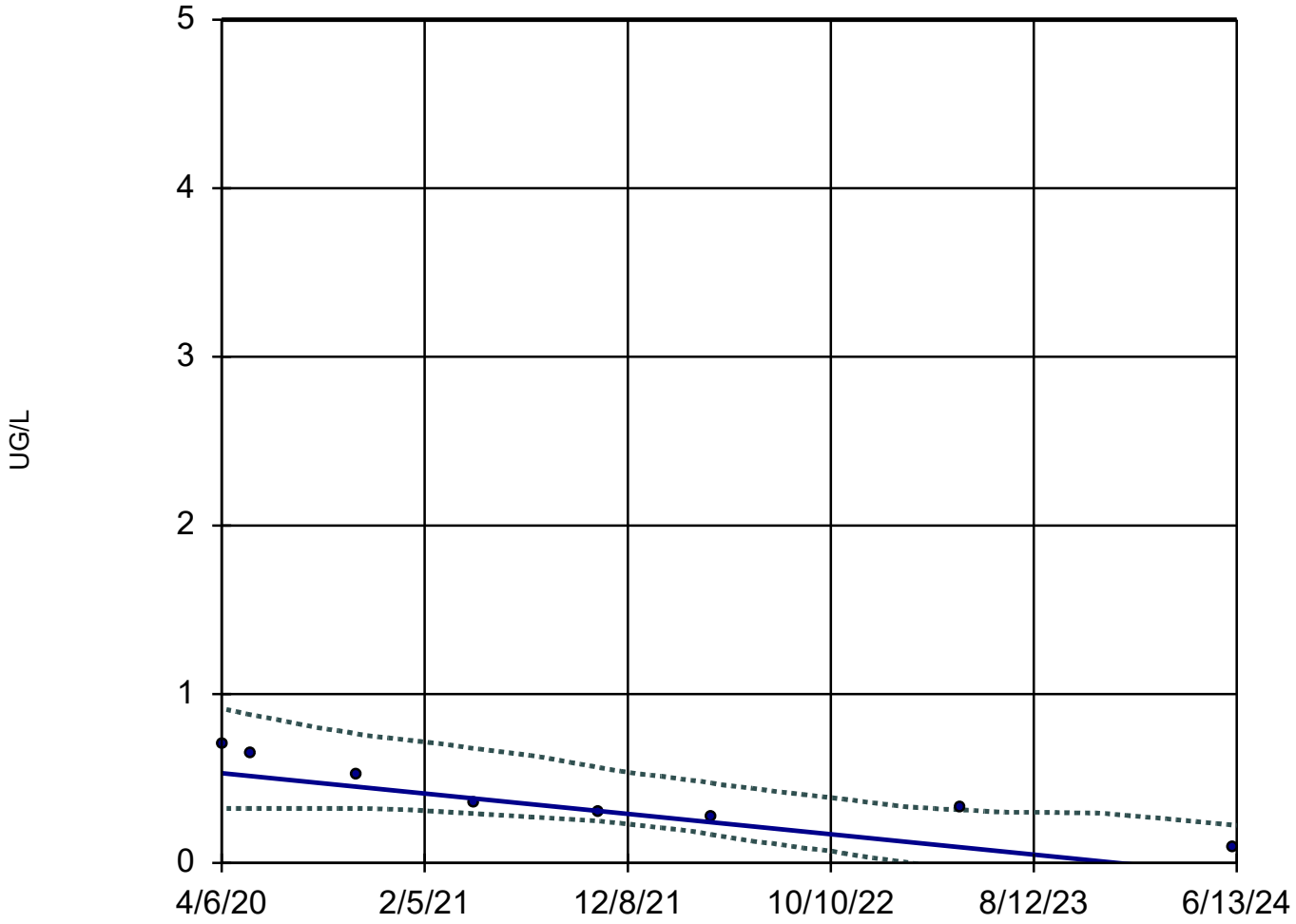
Constituent: BARIUM, TOTAL Analysis Run 3/10/2025 1:26 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-P-17I



n = 8

Slope = -0.144 units per year.

Mann-Kendall statistic = -24
critical = -20

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (5).

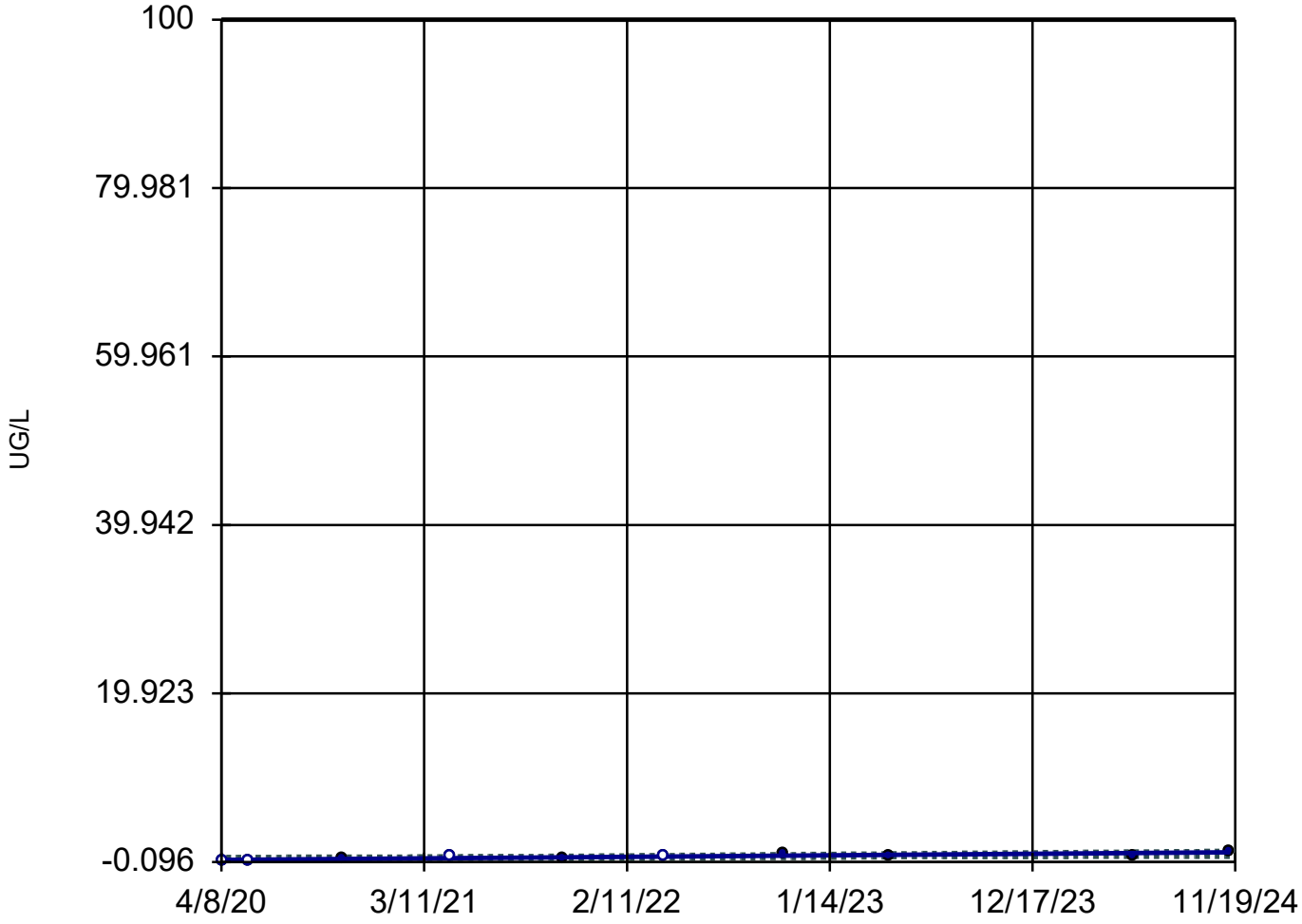
Constituent: CADMIUM, TOTAL Analysis Run 3/10/2025 1:26 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-10S



n = 10

Slope = 0.1966 units per year.

Mann-Kendall statistic = 35
critical = 27

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (100).

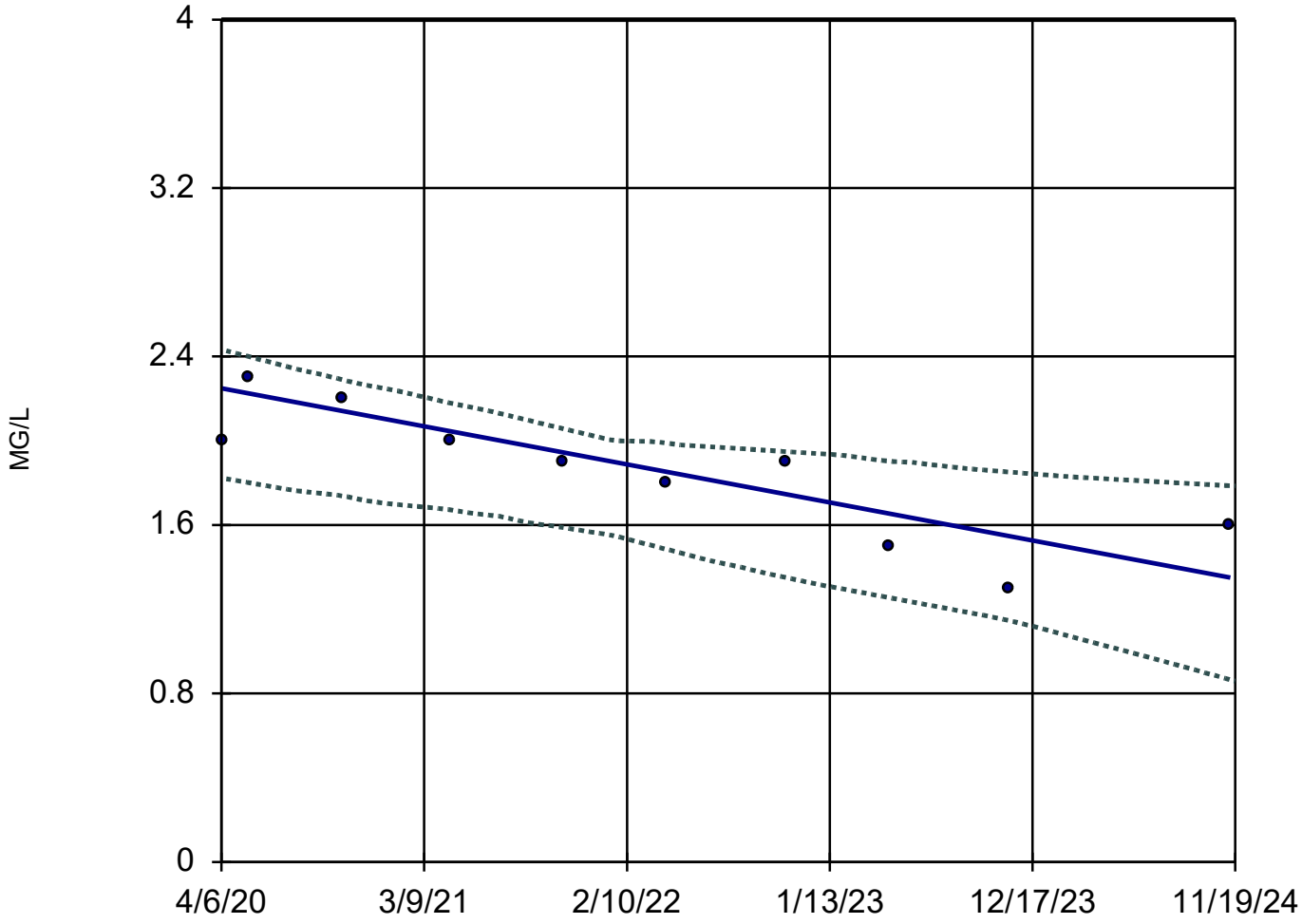
Constituent: CHROMIUM, TOTAL Analysis Run 3/10/2025 1:26 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-P-17I



n = 10

Slope = -0.1952 units per year.

Mann-Kendall statistic = -33
critical = -27

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (4).

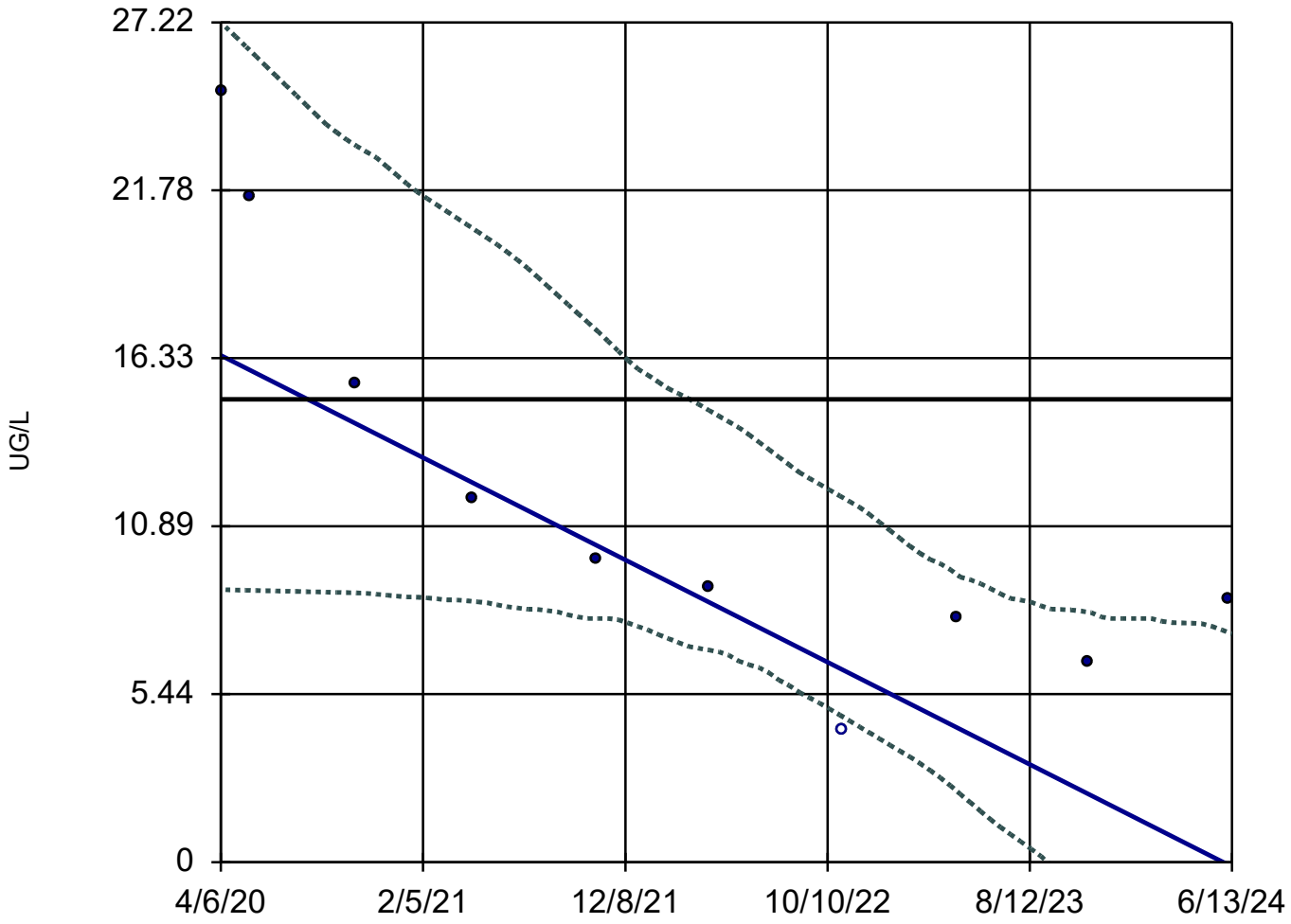
Constituent: FLUORIDE, TOTAL Analysis Run 3/10/2025 1:26 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-17I



n = 10

Slope = -3.957 units per year.

Mann-Kendall statistic = -35
critical = -27

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band intersects GWPS (15) on 03/29/22.

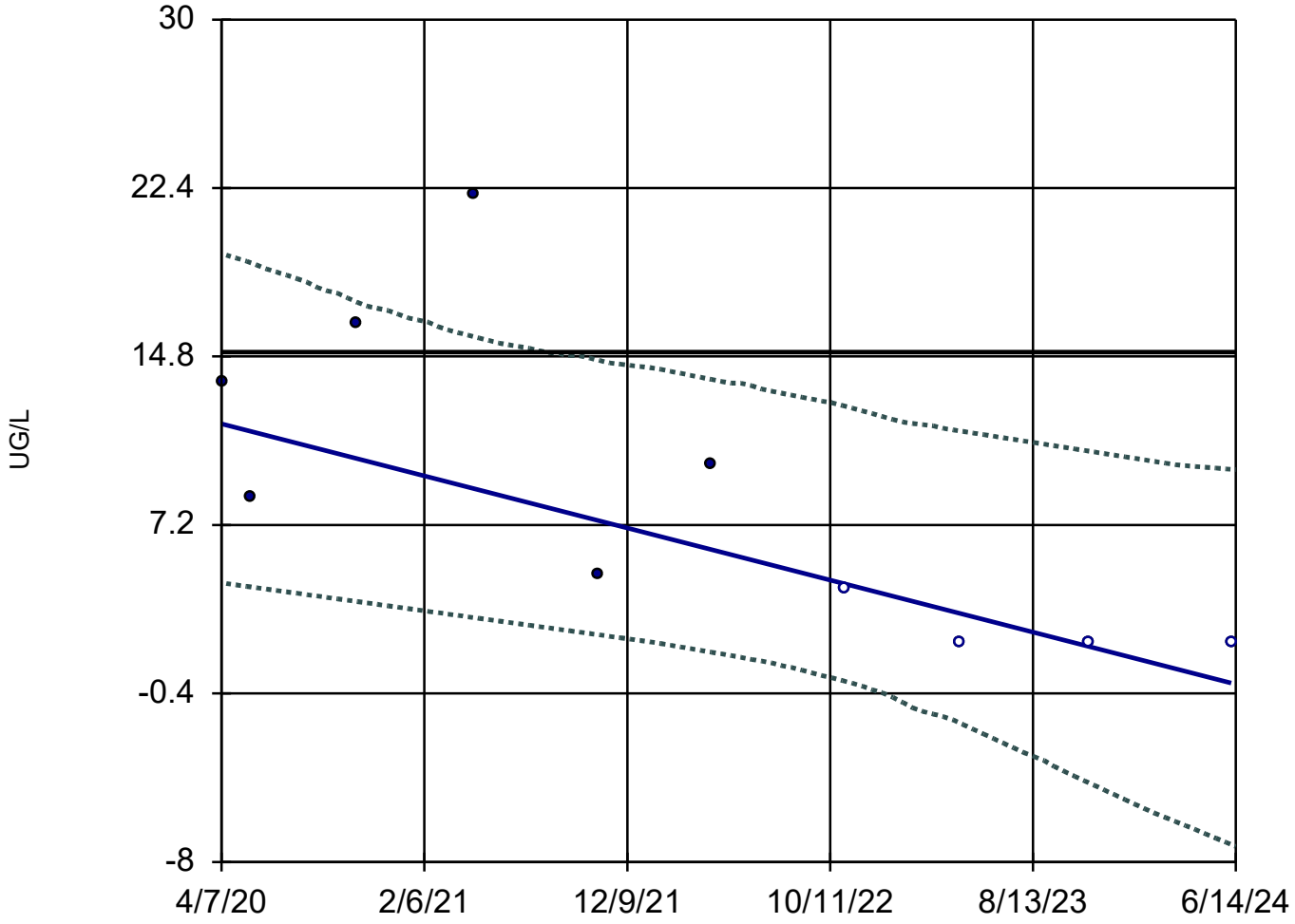
Constituent: LEAD, TOTAL Analysis Run 3/10/2025 1:27 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-19I



n = 10

Slope = -2.806 units per year.

Mann-Kendall statistic = -28
critical = -27

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

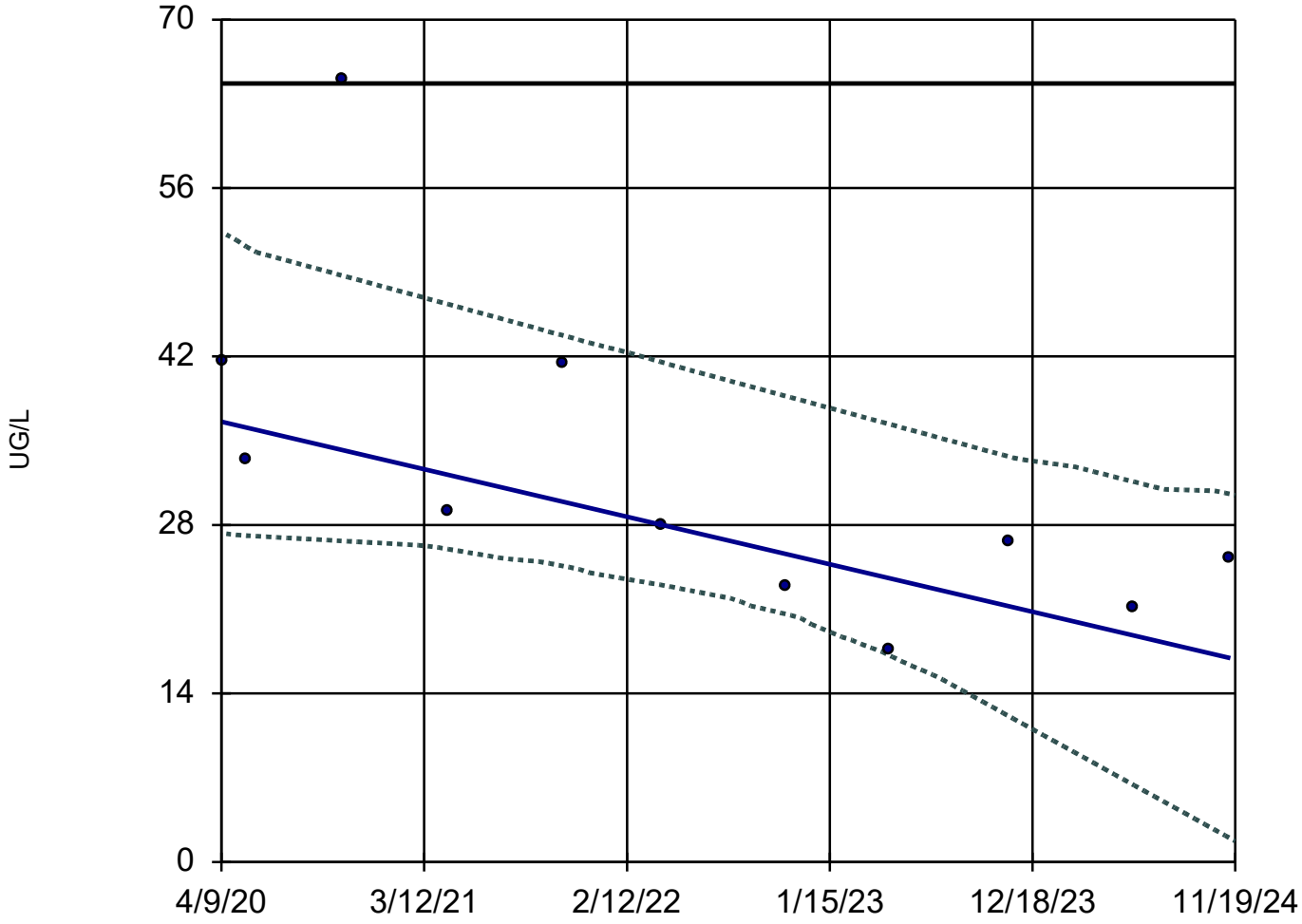
Confidence band intersects GWPS (15) on 08/14/21.

Constituent: LEAD, TOTAL Analysis Run 3/10/2025 1:27 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sen's Slope and 95% Confidence Band

R-P-16S



n = 11

Slope = -4.273 units per year.

Mann-Kendall statistic = -35 critical = -31

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (64.7).

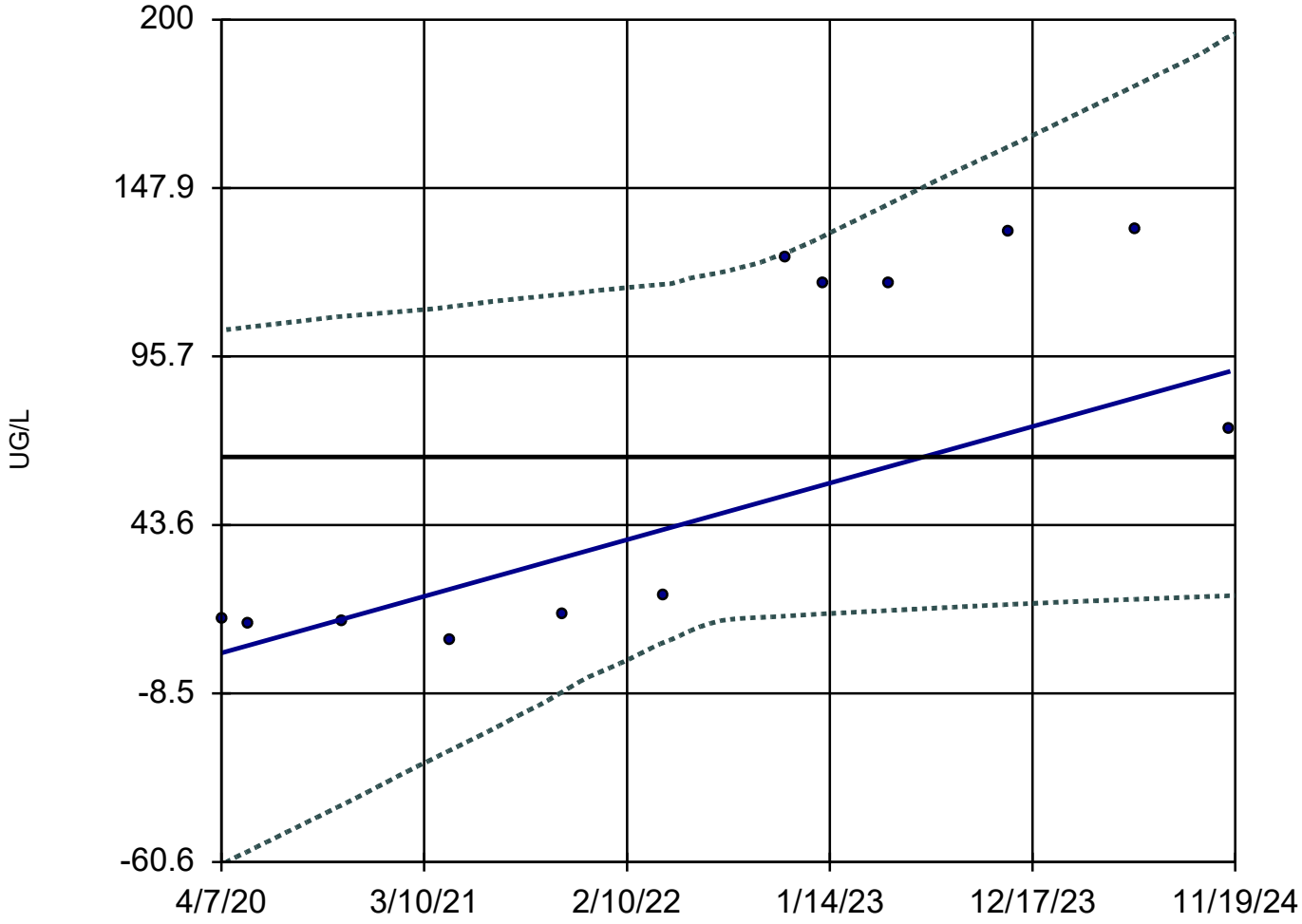
Constituent: LITHIUM, TOTAL Analysis Run 3/10/2025 1:27 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-P-19I



n = 12

Slope = 18.94 units per year.

Mann-Kendall statistic = 41
critical = 35

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

GWPS (64.7) is entirely within the confidence band.

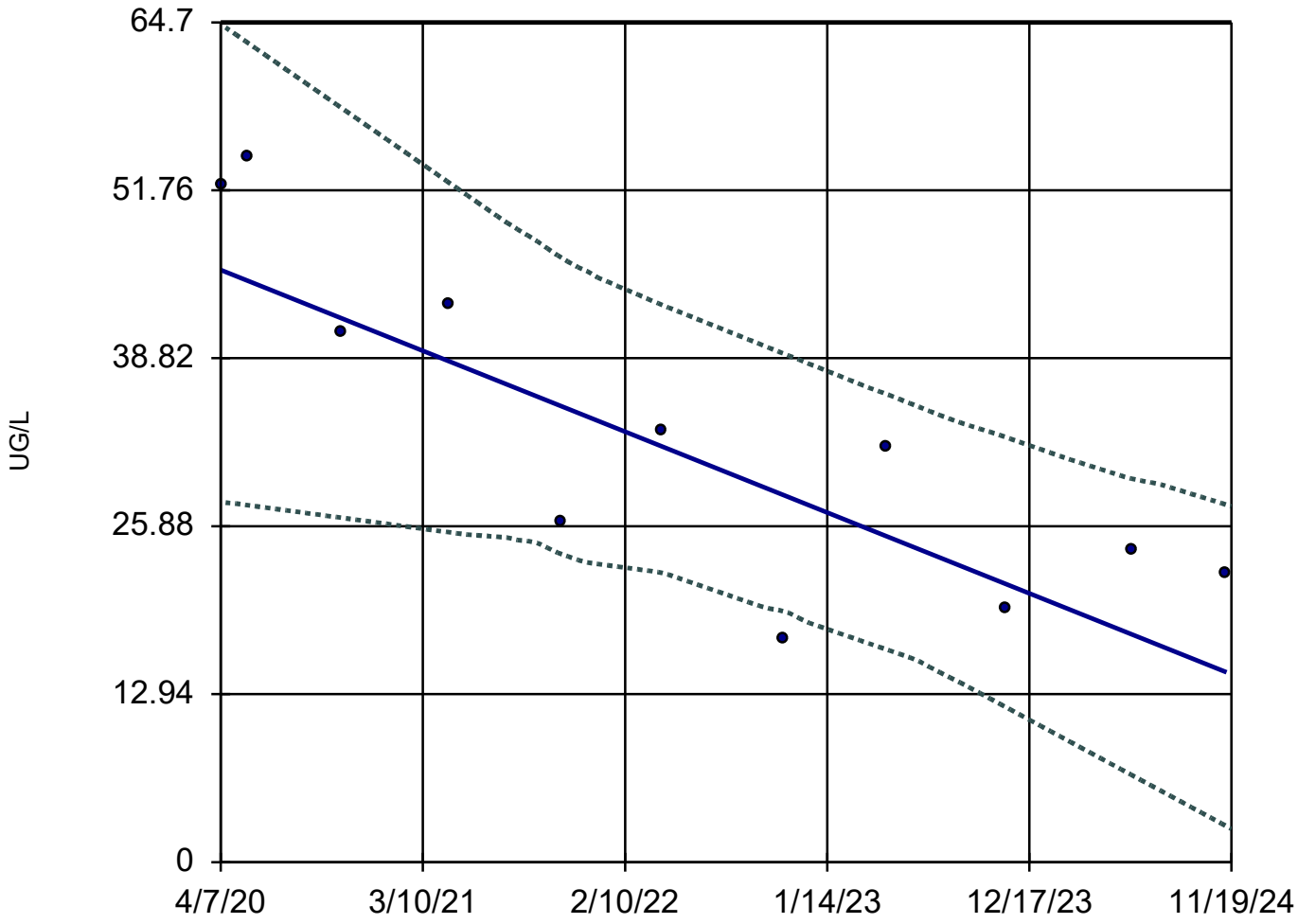
Constituent: LITHIUM, TOTAL Analysis Run 3/10/2025 1:27 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-P-19S



n = 11

Slope = -6.739 units per year.

Mann-Kendall statistic = -35 critical = -31

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (64.7).

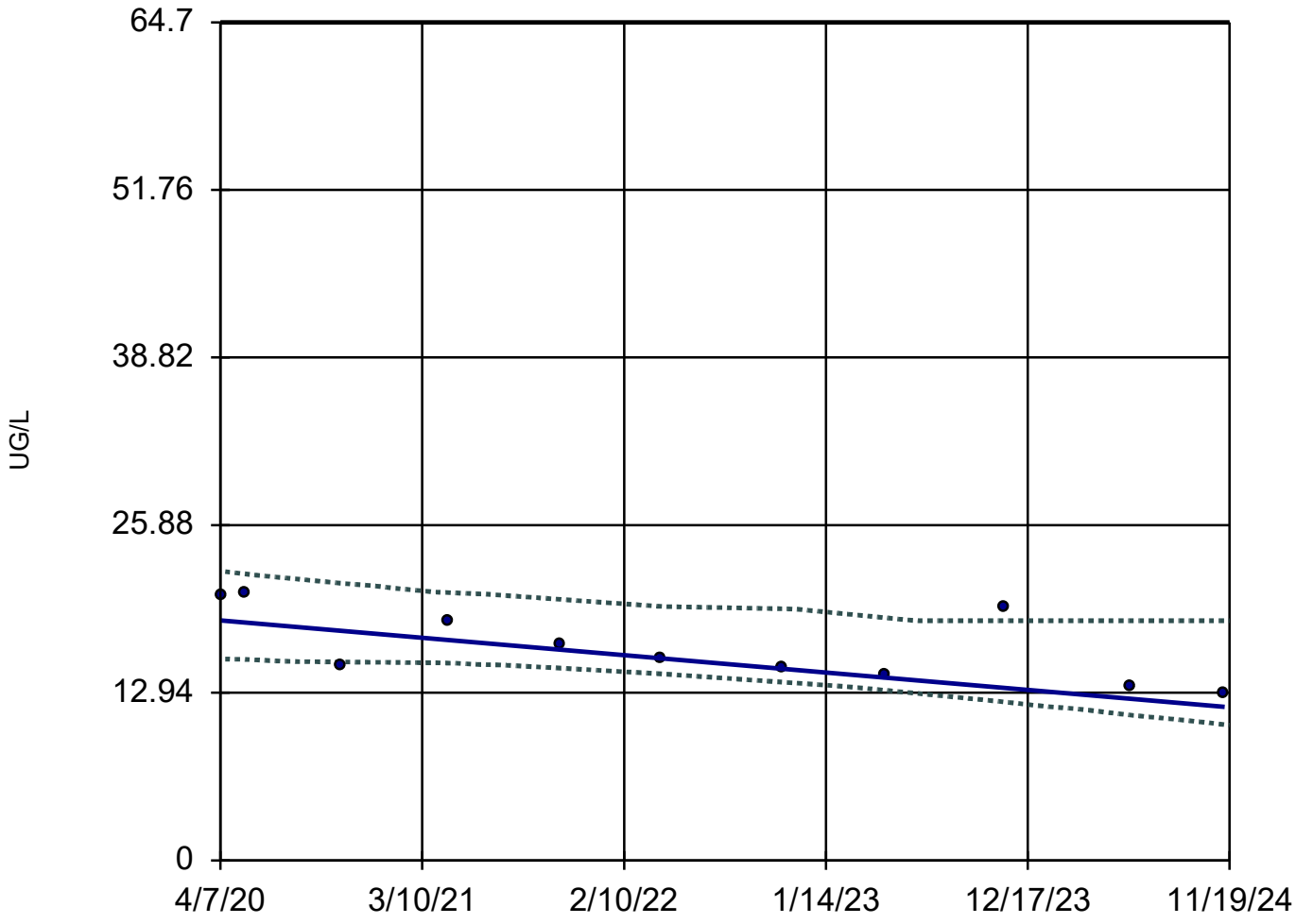
Constituent: LITHIUM, TOTAL Analysis Run 3/10/2025 1:27 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.24 Software licensed to Rocksmith Geoengineering. EPA

Sen's Slope and 95% Confidence Band

R-P-21S



n = 11

Slope = -1.453 units per year.

Mann-Kendall statistic = -35
critical = -31

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (64.7).

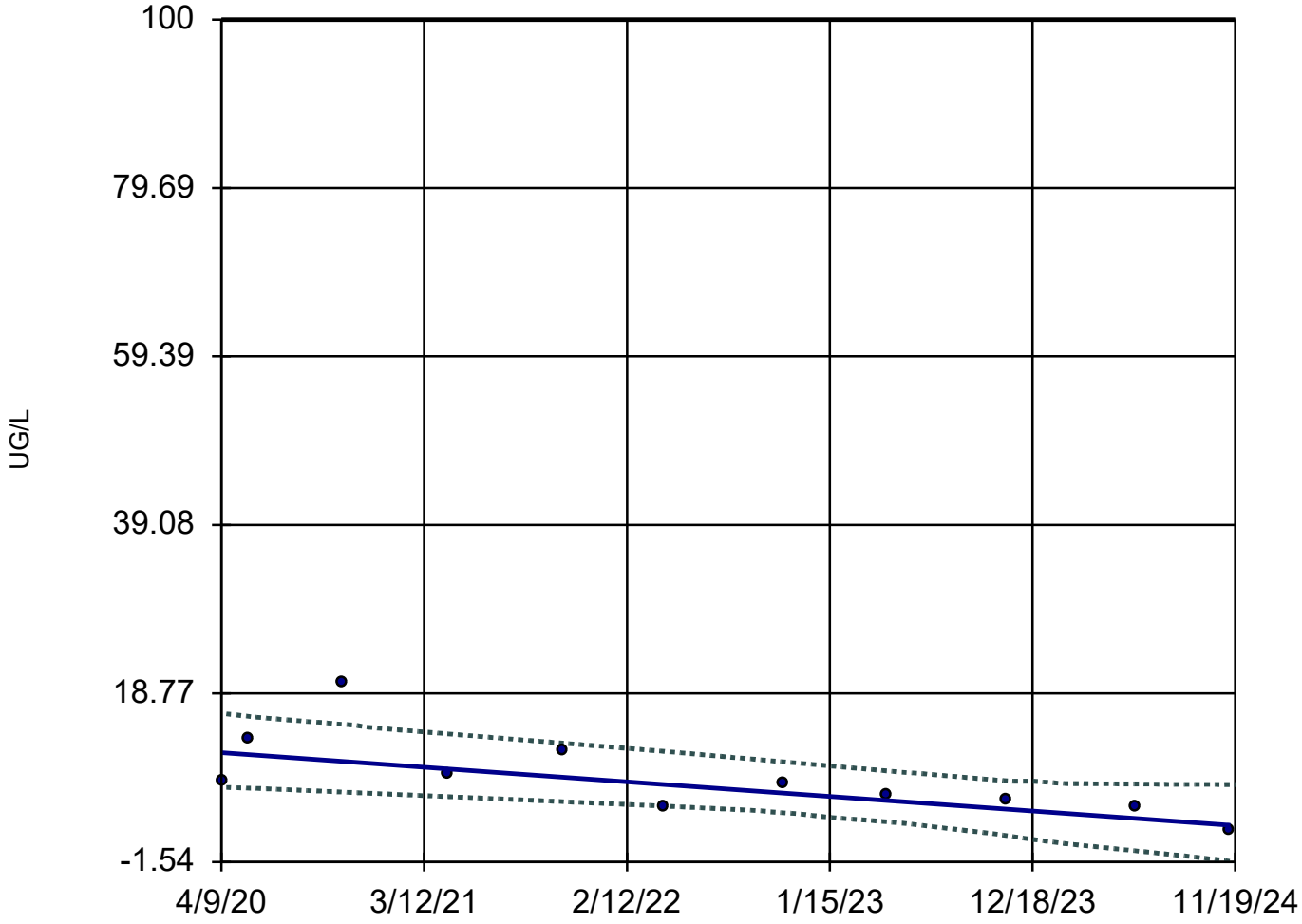
Constituent: LITHIUM, TOTAL Analysis Run 3/10/2025 1:27 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Sen's Slope and 95% Confidence Band

R-P-05S



n = 11

Slope = -1.911 units per year.

Mann-Kendall statistic = -36
critical = -31

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (100).

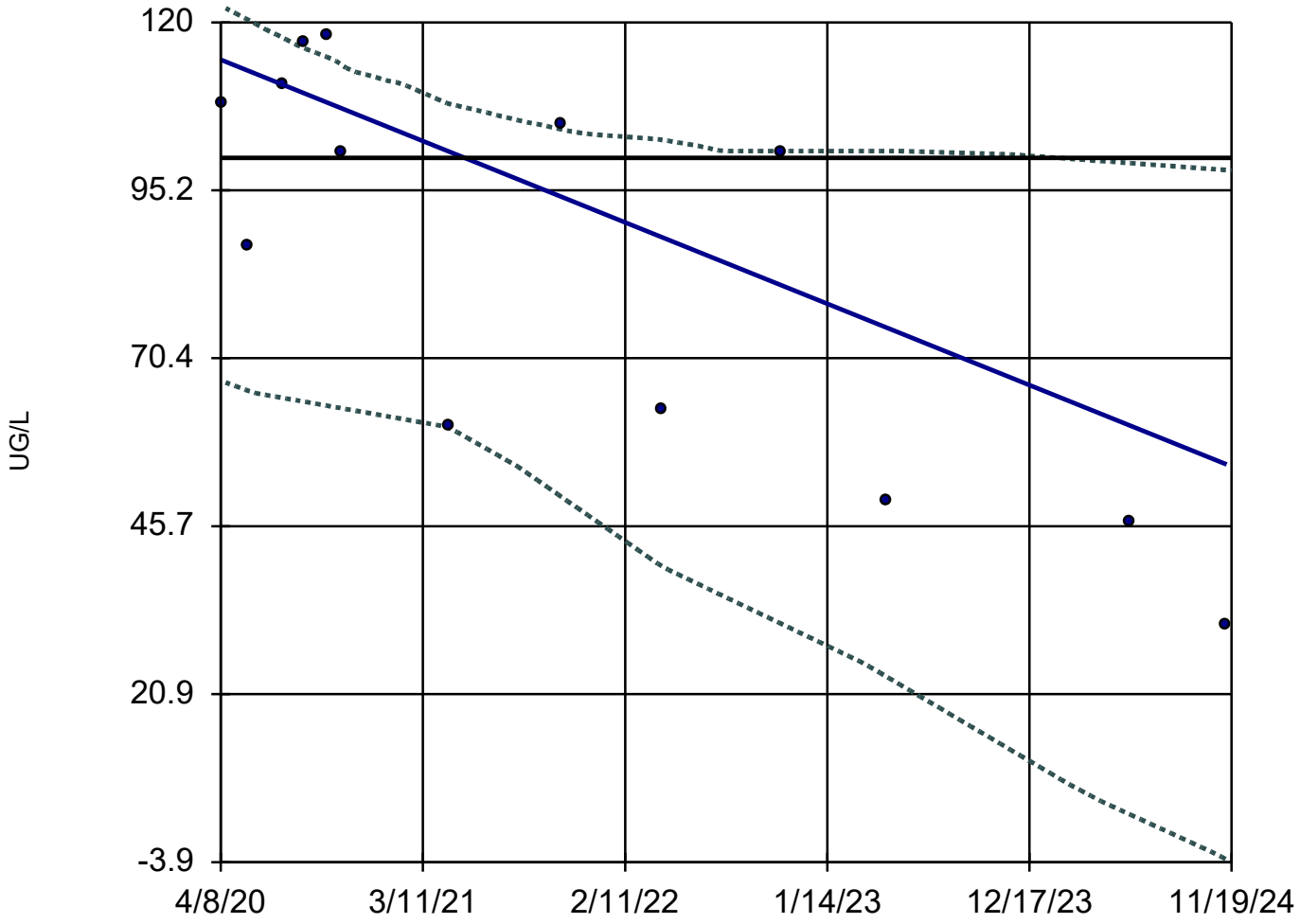
Constituent: MOLYBDENUM, TOTAL Analysis Run 3/10/2025 1:27 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Sen's Slope and 95% Confidence Band

R-P-10S



n = 13

Slope = -12.99 units per year.

Mann-Kendall statistic = -43
critical = -39

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band intersects GWPS (100) on 02/08/24.

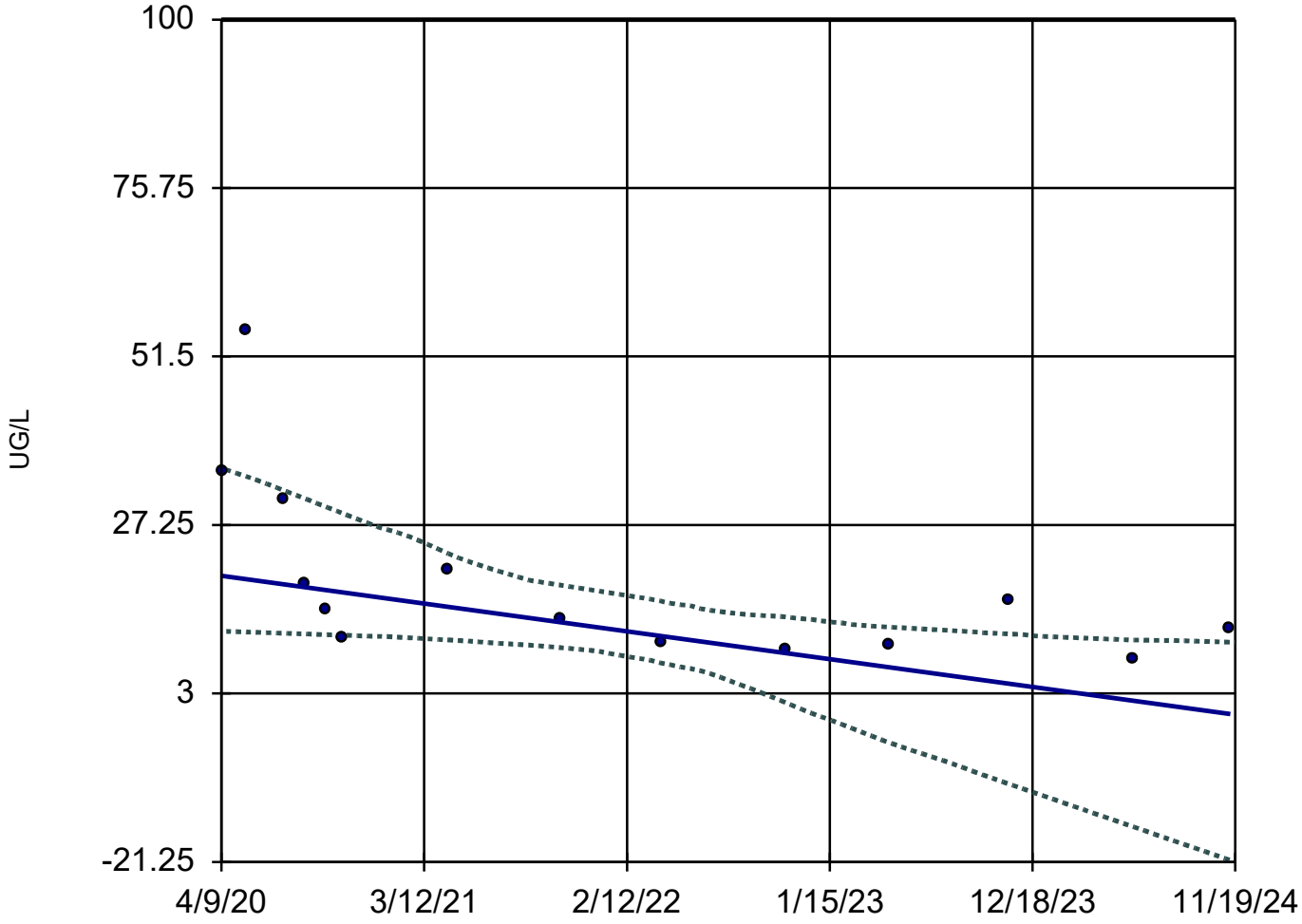
Constituent: MOLYBDENUM, TOTAL Analysis Run 3/10/2025 1:27 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Sen's Slope and 95% Confidence Band

R-P-16S



n = 14

Slope = -4.334 units per year.

Mann-Kendall statistic = -57 critical = -44

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (100).

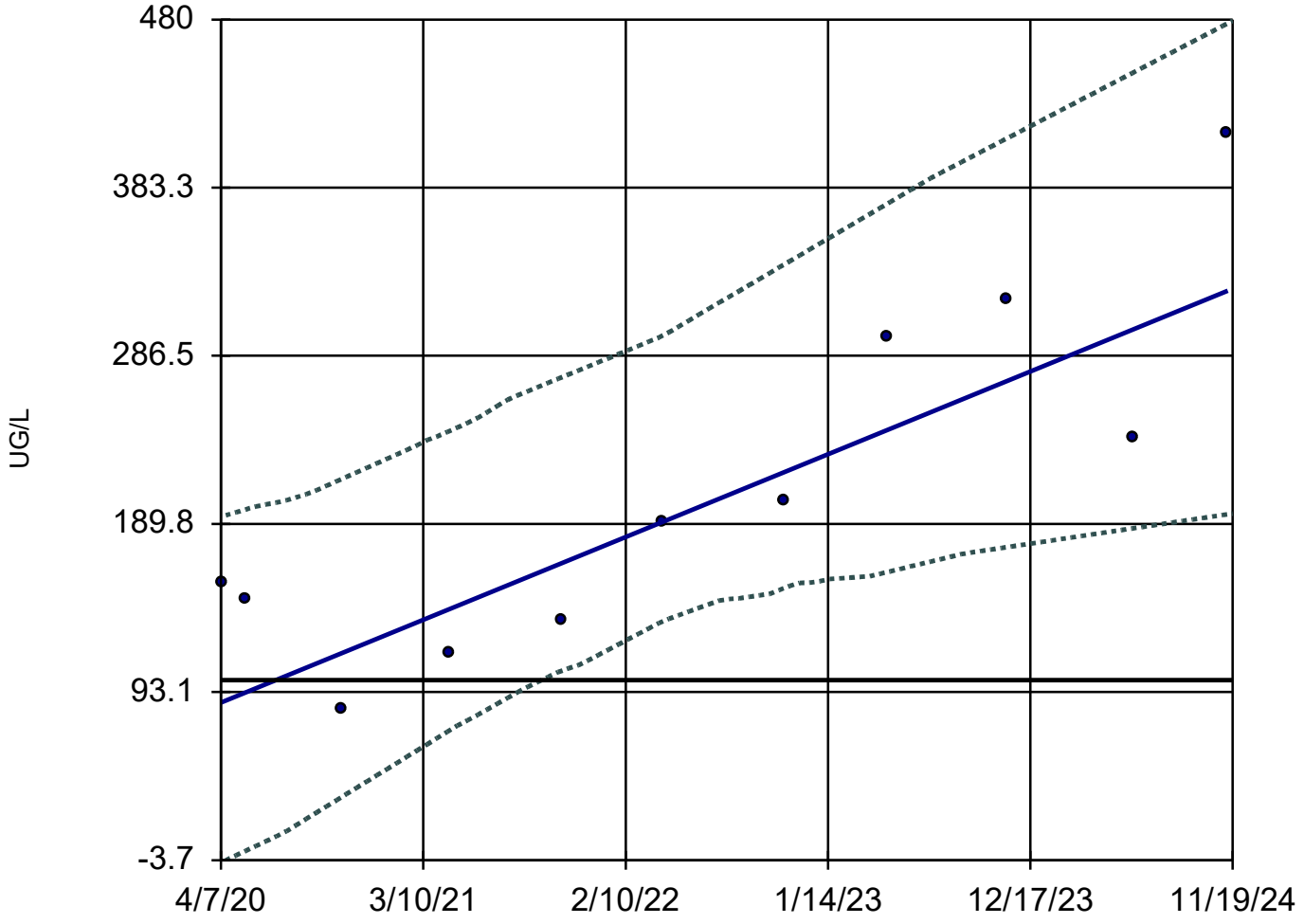
Constituent: MOLYBDENUM, TOTAL Analysis Run 3/10/2025 1:27 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Sen's Slope and 95% Confidence Band

R-P-21I



n = 11

Slope = 51.51 units per year.

Mann-Kendall statistic = 37
critical = 31

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band intersects GWPS (100) on 10/04/21.

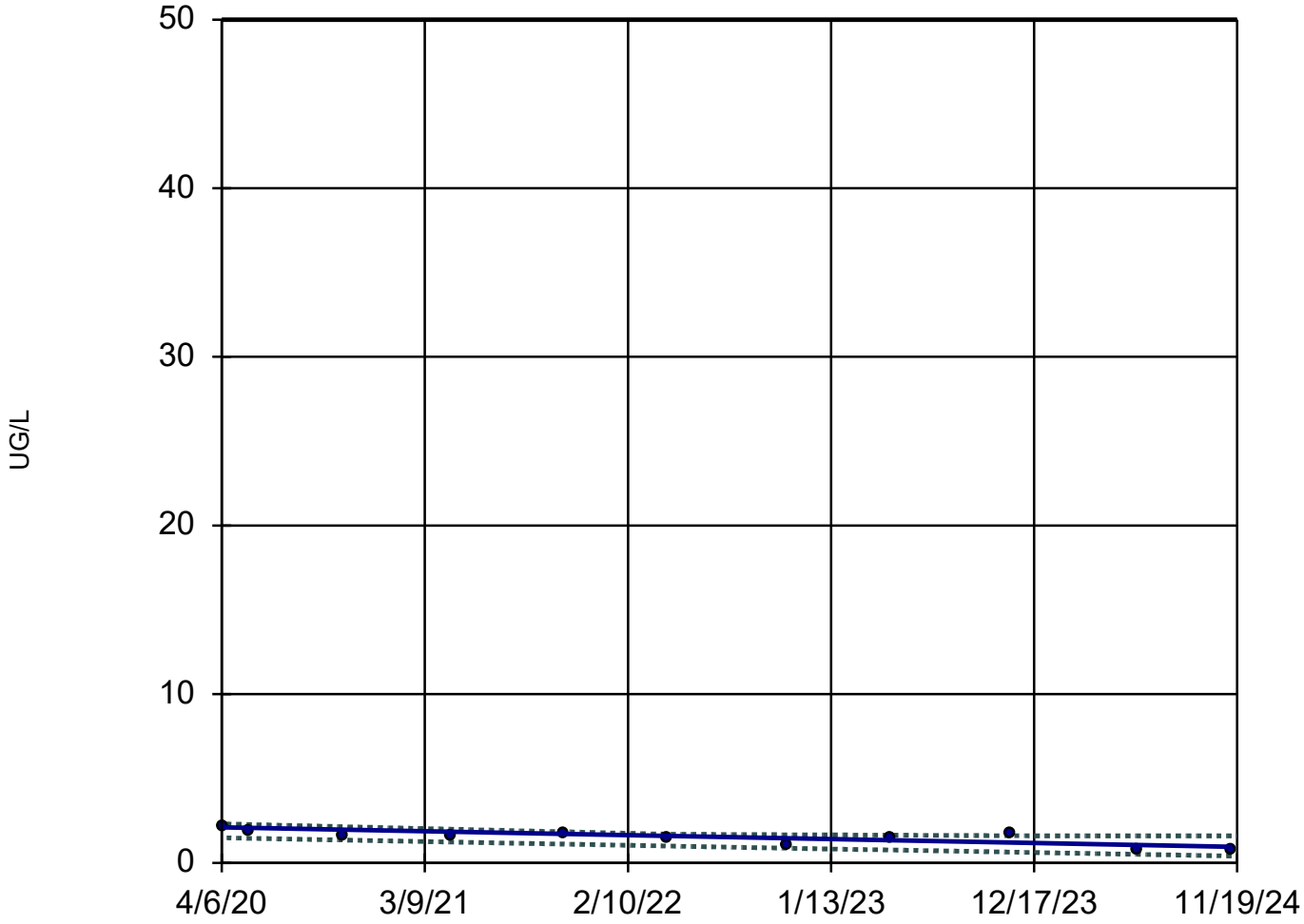
Constituent: MOLYBDENUM, TOTAL Analysis Run 3/10/2025 1:27 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Sen's Slope and 95% Confidence Band

R-P-17I



n = 11

Slope = -0.2491 units per year.

Mann-Kendall statistic = -34
critical = -31

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (50).

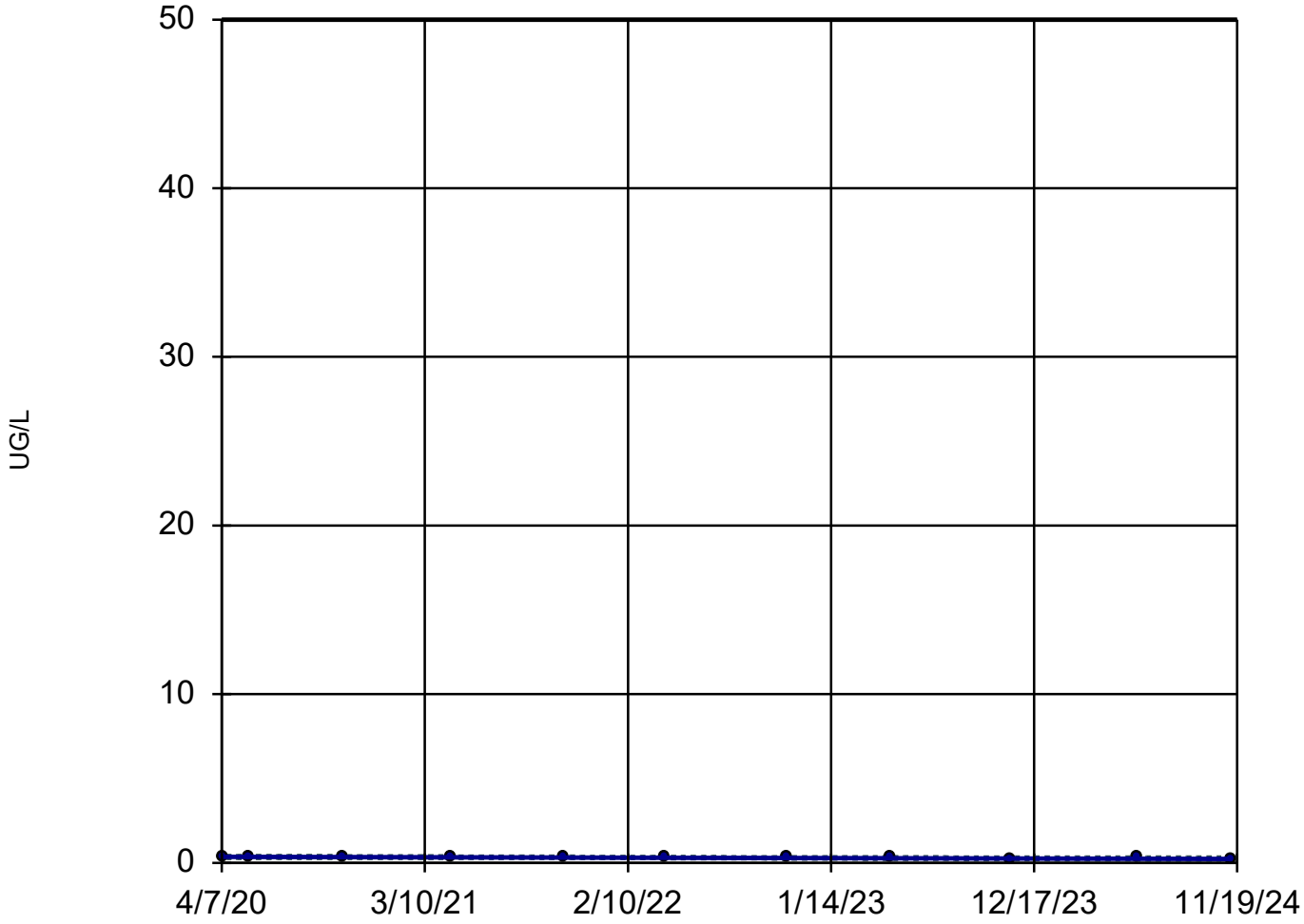
Constituent: SELENIUM, TOTAL Analysis Run 3/10/2025 1:27 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Sen's Slope and 95% Confidence Band

R-P-19D



n = 11

Slope = -0.02721 units per year.

Mann-Kendall statistic = -33
critical = -31

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

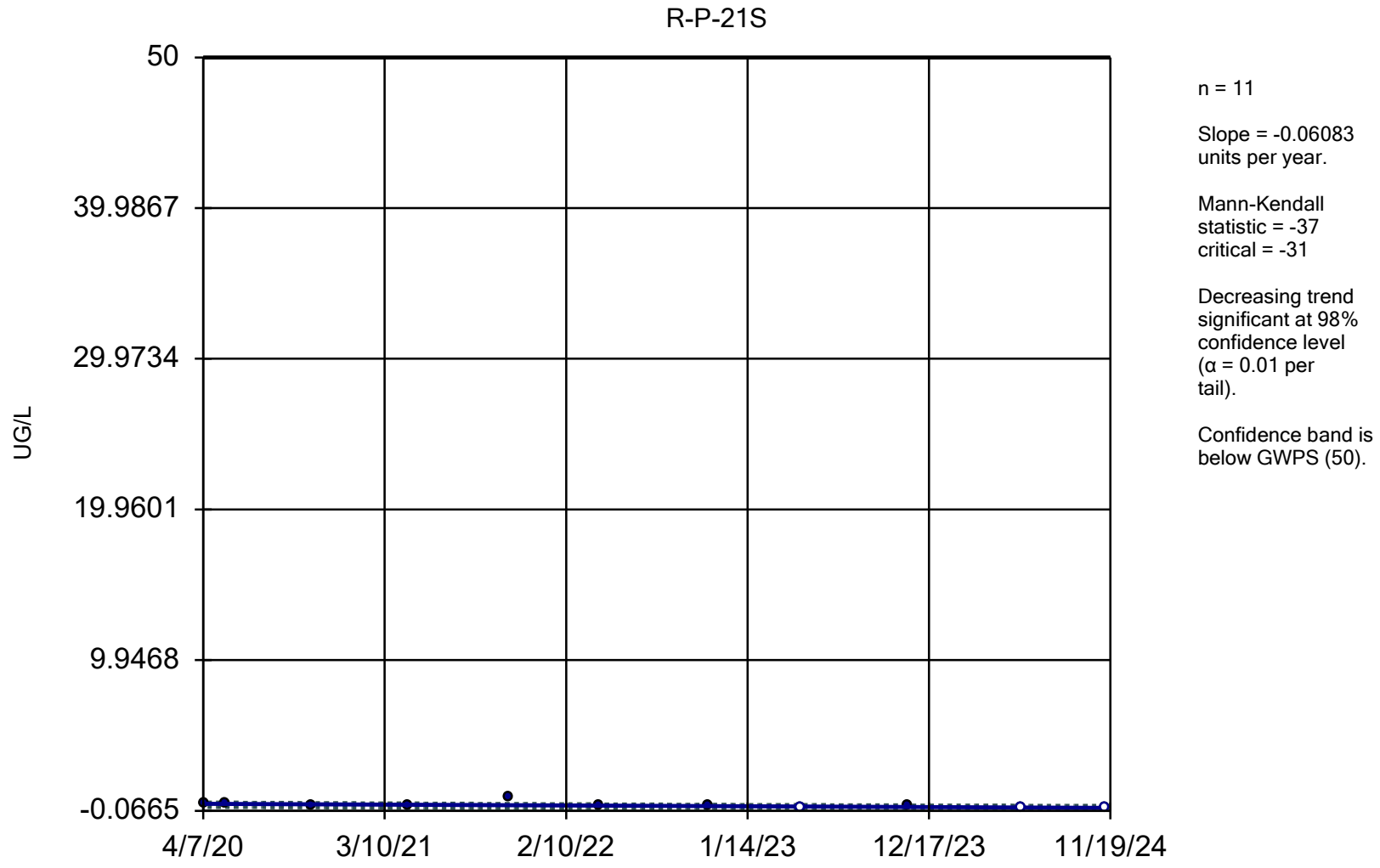
Confidence band is below GWPS (50).

Constituent: SELENIUM, TOTAL Analysis Run 3/10/2025 1:27 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



Constituent: SELENIUM, TOTAL Analysis Run 3/10/2025 1:28 PM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Trend Test

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 3/10/2025, 1:28 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
ANTIMONY, TOTAL (UG/L)	**R-P-05S**	**0.00281**	**36**	**31**	**Yes**	**11**	**100**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	R-P-10S	0	4	27	No	10	70	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	R-P-16S	0.002842	26	31	No	11	81.82	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	**R-P-17D**	**0.00281**	**36**	**31**	**Yes**	**11**	**100**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	**R-P-17I**	**-0.1067**	**-39**	**-31**	**Yes**	**11**	**9.091**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	R-P-17S	0.02266	19	31	No	11	36.36	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	**R-P-19D**	**0.00281**	**36**	**31**	**Yes**	**11**	**100**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	**R-P-19I**	**-1.142**	**-39**	**-31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	R-P-19S	0.001441	22	31	No	11	90.91	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	**R-P-21D**	**0.002812**	**36**	**31**	**Yes**	**11**	**100**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	**R-P-21I**	**0.002812**	**36**	**31**	**Yes**	**11**	**100**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	R-P-21S	0.002564	25	31	No	11	90.91	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	R-P-22D	0.0226	18	31	No	11	36.36	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	**R-P-22S**	**0.00281**	**36**	**31**	**Yes**	**11**	**100**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	R-P-30S	0.002762	27	27	No	10	100	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	**R-P-31S**	**0.003945**	**35**	**27**	**Yes**	**10**	**90**	**n/a**	**n/a**	**0.02**	**NP**
ARSENIC, TOTAL (UG/L)	R-P-05S	5.763	23	31	No	11	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-10S	-0.4134	-4	-39	No	13	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-16S	-0.1865	-27	-44	No	14	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-17D	0	-13	-31	No	11	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	**R-P-17I**	**-7.149**	**-45**	**-31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
ARSENIC, TOTAL (UG/L)	R-P-17S	-2.853	-23	-31	No	11	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-19D	-0.00...	-9	-31	No	11	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-19I	-61.9	-28	-31	No	11	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	**R-P-19S**	**-4.33**	**-51**	**-31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
ARSENIC, TOTAL (UG/L)	R-P-21D	-0.01853	-9	-31	No	11	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-21I	0.1234	16	31	No	11	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-21S	-13.22	-13	-31	No	11	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	**R-P-22D**	**0.7164**	**34**	**31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
ARSENIC, TOTAL (UG/L)	R-P-22S	0.602	22	31	No	11	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-30S	-0.09865	-23	-44	No	14	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-31S	2.774	32	35	No	12	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-P-05S	12.84	22	31	No	11	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	**R-P-10S**	**20.28**	**28**	**27**	**Yes**	**10**	**0**	**n/a**	**n/a**	**0.02**	**NP**
BARIUM, TOTAL (UG/L)	R-P-16S	7.572	9	27	No	10	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-P-17D	-1.59	-31	-31	No	11	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-P-17I	0.899	17	31	No	11	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-P-17S	3.628	11	27	No	10	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-P-19D	4.269	17	31	No	11	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	**R-P-19I**	**12.94**	**49**	**31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
BARIUM, TOTAL (UG/L)	R-P-19S	-82.84	-31	-31	No	11	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-P-21D	5.61	1	31	No	11	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	**R-P-21I**	**9.716**	**45**	**31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
BARIUM, TOTAL (UG/L)	**R-P-21S**	**-79.13**	**-39**	**-31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
BARIUM, TOTAL (UG/L)	R-P-22D	1.361	9	31	No	11	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-P-22S	-11.09	-29	-31	No	11	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-P-30S	2.893	16	31	No	11	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-P-31S	5.44	14	23	No	9	0	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-05S	-0.00...	-11	-20	No	8	100	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-10S	0.02621	8	20	No	8	0	n/a	n/a	0.02	NP

Trend Test

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 3/10/2025, 1:28 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
CADMIUM, TOTAL (UG/L)	R-P-16S	-0.02008	-14	-20	No	8	25	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-17D	0.004783	3	20	No	8	25	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	**R-P-17I**	**-0.144**	**-24**	**-20**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.02**	**NP**
CADMIUM, TOTAL (UG/L)	R-P-17S	0.02985	13	20	No	8	37.5	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-19D	0.003569	0	20	No	8	0	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-19I	-0.1106	-18	-20	No	8	0	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-19S	-0.00...	-11	-17	No	7	100	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-21D	0.02147	15	20	No	8	37.5	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-21I	0.001504	2	20	No	8	37.5	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-21S	0.005761	7	20	No	8	37.5	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-22D	0.004475	3	20	No	8	0	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-22S	0.009531	9	20	No	8	0	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-30S	-0.01269	-19	-20	No	8	50	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-31S	-0.00...	-11	-20	No	8	100	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-05S	0.0515	18	31	No	11	9.091	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	**R-P-10S**	**0.1966**	**35**	**27**	**Yes**	**10**	**40**	**n/a**	**n/a**	**0.02**	**NP**
CHROMIUM, TOTAL (UG/L)	R-P-16S	0.009898	10	31	No	11	81.82	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-17D	0.009612	11	31	No	11	54.55	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-17I	-0.07378	-17	-31	No	11	0	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-17S	0.04688	15	31	No	11	18.18	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-19D	-0.04613	-8	-31	No	11	18.18	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-19I	0.04267	10	31	No	11	0	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-19S	0.02296	16	31	No	11	27.27	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-21D	0	4	31	No	11	63.64	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-21I	0.02298	12	31	No	11	9.091	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-21S	0.01798	7	31	No	11	36.36	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-22D	0.1442	21	31	No	11	0	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-22S	0.01608	16	31	No	11	63.64	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-30S	0.03076	21	31	No	11	45.45	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-31S	0.1152	16	27	No	10	50	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-05S	-0.01834	-15	-27	No	10	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-10S	-0.08488	-26	-27	No	10	30	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-16S	-0.03113	-18	-31	No	11	36.36	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-17D	-0.06934	-21	-31	No	11	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	**R-P-17I**	**-0.1952**	**-33**	**-27**	**Yes**	**10**	**0**	**n/a**	**n/a**	**0.02**	**NP**
FLUORIDE, TOTAL (MG/L)	R-P-17S	-0.02624	-2	-31	No	11	18.18	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-19D	-0.04946	-19	-31	No	11	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-19I	-0.2572	-30	-31	No	11	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-19S	-0.02626	-19	-31	No	11	18.18	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-21D	-0.1488	-14	-31	No	11	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-21I	-0.04069	-16	-31	No	11	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-21S	-0.04946	-22	-31	No	11	27.27	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-22D	-0.06518	-12	-31	No	11	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-22S	-0.02828	-14	-31	No	11	54.55	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-30S	-0.06381	-23	-31	No	11	27.27	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-31S	-0.04078	-17	-27	No	10	20	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-05S	-0.09898	-16	-27	No	10	90	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-10S	0	-4	-20	No	8	100	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-16S	0	-10	-27	No	10	100	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-17D	-0.09898	-16	-27	No	10	90	n/a	n/a	0.02	NP

Trend Test

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 3/10/2025, 1:28 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
LEAD, TOTAL (UG/L)	**R-P-17I**	**-3.957**	**-35**	**-27**	**Yes**	**10**	**10**	**n/a**	**n/a**	**0.02**	**NP**
LEAD, TOTAL (UG/L)	R-P-17S	-0.1021	-18	-27	No	10	90	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-19D	-0.07878	-16	-27	No	10	100	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	**R-P-19I**	**-2.806**	**-28**	**-27**	**Yes**	**10**	**40**	**n/a**	**n/a**	**0.02**	**NP**
LEAD, TOTAL (UG/L)	R-P-19S	-0.09732	-15	-23	No	9	100	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-21D	0	-10	-27	No	10	100	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-21I	-0.07878	-16	-27	No	10	100	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-21S	-0.114	-17	-23	No	9	88.89	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-22D	0	0	27	No	10	80	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-22S	-0.09878	-12	-27	No	10	90	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-30S	-0.04803	-13	-23	No	9	100	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-31S	-0.04809	-9	-20	No	8	100	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-P-05S	-0.6083	-15	-31	No	11	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-P-10S	2.217	17	27	No	10	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	**R-P-16S**	**-4.273**	**-35**	**-31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
LITHIUM, TOTAL (UG/L)	R-P-17D	-0.7292	-19	-31	No	11	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-P-17I	0.2039	5	31	No	11	54.55	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-P-17S	0.8369	5	27	No	10	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-P-19D	0.7868	13	31	No	11	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	**R-P-19I**	**18.94**	**41**	**35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
LITHIUM, TOTAL (UG/L)	**R-P-19S**	**-6.739**	**-35**	**-31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
LITHIUM, TOTAL (UG/L)	R-P-21D	6.152	5	31	No	11	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-P-21I	1.094	23	31	No	11	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	**R-P-21S**	**-1.453**	**-35**	**-31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
LITHIUM, TOTAL (UG/L)	R-P-22D	-0.7208	-22	-31	No	11	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-P-22S	-3.847	-30	-31	No	11	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-P-30S	1.926	26	31	No	11	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-P-31S	-0.2409	-6	-20	No	8	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	**R-P-05S**	**-1.911**	**-36**	**-31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
MOLYBDENUM, TOTAL (UG/L)	**R-P-10S**	**-12.99**	**-43**	**-39**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.02**	**NP**
MOLYBDENUM, TOTAL (UG/L)	**R-P-16S**	**-4.334**	**-57**	**-44**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.02**	**NP**
MOLYBDENUM, TOTAL (UG/L)	R-P-17D	-15.14	-19	-31	No	11	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-17I	3.756	9	31	No	11	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-17S	6.051	7	31	No	11	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-19D	-46.02	-29	-31	No	11	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-19I	-24.22	-23	-31	No	11	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-19S	-0.6518	-17	-31	No	11	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-21D	8.261	3	31	No	11	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	**R-P-21I**	**51.51**	**37**	**31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
MOLYBDENUM, TOTAL (UG/L)	R-P-21S	-0.3611	-16	-31	No	11	27.27	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-22D	-11.53	-31	-31	No	11	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-22S	0.4013	13	31	No	11	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-30S	0.2626	30	44	No	14	50	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-31S	0.4702	24	39	No	13	7.692	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-05S	0.05392	18	27	No	10	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-10S	0.07566	23	27	No	10	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-16S	0.02414	7	31	No	11	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-17D	0.03841	7	31	No	11	90.91	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-17I	0.06788	7	31	No	11	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-17S	0.05202	17	31	No	11	100	n/a	n/a	0.02	NP

Trend Test

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 3/10/2025, 1:28 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
RADIUM [226 + 228] (PCI/L)	R-P-19D	-0.00...	-4	-31	No	11	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-19I	-0.00...	-3	-31	No	11	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-19S	-0.05098	-9	-31	No	11	72.73	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-21D	-0.1872	-13	-31	No	11	54.55	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-21I	-0.03418	-11	-31	No	11	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-21S	0.01292	3	31	No	11	90.91	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-22D	0.08178	17	31	No	11	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-22S	0.02762	9	31	No	11	90.91	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-30S	0.0712	13	31	No	11	90.91	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-31S	0.009978	4	23	No	9	100	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-05S	0	-5	-31	No	11	36.36	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-10S	0	-6	-27	No	10	70	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-16S	0.002177	1	31	No	11	0	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-17D	-0.01287	-22	-31	No	11	0	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	**R-P-17I**	**-0.2491**	**-34**	**-31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
SELENIUM, TOTAL (UG/L)	R-P-17S	0.07167	19	27	No	10	0	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	**R-P-19D**	**-0.02721**	**-33**	**-31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
SELENIUM, TOTAL (UG/L)	R-P-19I	-0.5478	-23	-31	No	11	0	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-19S	0	0	31	No	11	100	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-21D	0	2	31	No	11	90.91	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-21I	-0.02005	-21	-31	No	11	0	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	**R-P-21S**	**-0.06083**	**-37**	**-31**	**Yes**	**11**	**27.27**	**n/a**	**n/a**	**0.02**	**NP**
SELENIUM, TOTAL (UG/L)	R-P-22D	0.07439	29	31	No	11	0	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-22S	0.05027	17	31	No	11	27.27	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-30S	0.04995	6	27	No	10	30	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-31S	0	9	27	No	10	90	n/a	n/a	0.02	NP

Appendix F

May 2025 Corrective Action Statistical Evaluation

Memorandum
September 15, 2025

To:	Lisa Meyer – Ameren Missouri	**Project Number:**	23008-25
CC:	Ameren Missouri - Susan Knowles, Craig Giesmann, Bill Kutosky, Austin Nieman		
From:	Rocksmith Geoengineering - Mark Haddock, P.E., R.G., Jeff Ingram, R.G., Grant Morey, R.G.	**Email:**	jeff.ingram@rocksmithgeo.com
RE:	**Corrective Action Statistical Evaluation, RCPA Surface Impoundment, Rush Island Energy Center, Jefferson County, Missouri**		

1.0 INTRODUCTION

This Technical Memorandum provides the results of the Corrective Action Monitoring statistical analysis of the May 2025 sampling event for the RCPA Surface Impoundment at the Rush Island Energy Center (RIEC) located in Jefferson County, Missouri. As outlined in the remedy selection report for the RCPA, Corrective Action at the RCPA consists of two phases, as follows:

1) Source control, stabilization, and containment of Coal Combustion Residuals (CCR) by installation of a low-permeability geomembrane cap.
2) Once source control is achieved, monitor the natural attenuation (MNA) of groundwater concentrations to address limited and localized CCR-related impacts. Ongoing monitoring and modeling evaluations will document that concentrations are decreasing as modelled. MNA occurs due to naturally occurring processes within the aquifer.

Phase 1 of Corrective Action commenced in August 2019, and was substantially completed on December 15, 2020, with the installation of a low permeability cover system. In addition to MNA (Phase 2 of Corrective Action) as a corrective measure, Ameren also initiated groundwater extraction, treatment, and re-injection using ex-situ treatment technologies with chemical precipitation and selective ion exchange as a supplemental corrective measure. This treatment system became fully operational in February 2022 and began achieving target flow rates in January 2023. In May 2024, Haley & Aldrich produced a Supplemental Remedy Selection Report for the RIEC, documenting that the corrective measures are effectively contributing to constituent mass reductions in groundwater near the RCPA. The corrective measures are ongoing.

The initial Corrective Action sampling event was completed in April 2020, and a total of 12 sampling events have been completed for the Corrective Action Program to date at the RIEC. This analysis uses results collected since the beginning of Corrective Action monitoring (April 2020) to determine constituents exceeding groundwater protection standards (GWPSs). Data prior to this time were collected during active conditions of the RCPA, prior to the cessation of CCR disposal in the RCPA, and are not representative of groundwater conditions since the initiation of closure. Included in this memorandum is a summary of constituents that are currently in exceedance of the GWPSs, a list of site-specific Groundwater Protection Standards (**Table 1**), and the Sanitas Technologies™ (Sanitas) statistical software output for each of the Appendix IV parameters (**Appendix A** and **Appendix B**).

Several constituents were reported at concentrations below the Practical Quantitation Limit (PQL) during the April/May 2020, 2021, 2022, 2023, 2024 and/or 2025 sampling events, including beryllium, cadmium, cobalt, mercury, and thallium. When these constituents were not detected during the initial Corrective Action sampling event, they were not re-sampled/tested during the subsequent semi-annual sampling events in each calendar year. As a result, there are fewer results available for these constituents.

Trend tests using the Sen's Slope/Mann Kendall method require a minimum of eight independent results, as outlined in the USEPA Unified Guidance. Therefore, trend tests were completed for the following Appendix IV constituents: antimony, arsenic, barium, cadmium, chromium, cobalt, fluoride, lead, lithium, molybdenum, radium 226 + 228, and selenium. There is now a minimum of eight cobalt results at each well, so this is the first Corrective Action statistical evaluation where Sen's Slope/Mann Kendall analysis was performed for cobalt.

2.0 STATISTICAL EVALUATION

The Appendix IV constituents were evaluated for exceedances above GWPSs using the methods and procedures outlined in the Corrective Action Groundwater Monitoring Plan (CAGMP) Statistical Analysis Plan (SAP). An outlier analysis was completed as the first step of the statistical evaluation. The outlier analysis was performed only on results collected as a part of the Corrective Action Monitoring Program. In addition to outliers noted in previous Corrective Action evaluations, the following outliers were removed prior to the calculation of confidence limits:

- Antimony
    - R-P-16S at 0.14 J and 0.13 J micrograms per liter (µg/L) on 10/26/2021 and 11/8/2023: results are statistically higher than other antimony results at the same monitoring well. These higher results are not consistent with previous or subsequent antimony results at the well and are outliers.
    - R-P-21S at 0.19 J µg/L on 10/26/2021: result is statistically higher than other antimony results at the same monitoring well. This higher result is not consistent with previous or subsequent antimony results at the well and is an outlier.
- Chromium
    - R-P-05S at 18.6 µg/L on 11/11/2024: result is statistically higher than other chromium results at the same monitoring well. This higher result is not consistent with previous or subsequent chromium results at the well and is an outlier.
    - R-P-21I at 3.2 µg/L on 11/11/2024: result is statistically higher than other chromium results at the same monitoring well. This higher result is not consistent with previous or subsequent chromium results at the well and is an outlier.
- Radium 226 + 228
    - R-P-30S at 2.53 picocuries per liter (pCi/L) on 11/13/2024: result is statistically higher than other radium results at the same monitoring well. This higher result is not consistent with previous or subsequent radium results at the well and is an outlier.

An analysis of the outliers removed to date was completed, and no previously removed outliers were added back into the dataset prior to the calculation of confidence limits.

Following the outlier analysis, the second step in the statistical analysis was to calculate confidence intervals and compare those to site-specific GWPSs (**Appendix A**). Confidence interval evaluation was supplemented with Sen's Slope/Mann Kendall analysis on constituents that have eight independent sampling results at a given well, per the USEPA Unified Guidance (**Appendix B**). The Sen's Slope/Mann-Kendall analysis identifies well-analyte pairs that have statistically significant trends and calculates confidence bands that vary with time. The upper confidence band, in relation to the GWPS for a given constituent, is used to determine exceedances, as outlined in the site CAGMP. As discussed previously, beryllium, mercury, and thallium do not have the requisite quantity of results to perform Sen's Slope/Mann Kendall Analysis, so only confidence intervals were produced for those constituents.

Using these corrective action statistical methods, as of May 2025, the wells with constituents exceeding GWPSs are as follows:

- Arsenic at R-P-05S, R-P-17I[1], R-P-17S[2], R-P-19I[2], and R-P-21S[2]
- Lithium at R-P-19I and R-P-21D
- Molybdenum at R-P-17D[2], R-P-17I, R-P-19D[1], R-P-19I[2], P-P-21D, R-P-21I, and R-P-22D[1]

The arsenic, lithium, and molybdenum exceedances previously identified in the statistical evaluation for the November 2024 sampling event currently remain. Variability in initial constituent concentrations after the closure of the RCPA is expected, especially at wells nearest the CCR unit, where closure grading and disturbance activities were greatest. The groundwater concentrations in many of these wells with exceedances are trending downward, as indicated. The concentrations reported in these results following closure are expected to be variable but are expected to decrease over time as stabilization occurs and supplemental corrective measures are continued or put into service, such as the groundwater treatment system.

3.0 CLOSING

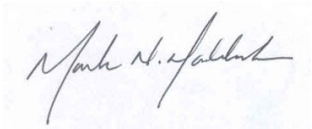
Rocksmith appreciates this opportunity to provide hydrogeological and engineering support services to Ameren. If you have any questions or comments regarding the information provided, please contact the undersigned.

Sincerely,

Rocksmith Geoengineering, LLC



Jeff Ingram, R.G.
Senior Geologist, Partner



Mark Haddock, P.E., R.G.
Principal Engineer, Senior Partner

[1] These results display an overall downward trend since April 2020 that is statistically significant at the 98% confidence level.

[2]These results display an overall downward trend since April 2020 that is not statistically significant at the 98% confidence level.

Attachments

Tables

Table 1 – RCPA Groundwater Protection Standards

Appendices

Appendix A – Sanitas Confidence Interval Statistical Output

Appendix B – Sanitas Trending Confidence Bands Statistical Output

Tables

Table 1 - RCPA Groundwater Protection Standards
RCPA Surface Impoundment
Rush Island Energy Center

Parameter	Units	MCL or Health Based GWPS	Site GWPS	Value to Return to Detection Monitoring [6]
Antimony	µg/L	6	6	DQR
Arsenic	µg/L	10	30	30
Barium	µg/L	2000	2000	554.8
Beryllium	µg/L	4	4	DQR
Cadmium	µg/L	5	5	DQR
Chromium	µg/L	100	100	1.909
Cobalt	µg/L	6	6	DQR
Fluoride	mg/L	4	4	0.2515
Lead	µg/L	15	15	DQR
Lithium	µg/L	40	64.7	64.7
Mercury	µg/L	2	2	DQR
Molybdenum	µg/L	100	100	DQR
Radium 226 + 228	pCi/L	5	5	2.297
Selenium	µg/L	50	50	DQR
Thallium	µg/L	2	2	DQR

Notes:

1. µg/L - micrograms per liter

2. mg/L - milligrams per liter

3. pCi/L - picocuries per liter

4. MCL - Maximum Contaminant Level. MCLs from United States Environmental Protection Agency (USEPA) National Primary Drinking Water Regulations. Updated December 12, 2024 at https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations

5. Health Based Groundwater Protection Standards (GWPS) were adoped for Appendix IV parameters without an MCL (i.e. cobalt, lithium, molybdenum, and lead). Information available at https://www.epa.gov/coalash/coal-ash-rule.

6. Values were calculated using statistical methods outlined for Detection Monitoring and are used for returning to Detection Monitoring based on available data to date.

7. DQR - Double Quantification Rule. If all baseline data are less than the Practical Quantitation Limit (PQL), then the DQR will be used. More information on the DQR is provided in the Statistical Analysis Plan.

8. Site GWPS is either the MCL/Health Based GWPS or based on background levels (calculated as described in the Statistical Analysis Plan for Assessment Monitoring), whichever is higher.

9. GWPS and background values calculated using results through May 2025 from monitoring wells MW-B1 and MW-B2.

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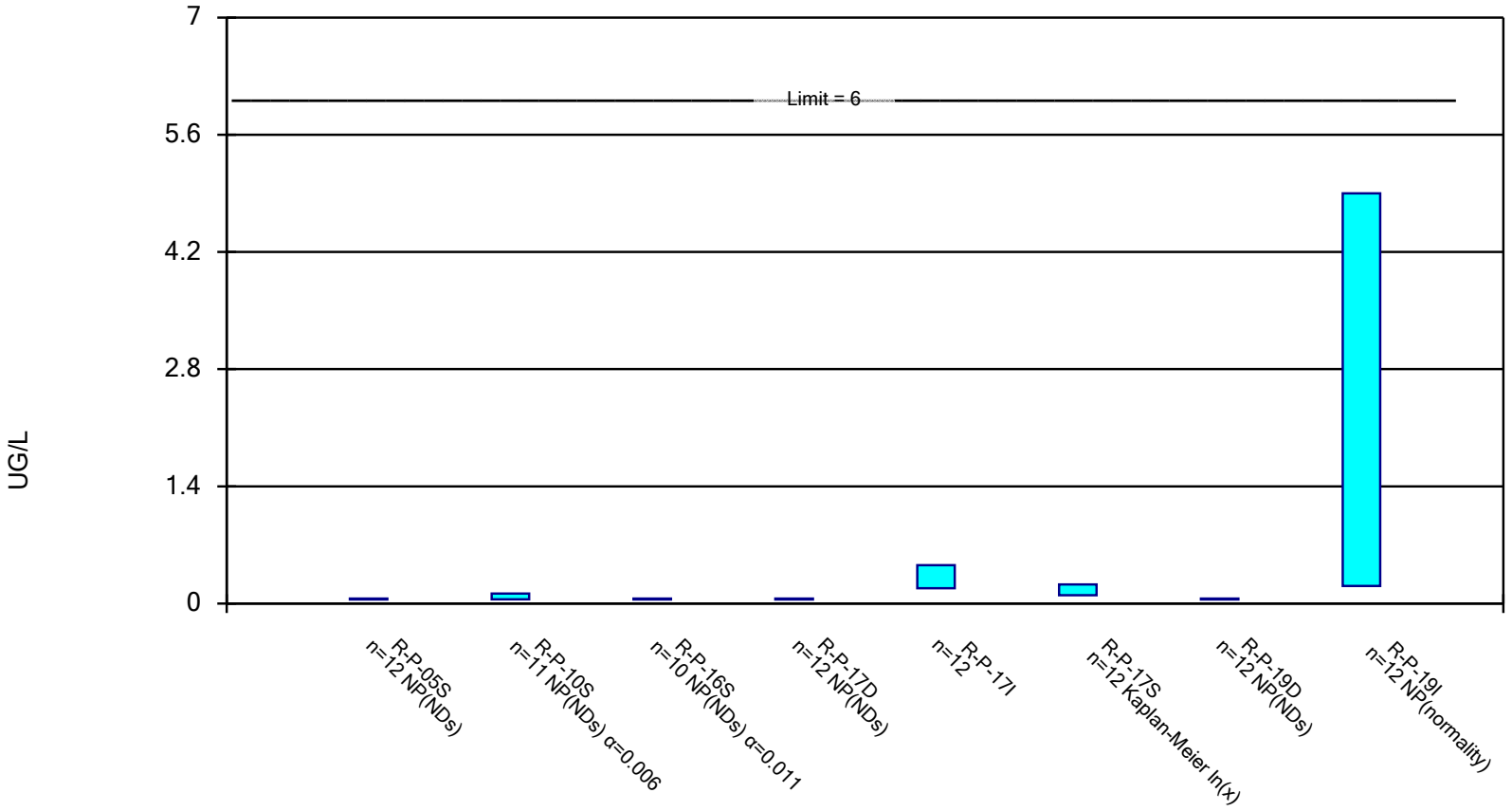
Prepared by: JTR
Checked by: GTM
Reviewed by: JSI

Appendix A
Sanitas Confidence Interval Statistical Output

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



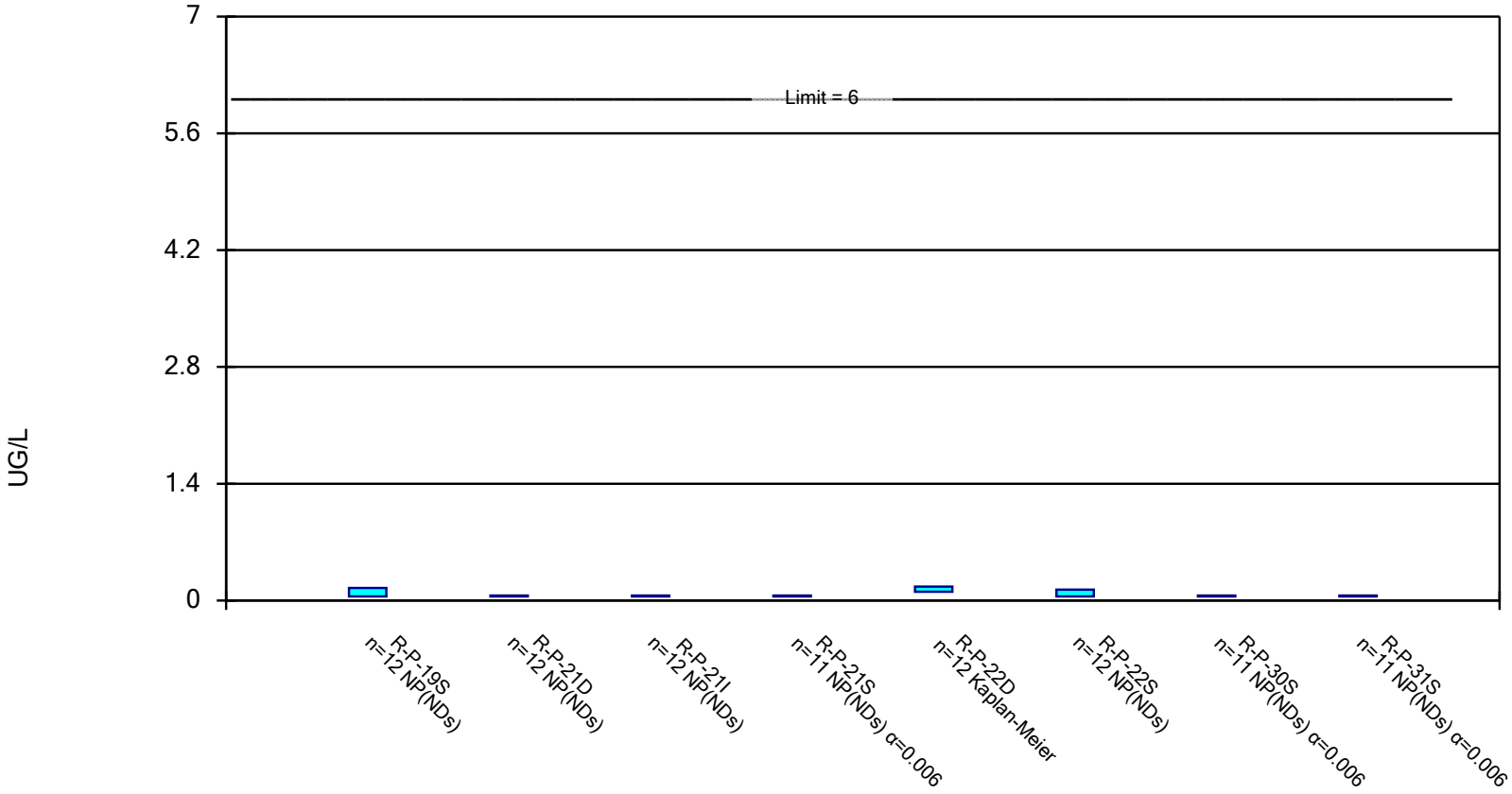
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



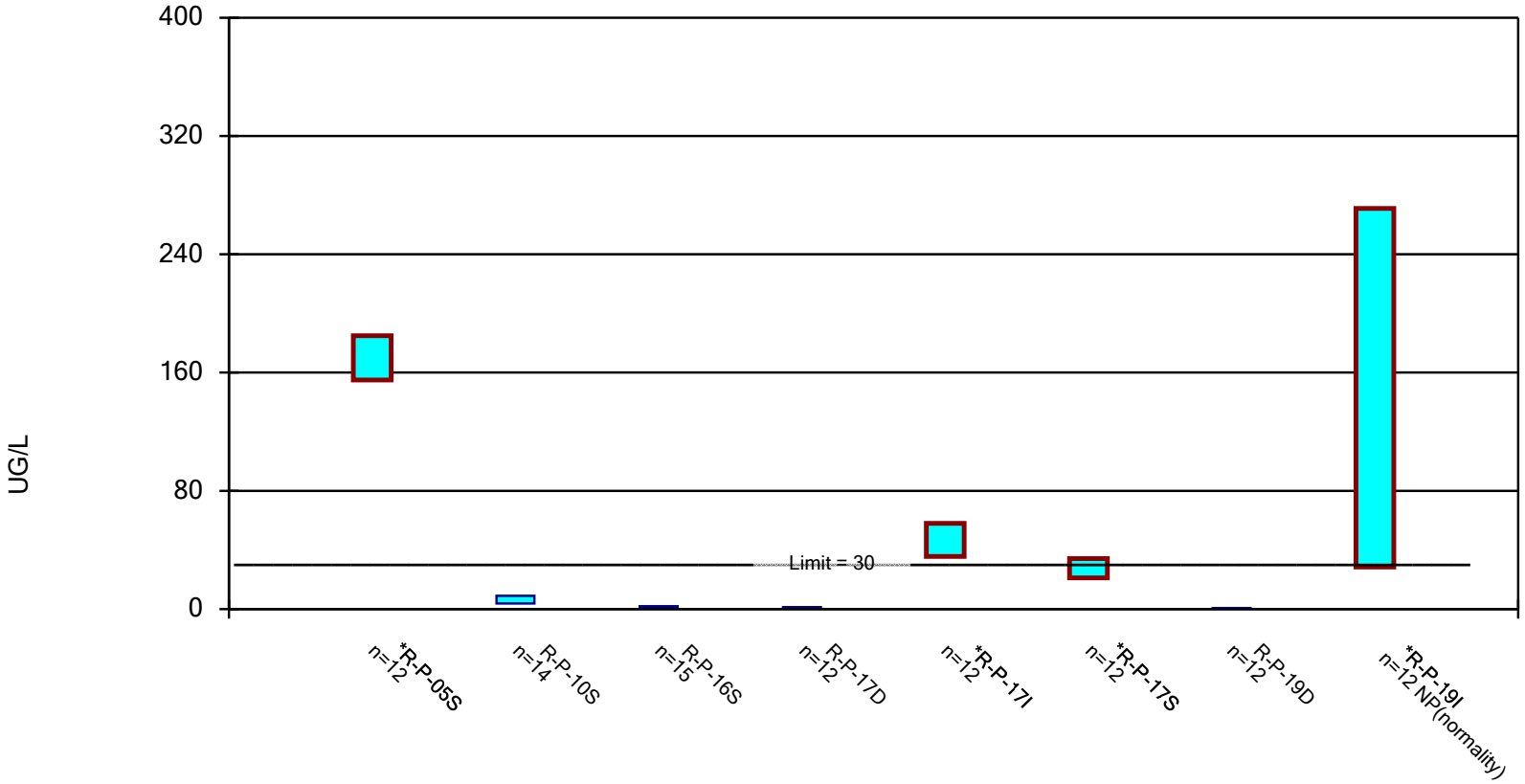
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



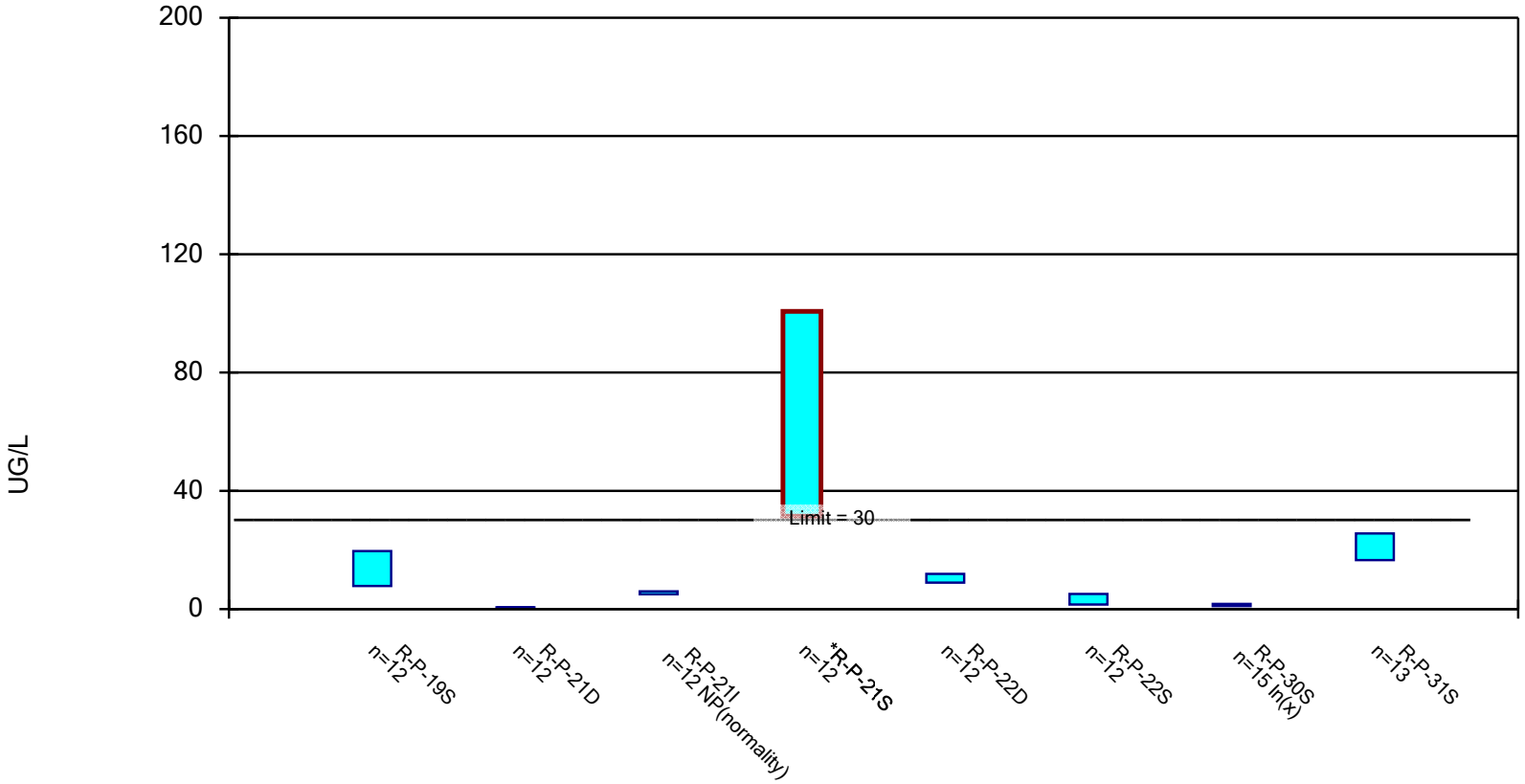
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



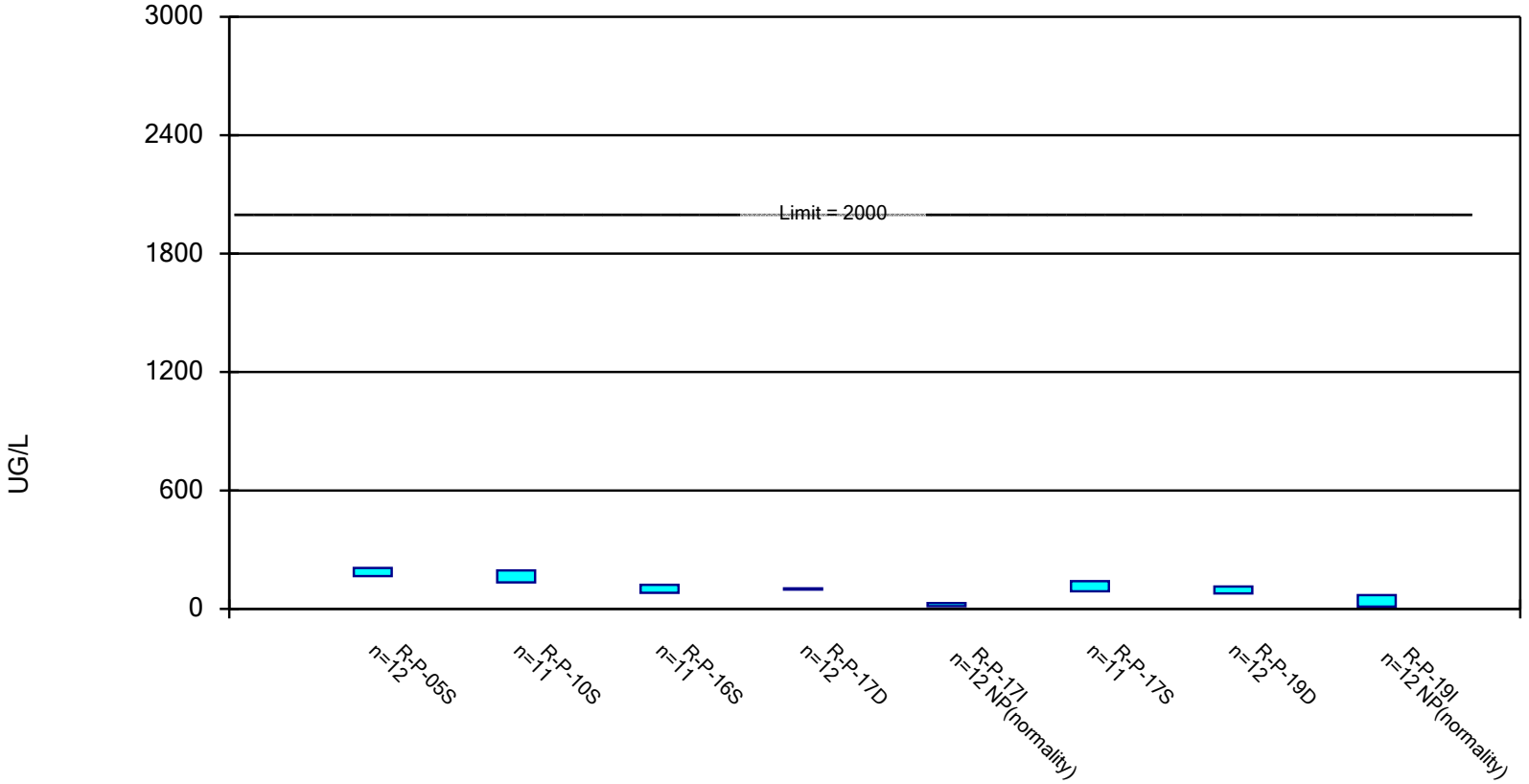
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

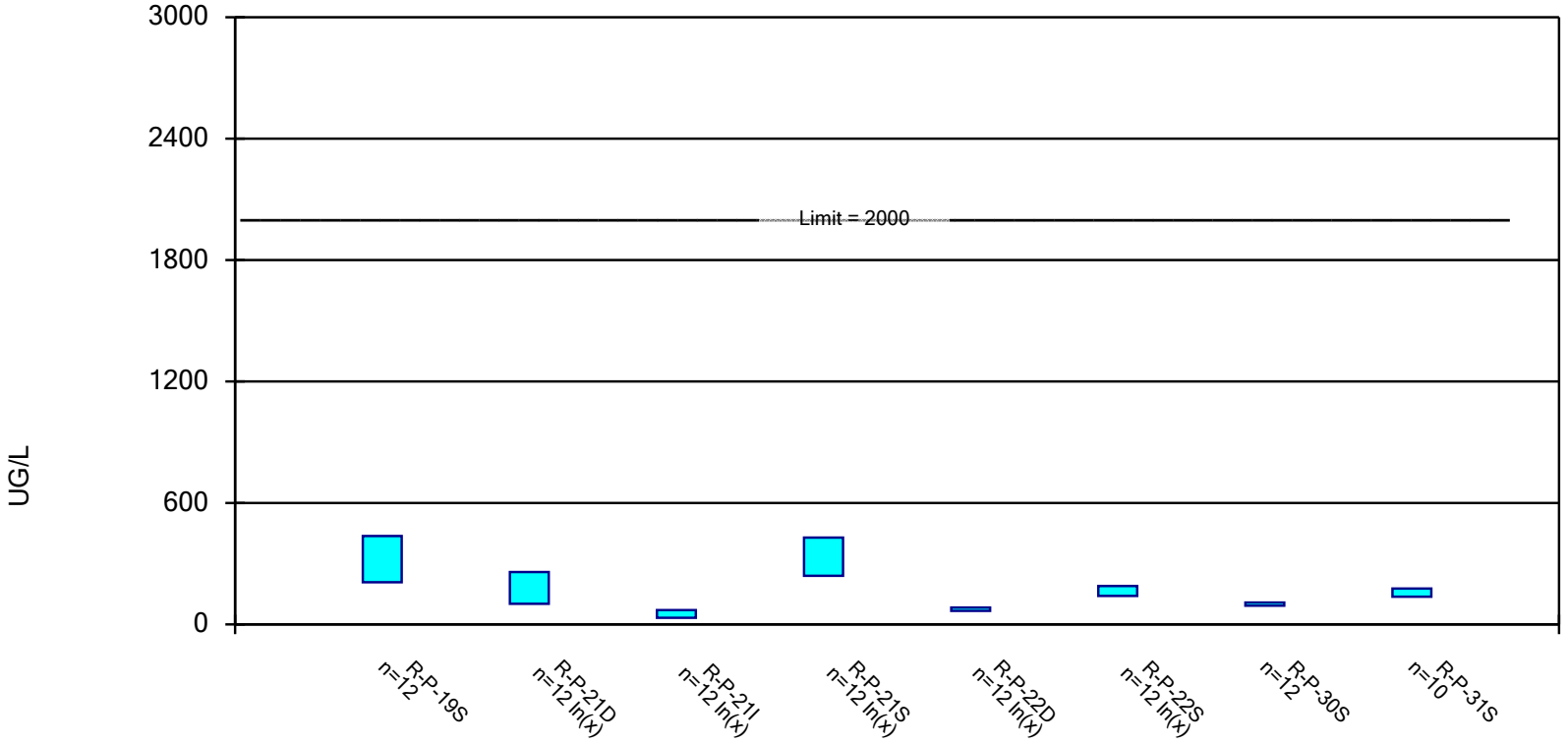


Constituent: BARIUM, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



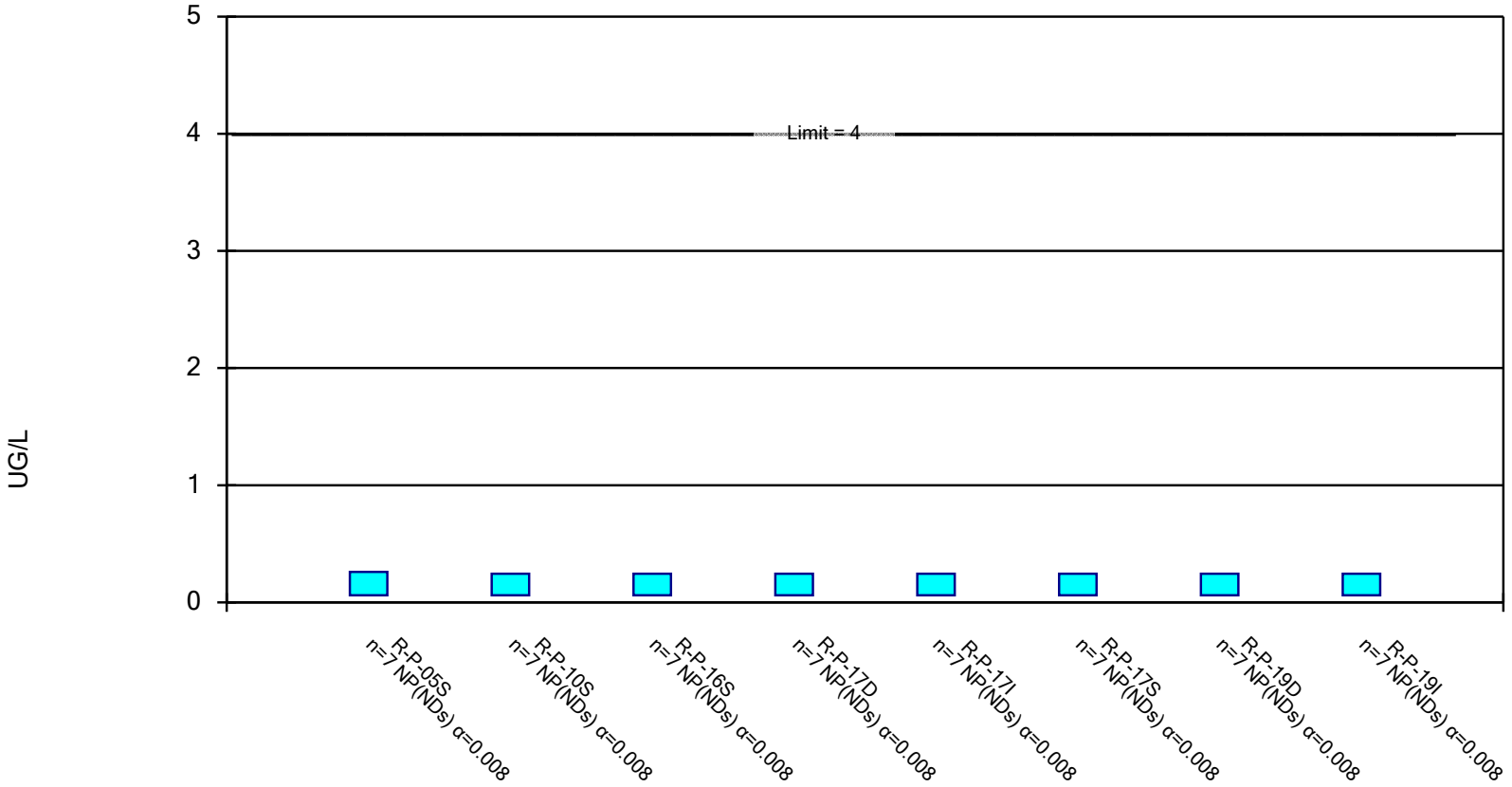
Constituent: BARIUM, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Non-Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded.



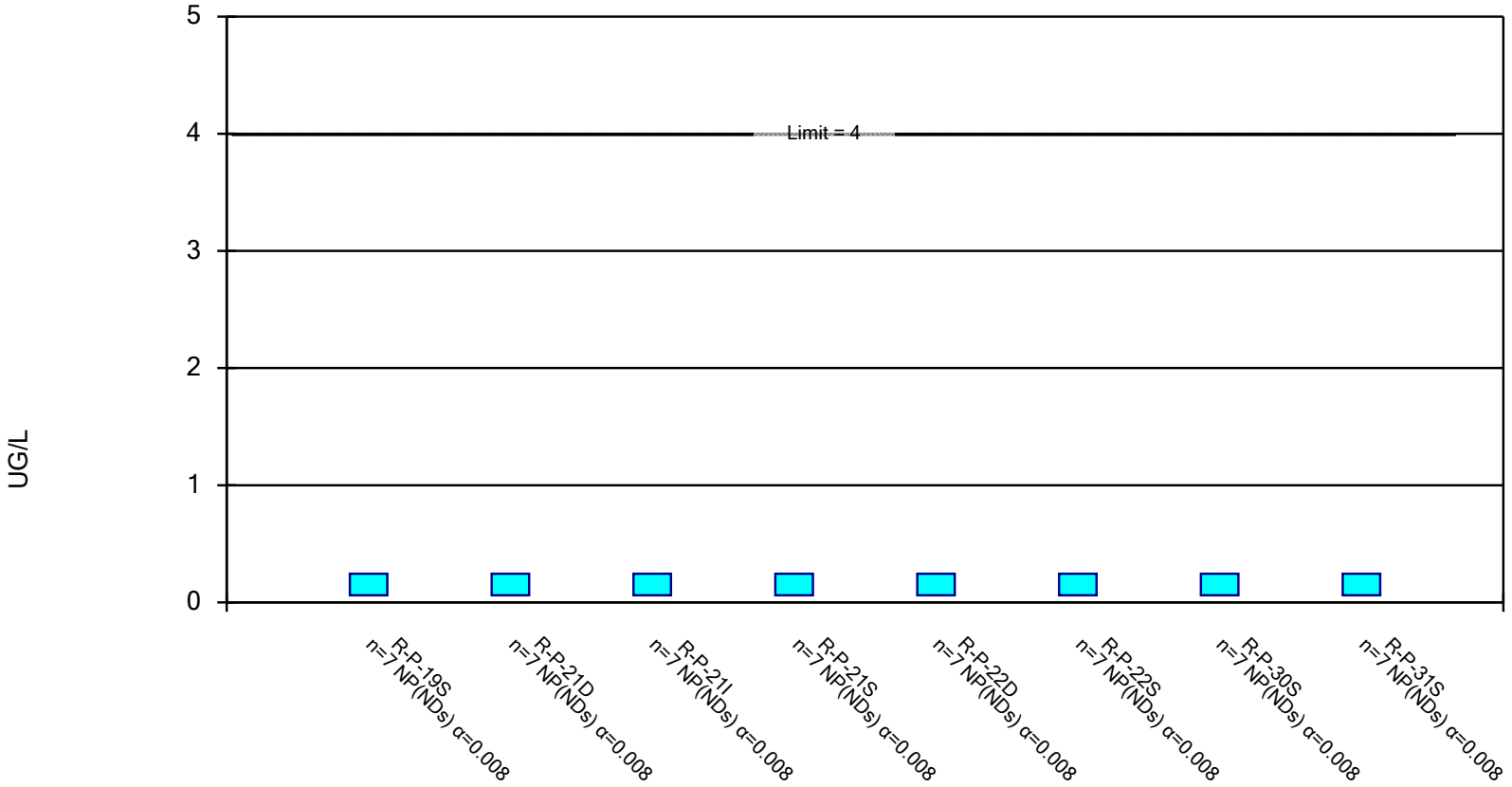
Constituent: BERYLLIUM, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Non-Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded.



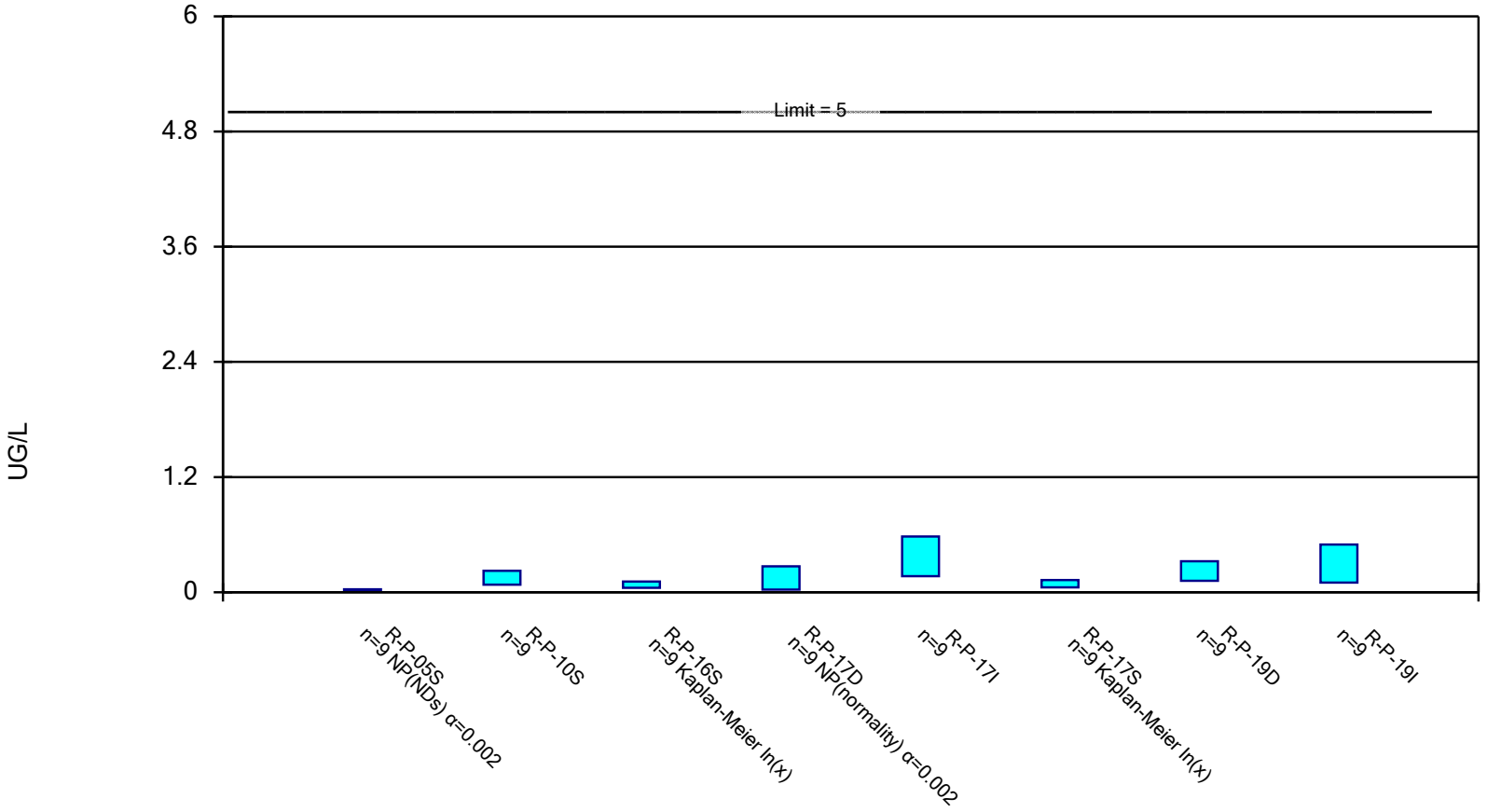
Constituent: BERYLLIUM, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

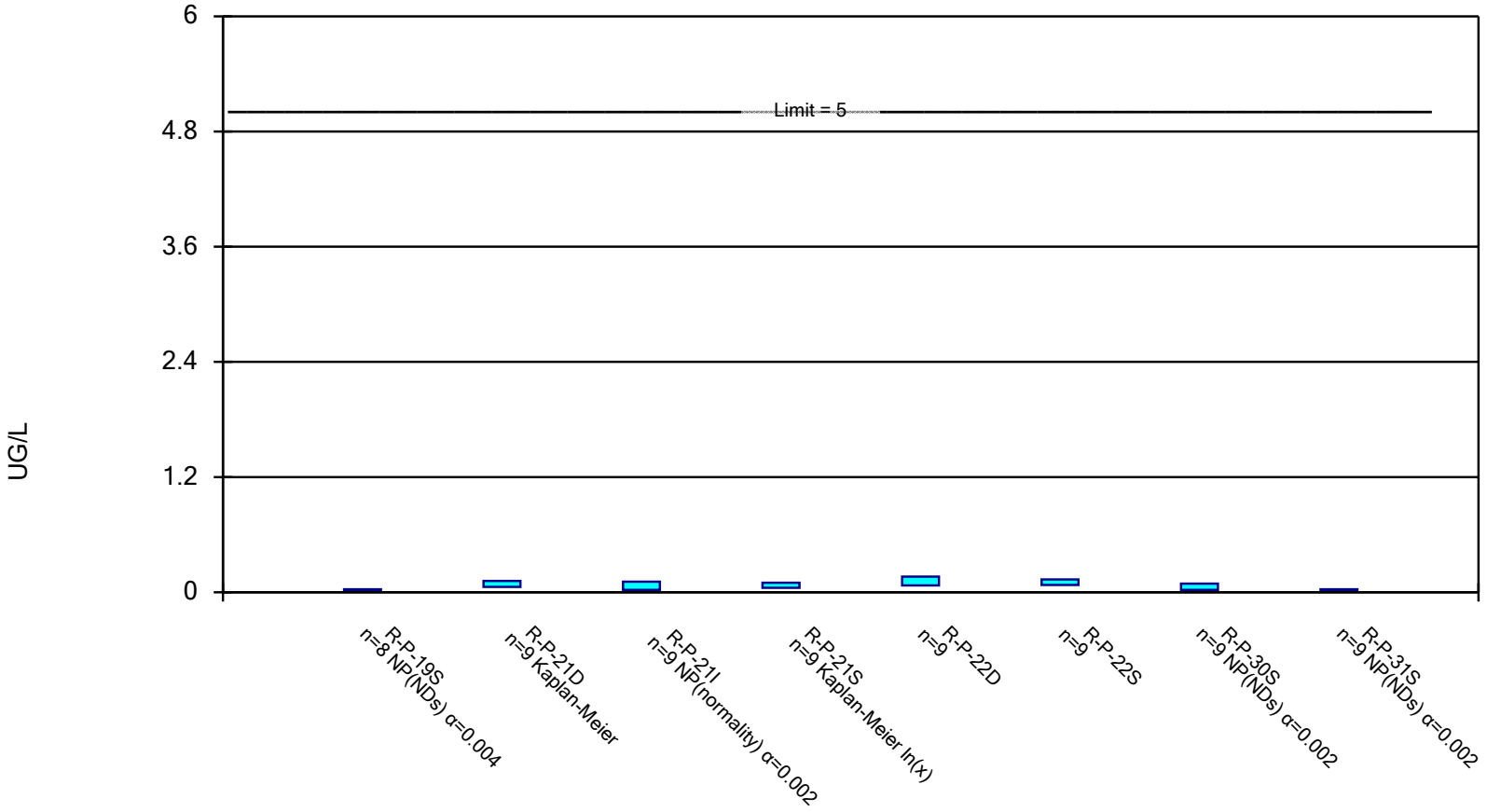


Constituent: CADMIUM, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



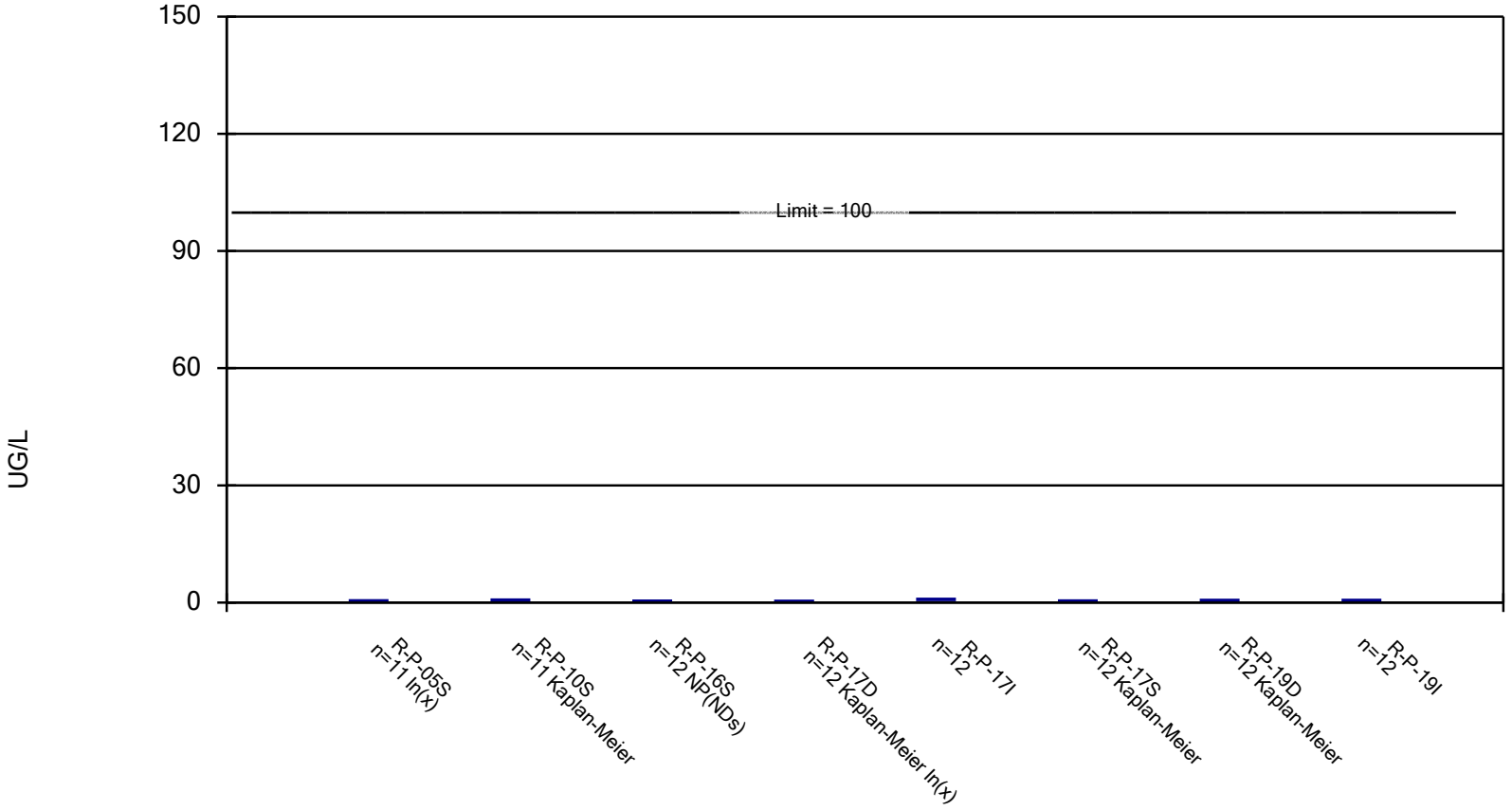
Constituent: CADMIUM, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



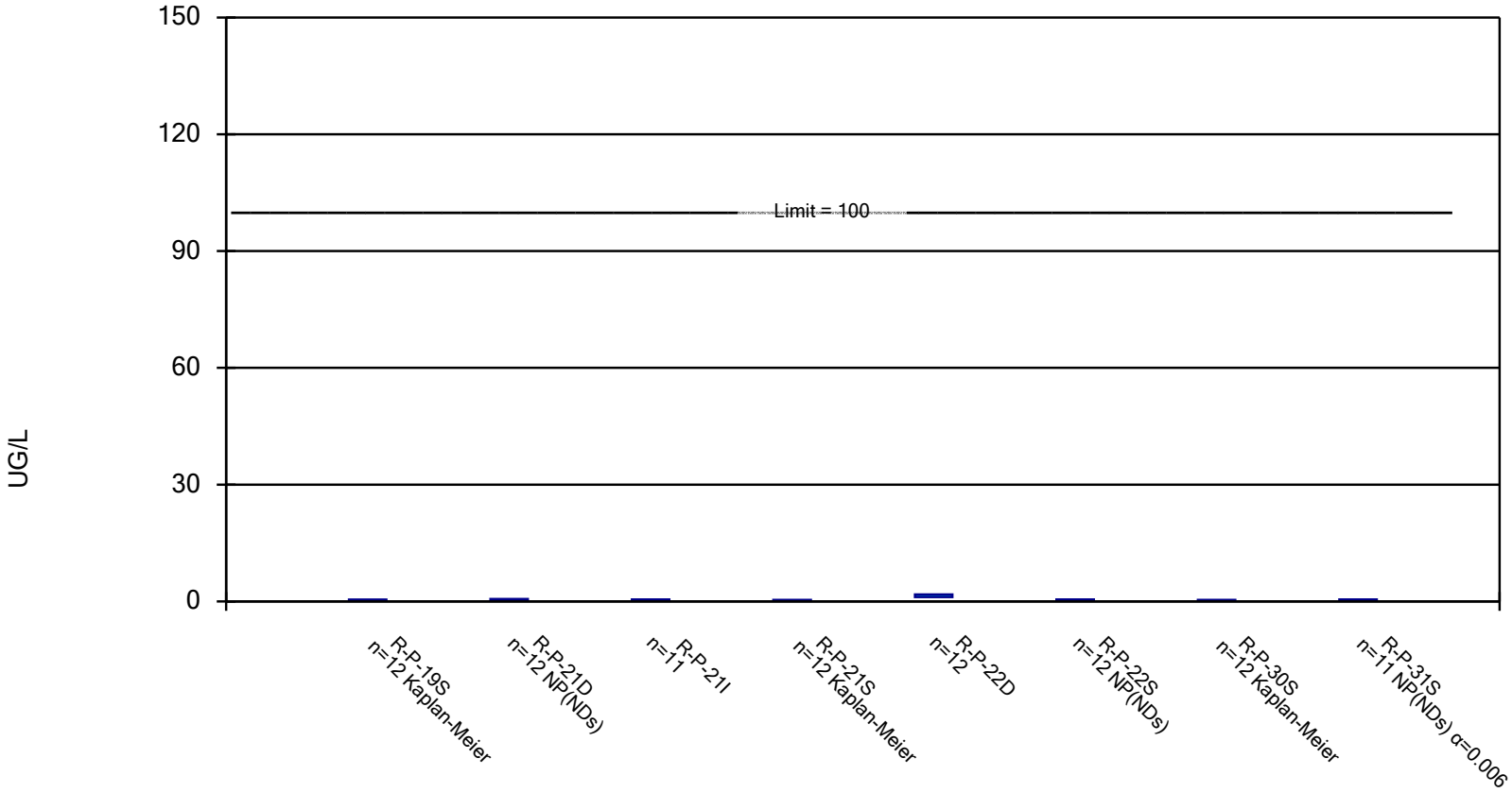
Constituent: CHROMIUM, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



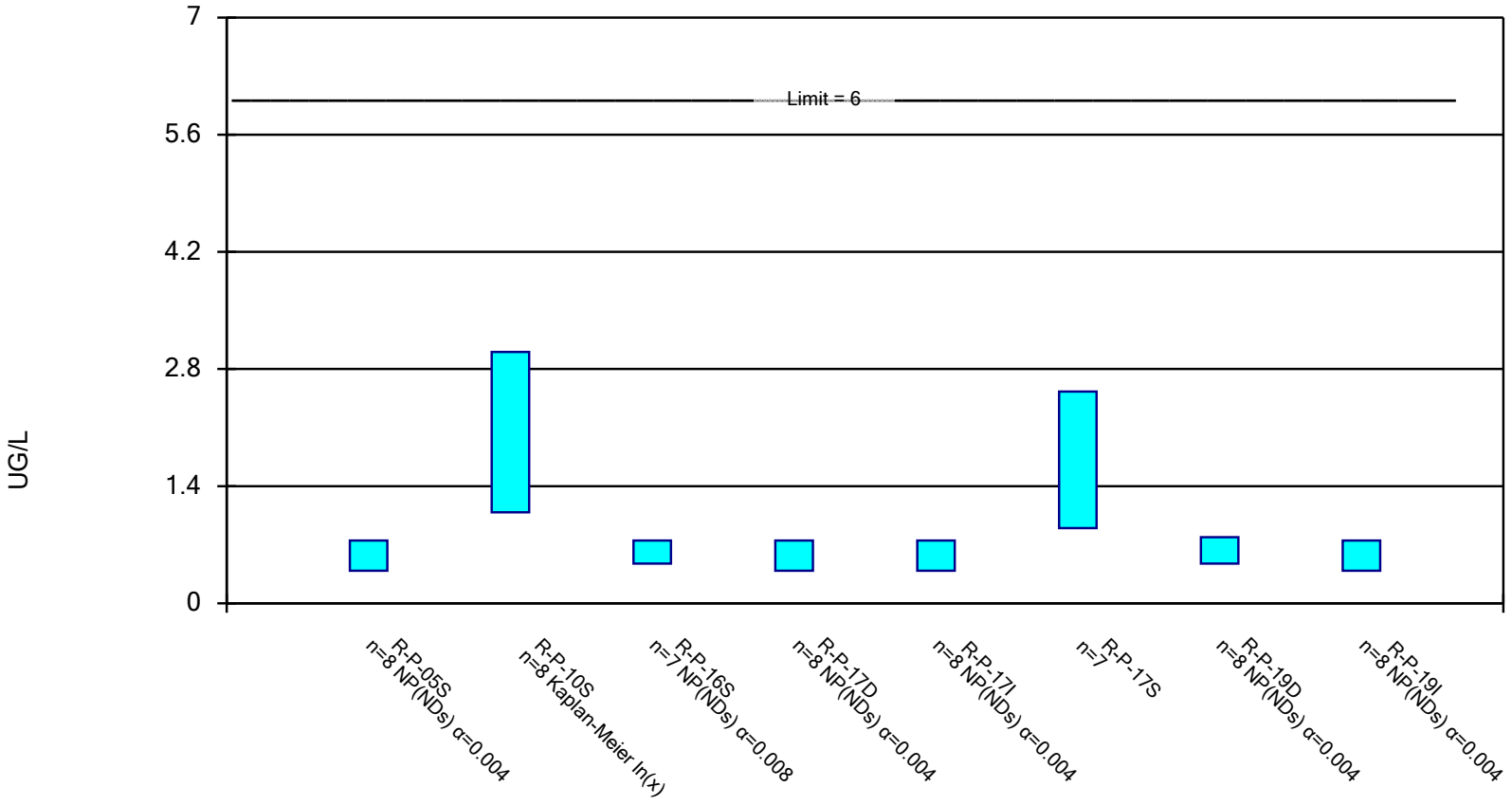
Constituent: CHROMIUM, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



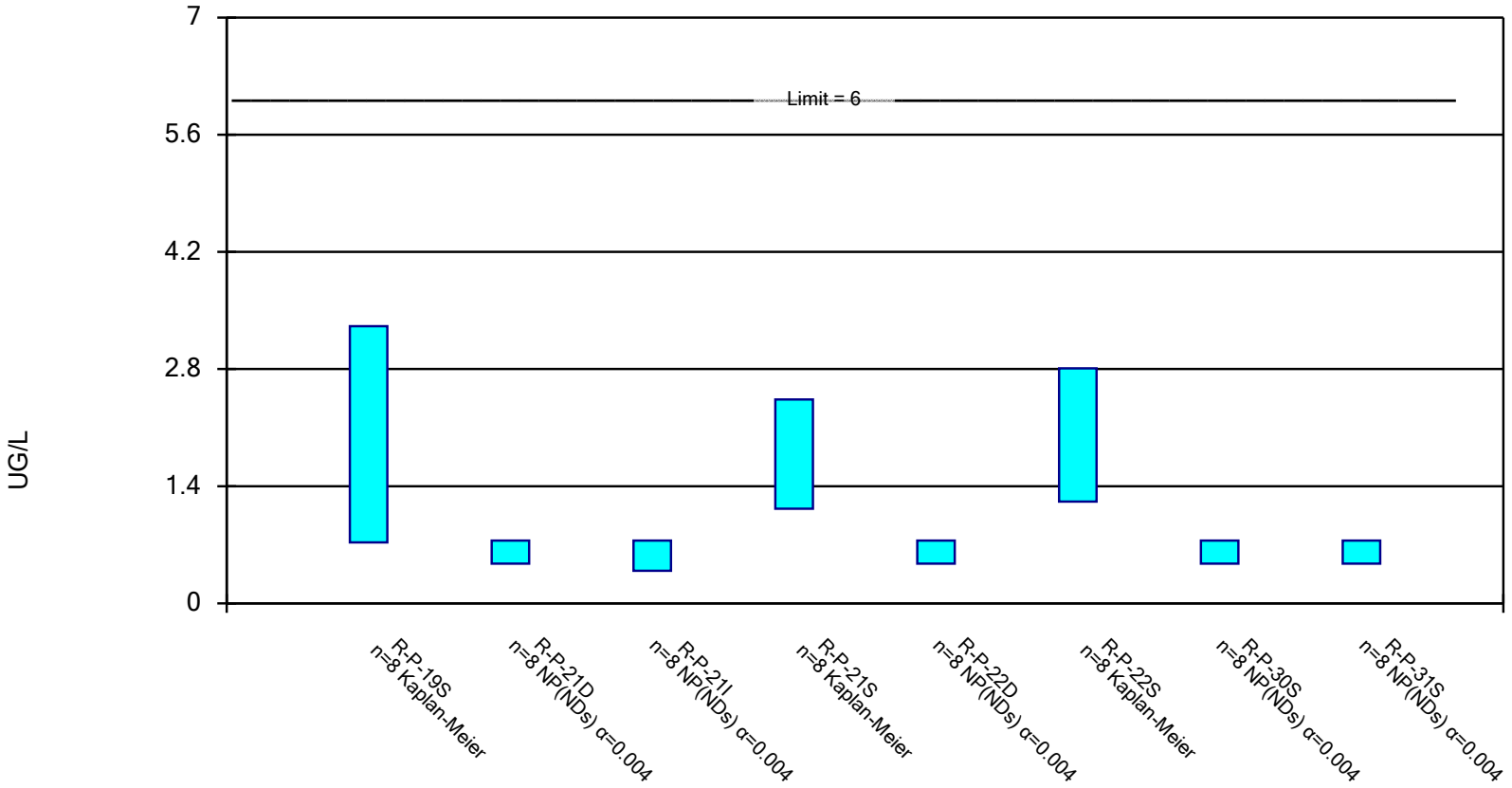
Constituent: COBALT, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



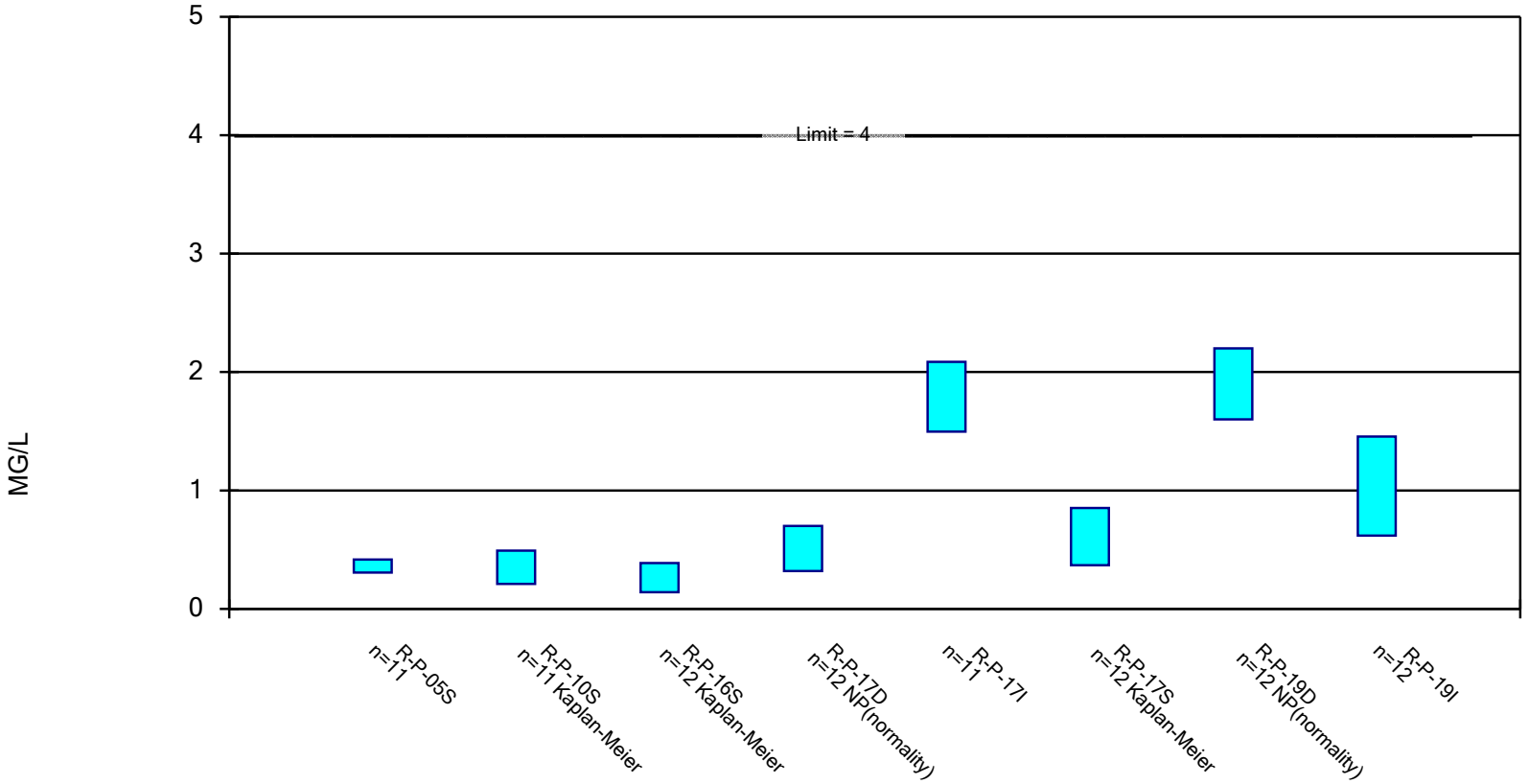
Constituent: COBALT, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



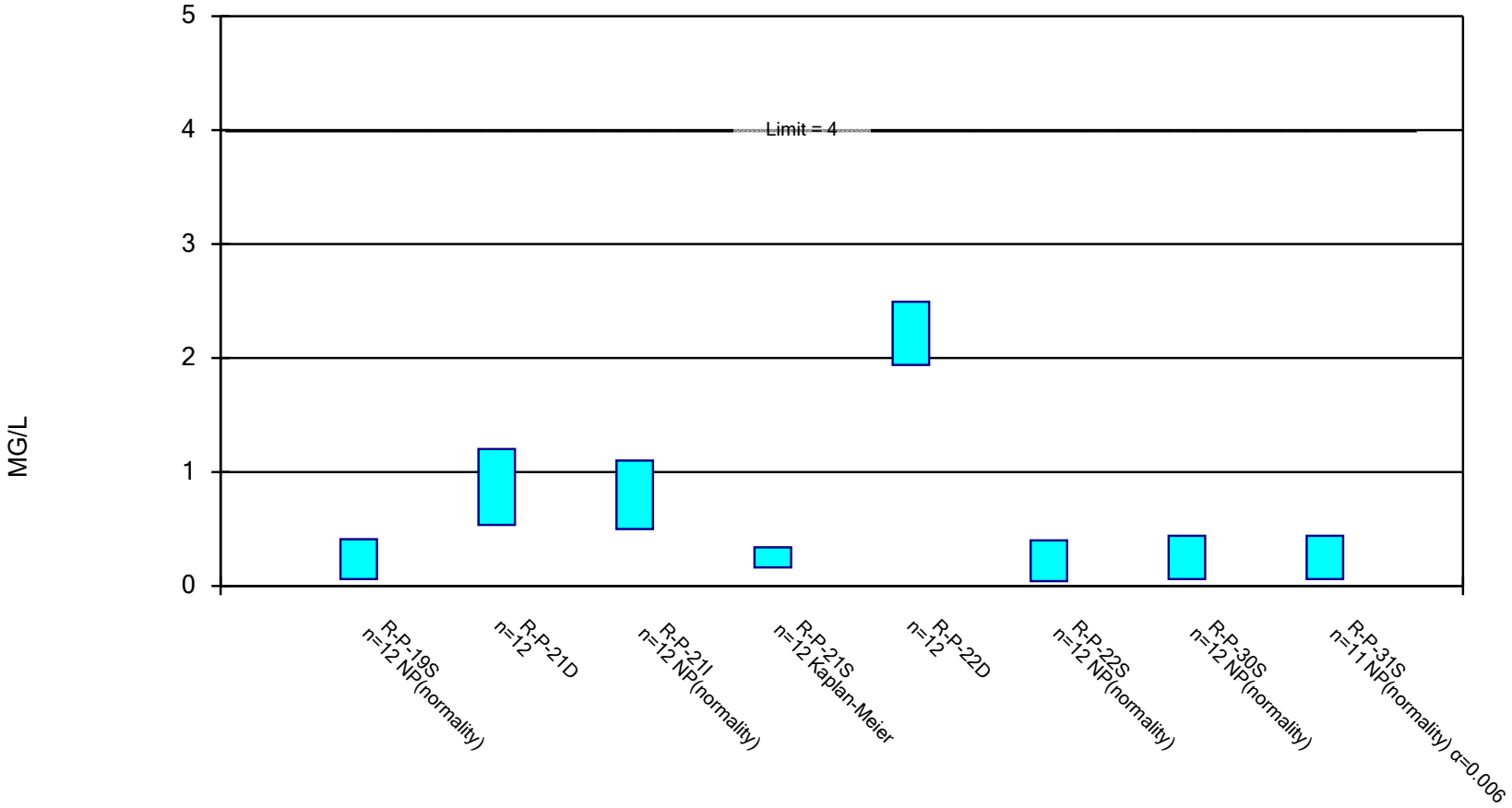
Constituent: FLUORIDE, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

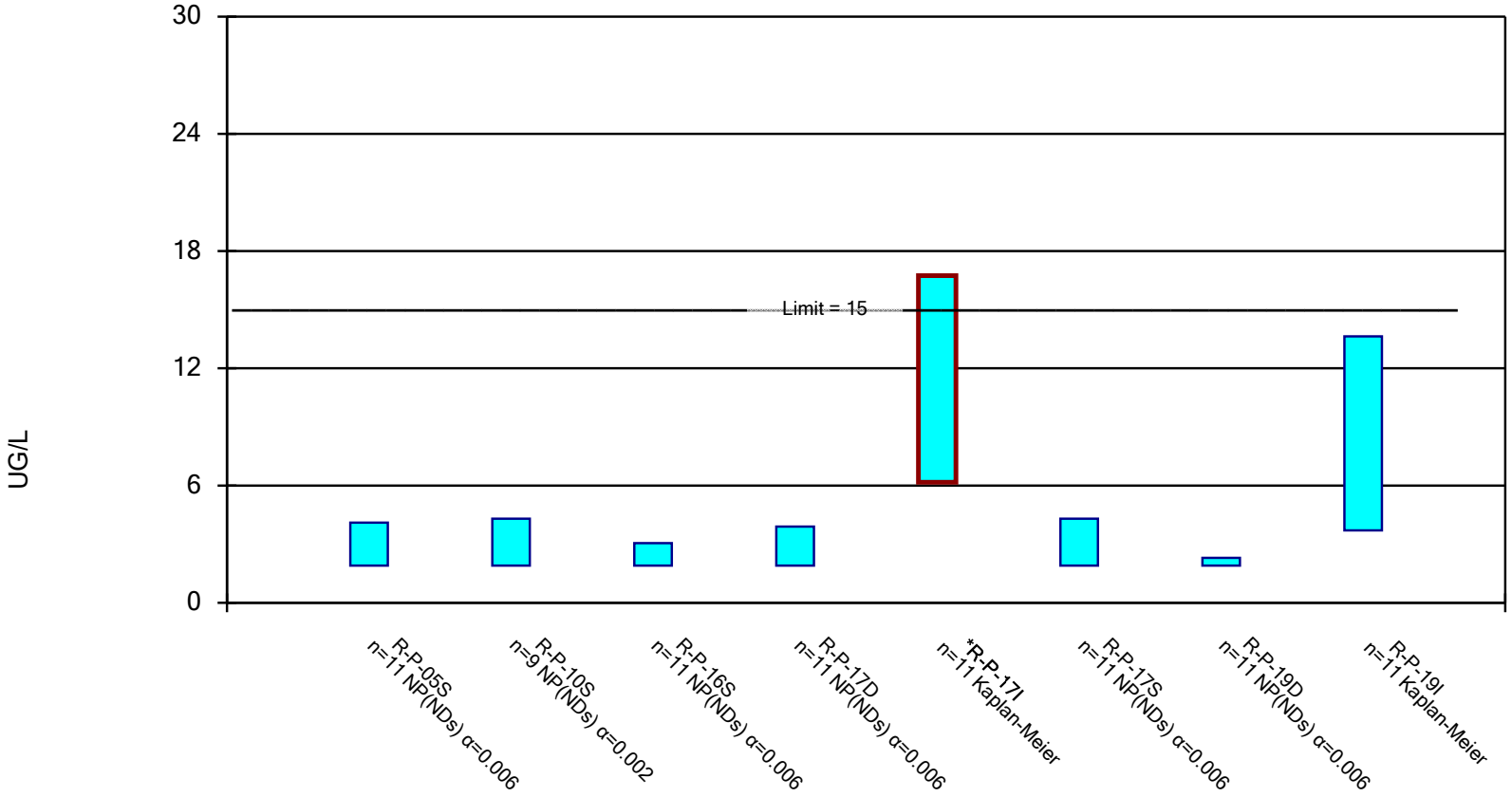


Constituent: FLUORIDE, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



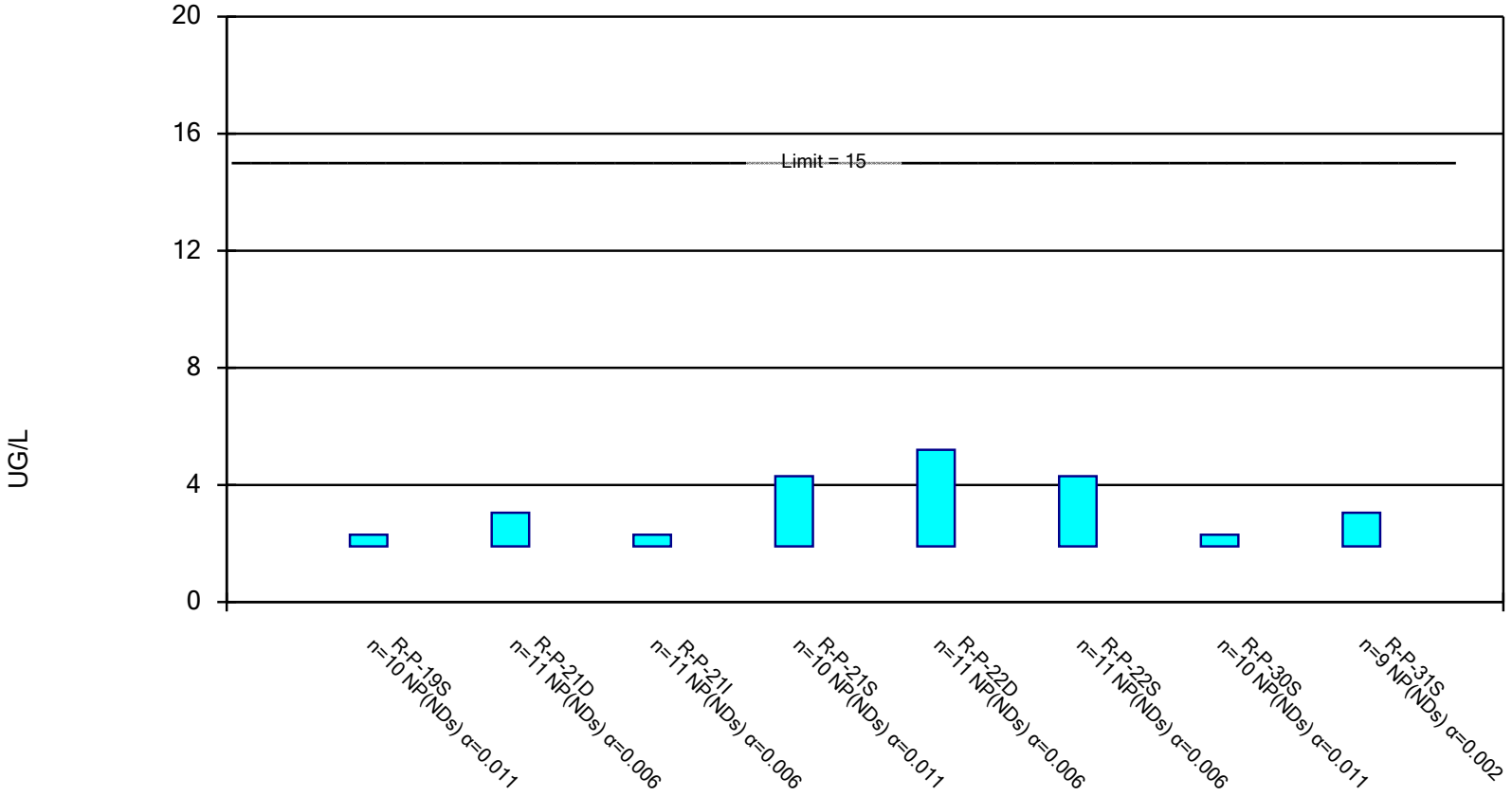
Constituent: LEAD, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Non-Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded.



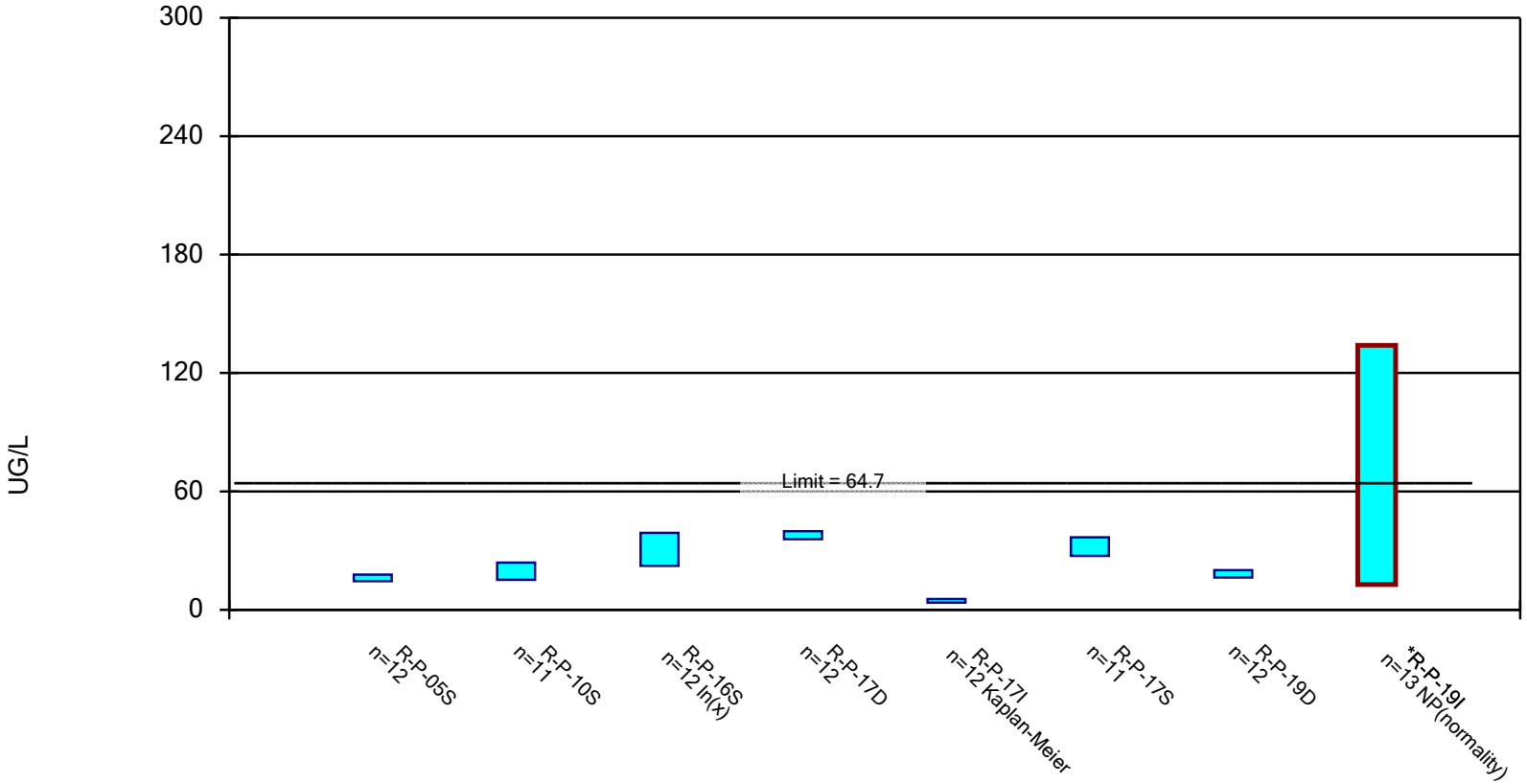
Constituent: LEAD, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



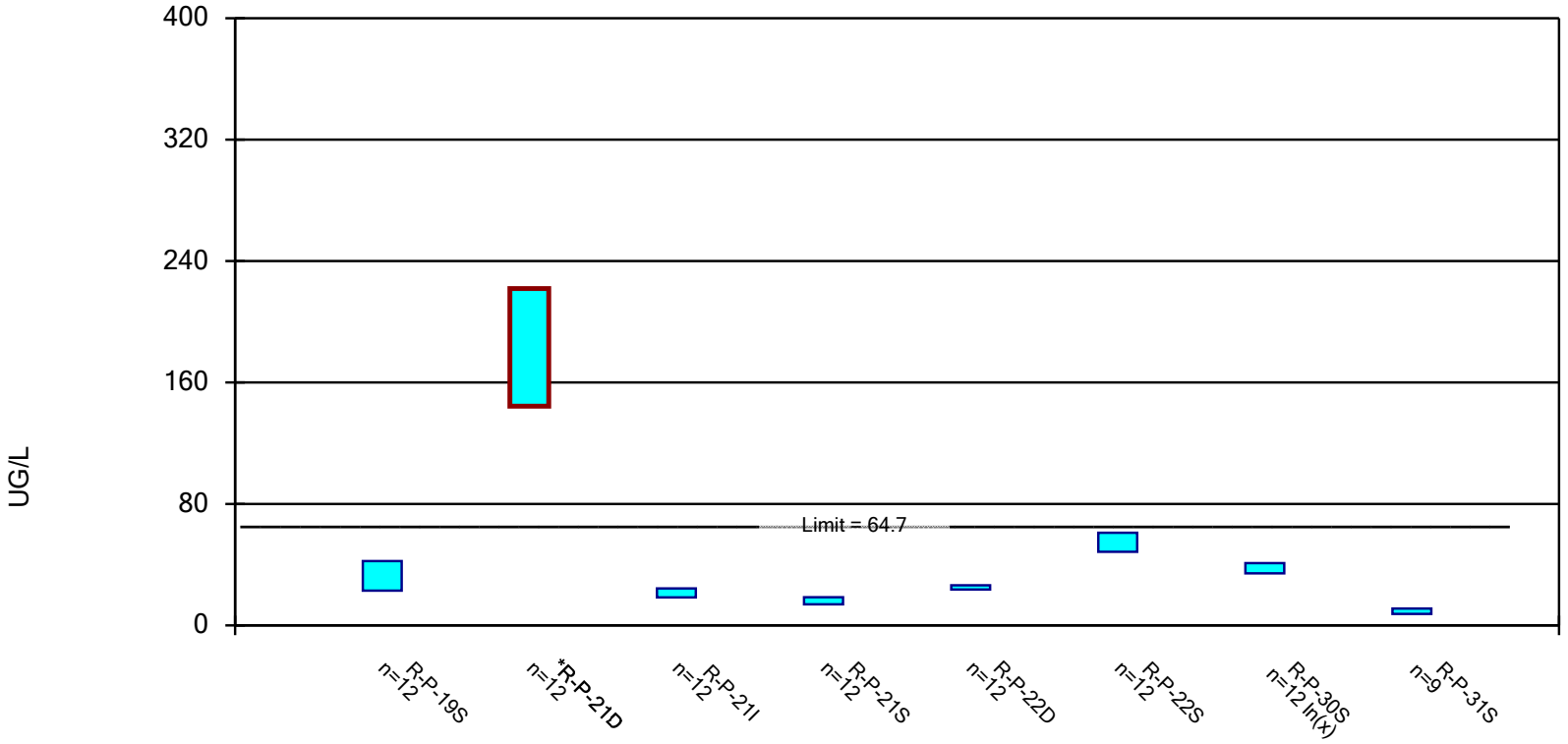
Constituent: LITHIUM, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Parametric Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

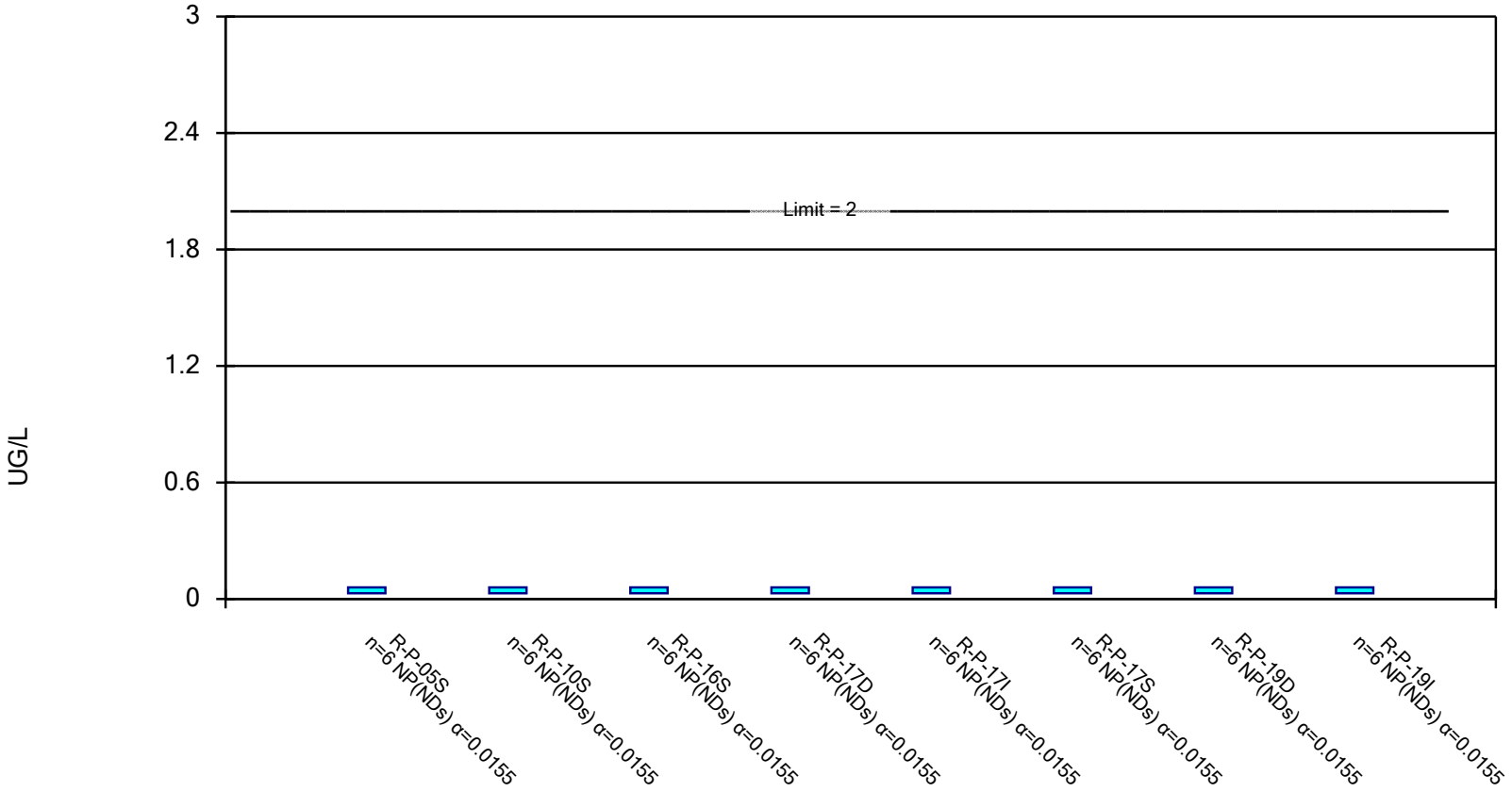


Constituent: LITHIUM, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Non-Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded.

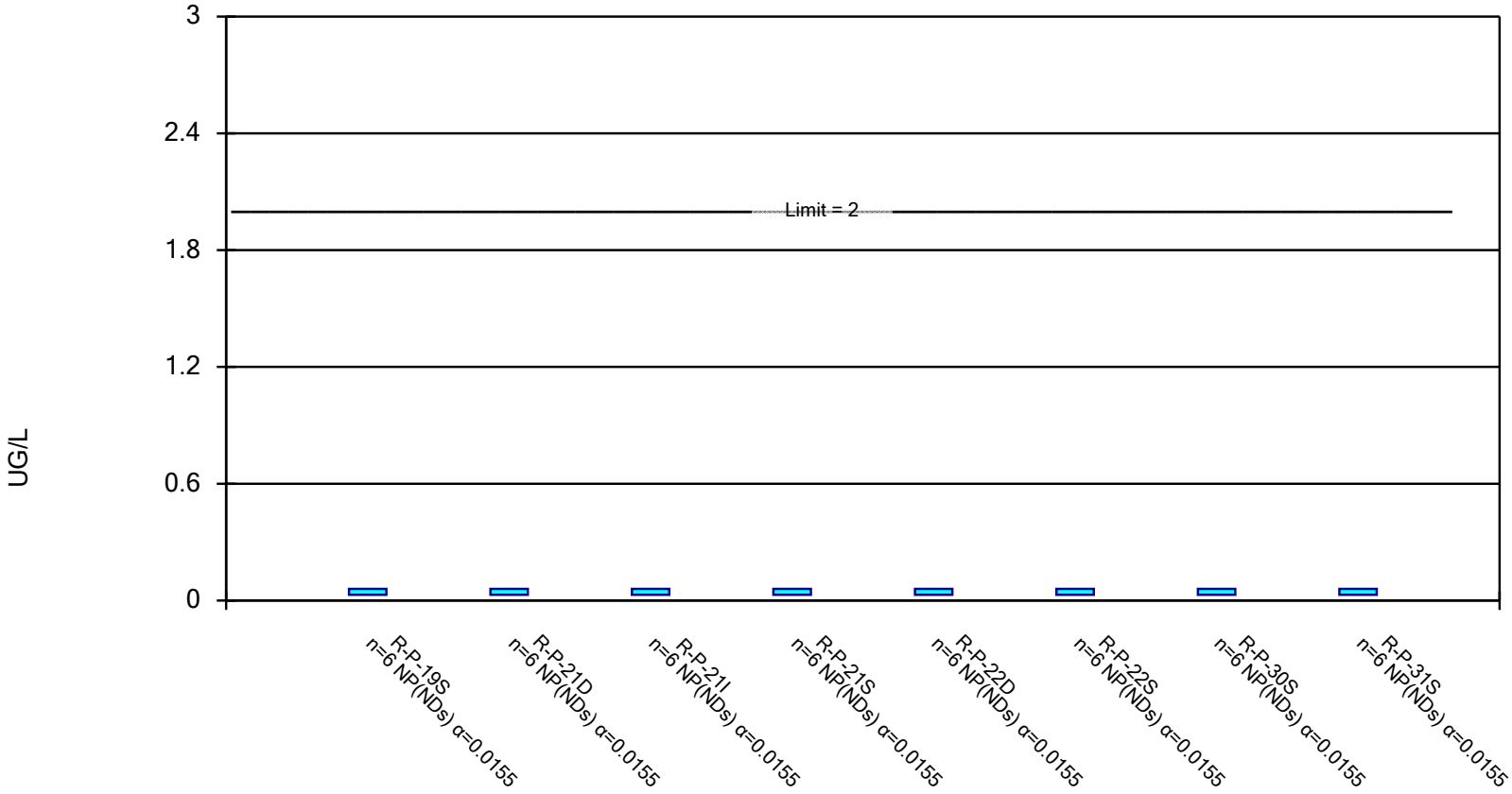


Constituent: MERCURY, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Non-Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded.



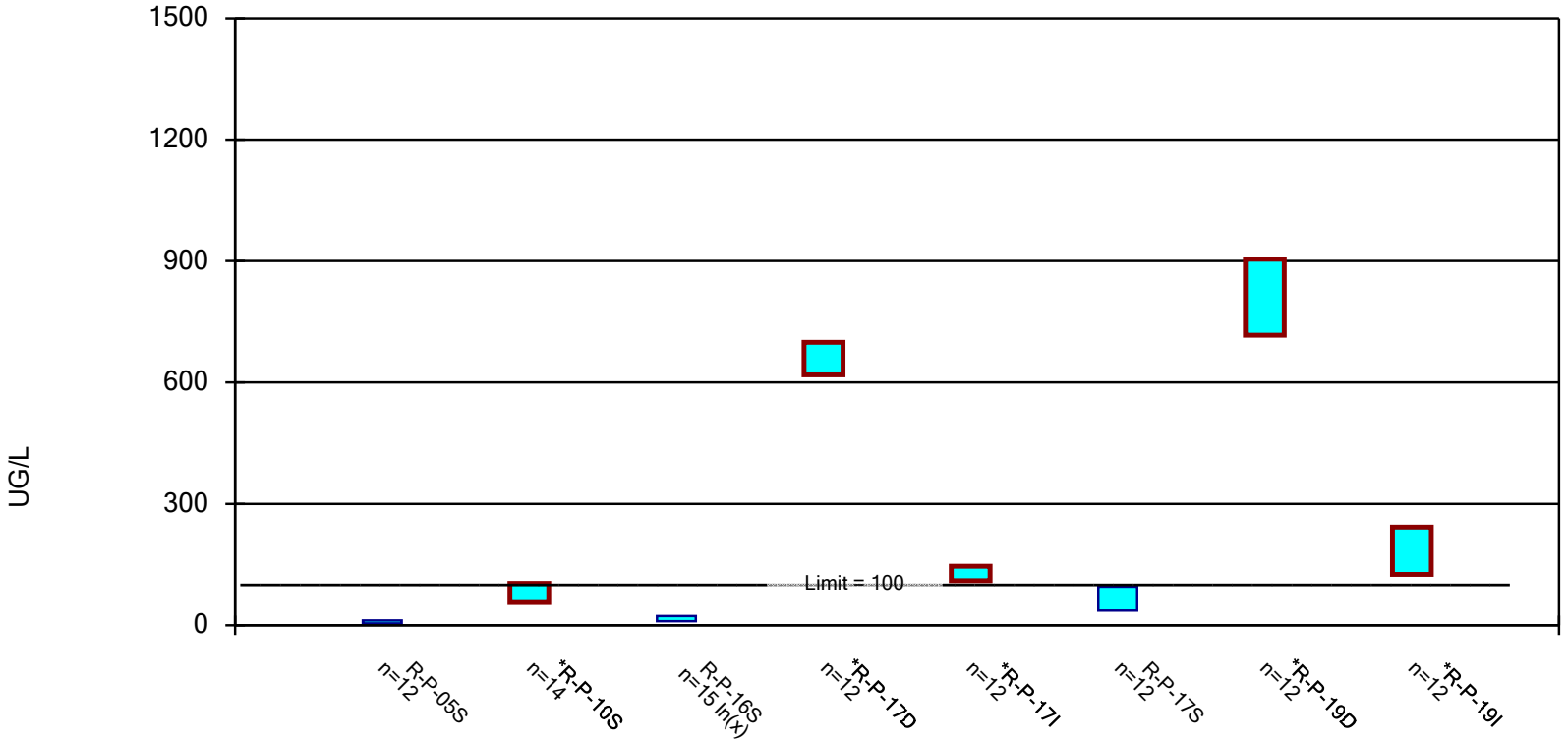
Constituent: MERCURY, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Parametric Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



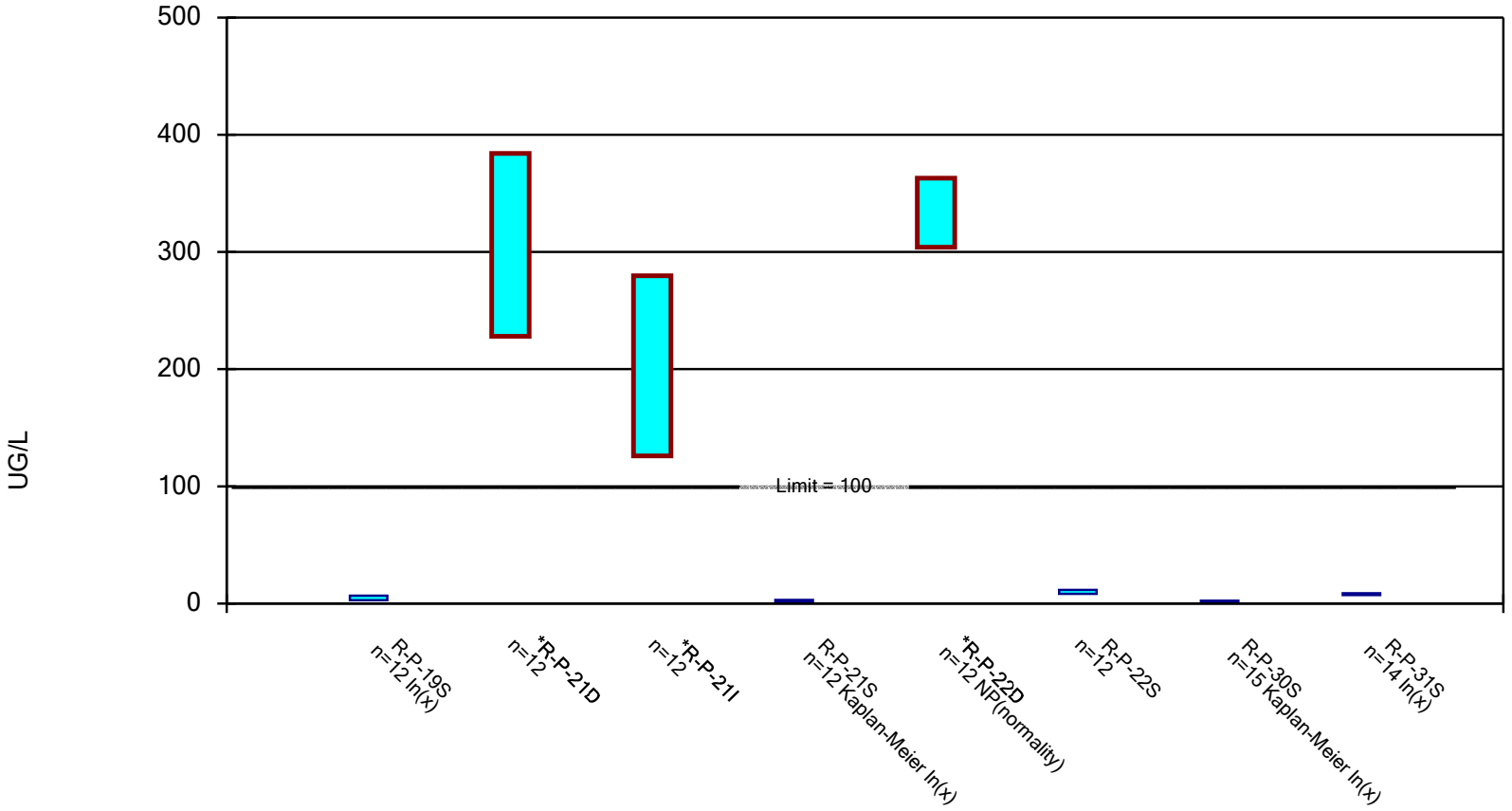
Constituent: MOLYBDENUM, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



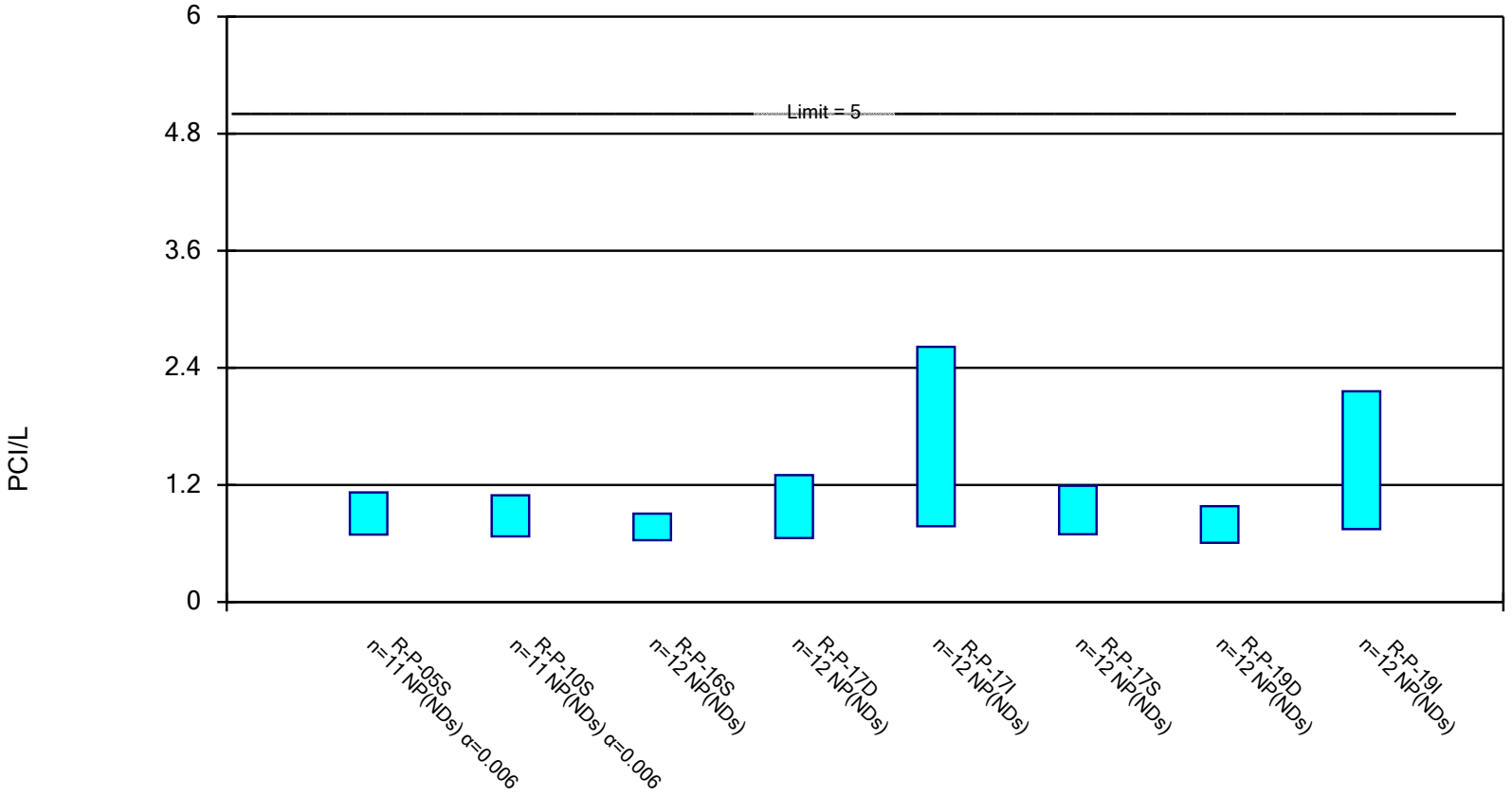
Constituent: MOLYBDENUM, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Non-Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



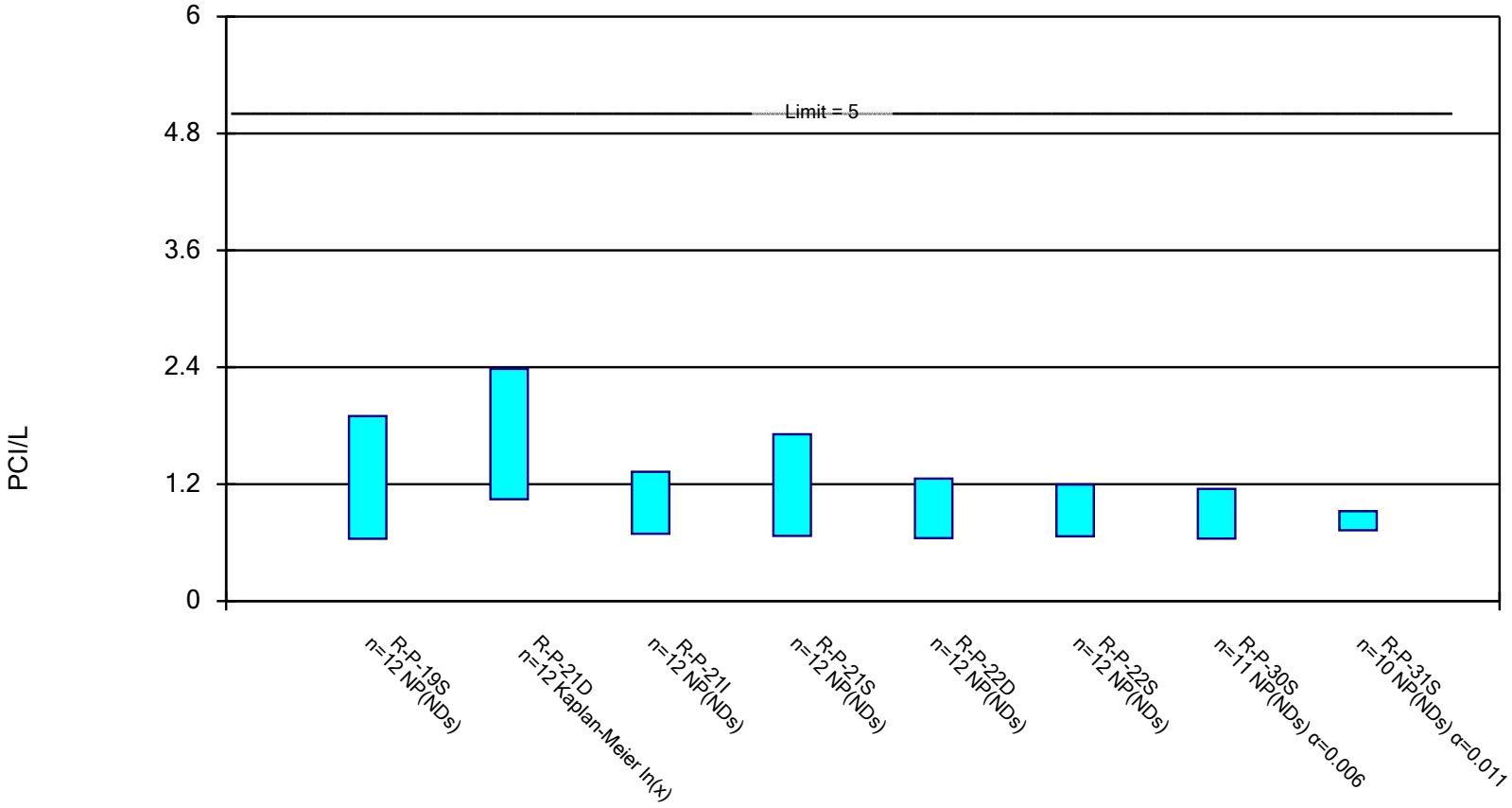
Constituent: RADIUM [226 + 228] Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



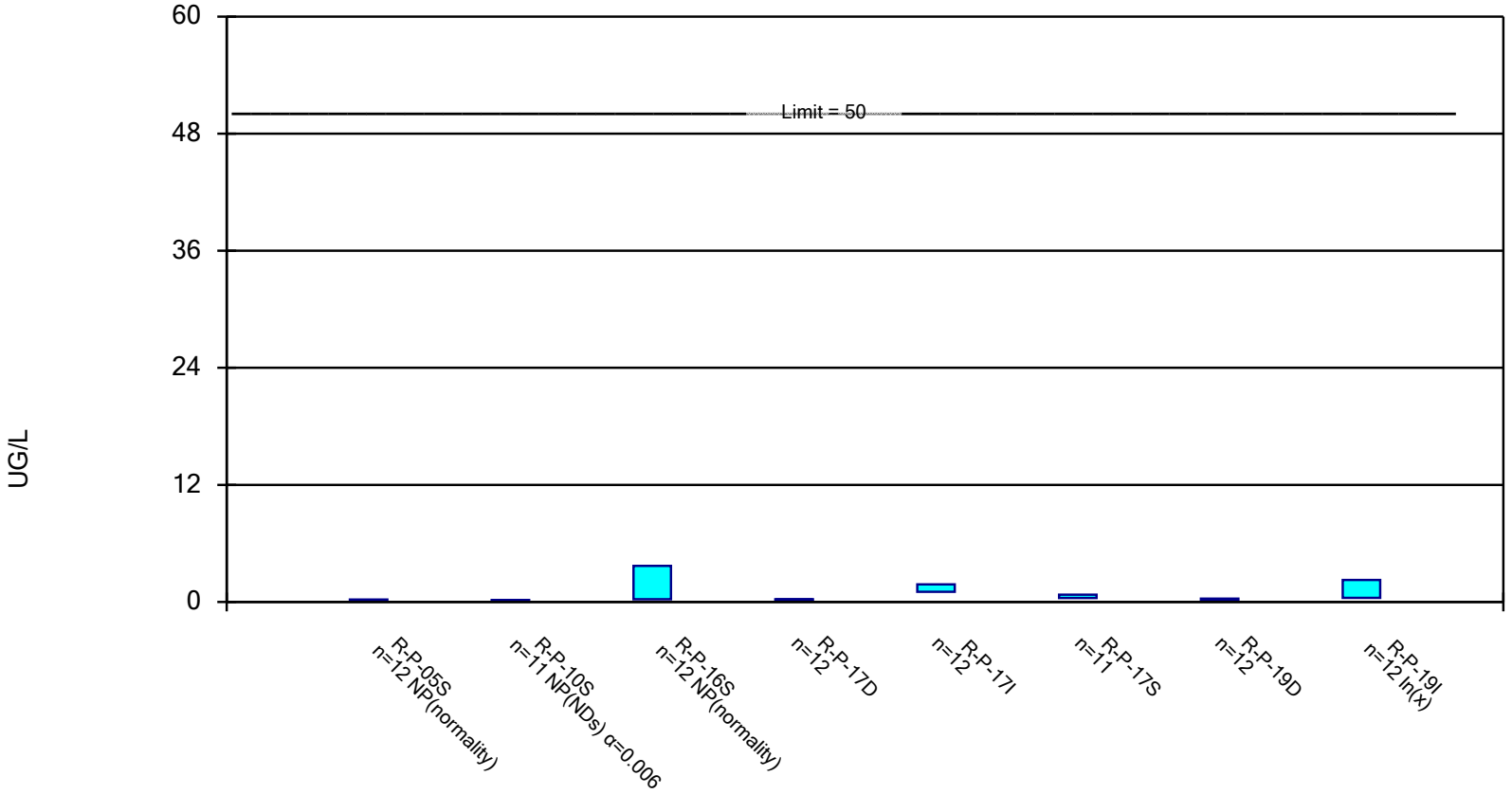
Constituent: RADIUM [226 + 228] Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



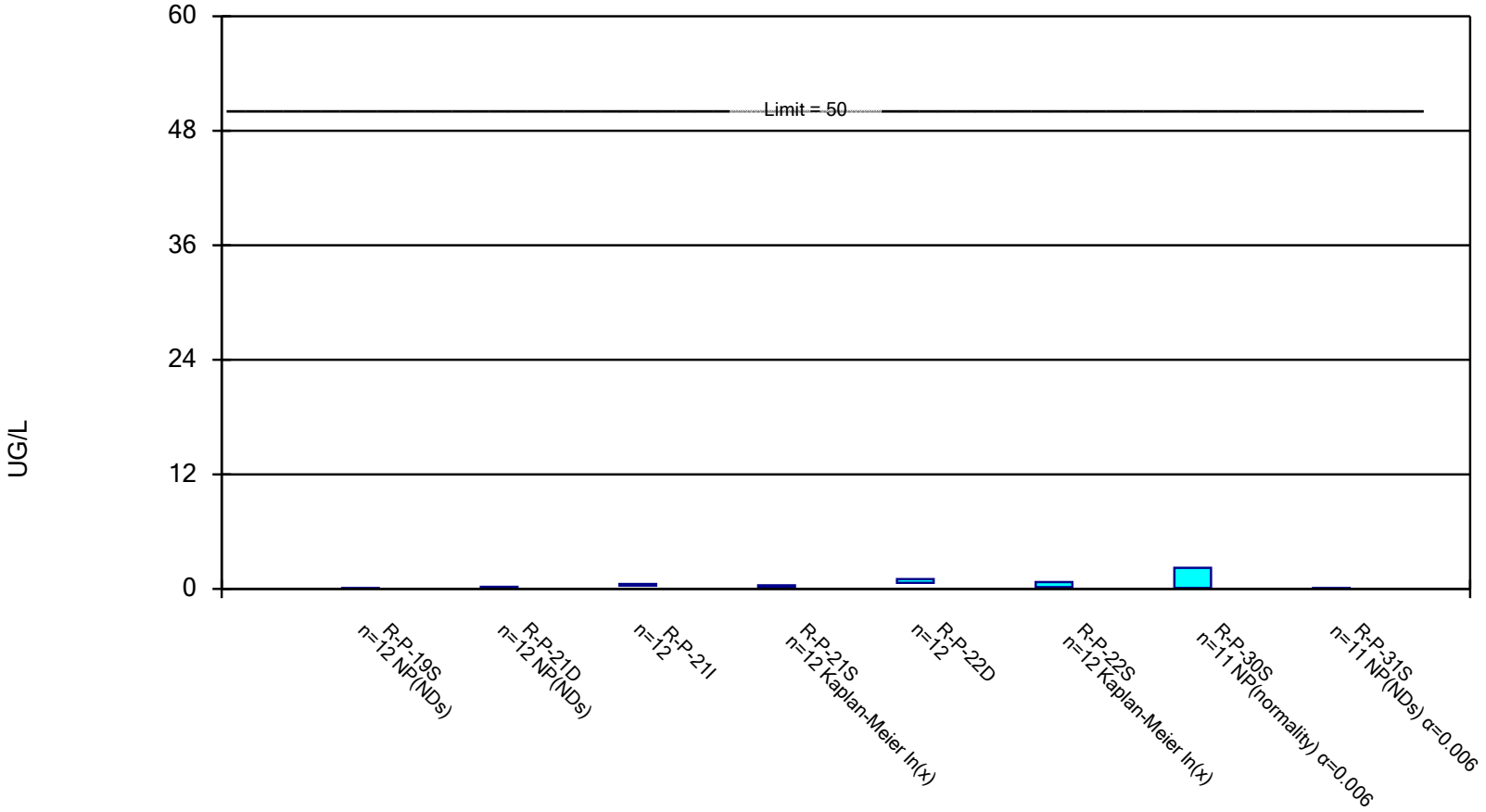
Constituent: SELENIUM, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



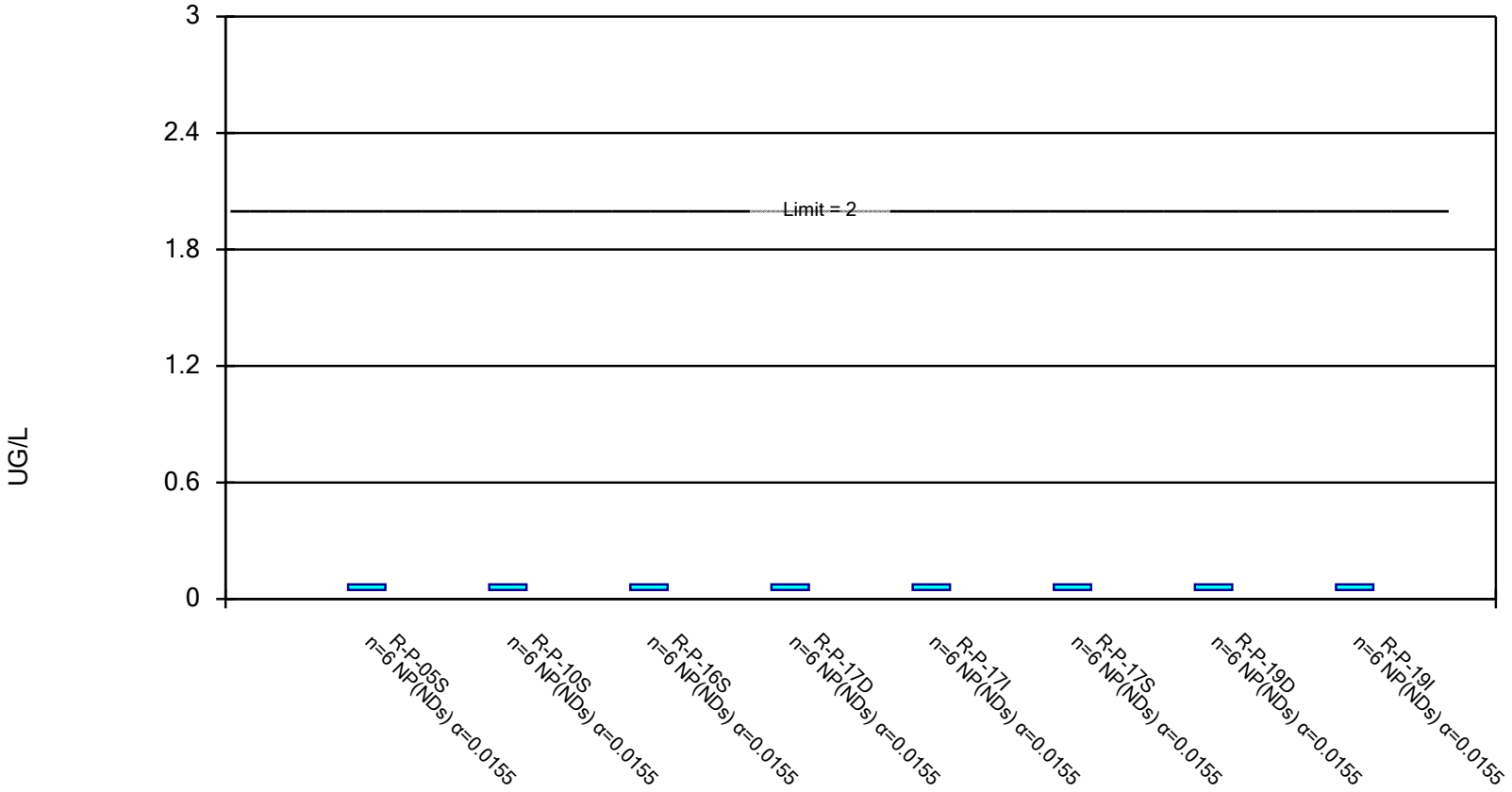
Constituent: SELENIUM, TOTAL Analysis Run 9/2/2025 9:52 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Non-Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded.



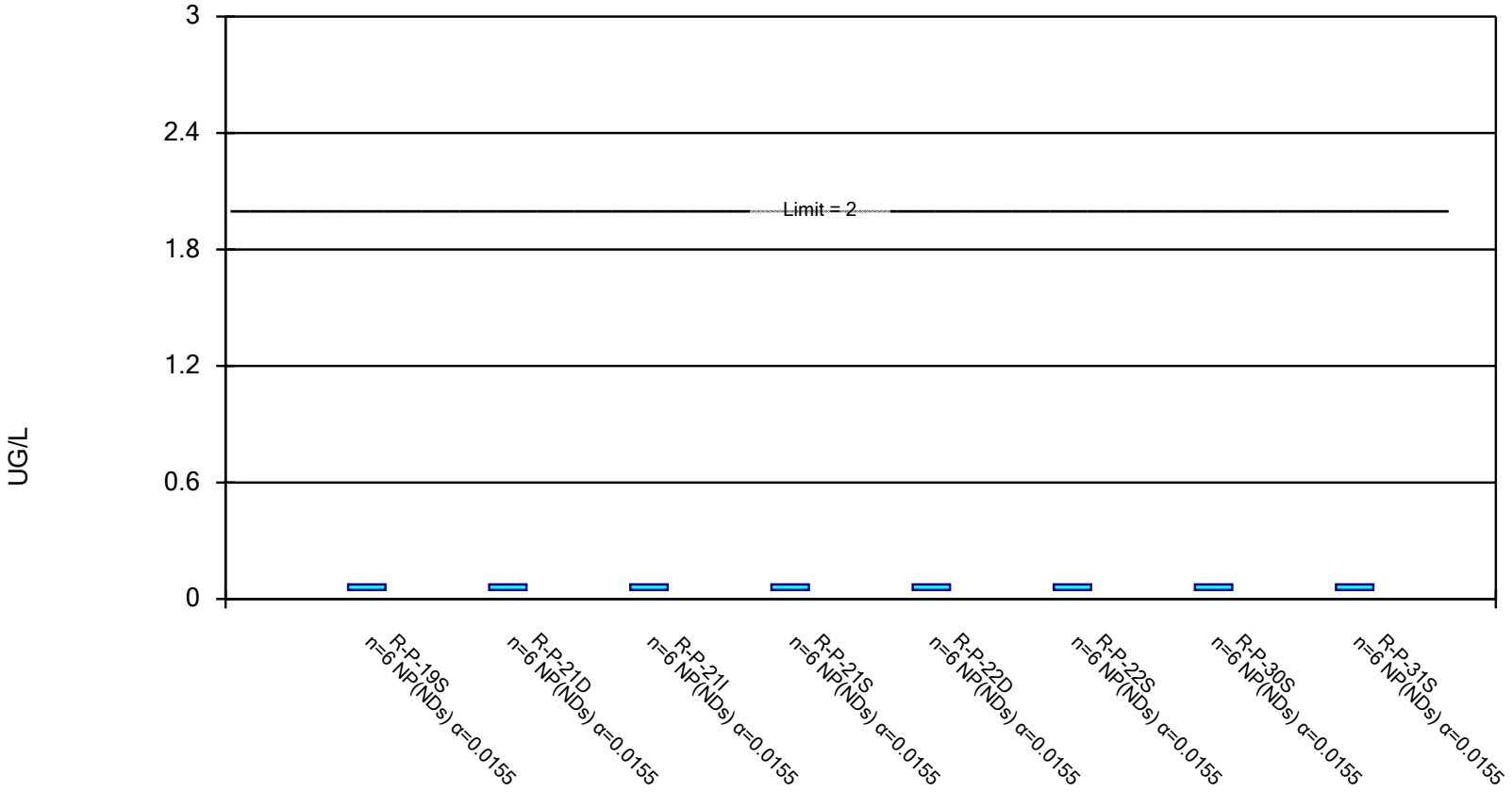
Constituent: THALLIUM, TOTAL Analysis Run 9/2/2025 9:53 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Non-Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded.



Constituent: THALLIUM, TOTAL Analysis Run 9/2/2025 9:53 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Confidence Interval

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 9/2/2025, 9:53 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
ANTIMONY, TOTAL (UG/L)	R-P-05S	0.06	0.0485	6	No	12	100	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-10S	0.12	0.05	6	No	11	72.73	No	0.006	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-16S	0.06	0.0485	6	No	10	100	No	0.011	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-17D	0.06	0.0485	6	No	12	100	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-17I	0.4575	0.1825	6	No	12	8.333	No	0.01	Param.
ANTIMONY, TOTAL (UG/L)	R-P-17S	0.2274	0.09952	6	No	12	41.67	ln(x)	0.01	Param.
ANTIMONY, TOTAL (UG/L)	R-P-19D	0.06	0.0485	6	No	12	100	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-19I	4.9	0.21	6	No	12	0	No	0.01	NP (normality)
ANTIMONY, TOTAL (UG/L)	R-P-19S	0.15	0.0485	6	No	12	91.67	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-21D	0.06	0.0485	6	No	12	100	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-21I	0.06	0.0485	6	No	12	100	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-21S	0.06	0.0485	6	No	11	100	No	0.006	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-22D	0.1669	0.1052	6	No	12	41.67	No	0.01	Param.
ANTIMONY, TOTAL (UG/L)	R-P-22S	0.13	0.0485	6	No	12	91.67	No	0.01	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-30S	0.06	0.0485	6	No	11	100	No	0.006	NP (NDs)
ANTIMONY, TOTAL (UG/L)	R-P-31S	0.06	0.0485	6	No	11	90.91	No	0.006	NP (NDs)
ARSENIC, TOTAL (UG/L)	**R-P-05S**	**184.9**	**154.9**	**30**	**Yes**	**12**	**0**	**No**	**0.01**	**Param.**
ARSENIC, TOTAL (UG/L)	R-P-10S	8.97	3.83	30	No	14	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-P-16S	1.931	1.256	30	No	15	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-P-17D	1.223	1.068	30	No	12	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	**R-P-17I**	**57.95**	**35.63**	**30**	**Yes**	**12**	**0**	**No**	**0.01**	**Param.**
ARSENIC, TOTAL (UG/L)	**R-P-17S**	**34.2**	**21.09**	**30**	**Yes**	**12**	**0**	**No**	**0.01**	**Param.**
ARSENIC, TOTAL (UG/L)	R-P-19D	0.729	0.566	30	No	12	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	**R-P-19I**	**271**	**28.5**	**30**	**Yes**	**12**	**0**	**No**	**0.01**	**NP (normality)**
ARSENIC, TOTAL (UG/L)	R-P-19S	19.64	7.823	30	No	12	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-P-21D	0.6116	0.4901	30	No	12	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-P-21I	6	5	30	No	12	0	No	0.01	NP (normality)
ARSENIC, TOTAL (UG/L)	**R-P-21S**	**100.7**	**31.41**	**30**	**Yes**	**12**	**0**	**No**	**0.01**	**Param.**
ARSENIC, TOTAL (UG/L)	R-P-22D	11.89	8.943	30	No	12	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-P-22S	5.128	1.522	30	No	12	0	No	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-P-30S	1.725	1.042	30	No	15	0	ln(x)	0.01	Param.
ARSENIC, TOTAL (UG/L)	R-P-31S	25.58	16.56	30	No	13	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-05S	207.5	166.3	2000	No	12	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-10S	194.6	134.5	2000	No	11	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-16S	122.1	81.03	2000	No	11	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-17D	103.5	97.69	2000	No	12	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-17I	29.6	13.9	2000	No	12	0	No	0.01	NP (normality)
BARIUM, TOTAL (UG/L)	R-P-17S	140.7	89.34	2000	No	11	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-19D	113.6	78.01	2000	No	12	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-19I	69.4	11.2	2000	No	12	0	No	0.01	NP (normality)
BARIUM, TOTAL (UG/L)	R-P-19S	436.6	207.8	2000	No	12	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-21D	258.8	101.4	2000	No	12	0	ln(x)	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-21I	70.6	32.59	2000	No	12	0	ln(x)	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-21S	428.9	240.2	2000	No	12	0	ln(x)	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-22D	83.13	66.48	2000	No	12	0	ln(x)	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-22S	189.4	140.6	2000	No	12	0	ln(x)	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-30S	107.6	92.62	2000	No	12	0	No	0.01	Param.
BARIUM, TOTAL (UG/L)	R-P-31S	176.9	136.3	2000	No	10	0	No	0.01	Param.
BERYLLIUM, TOTAL (UG/L)	R-P-05S	0.26	0.06	4	No	7	71.43	No	0.008	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-10S	0.245	0.06	4	No	7	100	No	0.008	NP (NDs)

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Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
BERYLLIUM, TOTAL (UG/L)	R-P-16S	0.245	0.06	4	No	7	100	No	0.008	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-17D	0.245	0.06	4	No	7	100	No	0.008	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-17I	0.245	0.06	4	No	7	100	No	0.008	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-17S	0.245	0.06	4	No	7	100	No	0.008	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-19D	0.245	0.06	4	No	7	100	No	0.008	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-19I	0.245	0.06	4	No	7	100	No	0.008	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-19S	0.245	0.06	4	No	7	85.71	No	0.008	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-21D	0.245	0.06	4	No	7	100	No	0.008	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-21I	0.245	0.06	4	No	7	100	No	0.008	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-21S	0.245	0.06	4	No	7	100	No	0.008	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-22D	0.245	0.06	4	No	7	57.14	No	0.008	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-22S	0.245	0.06	4	No	7	100	No	0.008	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-30S	0.245	0.06	4	No	7	100	No	0.008	NP (NDs)
BERYLLIUM, TOTAL (UG/L)	R-P-31S	0.245	0.06	4	No	7	85.71	No	0.008	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-P-05S	0.031	0.025	5	No	9	100	No	0.002	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-P-10S	0.224	0.07886	5	No	9	0	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-16S	0.1122	0.04579	5	No	9	33.33	ln(x)	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-17D	0.27	0.028	5	No	9	22.22	No	0.002	NP (normality)
CADMIUM, TOTAL (UG/L)	R-P-17I	0.5806	0.1679	5	No	9	0	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-17S	0.1267	0.05068	5	No	9	33.33	ln(x)	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-19D	0.3228	0.1187	5	No	9	0	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-19I	0.4964	0.1012	5	No	9	11.11	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-19S	0.031	0.025	5	No	8	100	No	0.004	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-P-21D	0.1177	0.05586	5	No	9	33.33	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-21I	0.11	0.025	5	No	9	44.44	No	0.002	NP (normality)
CADMIUM, TOTAL (UG/L)	R-P-21S	0.09957	0.04681	5	No	9	33.33	ln(x)	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-22D	0.1628	0.07034	5	No	9	11.11	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-22S	0.1334	0.07592	5	No	9	0	No	0.01	Param.
CADMIUM, TOTAL (UG/L)	R-P-30S	0.09	0.025	5	No	9	55.56	No	0.002	NP (NDs)
CADMIUM, TOTAL (UG/L)	R-P-31S	0.031	0.025	5	No	9	100	No	0.002	NP (NDs)
CHROMIUM, TOTAL (UG/L)	R-P-05S	0.5833	0.3554	100	No	11	9.091	ln(x)	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-10S	0.7626	0.279	100	No	11	45.45	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-16S	0.5	0.11	100	No	12	75	No	0.01	NP (NDs)
CHROMIUM, TOTAL (UG/L)	R-P-17D	0.445	0.2293	100	No	12	50	ln(x)	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-17I	0.9543	0.6573	100	No	12	0	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-17S	0.5187	0.2904	100	No	12	16.67	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-19D	0.6723	0.3644	100	No	12	16.67	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-19I	0.6788	0.3512	100	No	12	0	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-19S	0.4454	0.2807	100	No	12	25	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-21D	0.6	0.11	100	No	12	58.33	No	0.01	NP (NDs)
CHROMIUM, TOTAL (UG/L)	R-P-21I	0.5059	0.345	100	No	11	9.091	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-21S	0.3683	0.2353	100	No	12	33.33	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-22D	1.773	1.133	100	No	12	0	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-22S	0.5	0.11	100	No	12	58.33	No	0.01	NP (NDs)
CHROMIUM, TOTAL (UG/L)	R-P-30S	0.3964	0.2197	100	No	12	41.67	No	0.01	Param.
CHROMIUM, TOTAL (UG/L)	R-P-31S	0.51	0.11	100	No	11	54.55	No	0.006	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-05S	0.75	0.39	6	No	8	100	No	0.004	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-10S	3.004	1.087	6	No	8	37.5	ln(x)	0.01	Param.
COBALT, TOTAL (UG/L)	R-P-16S	0.75	0.475	6	No	7	100	No	0.008	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-17D	0.75	0.39	6	No	8	100	No	0.004	NP (NDs)

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Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
COBALT, TOTAL (UG/L)	R-P-17I	0.75	0.39	6	No	8	100	No	0.004	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-17S	2.53	0.8987	6	No	7	14.29	No	0.01	Param.
COBALT, TOTAL (UG/L)	R-P-19D	0.79	0.475	6	No	8	87.5	No	0.004	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-19I	0.75	0.39	6	No	8	100	No	0.004	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-19S	3.311	0.7287	6	No	8	37.5	No	0.01	Param.
COBALT, TOTAL (UG/L)	R-P-21D	0.75	0.475	6	No	8	100	No	0.004	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-21I	0.75	0.39	6	No	8	100	No	0.004	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-21S	2.436	1.131	6	No	8	37.5	No	0.01	Param.
COBALT, TOTAL (UG/L)	R-P-22D	0.75	0.475	6	No	8	100	No	0.004	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-22S	2.808	1.217	6	No	8	37.5	No	0.01	Param.
COBALT, TOTAL (UG/L)	R-P-30S	0.75	0.475	6	No	8	100	No	0.004	NP (NDs)
COBALT, TOTAL (UG/L)	R-P-31S	0.75	0.475	6	No	8	100	No	0.004	NP (NDs)
FLUORIDE, TOTAL (MG/L)	R-P-05S	0.4168	0.3068	4	No	11	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-10S	0.4922	0.2114	4	No	11	27.27	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-16S	0.3874	0.1403	4	No	12	33.33	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-17D	0.7	0.32	4	No	12	0	No	0.01	NP (normality)
FLUORIDE, TOTAL (MG/L)	R-P-17I	2.085	1.496	4	No	11	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-17S	0.8512	0.3688	4	No	12	16.67	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-19D	2.2	1.6	4	No	12	0	No	0.01	NP (normality)
FLUORIDE, TOTAL (MG/L)	R-P-19I	1.455	0.6185	4	No	12	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-19S	0.41	0.06	4	No	12	16.67	No	0.01	NP (normality)
FLUORIDE, TOTAL (MG/L)	R-P-21D	1.201	0.5354	4	No	12	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-21I	1.1	0.5	4	No	12	0	No	0.01	NP (normality)
FLUORIDE, TOTAL (MG/L)	R-P-21S	0.3394	0.1631	4	No	12	25	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-22D	2.494	1.939	4	No	12	0	No	0.01	Param.
FLUORIDE, TOTAL (MG/L)	R-P-22S	0.4	0.043	4	No	12	50	No	0.01	NP (normality)
FLUORIDE, TOTAL (MG/L)	R-P-30S	0.44	0.06	4	No	12	25	No	0.01	NP (normality)
FLUORIDE, TOTAL (MG/L)	R-P-31S	0.44	0.06	4	No	11	18.18	No	0.006	NP (normality)
LEAD, TOTAL (UG/L)	R-P-05S	4.1	1.9	15	No	11	90.91	No	0.006	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-10S	4.3	1.9	15	No	9	100	No	0.002	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-16S	3.05	1.9	15	No	11	100	No	0.006	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-17D	3.9	1.9	15	No	11	90.91	No	0.006	NP (NDs)
LEAD, TOTAL (UG/L)	**R-P-17I**	**16.74**	**6.165**	**15**	**Yes**	**11**	**18.18**	**No**	**0.01**	**Param.**
LEAD, TOTAL (UG/L)	R-P-17S	4.3	1.9	15	No	11	90.91	No	0.006	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-19D	2.3	1.9	15	No	11	100	No	0.006	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-19I	13.64	3.704	15	No	11	45.45	No	0.01	Param.
LEAD, TOTAL (UG/L)	R-P-19S	2.3	1.9	15	No	10	100	No	0.011	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-21D	3.05	1.9	15	No	11	100	No	0.006	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-21I	2.3	1.9	15	No	11	100	No	0.006	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-21S	4.3	1.9	15	No	10	90	No	0.011	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-22D	5.2	1.9	15	No	11	81.82	No	0.006	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-22S	4.3	1.9	15	No	11	90.91	No	0.006	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-30S	2.3	1.9	15	No	10	100	No	0.011	NP (NDs)
LEAD, TOTAL (UG/L)	R-P-31S	3.05	1.9	15	No	9	100	No	0.002	NP (NDs)
LITHIUM, TOTAL (UG/L)	R-P-05S	17.84	14.51	64.7	No	12	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-10S	23.92	15.19	64.7	No	11	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-16S	38.97	22.29	64.7	No	12	0	ln(x)	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-17D	39.82	35.83	64.7	No	12	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-17I	5.487	3.619	64.7	No	12	50	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-17S	36.69	27.34	64.7	No	11	0	No	0.01	Param.

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Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
LITHIUM, TOTAL (UG/L)	R-P-19D	20.1	16.4	64.7	No	12	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	**R-P-19I**	**134**	**12.8**	**64.7**	**Yes**	**13**	**0**	**No**	**0.01**	**NP (normality)**
LITHIUM, TOTAL (UG/L)	R-P-19S	42.35	22.83	64.7	No	12	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	**R-P-21D**	**221.9**	**144.4**	**64.7**	**Yes**	**12**	**0**	**No**	**0.01**	**Param.**
LITHIUM, TOTAL (UG/L)	R-P-21I	24.29	18.39	64.7	No	12	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-21S	18.5	13.88	64.7	No	12	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-22D	26.41	23.64	64.7	No	12	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-22S	61.03	48.49	64.7	No	12	0	No	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-30S	41.03	34.22	64.7	No	12	0	ln(x)	0.01	Param.
LITHIUM, TOTAL (UG/L)	R-P-31S	11.11	7.515	64.7	No	9	0	No	0.01	Param.
MERCURY, TOTAL (UG/L)	R-P-05S	0.06	0.029	2	No	6	100	No	0.0155	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-10S	0.06	0.029	2	No	6	100	No	0.0155	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-16S	0.06	0.029	2	No	6	100	No	0.0155	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-17D	0.06	0.029	2	No	6	100	No	0.0155	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-17I	0.06	0.029	2	No	6	100	No	0.0155	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-17S	0.06	0.029	2	No	6	100	No	0.0155	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-19D	0.06	0.029	2	No	6	100	No	0.0155	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-19I	0.06	0.029	2	No	6	100	No	0.0155	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-19S	0.06	0.029	2	No	6	100	No	0.0155	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-21D	0.06	0.029	2	No	6	100	No	0.0155	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-21I	0.06	0.029	2	No	6	100	No	0.0155	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-21S	0.06	0.029	2	No	6	100	No	0.0155	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-22D	0.06	0.029	2	No	6	100	No	0.0155	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-22S	0.06	0.029	2	No	6	100	No	0.0155	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-30S	0.06	0.029	2	No	6	100	No	0.0155	NP (NDs)
MERCURY, TOTAL (UG/L)	R-P-31S	0.06	0.029	2	No	6	100	No	0.0155	NP (NDs)
MOLYBDENUM, TOTAL (UG/L)	R-P-05S	12.12	4.445	100	No	12	0	No	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	**R-P-10S**	**103.8**	**56.1**	**100**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	R-P-16S	22.73	9.908	100	No	15	0	ln(x)	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	**R-P-17D**	**699.4**	**618.6**	**100**	**Yes**	**12**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	**R-P-17I**	**145.9**	**110.4**	**100**	**Yes**	**12**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	R-P-17S	95.43	36.23	100	No	12	0	No	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	**R-P-19D**	**904.5**	**716.6**	**100**	**Yes**	**12**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	**R-P-19I**	**242.8**	**125.8**	**100**	**Yes**	**12**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	R-P-19S	6.739	2.823	100	No	12	0	ln(x)	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	**R-P-21D**	**384.1**	**228.1**	**100**	**Yes**	**12**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	**R-P-21I**	**279.7**	**126**	**100**	**Yes**	**12**	**0**	**No**	**0.01**	**Param.**
MOLYBDENUM, TOTAL (UG/L)	R-P-21S	3.109	1.18	100	No	12	25	ln(x)	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	**R-P-22D**	**363**	**304**	**100**	**Yes**	**12**	**0**	**No**	**0.01**	**NP (normality)**
MOLYBDENUM, TOTAL (UG/L)	R-P-22S	11.6	8.267	100	No	12	0	No	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	R-P-30S	2.427	1.167	100	No	15	46.67	ln(x)	0.01	Param.
MOLYBDENUM, TOTAL (UG/L)	R-P-31S	8.73	7.172	100	No	14	7.143	ln(x)	0.01	Param.
RADIUM [226 + 228] (PCI/L)	R-P-05S	1.123	0.691	5	No	11	100	No	0.006	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-10S	1.094	0.673	5	No	11	100	No	0.006	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-16S	0.905	0.6335	5	No	12	100	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-17D	1.3	0.6555	5	No	12	91.67	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-17I	2.615	0.7765	5	No	12	100	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-17S	1.191	0.695	5	No	12	100	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-19D	0.9815	0.6075	5	No	12	100	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-19I	2.16	0.7475	5	No	12	100	No	0.01	NP (NDs)

Confidence Interval

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 9/2/2025, 9:53 AM

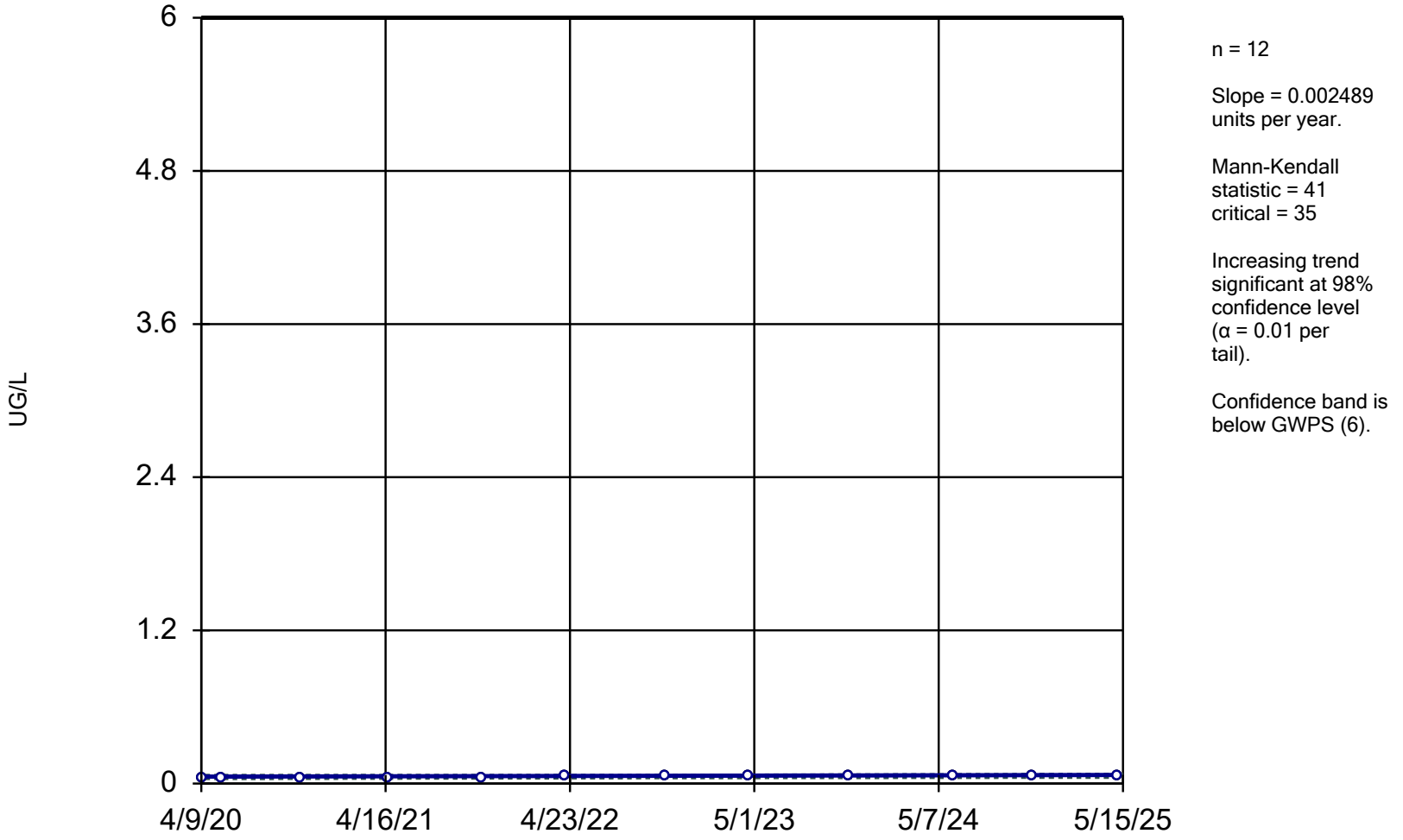
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
RADIUM [226 + 228] (PCI/L)	R-P-19S	1.899	0.6405	5	No	12	75	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-21D	2.383	1.046	5	No	12	50	ln(x)	0.01	Param.
RADIUM [226 + 228] (PCI/L)	R-P-21I	1.327	0.6905	5	No	12	100	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-21S	1.712	0.67	5	No	12	91.67	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-22D	1.257	0.646	5	No	12	100	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-22S	1.196	0.665	5	No	12	91.67	No	0.01	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-30S	1.151	0.6415	5	No	11	100	No	0.006	NP (NDs)
RADIUM [226 + 228] (PCI/L)	R-P-31S	0.922	0.7275	5	No	10	100	No	0.011	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-P-05S	0.25	0.09	50	No	12	41.67	No	0.01	NP (normality)
SELENIUM, TOTAL (UG/L)	R-P-10S	0.2	0.09	50	No	11	72.73	No	0.006	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-P-16S	3.7	0.27	50	No	12	0	No	0.01	NP (normality)
SELENIUM, TOTAL (UG/L)	R-P-17D	0.2786	0.2214	50	No	12	0	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-17I	1.794	1.033	50	No	12	0	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-17S	0.7477	0.405	50	No	11	0	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-19D	0.3453	0.2514	50	No	12	0	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-19I	2.249	0.4155	50	No	12	0	ln(x)	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-19S	0.09	0.09	50	No	12	100	No	0.01	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-P-21D	0.22	0.09	50	No	12	91.67	No	0.01	NP (NDs)
SELENIUM, TOTAL (UG/L)	R-P-21I	0.5078	0.3322	50	No	12	0	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-21S	0.3653	0.1861	50	No	12	33.33	ln(x)	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-22D	1.015	0.6362	50	No	12	0	No	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-22S	0.7182	0.1812	50	No	12	25	ln(x)	0.01	Param.
SELENIUM, TOTAL (UG/L)	R-P-30S	2.2	0.09	50	No	11	27.27	No	0.006	NP (normality)
SELENIUM, TOTAL (UG/L)	R-P-31S	0.09	0.09	50	No	11	90.91	No	0.006	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-05S	0.075	0.0465	2	No	6	100	No	0.0155	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-10S	0.075	0.0465	2	No	6	100	No	0.0155	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-16S	0.075	0.0465	2	No	6	100	No	0.0155	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-17D	0.075	0.0465	2	No	6	100	No	0.0155	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-17I	0.075	0.0465	2	No	6	100	No	0.0155	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-17S	0.075	0.0465	2	No	6	100	No	0.0155	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-19D	0.075	0.0465	2	No	6	100	No	0.0155	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-19I	0.075	0.0465	2	No	6	100	No	0.0155	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-19S	0.075	0.0465	2	No	6	100	No	0.0155	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-21D	0.075	0.0465	2	No	6	100	No	0.0155	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-21I	0.075	0.0465	2	No	6	100	No	0.0155	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-21S	0.075	0.0465	2	No	6	100	No	0.0155	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-22D	0.075	0.0465	2	No	6	100	No	0.0155	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-22S	0.075	0.0465	2	No	6	100	No	0.0155	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-30S	0.075	0.0465	2	No	6	100	No	0.0155	NP (NDs)
THALLIUM, TOTAL (UG/L)	R-P-31S	0.075	0.0465	2	No	6	100	No	0.0155	NP (NDs)

Appendix B
Sanitas Trending Confidence Bands Statistical Output

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-05S



n = 12

Slope = 0.002489 units per year.

Mann-Kendall statistic = 41
critical = 35

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

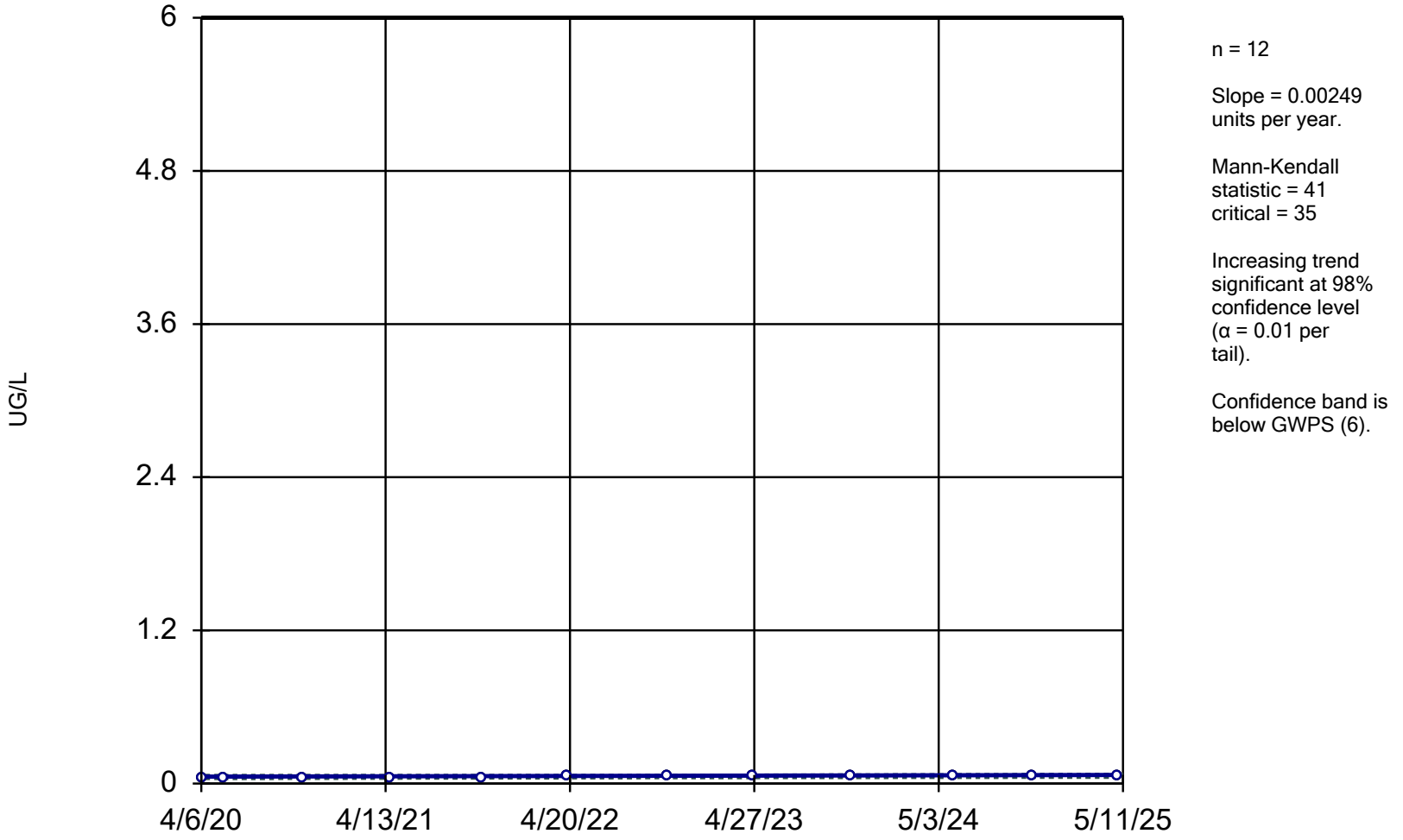
Constituent: ANTIMONY, TOTAL Analysis Run 9/2/2025 10:35 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-17D



n = 12

Slope = 0.00249 units per year.

Mann-Kendall statistic = 41
critical = 35

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

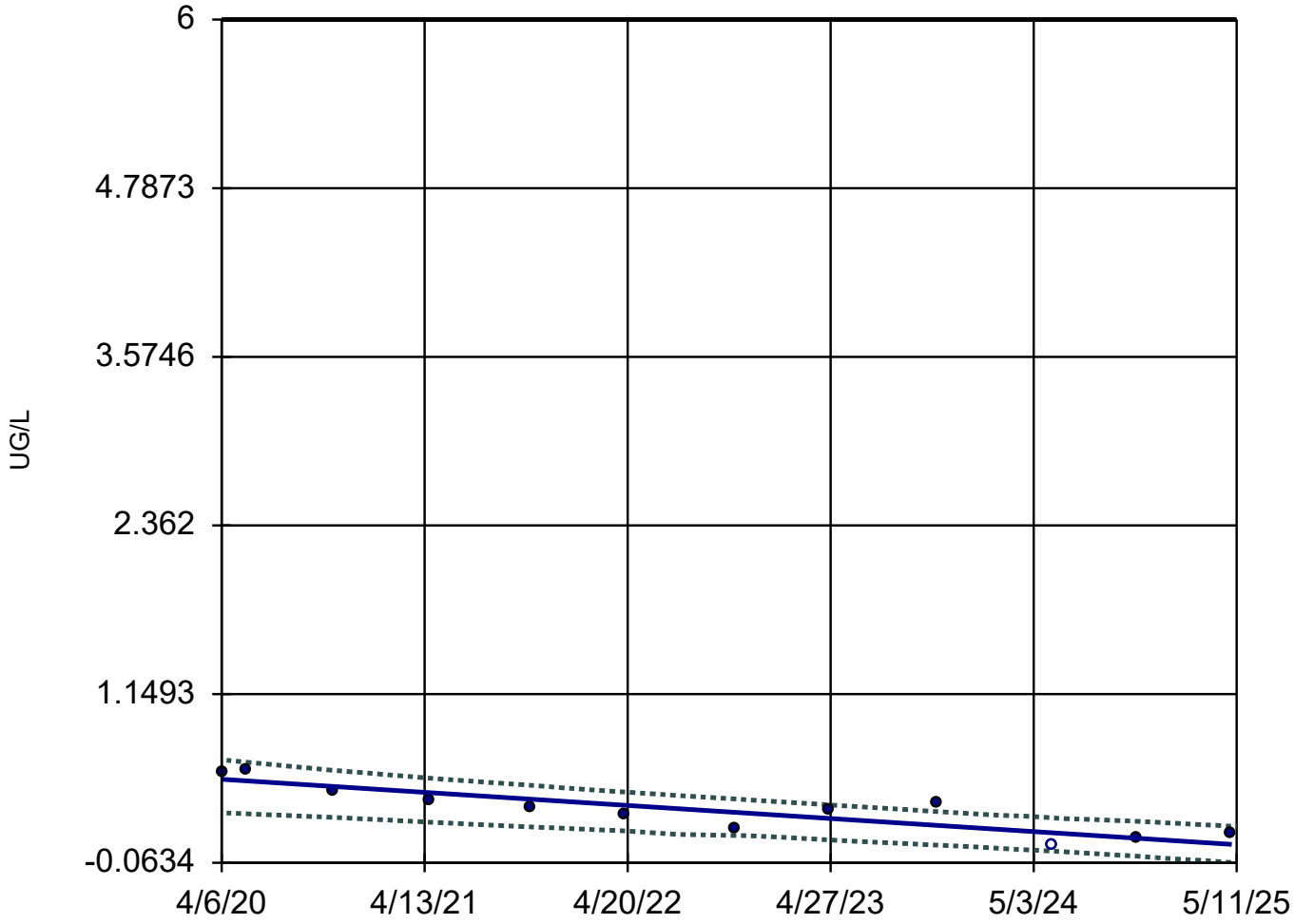
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-17I



n = 12

Slope = -0.09237 units per year.

Mann-Kendall statistic = -46
critical = -35

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

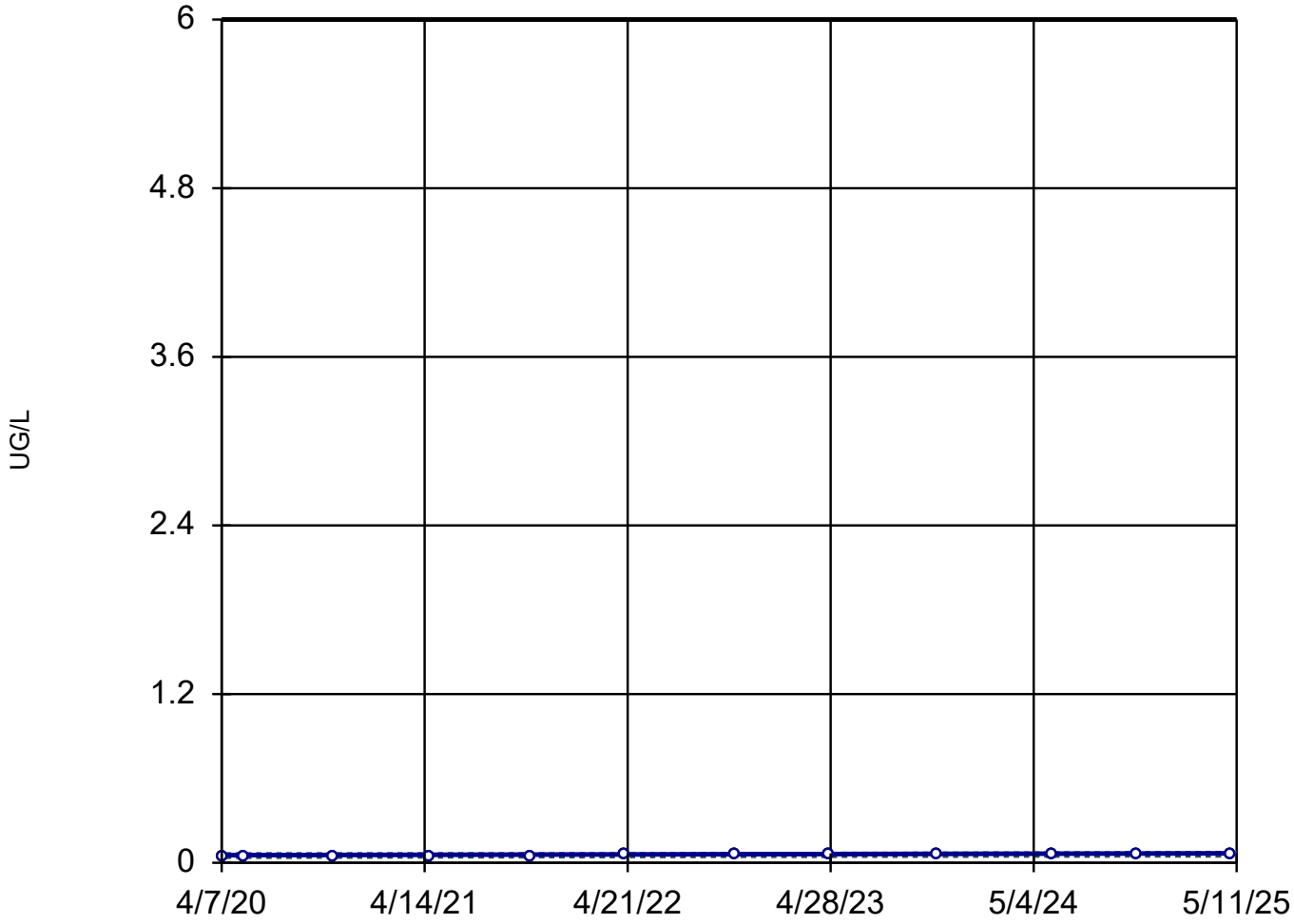
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-19D



n = 12

Slope = 0.002491 units per year.

Mann-Kendall statistic = 41
critical = 35

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

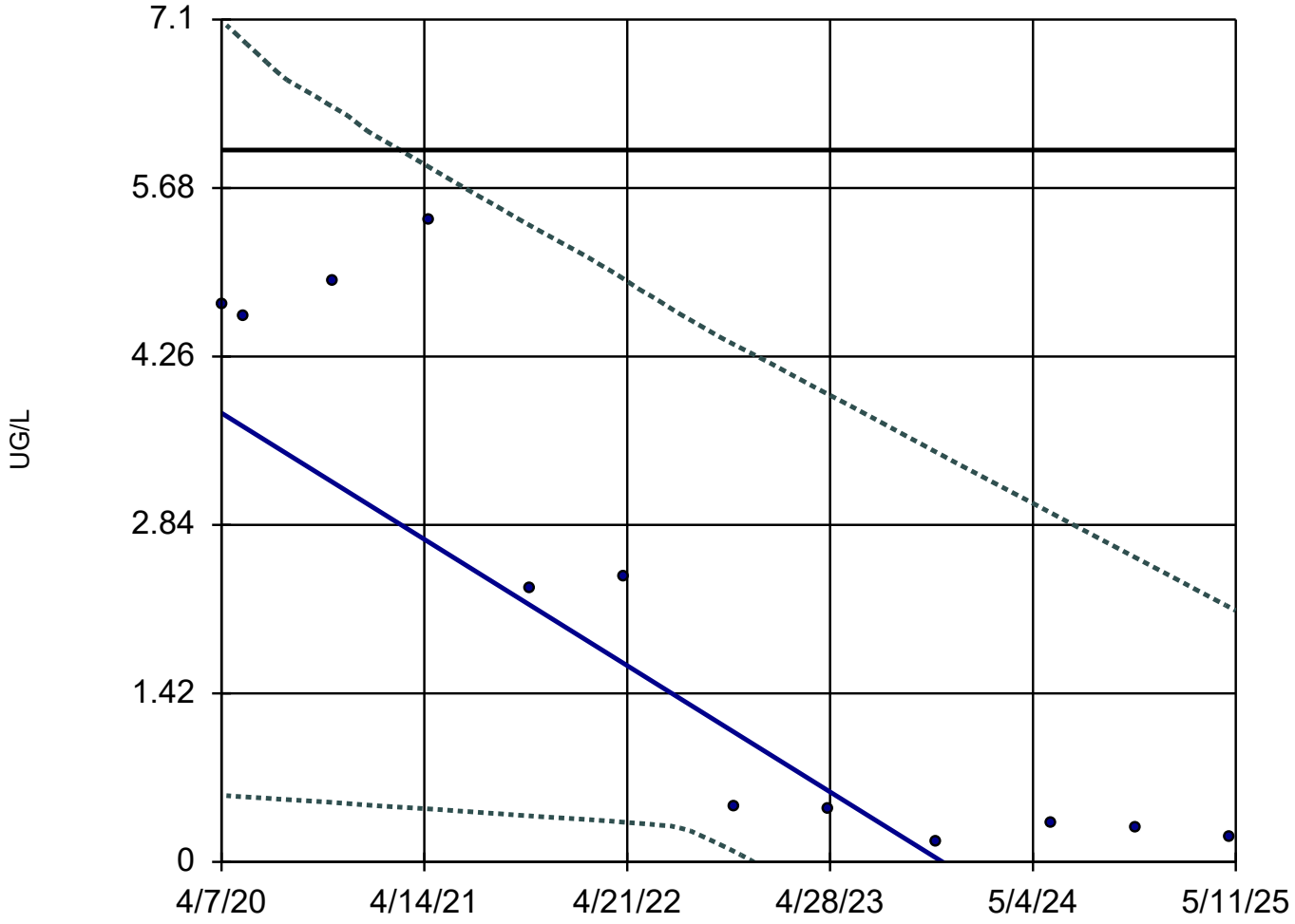
Constituent: ANTIMONY, TOTAL Analysis Run 9/2/2025 10:36 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-19I



n = 12

Slope = -1.045 units per year.

Mann-Kendall statistic = -48
critical = -35

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band intersects GWPS (6) on 03/15/21.

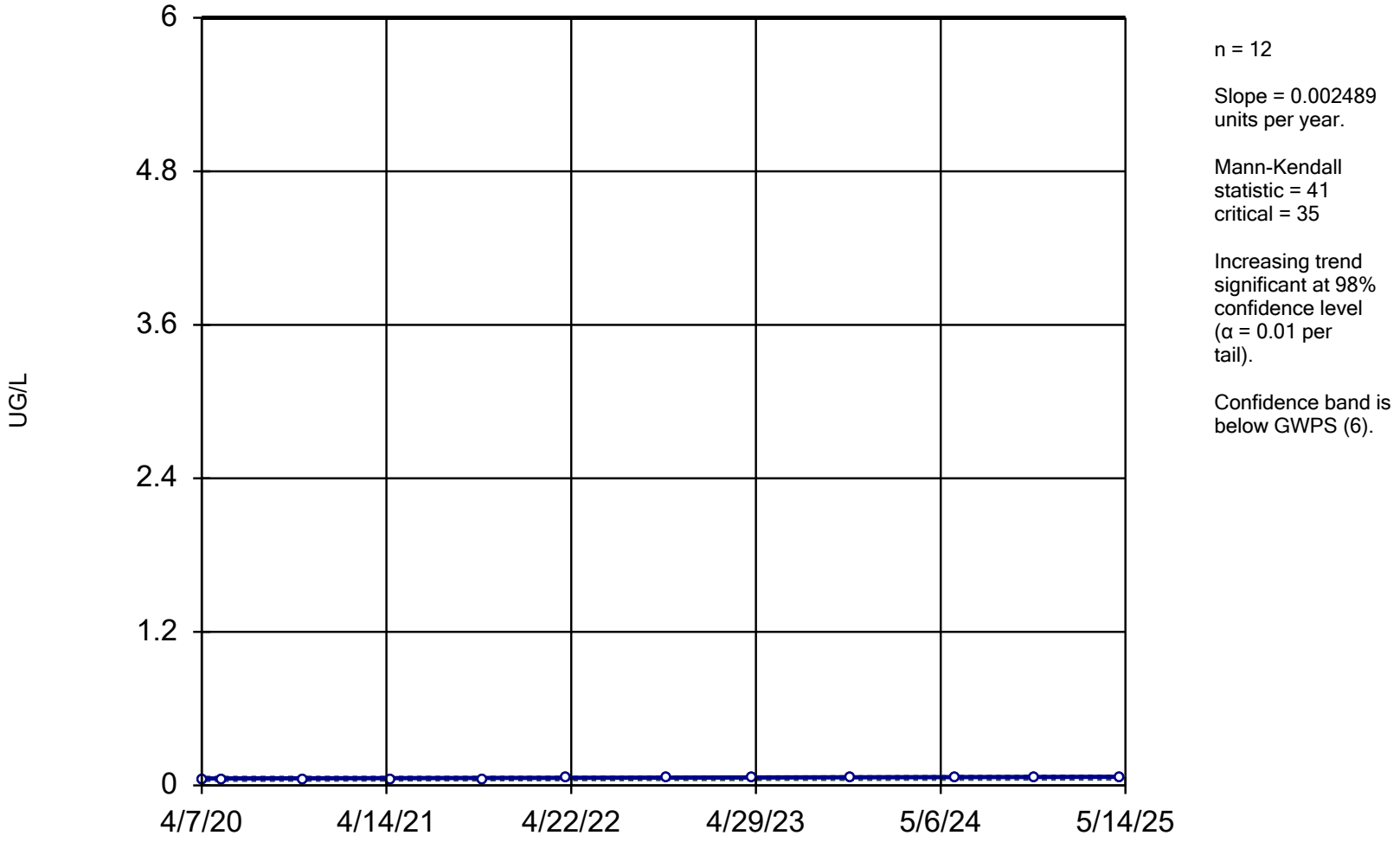
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-21D



n = 12

Slope = 0.002489 units per year.

Mann-Kendall statistic = 41
critical = 35

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

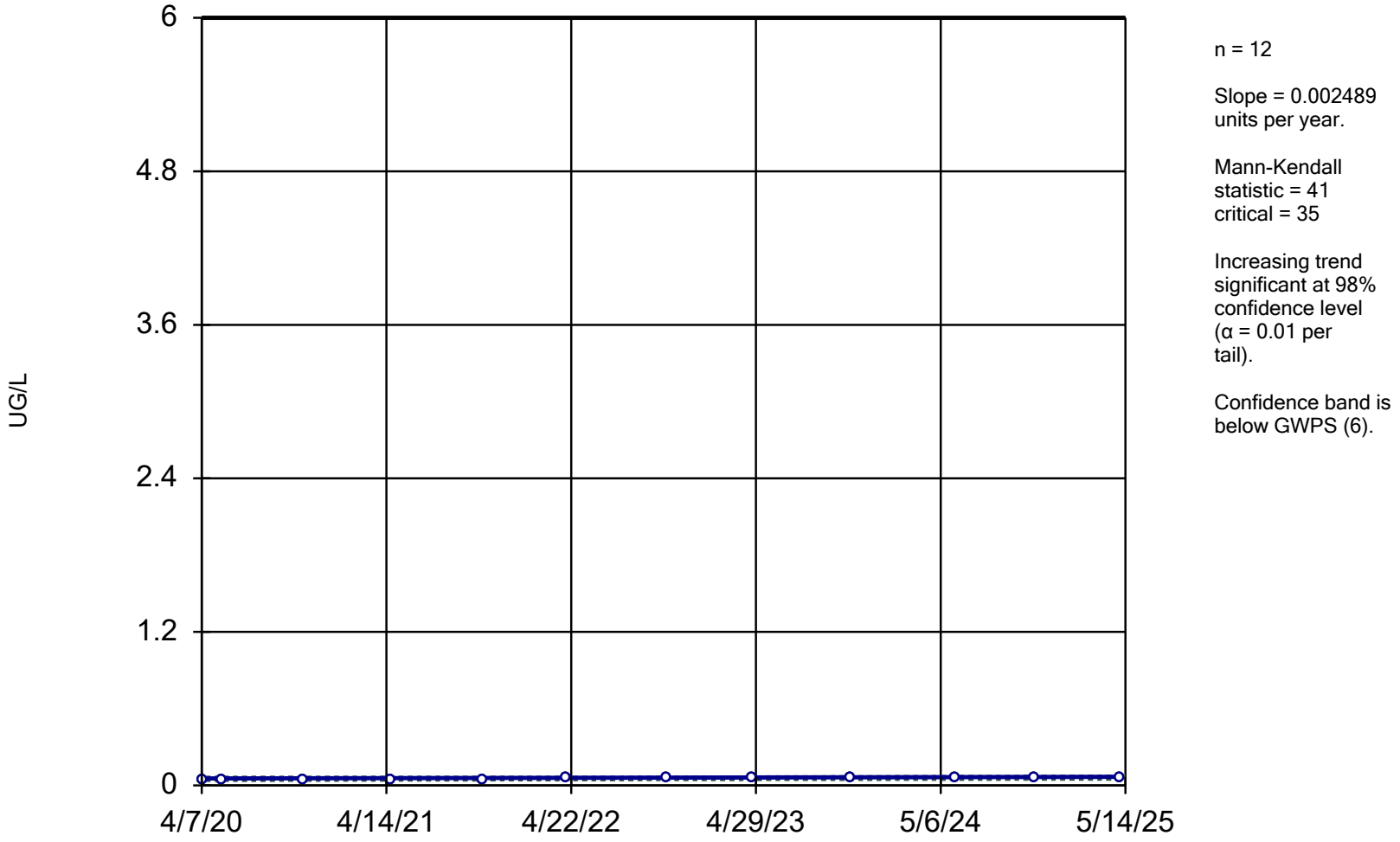
Constituent: ANTIMONY, TOTAL Analysis Run 9/2/2025 10:36 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-21I



n = 12

Slope = 0.002489 units per year.

Mann-Kendall statistic = 41
critical = 35

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

Constituent: ANTIMONY, TOTAL Analysis Run 9/2/2025 10:36 AM

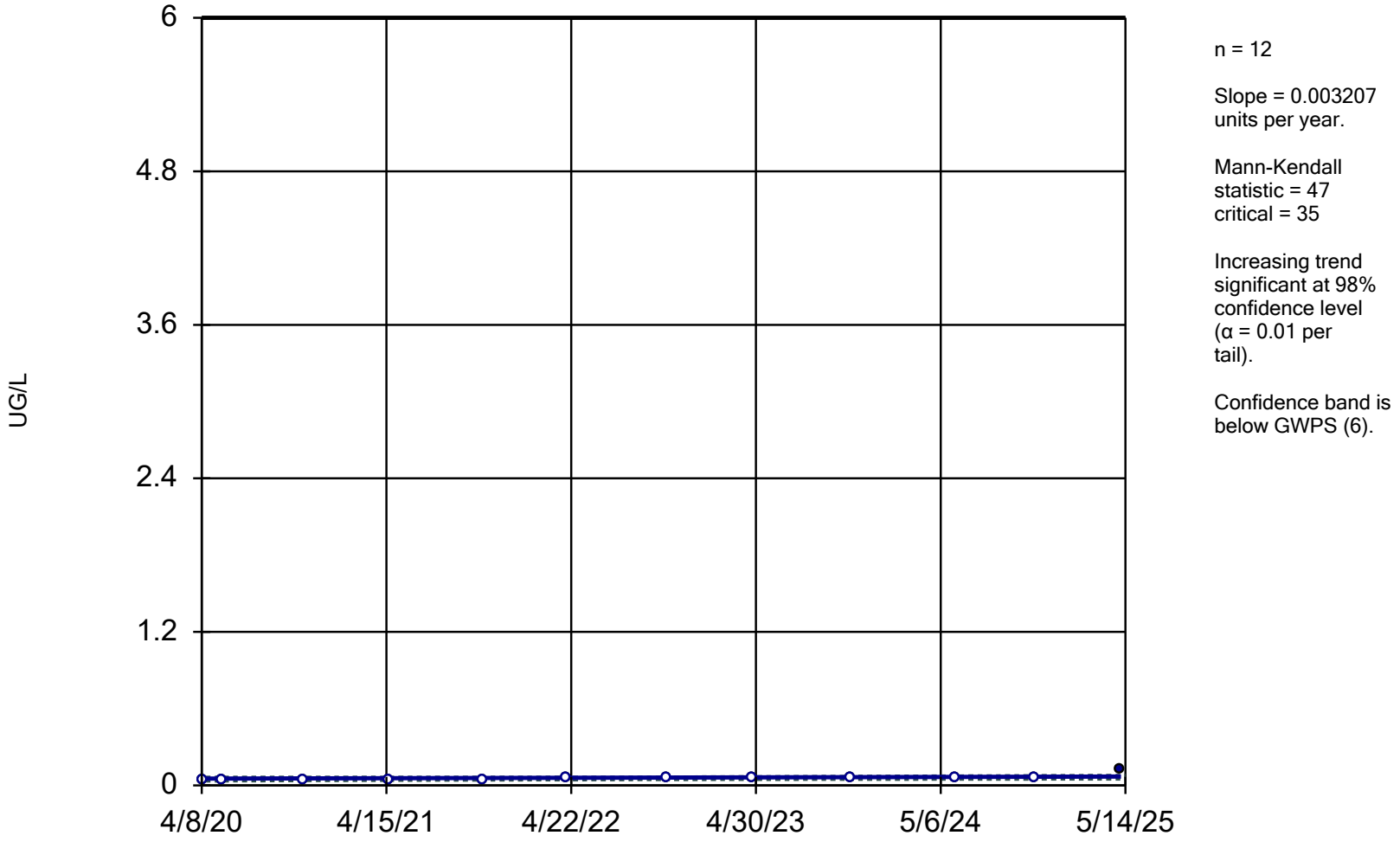
Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-22S



n = 12

Slope = 0.003207 units per year.

Mann-Kendall statistic = 47
critical = 35

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

Constituent: ANTIMONY, TOTAL Analysis Run 9/2/2025 10:36 AM

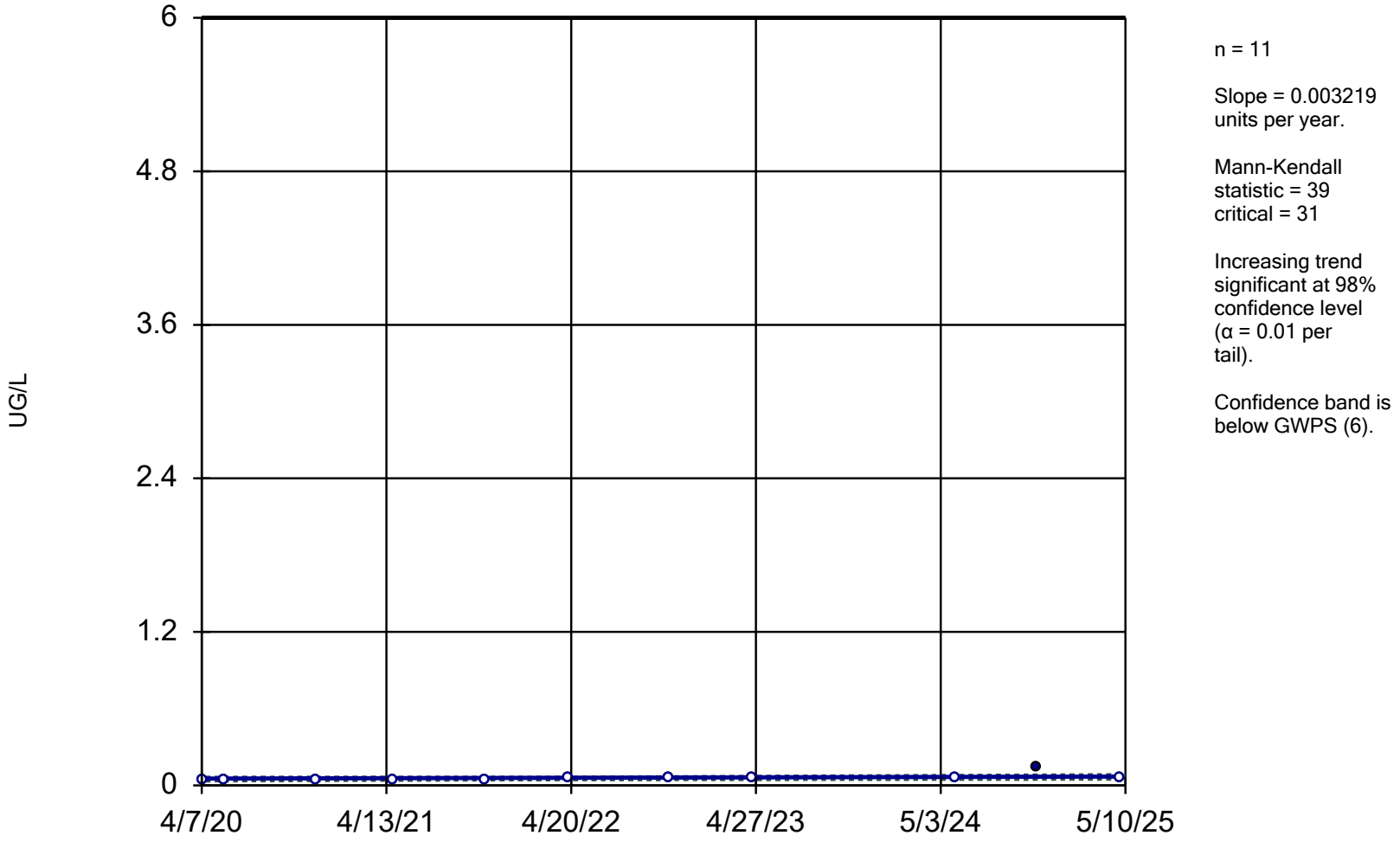
Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-31S



n = 11

Slope = 0.003219 units per year.

Mann-Kendall statistic = 39
critical = 31

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

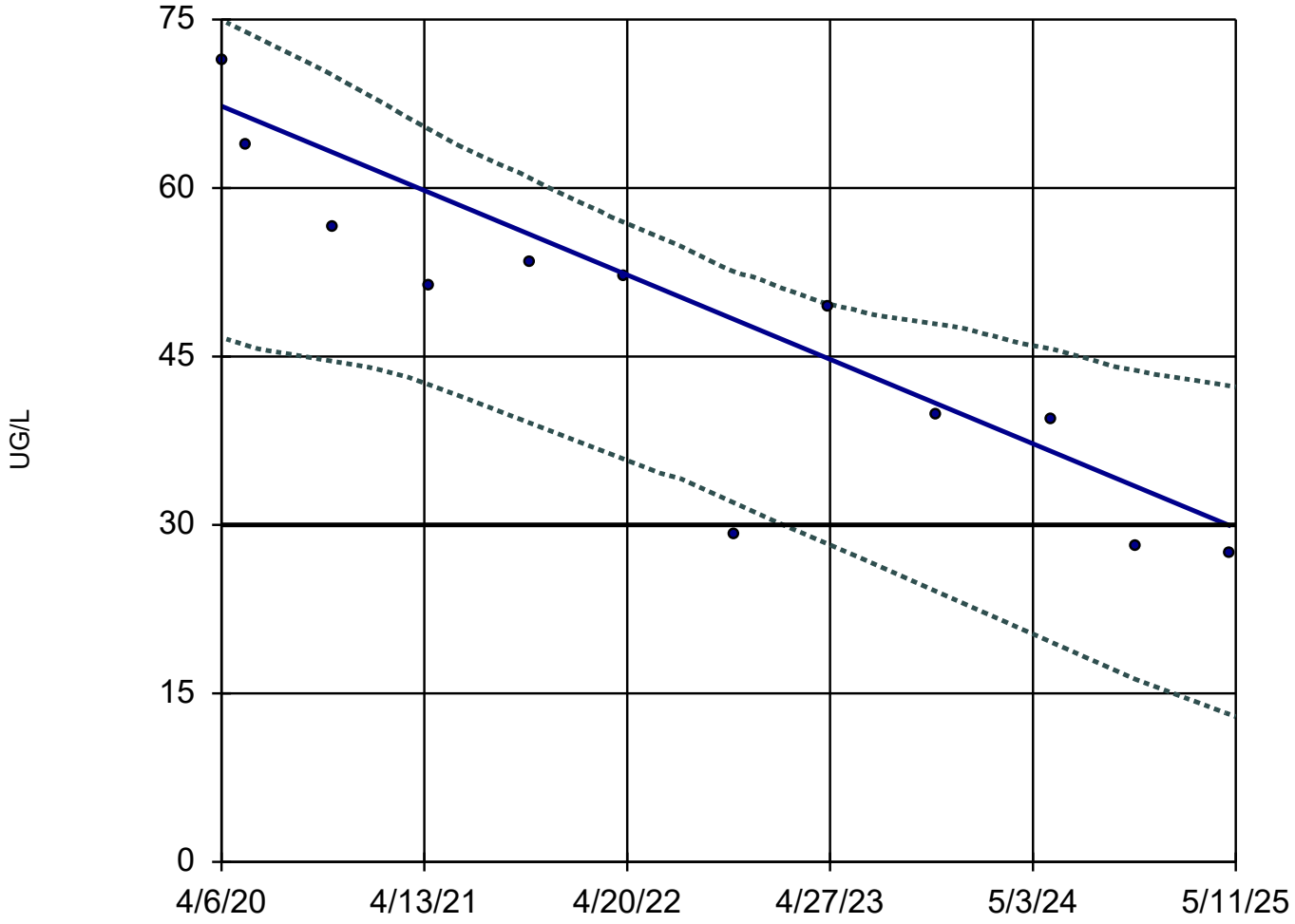
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-17I



n = 12

Slope = -7.368 units per year.

Mann-Kendall statistic = -56 critical = -35

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band intersects GWPS (30) on 02/16/23.

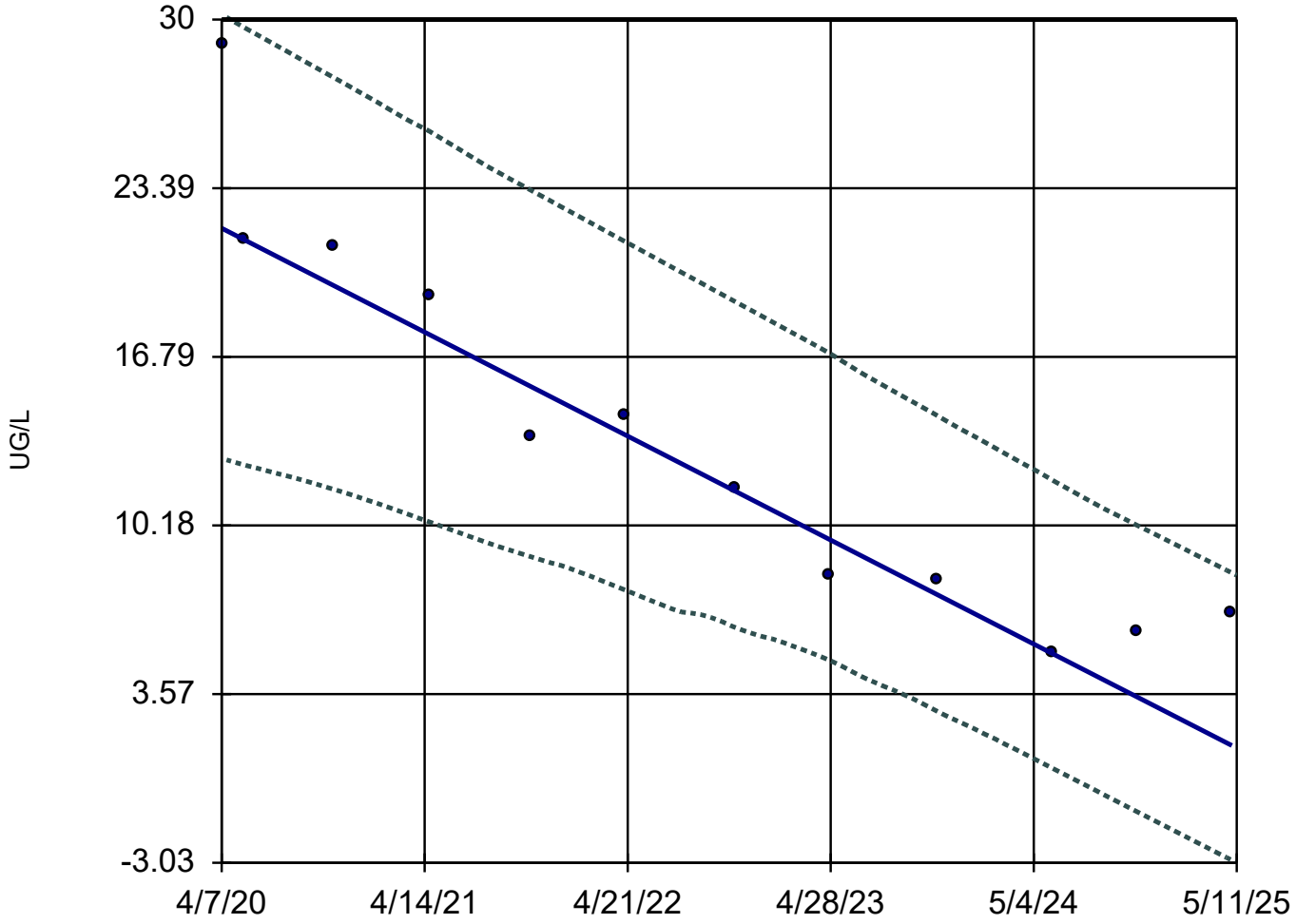
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Sen's Slope and 95% Confidence Band

R-P-19S



n = 12

Slope = -3.995 units per year.

Mann-Kendall statistic = -58 critical = -35

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band intersects GWPS (30) on 05/04/20.

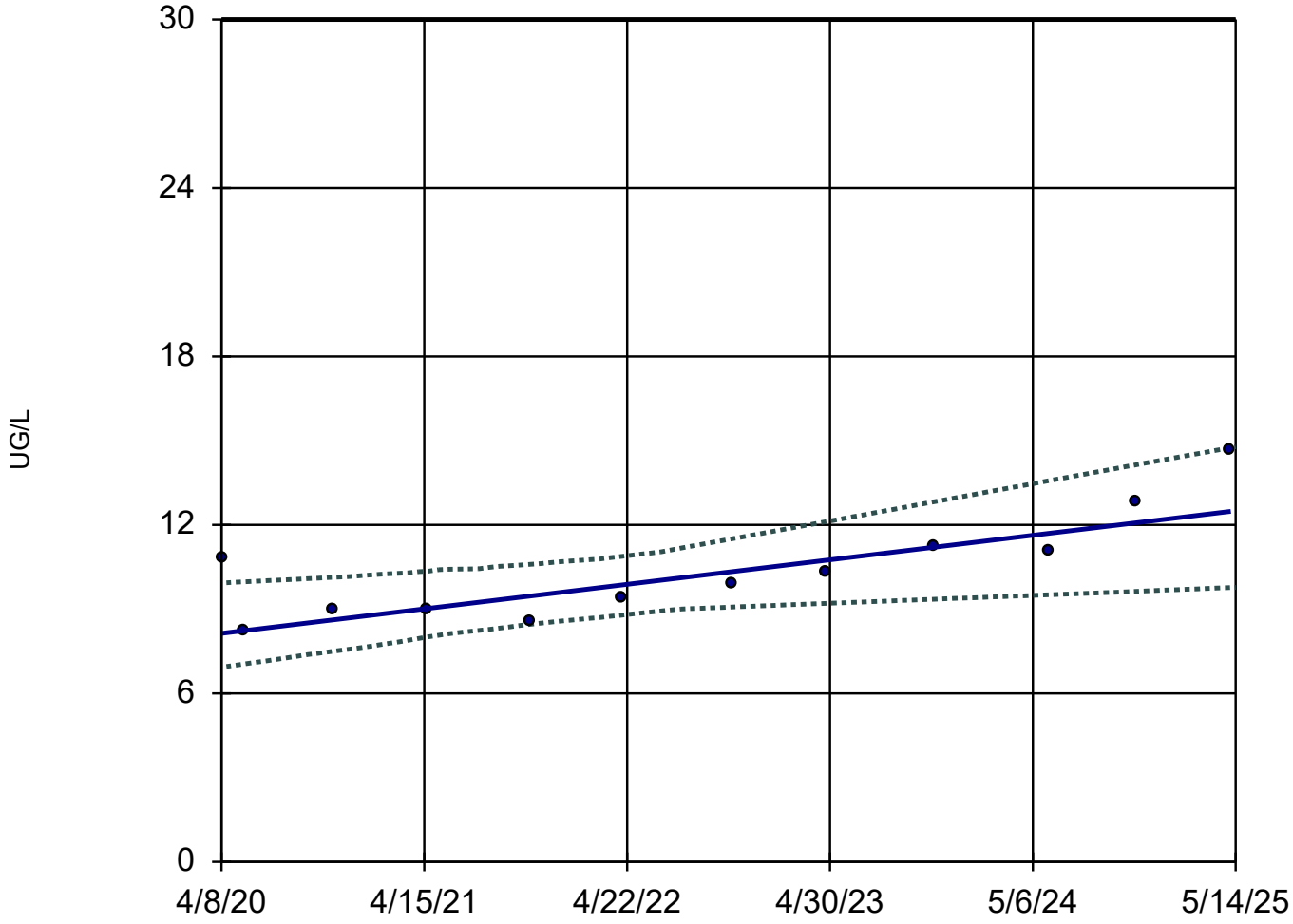
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Rush Island E.C. Client: Ameren Data: RIEC DATA

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Sen's Slope and 95% Confidence Band

R-P-22D



n = 12

Slope = 0.8564 units per year.

Mann-Kendall statistic = 45
critical = 35

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (30).

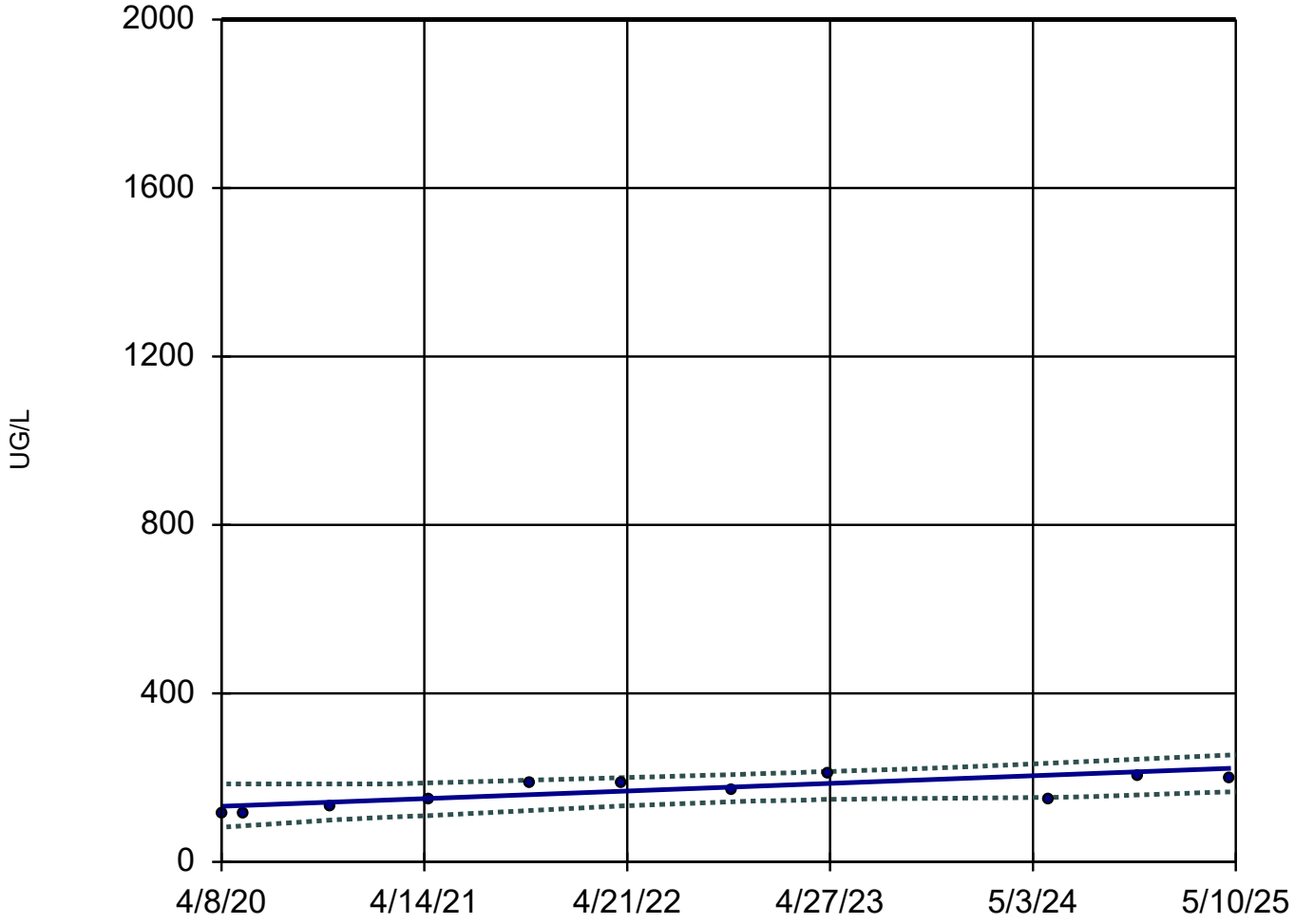
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-10S



n = 11

Slope = 17.79 units per year.

Mann-Kendall statistic = 34
critical = 31

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2000).

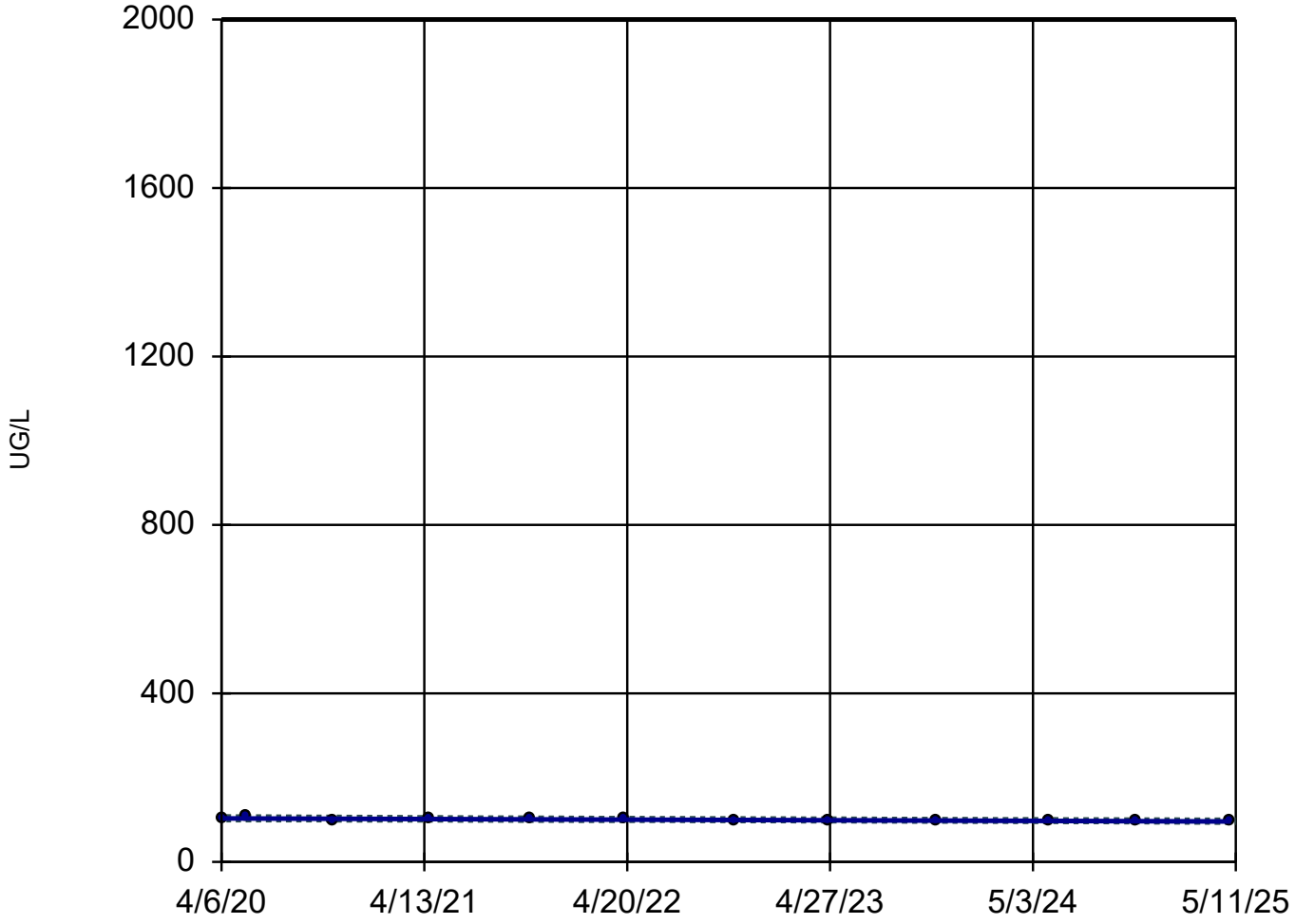
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-17D



n = 12

Slope = -1.464 units per year.

Mann-Kendall statistic = -38
critical = -35

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2000).

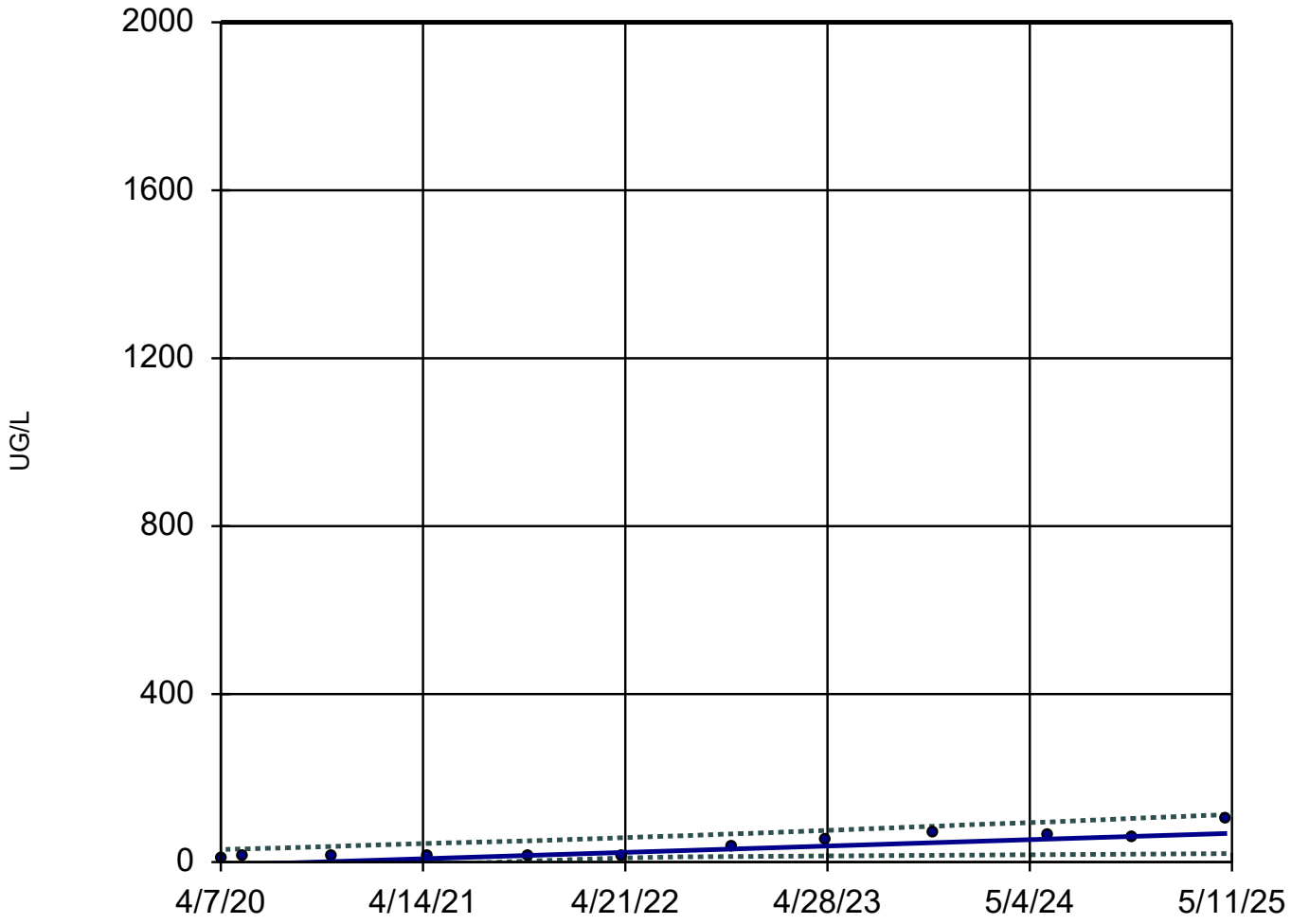
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-19I



n = 12

Slope = 14.91 units per year.

Mann-Kendall statistic = 60
critical = 35

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

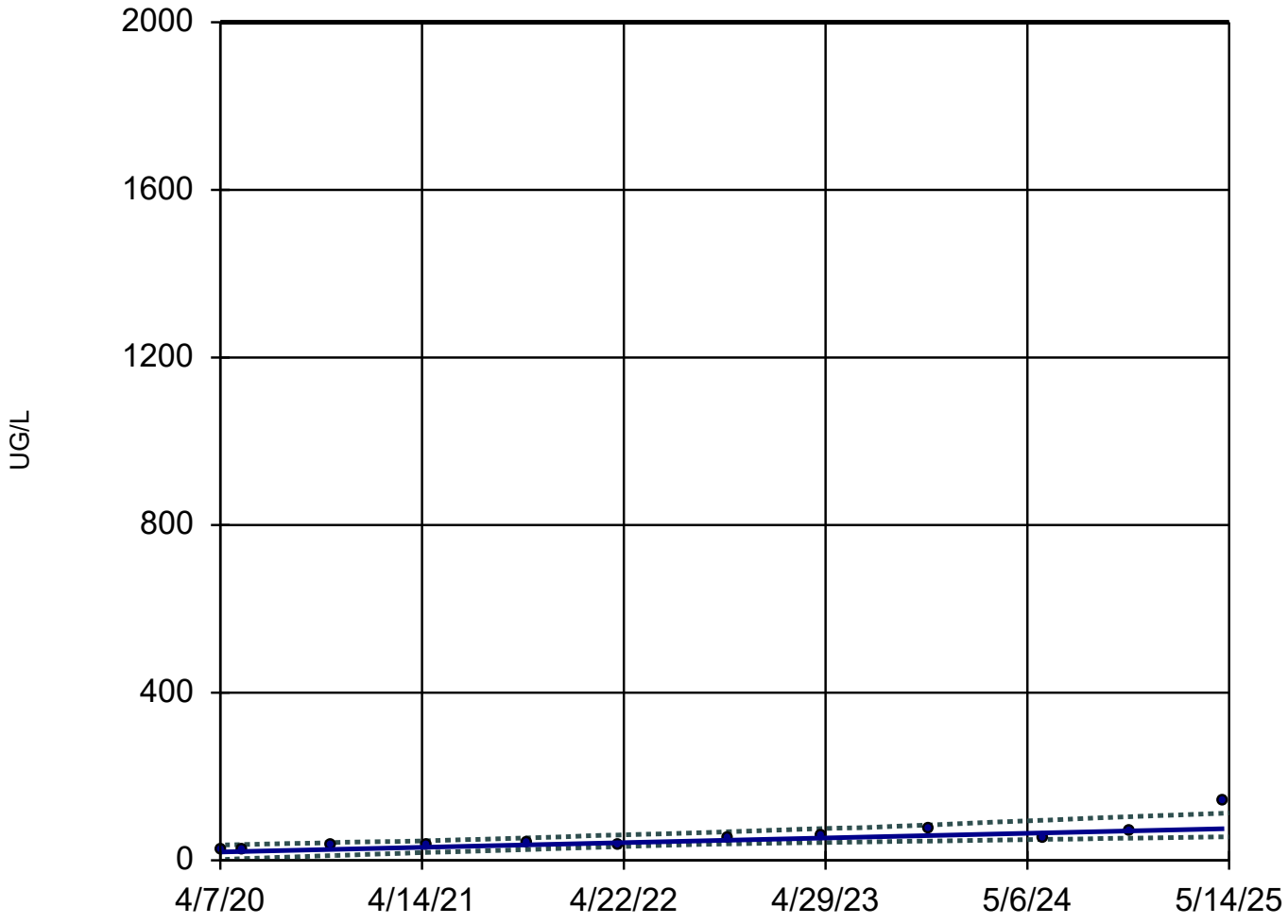
Confidence band is below GWPS (2000).

Constituent: BARIUM, TOTAL Analysis Run 9/2/2025 10:36 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sen's Slope and 95% Confidence Band

R-P-21I



n = 12

Slope = 10.94 units per year.

Mann-Kendall statistic = 56
critical = 35

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2000).

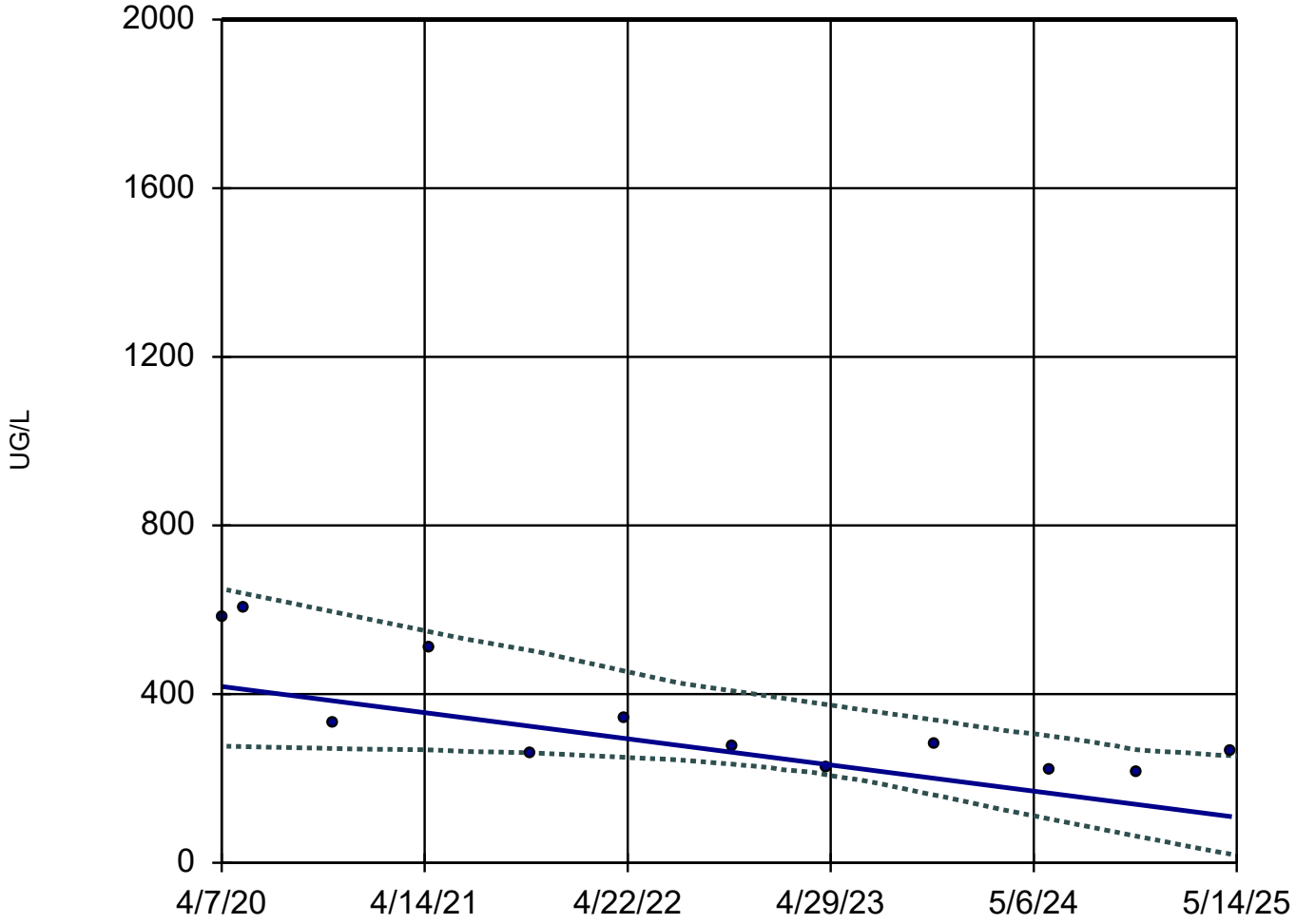
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-21S



n = 12

Slope = -60.81 units per year.

Mann-Kendall statistic = -42
critical = -35

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2000).

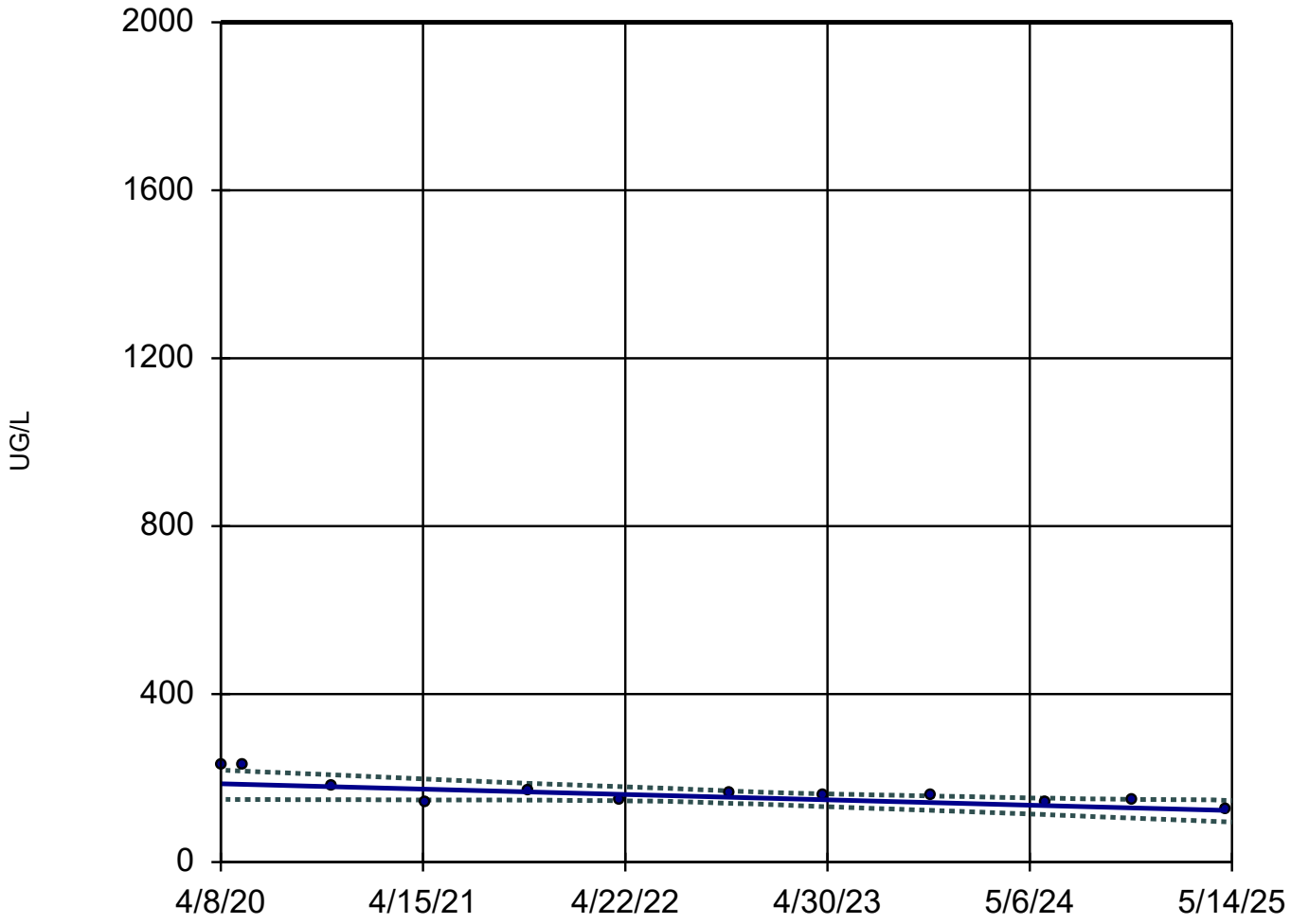
Constituent: BARIUM, TOTAL Analysis Run 9/2/2025 10:36 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-22S



n = 12

Slope = -12.49 units per year.

Mann-Kendall statistic = -40
critical = -35

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (2000).

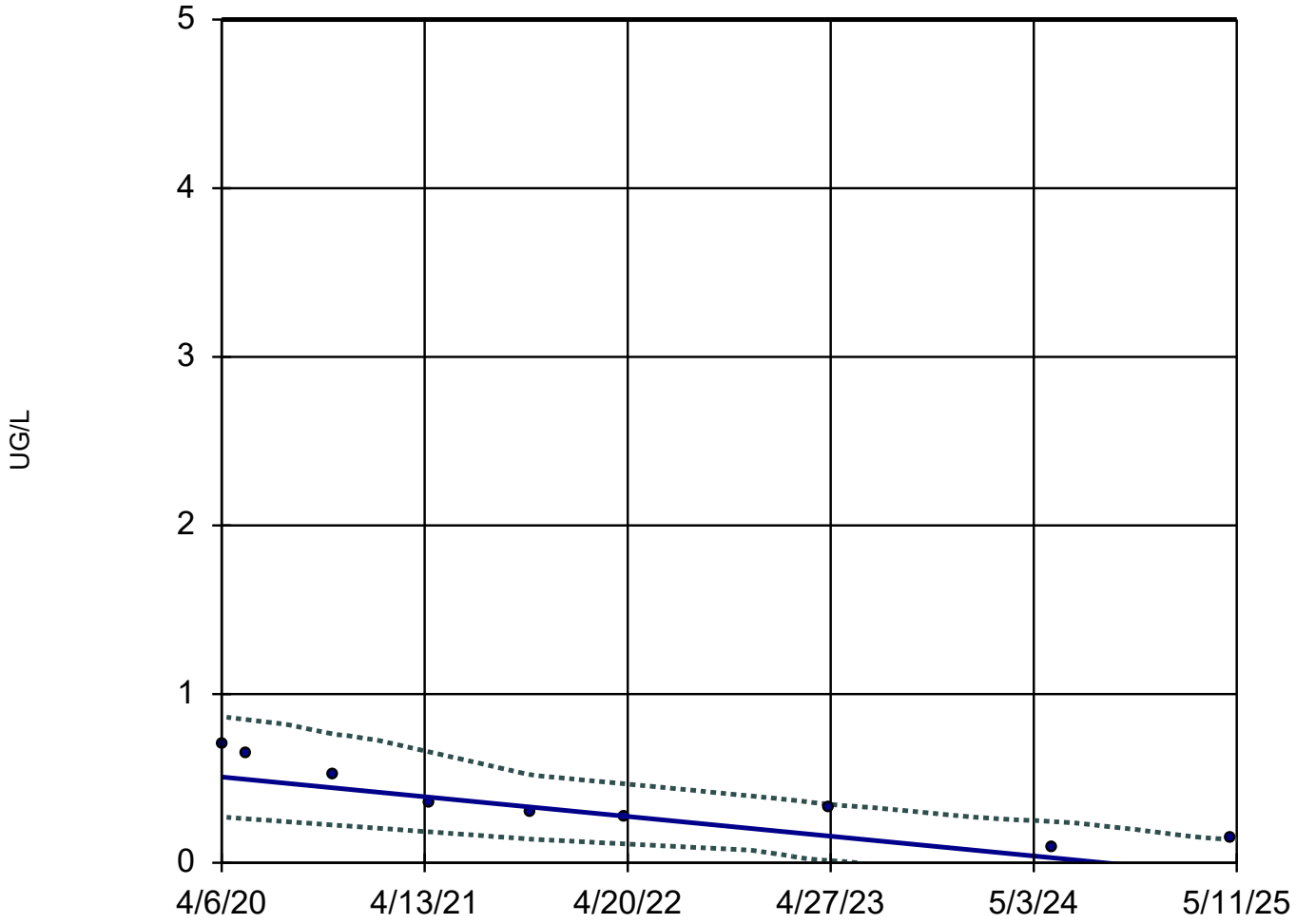
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Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-17I



n = 9

Slope = -0.1147 units per year.

Mann-Kendall statistic = -30
critical = -23

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

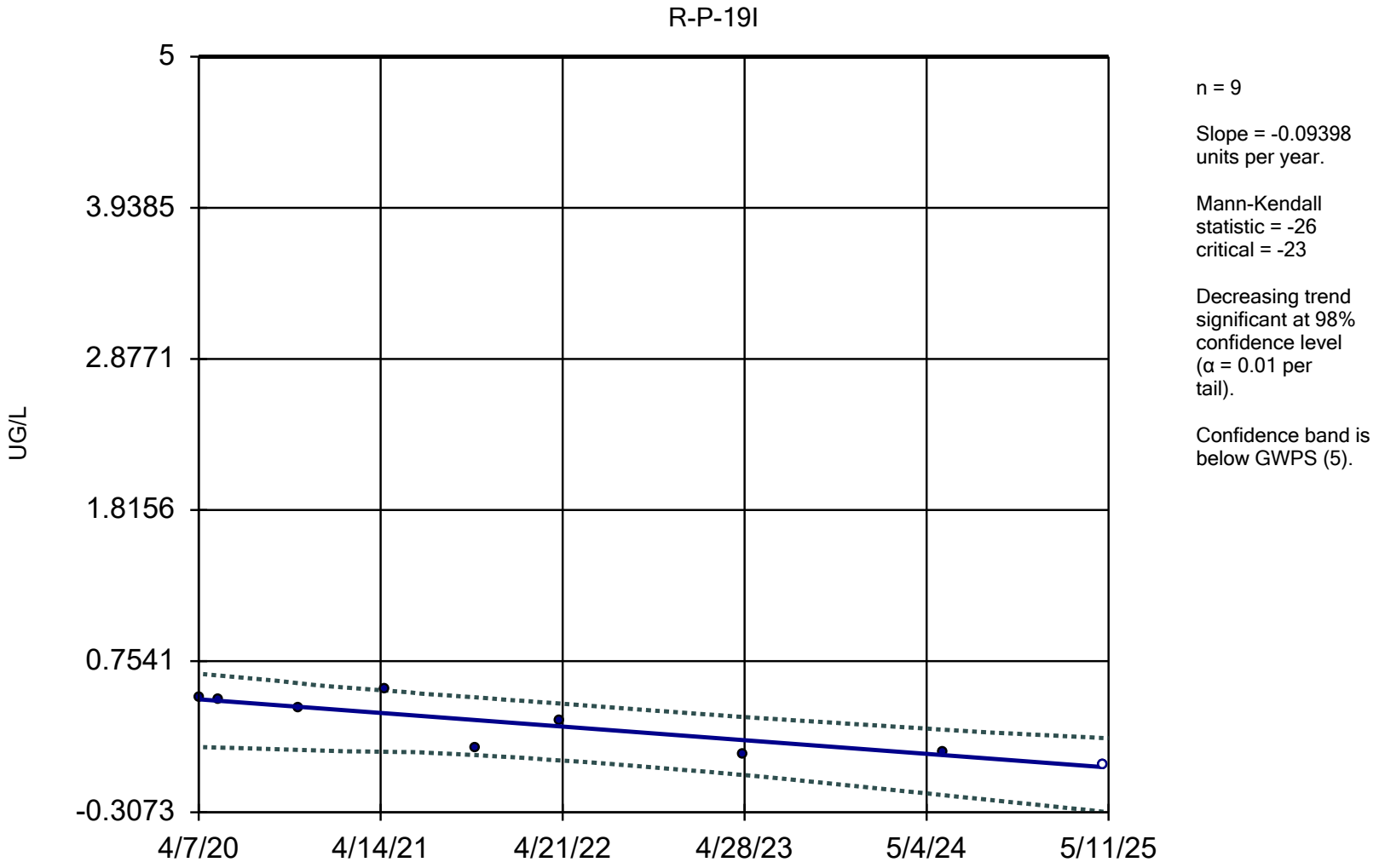
Confidence band is below GWPS (5).

Constituent: CADMIUM, TOTAL Analysis Run 9/2/2025 10:36 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



n = 9

Slope = -0.09398 units per year.

Mann-Kendall statistic = -26
critical = -23

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (5).

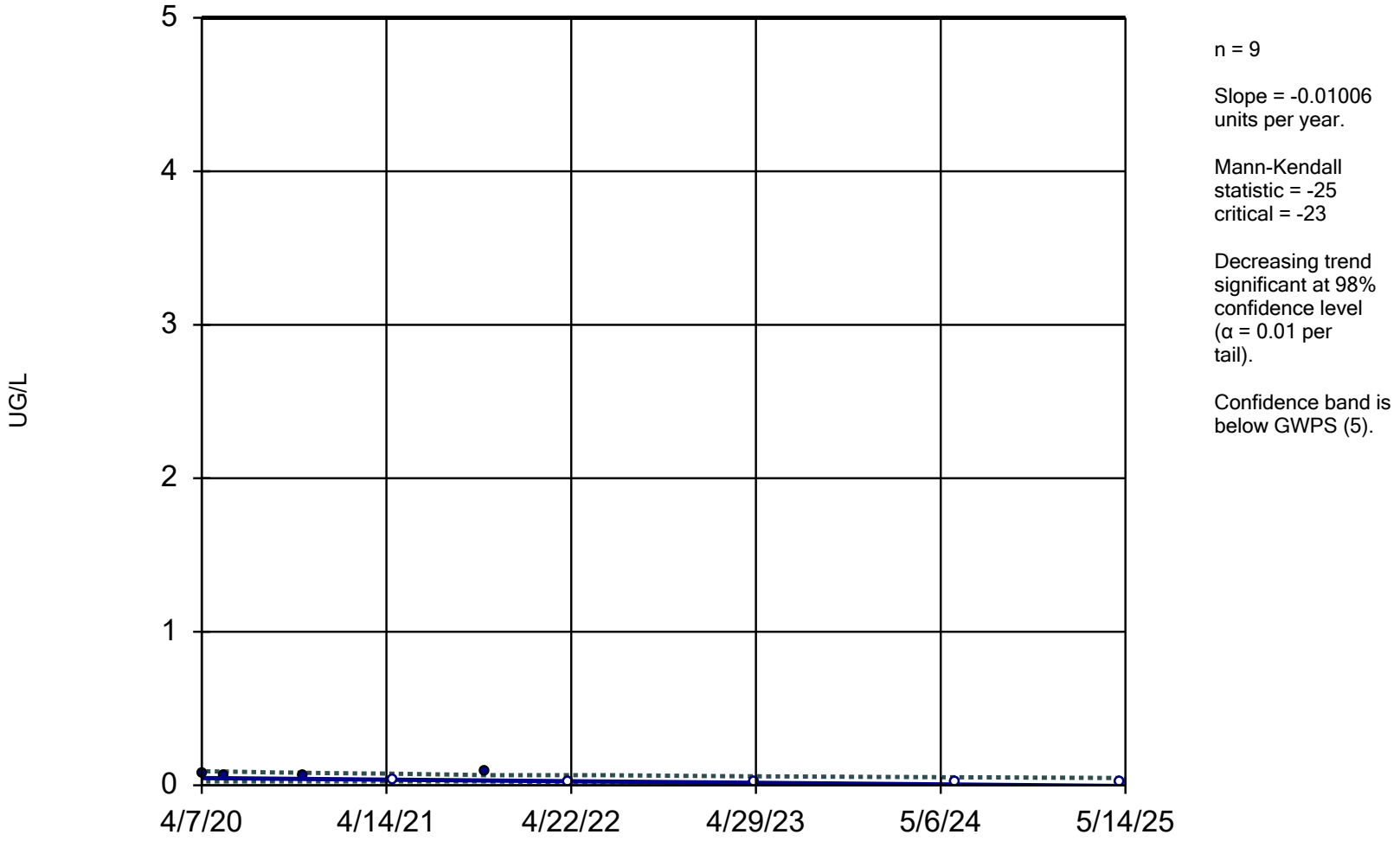
Constituent: CADMIUM, TOTAL Analysis Run 9/2/2025 10:36 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-30S



n = 9

Slope = -0.01006 units per year.

Mann-Kendall statistic = -25
critical = -23

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

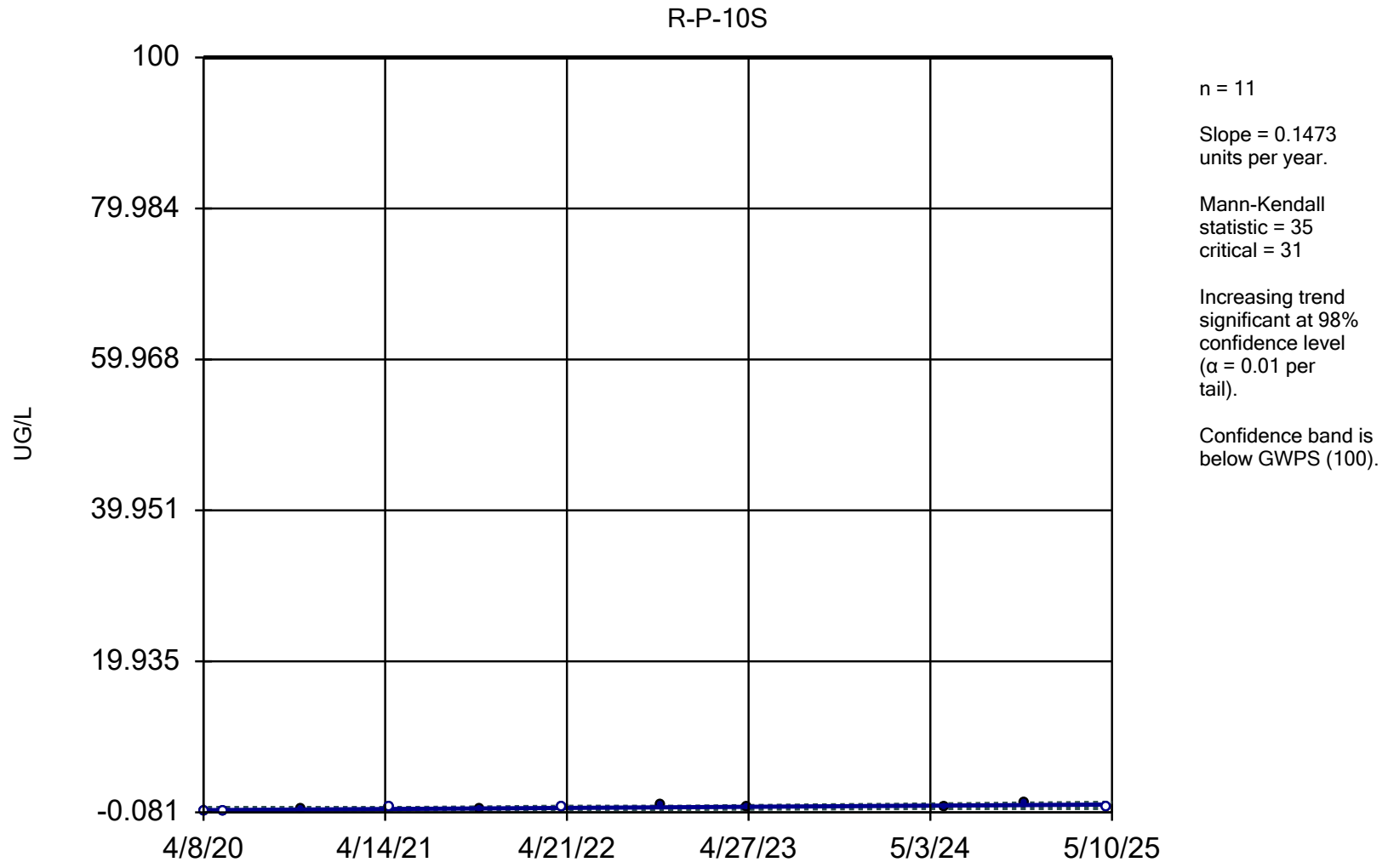
Confidence band is below GWPS (5).

Constituent: CADMIUM, TOTAL Analysis Run 9/2/2025 10:36 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



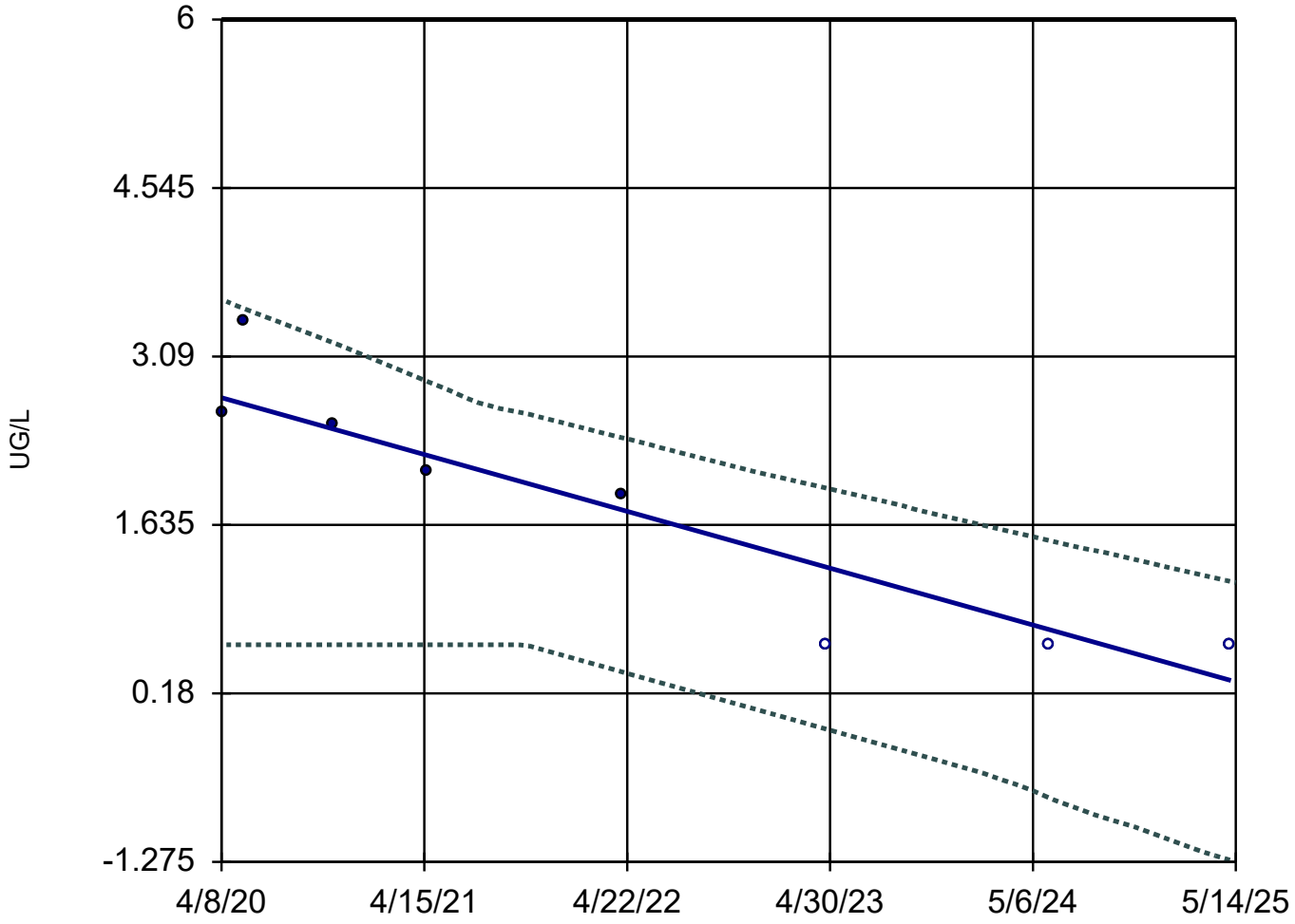
Constituent: CHROMIUM, TOTAL Analysis Run 9/2/2025 10:36 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-22S



n = 8

Slope = -0.4811 units per year.

Mann-Kendall statistic = -23
critical = -20

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (6).

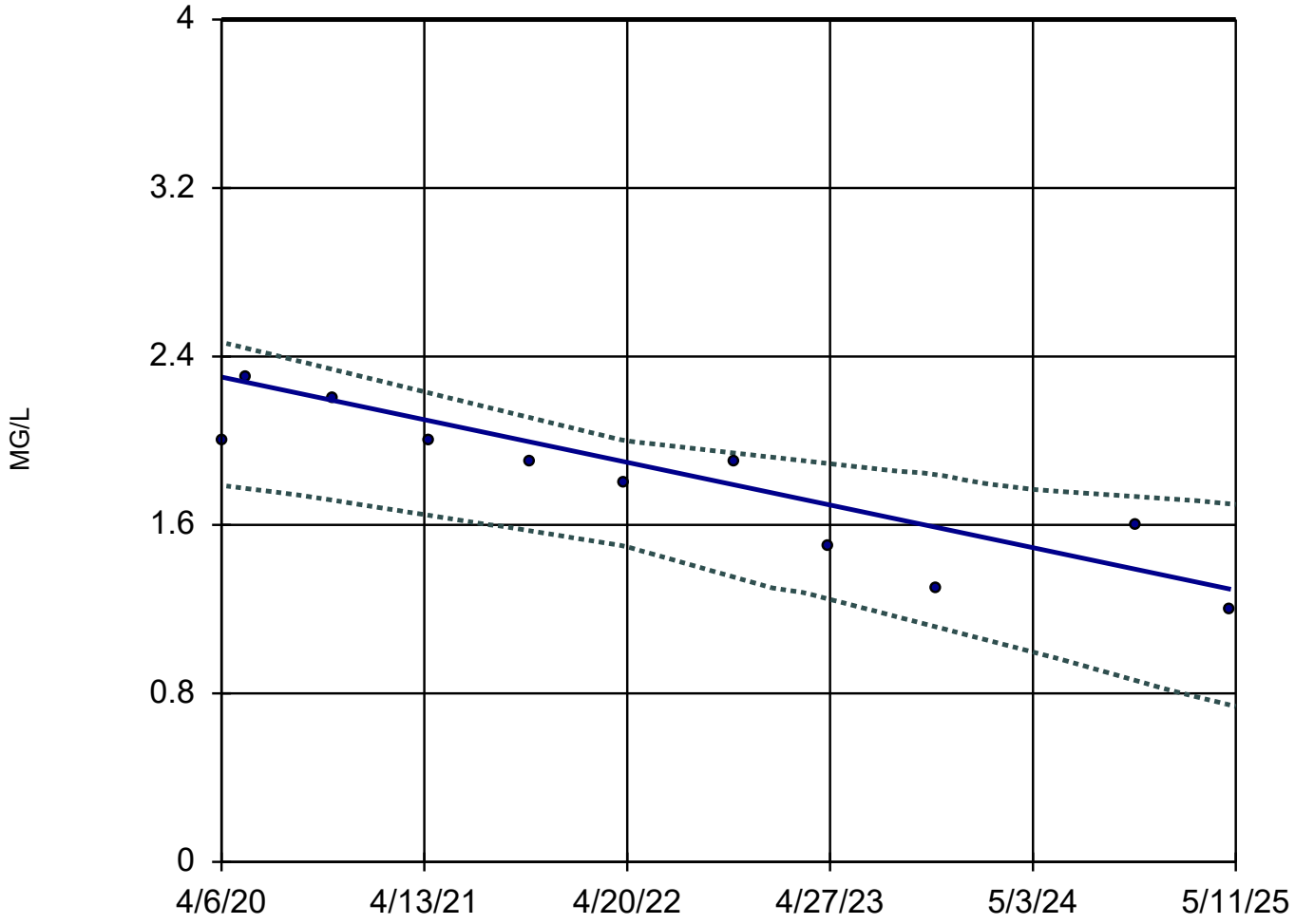
Constituent: COBALT, TOTAL Analysis Run 9/2/2025 10:37 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-17I



n = 11

Slope = -0.1985 units per year.

Mann-Kendall statistic = -43
critical = -31

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (4).

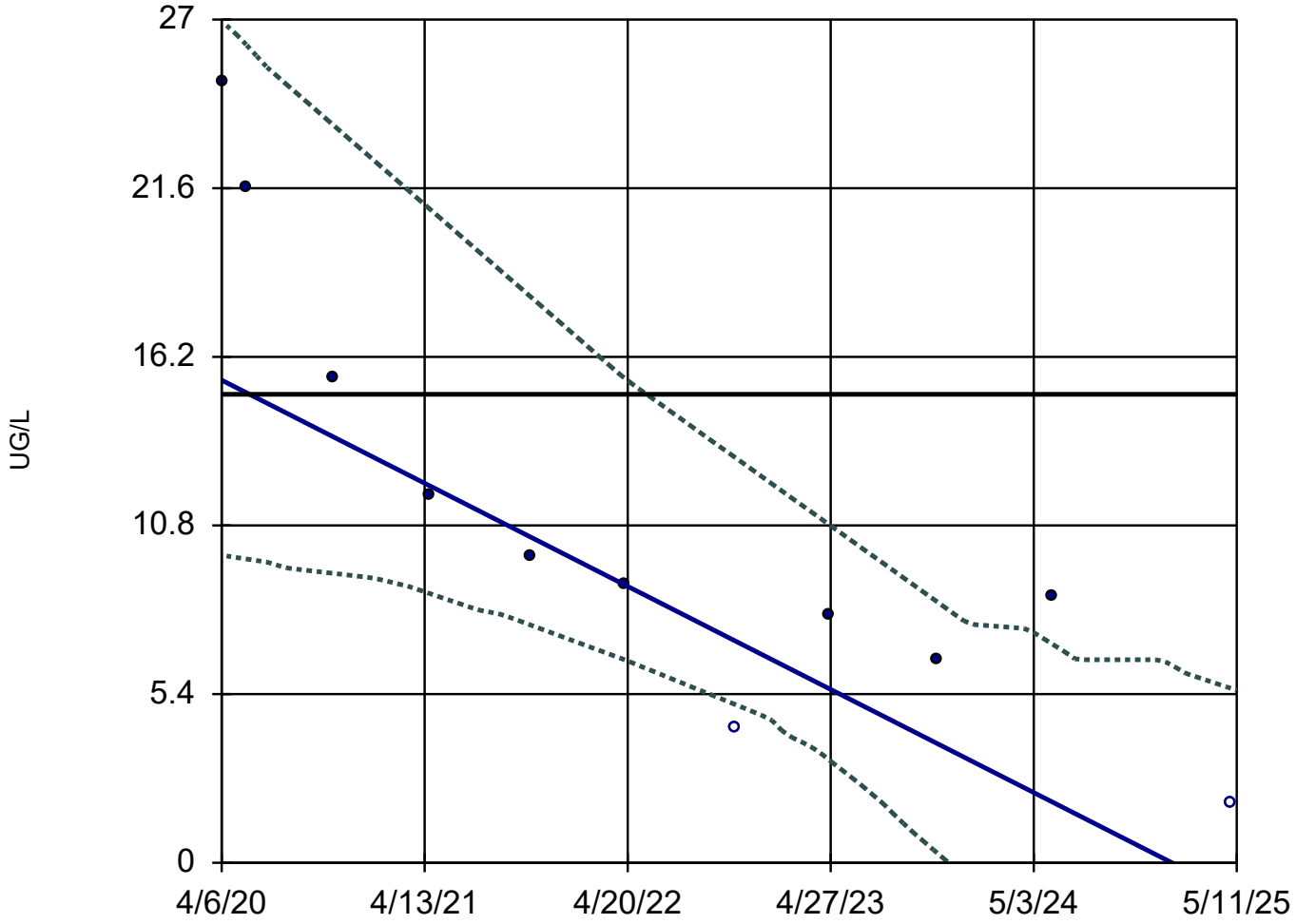
Constituent: FLUORIDE, TOTAL Analysis Run 9/2/2025 10:37 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

R-P-17I



n = 11

Slope = -3.237
units per year.

Mann-Kendall
statistic = -45
critical = -31

Decreasing trend
significant at 98%
confidence level
(α = 0.01 per
tail).

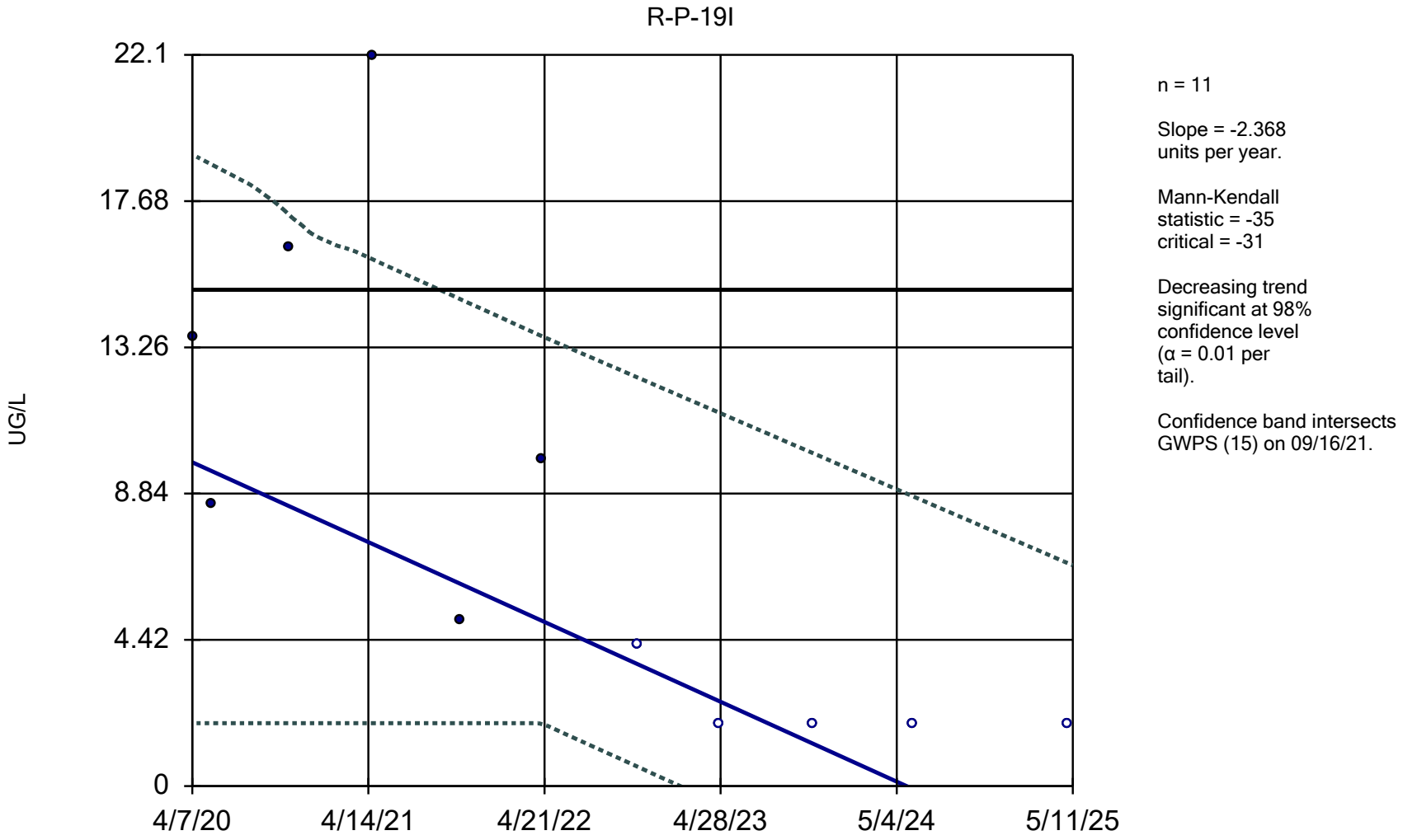
Confidence band intersects
GWPS (15) on 06/02/22.

Constituent: LEAD, TOTAL Analysis Run 9/2/2025 10:37 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG
Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



n = 11

Slope = -2.368 units per year.

Mann-Kendall statistic = -35
critical = -31

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band intersects GWPS (15) on 09/16/21.

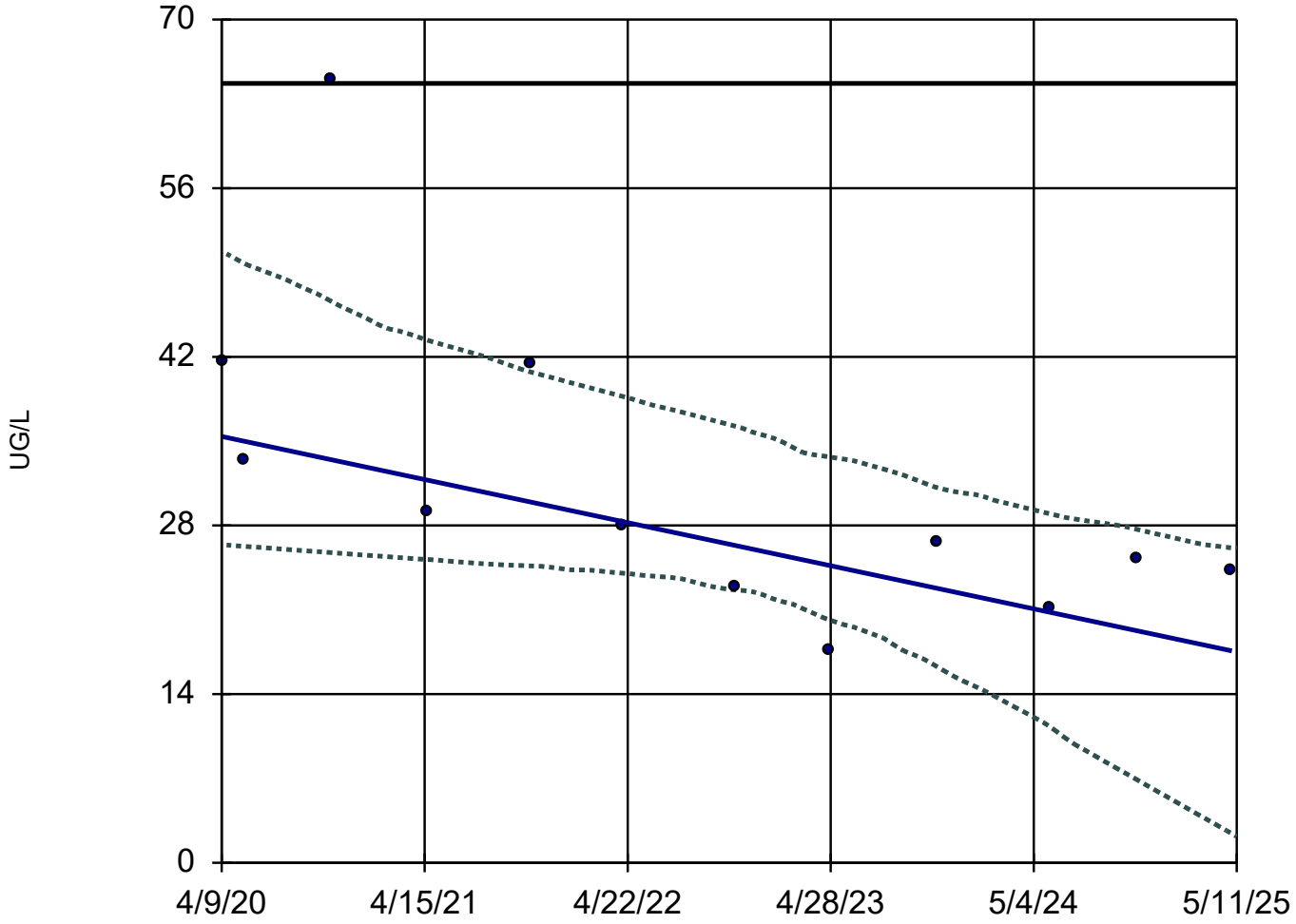
Constituent: LEAD, TOTAL Analysis Run 9/2/2025 10:37 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-16S



n = 12

Slope = -3.513 units per year.

Mann-Kendall statistic = -40
critical = -35

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (64.7).

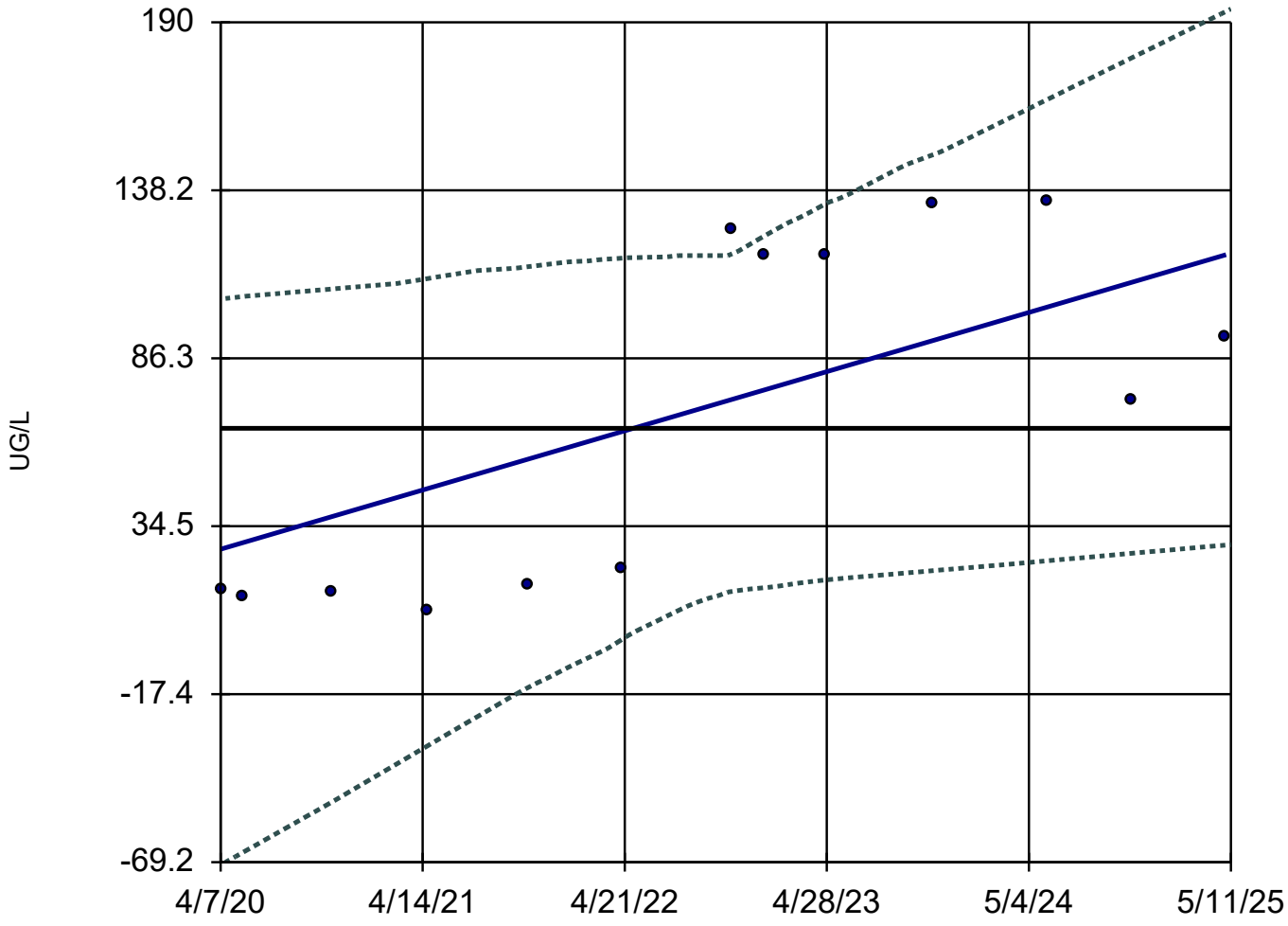
Constituent: LITHIUM, TOTAL Analysis Run 9/2/2025 10:37 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-19I



n = 13

Slope = 17.92 units per year.

Mann-Kendall statistic = 43
critical = 39

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

GWPS (64.7) is entirely within the confidence band.

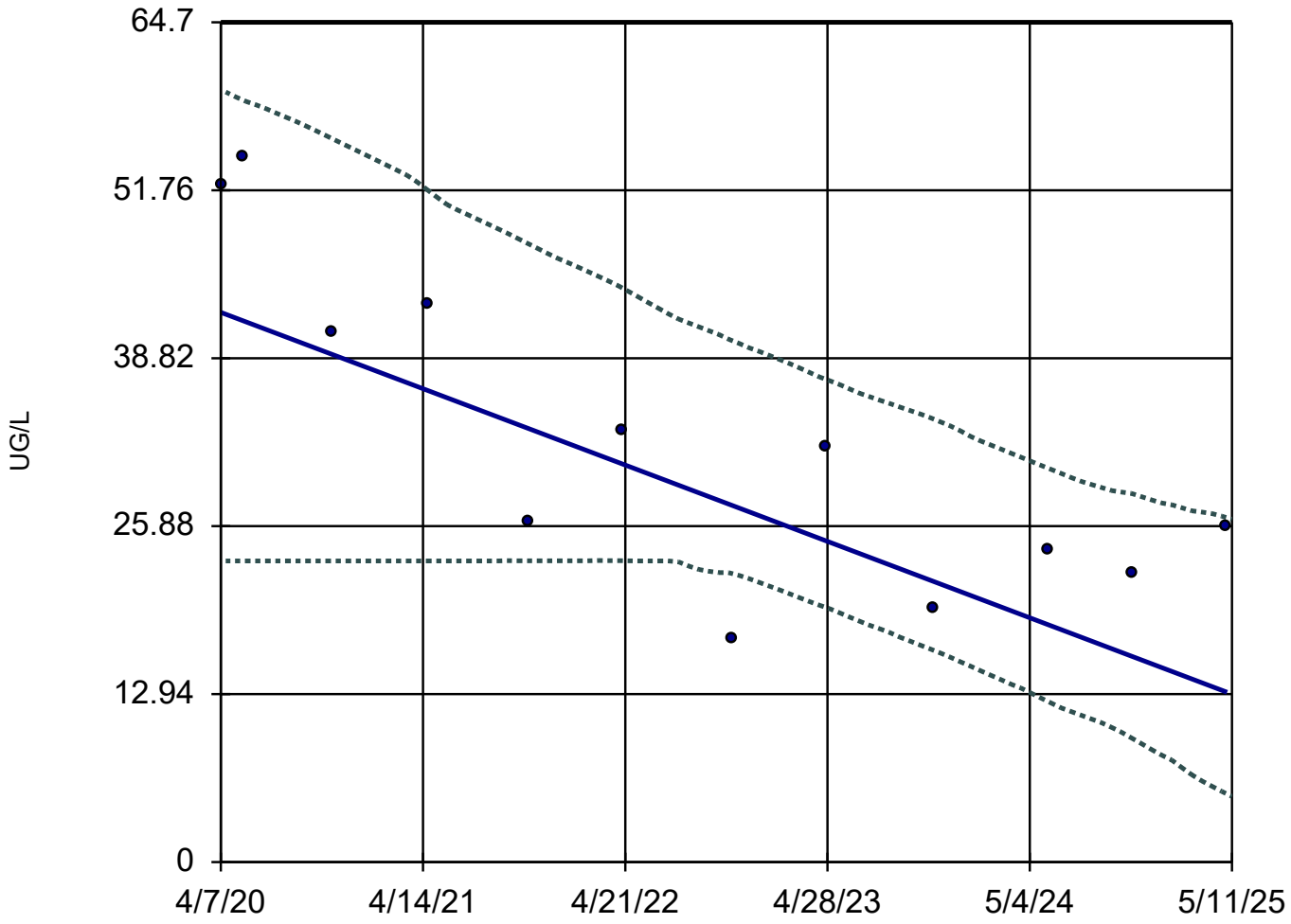
Constituent: LITHIUM, TOTAL Analysis Run 9/2/2025 10:37 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-19S



n = 12

Slope = -5.771 units per year.

Mann-Kendall statistic = -38
critical = -35

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (64.7).

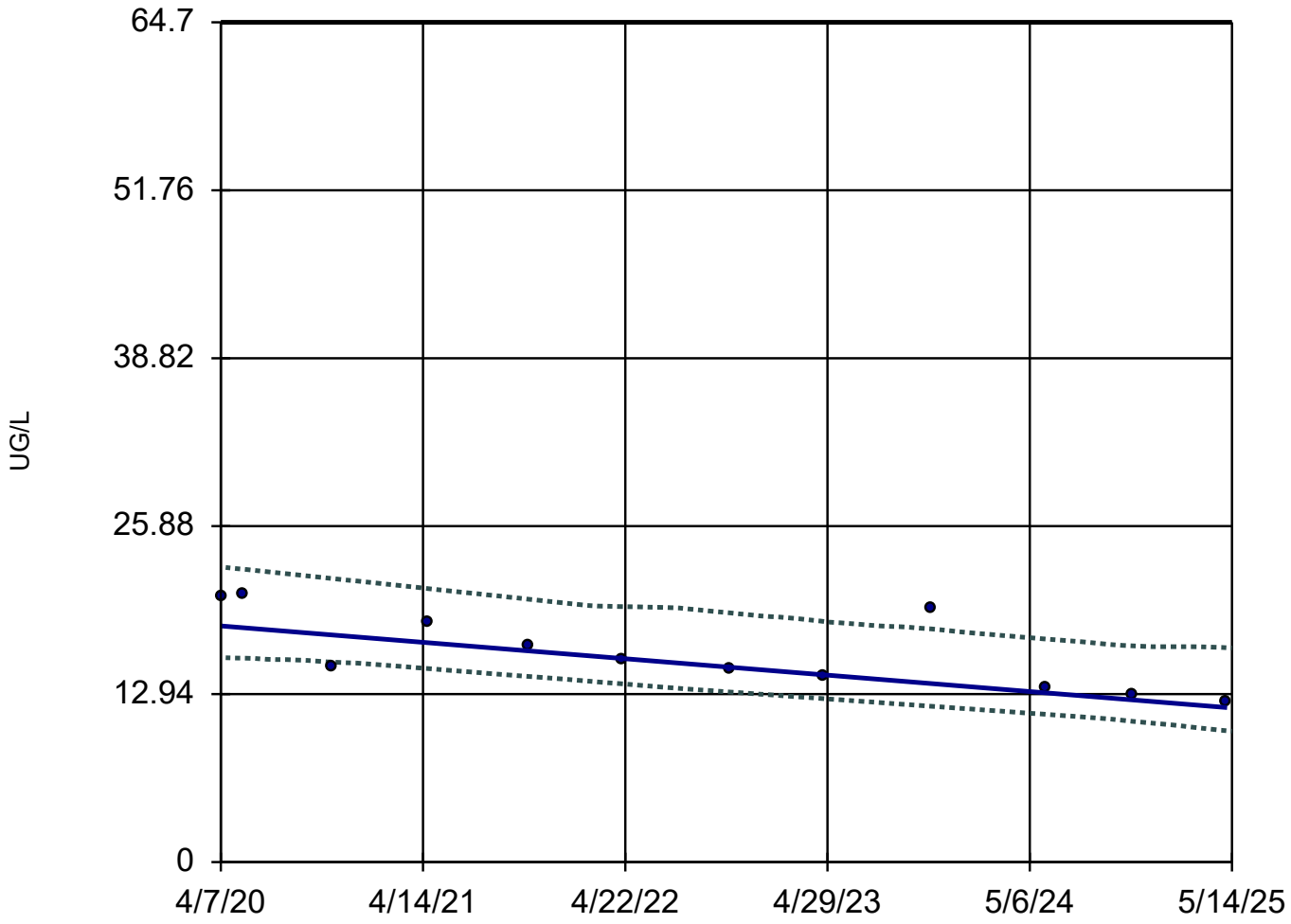
Constituent: LITHIUM, TOTAL Analysis Run 9/2/2025 10:37 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-21S



n = 12

Slope = -1.239 units per year.

Mann-Kendall statistic = -46
critical = -35

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (64.7).

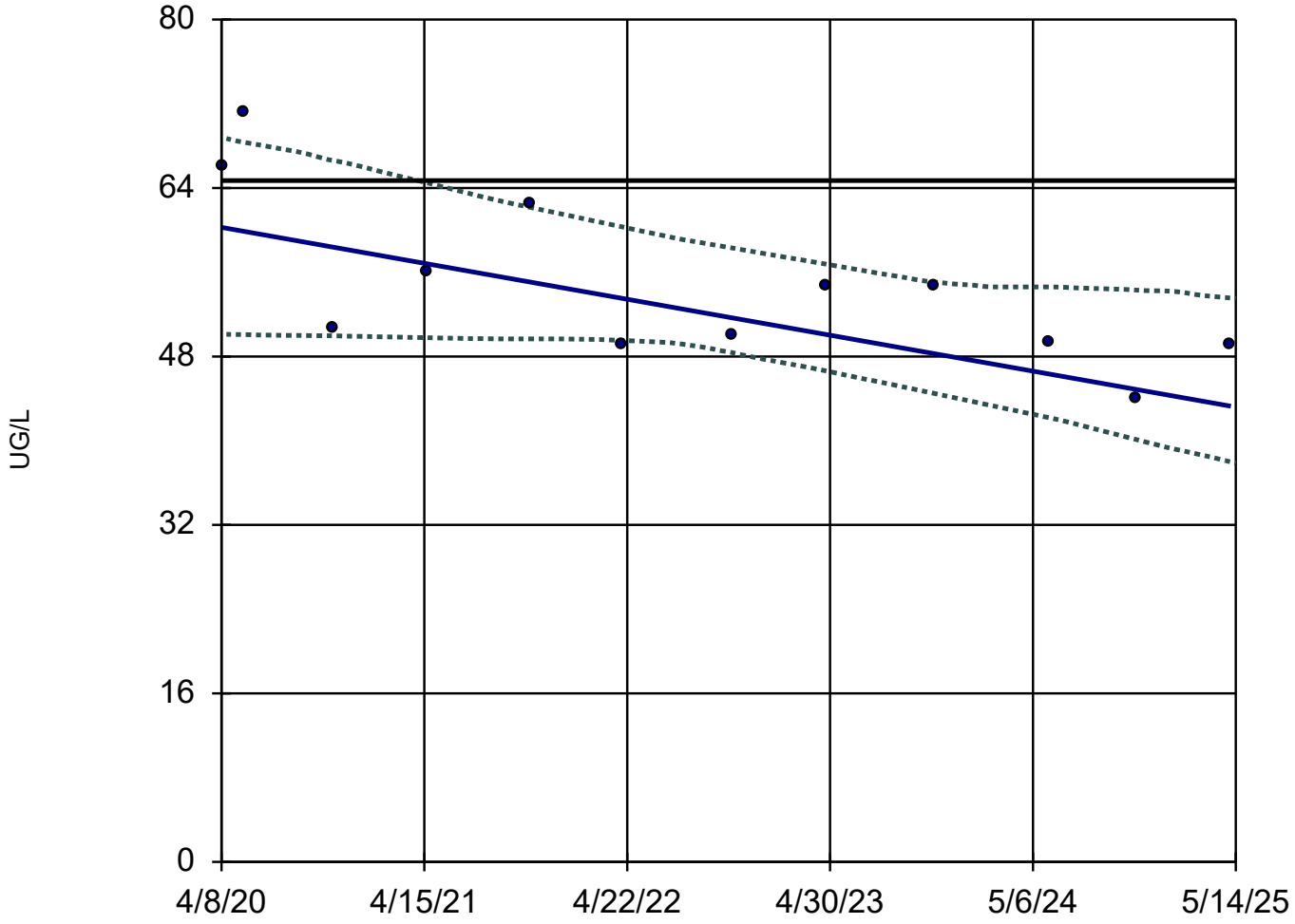
Constituent: LITHIUM, TOTAL Analysis Run 9/2/2025 10:37 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-22S



n = 12

Slope = -3.346 units per year.

Mann-Kendall statistic = -39 critical = -35

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band intersects GWPS (64.7) on 04/04/21.

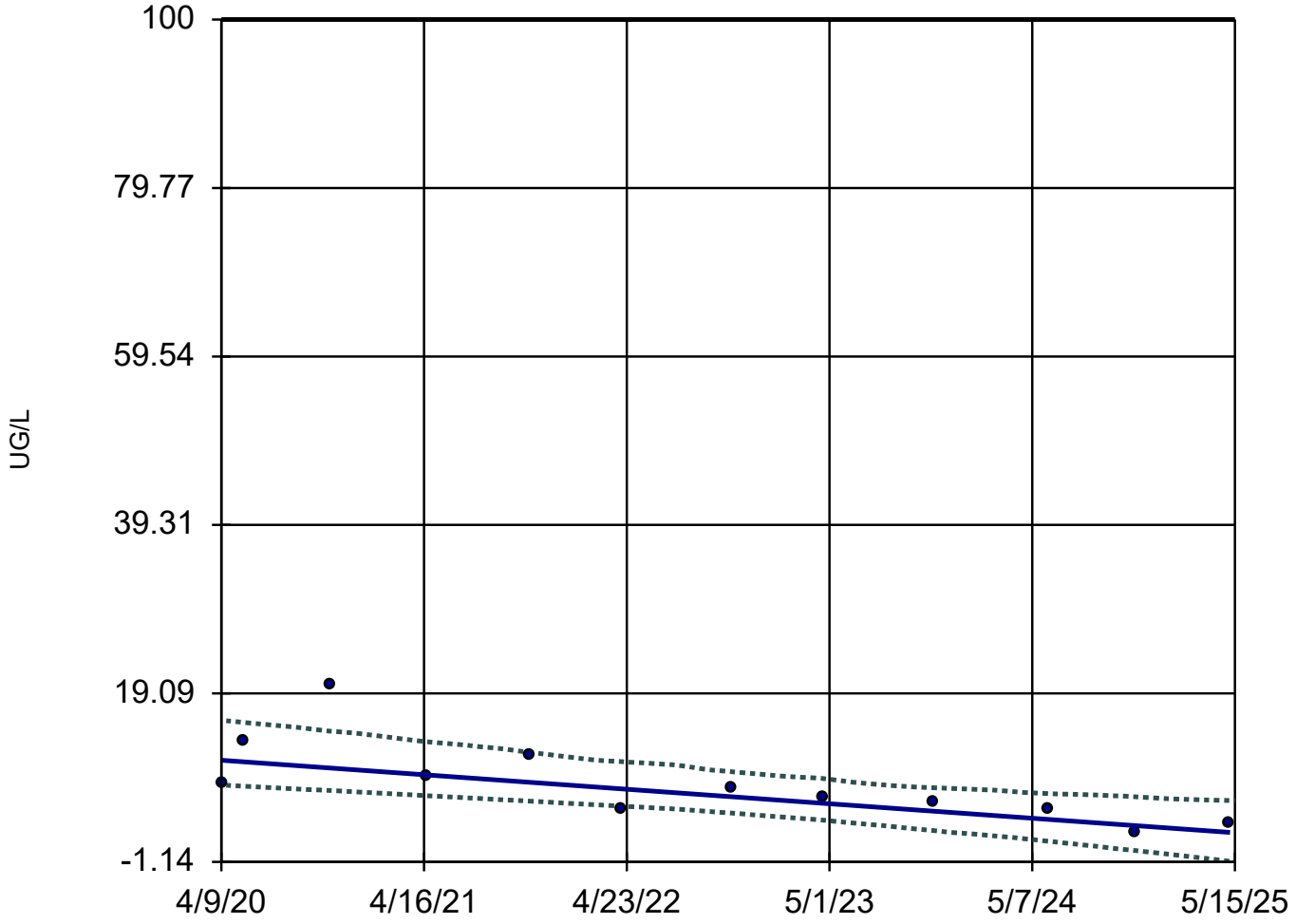
Constituent: LITHIUM, TOTAL Analysis Run 9/2/2025 10:37 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-05S



n = 12

Slope = -1.708 units per year.

Mann-Kendall statistic = -45 critical = -35

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (100).

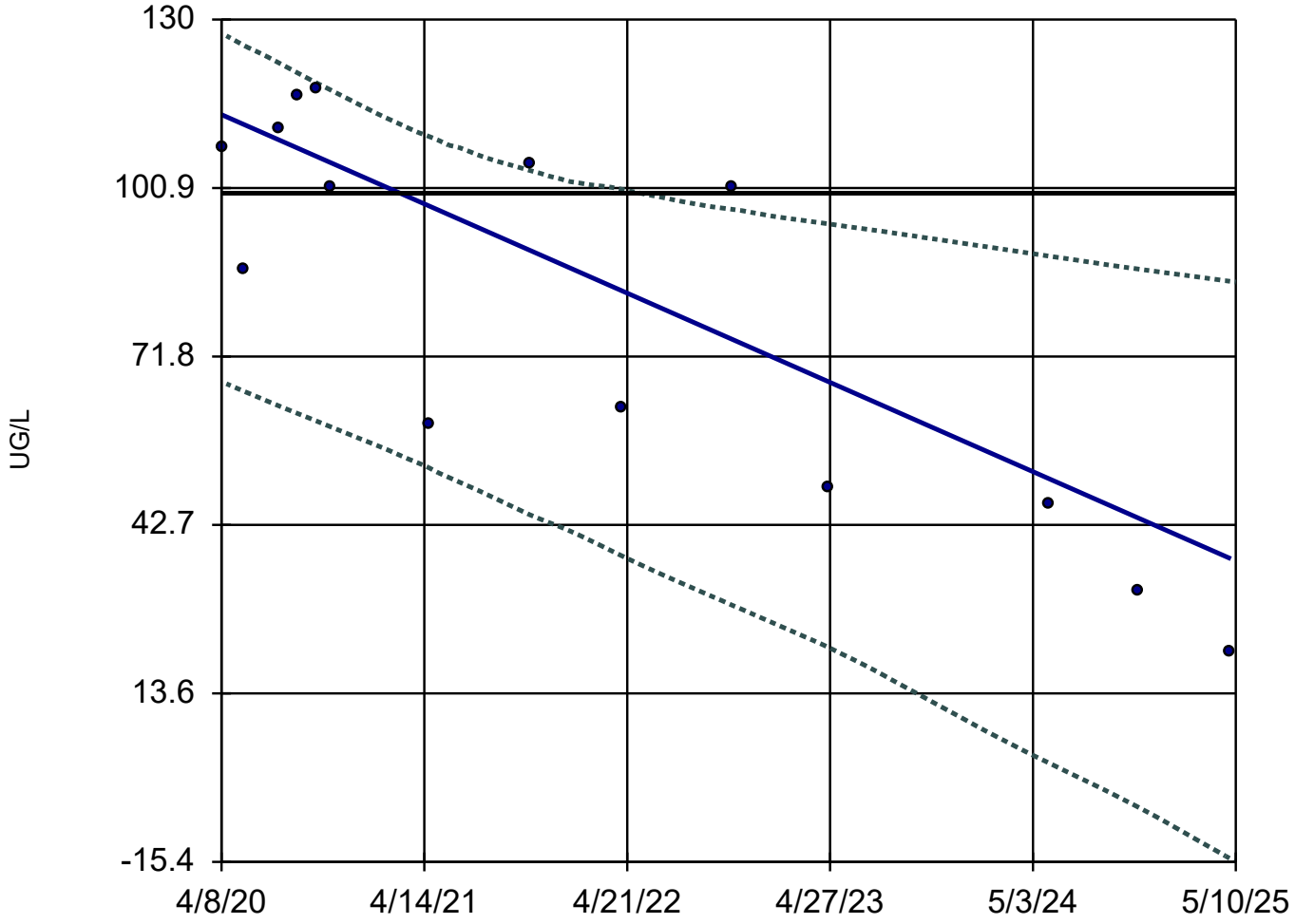
Constituent: MOLYBDENUM, TOTAL Analysis Run 9/2/2025 10:38 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-10S



n = 14

Slope = -15.13 units per year.

Mann-Kendall statistic = -56 critical = -44

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band intersects GWPS (100) on 06/02/22.

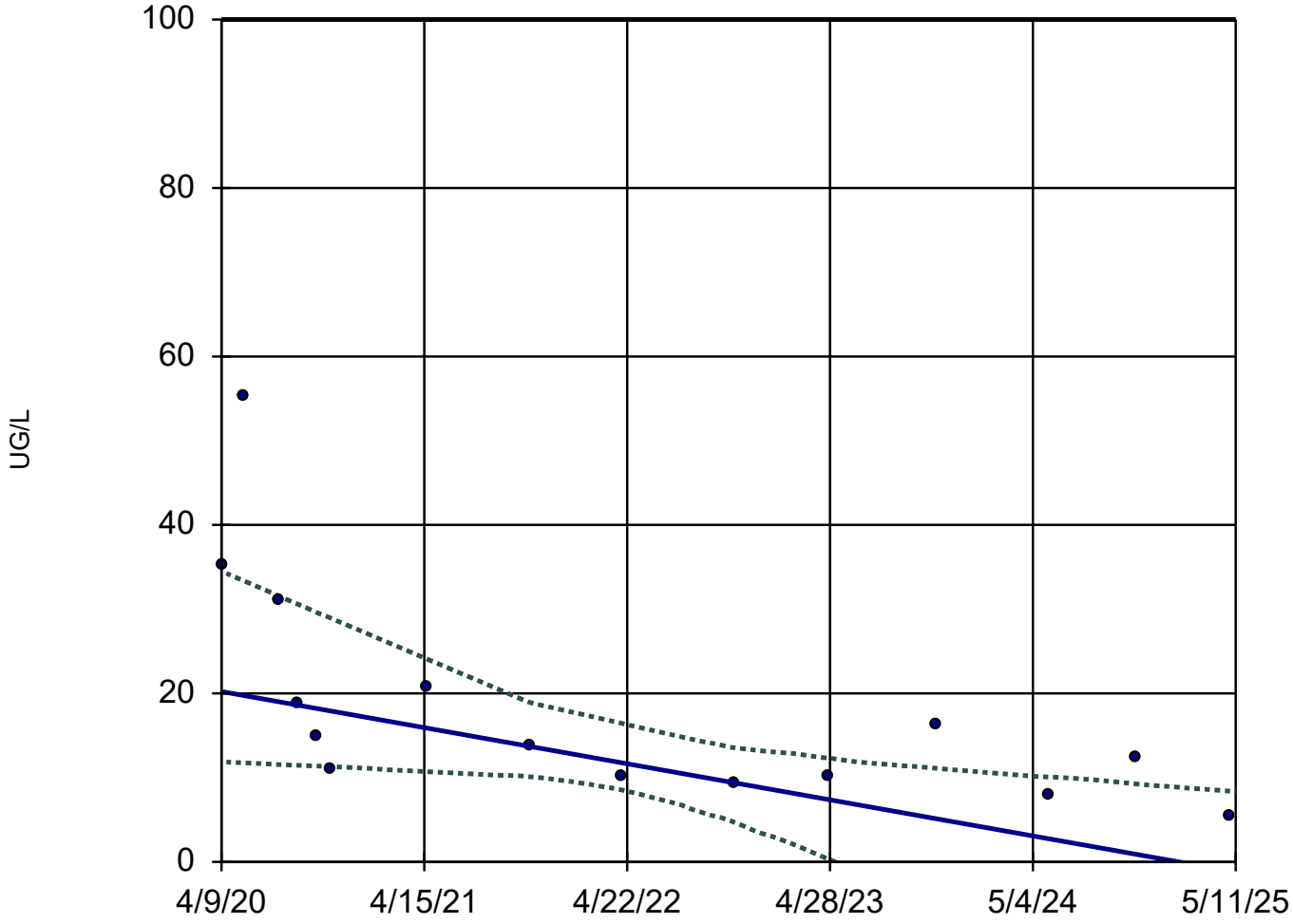
Constituent: MOLYBDENUM, TOTAL Analysis Run 9/2/2025 10:38 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-16S



n = 15

Slope = -4.208 units per year.

Mann-Kendall statistic = -71
critical = -48

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

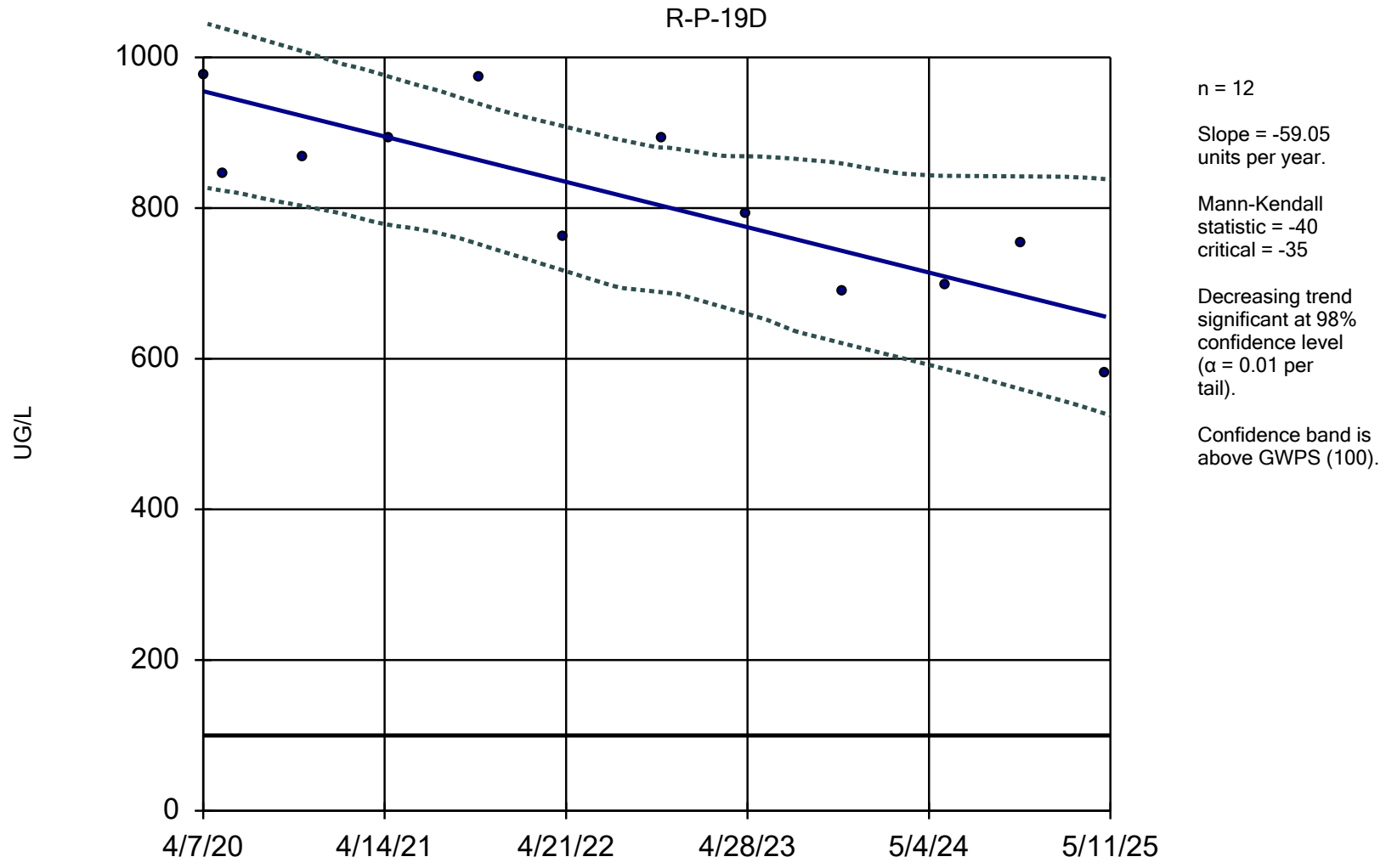
Confidence band is below GWPS (100).

Constituent: MOLYBDENUM, TOTAL Analysis Run 9/2/2025 10:38 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band



n = 12

Slope = -59.05 units per year.

Mann-Kendall statistic = -40
critical = -35

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is above GWPS (100).

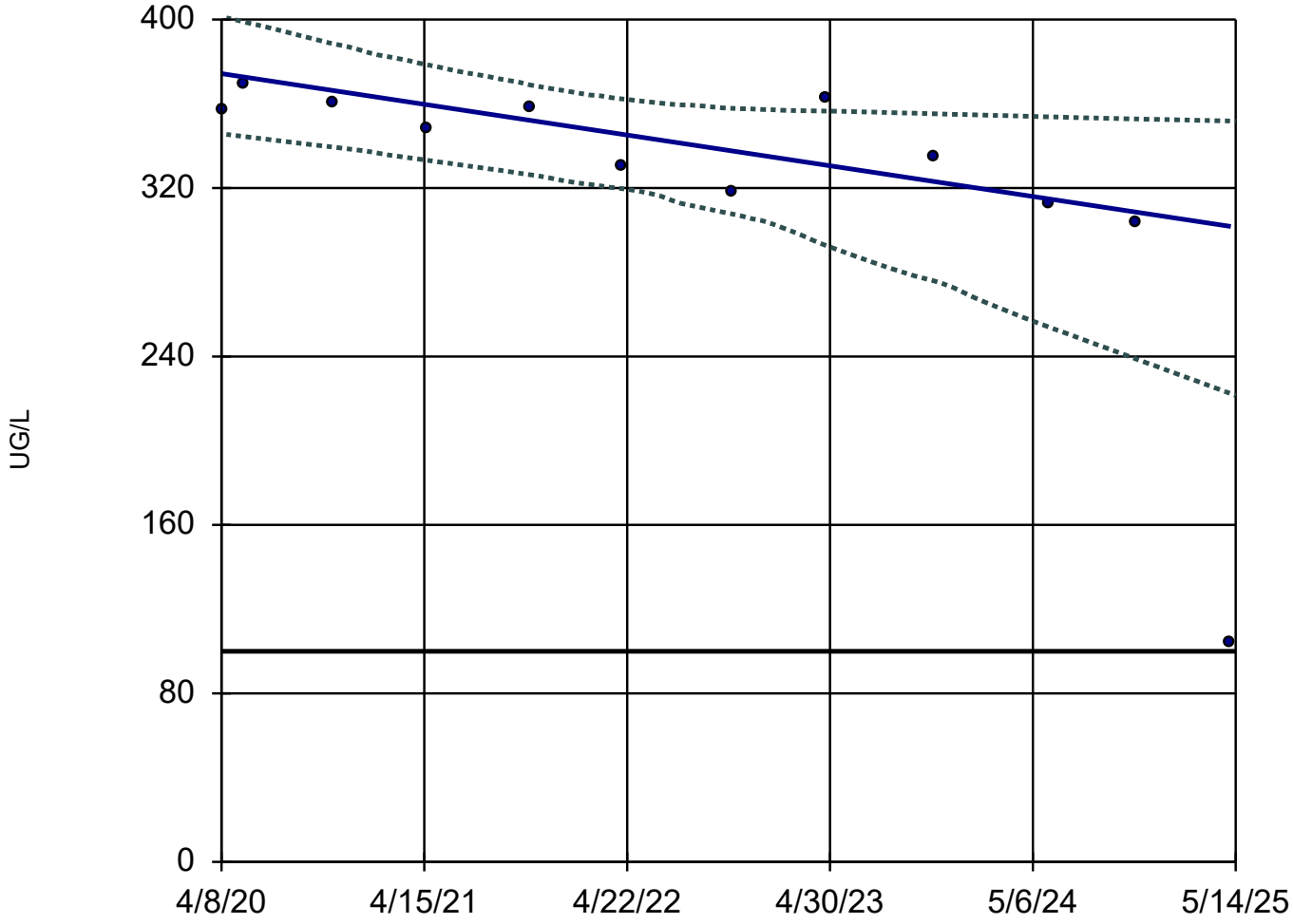
Constituent: MOLYBDENUM, TOTAL Analysis Run 9/2/2025 10:38 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-22D



n = 12

Slope = -14.3 units per year.

Mann-Kendall statistic = -42
critical = -35

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is above GWPS (100).

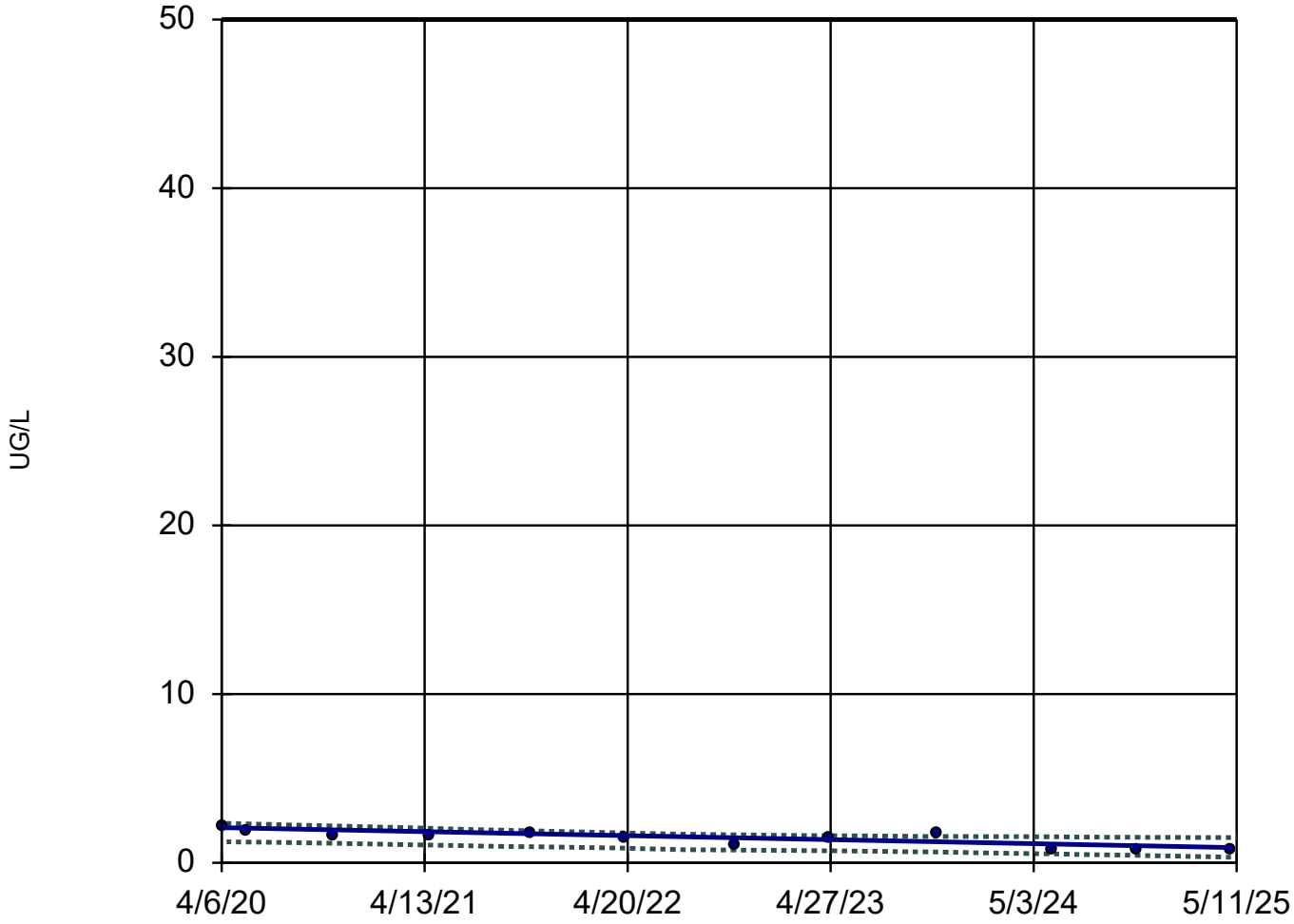
Constituent: MOLYBDENUM, TOTAL Analysis Run 9/2/2025 10:38 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-17I



n = 12

Slope = -0.2333 units per year.

Mann-Kendall statistic = -42
critical = -35

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below GWPS (50).

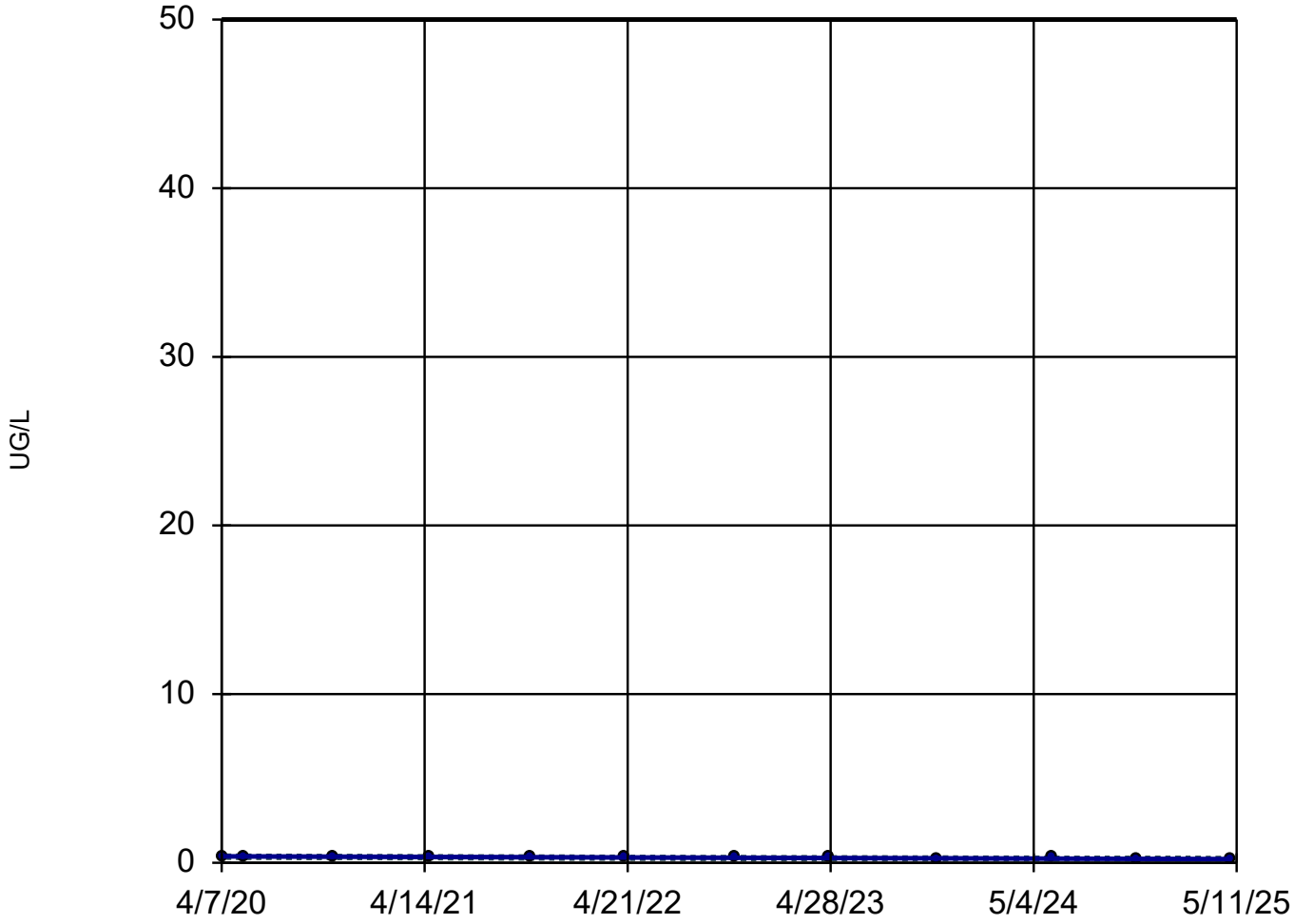
Constituent: SELENIUM, TOTAL Analysis Run 9/2/2025 10:38 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Sanitas™ v.10.0.27 Software licensed to Rocksmith Geoengineering. UG

Sen's Slope and 95% Confidence Band

R-P-19D



n = 12

Slope = -0.03108 units per year.

Mann-Kendall statistic = -42
critical = -35

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

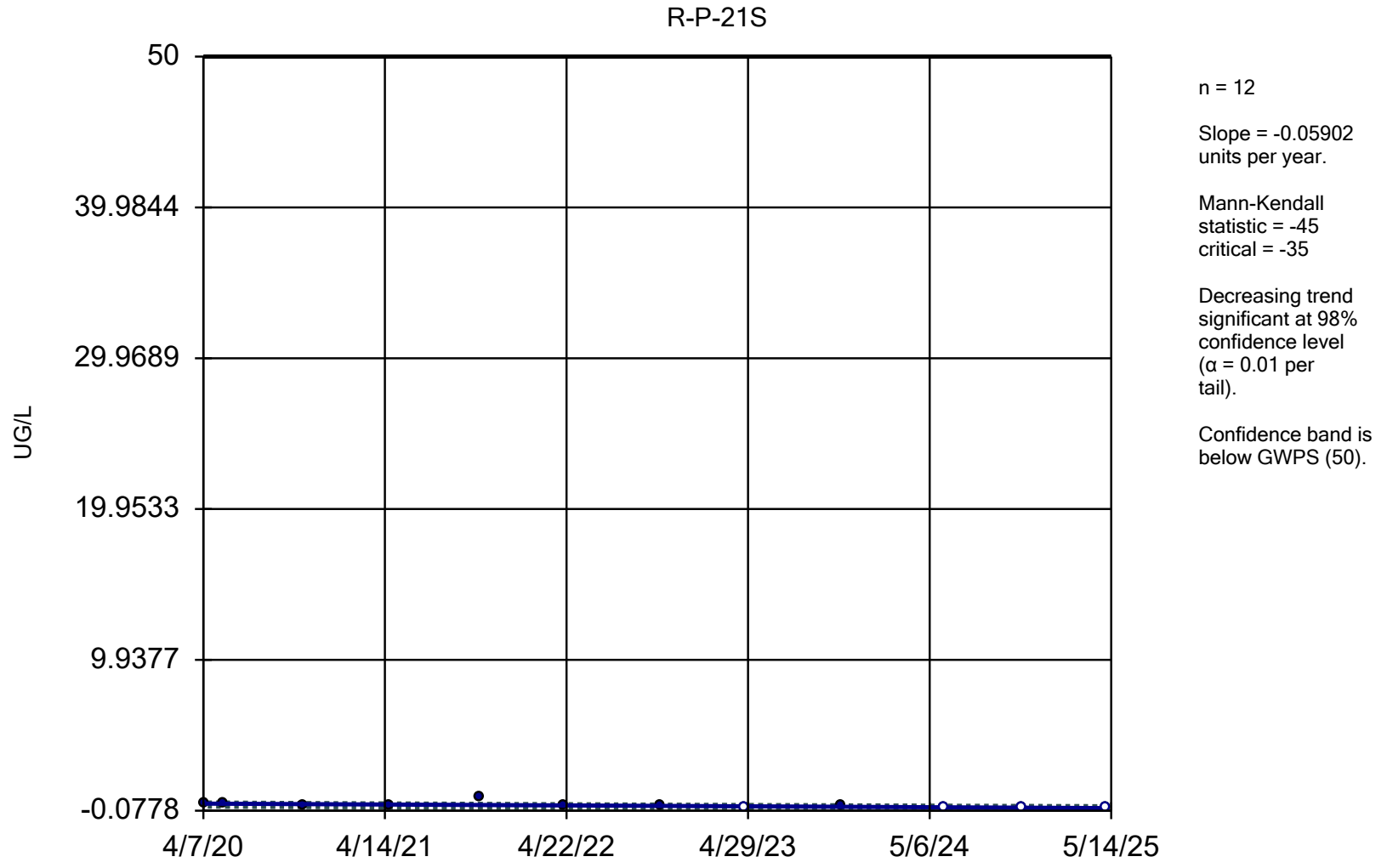
Confidence band is below GWPS (50).

Constituent: SELENIUM, TOTAL Analysis Run 9/2/2025 10:38 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

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Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



Constituent: SELENIUM, TOTAL Analysis Run 9/2/2025 10:38 AM

Rush Island E.C. Client: Ameren Data: RIEC DATA

Trend Test

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 9/2/2025, 10:44 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
ANTIMONY, TOTAL (UG/L)	**R-P-05S**	**0.002489**	**41**	**35**	**Yes**	**12**	**100**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	R-P-10S	0	4	31	No	11	72.73	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	R-P-16S	0.002481	27	27	No	10	100	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	**R-P-17D**	**0.00249**	**41**	**35**	**Yes**	**12**	**100**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	**R-P-17I**	**-0.09237**	**-46**	**-35**	**Yes**	**12**	**8.333**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	R-P-17S	0.005864	15	35	No	12	41.67	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	**R-P-19D**	**0.002491**	**41**	**35**	**Yes**	**12**	**100**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	**R-P-19I**	**-1.045**	**-48**	**-35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	R-P-19S	0.001003	25	35	No	12	91.67	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	**R-P-21D**	**0.002489**	**41**	**35**	**Yes**	**12**	**100**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	**R-P-21I**	**0.002489**	**41**	**35**	**Yes**	**12**	**100**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	R-P-21S	0.002317	31	31	No	11	100	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	R-P-22D	0.006077	12	35	No	12	41.67	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	**R-P-22S**	**0.003207**	**47**	**35**	**Yes**	**12**	**91.67**	**n/a**	**n/a**	**0.02**	**NP**
ANTIMONY, TOTAL (UG/L)	R-P-30S	0.002319	31	31	No	11	100	n/a	n/a	0.02	NP
ANTIMONY, TOTAL (UG/L)	**R-P-31S**	**0.003219**	**39**	**31**	**Yes**	**11**	**90.91**	**n/a**	**n/a**	**0.02**	**NP**
ARSENIC, TOTAL (UG/L)	R-P-05S	2.988	16	35	No	12	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-10S	-0.6697	-17	-44	No	14	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-16S	-0.07115	-18	-48	No	15	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-17D	-0.03032	-24	-35	No	12	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	**R-P-17I**	**-7.368**	**-56**	**-35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
ARSENIC, TOTAL (UG/L)	R-P-17S	-2.941	-32	-35	No	12	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-19D	-0.03236	-20	-35	No	12	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-19I	-52.94	-31	-35	No	12	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	**R-P-19S**	**-3.995**	**-58**	**-35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
ARSENIC, TOTAL (UG/L)	R-P-21D	-0.01976	-18	-35	No	12	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-21I	0.1484	24	35	No	12	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-21S	-10.86	-14	-35	No	12	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	**R-P-22D**	**0.8564**	**45**	**35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
ARSENIC, TOTAL (UG/L)	R-P-22S	0.4024	13	35	No	12	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-30S	-0.0729	-18	-48	No	15	0	n/a	n/a	0.02	NP
ARSENIC, TOTAL (UG/L)	R-P-31S	2.404	34	39	No	13	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-P-05S	7.694	21	35	No	12	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	**R-P-10S**	**17.79**	**34**	**31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
BARIUM, TOTAL (UG/L)	R-P-16S	5.6	9	31	No	11	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	**R-P-17D**	**-1.464**	**-38**	**-35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
BARIUM, TOTAL (UG/L)	R-P-17I	2.247	24	35	No	12	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-P-17S	4.04	15	31	No	11	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-P-19D	7.345	28	35	No	12	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	**R-P-19I**	**14.91**	**60**	**35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
BARIUM, TOTAL (UG/L)	R-P-19S	-68.58	-30	-35	No	12	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-P-21D	16.04	6	35	No	12	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	**R-P-21I**	**10.94**	**56**	**35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
BARIUM, TOTAL (UG/L)	**R-P-21S**	**-60.81**	**-42**	**-35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
BARIUM, TOTAL (UG/L)	R-P-22D	2.91	20	35	No	12	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	**R-P-22S**	**-12.49**	**-40**	**-35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
BARIUM, TOTAL (UG/L)	R-P-30S	2.943	24	35	No	12	0	n/a	n/a	0.02	NP
BARIUM, TOTAL (UG/L)	R-P-31S	7.341	21	27	No	10	0	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-05S	-0.00...	-17	-23	No	9	100	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-10S	0.01057	4	23	No	9	0	n/a	n/a	0.02	NP

Trend Test

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 9/2/2025, 10:44 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
CADMIUM, TOTAL (UG/L)	R-P-16S	-0.01609	-21	-23	No	9	33.33	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-17D	0.003347	3	23	No	9	22.22	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	**R-P-17I**	**-0.1147**	**-30**	**-23**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.02**	**NP**
CADMIUM, TOTAL (UG/L)	R-P-17S	0.01789	11	23	No	9	33.33	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-19D	-0.00835	-2	-23	No	9	0	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	**R-P-19I**	**-0.09398**	**-26**	**-23**	**Yes**	**9**	**11.11**	**n/a**	**n/a**	**0.02**	**NP**
CADMIUM, TOTAL (UG/L)	R-P-19S	-0.00...	-16	-20	No	8	100	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-21D	0.01028	13	23	No	9	33.33	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-21I	-0.00...	-6	-23	No	9	44.44	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-21S	0.005178	7	23	No	9	33.33	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-22D	-0.01103	-5	-23	No	9	11.11	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	R-P-22S	0.003961	7	23	No	9	0	n/a	n/a	0.02	NP
CADMIUM, TOTAL (UG/L)	**R-P-30S**	**-0.01006**	**-25**	**-23**	**Yes**	**9**	**55.56**	**n/a**	**n/a**	**0.02**	**NP**
CADMIUM, TOTAL (UG/L)	R-P-31S	-0.00...	-17	-23	No	9	100	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-05S	0.01548	11	31	No	11	9.091	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	**R-P-10S**	**0.1473**	**35**	**31**	**Yes**	**11**	**45.45**	**n/a**	**n/a**	**0.02**	**NP**
CHROMIUM, TOTAL (UG/L)	R-P-16S	0.01134	15	35	No	12	75	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-17D	0.01133	20	35	No	12	50	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-17I	-0.07526	-24	-35	No	12	0	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-17S	0.04779	20	35	No	12	16.67	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-19D	-0.04704	-11	-35	No	12	16.67	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-19I	0.02484	7	35	No	12	0	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-19S	0.0403	27	35	No	12	25	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-21D	0	3	35	No	12	58.33	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-21I	0	-1	-31	No	11	9.091	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-21S	0.02306	10	35	No	12	33.33	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-22D	0.06618	12	35	No	12	0	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-22S	0.03583	27	35	No	12	58.33	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-30S	0.05362	32	35	No	12	41.67	n/a	n/a	0.02	NP
CHROMIUM, TOTAL (UG/L)	R-P-31S	0.009912	12	31	No	11	54.55	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	R-P-05S	-0.03171	-10	-20	No	8	100	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	R-P-10S	0.183	6	20	No	8	37.5	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	R-P-16S	-0.03271	-9	-17	No	7	100	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	R-P-17D	-0.03174	-10	-20	No	8	100	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	R-P-17I	-0.03175	-10	-20	No	8	100	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	R-P-17S	-0.2424	-10	-17	No	7	14.29	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	R-P-19D	-0.02993	-8	-20	No	8	87.5	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	R-P-19I	-0.03175	-10	-20	No	8	100	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	R-P-19S	0.4	9	20	No	8	37.5	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	R-P-21D	-0.03145	-14	-20	No	8	100	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	R-P-21I	-0.03169	-10	-20	No	8	100	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	R-P-21S	-0.3839	-13	-20	No	8	37.5	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	R-P-22D	-0.03145	-14	-20	No	8	100	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	**R-P-22S**	**-0.4811**	**-23**	**-20**	**Yes**	**8**	**37.5**	**n/a**	**n/a**	**0.02**	**NP**
COBALT, TOTAL (UG/L)	R-P-30S	-0.03148	-14	-20	No	8	100	n/a	n/a	0.02	NP
COBALT, TOTAL (UG/L)	R-P-31S	-0.03156	-14	-20	No	8	100	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-05S	-0.01825	-23	-31	No	11	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-10S	-0.05959	-28	-31	No	11	27.27	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-16S	-0.02499	-19	-35	No	12	33.33	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-17D	-0.02384	-17	-35	No	12	0	n/a	n/a	0.02	NP

Trend Test

Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 9/2/2025, 10:44 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
FLUORIDE, TOTAL (MG/L)	**R-P-17I**	**-0.1985**	**-43**	**-31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
FLUORIDE, TOTAL (MG/L)	R-P-17S	0.005534	1	35	No	12	16.67	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-19D	-0.1099	-30	-35	No	12	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-19I	-0.2407	-35	-35	No	12	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-19S	-0.01038	-13	-35	No	12	16.67	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-21D	-0.1346	-21	-35	No	12	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-21I	-0.08896	-27	-35	No	12	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-21S	-0.01969	-21	-35	No	12	25	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-22D	-0.09264	-23	-35	No	12	0	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-22S	-0.01041	-12	-35	No	12	50	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-30S	-0.03084	-20	-35	No	12	25	n/a	n/a	0.02	NP
FLUORIDE, TOTAL (MG/L)	R-P-31S	-0.01743	-17	-31	No	11	18.18	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-05S	-0.08169	-22	-31	No	11	90.91	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-10S	-0.03948	-9	-23	No	9	100	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-16S	0	-15	-31	No	11	100	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-17D	-0.08199	-22	-31	No	11	90.91	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	**R-P-17I**	**-3.237**	**-45**	**-31**	**Yes**	**11**	**18.18**	**n/a**	**n/a**	**0.02**	**NP**
LEAD, TOTAL (UG/L)	R-P-17S	-0.08854	-24	-31	No	11	90.91	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-19D	-0.07878	-21	-31	No	11	100	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	**R-P-19I**	**-2.368**	**-35**	**-31**	**Yes**	**11**	**45.45**	**n/a**	**n/a**	**0.02**	**NP**
LEAD, TOTAL (UG/L)	R-P-19S	-0.08075	-20	-27	No	10	100	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-21D	0	-15	-31	No	11	100	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-21I	-0.07875	-21	-31	No	11	100	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-21S	-0.1023	-22	-27	No	10	90	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-22D	0	-6	-31	No	11	81.82	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-22S	-0.08848	-18	-31	No	11	90.91	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-30S	0	-17	-27	No	10	100	n/a	n/a	0.02	NP
LEAD, TOTAL (UG/L)	R-P-31S	-0.03946	-13	-23	No	9	100	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-P-05S	-0.209	-7	-35	No	12	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-P-10S	2.045	23	31	No	11	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	**R-P-16S**	**-3.513**	**-40**	**-35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
LITHIUM, TOTAL (UG/L)	R-P-17D	-0.9248	-30	-35	No	12	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-P-17I	0.3413	16	35	No	12	50	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-P-17S	0.869	9	31	No	11	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-P-19D	0.8436	19	35	No	12	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	**R-P-19I**	**17.92**	**43**	**39**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.02**	**NP**
LITHIUM, TOTAL (UG/L)	**R-P-19S**	**-5.771**	**-38**	**-35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
LITHIUM, TOTAL (UG/L)	R-P-21D	7.65	8	35	No	12	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-P-21I	1.619	34	35	No	12	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	**R-P-21S**	**-1.239**	**-46**	**-35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
LITHIUM, TOTAL (UG/L)	R-P-22D	-0.4312	-19	-35	No	12	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	**R-P-22S**	**-3.346**	**-39**	**-35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
LITHIUM, TOTAL (UG/L)	R-P-30S	1.012	31	35	No	12	0	n/a	n/a	0.02	NP
LITHIUM, TOTAL (UG/L)	R-P-31S	0.07341	2	23	No	9	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	**R-P-05S**	**-1.708**	**-45**	**-35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
MOLYBDENUM, TOTAL (UG/L)	**R-P-10S**	**-15.13**	**-56**	**-44**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.02**	**NP**
MOLYBDENUM, TOTAL (UG/L)	**R-P-16S**	**-4.208**	**-71**	**-48**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.02**	**NP**
MOLYBDENUM, TOTAL (UG/L)	R-P-17D	-20.43	-28	-35	No	12	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-17I	1.361	4	35	No	12	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-17S	6.672	12	35	No	12	0	n/a	n/a	0.02	NP

Trend Test

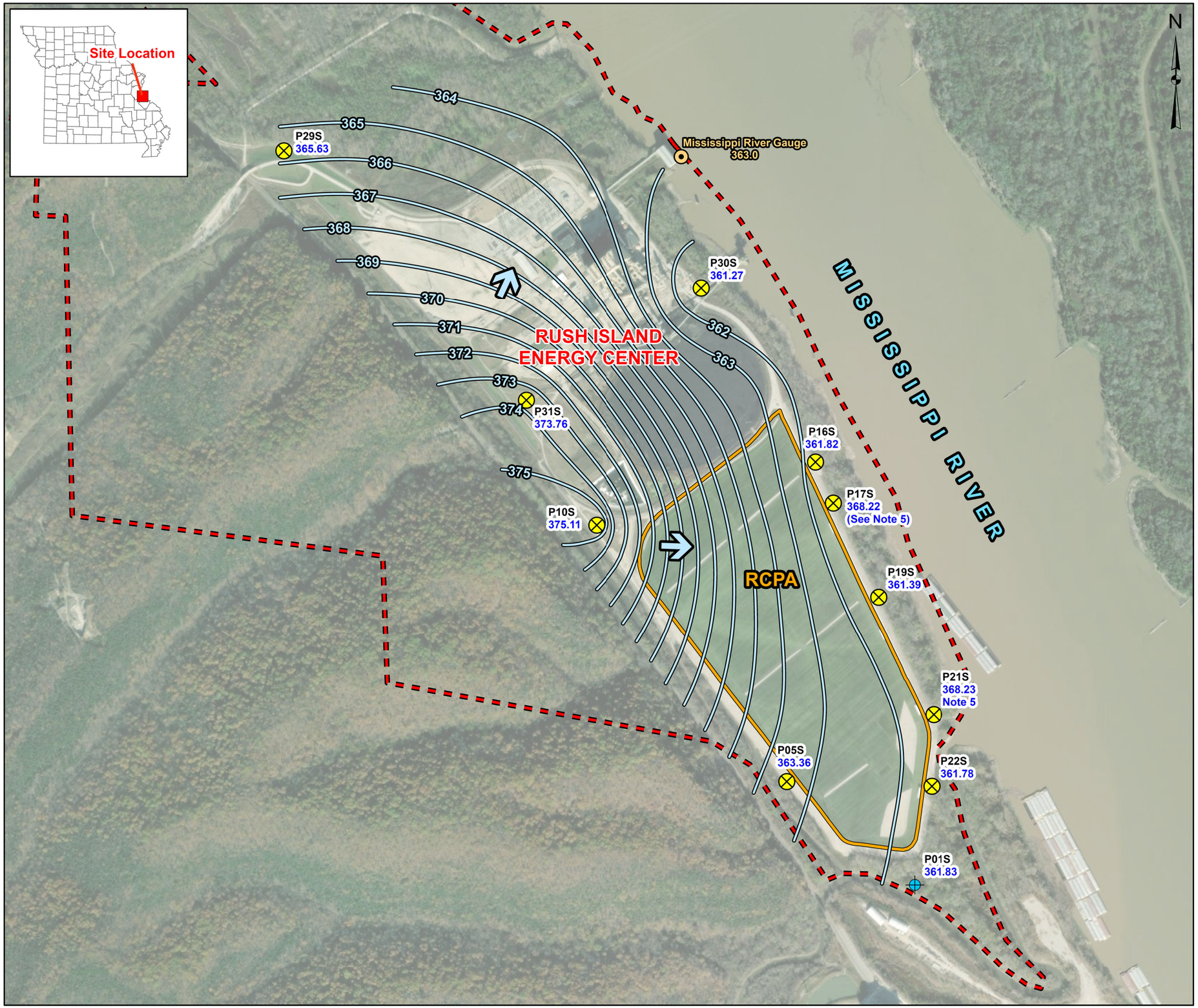
Rush Island E.C. Client: Ameren Data: RIEC DATA Printed 9/2/2025, 10:44 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
MOLYBDENUM, TOTAL (UG/L)	**R-P-19D**	**-59.05**	**-40**	**-35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
MOLYBDENUM, TOTAL (UG/L)	R-P-19I	-23.38	-30	-35	No	12	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-19S	-0.5866	-22	-35	No	12	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-21D	-15.44	-8	-35	No	12	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-21I	41.99	31	35	No	12	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-21S	-0.2509	-15	-35	No	12	25	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	**R-P-22D**	**-14.3**	**-42**	**-35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
MOLYBDENUM, TOTAL (UG/L)	R-P-22S	0.1766	4	35	No	12	0	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-30S	0.3598	40	48	No	15	46.67	n/a	n/a	0.02	NP
MOLYBDENUM, TOTAL (UG/L)	R-P-31S	0.2535	14	44	No	14	7.143	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-05S	0.07599	28	31	No	11	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-10S	0.0773	31	31	No	11	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-16S	0.04027	16	35	No	12	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-17D	0.06312	18	35	No	12	91.67	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-17I	0.1675	18	35	No	12	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-17S	0.07352	26	35	No	12	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-19D	0.01326	7	35	No	12	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-19I	0.03851	8	35	No	12	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-19S	-0.01682	-2	-35	No	12	75	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-21D	-0.0501	-4	-35	No	12	50	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-21I	-0.00...	0	35	No	12	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-21S	0.03966	10	35	No	12	91.67	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-22D	0.087	22	35	No	12	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-22S	0.05079	16	35	No	12	91.67	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-30S	0.008758	5	31	No	11	100	n/a	n/a	0.02	NP
RADIUM [226 + 228] (PCI/L)	R-P-31S	0.0192	13	27	No	10	100	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-05S	0	-12	-35	No	12	41.67	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-10S	0	-9	-31	No	11	72.73	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-16S	0.01498	5	35	No	12	0	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-17D	-0.01129	-27	-35	No	12	0	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	**R-P-17I**	**-0.2333**	**-42**	**-35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
SELENIUM, TOTAL (UG/L)	R-P-17S	0.04496	9	31	No	11	0	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	**R-P-19D**	**-0.03108**	**-42**	**-35**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.02**	**NP**
SELENIUM, TOTAL (UG/L)	R-P-19I	-0.4665	-30	-35	No	12	0	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-19S	0	0	35	No	12	100	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-21D	0	1	35	No	12	91.67	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-21I	-0.03925	-32	-35	No	12	0	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	**R-P-21S**	**-0.05902**	**-45**	**-35**	**Yes**	**12**	**33.33**	**n/a**	**n/a**	**0.02**	**NP**
SELENIUM, TOTAL (UG/L)	R-P-22D	0.04411	18	35	No	12	0	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-22S	0.07667	28	35	No	12	25	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-30S	0	2	31	No	11	27.27	n/a	n/a	0.02	NP
SELENIUM, TOTAL (UG/L)	R-P-31S	0	8	31	No	11	90.91	n/a	n/a	0.02	NP

Appendix G

2025 Potentiometric Surface Maps

FEBRUARY 5, 2025 POTENTIOMETRIC SURFACE MAP - SHALLOW ALLUVIAL AQUIFER ZONE



LEGEND

- Approximate Rush Island Energy Center Property Boundary
- RCPA Surface Impoundment

Ground/Surface Water Measurement Locations

- Mississippi River Gauge
- Corrective Action Monitoring Well
- Monitoring Well Used for Water Level Elevation Measurements Only

Groundwater Elevation Contours

- Groundwater Elevation Contour (FT MSL)
- Groundwater Flow Direction

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Groundwater elevation measurements collected by Rocksmith.
4. Mississippi River level provided by Ameren.
5. P17S and P21S were not used in potentiometric surface map contouring; well screen intervals are in lower permeability aquifer materials and their water level responses are slower than other wells in the aquifer.

REFERENCES

1. Ameren Missouri Rush Island Energy Center, Rush Island Property Control Map, January 2012.
2. Coordinate system: NAD 1983 State Plane Missouri East FIPS 2401 feet.

0 500 1,000 2,000 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

CLIENT
AMEREN MISSOURI
RUSH ISLAND ENERGY CENTER

ROCKSMITH GEOENGINEERING

DESIGN	GTM	YYYY-MM-DD	2025-04-02
PREPARED	JTR	PROJECT No.	23008-25
REVIEW	JDQ		
APPROVED	MNH		

FIGURE G1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 1 in

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FEBRUARY 5, 2025 POTENTIOMETRIC SURFACE MAP - INTERMEDIATE ALLUVIAL AQUIFER ZONE



LEGEND

- Approximate Rush Island Energy Center Property Boundary
- RCPA Surface Impoundment

Ground/Surface Water Measurement Locations

- Mississippi River Gauge
- CCR Rule Monitoring Well
- Corrective Action Monitoring Well
- Monitoring Well Used for Water Level Elevation Measurements Only

Groundwater Elevation Contours

- Groundwater Elevation Contour (FT MSL)
- Groundwater Flow Direction

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Groundwater elevation measurements collected by Rocksmith.
4. Mississippi River level provided by Ameren.

REFERENCES

1. Ameren Missouri Rush Island Energy Center, Rush Island Property Control Map, January 2012.
2. Coordinate system: NAD 1983 State Plane Missouri East FIPS 2401 feet.

0 500 1,000 2,000 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

CLIENT
AMEREN MISSOURI
RUSH ISLAND ENERGY CENTER

ROCKSMITH GEOENGINEERING

DESIGN	GTM	YYYY-MM-DD	2025-04-01
PREPARED	JTR	PROJECT No.	23008-25
REVIEW	JDQ		
APPROVED	MNH		

FIGURE G2

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 1 in 0

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FEBRUARY 5, 2025 POTENTIOMETRIC SURFACE MAP - DEEP ALLUVIAL AQUIFER ZONE

LEGEND

- Approximate Rush Island Energy Center Property Boundary
- RCPA Surface Impoundment

Ground/Surface Water Measurement Locations

- Mississippi River Gauge
- CCR Rule Monitoring Wells
- Corrective Action Monitoring Wells

Groundwater Elevation Contour

- Groundwater Elevation Contour (FT MSL)
- Groundwater Flow Direction

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Groundwater elevation measurements collected by Rocksmith.
4. Mississippi River level provided by Ameren.

REFERENCES

1. Ameren Missouri Rush Island Energy Center, Rush Island Property Control Map, January 2012.
2. Coordinate system: NAD 1983 State Plane Missouri East FIPS 2401 feet.

0 500 1,000 2,000 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

CLIENT
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PREPARED	JTR	PROJECT No.	23008-25
REVIEW	JDQ		
APPROVED	MNH		

FIGURE G3

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 1 in

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MAY 1, 2025 POTENTIOMETRIC SURFACE MAP - SHALLOW ALLUVIAL AQUIFER ZONE



LEGEND

- Approximate Rush Island Energy Center Property Boundary
- RCPA Surface Impoundment

Ground/Surface Water Measurement Locations

- Mississippi River Gauge
- Corrective Action Monitoring Well
- Monitoring Well Used for Water Level Elevation Measurements Only

Groundwater Elevation Contours

- Groundwater Elevation Contour (FT MSL)
- Groundwater Flow Direction

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Groundwater elevation measurements collected by Rocksmith.
4. Mississippi River level provided by Ameren.
5. P17S was not used in potentiometric surface map contouring; well screen interval is in lower permeability aquifer materials and their water level responses are slower than other wells in the aquifer.

REFERENCES

1. Ameren Missouri Rush Island Energy Center, Rush Island Property Control Map, January 2012.
2. Coordinate system: NAD 1983 State Plane Missouri East FIPS 2401 feet.

0 500 1,000 2,000 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

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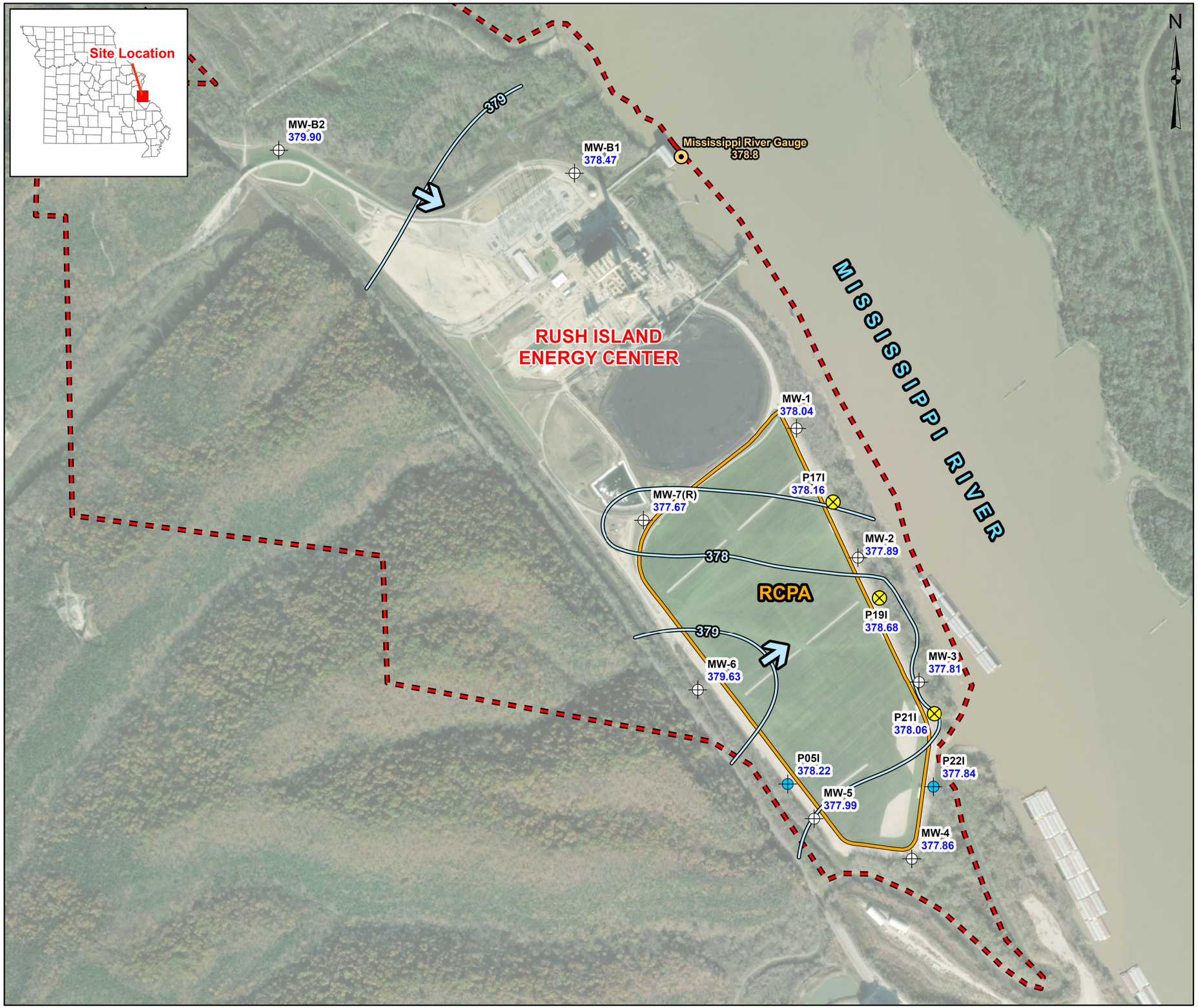
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PREPARED	JTR	PROJECT No.	23008-25
REVIEW	JDQ		
APPROVED	MNH		

FIGURE G4

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 1 in

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MAY 1, 2025 POTENTIOMETRIC SURFACE MAP - INTERMEDIATE ALLUVIAL AQUIFER ZONE



LEGEND

- Approximate Rush Island Energy Center Property Boundary
- RCPA Surface Impoundment

Ground/Surface Water Measurement Locations

- Mississippi River Gauge
- CCR Rule Monitoring Well
- Corrective Action Monitoring Well
- Monitoring Well Used for Water Level Elevation Measurements Only

Groundwater Elevation Contours

- Groundwater Elevation Contour (FT MSL)
- Groundwater Flow Direction

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Groundwater elevation measurements collected by Rocksmith.
4. Mississippi River level provided by Ameren.

REFERENCES

1. Ameren Missouri Rush Island Energy Center, Rush Island Property Control Map, January 2012.
2. Coordinate system: NAD 1983 State Plane Missouri East FIPS 2401 feet.

0 500 1,000 2,000 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

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PREPARED	JTR	PROJECT No.	23008-25
REVIEW	JDQ		
APPROVED	MNH		

FIGURE G5

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 1 in 0

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MAY 1, 2025 POTENTIOMETRIC SURFACE MAP - DEEP ALLUVIAL AQUIFER ZONE



LEGEND

- Approximate Rush Island Energy Center Property Boundary
- RCPA Surface Impoundment

Ground/Surface Water Measurement Locations

- Mississippi River Gauge
- CCR Rule Monitoring Wells
- Corrective Action Monitoring Wells

Groundwater Elevation Contour

- Groundwater Elevation Contour (FT MSL)
- Groundwater Flow Direction

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Groundwater elevation measurements collected by Rocksmith.
4. Mississippi River level provided by Ameren.

REFERENCES

1. Ameren Missouri Rush Island Energy Center, Rush Island Property Control Map, January 2012.
2. Coordinate system: NAD 1983 State Plane Missouri East FIPS 2401 feet.

0 500 1,000 2,000 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

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PREPARED	JTR	PROJECT No.	23008-25
REVIEW	JDQ		
APPROVED	MNH		

FIGURE G6

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 1 in

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JULY 11, 2025 POTENTIOMETRIC SURFACE MAP - SHALLOW ALLUVIAL AQUIFER ZONE



LEGEND

- Approximate Rush Island Energy Center Property Boundary
- RCPA Surface Impoundment

Ground/Surface Water Measurement Locations

- Mississippi River Gauge
- Corrective Action Monitoring Well
- Monitoring Well Used for Water Level Elevation Measurements Only

Groundwater Elevation Contours

- Groundwater Elevation Contour (FT MSL)
- Groundwater Flow Direction

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Groundwater elevation measurements collected by Rocksmith.
4. Mississippi River level calculated using USGS gauges at St. Louis, Mo (07010000) and Chester, Il (07020500).
5. P17S was not used in potentiometric surface map contouring; well screen interval is in lower permeability aquifer materials and their water level responses are slower than other wells in the aquifer.
6. P30S was not used in potentiometric surface calculation due to measurement error.
7. P01S was not used in potentiometric surface calculation due to measurement error.

REFERENCES

1. Ameren Missouri Rush Island Energy Center, Rush Island Property Control Map, January 2012.
2. Coordinate system: NAD 1983 State Plane Missouri East FIPS 2401 feet.

0 500 1,000 2,000 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

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PREPARED	JDQ	PROJECT No.	23008-25
REVIEW	JTR		
APPROVED	MNH		

FIGURE G7

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

1 in

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JULY 11, 2025 POTENTIOMETRIC SURFACE MAP - INTERMEDIATE ALLUVIAL AQUIFER ZONE



LEGEND

- Approximate Rush Island Energy Center Property Boundary
- RCPA Surface Impoundment

Ground/Surface Water Measurement Locations

- Mississippi River Gauge
- CCR Rule Monitoring Well
- Corrective Action Monitoring Well
- Monitoring Well Used for Water Level Elevation Measurements Only

Groundwater Elevation Contours

- Groundwater Elevation Contour (FT MSL)
- Groundwater Flow Direction

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Groundwater elevation measurements collected by Rocksmith.
4. Mississippi River level calculated using USGS gauges at St. Louis, Mo (07010000) and Chester, Il (07020500).

REFERENCES

1. Ameren Missouri Rush Island Energy Center, Rush Island Property Control Map, January 2012.
2. Coordinate system: NAD 1983 State Plane Missouri East FIPS 2401 feet.

0 500 1,000 2,000 Feet

PROJECT
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PREPARED	JDQ	PROJECT No.	23008-25
REVIEW	JTR		
APPROVED	MNH		

FIGURE G8

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

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JULY 11, 2025 POTENTIOMETRIC SURFACE MAP - DEEP ALLUVIAL AQUIFER ZONE



LEGEND

- Approximate Rush Island Energy Center Property Boundary
- RCPA Surface Impoundment

Ground/Surface Water Measurement Locations

- Mississippi River Gauge
- CCR Rule Monitoring Wells
- Corrective Action Monitoring Wells

Groundwater Elevation Contour

- Groundwater Elevation Contour (FT MSL)
- Groundwater Flow Direction

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Groundwater elevation measurements collected by Rocksmith.
4. Mississippi River level calculated using USGS gauges at St. Louis, Mo (07010000) and Chester, Il (07020500).

REFERENCES

1. Ameren Missouri Rush Island Energy Center, Rush Island Property Control Map, January 2012.
2. Coordinate system: NAD 1983 State Plane Missouri East FIPS 2401 feet.

0 500 1,000 2,000 Feet

PROJECT
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DESIGN	GTM	YYYY-MM-DD	2025-12-16
PREPARED	JDQ	PROJECT No.	23008-25
REVIEW	JTR		
APPROVED	MNH		

FIGURE G9

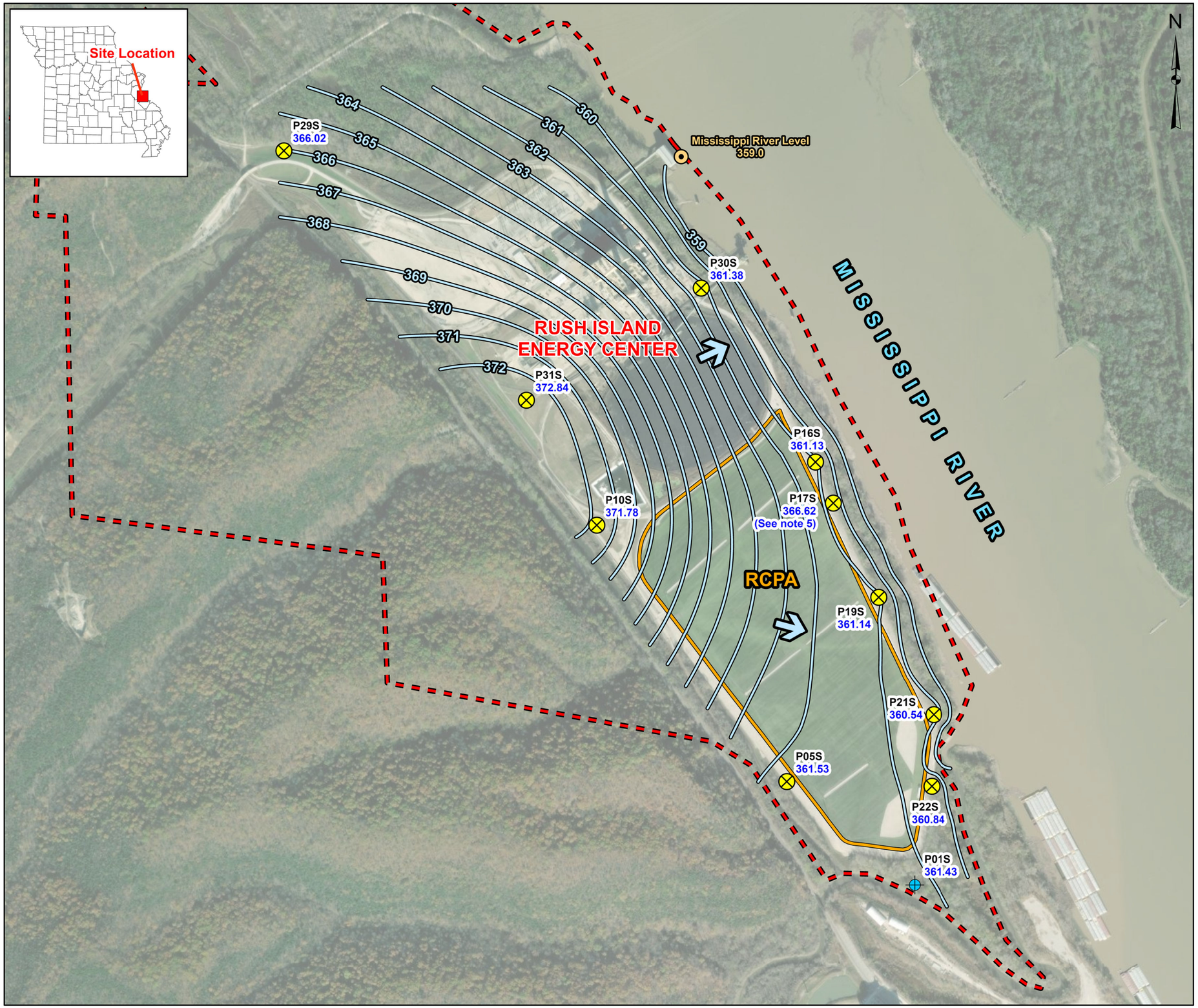
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OCTOBER 13, 2025 POTENTIOMETRIC SURFACE MAP - SHALLOW ALLUVIAL AQUIFER ZONE



LEGEND

- Approximate Rush Island Energy Center Property Boundary
- RCPA Surface Impoundment

Ground/Surface Water Measurement Locations

- Mississippi River Gauge
- Corrective Action Monitoring Well
- Monitoring Well Used for Water Level Elevation Measurements Only

Groundwater Elevation Contours

- Groundwater Elevation Contour (FT MSL)
- Groundwater Flow Direction

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Groundwater elevation measurements collected by Rocksmith.
4. Mississippi River level calculated using USGS gauges at St. Louis, Mo (07010000) and Chester, Il (07020500).
5. P17S was not used in potentiometric surface map contouring; well screen interval is in lower permeability aquifer materials and their water level responses are slower than other wells in the aquifer.

REFERENCES

1. Ameren Missouri Rush Island Energy Center, Rush Island Property Control Map, January 2012.
2. Coordinate system: NAD 1983 State Plane Missouri East FIPS 2401 feet.

0 500 1,000 2,000 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

CLIENT
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PREPARED	JDQ	PROJECT No.	23008-25
REVIEW	JTR		
APPROVED	MNH		

FIGURE G10

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

1 in

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OCTOBER 13, 2025 POTENTIOMETRIC SURFACE MAP - INTERMEDIATE ALLUVIAL AQUIFER ZONE



LEGEND

- Approximate Rush Island Energy Center Property Boundary
- RCPA Surface Impoundment

Ground/Surface Water Measurement Locations

- Mississippi River Gauge
- CCR Rule Monitoring Well
- Corrective Action Monitoring Well
- Monitoring Well Used for Water Level Elevation Measurements Only

Groundwater Elevation Contours

- Groundwater Elevation Contour (FT MSL)
- Groundwater Flow Direction

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Groundwater elevation measurements collected by Rocksmith.
4. Mississippi River level calculated using USGS gauges at St. Louis, Mo (07010000) and Chester, Il (07020500).

REFERENCES

1. Ameren Missouri Rush Island Energy Center, Rush Island Property Control Map, January 2012.
2. Coordinate system: NAD 1983 State Plane Missouri East FIPS 2401 feet.

0 500 1,000 2,000 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

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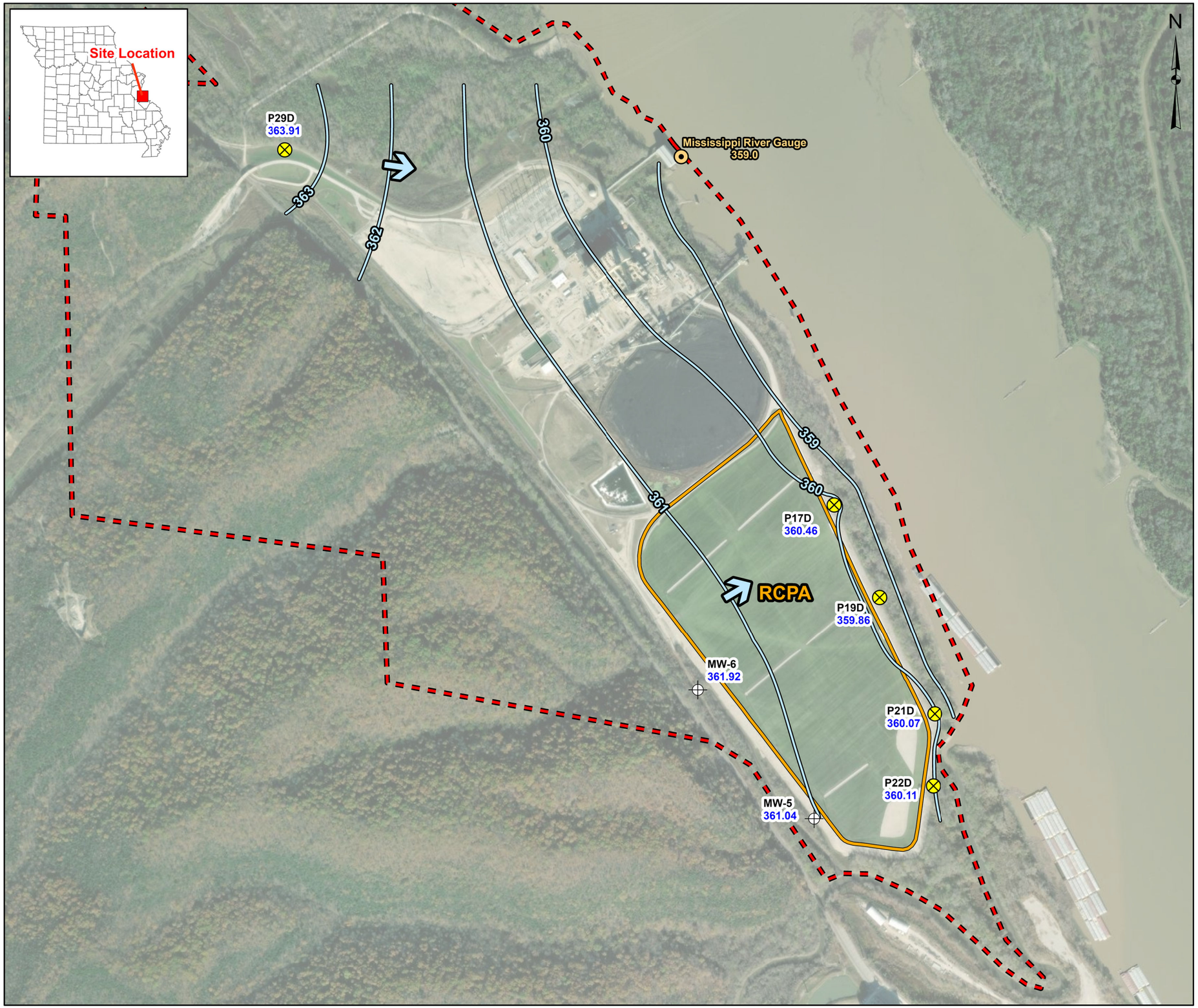
ROCKSMITH GEOENGINEERING

DESIGN	GTM	YYYY-MM-DD	2025-12-16
PREPARED	JDQ	PROJECT No.	23008-25
REVIEW	JTR		
APPROVED	MNH		

FIGURE G11

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

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OCTOBER 13, 2025 POTENTIOMETRIC SURFACE MAP - DEEP ALLUVIAL AQUIFER ZONE

LEGEND

- Approximate Rush Island Energy Center Property Boundary
- RCPA Surface Impoundment

Ground/Surface Water Measurement Locations

- Mississippi River Gauge
- CCR Rule Monitoring Wells
- Corrective Action Monitoring Wells

Groundwater Elevation Contour

- Groundwater Elevation Contour (FT MSL)
- Groundwater Flow Direction

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Groundwater elevation measurements collected by Rocksmith.
4. Mississippi River level calculated using USGS gauges at St. Louis, Mo (07010000) and Chester, Il (07020500).

REFERENCES

1. Ameren Missouri Rush Island Energy Center, Rush Island Property Control Map, January 2012.
2. Coordinate system: NAD 1983 State Plane Missouri East FIPS 2401 feet.

0 500 1,000 2,000 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

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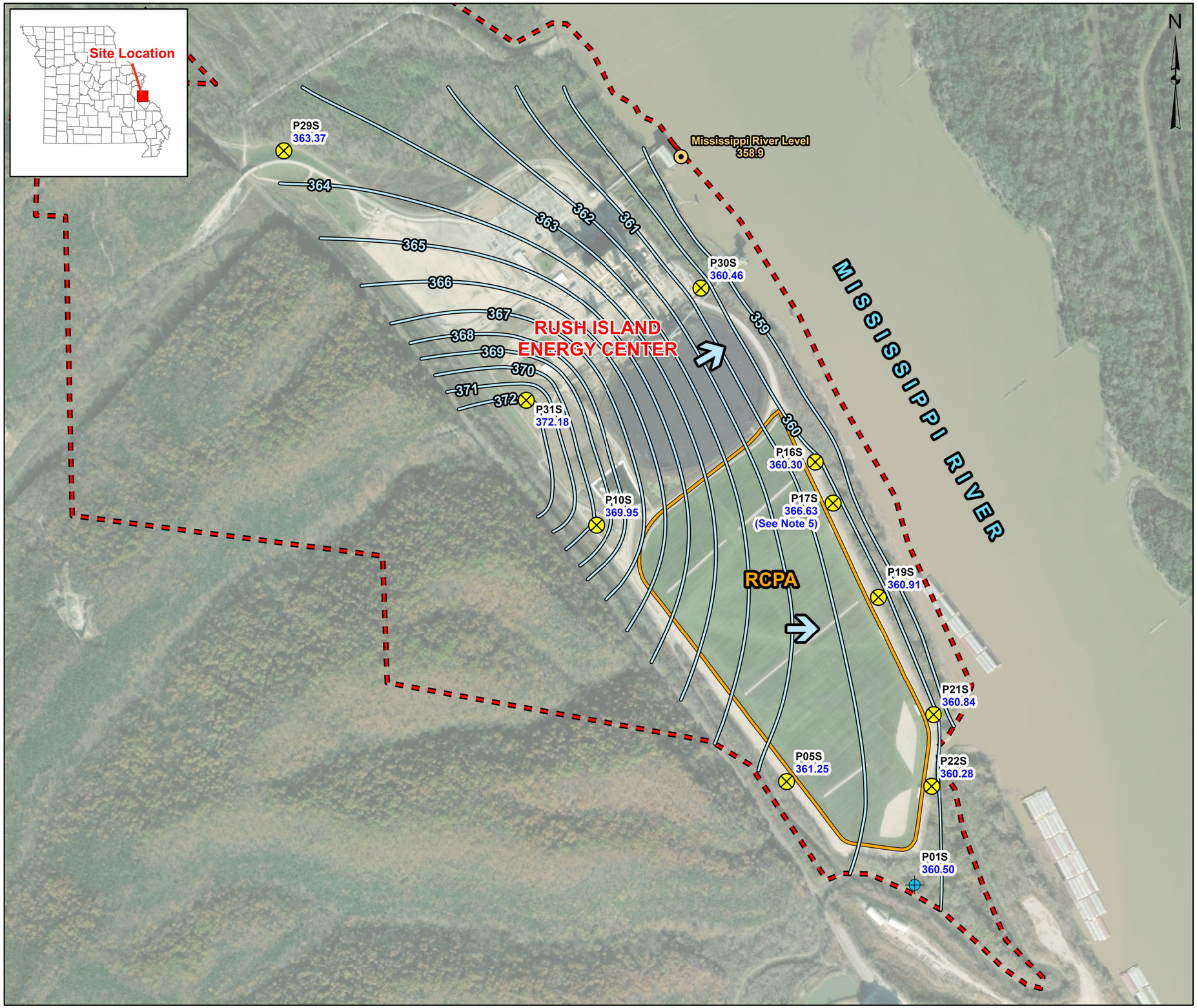
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PREPARED	JDQ	PROJECT No.	23008-25
REVIEW	JTR		
APPROVED	MNH		

FIGURE G12

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

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DECEMBER 1, 2025 POTENTIOMETRIC SURFACE MAP - SHALLOW ALLUVIAL AQUIFER ZONE



LEGEND

- Approximate Rush Island Energy Center Property Boundary
- RCPA Surface Impoundment

Ground/Surface Water Measurement Locations

- Mississippi River Gauge
- Corrective Action Monitoring Well
- Monitoring Well Used for Water Level Elevation Measurements Only

Groundwater Elevation Contours

- Groundwater Elevation Contour (FT MSL)
- Groundwater Flow Direction

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Groundwater elevation measurements collected by Rocksmith.
4. Mississippi River level calculated using USGS gauges at St. Louis, Mo (07010000) and Chester, Il (07020500).
5. P17S was not used in potentiometric surface map contouring; well screen interval is in lower permeability aquifer materials and their water level responses are slower than other wells in the aquifer.

REFERENCES

1. Ameren Missouri Rush Island Energy Center, Rush Island Property Control Map, January 2012.
2. Coordinate system: NAD 1983 State Plane Missouri East FIPS 2401 feet.

0 500 1,000 2,000 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

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PREPARED	JDQ	PROJECT No.	23008-25
REVIEW	JTR		
APPROVED	MNH		

FIGURE G13

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

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DECEMBER 1, 2025 POTENTIOMETRIC SURFACE MAP - INTERMEDIATE ALLUVIAL AQUIFER ZONE



LEGEND

- Approximate Rush Island Energy Center Property Boundary
- RCPA Surface Impoundment

Ground/Surface Water Measurement Locations

- Mississippi River Gauge
- CCR Rule Monitoring Well
- Corrective Action Monitoring Well
- Monitoring Well Used for Water Level Elevation Measurements Only

Groundwater Elevation Contours

- Groundwater Elevation Contour (FT MSL)
- Groundwater Flow Direction

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Groundwater elevation measurements collected by Rocksmith.
4. Mississippi River level calculated using USGS gauges at St. Louis, Mo (07010000) and Chester, Il (07020500).

REFERENCES

1. Ameren Missouri Rush Island Energy Center, Rush Island Property Control Map, January 2012.
2. Coordinate system: NAD 1983 State Plane Missouri East FIPS 2401 feet.

0 500 1,000 2,000 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

CLIENT
AMEREN MISSOURI
RUSH ISLAND ENERGY CENTER

ROCKSMITH GEOENGINEERING

DESIGN	GTM	YYYY-MM-DD	2025-12-17
PREPARED	JDQ	PROJECT No.	23008-25
REVIEW	GTM		
APPROVED	MNH		

FIGURE G14

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

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DECEMBER 1, 2025 POTENTIOMETRIC SURFACE MAP - DEEP ALLUVIAL AQUIFER ZONE



LEGEND

- Approximate Rush Island Energy Center Property Boundary
- RCPA Surface Impoundment

Ground/Surface Water Measurement Locations

- Mississippi River Gauge
- CCR Rule Monitoring Wells
- Corrective Action Monitoring Wells

Groundwater Elevation Contour

- Groundwater Elevation Contour (FT MSL)
- Groundwater Flow Direction

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Groundwater elevation measurements collected by Rocksmith.
4. Mississippi River level calculated using USGS gauges at St. Louis, Mo (07010000) and Chester, Il (07020500).

REFERENCES

1. Ameren Missouri Rush Island Energy Center, Rush Island Property Control Map, January 2012.
2. Coordinate system: NAD 1983 State Plane Missouri East FIPS 2401 feet.

0 500 1,000 2,000 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

CLIENT
AMEREN MISSOURI
RUSH ISLAND ENERGY CENTER

ROCKSMITH GEOENGINEERING

DESIGN	GTM	YYYY-MM-DD	2025-12-17
PREPARED	JDQ	PROJECT No.	23008-25
REVIEW	JTR		
APPROVED	MNH		

FIGURE G15

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

1 in

0

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