

REPORT

2025 Annual Groundwater Monitoring and Corrective Action Report

SCPB Surface Impoundment, Sioux Energy Center, St. Charles County, Missouri, USA

January 31, 2026

Project Number: 23009-25

Submitted to:



Ameren Missouri
1901 Chouteau Avenue
St. Louis, Missouri 63103

Submitted by:



Rocksmith Geoengineering, LLC
2320 Creve Coeur Mill Rd
Maryland Heights, MO 63043



EXECUTIVE SUMMARY AND STATUS OF THE SCPB 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 SCPB Coal Combustion Residuals (CCR) Surface Impoundment at the Sioux Energy Center (SEC) is subject to the requirements of the CCR Rule. This Annual Report for the SCPB 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 SCPB CCR unit has been operating under the Detection Monitoring Program (§257.94), which began October 17, 2017. As a part of Detection Monitoring, statistical evaluations are completed after each groundwater sampling event to determine if there are any values that represent a Statistically Significant Increase (SSI) over background concentrations. SSIs have been determined during each sampling event and a summary of the SSIs for the past year is provided in **Table 1**.

Table 1 - Summary of 2025 SCPB Sampling Events, Previous Year Verification, and Statistical Evaluations

Event Name	Type of Event and Sampling Dates	Laboratory Analytical Data Receipt	Parameters Collected	Verified SSIs	SSI Determination Date	ASD Completion Date
November 2024 Sampling Event	Detection Monitoring, November 14-20, 2024	December 23, 2024	Appendix III, Major Cations and Anions	Boron: LMW-1S, LMW-2S, LMW-3S, LMW-4S, LMW-5S, LMW-6S, LMW-7S, LMW-8S, LMW-9S Calcium: LMW-4S, LMW-5S, LMW-6S, LMW-7S, LMW-8S, LMW-9S Chloride: LMW-1S, LMW-2S, LMW-7S, LMW-8S, LMW-9S Sulfate: LMW-1S, LMW-2S, LMW-5S, LMW-6S, LMW-7S, LMW-8S, LMW-9S TDS: LMW-1S, LMW-2S, LMW-4S, LMW-5S, LMW-6S, LMW-7S, LMW-8S, LMW-9S	March 23, 2025	June 20, 2025
	Verification Sampling, February 6-7, 2025	February 21, 2025	Detected Appendix III parameters ^(See Note 1)			
May 2025 Sampling Event	Detection Monitoring, May 7-12, 2025	June 27, 2025	Appendix III, Major Cations and Anions	Boron: LMW-1S, LMW-2S, LMW-3S, LMW-4S, LMW-5S, LMW-6S, LMW-7S, LMW-8S, LMW-9S Calcium: LMW-4S, LMW-5S, LMW-6S, LMW-7S, LMW-8S Chloride: LMW-1S, LMW-2S, LMW-7S, LMW-8S, LMW-9S Sulfate: LMW-1S, LMW-2S, LMW-5S, LMW-6S, LMW-7S, LMW-8S, LMW-9S TDS: LMW-1S, LMW-2S, LMW-4S, LMW-5S, LMW-6S, LMW-7S, LMW-8S, LMW-9S	September 25, 2025	December 24, 2025
	Verification Sampling July 9, 2025	July 25, 2025	Detected Appendix III parameters ^(See Note 1)			
October 2025 Sampling Event	Detection Monitoring, October 3-8, 2025	November 12, 2025	Appendix III, Major Cations and Anions	Boron: LMW-1S, LMW-2S, LMW-3S, LMW-4S, LMW-5S, LMW-6S, LMW-7S, LMW-8S, LMW-9S Calcium: LMW-4S, LMW-5S, LMW-6S, LMW-7S, LMW-8S Chloride: LMW-1S, LMW-2S, LMW-5S, LMW-7S, LMW-8S, LMW-9S Fluoride: LMW-5S Sulfate: LMW-1S, LMW-2S, LMW-5S, LMW-6S, LMW-7S, LMW-8S, LMW-9S TDS: LMW-1S, LMW-2S, LMW-4S, LMW-5S, LMW-6S, LMW-7S, LMW-8S	January 31, 2026	To be evaluated in 2026
	Verification Sampling December 3-4, 2025	December 22, 2025	Detected Appendix III parameters ^(See Note 1)			

Notes:

- 1) Only analytes/wells that were detected above the prediction limit and that were not previously verified as SSIs were tested during Verification Sampling.
- 2) SSI – Statistically Significant Increase.
- 3) ASD – Alternative Source Demonstration.
- 4) TDS – Total Dissolved Solids.

As outlined in section 257.94(e)(2) of the CCR Rule, the owner or operator may demonstrate that a source other than the CCR Unit has caused an SSI and that the apparent SSI was the result of an alternative source or resulted from errors in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Alternative Source Demonstrations (ASDs) were prepared for the November 2024 and May 2025 sampling events and are discussed further in this Annual Report. An ASD will be evaluated for the October 2025 sampling event in 2026.

There were no changes made to the SCPB monitoring network in 2025 with no new wells being installed or decommissioned. Capping and closure of the SCPB was fully completed in 2022 with closure certification dated October 14, 2022. As outlined in §257.104 (Post-closure Care Requirements) of the CCR Rule, now that the SCPB CCR unit has been successfully closed, the monitoring system and programs must be maintained for at least 30 years after the completion of closure.

Table of Contents

1.0	Installation or Decommissioning of Monitoring Wells.....	1
2.0	Groundwater Sampling Results and Discussion.....	1
2.1	Detection Monitoring Program	1
2.2	Groundwater Elevation, Flow Rate and Direction	2
2.3	Sampling Issues	2
3.0	Activities Planned for 2026.....	3

TABLES

Table 1 - Summary of 2025 SCPB Sampling Events, Previous Year Verification, and Statistical Evaluations (in executive summary)

Table 2 - Summary of Groundwater Sampling Dates (in text)

Table 3 - November 2024 Detection Monitoring Results

Table 4 - May 2025 Detection Monitoring Results

Table 5 - October 2025 Detection Monitoring Results

FIGURES

Figure 1 - Sioux Energy Center Groundwater Monitoring Programs and Sample Location Map

APPENDICES

Appendix A - Laboratory Analytical Data

Appendix B - Alternative Source Demonstration – November 2024 Sampling Event

Appendix C - Alternative Source Demonstration – May 2025 Sampling Event

Appendix D - 2025 Potentiometric Surface Maps

1.0 INSTALLATION OR DECOMMISSIONING OF MONITORING WELLS

In accordance with the CCR Rule, a groundwater monitoring system has been installed to monitor the SCPB. The groundwater monitoring system consists of eleven groundwater monitoring wells screened in the uppermost aquifer and is displayed in **Figure 1** and as listed on **Table 2**, below. No new monitoring wells were installed or decommissioned in 2025 as a part of the CCR Rule monitoring network for the SCPB. For more information on the groundwater monitoring network, details are provided in the previous Annual Groundwater Monitoring Reports for the SCPB.

2.0 GROUNDWATER SAMPLING RESULTS AND DISCUSSION

The following sections discuss the sampling events completed for the SCPB CCR Unit in 2025. **Table 2** below provides a summary of the groundwater samples collected in 2025 including the quantities of samples, sample collection dates, and the monitoring program for which samples were collected.

Table 2 – Summary of Groundwater Sampling Dates

Sampling Event	Groundwater Monitoring Wells											Monitoring Program
	BMW-1S	BMW-3S	LMW-1S	LMW-2S	LMW-3S	LMW-4S	LMW-5S	LMW-6S	LMW-7S	LMW-8S	LMW-9S	
	Date of Sample Collection											
February 2025 Verification Sampling	-	-	-	-	-	-	-	2/6/2025	-	2/7/2025	2/6/2025	Detection
May 2025 Sampling	5/7/2025	5/7/2025	5/12/2025	5/7/2025	5/8/2025	5/9/2025	5/12/2025	5/12/2025	5/12/2025	5/12/2025	5/9/2025	Detection
July 2025 Verification Sampling	-	-	-	-	7/9/2025	-	-	-	-	-	-	Detection
October 2025 Sampling	10/6/2025	10/6/2025	10/6/2025	10/7/2025	10/8/2025	10/7/2025	10/3/2025	10/3/2025	10/8/2025	10/8/2025	10/6/2025	Detection
December 2025 Verification Sampling	-	-	-	-	-	-	12/3/2025	-	-	-	12/4/2025	Detection
Total Number of Samples Collected	2	2	2	2	3	2	3	3	2	3	4	NA

Notes:

- 1) Detection Monitoring events tested for Appendix III Parameters.
- 2) Verification Sampling events tested for Appendix III Parameters with initial exceedances that have not already been verified.
- 3) "-" No sample collected.
- 4) NA – Not applicable.

2.1 Detection Monitoring Program

A Detection Monitoring groundwater sampling event was completed November 14-20, 2024. Verification sampling and the statistical analysis to evaluate for SSIs for the November 2024 event were not completed until 2025 and are included in this report. New initial exceedances of some Appendix III analytes triggered a verification sampling event, which was completed between February 6-7, 2025, and verified no new SSIs. **Table 3** summarizes the results and statistical analysis of the November 2024 Detection Monitoring event. Laboratory analytical data from the February 2025 verification sampling event and all other sampling events completed in 2025 is provided in **Appendix A**. Laboratory Analytical data for the November 2024 Detection Monitoring event are provided in the 2024 Groundwater Monitoring and Corrective Action Annual Report for the SCPB.

As outlined in section 257.94(e)(2) of the CCR Rule, the owner or operator may demonstrate that a source other than the CCR unit has caused an SSI and that the apparent SSI was the result of an alternative source or resulted from errors in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. An ASD was completed for the SSIs indicated on **Table 3** and is provided in **Appendix B**. This ASD demonstrates that SSIs at the monitoring wells around the SCPB are not caused by the SCPB CCR Unit, and therefore, the SCPB CCR Unit remains in Detection Monitoring.

Detection Monitoring samples were collected May 7-12, 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 prediction limits used to determine an SSI were updated according to the Statistical Analysis Plan. There was one new initial exceedance of an Appendix III analyte, and verification sampling was conducted on July 9, 2025. Verification sampling did not verify the new initial exceedance as an SSI. **Table 4** summarizes the results and statistical analysis of the May 2025 Detection Monitoring event. Similar to the previous sampling event, it was determined the SSIs are not caused by the SCPB CCR unit, as demonstrated by the ASD provided in **Appendix C**.

A Detection Monitoring sampling event was completed between October 3-8, 2025, and testing was completed for all Appendix III analytes, as well as major cations and anions. New initial exceedances of Appendix III analytes triggered a verification sampling event, which was completed December 3-4, 2025. Verification sampling confirmed two new SSIs. **Table 5** summarizes the results and statistical analysis of the October 2025 Detection Monitoring event. The ASD associated with the October 2025 sampling event will be evaluated in 2026.

2.2 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 D**. As shown on the potentiometric surface maps, groundwater flow direction within the uppermost aquifer is dynamic and influenced by seasonal changes in the water level in the adjacent Mississippi and Missouri Rivers, which affect water levels, gradients and flow directions in the alluvial aquifer. Groundwater in the alluvial aquifer will generally flow from the higher of the two rivers toward the lower water elevation 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. At this facility, groundwater can flow north and south toward the Mississippi and Missouri Rivers, depending on river levels.

Groundwater flow direction and hydraulic gradient at the SEC were estimated for the alluvial aquifer wells using commercially available software to evaluate manually collected water level data since 2016. Results indicate that groundwater flow direction at the SEC is variable due to fluctuating river levels but generally flows to the south. The overall net groundwater flow direction in the alluvial aquifer at the SEC was south-southeast in 2025 because of river level differences between the Missouri and Mississippi Rivers. From 2016 through 2025, horizontal gradients have ranged from 0.00006 to 0.001 feet/foot with an estimated net annual groundwater movement of approximately 10 feet per year in the prevailing downgradient direction. Based on water level data collected in 2025, net annual groundwater movement across the site during the year was approximately 8 feet to the south-southeast.

2.3 Sampling Issues

Following a courier issue, wells LMW-7S and LMW-8S were resampled due to arriving at the laboratory outside of the hold temperature control range. These wells were originally sampled on October 3, 2025 and were resampled on October 8, 2025. Results from the resampling are reported and the original samples were discarded by the laboratory.

There were no other notable sampling issues associated with SCPB groundwater monitoring in 2025.

3.0 ACTIVITIES PLANNED FOR 2026

Detection Monitoring is scheduled to continue on a semi-annual basis in the second and fourth quarters of 2026. The ASD associated with the October 2025 sampling event will be completed in 2026.

Tables

Table 3
November 2024 Detection Monitoring Results
SCPB Surface Impoundment
Sioux Energy Center, St. Charles County, MO

ANALYTE	UNITS	PREDICTION LIMITS	BACKGROUND		GROUNDWATER MONITORING WELLS								
			BMW-1S	BMW-3S	LMW-1S	LMW-2S	LMW-3S	LMW-4S	LMW-5S	LMW-6S	LMW-7S	LMW-8S	LMW-9S
November 2024 Detection Monitoring Event													
DATE	NA	NA	11/20/2024	11/20/2024	11/14/2024	11/19/2024	11/19/2024	11/19/2024	11/15/2024	11/15/2024	11/15/2024	11/15/2024	11/15/2024
pH	SU	6.515-7.42	6.57	6.72	7.26	6.97	6.58	6.83	6.65	6.50	6.75	6.36	6.24
BORON, TOTAL	µg/L	118	61.9 J	57.3 J	1,240	9,060	151	310	17,700	17,800	3,700	7,410	986
CALCIUM, TOTAL	µg/L	174,465	175,000	113,000	142,000	172,000	143,000	220,000	236,000	259,000	213,000	342,000 J	201,000
CHLORIDE, TOTAL	mg/L	13.65	14.2	13.1	175 J	137	13.3	3.3	10.6 J	6.4 J	31.6	205	39.2
FLUORIDE, TOTAL	mg/L	0.46	ND	ND	0.34 J	ND	0.32	ND	0.37 J	0.33 J	ND	0.48 J	0.21 J
SULFATE, TOTAL	mg/L	61.1	37.1	17.1	108 J	234	46.3	33.3	915 J	547 J	396	745	158
TOTAL DISSOLVED SOLIDS	mg/L	608.2	613	413	713	892 J	569	785 J	1,630	1,290	998	1,870	992
February 2025 Verification Sampling Event													
DATE	NA	NA								2/6/2025		2/7/2025	2/6/2025
pH	SU	6.515-7.42								6.58		6.93	6.69
BORON, TOTAL	µg/L	118											
CALCIUM, TOTAL	µg/L	174,465											
CHLORIDE, TOTAL	mg/L	13.65											
FLUORIDE, TOTAL	mg/L	0.46										0.18 J	
SULFATE, TOTAL	mg/L	61.1											
TOTAL DISSOLVED SOLIDS	mg/L	608.2											

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. 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.
4. NA - Not applicable.
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 4
May 2025 Detection Monitoring Results
SCPB Surface Impoundment
Sioux Energy Center, St. Charles County, MO

ANALYTE	UNITS	PREDICTION LIMITS	BACKGROUND		GROUNDWATER MONITORING WELLS									
			BMW-1S	BMW-3S	LMW-1S	LMW-2S	LMW-3S	LMW-4S	LMW-5S	LMW-6S	LMW-7S	LMW-8S	LMW-9S	
May 2025 Detection Monitoring Event														
DATE	NA	NA	5/7/2025	5/7/2025	5/12/2025	5/7/2025	5/8/2025	5/9/2025	5/12/2025	5/12/2025	5/12/2025	5/12/2025	5/12/2025	5/9/2025
pH	SU	6.5152-7.3857	6.82	6.85	7.19	6.96	6.71	6.79	6.85	6.80	6.83	6.83	6.95	6.77
BORON, TOTAL	µg/L	118	56.5 J	55.1 J	900	8,970	153	216	18,000	16,700	2,870	6,520	853	
CALCIUM, TOTAL	µg/L	176,246	177,000 J	129,000	130,000	169,000 J	144,000	230,000	221,000	248,000	185,000 J	339,000	140,000 J	
CHLORIDE, TOTAL	mg/L	14.152	11.4	10.6	130	128	22.3 J	2.6 J	9.7	3.5	50.1	194 J	58.0	
FLUORIDE, TOTAL	mg/L	0.46	0.26	0.30	ND	0.17 J	0.18 J	ND	ND	ND	ND	ND	0.23	
SULFATE, TOTAL	mg/L	42.073	35.1	24.5	93.6	219	32.7 J	31.2 J	113	684	321	660 J	113	
TOTAL DISSOLVED SOLIDS	mg/L	634.46	615	449	691	946	580	878	1,700	1,310	889	1,770	747	
July 2025 Verification Sampling Event														
DATE	NA	NA					7/9/2025							
pH	SU	6.5152-7.3857												
BORON, TOTAL	µg/L	118												
CALCIUM, TOTAL	µg/L	176246												
CHLORIDE, TOTAL	mg/L	14.152					8.6							
FLUORIDE, TOTAL	mg/L	0.46												
SULFATE, TOTAL	mg/L	42.073												
TOTAL DISSOLVED SOLIDS	mg/L	634.46												

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. 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.
4. NA - Not applicable.
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 5
October 2025 Detection Monitoring Results
SCPB Surface Impoundment
Sioux Energy Center, St. Charles County, MO

ANALYTE	UNITS	PREDICTION LIMITS	BACKGROUND		GROUNDWATER MONITORING WELLS									
			BMW-1S	BMW-3S	LMW-1S	LMW-2S	LMW-3S	LMW-4S	LMW-5S	LMW-6S	LMW-7S	LMW-8S	LMW-9S	
October 2025 Detection Monitoring Event														
DATE	NA	NA	10/6/2025	10/6/2025	10/6/2025	10/7/2025	10/8/2025	10/7/2025	10/3/2025	10/3/2025	10/8/2025	10/8/2025	10/6/2025	
pH	SU	6.5152-7.3857	6.68	6.85	7.20	7.02	6.95	6.83	6.96	6.70	6.83	6.65	6.89	
BORON, TOTAL	µg/L	118	68.5 J	62.1 J	910	7,650	133	225	14,600	15,900	3,310	6,420	706	
CALCIUM, TOTAL	µg/L	176,246	168,000	129,000	134,000	138,000	106,000	232,000	204,000	237,000	194,000	301,000 J	110,000	
CHLORIDE, TOTAL	mg/L	14.152	11.4	9.6	123	86.0	3.4	4.0	21.3	4.3	23.4	206	73.4	
FLUORIDE, TOTAL	mg/L	0.46	0.27	0.30	0.26	0.37	0.36	0.14	0.48	0.15	0.26	0.24	0.60	
SULFATE, TOTAL	mg/L	42.073	39.2	35.6	93.6	188	35.5	36.4	745	458	336	543	105	
TOTAL DISSOLVED SOLIDS	mg/L	634.46	596	477	685	748	418	841	1,480	1,280	952	1,560	600	
December 2025 Verification Sampling Event														
DATE	NA	NA							12/3/2025				12/4/2025	
pH	SU	6.5152-7.3857												
BORON, TOTAL	µg/L	118												
CALCIUM, TOTAL	µg/L	176,246												
CHLORIDE, TOTAL	mg/L	14.152							24.1					
FLUORIDE, TOTAL	mg/L	0.46							0.50 J				0.41 J	
SULFATE, TOTAL	mg/L	42.073												
TOTAL DISSOLVED SOLIDS	mg/L	634.46												

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. 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.
4. NA - Not applicable.
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.

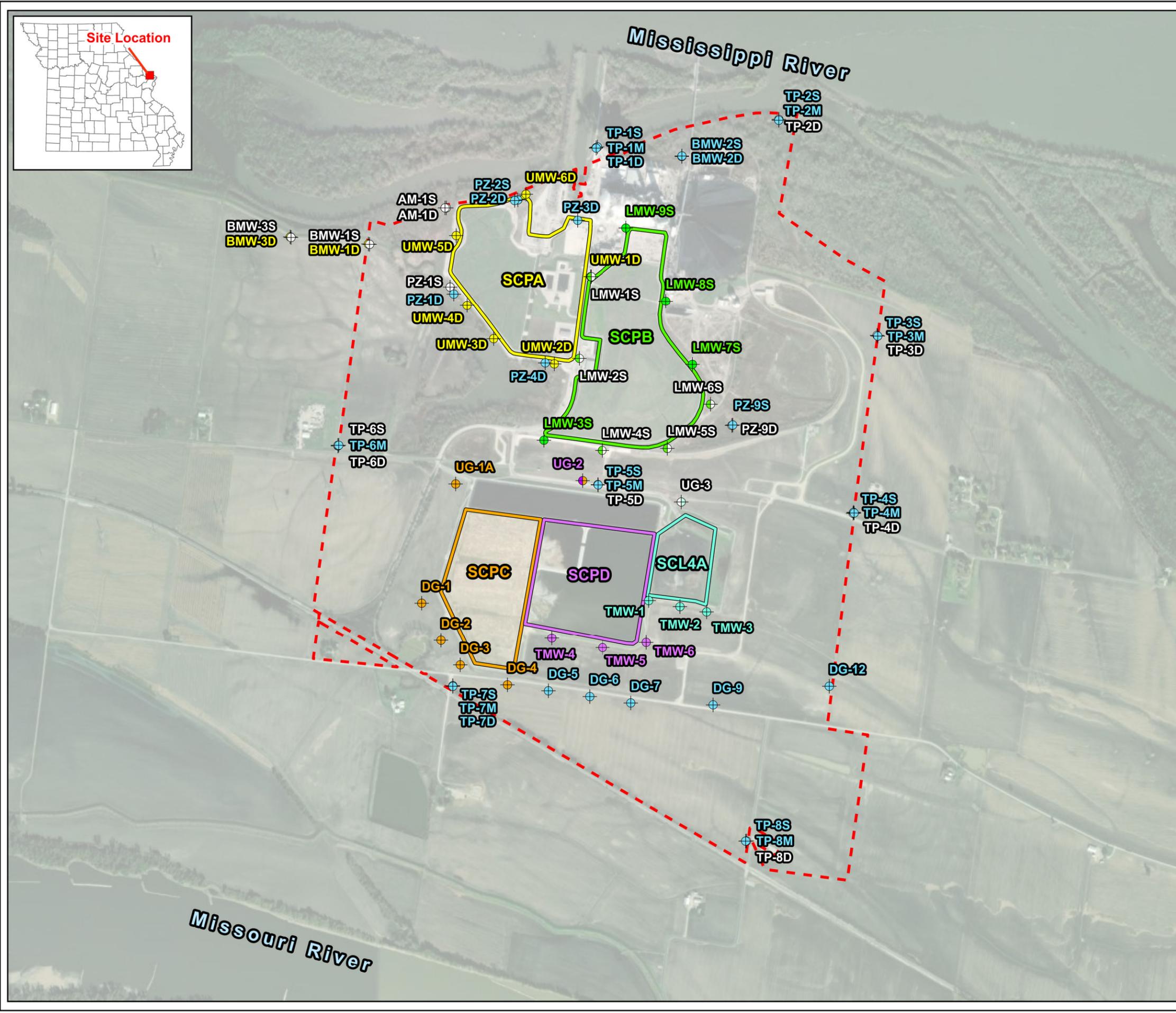
Prepared By: GTM
Checked By: JDQ
Reviewed By: JSI

Figures



TITLE
SIoux ENERGY CENTER GROUNDWATER MONITORING PROGRAMS AND SAMPLE LOCATION MAP

- Legend**
- Sioux Energy Center Property Boundary
 - CCR Units**
 - SCPA - Unlined Bottom Ash Surface Impoundment (Closed)
 - SCPB - Lined Fly Ash Surface Impoundment (Closed)
 - Utility Waste Landfill Cells**
 - SCL4A - Dry CCR Disposal Area
 - SCPC - FGD Surface Impoundment (Closed)
 - SCPD - FGD Surface Impoundment
 - Monitoring Well Networks**
 - + Corrective Action Monitoring Well
 - + SCPA Detection and Assessment Monitoring Well
 - + SCPB and Corrective Action Monitoring Well
 - + SCPB Detection Monitoring Well
 - + SCPC Detection Monitoring Well
 - + SCPD and SCPC Detection Monitoring Well
 - + SCPD Detection Monitoring Well
 - + SCL4A and Corrective Action Monitoring Well
 - + SCL4A Detection Monitoring Well
 - + Monitoring Well Used for Water Level Elevation Measurements Only



- NOTES**
- All boundaries and locations are approximate.
 - FGD - Flue Gas Desulfurization.
 - CCR - Coal Combustion Residuals.

- REFERENCES**
- St Charles County, Missouri Geo-Data & Mapping Hub, Parcel Dataset, Updated April 2025.



PROJECT
 CCR RULE GROUNDWATER MONITORING PROGRAM

CLIENT
 AMEREN MISSOURI
 SIOUX ENERGY CENTER

	DESIGN	JSI	YYYY-MM-DD	2025-06-02
	PREPARED	GTM	PROJECT No.	23009-25
	REVIEW	JSI	FIGURE 1	
	APPROVED	MNH		

Path: C:\Users\CramMosey\RockSmith Geoenvironmenting LLC\202007 - Ameren GW - Documents\400 - Drawings - Figures\4.3-SECC\4.3.2 - Production\2025\CD\Figure 1 - Well Locations - No Extrusion Locations.aprx

1" IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM:

Appendix A

Laboratory Analytical Data



February 21, 2025

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

RE: Project: AMEREN SCPB-VERIFICATION
Pace Project No.: 60469218

Dear Mark Haddock:

Enclosed are the analytical results for sample(s) received by the laboratory on February 08, 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



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



CERTIFICATIONS

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60469218

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219

Arkansas Certification #: 88-00679

Illinois Certification #: 2000302023-6

Colorado Division of Oil and Public Safety

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



SAMPLE SUMMARY

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60469218

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60469218001	S-LMW-8S	Water	02/07/25 11:10	02/08/25 05:44
60469218002	S-LMW-DUP-1	Water	02/07/25 08:00	02/08/25 05:44
60469218003	S-LMW-FB-1	Water	02/07/25 10:55	02/08/25 05:44

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



SAMPLE ANALYTE COUNT

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60469218

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60469218001	S-LMW-8S	EPA 300.0	AAA	1	PASI-K
60469218002	S-LMW-DUP-1	EPA 300.0	AAA	1	PASI-K
60469218003	S-LMW-FB-1	EPA 300.0	AAA	1	PASI-K

PASI-K = Pace Analytical Services - Kansas City

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60469218

Sample: S-LMW-8S Lab ID: 60469218001 Collected: 02/07/25 11:10 Received: 02/08/25 05:44 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									
Fluoride	0.18J	mg/L	0.20	0.12	1		02/14/25 16:41	16984-48-8	M1

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60469218

Sample: S-LMW-DUP-1 Lab ID: 60469218002 Collected: 02/07/25 08:00 Received: 02/08/25 05:44 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									
Fluoride	<0.12	mg/L	0.20	0.12	1		02/13/25 19:41	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60469218

Sample: S-LMW-FB-1 Lab ID: 60469218003 Collected: 02/07/25 10:55 Received: 02/08/25 05:44 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									
Fluoride	<0.12	mg/L	0.20	0.12	1		02/13/25 20:25	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB-VERIFICATION
Pace Project No.: 60469218

QC Batch: 924822 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: 60469218002, 60469218003

METHOD BLANK: 3662520 Matrix: Water
Associated Lab Samples: 60469218002, 60469218003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	<0.12	0.20	0.12	02/13/25 04:37	

LABORATORY CONTROL SAMPLE: 3662521

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.5	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3662522 3662523

Parameter	Units	60469213004		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.										
Fluoride	mg/L	0.39	2.5	2.5	2.5	3.6	3.2	130	113	80-120	13	15	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3662525 3662526

Parameter	Units	60469215002		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.										
Fluoride	mg/L	0.32	2.5	2.5	2.5	2.8	3.1	101	110	80-120	8	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3662528 3662529

Parameter	Units	60469216001		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.										
Fluoride	mg/L	0.24	2.5	2.5	2.5	2.6	2.7	95	98	80-120	2	15	

SAMPLE DUPLICATE: 3662524

Parameter	Units	60469213004 Result	Dup Result	RPD	Max RPD	Qualifiers
Fluoride	mg/L	0.39	0.37	5	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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60469218

SAMPLE DUPLICATE: 3662527

Parameter	Units	60469215002 Result	Dup Result	RPD	Max RPD	Qualifiers
Fluoride	mg/L	0.32	0.31	3	15	

SAMPLE DUPLICATE: 3662530

Parameter	Units	60469216001 Result	Dup Result	RPD	Max RPD	Qualifiers
Fluoride	mg/L	0.24	0.23	3	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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60469218

QC Batch: 924958

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: 60469218001

METHOD BLANK: 3663200

Matrix: Water

Associated Lab Samples: 60469218001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	<0.12	0.20	0.12	02/14/25 11:29	

LABORATORY CONTROL SAMPLE: 3663201

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.4	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3663202 3663203

Parameter	Units	60469217001		3663203		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Fluoride	mg/L	<1.2	25	25	25.6	24.7	100	97	80-120	3	15

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3663205 3663206

Parameter	Units	60469218001		3663206		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Fluoride	mg/L	0.18J	2.5	2.5	2.2	2.2	79	82	80-120	4	15 M1

SAMPLE DUPLICATE: 3663204

Parameter	Units	60469217001 Result	Dup Result	RPD	Max RPD	Qualifiers
Fluoride	mg/L	<1.2	<1.2		15	

SAMPLE DUPLICATE: 3663207

Parameter	Units	60469218001 Result	Dup Result	RPD	Max RPD	Qualifiers
Fluoride	mg/L	0.18J	0.20		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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALIFIERS

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60469218

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

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60469218

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60469218001	S-LMW-8S	EPA 300.0	924958		
60469218002	S-LMW-DUP-1	EPA 300.0	924822		
60469218003	S-LMW-FB-1	EPA 300.0	924822		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



DC#_ Title: ENV-FRM-LENE-0009_Samp

Revision: 2

Effective Date: 01/12/202

WO#: 60469218



Client Name: Rocksouth Geoeengineering, LLC

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: T301 Type of Ice: (Gel) Blue None

Cooler Temperature (°C): As-read 1.9 Corr. Factor -1 Corrected 2.0

Date and initials of person examining contents: 2/8/25 JA

Temperature should be above freezing to 6°C 1.7, 1.1 1.8, 1.2

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix: <u>WT</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers requiring pH preservation in compliance? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Potassium iodide test strip turns blue/purple? (Preserve)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Samples from USDA Regulated Area: State:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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: _____



Memorandum

February 26, 2025

To: Project File
Rocksmith Geoengineering, LLC

Project Number: 23009-24

CC: Mark Haddock, Jeffrey Ingram

From: Grant Morey

Email: grant.morey@rocksmithgeo.com

RE: **Data Validation Summary, Sioux Energy Center – SCPB Verification – Data Package 60469218**

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 compound was analyzed outside of hold time controls, the 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 Name: Ameren SCPB Verification
 Reviewer: G. Morey

Project Manager: J. Ingram
 Project Number: 23009-24
 Validation Date: 2/26/2025

Laboratory: Pace Analytical

SDG #: 60469218

Analytical Method (type and no.): EPA 300.0 (Fluoride)

Matrix: Air Soil/Sed. Water Waste

Sample Names S-LMW-8S, S-LMW-DUP-1, S-LMW-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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>2/7/2025</u>
b) Sampling team indicated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>GTM/JTR</u>
c) Sample location noted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
d) Sample depth indicated (Soils)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u></u>
e) Sample type indicated (grab/composite)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Grab</u>
f) Field QC noted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Notes</u>
g) Field parameters collected (note types)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>pH, Spec Cond, Turb, Temp, DO, ORP</u>
h) Field Calibration within control limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
i) Notations of unacceptable field conditions/performances from field logs or field notes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u></u>
j) Does the laboratory narrative indicate deficiencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>No lab narrative.</u>

Note Deficiencies:

Chain-of-Custody (COC)	YES	NO	NA	COMMENTS
a) Was the COC properly completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
b) Was the COC signed by both field and laboratory personnel?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
c) Were samples received in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>

General (reference QAPP or Method)	YES	NO	NA	COMMENTS
a) Were hold times met for sample pretreatment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
b) Were hold times met for sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
c) Were the correct preservatives used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
d) Was the correct method used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
e) Were appropriate reporting limits achieved?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
f) Were any sample dilutions noted?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u></u>
g) Were any matrix problems noted?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u></u>

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Blanks	YES	NO	NA	COMMENTS
a) Were analytes detected in the method blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b) Were analytes detected in the field blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	S-LMW-FB-1 @ S-LMW-8S
c) Were analytes detected in the equipment blank(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d) Were analytes detected in the trip blank(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Laboratory Control Sample (LCS)	YES	NO	NA	COMMENTS
a) Was a LCS analyzed once per SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) Were the proper analytes included in the LCS?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) Was the LCS accuracy criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Duplicates	YES	NO	NA	COMMENTS
a) Were field duplicates collected (note original and duplicate sample names)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	S-UMW-DUP-1 @ S-UMW-4D
b) Were field dup. precision criteria met (note RPD)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Notes
c) Were lab duplicates analyzed (note original and duplicate samples)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Notes
d) Were lab dup. precision criteria met (note RPD)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Notes

Blind Standards	YES	NO	NA	COMMENTS
a) Was a blind standard used (indicate name, analytes included and concentrations)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Was the %D within control limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

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

Comments/Notes:

Duplicates:

S-LMW-DUP-1 @ S-LMW-8S: Fluoride detected in parent sample and not in field duplicate, results qualified as estimates.

Lab duplicate max RPD: 15%: fluoride. Lab duplicate RPDs within control limits.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Comments/Notes:

MS/MSD:

3662522/3662523: MS recovery high for fluoride, MSD recovery and RPD within control limits, no qualification necessary.

3663205/3663206: MS recovery low for fluoride, MSD recovery and RPD within control limits, no qualification necessary.

Blank lined area for additional comments, crossed out with a diagonal line.



July 01, 2025

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

RE: Project: AMEREN SCPB
Pace Project No.: 60474940

Dear Mark Haddock:

Enclosed are the analytical results for sample(s) received by the laboratory between May 09, 2025 and May 14, 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



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



CERTIFICATIONS

Project: AMEREN SCPB

Pace Project No.: 60474940

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219

Arkansas Certification #: 88-00679

Illinois Certification #: 2000302023-6

Colorado Division of Oil and Public Safety

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



SAMPLE SUMMARY

Project: AMEREN SCPB

Pace Project No.: 60474940

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60474940001	S-LMW-3S	Water	05/08/25 16:06	05/12/25 06:51
60474940002	S-LMW-9S	Water	05/09/25 11:30	05/12/25 06:51
60474940003	S-LMW-DUP-1	Water	05/09/25 08:00	05/12/25 06:51
60474940004	S-LMW-FB-1	Water	05/08/25 16:20	05/12/25 06:51
60474940005	S-LMW-7S	Water	05/12/25 09:53	05/14/25 06:45
60474940006	S-LMW-8S	Water	05/12/25 09:04	05/14/25 06:45
60474940007	S-LMW-DUP-2	Water	05/12/25 00:00	05/14/25 06:45
60474940008	S-LMW-FB-2	Water	05/12/25 09:45	05/14/25 06:45
60474805021	S-LMW-1S	Water	05/12/25 15:22	05/14/25 06:45
60474805003	S-LMW-2S	Water	05/07/25 16:17	05/09/25 02:07
60474805007	S-LMW-4S	Water	05/09/25 14:41	05/10/25 06:51
60474805022	S-LMW-5S	Water	05/12/25 10:45	05/14/25 06:45
60474805023	S-LMW-6S	Water	05/12/25 13:35	05/14/25 06:45
60474805001	S-BMW-1S	Water	05/07/25 15:05	05/09/25 02:07
60474805002	S-BMW-3S	Water	05/07/25 14:10	05/09/25 02:07

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



SAMPLE ANALYTE COUNT

Project: AMEREN SCPB

Pace Project No.: 60474940

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60474940001	S-LMW-3S	EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
60474940002	S-LMW-9S	EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
60474940003	S-LMW-DUP-1	EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
60474940004	S-LMW-FB-1	EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
60474940005	S-LMW-7S	EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	BMT	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
60474940006	S-LMW-8S	EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	BMT	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
60474940007	S-LMW-DUP-2	EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	BMT	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
60474940008	S-LMW-FB-2	EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	BMT	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
60474805021	S-LMW-1S	EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	BMT	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
60474805003	S-LMW-2S	EPA 200.7	ARMN	7	PASI-K

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



SAMPLE ANALYTE COUNT

Project: AMEREN SCPB

Pace Project No.: 60474940

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60474805007	S-LMW-4S	SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
		EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
60474805022	S-LMW-5S	EPA 300.0	MLD	3	PASI-K
		EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	BMT	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
		EPA 200.7	ARMN	7	PASI-K
60474805023	S-LMW-6S	SM 2320B	EFM	1	PASI-K
		SM 2540C	BMT	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
		EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	BMT	1	PASI-K
60474805001	S-BMW-1S	EPA 300.0	MLD	3	PASI-K
		EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 300.0	MLD	3	PASI-K
		EPA 200.7	ARMN	7	PASI-K
60474805002	S-BMW-3S	SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 300.0	MLD	3	PASI-K

PASI-K = Pace Analytical Services - Kansas City

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60474940

Sample: S-LMW-3S **Lab ID: 60474940001** Collected: 05/08/25 16:06 Received: 05/12/25 06:51 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							
Boron	153	ug/L	100	6.4	1	05/16/25 11:44	05/23/25 16:55	7440-42-8	
Calcium	144000	ug/L	200	26.9	1	05/16/25 11:44	05/23/25 16:55	7440-70-2	
Iron	102	ug/L	50.0	9.1	1	05/16/25 11:44	05/23/25 16:55	7439-89-6	
Magnesium	29900	ug/L	50.0	20.1	1	05/16/25 11:44	05/23/25 16:55	7439-95-4	
Manganese	52.1	ug/L	5.0	0.39	1	05/16/25 11:44	05/23/25 16:55	7439-96-5	
Potassium	3520	ug/L	500	69.7	1	05/16/25 11:44	05/23/25 16:55	7440-09-7	
Sodium	11700	ug/L	500	115	1	05/16/25 11:44	05/23/25 16:55	7440-23-5	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	481	mg/L	20.0	10.5	1		05/16/25 23:05		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	580	mg/L	13.3	13.3	1		05/14/25 16:08		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	22.3	mg/L	5.0	2.6	5		06/11/25 04:12	16887-00-6	B,H1
Fluoride	0.18J	mg/L	0.20	0.12	1		06/05/25 20:07	16984-48-8	
Sulfate	32.7	mg/L	5.0	2.8	5		06/11/25 04:12	14808-79-8	H1

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60474940

Sample: S-LMW-9S **Lab ID: 60474940002** Collected: 05/09/25 11:30 Received: 05/12/25 06:51 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							
Boron	853	ug/L	100	6.4	1	05/16/25 11:44	05/23/25 16:57	7440-42-8	
Calcium	140000	ug/L	200	26.9	1	05/16/25 11:44	05/23/25 16:57	7440-70-2	M1,P6
Iron	<9.1	ug/L	50.0	9.1	1	05/16/25 11:44	05/23/25 16:57	7439-89-6	
Magnesium	45900	ug/L	50.0	20.1	1	05/16/25 11:44	05/23/25 16:57	7439-95-4	
Manganese	47.6	ug/L	5.0	0.39	1	05/16/25 11:44	05/23/25 16:57	7439-96-5	
Potassium	4090	ug/L	500	69.7	1	05/16/25 11:44	05/23/25 16:57	7440-09-7	
Sodium	28800	ug/L	500	115	1	05/16/25 11:44	05/23/25 16:57	7440-23-5	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	401	mg/L	20.0	10.5	1		05/19/25 23:54		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	747	mg/L	13.3	13.3	1		05/15/25 16:54		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	58.0	mg/L	20.0	10.5	20		06/06/25 15:47	16887-00-6	
Fluoride	0.23	mg/L	0.20	0.12	1		06/06/25 15:35	16984-48-8	
Sulfate	113	mg/L	20.0	11.0	20		06/06/25 15:47	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60474940

Sample: S-LMW-DUP-1 Lab ID: 60474940003 Collected: 05/09/25 08:00 Received: 05/12/25 06:51 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							
Boron	857	ug/L	100	6.4	1	05/16/25 11:44	05/23/25 17:01	7440-42-8	
Calcium	140000	ug/L	200	26.9	1	05/16/25 11:44	05/23/25 17:01	7440-70-2	
Iron	<9.1	ug/L	50.0	9.1	1	05/16/25 11:44	05/23/25 17:01	7439-89-6	
Magnesium	46200	ug/L	50.0	20.1	1	05/16/25 11:44	05/23/25 17:01	7439-95-4	
Manganese	54.1	ug/L	5.0	0.39	1	05/16/25 11:44	05/23/25 17:01	7439-96-5	
Potassium	4170	ug/L	500	69.7	1	05/16/25 11:44	05/23/25 17:01	7440-09-7	
Sodium	29000	ug/L	500	115	1	05/16/25 11:44	05/23/25 17:01	7440-23-5	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	404	mg/L	20.0	10.5	1		05/20/25 00:01		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	751	mg/L	13.3	13.3	1		05/15/25 16:54		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	69.1	mg/L	20.0	10.5	20		06/06/25 16:11	16887-00-6	
Fluoride	0.22	mg/L	0.20	0.12	1		06/06/25 15:59	16984-48-8	
Sulfate	137	mg/L	20.0	11.0	20		06/06/25 16:11	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60474940

Sample: S-LMW-FB-1 **Lab ID: 60474940004** Collected: 05/08/25 16:20 Received: 05/12/25 06:51 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							
Boron	<6.4	ug/L	100	6.4	1	05/16/25 11:44	05/23/25 17:08	7440-42-8	
Calcium	<26.9	ug/L	200	26.9	1	05/16/25 11:44	05/23/25 17:08	7440-70-2	
Iron	<9.1	ug/L	50.0	9.1	1	05/16/25 11:44	05/23/25 17:08	7439-89-6	
Magnesium	<20.1	ug/L	50.0	20.1	1	05/16/25 11:44	05/23/25 17:08	7439-95-4	
Manganese	<0.39	ug/L	5.0	0.39	1	05/16/25 11:44	05/23/25 17:08	7439-96-5	
Potassium	<69.7	ug/L	500	69.7	1	05/16/25 11:44	05/23/25 17:08	7440-09-7	
Sodium	<115	ug/L	500	115	1	05/16/25 11:44	05/23/25 17:08	7440-23-5	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	<10.5	mg/L	20.0	10.5	1		05/19/25 20:05		
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		05/15/25 16:54		
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		06/05/25 20:43	16887-00-6	
Fluoride	<0.12	mg/L	0.20	0.12	1		06/05/25 20:43	16984-48-8	
Sulfate	<0.55	mg/L	1.0	0.55	1		06/05/25 20:43	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60474940

Sample: S-LMW-7S **Lab ID: 60474940005** Collected: 05/12/25 09:53 Received: 05/14/25 06:45 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							
Boron	2870	ug/L	100	6.4	1	05/19/25 14:28	05/30/25 16:46	7440-42-8	
Calcium	185000	ug/L	200	26.9	1	05/19/25 14:28	05/30/25 16:46	7440-70-2	M1,P6
Iron	<9.1	ug/L	50.0	9.1	1	05/19/25 14:28	05/30/25 16:46	7439-89-6	
Magnesium	50900	ug/L	50.0	20.1	1	05/19/25 14:28	05/30/25 16:46	7439-95-4	
Manganese	607	ug/L	5.0	0.39	1	05/19/25 14:28	05/30/25 16:46	7439-96-5	
Potassium	4450	ug/L	500	69.7	1	05/19/25 14:28	05/30/25 16:46	7440-09-7	
Sodium	22100	ug/L	500	115	1	05/19/25 14:28	05/30/25 16:46	7440-23-5	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	379	mg/L	20.0	10.5	1		05/20/25 16:15		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	889	mg/L	13.3	13.3	1		05/19/25 15:01		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	50.1	mg/L	50.0	26.4	50		06/07/25 14:50	16887-00-6	
Fluoride	<0.12	mg/L	0.20	0.12	1		06/07/25 14:37	16984-48-8	
Sulfate	321	mg/L	50.0	27.5	50		06/07/25 14:50	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60474940

Sample: S-LMW-8S **Lab ID: 60474940006** Collected: 05/12/25 09:04 Received: 05/14/25 06:45 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							
Boron	6520	ug/L	100	6.4	1	05/19/25 14:28	05/30/25 16:52	7440-42-8	
Calcium	339000	ug/L	200	26.9	1	05/19/25 14:28	05/30/25 16:52	7440-70-2	M1
Iron	<9.1	ug/L	50.0	9.1	1	05/19/25 14:28	05/30/25 16:52	7439-89-6	
Magnesium	74600	ug/L	50.0	20.1	1	05/19/25 14:28	05/30/25 16:52	7439-95-4	
Manganese	1200	ug/L	5.0	0.39	1	05/19/25 14:28	05/30/25 16:52	7439-96-5	
Potassium	5510	ug/L	500	69.7	1	05/19/25 14:28	05/30/25 16:52	7440-09-7	
Sodium	76900	ug/L	500	115	1	05/19/25 14:28	05/30/25 16:52	7440-23-5	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	387	mg/L	20.0	10.5	1		05/20/25 16:22		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	1770	mg/L	66.7	66.7	1		05/19/25 15:01		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	194	mg/L	50.0	26.4	50		06/07/25 16:22	16887-00-6	H1,M1
Fluoride	<0.12	mg/L	0.20	0.12	1		06/07/25 15:03	16984-48-8	H1,M1
Sulfate	660	mg/L	50.0	27.5	50		06/07/25 16:22	14808-79-8	H1,M1

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60474940

Sample: S-LMW-DUP-2 **Lab ID: 60474940007** Collected: 05/12/25 00:00 Received: 05/14/25 06:45 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							
Boron	2840	ug/L	100	6.4	1	05/19/25 14:28	05/30/25 16:57	7440-42-8	
Calcium	184000	ug/L	200	26.9	1	05/19/25 14:28	05/30/25 16:57	7440-70-2	
Iron	<9.1	ug/L	50.0	9.1	1	05/19/25 14:28	05/30/25 16:57	7439-89-6	
Magnesium	50400	ug/L	50.0	20.1	1	05/19/25 14:28	05/30/25 16:57	7439-95-4	
Manganese	600	ug/L	5.0	0.39	1	05/19/25 14:28	05/30/25 16:57	7439-96-5	
Potassium	4450	ug/L	500	69.7	1	05/19/25 14:28	05/30/25 16:57	7440-09-7	
Sodium	21900	ug/L	500	115	1	05/19/25 14:28	05/30/25 16:57	7440-23-5	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	389	mg/L	20.0	10.5	1		05/20/25 16:35		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	925	mg/L	13.3	13.3	1		05/19/25 15:03		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	51.1	mg/L	50.0	26.4	50		06/07/25 17:27	16887-00-6	
Fluoride	<0.12	mg/L	0.20	0.12	1		06/07/25 17:14	16984-48-8	
Sulfate	321	mg/L	50.0	27.5	50		06/07/25 17:27	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60474940

Sample: S-LMW-FB-2 Lab ID: 60474940008 Collected: 05/12/25 09:45 Received: 05/14/25 06:45 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							
Boron	7.3J	ug/L	100	6.4	1	05/19/25 14:28	05/30/25 17:05	7440-42-8	
Calcium	<26.9	ug/L	200	26.9	1	05/19/25 14:28	05/30/25 17:05	7440-70-2	
Iron	<9.1	ug/L	50.0	9.1	1	05/19/25 14:28	05/30/25 17:05	7439-89-6	
Magnesium	<20.1	ug/L	50.0	20.1	1	05/19/25 14:28	05/30/25 17:05	7439-95-4	
Manganese	<0.39	ug/L	5.0	0.39	1	05/19/25 14:28	05/30/25 17:05	7439-96-5	
Potassium	<69.7	ug/L	500	69.7	1	05/19/25 14:28	05/30/25 17:05	7440-09-7	
Sodium	<115	ug/L	500	115	1	05/19/25 14:28	05/30/25 17:05	7440-23-5	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	<10.5	mg/L	20.0	10.5	1		05/20/25 16:38		
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		05/19/25 15:03		
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		06/07/25 17:40	16887-00-6	
Fluoride	<0.12	mg/L	0.20	0.12	1		06/07/25 17:40	16984-48-8	
Sulfate	<0.55	mg/L	1.0	0.55	1		06/07/25 17:40	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60474940

Sample: S-LMW-1S Lab ID: 60474805021 Collected: 05/12/25 15:22 Received: 05/14/25 06:45 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							
Boron	900	ug/L	100	6.4	1	05/23/25 09:30	06/02/25 14:37	7440-42-8	
Calcium	130000	ug/L	200	26.9	1	05/23/25 09:30	06/02/25 14:37	7440-70-2	
Iron	84.0	ug/L	50.0	9.1	1	05/23/25 09:30	06/02/25 14:37	7439-89-6	B
Magnesium	29300	ug/L	50.0	20.1	1	05/23/25 09:30	06/02/25 14:37	7439-95-4	
Manganese	66.4	ug/L	5.0	0.39	1	05/23/25 09:30	06/02/25 14:37	7439-96-5	
Potassium	11000	ug/L	500	69.7	1	05/23/25 09:30	06/02/25 14:37	7440-09-7	
Sodium	60400	ug/L	500	115	1	05/23/25 09:30	06/02/25 14:37	7440-23-5	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	325	mg/L	20.0	10.5	1		05/20/25 16:44		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	691	mg/L	13.3	13.3	1		05/19/25 15:03		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	130	mg/L	20.0	10.5	20		06/07/25 12:00	16887-00-6	
Fluoride	<0.12	mg/L	0.20	0.12	1		06/07/25 11:47	16984-48-8	
Sulfate	93.6	mg/L	20.0	11.0	20		06/07/25 12:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60474940

Sample: S-LMW-2S **Lab ID: 60474805003** Collected: 05/07/25 16:17 Received: 05/09/25 02:07 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							
Boron	8970	ug/L	100	6.4	1	05/20/25 13:36	06/06/25 17:31	7440-42-8	
Calcium	169000	ug/L	200	26.9	1	05/20/25 13:36	06/06/25 17:31	7440-70-2	M1,P6
Iron	35.1J	ug/L	50.0	9.1	1	05/20/25 13:36	06/06/25 17:31	7439-89-6	
Magnesium	30800	ug/L	50.0	20.1	1	05/20/25 13:36	06/06/25 17:31	7439-95-4	
Manganese	376	ug/L	5.0	0.39	1	05/20/25 13:36	06/06/25 17:31	7439-96-5	
Potassium	6060	ug/L	500	69.7	1	05/20/25 13:36	06/06/25 17:31	7440-09-7	
Sodium	69800	ug/L	500	115	1	05/20/25 13:36	06/06/25 17:31	7440-23-5	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	333	mg/L	20.0	10.5	1		05/16/25 17:10		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	946	mg/L	20.0	20.0	1		05/13/25 15:28		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	128	mg/L	20.0	10.5	20		06/03/25 08:16	16887-00-6	
Fluoride	0.17J	mg/L	0.20	0.12	1		06/03/25 00:18	16984-48-8	
Sulfate	219	mg/L	20.0	11.0	20		06/03/25 08:16	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60474940

Sample: S-LMW-4S **Lab ID: 60474805007** Collected: 05/09/25 14:41 Received: 05/10/25 06:51 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							
Boron	216	ug/L	100	6.4	1	05/22/25 11:08	06/05/25 11:25	7440-42-8	
Calcium	230000	ug/L	200	26.9	1	05/22/25 11:08	06/05/25 11:25	7440-70-2	
Iron	13.7J	ug/L	50.0	9.1	1	05/22/25 11:08	06/05/25 11:25	7439-89-6	
Magnesium	54900	ug/L	50.0	20.1	1	05/22/25 11:08	06/05/25 11:25	7439-95-4	
Manganese	131	ug/L	5.0	0.39	1	05/22/25 11:08	06/05/25 11:25	7439-96-5	
Potassium	5600	ug/L	500	69.7	1	05/22/25 11:08	06/05/25 11:25	7440-09-7	
Sodium	10300	ug/L	500	115	1	05/22/25 11:08	06/05/25 11:25	7440-23-5	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	800	mg/L	20.0	10.5	1		05/20/25 00:09		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	878	mg/L	20.0	20.0	1		05/15/25 16:59		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	2.6	mg/L	1.0	0.53	1		06/11/25 07:02	16887-00-6	B,H1
Fluoride	<0.12	mg/L	0.20	0.12	1		06/11/25 07:02	16984-48-8	H1
Sulfate	31.2	mg/L	10.0	5.5	10		06/11/25 07:15	14808-79-8	H1

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60474940

Sample: S-LMW-5S **Lab ID: 60474805022** Collected: 05/12/25 10:45 Received: 05/14/25 06:45 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							
Boron	18000	ug/L	100	6.4	1	05/23/25 09:30	06/02/25 14:39	7440-42-8	
Calcium	221000	ug/L	200	26.9	1	05/23/25 09:30	06/02/25 14:39	7440-70-2	
Iron	26.5J	ug/L	50.0	9.1	1	05/23/25 09:30	06/02/25 14:39	7439-89-6	B
Magnesium	39200	ug/L	50.0	20.1	1	05/23/25 09:30	06/02/25 14:39	7439-95-4	
Manganese	1570	ug/L	5.0	0.39	1	05/23/25 09:30	06/02/25 14:39	7439-96-5	
Potassium	4020	ug/L	500	69.7	1	05/23/25 09:30	06/02/25 14:39	7440-09-7	
Sodium	204000	ug/L	500	115	1	05/23/25 09:30	06/02/25 14:39	7440-23-5	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	317	mg/L	20.0	10.5	1		05/20/25 16:50		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	1700	mg/L	40.0	40.0	1		05/19/25 15:04		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	9.7	mg/L	1.0	0.53	1		06/07/25 12:13	16887-00-6	
Fluoride	<0.12	mg/L	0.20	0.12	1		06/07/25 12:13	16984-48-8	
Sulfate	113	mg/L	100	55.0	100		06/07/25 12:26	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60474940

Sample: S-LMW-6S **Lab ID: 60474805023** Collected: 05/12/25 13:35 Received: 05/14/25 06:45 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							
Boron	16700	ug/L	100	6.4	1	05/23/25 09:30	06/02/25 14:40	7440-42-8	
Calcium	248000	ug/L	200	26.9	1	05/23/25 09:30	06/02/25 14:40	7440-70-2	
Iron	14.4J	ug/L	50.0	9.1	1	05/23/25 09:30	06/02/25 14:40	7439-89-6	B
Magnesium	54000	ug/L	50.0	20.1	1	05/23/25 09:30	06/02/25 14:40	7439-95-4	
Manganese	431	ug/L	5.0	0.39	1	05/23/25 09:30	06/02/25 14:40	7439-96-5	
Potassium	4280	ug/L	500	69.7	1	05/23/25 09:30	06/02/25 14:40	7440-09-7	
Sodium	71200	ug/L	500	115	1	05/23/25 09:30	06/02/25 14:40	7440-23-5	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	526	mg/L	20.0	10.5	1		05/20/25 17:15		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	1310	mg/L	20.0	20.0	1		05/19/25 15:04		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	3.5	mg/L	1.0	0.53	1		06/07/25 12:39	16887-00-6	
Fluoride	<0.12	mg/L	0.20	0.12	1		06/07/25 12:39	16984-48-8	
Sulfate	684	mg/L	500	275	500		06/07/25 13:19	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60474940

Sample: S-BMW-1S Lab ID: 60474805001 Collected: 05/07/25 15:05 Received: 05/09/25 02:07 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							
Boron	56.5J	ug/L	100	6.4	1	05/21/25 10:30	06/03/25 17:57	7440-42-8	
Calcium	177000	ug/L	200	26.9	1	05/21/25 10:30	06/03/25 17:57	7440-70-2	M1,P6
Iron	38.1J	ug/L	50.0	9.1	1	05/21/25 10:30	06/03/25 17:57	7439-89-6	
Magnesium	35100	ug/L	50.0	20.1	1	05/21/25 10:30	06/03/25 17:57	7439-95-4	
Manganese	749	ug/L	5.0	0.39	1	05/21/25 10:30	06/03/25 17:57	7439-96-5	
Potassium	479J	ug/L	500	69.7	1	05/21/25 10:30	06/03/25 17:57	7440-09-7	
Sodium	5540	ug/L	500	115	1	05/21/25 10:30	06/03/25 17:57	7440-23-5	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	555	mg/L	20.0	10.5	1		05/16/25 16:37		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	615	mg/L	13.3	13.3	1		05/13/25 15:27		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	11.4	mg/L	1.0	0.53	1		06/02/25 23:31	16887-00-6	
Fluoride	0.26	mg/L	0.20	0.12	1		06/02/25 23:31	16984-48-8	
Sulfate	35.1	mg/L	10.0	5.5	10		06/02/25 23:43	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60474940

Sample: S-BMW-3S **Lab ID: 60474805002** Collected: 05/07/25 14:10 Received: 05/09/25 02:07 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							
Boron	55.1J	ug/L	100	6.4	1	05/21/25 10:30	06/03/25 18:03	7440-42-8	
Calcium	129000	ug/L	200	26.9	1	05/21/25 10:30	06/03/25 18:03	7440-70-2	
Iron	<9.1	ug/L	50.0	9.1	1	05/21/25 10:30	06/03/25 18:03	7439-89-6	
Magnesium	22700	ug/L	50.0	20.1	1	05/21/25 10:30	06/03/25 18:03	7439-95-4	
Manganese	249	ug/L	5.0	0.39	1	05/21/25 10:30	06/03/25 18:03	7439-96-5	
Potassium	436J	ug/L	500	69.7	1	05/21/25 10:30	06/03/25 18:03	7440-09-7	
Sodium	6420	ug/L	500	115	1	05/21/25 10:30	06/03/25 18:03	7440-23-5	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	375	mg/L	20.0	10.5	1		05/16/25 17:04		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	449	mg/L	10.0	10.0	1		05/13/25 15:28		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City							
Chloride	10.6	mg/L	1.0	0.53	1		06/02/25 23:55	16887-00-6	
Fluoride	0.30	mg/L	0.20	0.12	1		06/02/25 23:55	16984-48-8	
Sulfate	24.5	mg/L	10.0	5.5	10		06/03/25 00:07	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch:	935320	Analysis Method:	EPA 200.7
QC Batch Method:	EPA 200.7	Analysis Description:	200.7 Metals, Total
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60474940001, 60474940002, 60474940003, 60474940004

METHOD BLANK: 3707170 Matrix: Water

Associated Lab Samples: 60474940001, 60474940002, 60474940003, 60474940004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	ug/L	<6.4	100	6.4	05/23/25 16:24	
Calcium	ug/L	<26.9	200	26.9	05/23/25 16:24	
Iron	ug/L	<9.1	50.0	9.1	05/23/25 16:24	
Magnesium	ug/L	<20.1	50.0	20.1	05/23/25 16:24	
Manganese	ug/L	<0.39	5.0	0.39	05/23/25 16:24	
Potassium	ug/L	<69.7	500	69.7	05/23/25 16:24	
Sodium	ug/L	<115	500	115	05/23/25 16:24	

LABORATORY CONTROL SAMPLE: 3707171

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	1000	892	89	85-115	
Calcium	ug/L	10000	10000	100	85-115	
Iron	ug/L	10000	9830	98	85-115	
Magnesium	ug/L	10000	9670	97	85-115	
Manganese	ug/L	1000	983	98	85-115	
Potassium	ug/L	10000	9690	97	85-115	
Sodium	ug/L	10000	9600	96	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3707172 3707173

Parameter	Units	60474941004		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	Result	Result	% Rec	% Rec					
Boron	ug/L	105	1000	1000	986	997	88	89	70-130	1	20		
Calcium	ug/L	155000	10000	10000	163000	165000	74	99	70-130	2	20		
Iron	ug/L	4070	10000	10000	13600	13600	95	95	70-130	0	20		
Magnesium	ug/L	31500	10000	10000	40300	40900	88	94	70-130	2	20		
Manganese	ug/L	756	1000	1000	1670	1720	92	96	70-130	3	20		
Potassium	ug/L	5420	10000	10000	14900	15200	95	98	70-130	2	20		
Sodium	ug/L	5880	10000	10000	15000	15300	91	95	70-130	2	20		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3707174 3707175

Parameter	Units	60474942001		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	Result	Result	% Rec	% Rec					
Boron	ug/L	75.3J	1000	1000	942	927	87	85	70-130	2	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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3707174												3707175	
Parameter	Units	60474942001	MS	MSD	MS	MSD	MS	MSD	% Rec	Max	RPD	RPD	Qual
		Result	Spike Conc.	Spike Conc.	Result	Result	Result	Result	% Rec	Limits			
Calcium	ug/L	118000	10000	10000	125000	124000	71	61	70-130	1	20	M1	
Iron	ug/L	16.4J	10000	10000	9240	9190	92	92	70-130	1	20		
Magnesium	ug/L	22200	10000	10000	30600	30500	84	83	70-130	0	20		
Manganese	ug/L	371	1000	1000	1290	1270	92	90	70-130	1	20		
Potassium	ug/L	4560	10000	10000	14100	13900	95	93	70-130	1	20		
Sodium	ug/L	4050	10000	10000	13100	13000	91	89	70-130	2	20		

MATRIX SPIKE SAMPLE: 3707176											
Parameter	Units	60474940002	Spike	MS	MS	% Rec	Qualifiers				
		Result	Conc.	Result	% Rec	Limits					
Boron	ug/L	853	1000	1720	86	70-130					
Calcium	ug/L	140000	10000	145000	54	70-130	M1				
Iron	ug/L	<9.1	10000	9520	95	70-130					
Magnesium	ug/L	45900	10000	54000	81	70-130					
Manganese	ug/L	47.6	1000	998	95	70-130					
Potassium	ug/L	4090	10000	13500	94	70-130					
Sodium	ug/L	28800	10000	37300	85	70-130					

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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch: 935604 Analysis Method: EPA 200.7
 QC Batch Method: EPA 200.7 Analysis Description: 200.7 Metals, Total
 Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60474940005, 60474940006, 60474940007, 60474940008

METHOD BLANK: 3708656 Matrix: Water

Associated Lab Samples: 60474940005, 60474940006, 60474940007, 60474940008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	ug/L	<6.4	100	6.4	05/30/25 16:42	
Calcium	ug/L	<26.9	200	26.9	05/30/25 16:42	
Iron	ug/L	<9.1	50.0	9.1	05/30/25 16:42	
Magnesium	ug/L	<20.1	50.0	20.1	05/30/25 16:42	
Manganese	ug/L	<0.39	5.0	0.39	05/30/25 16:42	
Potassium	ug/L	<69.7	500	69.7	05/30/25 16:42	
Sodium	ug/L	<115	500	115	05/30/25 16:42	

LABORATORY CONTROL SAMPLE: 3708657

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	1000	936	94	85-115	
Calcium	ug/L	10000	10100	101	85-115	
Iron	ug/L	10000	10100	101	85-115	
Magnesium	ug/L	10000	10000	100	85-115	
Manganese	ug/L	1000	978	98	85-115	
Potassium	ug/L	10000	9850	99	85-115	
Sodium	ug/L	10000	10100	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3708658 3708659

Parameter	Units	60474940005		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Boron	ug/L	2870	1000	1000	3730	3740	86	87	70-130	0	20		
Calcium	ug/L	185000	10000	10000	190000	190000	48	52	70-130	0	20	M1	
Iron	ug/L	<9.1	10000	10000	9900	9520	99	95	70-130	4	20		
Magnesium	ug/L	50900	10000	10000	59300	59200	83	83	70-130	0	20		
Manganese	ug/L	607	1000	1000	1530	1530	92	92	70-130	0	20		
Potassium	ug/L	4450	10000	10000	14100	14000	97	96	70-130	1	20		
Sodium	ug/L	22100	10000	10000	31300	31100	92	90	70-130	1	20		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3708677 3708678

Parameter	Units	60474940006		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Boron	ug/L	6520	1000	1000	7460	7470	94	95	70-130	0	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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3708677												3708678	
Parameter	Units	60474940006 Result	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	Qual	
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD		
Calcium	ug/L	339000	10000	10000	343000	346000	45	72	70-130	1	20	M1	
Iron	ug/L	<9.1	10000	10000	9720	9480	97	95	70-130	2	20		
Magnesium	ug/L	74600	10000	10000	83100	83500	85	89	70-130	0	20		
Manganese	ug/L	1200	1000	1000	2160	2120	96	92	70-130	2	20		
Potassium	ug/L	5510	10000	10000	15500	15200	100	96	70-130	2	20		
Sodium	ug/L	76900	10000	10000	86400	86400	95	95	70-130	0	20		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3708679												3708680	
Parameter	Units	60475118003 Result	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	Qual	
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD		
Boron	ug/L	88.9J	1000	1000	1000	1020	91	93	70-130	2	20		
Calcium	ug/L	143000	10000	10000	151000	154000	82	107	70-130	2	20		
Iron	ug/L	<9.1	10000	10000	9660	9790	97	98	70-130	1	20		
Magnesium	ug/L	27700	10000	10000	36900	37500	92	99	70-130	2	20		
Manganese	ug/L	118	1000	1000	1080	1080	96	96	70-130	0	20		
Potassium	ug/L	8110	10000	10000	17900	17900	98	98	70-130	0	20		
Sodium	ug/L	5510	10000	10000	15200	15400	97	99	70-130	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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch: 935770

Analysis Method: EPA 200.7

QC Batch Method: EPA 200.7

Analysis Description: 200.7 Metals, Total

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60474805003

METHOD BLANK: 3709216

Matrix: Water

Associated Lab Samples: 60474805003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	ug/L	<6.4	100	6.4	06/06/25 17:00	
Calcium	ug/L	<26.9	200	26.9	06/06/25 17:00	
Iron	ug/L	<9.1	50.0	9.1	06/06/25 17:00	
Magnesium	ug/L	<20.1	50.0	20.1	06/06/25 17:00	
Manganese	ug/L	<0.39	5.0	0.39	06/06/25 17:00	
Potassium	ug/L	118J	500	69.7	06/06/25 17:00	
Sodium	ug/L	138J	500	115	06/06/25 17:00	

LABORATORY CONTROL SAMPLE: 3709217

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	1800	1600	89	85-115	
Calcium	ug/L	18000	16900	94	85-115	
Iron	ug/L	18000	16600	92	85-115	
Magnesium	ug/L	18000	16500	92	85-115	
Manganese	ug/L	1800	1700	94	85-115	
Potassium	ug/L	18000	16800	93	85-115	
Sodium	ug/L	18000	16700	93	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3709218 3709219

Parameter	Units	60474407003		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	Result	MSD Result	% Rec	% Rec					
Boron	ug/L	ND	1000	1000	1010	1000	92	92	70-130	1	20		
Calcium	ug/L	59200	10000	10000	70000	68500	108	93	70-130	2	20		
Iron	ug/L	ND	10000	10000	9730	9520	97	95	70-130	2	20		
Magnesium	ug/L	19300	10000	10000	29200	28600	99	92	70-130	2	20		
Manganese	ug/L	10.5	1000	1000	980	1030	97	102	70-130	5	20		
Potassium	ug/L	8290	10000	10000	17900	18000	96	97	70-130	0	20		
Sodium	ug/L	63700	10000	10000	74300	72900	106	92	70-130	2	20		

MATRIX SPIKE SAMPLE: 3709222

Parameter	Units	60474805003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Boron	ug/L		8970	2000	10500	77	70-130
Calcium	ug/L		169000	20000	180000	56	70-130 M1

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

MATRIX SPIKE SAMPLE:		3709222					
Parameter	Units	60474805003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	35.1J	20000	18900	94	70-130	
Magnesium	ug/L	30800	20000	47900	85	70-130	
Manganese	ug/L	376	2000	2390	101	70-130	
Potassium	ug/L	6060	20000	25300	96	70-130	
Sodium	ug/L	69800	20000	86500	84	70-130	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch: 935894

Analysis Method: EPA 200.7

QC Batch Method: EPA 200.7

Analysis Description: 200.7 Metals, Total

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60474805001, 60474805002

METHOD BLANK: 3709607

Matrix: Water

Associated Lab Samples: 60474805001, 60474805002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	ug/L	<6.4	100	6.4	06/03/25 17:53	
Calcium	ug/L	<26.9	200	26.9	06/03/25 17:53	
Iron	ug/L	<9.1	50.0	9.1	06/03/25 17:53	
Magnesium	ug/L	<20.1	50.0	20.1	06/03/25 17:53	
Manganese	ug/L	<0.39	5.0	0.39	06/03/25 17:53	
Potassium	ug/L	<69.7	500	69.7	06/03/25 17:53	
Sodium	ug/L	<115	500	115	06/03/25 17:53	

LABORATORY CONTROL SAMPLE: 3709608

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	1000	915	92	85-115	
Calcium	ug/L	10000	10000	100	85-115	
Iron	ug/L	10000	10100	101	85-115	
Magnesium	ug/L	10000	9660	97	85-115	
Manganese	ug/L	1000	954	95	85-115	
Potassium	ug/L	10000	9540	95	85-115	
Sodium	ug/L	10000	9900	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3709609 3709610

Parameter	Units	60474805001		MSD		MS		MSD		% Rec Limits	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	Result	MSD Result	% Rec	% Rec				
Boron	ug/L	56.5J	1000	1000	1030	980	97	92	70-130	5	20	
Calcium	ug/L	177000	10000	10000	186000	176000	93	-8	70-130	6	20	M1
Iron	ug/L	38.1J	10000	10000	10700	9930	106	99	70-130	7	20	
Magnesium	ug/L	35100	10000	10000	44900	42400	98	73	70-130	6	20	
Manganese	ug/L	749	1000	1000	1720	1680	97	93	70-130	2	20	
Potassium	ug/L	479J	10000	10000	10600	10300	102	98	70-130	3	20	
Sodium	ug/L	5540	10000	10000	15900	15100	104	96	70-130	5	20	

MATRIX SPIKE SAMPLE: 3709611

Parameter	Units	60475280007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	126	1000	1090	96	70-130	
Calcium	ug/L	128000	10000	143000	152	70-130	M1

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

MATRIX SPIKE SAMPLE:		3709611					
Parameter	Units	60475280007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	777	10000	11400	106	70-130	
Magnesium	ug/L	15900	10000	26200	103	70-130	
Manganese	ug/L	13.0	1000	995	98	70-130	
Potassium	ug/L	6090	10000	16200	101	70-130	
Sodium	ug/L	61300	10000	72800	114	70-130	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch: 936017

Analysis Method: EPA 200.7

QC Batch Method: EPA 200.7

Analysis Description: 200.7 Metals, Total

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60474805007

METHOD BLANK: 3710285

Matrix: Water

Associated Lab Samples: 60474805007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	ug/L	<6.4	100	6.4	06/05/25 11:02	
Calcium	ug/L	<26.9	200	26.9	06/05/25 11:02	
Iron	ug/L	<9.1	50.0	9.1	06/05/25 11:02	
Magnesium	ug/L	<20.1	50.0	20.1	06/05/25 11:02	
Manganese	ug/L	<0.39	5.0	0.39	06/05/25 11:02	
Potassium	ug/L	<69.7	500	69.7	06/05/25 11:02	
Sodium	ug/L	<115	500	115	06/05/25 11:02	

LABORATORY CONTROL SAMPLE: 3710286

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	1000	942	94	85-115	
Calcium	ug/L	10000	10100	101	85-115	
Iron	ug/L	10000	10100	101	85-115	
Magnesium	ug/L	10000	9860	99	85-115	
Manganese	ug/L	1000	1010	101	85-115	
Potassium	ug/L	10000	9870	99	85-115	
Sodium	ug/L	10000	9980	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3710287 3710288

Parameter	Units	60474802006		3710287		3710288		% Rec	% Rec	Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Result						
Boron	ug/L	5490	1000	1000	6490	6520	100	102	70-130	0	20		
Calcium	ug/L	89600	10000	10000	99800	101000	103	110	70-130	1	20		
Iron	ug/L	3880	10000	10000	13800	13900	99	100	70-130	1	20		
Magnesium	ug/L	19500	10000	10000	29200	29300	96	97	70-130	0	20		
Manganese	ug/L	459	1000	1000	1450	1440	99	98	70-130	1	20		
Potassium	ug/L	10400	10000	10000	20500	20400	101	99	70-130	1	20		
Sodium	ug/L	24300	10000	10000	34200	34200	99	99	70-130	0	20		

MATRIX SPIKE SAMPLE: 3710289

Parameter	Units	60474805010 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	57.5J	1000	1000	95	70-130	
Calcium	ug/L	122000	10000	133000	114	70-130	

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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

MATRIX SPIKE SAMPLE:		3710289					
Parameter	Units	60474805010 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	8100	10000	18300	102	70-130	
Magnesium	ug/L	29600	10000	39500	99	70-130	
Manganese	ug/L	682	1000	1660	98	70-130	
Potassium	ug/L	4160	10000	14100	99	70-130	
Sodium	ug/L	6970	10000	16900	99	70-130	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch:	936256	Analysis Method:	EPA 200.7
QC Batch Method:	EPA 200.7	Analysis Description:	200.7 Metals, Total
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60474805021, 60474805022, 60474805023

METHOD BLANK: 3711403 Matrix: Water
 Associated Lab Samples: 60474805021, 60474805022, 60474805023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	ug/L	<6.4	100	6.4	06/02/25 14:28	
Calcium	ug/L	<26.9	200	26.9	06/02/25 14:28	
Iron	ug/L	10.7J	50.0	9.1	06/02/25 14:28	
Magnesium	ug/L	<20.1	50.0	20.1	06/02/25 14:28	
Manganese	ug/L	<0.39	5.0	0.39	06/02/25 14:28	
Potassium	ug/L	<69.7	500	69.7	06/02/25 14:28	
Sodium	ug/L	<115	500	115	06/02/25 14:28	

LABORATORY CONTROL SAMPLE: 3711404

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	1000	974	97	85-115	
Calcium	ug/L	10000	10600	106	85-115	
Iron	ug/L	10000	10700	107	85-115	
Magnesium	ug/L	10000	10400	104	85-115	
Manganese	ug/L	1000	1040	104	85-115	
Potassium	ug/L	10000	10300	103	85-115	
Sodium	ug/L	10000	10700	107	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3711405 3711406

Parameter	Units	60474802012		3711406		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Boron	ug/L	<6.4	1000	1000	963	929	96	93	70-130	4	20
Calcium	ug/L	111J	10000	10000	10500	10000	104	99	70-130	5	20
Iron	ug/L	<9.1	10000	10000	10600	10100	106	101	70-130	5	20
Magnesium	ug/L	<20.1	10000	10000	10300	9890	103	99	70-130	4	20
Manganese	ug/L	<0.39	1000	1000	1050	994	105	99	70-130	5	20
Potassium	ug/L	<69.7	10000	10000	10200	9700	102	97	70-130	5	20
Sodium	ug/L	<115	10000	10000	10700	10200	106	102	70-130	4	20

MATRIX SPIKE SAMPLE: 3711407

Parameter	Units	60475671001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	8.3J	1000	1020	102	70-130	
Calcium	ug/L	25300	10000	35200	99	70-130	

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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

MATRIX SPIKE SAMPLE:		3711407					
Parameter	Units	60475671001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	<9.1	10000	11100	111	70-130	
Magnesium	ug/L	5210	10000	15700	105	70-130	
Manganese	ug/L	0.66J	1000	1100	110	70-130	
Potassium	ug/L	1440	10000	12200	108	70-130	
Sodium	ug/L	17100	10000	27400	103	70-130	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch:	935400	Analysis Method:	SM 2320B
QC Batch Method:	SM 2320B	Analysis Description:	2320B Alkalinity
		Laboratory:	Pace Analytical Services - Kansas City
Associated Lab Samples:	60474805001, 60474805002, 60474805003		

METHOD BLANK: 3707605 Matrix: Water

Associated Lab Samples: 60474805001, 60474805002, 60474805003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	05/16/25 14:53	

LABORATORY CONTROL SAMPLE: 3707606

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	540	108	90-110	

SAMPLE DUPLICATE: 3707607

Parameter	Units	60474665010 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	468	456	3	10	

SAMPLE DUPLICATE: 3707608

Parameter	Units	60474796004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	293	301	3	10	

SAMPLE DUPLICATE: 3707609

Parameter	Units	60474805001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	555	538	3	10	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch: 935488

Analysis Method: SM 2320B

QC Batch Method: SM 2320B

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60474940001

METHOD BLANK: 3708147

Matrix: Water

Associated Lab Samples: 60474940001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	05/16/25 22:17	

LABORATORY CONTROL SAMPLE: 3708148

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	538	108	90-110	

SAMPLE DUPLICATE: 3708149

Parameter	Units	60474882003 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	328	322	2	10	

SAMPLE DUPLICATE: 3708150

Parameter	Units	60474941004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	465	460	1	10	

SAMPLE DUPLICATE: 3708151

Parameter	Units	60474941008 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	289	299	3	10	

SAMPLE DUPLICATE: 3708152

Parameter	Units	60474802006 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	319	309	3	10	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch: 935651

Analysis Method: SM 2320B

QC Batch Method: SM 2320B

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60474940004

METHOD BLANK: 3708733

Matrix: Water

Associated Lab Samples: 60474940004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	05/19/25 19:51	

LABORATORY CONTROL SAMPLE: 3708734

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	505	101	90-110	

SAMPLE DUPLICATE: 3708735

Parameter	Units	60474940004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	<10.5		10	

SAMPLE DUPLICATE: 3708736

Parameter	Units	60474805012 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	305	302	1	10	

SAMPLE DUPLICATE: 3708737

Parameter	Units	60474899001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	584	607	4	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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch: 935652

Analysis Method: SM 2320B

QC Batch Method: SM 2320B

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60474805007, 60474940002, 60474940003

METHOD BLANK: 3708738

Matrix: Water

Associated Lab Samples: 60474805007, 60474940002, 60474940003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	05/19/25 22:48	

LABORATORY CONTROL SAMPLE: 3708739

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	507	101	90-110	

SAMPLE DUPLICATE: 3708740

Parameter	Units	60474899012 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	485	490	1	10	

SAMPLE DUPLICATE: 3708741

Parameter	Units	60474805011 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	323	331	3	10	

SAMPLE DUPLICATE: 3708742

Parameter	Units	60475025002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	481	490	2	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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch:	935733	Analysis Method:	SM 2320B
QC Batch Method:	SM 2320B	Analysis Description:	2320B Alkalinity
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60474805021, 60474805022, 60474805023, 60474940005, 60474940006, 60474940007, 60474940008

METHOD BLANK: 3709029 Matrix: Water
 Associated Lab Samples: 60474805021, 60474805022, 60474805023, 60474940005, 60474940006, 60474940007, 60474940008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	05/20/25 15:12	

LABORATORY CONTROL SAMPLE: 3709030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	495	99	90-110	

SAMPLE DUPLICATE: 3709031

Parameter	Units	60475110002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	843	864	2	10	

SAMPLE DUPLICATE: 3709032

Parameter	Units	60474940006 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	387	382	1	10	

SAMPLE DUPLICATE: 3709033

Parameter	Units	60474805022 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	317	305	4	10	

SAMPLE DUPLICATE: 3709034

Parameter	Units	60475118003 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	424	424	0	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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch: 934870

Analysis Method: SM 2540C

QC Batch Method: SM 2540C

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60474805001, 60474805002, 60474805003

METHOD BLANK: 3704941

Matrix: Water

Associated Lab Samples: 60474805001, 60474805002, 60474805003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	05/13/25 15:26	

LABORATORY CONTROL SAMPLE: 3704942

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

SAMPLE DUPLICATE: 3704943

Parameter	Units	60474796004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	3330	3320	0	10	

SAMPLE DUPLICATE: 3704944

Parameter	Units	60474832004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	443	449	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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch: 935019

Analysis Method: SM 2540C

QC Batch Method: SM 2540C

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60474940001

METHOD BLANK: 3705708

Matrix: Water

Associated Lab Samples: 60474940001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	05/14/25 16:07	

LABORATORY CONTROL SAMPLE: 3705709

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

SAMPLE DUPLICATE: 3705710

Parameter	Units	60474942001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	466	477	2	10	

SAMPLE DUPLICATE: 3705711

Parameter	Units	60474802006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	431	423	2	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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch: 935176

Analysis Method: SM 2540C

QC Batch Method: SM 2540C

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60474805007, 60474940002, 60474940003, 60474940004

METHOD BLANK: 3706328

Matrix: Water

Associated Lab Samples: 60474805007, 60474940002, 60474940003, 60474940004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	05/15/25 16:54	

LABORATORY CONTROL SAMPLE: 3706329

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

SAMPLE DUPLICATE: 3706330

Parameter	Units	60474940002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	747	737	1	10	

SAMPLE DUPLICATE: 3706331

Parameter	Units	60474941004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	619	623	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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch:	935357	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60474805021, 60474805022, 60474805023, 60474940005, 60474940006, 60474940007, 60474940008

METHOD BLANK: 3707336 Matrix: Water
 Associated Lab Samples: 60474805021, 60474805022, 60474805023, 60474940005, 60474940006, 60474940007, 60474940008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	05/19/25 15:00	

LABORATORY CONTROL SAMPLE: 3707337

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	981	98	80-120	

SAMPLE DUPLICATE: 3707338

Parameter	Units	60474940006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1770	1790	1	10	

SAMPLE DUPLICATE: 3707339

Parameter	Units	60475118003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	553	544	2	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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch:	937191	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:	60474805001, 60474805002, 60474805003		

METHOD BLANK: 3715440 Matrix: Water
 Associated Lab Samples: 60474805001, 60474805002, 60474805003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.53	1.0	0.53	06/02/25 17:48	
Fluoride	mg/L	<0.12	0.20	0.12	06/02/25 17:48	
Sulfate	mg/L	<0.55	1.0	0.55	06/02/25 17:48	

LABORATORY CONTROL SAMPLE: 3715441

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	96	90-110	
Fluoride	mg/L	2.5	2.4	94	90-110	
Sulfate	mg/L	5	5.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3715442 3715443

Parameter	Units	60474796004		3715443		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	50.1	50	96.0	89.8	92	79	80-120	7	15	M1
Fluoride	mg/L	ND	25	21.9	20.4	85	79	80-120	7	15	M1
Sulfate	mg/L	1780	1000	3010	2870	123	109	80-120	5	15	M1

SAMPLE DUPLICATE: 3715470

Parameter	Units	60474796004 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	50.1	43.6	14	15	
Fluoride	mg/L	ND	<1.2		15	
Sulfate	mg/L	1780	1880	6	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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch:	937354	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: 60474805007, 60474940001, 60474940004

METHOD BLANK: 3716100 Matrix: Water
 Associated Lab Samples: 60474805007, 60474940001, 60474940004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.54J	1.0	0.53	06/11/25 00:29	
Fluoride	mg/L	<0.12	0.20	0.12	06/11/25 00:29	
Sulfate	mg/L	<0.55	1.0	0.55	06/11/25 00:29	

LABORATORY CONTROL SAMPLE: 3716101

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	2.5	100	90-110	
Sulfate	mg/L	5	5.1	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3716102 3716103

Parameter	Units	60474802006		3716102		3716103		% Rec	% Rec	Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	46.6	25	25	68.6	68.0	88	86	80-120	1	15	H1	
Fluoride	mg/L	0.56	2.5	2.5	2.7	2.7	85	85	80-120	0	15	H1	
Sulfate	mg/L	8.0	5	5	13.2	13.2	103	103	80-120	0	15	H1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3716105 3716106

Parameter	Units	60474942001		3716105		3716106		% Rec	% Rec	Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	10.8	5	5	15.9	16.0	103	105	80-120	1	15	H1	
Fluoride	mg/L	0.34	2.5	2.5	2.5	2.6	87	90	80-120	3	15	H1	
Sulfate	mg/L	57.3	50	50	106	105	98	96	80-120	1	15	H1	

SAMPLE DUPLICATE: 3716104

Parameter	Units	60474802006 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	46.6	45.6	2	15	H1
Fluoride	mg/L	0.56	0.26	72	15	D6,H1
Sulfate	mg/L	8.0	8.1	1	15	H1

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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

SAMPLE DUPLICATE: 3716107

Parameter	Units	60474942001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	10.8	11.5	6	15	H1
Fluoride	mg/L	0.34	0.14J		15	H1
Sulfate	mg/L	57.3	56.3	2	15	H1

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch:	937359	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: 60474940002, 60474940003

METHOD BLANK: 3716114 Matrix: Water

Associated Lab Samples: 60474940002, 60474940003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.53	1.0	0.53	06/06/25 15:12	
Fluoride	mg/L	<0.12	0.20	0.12	06/06/25 15:12	
Sulfate	mg/L	<0.55	1.0	0.55	06/06/25 15:12	

LABORATORY CONTROL SAMPLE: 3716115

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	97	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	5	5.1	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3716116 3716117

Parameter	Units	60474941004		3716117		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	25.1	50	69.1	69.3	88	88	80-120	0	15	H1
Fluoride	mg/L	0.18J	2.5	1.8	1.8	63	67	80-120	4	15	H1,M1
Sulfate	mg/L	74.8	50	122	122	95	94	80-120	0	15	H1

SAMPLE DUPLICATE: 3716118

Parameter	Units	60474941004 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	25.1	25.6	2	15	
Fluoride	mg/L	0.18J	0.17J		15	
Sulfate	mg/L	74.8	75.3	1	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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60474940

QC Batch:	937709	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: 60474805021, 60474805022, 60474805023, 60474940005, 60474940006, 60474940007, 60474940008

METHOD BLANK: 3717638 Matrix: Water
 Associated Lab Samples: 60474805021, 60474805022, 60474805023, 60474940005, 60474940006, 60474940007, 60474940008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.53	1.0	0.53	06/07/25 10:42	
Fluoride	mg/L	<0.12	0.20	0.12	06/07/25 10:42	
Sulfate	mg/L	<0.55	1.0	0.55	06/07/25 10:42	

LABORATORY CONTROL SAMPLE: 3717639

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.0	99	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	5	5.1	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3717640 3717641

Parameter	Units	60474940006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	194	250	250	262	263	27	28	80-120	0	15	H1,M1
Fluoride	mg/L	<0.12	2.5	2.5	1.5	1.5	60	60	80-120	0	15	H1,M1
Sulfate	mg/L	660	250	250	309	309	-141	-141	80-120	0	15	H1,M1

SAMPLE DUPLICATE: 3717642

Parameter	Units	60474940006 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	194	188	3	15	
Fluoride	mg/L	<0.12	<0.12		15	
Sulfate	mg/L	660	639	3	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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALIFIERS

Project: AMEREN SCPB

Pace Project No.: 60474940

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

B Analyte was detected in the associated method blank.

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.

P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN SCPB

Pace Project No.: 60474940

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60474805001	S-BMW-1S	EPA 200.7	935894	EPA 200.7	935991
60474805002	S-BMW-3S	EPA 200.7	935894	EPA 200.7	935991
60474805003	S-LMW-2S	EPA 200.7	935770	EPA 200.7	935797
60474940001	S-LMW-3S	EPA 200.7	935320	EPA 200.7	935524
60474940002	S-LMW-9S	EPA 200.7	935320	EPA 200.7	935524
60474940003	S-LMW-DUP-1	EPA 200.7	935320	EPA 200.7	935524
60474940004	S-LMW-FB-1	EPA 200.7	935320	EPA 200.7	935524
60474805007	S-LMW-4S	EPA 200.7	936017	EPA 200.7	936124
60474940005	S-LMW-7S	EPA 200.7	935604	EPA 200.7	935626
60474940006	S-LMW-8S	EPA 200.7	935604	EPA 200.7	935626
60474940007	S-LMW-DUP-2	EPA 200.7	935604	EPA 200.7	935626
60474940008	S-LMW-FB-2	EPA 200.7	935604	EPA 200.7	935626
60474805021	S-LMW-1S	EPA 200.7	936256	EPA 200.7	936304
60474805022	S-LMW-5S	EPA 200.7	936256	EPA 200.7	936304
60474805023	S-LMW-6S	EPA 200.7	936256	EPA 200.7	936304
60474805001	S-BMW-1S	SM 2320B	935400		
60474805002	S-BMW-3S	SM 2320B	935400		
60474805003	S-LMW-2S	SM 2320B	935400		
60474940001	S-LMW-3S	SM 2320B	935488		
60474940002	S-LMW-9S	SM 2320B	935652		
60474940003	S-LMW-DUP-1	SM 2320B	935652		
60474940004	S-LMW-FB-1	SM 2320B	935651		
60474805007	S-LMW-4S	SM 2320B	935652		
60474940005	S-LMW-7S	SM 2320B	935733		
60474940006	S-LMW-8S	SM 2320B	935733		
60474940007	S-LMW-DUP-2	SM 2320B	935733		
60474940008	S-LMW-FB-2	SM 2320B	935733		
60474805021	S-LMW-1S	SM 2320B	935733		
60474805022	S-LMW-5S	SM 2320B	935733		
60474805023	S-LMW-6S	SM 2320B	935733		
60474805001	S-BMW-1S	SM 2540C	934870		
60474805002	S-BMW-3S	SM 2540C	934870		
60474805003	S-LMW-2S	SM 2540C	934870		
60474940001	S-LMW-3S	SM 2540C	935019		
60474940002	S-LMW-9S	SM 2540C	935176		
60474940003	S-LMW-DUP-1	SM 2540C	935176		
60474940004	S-LMW-FB-1	SM 2540C	935176		
60474805007	S-LMW-4S	SM 2540C	935176		
60474940005	S-LMW-7S	SM 2540C	935357		
60474940006	S-LMW-8S	SM 2540C	935357		
60474940007	S-LMW-DUP-2	SM 2540C	935357		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN SCPB

Pace Project No.: 60474940

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60474940008	S-LMW-FB-2	SM 2540C	935357		
60474805021	S-LMW-1S	SM 2540C	935357		
60474805022	S-LMW-5S	SM 2540C	935357		
60474805023	S-LMW-6S	SM 2540C	935357		
60474805001	S-BMW-1S	EPA 300.0	937191		
60474805002	S-BMW-3S	EPA 300.0	937191		
60474805003	S-LMW-2S	EPA 300.0	937191		
60474940001	S-LMW-3S	EPA 300.0	937354		
60474940002	S-LMW-9S	EPA 300.0	937359		
60474940003	S-LMW-DUP-1	EPA 300.0	937359		
60474940004	S-LMW-FB-1	EPA 300.0	937354		
60474805007	S-LMW-4S	EPA 300.0	937354		
60474940005	S-LMW-7S	EPA 300.0	937709		
60474940006	S-LMW-8S	EPA 300.0	937709		
60474940007	S-LMW-DUP-2	EPA 300.0	937709		
60474940008	S-LMW-FB-2	EPA 300.0	937709		
60474805021	S-LMW-1S	EPA 300.0	937709		
60474805022	S-LMW-5S	EPA 300.0	937709		
60474805023	S-LMW-6S	EPA 300.0	937709		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

WO#: 60474940



DC#_Title: ENV-FRM-LENE-0009_Sample Cor

Revision: 2

Effective Date: 01/12/2022

Issued By: Lenexa

Client Name: Rocksmitn 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 0.7/1.9 Corr. Factor 10.1 Corrected 0.8/2.0

Date and initials of person examining contents:

RS 1/12/25

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix: <u>WT</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers requiring pH preservation in compliance? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Potassium iodide test strip turns blue/purple? (Preserve)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Samples from USDA Regulated Area: State:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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: _____

Client: Roc K Smith Geoeng

Profile/EZ# 3244562

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																														
3																														
4	↓																													
5																														
6																														
7	WT																													
8																														
9																														
10																														
11																														
12																														

DO NOT LOG

Container Codes

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

60074940

Work Order Number:

WO#: 60474940



DC#_Title: ENV-FRM-LENE-0009_Sample C

Revision: 2

Effective Date: 01/12/2022

Issued By: Lenexa

Client Name: Rocksmith Geoveng

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 1.4/0.8 Corr. Factor 10.1 Corrected 1.5/0.9

Date and initials of person examining contents:

5/14/25

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix: <u>WT</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers requiring pH preservation in compliance? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#: <u>96888</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Potassium iodide test strip turns blue/purple? (Preserve)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Samples from USDA Regulated Area: State:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

CHAIN-OF-CUSTODY Analytical Request Document
 Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY - Affix Workorder/Login Label Here

 Scan QR Code for instructions

Company Name: **Rocksouth Geoenvironmental, LLC.**
 Street Address: **2320 Creve Coeur Mill Road, Maryland Heights, MO 63043**
 Customer Project #: **COCH9**
 Project Name: **AMEREN SCPB**
 Site Collection Info/Facility ID (as applicable):

Contact/Report To: **Mark Haddock**
 Phone #: **314-974-6578**
 E-Mail: **mark.haddock@rocksmithgeo.com**
 Cc E-Mail:

Invoice To: **Mark Haddock**
 Invoice E-Mail: **mark.haddock@rocksmithgeo.com**
 Purchase Order # (if applicable):
 Quote #:

County / State origin of sample(s): **Missouri**

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

Rush (Pre-approval required): **DW PWSID # or WW Permit # as applicable:**
 Same Day 1 Day 2 Day 3 Day Other

Date Results Requested:
 Other

* 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)

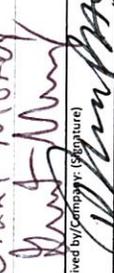
Specify Container Size **
 1 3 4
 Identify Container Preservative Type **
 1 2 3 4
 Analysis Requested

** Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) InCore, (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

Proj. Mgr: **Jamie Church**
 AcctNum / Client ID:
 Table #:
 Profile / Template: **15856**
 Prelog / Bottle Ord. ID: **EZ 3244562**

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Time	Collected or Composite End Date	Time	# Cont.	Res. Results	Res. Chlorine Units	Chloride/Fluoride/Sulfate	TDS / Alkalinity	App III and Cat/An Metals (200.7)*	Sample Comment
S-LMW-3S S-LMW-1S	WT	G	5-12-25	1522	5-12-25	1522	2			✓	✓	✓	
S-LMW-7S	WT	G	5-12-25	0953	5-12-25	0953	2			✓	✓	✓	
S-LMW-8S	WT	G	5-12-25	0904	5-12-25	0904	2			✓	✓	✓	
S-LMW-9S S-LMW-6S	WT	G					2			✓	✓	✓	
S-LMW-DUP-1 S-LMW-5S	WT	G					2			✓	✓	✓	
S-LMW-DUP-2	WT	G	5-12-25	-	5-12-25	-	2			✓	✓	✓	
S-LMW-FB-1	WT	G								✓	✓	✓	
S-LMW-FB-2	WT	G	5-12-25	0945	5-12-25	0945	2			✓	✓	✓	
S-LMW-MS-1	WT	G					2			✓	✓	✓	
S-LMW-MSD-2	WT	G					2			✓	✓	✓	Collected @ S-LMW-8S

Additional Instructions from Pace*:
 • App III and Cat/An Metals • EPA 200.7: B, Ca, Fe, Mg, Mn, K, Na

Collected By: **Grant Morey**
 Signature: 

Thermometer ID: **7-301** Correction Factor [°C]: **+0.1** Obs. Temp. [°C]: **1.4/0.8** Corrected Temp. [°C]: **1.5/0.9** On Ice:
 Date/Time: **5/14** Tracking Number:
 Date/Time: **06:45**

Relinquished by/Company: (Signature) **Rocksouth** Date/Time: **5/13/25** / **1420**
 Relinquished by/Company: (Signature) Date/Time:
 Relinquished by/Company: (Signature) Date/Time:
 Relinquished by/Company: (Signature) Date/Time:

Delivered by: In-Person Courier
 FedEx UPS Other

Page: **1** of **1**



Memorandum

July 30, 2025

To: Project File
Rocksmith Geoengineering, LLC

Project Number: 23009-25

CC: Mark Haddock, Jeffrey Ingram

From: Jack Rasmussen

Email: Jack.Rasmussen@Rocksmithgeo.com

RE: **Data Validation Summary, Sioux Energy Center – SCPB – Data Package 60474940**

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 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 Name: Ameren SCPB
 Reviewer: J. Rasmussen

Project Manager: J. Ingram
 Project Number: 23009-25
 Validation Date: 7/30/2025

Laboratory: Pace Analytical SDG #: 60474940

Analytical Method (type and no.): EPA 200.7 (Total Metals); SM 2320B (Alkalinity); SM 2540C (TDS); EPA 300.0 (Anions)

Matrix: Air Soil/Sed. Water Waste

Sample Names S-LMW-3S, S-LMW-9S, S-LMW-DUP-1, S-LMW-FB-1, S-LMW-7S, S-LMW-8S, S-LMW-DUP-2, S-LMW-FB-2, S-LMW-1S, S-LMW-2S, S-LMW-4S, S-LMW-5S, S-LMW-6S, S-BMW-1S, S-BMW-3S

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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>05/07/2025-05/12/2025</u>
b) Sampling team indicated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>JTR/GTM</u>
c) Sample location noted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
d) Sample depth indicated (Soils)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u></u>
e) Sample type indicated (grab/composite)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Grab</u>
f) Field QC noted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Notes</u>
g) Field parameters collected (note types)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>pH, Spec Cond, Turb, Temp, DO, ORP</u>
h) Field Calibration within control limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
i) Notations of unacceptable field conditions/performances from field logs or field notes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u></u>
j) Does the laboratory narrative indicate deficiencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>No lab narrative.</u>

Note Deficiencies: _____

Chain-of-Custody (COC)	YES	NO	NA	COMMENTS
a) Was the COC properly completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
b) Was the COC signed by both field and laboratory personnel?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
c) Were samples received in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>

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

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Blanks	YES	NO	NA	COMMENTS
a) Were analytes detected in the method blank(s)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Notes
b) Were analytes detected in the field blank(s)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Notes
c) Were analytes detected in the equipment blank(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d) Were analytes detected in the trip blank(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Laboratory Control Sample (LCS)	YES	NO	NA	COMMENTS
a) Was a LCS analyzed once per SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) Were the proper analytes included in the LCS?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) Was the LCS accuracy criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Duplicates	YES	NO	NA	COMMENTS
a) Were field duplicates collected (note original and duplicate sample names)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Notes
b) Were field dup. precision criteria met (note RPD)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Notes
c) Were lab duplicates analyzed (note original and duplicate samples)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d) Were lab dup. precision criteria met (note RPD)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Notes

Blind Standards	YES	NO	NA	COMMENTS
a) Was a blind standard used (indicate name, analytes included and concentrations)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Was the %D within control limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

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

Comments/Notes:

General:

Chloride, sulfate and/or fluoride analyzed outside of time for multiple samples. Results qualified as estimates.

Chloride and sulfate diluted in several samples, no qualifications necessary.

Method blanks:

3709216: Potassium (118J), sodium (138J), associated with sample -003. Results > RL and 10x blank. No qualification necessary.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Data Qualification:

Sample Name	Constituent(s)	Result	Qualifier	Reason
S-LMW-3S	Chloride	22.3	J	Analyzed outside of hold time
"	Sulfate	32.7	J	"
S-LMW-8S	Chloride	194	J	"
"	Fluoride	0.12	UJ	"
"	Sulfate	660	J	"
S-LMW-4S	Chloride	2.6	J	"
"	Fluoride	0.12	UJ	"
"	Sulfate	31.2	J	"
S-LMW-1S	Iron	84.0	J	Detected in method blank, result >RL and <10x blank
S-LMW-5S	"	50.0	U	Detected in method blank, result <RL
S-LMW-6S	"	50.0	U	"
S-LMW-4S	Chloride	2.6	J	Detected in method blank, result >RL and <10x blank
S-LMW-9S	Calcium	140,000	J-	MS recovery low
S-LMW-7S	"	185,000	J-	MS/MSD recovery low
S-LMW-2S	"	169,000	J-	MS recovery low
S-BMW-1S	"	177,000	J-	MSD recovery below 10%
S-LMW-8S	Chloride	194	J-	MS and MSD recovery low
"	Fluoride	0.12	UJ	"
"	Sulfate	660	J-	"

Signature: _____ 

Date: 07/30/2025



July 25, 2025

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

RE: Project: AMEREN SCPB-VERIFICATION
Pace Project No.: 60478806

Dear Mark Haddock:

Enclosed are the analytical results for sample(s) received by the laboratory on July 11, 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



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



CERTIFICATIONS

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60478806

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219

Arkansas Certification #: 88-00679

Illinois Certification #: 2000302023-6

Colorado Division of Oil and Public Safety

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



SAMPLE SUMMARY

Project: AMEREN SCPB-VERIFICATION
Pace Project No.: 60478806

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60478806001	S-LMW-3S	Water	07/09/25 16:12	07/11/25 07:09
60478806002	S-LMW-LMW-DUP-1	Water	07/09/25 00:00	07/11/25 07:09
60478806003	S-LMW-LMW-FB-1	Water	07/09/25 15:53	07/11/25 07:09

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



SAMPLE ANALYTE COUNT

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60478806

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60478806001	S-LMW-3S	EPA 300.0	MLD	1	PASI-K
60478806002	S-LMW-LMW-DUP-1	EPA 300.0	MLD	1	PASI-K
60478806003	S-LMW-LMW-FB-1	EPA 300.0	MLD	1	PASI-K

PASI-K = Pace Analytical Services - Kansas City

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60478806

Sample: S-LMW-3S Lab ID: 60478806001 Collected: 07/09/25 16:12 Received: 07/11/25 07:09 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	8.6	mg/L	1.0	0.53	1		07/21/25 22:33	16887-00-6	M1

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60478806

Sample: S-LMW-LMW-DUP-1 Lab ID: 60478806002 Collected: 07/09/25 00:00 Received: 07/11/25 07:09 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	10.0	mg/L	10.0	5.3	10		07/19/25 17:59	16887-00-6	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60478806

Sample: S-LMW-LMW-FB-1 Lab ID: 60478806003 Collected: 07/09/25 15:53 Received: 07/11/25 07:09 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	<0.53	mg/L	1.0	0.53	1		07/19/25 18:12	16887-00-6	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60478806

QC Batch: 942250

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: 60478806002, 60478806003

METHOD BLANK: 3735317

Matrix: Water

Associated Lab Samples: 60478806002, 60478806003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.53	1.0	0.53	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		3735330		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
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	

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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60478806

QC Batch: 942433

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: 60478806001

METHOD BLANK: 3735893

Matrix: Water

Associated Lab Samples: 60478806001

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		3735895		3735896		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	8.6	5	5	5	12.4	12.3	75	73	80-120	1	15	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3735898 3735899

Parameter	Units	60478810001		3735898		3735899		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	1.5	5	5	5	5.6	5.7	83	84	80-120	1	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3735904 3735905

Parameter	Units	60478826001		3735904		3735905		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	11.8	5	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	

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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60478806

SAMPLE DUPLICATE: 3735906

Parameter	Units	60478826001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	11.8	11.8	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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALIFIERS

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60478806

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

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60478806

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60478806001	S-LMW-3S	EPA 300.0	942433		
60478806002	S-LMW-LMW-DUP-1	EPA 300.0	942250		
60478806003	S-LMW-LMW-FB-1	EPA 300.0	942250		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

WO#: 60478806



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 1.5 Corr. Factor 0.0 Corrected 1.5

Date and initials of person examining contents:

R 2/11/25

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix: <u>WT</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers requiring pH preservation in compliance? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Potassium iodide test strip turns blue/purple? (Preserve)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Samples from USDA Regulated Area: State:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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: _____



Memorandum

August 12, 2025

To: Project File
Rocksmith Geoengineering, LLC

Project Number: 23009-25

CC: Mark Haddock, Jeffrey Ingram

From: Emy Ludwig

Email: emy.ludwig@rocksmithgeo.com

RE: **Data Validation Summary, Sioux Energy Center – SCPB – Data Package 60478806**

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 Name: Ameren SCPB - Verification
 Reviewer: E. Ludwig

Project Manager: J. Ingram
 Project Number: 23009-25
 Validation Date: 8/12/2025

Laboratory: Pace Analytical

SDG #: 60478806

Analytical Method (type and no.): EPA 300.0 (Anions)

Matrix: Air Soil/Sed. Water Waste

Sample Names S-LMW-3S, S-LMW-DUP-1, S-LMW-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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>7/09/2025</u>
b) Sampling team indicated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>JTR/JDQ/CLJ</u>
c) Sample location noted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
d) Sample depth indicated (Soils)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u></u>
e) Sample type indicated (grab/composite)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Grab</u>
f) Field QC noted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Notes</u>
g) Field parameters collected (note types)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>pH, Spec Cond, Turb, Temp, DO, ORP</u>
h) Field Calibration within control limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
i) Notations of unacceptable field conditions/performances from field logs or field notes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u></u>
j) Does the laboratory narrative indicate deficiencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>No lab narrative.</u>

Note Deficiencies:

Chain-of-Custody (COC)	YES	NO	NA	COMMENTS
a) Was the COC properly completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
b) Was the COC signed by both field and laboratory personnel?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
c) Were samples received in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>

General (reference QAPP or Method)	YES	NO	NA	COMMENTS
a) Were hold times met for sample pretreatment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
b) Were hold times met for sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
c) Were the correct preservatives used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
d) Was the correct method used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
e) Were appropriate reporting limits achieved?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
f) Were any sample dilutions noted?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>See Note</u>
g) Were any matrix problems noted?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u></u>

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Blanks	YES	NO	NA	COMMENTS
a) Were analytes detected in the method blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
b) Were analytes detected in the field blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
c) Were analytes detected in the equipment blank(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
d) Were analytes detected in the trip blank(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____

Laboratory Control Sample (LCS)	YES	NO	NA	COMMENTS
a) Was a LCS analyzed once per SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
b) Were the proper analytes included in the LCS?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
c) Was the LCS accuracy criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Duplicates	YES	NO	NA	COMMENTS
a) Were field duplicates collected (note original and duplicate sample names)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Notes _____
b) Were field dup. precision criteria met (note RPD)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
c) Were lab duplicates analyzed (note original and duplicate samples)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Notes _____
d) Were lab dup. precision criteria met (note RPD)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Blind Standards	YES	NO	NA	COMMENTS
a) Was a blind standard used (indicate name, analytes included and concentrations)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
b) Was the %D within control limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____

Matrix Spike/Matrix Spike Duplicate (MS/MSD)	YES	NO	NA	COMMENTS
a) Was MS accuracy criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Recovery could not be calculated since sample contained high concentration of analyte?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
b) Was MSD accuracy criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Recovery could not be calculated since sample contained high concentration of analyte?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
c) Were MS/MSD precision criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Comments/Notes:

QAQC Samples:

All QAQC samples are associated with S-LMW-3S.

Dilutions:

Sample S-LMW-DUP-1 (Chloride) was diluted at a factor of 10. No qualification applied.



November 13, 2025

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

RE: Project: AMEREN SCPB
Pace Project No.: 60483727

Dear Mark Haddock:

Enclosed are the analytical results for sample(s) received by the laboratory between October 06, 2025 and October 10, 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 - Salina

REV-1: Per client request, sample ID L-LMW-3S revised to S-LMW-3S.

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



CERTIFICATIONS

Project: AMEREN SCPB

Pace Project No.: 60483727

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219

EPA Lab Code: KS00021

Arkansas Certification #: 88-00679

Colorado Division of Oil and Public Safety

Illinois Certification #: 200030

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



SAMPLE SUMMARY

Project: AMEREN SCPB

Pace Project No.: 60483727

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60483727001	S-LMW-9S	Water	10/06/25 15:06	10/08/25 08:20
60483727002	S-LMW-DUP-2	Water	10/06/25 08:00	10/08/25 08:20
60483727003	S-LMW-3S	Water	10/08/25 15:40	10/10/25 07:30
60483727004	S-LMW-7S	Water	10/08/25 11:50	10/10/25 07:30
60483727005	S-LMW-DUP-1	Water	10/08/25 00:00	10/10/25 07:30
60483727006	S-LMW-8S	Water	10/08/25 12:38	10/10/25 07:30
60483727007	S-LMW-FB-1	Water	10/08/25 12:55	10/10/25 07:30
60483727008	S-LMW-FB-2	Water	10/08/25 15:45	10/10/25 07:30
60483592006	S-LMW-1S	Water	10/06/25 13:27	10/08/25 08:20
60483592007	S-LMW-2S	Water	10/07/25 14:20	10/08/25 08:20
60483592008	S-LMW-4S	Water	10/07/25 09:58	10/08/25 08:20
60483592001	S-LMW-5S	Water	10/03/25 13:10	10/06/25 12:57
60483592002	S-LMW-6S	Water	10/03/25 10:39	10/06/25 12:57
60483592004	S-BMW-1S	Water	10/06/25 10:16	10/08/25 08:20
60483592005	S-BMW-3S	Water	10/06/25 11:57	10/08/25 08:20

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



SAMPLE ANALYTE COUNT

Project: AMEREN SCPB

Pace Project No.: 60483727

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60483727001	S-LMW-9S	EPA 200.7	JGP	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
60483727002	S-LMW-DUP-2	EPA 200.7	JGP	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
60483727003	S-LMW-3S	EPA 200.7	ARMN	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
60483727004	S-LMW-7S	EPA 200.7	ARMN	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
60483727005	S-LMW-DUP-1	EPA 200.7	ARMN	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
60483727006	S-LMW-8S	EPA 200.7	ARMN	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
60483727007	S-LMW-FB-1	EPA 200.7	ARMN	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
60483727008	S-LMW-FB-2	EPA 200.7	ARMN	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
60483592006	S-LMW-1S	EPA 200.7	JGP	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	CAR	1	PASI-K
60483592007	S-LMW-2S	EPA 200.7	JGP	7	PASI-K

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



SAMPLE ANALYTE COUNT

Project: AMEREN SCPB

Pace Project No.: 60483727

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60483592008	S-LMW-4S	EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 200.7	JGP	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
60483592001	S-LMW-5S	SM 2320B	AJWM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 200.7	JGP	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
60483592002	S-LMW-6S	SM 2540C	CAR	1	PASI-K
		EPA 200.7	JGP	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
60483592004	S-BMW-1S	EPA 200.7	JGP	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 200.7	JGP	7	PASI-K
60483592005	S-BMW-3S	EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 200.7	JGP	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA

PASI-K = Pace Analytical Services - Kansas City

PASI-SA = Pace Analytical Services - Salina

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60483727

Sample: S-LMW-9S Lab ID: 60483727001 Collected: 10/06/25 15:06 Received: 10/08/25 08:20 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									
Boron	706	ug/L	100	7.3	1	10/09/25 14:57	10/20/25 11:08	7440-42-8	
Calcium	110000	ug/L	200	12.1	1	10/09/25 14:57	10/20/25 11:08	7440-70-2	
Iron	18.7J	ug/L	50.0	8.7	1	10/09/25 14:57	10/20/25 11:08	7439-89-6	
Magnesium	34800	ug/L	50.0	16.0	1	10/09/25 14:57	10/20/25 11:08	7439-95-4	
Manganese	178	ug/L	5.0	0.52	1	10/09/25 14:57	10/20/25 11:08	7439-96-5	
Potassium	4040	ug/L	500	66.6	1	10/09/25 14:57	10/20/25 11:08	7440-09-7	
Sodium	37700	ug/L	500	46.9	1	10/09/25 14:57	10/20/25 11:08	7440-23-5	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0									
Pace Analytical Services - Salina									
Chloride	73.4	mg/L	10.0	1.8	10		10/28/25 17:29	16887-00-6	
Fluoride	0.60	mg/L	0.10	0.040	1		10/28/25 10:33	16984-48-8	
Sulfate	105	mg/L	10.0	0.96	10		10/28/25 17:29	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		10/17/25 14:20		L1
2540C Total Dissolved Solids									
Analytical Method: SM 2540C									
Pace Analytical Services - Kansas City									
Total Dissolved Solids	600	mg/L	10.0	10.0	1		10/13/25 13:45		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60483727

Sample: S-LMW-DUP-2 Lab ID: 60483727002 Collected: 10/06/25 08:00 Received: 10/08/25 08:20 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							
Boron	731	ug/L	100	7.3	1	10/09/25 14:57	10/20/25 11:09	7440-42-8	
Calcium	113000	ug/L	200	12.1	1	10/09/25 14:57	10/20/25 11:09	7440-70-2	
Iron	11.7J	ug/L	50.0	8.7	1	10/09/25 14:57	10/20/25 11:09	7439-89-6	
Magnesium	36000	ug/L	50.0	16.0	1	10/09/25 14:57	10/20/25 11:09	7439-95-4	
Manganese	162	ug/L	5.0	0.52	1	10/09/25 14:57	10/20/25 11:09	7439-96-5	
Potassium	4220	ug/L	500	66.6	1	10/09/25 14:57	10/20/25 11:09	7440-09-7	
Sodium	39200	ug/L	500	46.9	1	10/09/25 14:57	10/20/25 11:09	7440-23-5	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Salina							
Chloride	73.3	mg/L	10.0	1.8	10		10/28/25 17:41	16887-00-6	
Fluoride	0.61	mg/L	0.10	0.040	1		10/28/25 10:46	16984-48-8	
Sulfate	104	mg/L	10.0	0.96	10		10/28/25 17:41	14808-79-8	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	290	mg/L	20.0	10.5	1		10/17/25 14:20		L1
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	599	mg/L	10.0	10.0	1		10/13/25 13:45		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60483727

Sample: S-LMW-3S Lab ID: 60483727003 Collected: 10/08/25 15:40 Received: 10/10/25 07:30 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							
Boron	133	ug/L	100	33.2	1	10/15/25 09:48	10/16/25 16:46	7440-42-8	
Calcium	106000	ug/L	200	45.3	1	10/15/25 09:48	10/16/25 16:46	7440-70-2	
Iron	87.6	ug/L	50.0	15.4	1	10/15/25 09:48	10/16/25 16:46	7439-89-6	
Magnesium	21600	ug/L	50.0	21.1	1	10/15/25 09:48	10/16/25 16:46	7439-95-4	
Manganese	33.5	ug/L	5.0	0.42	1	10/15/25 09:48	10/16/25 16:46	7439-96-5	
Potassium	3270	ug/L	500	45.2	1	10/15/25 09:48	10/16/25 16:46	7440-09-7	
Sodium	11000	ug/L	500	31.8	1	10/15/25 09:48	10/16/25 16:46	7440-23-5	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Salina							
Chloride	3.4	mg/L	1.0	0.18	1		10/29/25 11:59	16887-00-6	
Fluoride	0.36	mg/L	0.10	0.040	1		10/29/25 11:59	16984-48-8	
Sulfate	35.5	mg/L	5.0	0.48	5		10/29/25 17:20	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		10/22/25 18:19		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	418	mg/L	10.0	10.0	1		10/14/25 09:14		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60483727

Sample: S-LMW-7S **Lab ID: 60483727004** Collected: 10/08/25 11:50 Received: 10/10/25 07:30 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							
Boron	3310	ug/L	100	33.2	1	10/15/25 09:48	10/16/25 16:48	7440-42-8	
Calcium	194000	ug/L	200	45.3	1	10/15/25 09:48	10/16/25 16:48	7440-70-2	
Iron	<15.4	ug/L	50.0	15.4	1	10/15/25 09:48	10/16/25 16:48	7439-89-6	
Magnesium	53200	ug/L	50.0	21.1	1	10/15/25 09:48	10/16/25 16:48	7439-95-4	
Manganese	422	ug/L	5.0	0.42	1	10/15/25 09:48	10/16/25 16:48	7439-96-5	
Potassium	4290	ug/L	500	45.2	1	10/15/25 09:48	10/16/25 16:48	7440-09-7	
Sodium	21900	ug/L	500	31.8	1	10/15/25 09:48	10/16/25 16:48	7440-23-5	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Salina							
Chloride	23.4	mg/L	2.0	0.36	2		10/29/25 17:32	16887-00-6	
Fluoride	0.26	mg/L	0.10	0.040	1		10/29/25 12:12	16984-48-8	
Sulfate	336	mg/L	50.0	4.8	50		10/29/25 17:44	14808-79-8	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	394	mg/L	20.0	10.5	1		10/22/25 18:19		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	952	mg/L	13.3	13.3	1		10/14/25 09:14		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60483727

Sample: S-LMW-DUP-1 **Lab ID: 60483727005** Collected: 10/08/25 00:00 Received: 10/10/25 07:30 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							
Boron	3290	ug/L	100	33.2	1	10/15/25 09:48	10/16/25 16:50	7440-42-8	
Calcium	195000	ug/L	200	45.3	1	10/15/25 09:48	10/16/25 16:50	7440-70-2	
Iron	<15.4	ug/L	50.0	15.4	1	10/15/25 09:48	10/16/25 16:50	7439-89-6	
Magnesium	53800	ug/L	50.0	21.1	1	10/15/25 09:48	10/16/25 16:50	7439-95-4	
Manganese	404	ug/L	5.0	0.42	1	10/15/25 09:48	10/16/25 16:50	7439-96-5	
Potassium	4330	ug/L	500	45.2	1	10/15/25 09:48	10/16/25 16:50	7440-09-7	
Sodium	21300	ug/L	500	31.8	1	10/15/25 09:48	10/16/25 16:50	7440-23-5	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Salina							
Chloride	23.8	mg/L	2.0	0.36	2		10/29/25 17:56	16887-00-6	
Fluoride	0.29	mg/L	0.10	0.040	1		10/29/25 12:24	16984-48-8	
Sulfate	332	mg/L	50.0	4.8	50		10/29/25 18:08	14808-79-8	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	404	mg/L	20.0	10.5	1		10/22/25 18:20		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	940	mg/L	13.3	13.3	1		10/14/25 09:15		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60483727

Sample: S-LMW-8S Lab ID: 60483727006 Collected: 10/08/25 12:38 Received: 10/10/25 07:30 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									
Boron	6420	ug/L	100	33.2	1	10/15/25 09:48	10/16/25 16:40	7440-42-8	
Calcium	301000	ug/L	200	45.3	1	10/15/25 09:48	10/16/25 16:40	7440-70-2	M1
Iron	<15.4	ug/L	50.0	15.4	1	10/15/25 09:48	10/16/25 16:40	7439-89-6	
Magnesium	67000	ug/L	50.0	21.1	1	10/15/25 09:48	10/16/25 16:40	7439-95-4	
Manganese	1120	ug/L	5.0	0.42	1	10/15/25 09:48	10/16/25 16:40	7439-96-5	
Potassium	5270	ug/L	500	45.2	1	10/15/25 09:48	10/16/25 16:40	7440-09-7	
Sodium	72100	ug/L	500	31.8	1	10/15/25 09:48	10/16/25 16:40	7440-23-5	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0									
Pace Analytical Services - Salina									
Chloride	206	mg/L	20.0	3.6	20		10/29/25 18:21	16887-00-6	
Fluoride	0.24	mg/L	0.10	0.040	1		10/29/25 12:36	16984-48-8	
Sulfate	543	mg/L	100	9.6	100		10/29/25 19:22	14808-79-8	
2320B Alkalinity									
Analytical Method: SM 2320B									
Pace Analytical Services - Kansas City									
Alkalinity, Total as CaCO3	358	mg/L	20.0	10.5	1		10/22/25 18:20		
2540C Total Dissolved Solids									
Analytical Method: SM 2540C									
Pace Analytical Services - Kansas City									
Total Dissolved Solids	1560	mg/L	40.0	40.0	1		10/14/25 09:15		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60483727

Sample: S-LMW-FB-1 Lab ID: 60483727007 Collected: 10/08/25 12:55 Received: 10/10/25 07:30 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									
Boron	<33.2	ug/L	100	33.2	1	10/15/25 09:48	10/16/25 16:51	7440-42-8	
Calcium	<45.3	ug/L	200	45.3	1	10/15/25 09:48	10/16/25 16:51	7440-70-2	
Iron	<15.4	ug/L	50.0	15.4	1	10/15/25 09:48	10/16/25 16:51	7439-89-6	
Magnesium	<21.1	ug/L	50.0	21.1	1	10/15/25 09:48	10/16/25 16:51	7439-95-4	
Manganese	<0.42	ug/L	5.0	0.42	1	10/15/25 09:48	10/16/25 16:51	7439-96-5	
Potassium	<45.2	ug/L	500	45.2	1	10/15/25 09:48	10/16/25 16:51	7440-09-7	
Sodium	322J	ug/L	500	31.8	1	10/15/25 09:48	10/16/25 16:51	7440-23-5	B
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		10/29/25 13:13	16887-00-6	
Fluoride	<0.040	mg/L	0.10	0.040	1		10/29/25 13:13	16984-48-8	
Sulfate	<0.096	mg/L	1.0	0.096	1		10/29/25 13:13	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		10/22/25 18:20		
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		10/14/25 09:15		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60483727

Sample: S-LMW-FB-2 **Lab ID: 60483727008** Collected: 10/08/25 15:45 Received: 10/10/25 07:30 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									
Boron	<33.2	ug/L	100	33.2	1	10/15/25 09:48	10/16/25 16:59	7440-42-8	
Calcium	<45.3	ug/L	200	45.3	1	10/15/25 09:48	10/16/25 16:59	7440-70-2	
Iron	15.4J	ug/L	50.0	15.4	1	10/15/25 09:48	10/16/25 16:59	7439-89-6	
Magnesium	<21.1	ug/L	50.0	21.1	1	10/15/25 09:48	10/16/25 16:59	7439-95-4	
Manganese	<0.42	ug/L	5.0	0.42	1	10/15/25 09:48	10/16/25 16:59	7439-96-5	
Potassium	<45.2	ug/L	500	45.2	1	10/15/25 09:48	10/16/25 16:59	7440-09-7	
Sodium	249J	ug/L	500	31.8	1	10/15/25 09:48	10/16/25 16:59	7440-23-5	B
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		10/29/25 13:26	16887-00-6	
Fluoride	<0.040	mg/L	0.10	0.040	1		10/29/25 13:26	16984-48-8	
Sulfate	<0.096	mg/L	1.0	0.096	1		10/29/25 13:26	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		10/22/25 18:20		
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		10/14/25 09:15		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60483727

Sample: S-LMW-1S **Lab ID: 60483592006** Collected: 10/06/25 13:27 Received: 10/08/25 08:20 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							
Boron	910	ug/L	100	33.2	1	10/08/25 15:11	10/17/25 15:24	7440-42-8	
Calcium	134000	ug/L	200	45.3	1	10/08/25 15:11	10/17/25 15:24	7440-70-2	
Iron	<15.4	ug/L	50.0	15.4	1	10/08/25 15:11	10/17/25 15:24	7439-89-6	
Magnesium	30000	ug/L	50.0	21.1	1	10/08/25 15:11	10/17/25 15:24	7439-95-4	
Manganese	42.7	ug/L	5.0	0.42	1	10/08/25 15:11	10/17/25 15:24	7439-96-5	
Potassium	11200	ug/L	500	45.2	1	10/08/25 15:11	10/17/25 15:24	7440-09-7	
Sodium	58200	ug/L	500	31.8	1	10/08/25 15:11	10/17/25 15:24	7440-23-5	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Salina							
Chloride	123	mg/L	10.0	1.8	10		10/26/25 17:37	16887-00-6	
Fluoride	0.26	mg/L	0.10	0.040	1		10/26/25 10:44	16984-48-8	
Sulfate	93.6	mg/L	10.0	0.96	10		10/26/25 17:37	14808-79-8	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	312	mg/L	20.0	10.5	1		10/20/25 15:57		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	685	mg/L	13.3	13.3	1		10/09/25 15:30		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60483727

Sample: S-LMW-2S Lab ID: 60483592007 Collected: 10/07/25 14:20 Received: 10/08/25 08:20 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							
Boron	7650	ug/L	100	33.2	1	10/08/25 15:11	10/17/25 15:25	7440-42-8	
Calcium	138000	ug/L	200	45.3	1	10/08/25 15:11	10/17/25 15:25	7440-70-2	
Iron	127	ug/L	50.0	15.4	1	10/08/25 15:11	10/17/25 15:25	7439-89-6	
Magnesium	29000	ug/L	50.0	21.1	1	10/08/25 15:11	10/17/25 15:25	7439-95-4	
Manganese	345	ug/L	5.0	0.42	1	10/08/25 15:11	10/17/25 15:25	7439-96-5	
Potassium	4570	ug/L	500	45.2	1	10/08/25 15:11	10/17/25 15:25	7440-09-7	
Sodium	58400	ug/L	500	31.8	1	10/08/25 15:11	10/17/25 15:25	7440-23-5	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Salina							
Chloride	86.0	mg/L	10.0	1.8	10		10/26/25 17:49	16887-00-6	
Fluoride	0.37	mg/L	0.10	0.040	1		10/26/25 10:57	16984-48-8	
Sulfate	188	mg/L	10.0	0.96	10		10/26/25 17:49	14808-79-8	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	284	mg/L	20.0	10.5	1		10/21/25 17:32		L1
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	748	mg/L	13.3	13.3	1		10/13/25 16:32		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60483727

Sample: S-LMW-4S **Lab ID: 60483592008** Collected: 10/07/25 09:58 Received: 10/08/25 08:20 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									
Boron	225	ug/L	100	33.2	1	10/08/25 15:11	10/17/25 15:27	7440-42-8	
Calcium	232000	ug/L	200	45.3	1	10/08/25 15:11	10/17/25 15:27	7440-70-2	
Iron	17.4J	ug/L	50.0	15.4	1	10/08/25 15:11	10/17/25 15:27	7439-89-6	
Magnesium	56000	ug/L	50.0	21.1	1	10/08/25 15:11	10/17/25 15:27	7439-95-4	
Manganese	333	ug/L	5.0	0.42	1	10/08/25 15:11	10/17/25 15:27	7439-96-5	
Potassium	5990	ug/L	500	45.2	1	10/08/25 15:11	10/17/25 15:27	7440-09-7	
Sodium	10600	ug/L	500	31.8	1	10/08/25 15:11	10/17/25 15:27	7440-23-5	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0									
Pace Analytical Services - Salina									
Chloride	4.0	mg/L	1.0	0.18	1		10/26/25 11:09	16887-00-6	
Fluoride	0.14	mg/L	0.10	0.040	1		10/26/25 11:09	16984-48-8	
Sulfate	36.4	mg/L	5.0	0.48	5		10/26/25 18:14	14808-79-8	
2320B Alkalinity									
Analytical Method: SM 2320B									
Pace Analytical Services - Kansas City									
Alkalinity, Total as CaCO3	770	mg/L	20.0	10.5	1		10/21/25 17:32		L1
2540C Total Dissolved Solids									
Analytical Method: SM 2540C									
Pace Analytical Services - Kansas City									
Total Dissolved Solids	841	mg/L	13.3	13.3	1		10/13/25 16:32		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60483727

Sample: S-LMW-5S **Lab ID: 60483592001** Collected: 10/03/25 13:10 Received: 10/06/25 12:57 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									
Boron	14600	ug/L	100	33.2	1	10/08/25 15:11	10/17/25 15:53	7440-42-8	
Calcium	204000	ug/L	200	45.3	1	10/08/25 15:11	10/17/25 15:53	7440-70-2	
Iron	80.4	ug/L	50.0	15.4	1	10/08/25 15:11	10/17/25 15:53	7439-89-6	
Magnesium	38400	ug/L	50.0	21.1	1	10/08/25 15:11	10/17/25 15:53	7439-95-4	
Manganese	1360	ug/L	5.0	0.42	1	10/08/25 15:11	10/17/25 15:53	7439-96-5	
Potassium	4790	ug/L	500	45.2	1	10/08/25 15:11	10/17/25 15:53	7440-09-7	
Sodium	170000	ug/L	500	31.8	1	10/08/25 15:11	10/17/25 15:53	7440-23-5	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0									
Pace Analytical Services - Salina									
Chloride	21.3	mg/L	2.0	0.36	2		10/26/25 16:23	16887-00-6	
Fluoride	0.48	mg/L	0.10	0.040	1		10/26/25 09:43	16984-48-8	
Sulfate	745	mg/L	100	9.6	100		10/26/25 16:35	14808-79-8	
2320B Alkalinity									
Analytical Method: SM 2320B									
Pace Analytical Services - Kansas City									
Alkalinity, Total as CaCO3	298	mg/L	20.0	10.5	1		10/17/25 14:20		L1
2540C Total Dissolved Solids									
Analytical Method: SM 2540C									
Pace Analytical Services - Kansas City									
Total Dissolved Solids	1480	mg/L	20.0	20.0	1		10/07/25 14:31		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60483727

Sample: S-LMW-6S Lab ID: 60483592002 Collected: 10/03/25 10:39 Received: 10/06/25 12:57 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							
Boron	15900	ug/L	100	33.2	1	10/08/25 15:11	10/17/25 15:55	7440-42-8	
Calcium	237000	ug/L	200	45.3	1	10/08/25 15:11	10/17/25 15:55	7440-70-2	
Iron	75.3	ug/L	50.0	15.4	1	10/08/25 15:11	10/17/25 15:55	7439-89-6	
Magnesium	52600	ug/L	50.0	21.1	1	10/08/25 15:11	10/17/25 15:55	7439-95-4	
Manganese	456	ug/L	5.0	0.42	1	10/08/25 15:11	10/17/25 15:55	7439-96-5	
Potassium	4460	ug/L	500	45.2	1	10/08/25 15:11	10/17/25 15:55	7440-09-7	
Sodium	74100	ug/L	500	31.8	1	10/08/25 15:11	10/17/25 15:55	7440-23-5	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Salina							
Chloride	4.3	mg/L	1.0	0.18	1		10/26/25 09:55	16887-00-6	
Fluoride	0.15	mg/L	0.10	0.040	1		10/26/25 09:55	16984-48-8	
Sulfate	458	mg/L	50.0	4.8	50		10/26/25 16:48	14808-79-8	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	534	mg/L	20.0	10.5	1		10/17/25 14:20		L1
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	1280	mg/L	20.0	20.0	1		10/07/25 14:31		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60483727

Sample: S-BMW-1S **Lab ID: 60483592004** Collected: 10/06/25 10:16 Received: 10/08/25 08:20 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							
Boron	68.5J	ug/L	100	33.2	1	10/08/25 15:11	10/17/25 15:59	7440-42-8	
Calcium	168000	ug/L	200	45.3	1	10/08/25 15:11	10/17/25 15:59	7440-70-2	
Iron	35.5J	ug/L	50.0	15.4	1	10/08/25 15:11	10/17/25 15:59	7439-89-6	
Magnesium	34000	ug/L	50.0	21.1	1	10/08/25 15:11	10/17/25 15:59	7439-95-4	
Manganese	825	ug/L	5.0	0.42	1	10/08/25 15:11	10/17/25 15:59	7439-96-5	
Potassium	516	ug/L	500	45.2	1	10/08/25 15:11	10/17/25 15:59	7440-09-7	B
Sodium	5400	ug/L	500	31.8	1	10/08/25 15:11	10/17/25 15:59	7440-23-5	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Salina							
Chloride	11.4	mg/L	1.0	0.18	1		10/26/25 10:20	16887-00-6	
Fluoride	0.27	mg/L	0.10	0.040	1		10/26/25 10:20	16984-48-8	
Sulfate	39.2	mg/L	5.0	0.48	5		10/26/25 17:12	14808-79-8	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	514	mg/L	20.0	10.5	1		10/20/25 15:57		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	596	mg/L	13.3	13.3	1		10/09/25 15:29		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB

Pace Project No.: 60483727

Sample: S-BMW-3S **Lab ID: 60483592005** Collected: 10/06/25 11:57 Received: 10/08/25 08:20 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							
Boron	62.1J	ug/L	100	33.2	1	10/08/25 15:11	10/17/25 15:22	7440-42-8	
Calcium	129000	ug/L	200	45.3	1	10/08/25 15:11	10/17/25 15:22	7440-70-2	
Iron	<15.4	ug/L	50.0	15.4	1	10/08/25 15:11	10/17/25 15:22	7439-89-6	
Magnesium	22900	ug/L	50.0	21.1	1	10/08/25 15:11	10/17/25 15:22	7439-95-4	
Manganese	423	ug/L	5.0	0.42	1	10/08/25 15:11	10/17/25 15:22	7439-96-5	
Potassium	516	ug/L	500	45.2	1	10/08/25 15:11	10/17/25 15:22	7440-09-7	B
Sodium	6200	ug/L	500	31.8	1	10/08/25 15:11	10/17/25 15:22	7440-23-5	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Salina							
Chloride	9.6	mg/L	1.0	0.18	1		10/26/25 10:32	16887-00-6	
Fluoride	0.30	mg/L	0.10	0.040	1		10/26/25 10:32	16984-48-8	
Sulfate	35.6	mg/L	2.0	0.19	2		10/26/25 17:25	14808-79-8	
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Kansas City							
Alkalinity, Total as CaCO3	380	mg/L	20.0	10.5	1		10/20/25 15:57		
2540C Total Dissolved Solids		Analytical Method: SM 2540C Pace Analytical Services - Kansas City							
Total Dissolved Solids	477	mg/L	10.0	10.0	1		10/09/25 15:30		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

QC Batch: 950940 Analysis Method: EPA 200.7
 QC Batch Method: EPA 200.7 Analysis Description: 200.7 Metals, Total
 Laboratory: Pace Analytical Services - Kansas City
 Associated Lab Samples: 60483592001, 60483592002, 60483592004, 60483592005, 60483592006, 60483592007, 60483592008

METHOD BLANK: 3768607 Matrix: Water
 Associated Lab Samples: 60483592001, 60483592002, 60483592004, 60483592005, 60483592006, 60483592007, 60483592008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	ug/L	<33.2	100	33.2	10/17/25 15:00	
Calcium	ug/L	<45.3	200	45.3	10/17/25 15:00	
Iron	ug/L	<15.4	50.0	15.4	10/17/25 15:00	
Magnesium	ug/L	<21.1	50.0	21.1	10/17/25 15:00	
Manganese	ug/L	<0.42	5.0	0.42	10/17/25 15:00	
Potassium	ug/L	60.5J	500	45.2	10/17/25 15:00	
Sodium	ug/L	<31.8	500	31.8	10/17/25 15:00	

LABORATORY CONTROL SAMPLE: 3768608

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	1000	985	98	85-115	
Calcium	ug/L	10000	10300	103	85-115	
Iron	ug/L	10000	10300	103	85-115	
Magnesium	ug/L	10000	10000	100	85-115	
Manganese	ug/L	1000	1020	102	85-115	
Potassium	ug/L	10000	10200	102	85-115	
Sodium	ug/L	10000	10100	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3768609 3768610

Parameter	Units	60483592010		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Boron	ug/L	7210	1000	1000	8410	8400	119	119	70-130	0	20		
Calcium	ug/L	142000	10000	10000	155000	155000	131	130	70-130	0	20	M1	
Iron	ug/L	9710	10000	10000	20100	20100	104	104	70-130	0	20		
Magnesium	ug/L	35900	10000	10000	46700	46700	108	108	70-130	0	20		
Manganese	ug/L	1110	1000	1000	2150	2150	104	104	70-130	0	20		
Potassium	ug/L	5170	10000	10000	15700	15500	105	104	70-130	1	20		
Sodium	ug/L	33700	10000	10000	44700	44700	110	110	70-130	0	20		

MATRIX SPIKE SAMPLE: 3768611

Parameter	Units	60483592009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Boron	ug/L		5610	1000	6520	92	70-130
Calcium	ug/L		112000	10000	121000	83	70-130

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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

MATRIX SPIKE SAMPLE:		3768611					
Parameter	Units	60483592009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	9370	10000	19700	103	70-130	
Magnesium	ug/L	24000	10000	33500	94	70-130	
Manganese	ug/L	833	1000	1840	101	70-130	
Potassium	ug/L	2260	10000	12300	101	70-130	
Sodium	ug/L	29300	10000	38900	96	70-130	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

QC Batch:	951101	Analysis Method:	EPA 200.7
QC Batch Method:	EPA 200.7	Analysis Description:	200.7 Metals, Total
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60483727001, 60483727002

METHOD BLANK: 3769392 Matrix: Water

Associated Lab Samples: 60483727001, 60483727002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	ug/L	<7.3	100	7.3	10/20/25 10:59	
Calcium	ug/L	<12.1	200	12.1	10/20/25 10:59	
Iron	ug/L	<8.7	50.0	8.7	10/20/25 10:59	
Magnesium	ug/L	<16.0	50.0	16.0	10/20/25 10:59	
Manganese	ug/L	<0.52	5.0	0.52	10/20/25 10:59	
Potassium	ug/L	<66.6	500	66.6	10/20/25 10:59	
Sodium	ug/L	<46.9	500	46.9	10/20/25 10:59	

LABORATORY CONTROL SAMPLE: 3769393

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	1000	1040	104	85-115	
Calcium	ug/L	10000	11000	110	85-115	
Iron	ug/L	10000	11200	112	85-115	
Magnesium	ug/L	10000	10600	106	85-115	
Manganese	ug/L	1000	1100	110	85-115	
Potassium	ug/L	10000	10500	105	85-115	
Sodium	ug/L	10000	10700	107	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3769394 3769395

Parameter	Units	60483730001		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Boron	ug/L	115	1000	1000	1140	1120	103	101	70-130	2	20		
Calcium	ug/L	131000	10000	10000	141000	133000	95	15	70-130	6	20 M1		
Iron	ug/L	<8.7	10000	10000	10700	10400	107	104	70-130	3	20		
Magnesium	ug/L	36000	10000	10000	45800	43400	98	74	70-130	5	20		
Manganese	ug/L	790	1000	1000	1790	1750	100	96	70-130	2	20		
Potassium	ug/L	7440	10000	10000	18000	17400	106	100	70-130	3	20		
Sodium	ug/L	8040	10000	10000	18600	17700	105	97	70-130	5	20		

MATRIX SPIKE SAMPLE: 3769396

Parameter	Units	60483730005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	<7.3	1000	1010	101	70-130	
Calcium	ug/L	<12.1	10000	10300	103	70-130	

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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

MATRIX SPIKE SAMPLE:		3769396					
Parameter	Units	60483730005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	<8.7	10000	10700	107	70-130	
Magnesium	ug/L	<16.0	10000	9920	99	70-130	
Manganese	ug/L	<0.52	1000	1080	108	70-130	
Potassium	ug/L	<66.6	10000	10100	101	70-130	
Sodium	ug/L	<46.9	10000	10200	102	70-130	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

QC Batch: 951640 Analysis Method: EPA 200.7
 QC Batch Method: EPA 200.7 Analysis Description: 200.7 Metals, Total
 Laboratory: Pace Analytical Services - Kansas City
 Associated Lab Samples: 60483727003, 60483727004, 60483727005, 60483727006, 60483727007, 60483727008

METHOD BLANK: 3771453 Matrix: Water
 Associated Lab Samples: 60483727003, 60483727004, 60483727005, 60483727006, 60483727007, 60483727008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	ug/L	<33.2	100	33.2	10/16/25 16:37	
Calcium	ug/L	<45.3	200	45.3	10/16/25 16:37	
Iron	ug/L	<15.4	50.0	15.4	10/16/25 16:37	
Magnesium	ug/L	<21.1	50.0	21.1	10/16/25 16:37	
Manganese	ug/L	<0.42	5.0	0.42	10/16/25 16:37	
Potassium	ug/L	<45.2	500	45.2	10/16/25 16:37	
Sodium	ug/L	410J	500	31.8	10/16/25 16:37	

LABORATORY CONTROL SAMPLE: 3771454

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	1000	948	95	85-115	
Calcium	ug/L	10000	9910	99	85-115	
Iron	ug/L	10000	9920	99	85-115	
Magnesium	ug/L	10000	9580	96	85-115	
Manganese	ug/L	1000	1010	101	85-115	
Potassium	ug/L	10000	9850	98	85-115	
Sodium	ug/L	10000	10000	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3771455 3771456

Parameter	Units	60483727006		MSD		MS		MSD		% Rec Limits	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	Result	MSD Result	% Rec	% Rec				
Boron	ug/L	6420	1000	1000	7310	7350	89	92	70-130	0	20	
Calcium	ug/L	301000	10000	10000	305000	308000	42	64	70-130	1	20	M1
Iron	ug/L	<15.4	10000	10000	9790	9980	98	100	70-130	2	20	
Magnesium	ug/L	67000	10000	10000	75400	76000	84	90	70-130	1	20	
Manganese	ug/L	1120	1000	1000	2080	2060	96	94	70-130	1	20	
Potassium	ug/L	5270	10000	10000	15200	15200	99	99	70-130	0	20	
Sodium	ug/L	72100	10000	10000	80500	80700	84	86	70-130	0	20	

MATRIX SPIKE SAMPLE: 3771457

Parameter	Units	60483728007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Boron	ug/L		103	1000	1020	92	70-130
Calcium	ug/L		169000	10000	174000	47	70-130 M1

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

MATRIX SPIKE SAMPLE:		3771457					
Parameter	Units	60483728007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	<15.4	10000	9620	96	70-130	
Magnesium	ug/L	43500	10000	51700	81	70-130	
Manganese	ug/L	330	1000	1260	93	70-130	
Potassium	ug/L	6010	10000	15400	94	70-130	
Sodium	ug/L	9730	10000	18700	90	70-130	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

QC Batch:	952778	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
		Laboratory:	Pace Analytical Services - Salina

Associated Lab Samples: 60483592001, 60483592002, 60483592004, 60483592005, 60483592006, 60483592007, 60483592008

METHOD BLANK: 3776285 Matrix: Water
 Associated Lab Samples: 60483592001, 60483592002, 60483592004, 60483592005, 60483592006, 60483592007, 60483592008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.18	1.0	0.18	10/26/25 09:18	
Fluoride	mg/L	<0.040	0.10	0.040	10/26/25 09:18	
Sulfate	mg/L	<0.096	1.0	0.096	10/26/25 09:18	

LABORATORY CONTROL SAMPLE: 3776286

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	93	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	5	4.9	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3776287 3776288

Parameter	Units	60483592010		3776287		3776288		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Chloride	mg/L	35.9	25	25	60.6	58.6	99	91	80-120	3	15		
Fluoride	mg/L	0.31	2.5	2.5	2.7	2.7	96	95	80-120	1	15		
Sulfate	mg/L	243	250	250	473	469	92	90	80-120	1	15		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3776289 3776290

Parameter	Units	60483592021		3776289		3776290		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Chloride	mg/L	14.6	5	5	19.4	19.3	95	93	80-120	0	15		
Fluoride	mg/L	0.24	2.5	2.5	2.7	2.7	99	97	80-120	1	15		
Sulfate	mg/L	60.2	50	50	111	109	102	97	80-120	2	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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

QC Batch:	953128	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
		Laboratory:	Pace Analytical Services - Salina

Associated Lab Samples: 60483727001, 60483727002

METHOD BLANK: 3777712 Matrix: Water

Associated Lab Samples: 60483727001, 60483727002

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		MS		MSD		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result						
Chloride	mg/L	16.4	10	10	10	25.6	25.8	91	94	80-120	1	15	
Fluoride	mg/L	0.30	2.5	2.5	2.5	2.8	2.8	101	99	80-120	2	15	
Sulfate	mg/L	44.9	25	25	25	69.1	69.8	97	100	80-120	1	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3777716 3777717

Parameter	Units	60484583002		MS		MSD		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result						
Chloride	mg/L	8.8	5	5	5	12.5	12.5	75	75	80-120	0	15 M1	
Fluoride	mg/L	0.16	2.5	2.5	2.5	2.4	2.6	88	98	80-120	11	15	
Sulfate	mg/L	110	50	50	50	162	159	104	99	80-120	2	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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

QC Batch: 953362 Analysis Method: EPA 300.0
 QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
 Laboratory: Pace Analytical Services - Salina
 Associated Lab Samples: 60483727003, 60483727004, 60483727005, 60483727006, 60483727007, 60483727008

METHOD BLANK: 3778553 Matrix: Water
 Associated Lab Samples: 60483727003, 60483727004, 60483727005, 60483727006, 60483727007, 60483727008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.18	1.0	0.18	10/29/25 10:09	
Fluoride	mg/L	<0.040	0.10	0.040	10/29/25 10:09	
Sulfate	mg/L	<0.096	1.0	0.096	10/29/25 10:09	

LABORATORY CONTROL SAMPLE: 3778554

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	2.6	104	90-110	
Sulfate	mg/L	5	4.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3778555 3778556

Parameter	Units	60483730001		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Chloride	mg/L	1.7	5	5	6.7	6.7	101	100	80-120	1	15		
Fluoride	mg/L	0.41	2.5	2.5	2.9	2.9	100	99	80-120	1	15		
Sulfate	mg/L	87.9	50	50	140	139	104	103	80-120	0	15		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3778557 3778558

Parameter	Units	60483727006		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Chloride	mg/L	206	100	100	308	309	102	103	80-120	0	15		
Fluoride	mg/L	0.24	2.5	2.5	2.4	2.3	85	84	80-120	1	15		
Sulfate	mg/L	543	500	500	1050	1040	100	99	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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

QC Batch:	951915	Analysis Method:	SM 2320B
QC Batch Method:	SM 2320B	Analysis Description:	2320B Alkalinity
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60483592001, 60483592002, 60483727001, 60483727002

METHOD BLANK: 3772675 Matrix: Water
 Associated Lab Samples: 60483592001, 60483592002, 60483727001, 60483727002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	10/17/25 14:19	

LABORATORY CONTROL SAMPLE: 3772676

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	300	490	163	90-110	L1

SAMPLE DUPLICATE: 3772677

Parameter	Units	60483592001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	298	302	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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

QC Batch:	952195	Analysis Method:	SM 2320B
QC Batch Method:	SM 2320B	Analysis Description:	2320B Alkalinity
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60483592004, 60483592005, 60483592006

METHOD BLANK: 3773924 Matrix: Water

Associated Lab Samples: 60483592004, 60483592005, 60483592006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	10/20/25 15:57	

LABORATORY CONTROL SAMPLE: 3773925

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	486	97	90-110	

SAMPLE DUPLICATE: 3773926

Parameter	Units	60483723002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	362	368	2	10	

SAMPLE DUPLICATE: 3773927

Parameter	Units	60483723004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	<10.5		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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

QC Batch: 952197

Analysis Method: SM 2320B

QC Batch Method: SM 2320B

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60483592007, 60483592008

METHOD BLANK: 3773930

Matrix: Water

Associated Lab Samples: 60483592007, 60483592008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	10/21/25 17:31	

LABORATORY CONTROL SAMPLE: 3773931

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	492	98	90-110	L1

SAMPLE DUPLICATE: 3773932

Parameter	Units	60483730001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	368	368	0	10	

SAMPLE DUPLICATE: 3773933

Parameter	Units	60483592010 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	306	376	21	10	D6

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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

QC Batch:	952482	Analysis Method:	SM 2320B
QC Batch Method:	SM 2320B	Analysis Description:	2320B Alkalinity
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60483727003, 60483727004, 60483727005, 60483727006, 60483727007, 60483727008

METHOD BLANK: 3774885 Matrix: Water

Associated Lab Samples: 60483727003, 60483727004, 60483727005, 60483727006, 60483727007, 60483727008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	10/22/25 18:19	

LABORATORY CONTROL SAMPLE: 3774886

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	508	102	90-110	

SAMPLE DUPLICATE: 3774887

Parameter	Units	60483727006 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	358	368	3	10	

SAMPLE DUPLICATE: 3774888

Parameter	Units	60483711012 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	324	330	2	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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

QC Batch: 950736

Analysis Method: SM 2540C

QC Batch Method: SM 2540C

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60483592001, 60483592002

METHOD BLANK: 3767736

Matrix: Water

Associated Lab Samples: 60483592001, 60483592002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	10/07/25 14:30	

LABORATORY CONTROL SAMPLE: 3767737

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

SAMPLE DUPLICATE: 3767738

Parameter	Units	60483528001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1020	1020	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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

QC Batch:	951058	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60483592004, 60483592005, 60483592006

METHOD BLANK: 3769111 Matrix: Water

Associated Lab Samples: 60483592004, 60483592005, 60483592006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	10/09/25 15:28	

LABORATORY CONTROL SAMPLE: 3769112

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

SAMPLE DUPLICATE: 3769113

Parameter	Units	60483638001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	12200	10600	15	10	D6

SAMPLE DUPLICATE: 3769114

Parameter	Units	60483592004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	596	601	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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

QC Batch:	951335	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60483727001, 60483727002

METHOD BLANK: 3770459 Matrix: Water
 Associated Lab Samples: 60483727001, 60483727002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	10/13/25 13:43	

LABORATORY CONTROL SAMPLE: 3770460

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

SAMPLE DUPLICATE: 3770461

Parameter	Units	60483723002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	463	466	1	10	

SAMPLE DUPLICATE: 3770462

Parameter	Units	60483888002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1010	8800	159	10 D6	

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

This report shall not be reproduced, except in full,
 without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

QC Batch: 951336	Analysis Method: SM 2540C
QC Batch Method: SM 2540C	Analysis Description: 2540C Total Dissolved Solids
	Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60483592007, 60483592008

METHOD BLANK: 3770463 Matrix: Water

Associated Lab Samples: 60483592007, 60483592008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	10/13/25 16:32	

LABORATORY CONTROL SAMPLE: 3770464

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	996	100	80-120	

SAMPLE DUPLICATE: 3770465

Parameter	Units	60483592010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	756	759	0	10	

SAMPLE DUPLICATE: 3770466

Parameter	Units	60483755001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	6880	7050	3	10	

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB

Pace Project No.: 60483727

QC Batch: 951460

Analysis Method: SM 2540C

QC Batch Method: SM 2540C

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60483727003, 60483727004, 60483727005, 60483727006, 60483727007, 60483727008

METHOD BLANK: 3770737

Matrix: Water

Associated Lab Samples: 60483727003, 60483727004, 60483727005, 60483727006, 60483727007, 60483727008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	10/14/25 09:13	

LABORATORY CONTROL SAMPLE: 3770738

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	996	100	80-120	

SAMPLE DUPLICATE: 3770739

Parameter	Units	60483730001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	568	558	2	10	

SAMPLE DUPLICATE: 3770740

Parameter	Units	60483727006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1560	1560	0	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

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALIFIERS

Project: AMEREN SCPB

Pace Project No.: 60483727

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

B Analyte was detected in the associated method blank.

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN SCPB

Pace Project No.: 60483727

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60483592001	S-LMW-5S	EPA 200.7	950940	EPA 200.7	950995
60483592002	S-LMW-6S	EPA 200.7	950940	EPA 200.7	950995
60483592004	S-BMW-1S	EPA 200.7	950940	EPA 200.7	950995
60483592005	S-BMW-3S	EPA 200.7	950940	EPA 200.7	950995
60483592006	S-LMW-1S	EPA 200.7	950940	EPA 200.7	950995
60483592007	S-LMW-2S	EPA 200.7	950940	EPA 200.7	950995
60483592008	S-LMW-4S	EPA 200.7	950940	EPA 200.7	950995
60483727001	S-LMW-9S	EPA 200.7	951101	EPA 200.7	951114
60483727002	S-LMW-DUP-2	EPA 200.7	951101	EPA 200.7	951114
60483727003	S-LMW-3S	EPA 200.7	951640	EPA 200.7	951666
60483727004	S-LMW-7S	EPA 200.7	951640	EPA 200.7	951666
60483727005	S-LMW-DUP-1	EPA 200.7	951640	EPA 200.7	951666
60483727006	S-LMW-8S	EPA 200.7	951640	EPA 200.7	951666
60483727007	S-LMW-FB-1	EPA 200.7	951640	EPA 200.7	951666
60483727008	S-LMW-FB-2	EPA 200.7	951640	EPA 200.7	951666
60483592001	S-LMW-5S	EPA 300.0	952778		
60483592002	S-LMW-6S	EPA 300.0	952778		
60483592004	S-BMW-1S	EPA 300.0	952778		
60483592005	S-BMW-3S	EPA 300.0	952778		
60483592006	S-LMW-1S	EPA 300.0	952778		
60483592007	S-LMW-2S	EPA 300.0	952778		
60483592008	S-LMW-4S	EPA 300.0	952778		
60483727001	S-LMW-9S	EPA 300.0	953128		
60483727002	S-LMW-DUP-2	EPA 300.0	953128		
60483727003	S-LMW-3S	EPA 300.0	953362		
60483727004	S-LMW-7S	EPA 300.0	953362		
60483727005	S-LMW-DUP-1	EPA 300.0	953362		
60483727006	S-LMW-8S	EPA 300.0	953362		
60483727007	S-LMW-FB-1	EPA 300.0	953362		
60483727008	S-LMW-FB-2	EPA 300.0	953362		
60483592001	S-LMW-5S	SM 2320B	951915		
60483592002	S-LMW-6S	SM 2320B	951915		
60483592004	S-BMW-1S	SM 2320B	952195		
60483592005	S-BMW-3S	SM 2320B	952195		
60483592006	S-LMW-1S	SM 2320B	952195		
60483592007	S-LMW-2S	SM 2320B	952197		
60483592008	S-LMW-4S	SM 2320B	952197		
60483727001	S-LMW-9S	SM 2320B	951915		
60483727002	S-LMW-DUP-2	SM 2320B	951915		
60483727003	S-LMW-3S	SM 2320B	952482		
60483727004	S-LMW-7S	SM 2320B	952482		
60483727005	S-LMW-DUP-1	SM 2320B	952482		
60483727006	S-LMW-8S	SM 2320B	952482		
60483727007	S-LMW-FB-1	SM 2320B	952482		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN SCPB

Pace Project No.: 60483727

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60483727008	S-LMW-FB-2	SM 2320B	952482		
60483592001	S-LMW-5S	SM 2540C	950736		
60483592002	S-LMW-6S	SM 2540C	950736		
60483592004	S-BMW-1S	SM 2540C	951058		
60483592005	S-BMW-3S	SM 2540C	951058		
60483592006	S-LMW-1S	SM 2540C	951058		
60483592007	S-LMW-2S	SM 2540C	951336		
60483592008	S-LMW-4S	SM 2540C	951336		
60483727001	S-LMW-9S	SM 2540C	951335		
60483727002	S-LMW-DUP-2	SM 2540C	951335		
60483727003	S-LMW-3S	SM 2540C	951460		
60483727004	S-LMW-7S	SM 2540C	951460		
60483727005	S-LMW-DUP-1	SM 2540C	951460		
60483727006	S-LMW-8S	SM 2540C	951460		
60483727007	S-LMW-FB-1	SM 2540C	951460		
60483727008	S-LMW-FB-2	SM 2540C	951460		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

WO#: 60483727



60483727



DC#_Title: ENV-FRM-LENE-0009_Sample Co

Revision: 3

Effective Date: 09/22/2025

Issued By: Lenexa

Client Name: Roxsmith Geoenig

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 1.1 Corr. Factor 0.0 Corrected 1.1

Date and initials of person examining contents:

M10/Phs

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Rush Turn Around Time requested:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Extra samples not on COC.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	S-LMW-95 10/6/25 1506
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	S-LMW-DUP-2 ↓ 08:00
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers requiring pH preservation in compliance? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, Radium) LOT#: <u>96888</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Potassium iodide test strip turns blue/purple? (Preserve)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Samples from USDA Regulated Area: State:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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

Company Name: Rocksmith Geoen지니어링, LLC.
 Street Address: 2320 Creve Coeur Mill Road, Maryland Heights, MO 63043

Customer/Project #: COCH# 9
 Project Name: AMEREN SCPB

Site Collection Info/Facility ID (as applicable):

Time Zone Collected: [] AK [] PT [] MT [] CT [] ET
 Data Deliverables: Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [] Yes [] No

[] Level II [] Level III [] Level IV
 [] EQUIS
 [] Other

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

Date Results Requested:
 Field Filtered (if applicable): [] Yes [] No

Matrix *
 * 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	Comp / Grab	Composite Start		Collected or Composite End		# Cont.	Res. Chlorine Results	Units
		Date	Time	Date	Time			
S-BMW-15	G			10/6/25	0958	4		
S-BMW-35	G			10/6/25	0958	4		
S-LMW-45	G			10/7/25	0958			

Additional Instructions from Pace*:
 * - App III and Cal/An Metals* - EPA 200.7: B, Ca, Fe, Mg, Mn, K, Na

Collected By: (Printed Name) John Rasmussen
 Signature: *[Signature]*

Relinquished by/Company: (Signature) *[Signature]* / Rocksmith
 Date/Time: 10/17/25 1340

Relinquished by/Company: (Signature) *[Signature]*
 Date/Time: 10/17/25 1340

Relinquished by/Company: (Signature) *[Signature]*
 Date/Time: 10/17/25 1340

Relinquished by/Company: (Signature) *[Signature]*
 Date/Time: 10/17/25 1340

CHAIN-OF-CUSTODY Analytical Request Document

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

Contact/Report To: Mark Haddock
 Phone #: 314-974-6578
 E-Mail: mark.haddock@rocksmithgeo.com
 Cc E-Mail:

Invoice To: Mark Haddock
 Invoice E-Mail: mark.haddock@rocksmithgeo.com
 Purchase Order # (if applicable):
 Quote #:

County / State origin of sample(s): Missouri

Preservation non-conformance identified for

Proj. Migr: Jamie Church
 AcctNum / Client ID:
 Table #:
 Profile / Template: 15856
 Prelog / Bottle Ord. ID: EZ 3303560

Lab Use Only

Chloride/Fluoride/Sulfate

TDS / Alkalinity

App III and Cal/An Metals (200.7)*

Sample Comment	Time
	Time: 1016
	Time: 1157

Customer Remarks / Special Conditions / Possible Hazards:

Coolers: 1
 Thermometer ID: T-301
 Correction Factor (°C): 0.0

Obs. Temp. (°C): 11
 Corrected Temp. (°C): 11
 On Ice:

Tracking Number: 10/8/25 0800

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

Date/Time:
 Date/Time:
 Date/Time:
 Date/Time:

Page: 1 of 4

LAB USE ONLY - Affix Workorder/Login Label Here
 Scan QR Code for instructions
 60883727

**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

Client: Rocksmita Geeng

Profile # 3303560

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
2																														
3																														
4	WT																													
5	WT																													
6																														
7																														
8																														
9																														
10																														
11																														
12																														

NO + LOG
10 + LOG
15:06
08:00
10/6/25
109 4/1 1975

S-LMW-9S
S-LMW-DUP-2

Container Codes

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

Work Order Number: 60483727

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

CHAIN-OF-CUSTODY Analytical Request Document
Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY - Afixx WorkorderLogin Label Here

Scan QR Code for instructions


Company Name: **Rocksmith Geoengineering, LLC**
Street Address: **2320 Creve Coeur Mill Road, Maryland Heights, MO 63043**

Contact/Report To: **Mark Haddock**
Phone #: **314-974-6578**
E-Mail: **mark.haddock@rocksmithgeo.com**
CC E-Mail:

Customer Project #: **COCH 9**
Project Name: **AMEREN SCBP**

Invoice To: **Mark Haddock**
Invoice E-Mail: **mark.haddock@rocksmithgeo.com**
Purchase Order # (if applicable):
Quote #:

Site Collection Info/Facility ID (as applicable):

Time Zone Collected: AK PT MT CT ET
Data Deliverables: Regulatory Program (DW, RCHA, etc.) as applicable: Reportable Yes No

Level II Level III Level IV

Rush (Pre-approval required):
 Same Day 1 Day 2 Day 3 Day Other _____
Date 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), Leachate (LL), Biosolid (BS), Other (O)

Customer Sample ID

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Time	Collected or Composite End Date	Time	# Cont.	Res. Chlorine Results	Units
S-B/MW-15	WT	G	10/6/25	10:10	10/6/25	10:16	4		
S-B/MW-35	WT	G	10/6/25	09:58	10/6/25	10:06	4		
S-LMW-45	WT	G	10/6/25	10:06	10/6/25	10:15	4		
S-LMW-95	WT	G	10/6/25	10:15	10/6/25	10:25	4		
S-LMW-DUP-2	WT	G	10/6/25	—	10/6/25	—	4		

Chloride/Fluoride/Sulfate
TDS / Alkalinity
App III and Cat/An Metals (200.7)*

Additional Instructions from Pace®:
* App III and Cat/An Metals* - EPA 200.7: B, Ca, Fe, Mg, Mn, K, Na

Collected By: **John Rasmussen**
(Printed Name)
Signature: _____

Relinquished By/Company (Signature): **Rocksmith**
Date/Time: **10/17/25 13:40**
Received By/Company (Signature): **John Rasmussen**
Date/Time: **10/6/25 08:20**

Relinquished By/Company (Signature): _____
Date/Time: _____
Received By/Company (Signature): _____
Date/Time: _____

Relinquished By/Company (Signature): _____
Date/Time: _____
Received By/Company (Signature): _____
Date/Time: _____

Specify Container Size **
125mL (5) 100mL (6) 40mL vial (7) Encore (8)
Terracore (9) 90mL (10) Other _____
Identify Container Preservative Type***
Analysis Requested

Lab Use Only
Prof. Mgr: **Jamie Church**
Actinum / Client ID:
Table #:
Profile / Template: **15856**
Prelog / Bottle Ord. ID: **EZ 3303560**
Sample Comment: **Time: 10:16**
Time: 11:57

Customer Remarks / Special Conditions / Possible Hazards:
Thermometer ID: **T-301** Correction Factor (C): **0.0**
Obs. Temp (C): **11** Corrected Temp (C): **11**
On Ice: _____
Date/Time: **10/6/25 08:20**

Delivered by: In-Person Courier
 FedEx UPS Other

WO#: 60483727



	DC#_Title: ENV-FRM-LENE-0009_Sample Cor	
	Revision: 3	Effective Date: 09/22/2025 Issued By: Lenexa

Client Name: Rochsmith Geology

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 2.5/1.5/2.1 Corr. Factor 0-0 Corrected 2.5/1.5/2.1

Date and initials of person examining contents:
JW/10/10/25

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix: <u>WT</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers requiring pH preservation in compliance? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, Radium) LOT#: <u>96888</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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) <input type="checkbox"/> Yes <input type="checkbox"/> No Potassium iodide test strip turns blue/purple? (Preserve) <input type="checkbox"/> Yes <input type="checkbox"/> No		
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Samples from USDA Regulated Area: State:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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: _____

60483727

Scan QR Code for instructions

Chain-of-Custody Analytical Request Document

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

Pace® Location Requested (City/State):
 Pace Analytical Kansas
 5608 Lorret Blvd., Lenexa, KS 66219

Company Name: Rocksmith Geoen지니어링, LLC
Street Address: 2320 Creve Coeur Mill Road, Maryland Heights, MO 63043

Contact/Report To: Mark Haddock
Phone #: 314-974-6578
E-Mail: mark.haddock@rocksmithgeo.com
Cc E-Mail:

Invoice To: Mark Haddock
Invoice E-Mail: mark.haddock@rocksmithgeo.com
Purchase Order # (if applicable):
Quote #:

Customer Project #: COC #2
Project Name: AMEREN-SCPB

Site Collection Info/Facility ID (as applicable):

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

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

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

Rush (Pre-approval required): DW PWSID # or VW Permit # as applicable: [] Yes [] No
 [] Same Day [] 1 Day [] 2 Day [] 3 Day [] Other

Date Requested: [] Other: Analysis:

Matrix * Comp / Grab

Customer Sample ID

Collected or Composite Start Date Time

Collected or Composite End Date Time

Cont.

Res. Chlorine Results Units

Customer Sample ID	Matrix *	Comp / Grab	Collected or Composite Start Date Time	Collected or Composite End Date Time	# Cont.	Res. Chlorine Results Units
L-MS-2	WT					
L-MSD-2	WT					
L-Lmw-35	WT	G	10-8-25 1540		2	
S-Lmw-75	WT	G	10-8-25 1150		2	
S-Lmw-100-1	WT	G	10-8-25 -		2	
S-Lmw-85	WT	G	10-8-25 1238		2	
S-Lmw-MS/MSD-1	WT	G	10-8-25 1238		2	
S-Lmw-FB-1	WT	G	10-8-25 1255		2	
S-Lmw-FB-2	WT	G	10-8-25 1515		2	

Additional Instructions from Pace®:
 * App and Cat/A Metals - EPA 800.7 (Frogging, Nyl, Ca, B)
 * App and Cat/A Metals - EPA 800.7 (Boric Acid, Lead, Pb, As, Cd, Cr, Se, V, + 7470 Ag)
 * App and Cat/A Metals - EPA 800.7 (Boric Acid, Lead, Pb, As, Cd, Cr, Se, V, + 7470 Ag)
 * App and Cat/A Metals - EPA 800.7 (Al, Cu, Ni, Pb, Zn + Hardness)

Collected By: David Owen
Signature: [Signature]

Received by (Company Signature): [Signature]
Date/Time: 10-9-25

Received by (Company Signature): [Signature]
Date/Time: 10-9-25

Received by (Company Signature): [Signature]
Date/Time:

Received by (Company Signature): [Signature]
Date/Time:

Chloride/Fluoride/Sulfate	TDS / Alkalinity	COD / TOC	App III and Cat/An Metals (200.7)*	Appendix IV Metals (200.7/200.8/7470)**	UWL Metals (200.7)***	TOX	Radium 226 & Radium 228
✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓

Customer Remarks / Special Conditions / Possible Hazards:

Coolers: 3

Thermometer ID: T-301

Correction Factor (°C): 0.0

Obs. Temp. (°C): 2.5/1.5/2.1

Corrected Temp. (°C): 2.5/1.5/2.1

Tracking Number: 1010/25 0730

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

Page: of



Memorandum

November 17, 2025

To: Project File
Rocksmith Geoengineering, LLC

Project Number: 23009-25

CC: Mark Haddock, Jeffrey Ingram

From: Jack Rasmussen

Email: Jack.Rasmussen@rocksmithgeo.com

RE: **Data Validation Summary, Sioux Energy Center – SCPB – Data Package 60483727**

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 duplicate criterion was not met, the associated sample result was qualified as an estimate (J for detects, UJ for non-detects).
- 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).
- 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 Name: Ameren SCPB
 Reviewer: J. Rasmussen

Project Manager: J. Ingram
 Project Number: 23009-25
 Validation Date: 11/17/2025

Laboratory: Pace Analytical SDG #: 60483727

Analytical Method (type and no.): EPA 200.7 (Total Metals); SM 2320B (Alkalinity); SM 2540C (TDS); EPA 300.0 (Anions)

Matrix: Air Soil/Sed. Water Waste

Sample Names S-LMW-3S, S-LMW-9S, S-LMW-DUP-1, S-LMW-FB-1, S-LMW-7S, S-LMW-8S, S-LMW-DUP-2, S-LMW-FB-2, S-LMW-1S, S-LMW-2S, S-LMW-4S, S-LMW-5S, S-LMW-6S, S-BMW-1S, S-BMW-3S

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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>10/03/2025, 10/06/2025 - 10/08/2025</u>
b) Sampling team indicated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>JTR/LES/JDQ</u>
c) Sample location noted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
d) Sample depth indicated (Soils)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u></u>
e) Sample type indicated (grab/composite)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Grab</u>
f) Field QC noted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Notes</u>
g) Field parameters collected (note types)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>pH, Spec Cond, Turb, Temp, DO, ORP</u>
h) Field Calibration within control limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
i) Notations of unacceptable field conditions/performances from field logs or field notes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u></u>
j) Does the laboratory narrative indicate deficiencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>No lab narrative.</u>

Note Deficiencies: _____

Chain-of-Custody (COC)	YES	NO	NA	COMMENTS
a) Was the COC properly completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
b) Was the COC signed by both field and laboratory personnel?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
c) Were samples received in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>

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

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Blanks	YES	NO	NA	COMMENTS
a) Were analytes detected in the method blank(s)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Notes
b) Were analytes detected in the field blank(s)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Notes
c) Were analytes detected in the equipment blank(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d) Were analytes detected in the trip blank(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Laboratory Control Sample (LCS)	YES	NO	NA	COMMENTS
a) Was a LCS analyzed once per SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) Were the proper analytes included in the LCS?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) Was the LCS accuracy criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Duplicates	YES	NO	NA	COMMENTS
a) Were field duplicates collected (note original and duplicate sample names)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Notes
b) Were field dup. precision criteria met (note RPD)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Notes
c) Were lab duplicates analyzed (note original and duplicate samples)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d) Were lab dup. precision criteria met (note RPD)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Notes

Blind Standards	YES	NO	NA	COMMENTS
a) Was a blind standard used (indicate name, analytes included and concentrations)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Was the %D within control limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

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

Comments/Notes:

General:

Chloride and sulfate diluted in several samples, no qualifications necessary.

Method blanks:

3768607: Potassium (60.5 J), associated with samples -001 through -008. Samples -004 and -005 results > RL and < 10x blank, results qualified as estimates. Samples -001 through -003 and -006 through -008 > RL and 10x blank, no qualification necessary.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Comments/Notes:

Method Blanks, continued:

3771453: Sodium (410 J), associated with samples -727003 through -008. Samples -727007 and -727008 results < RL, results qualified as estimates.

Field blanks:

S-LMW-FB-1 @ S-LMW-8S, S-LMW-FB-2 @ S-LMW-3S: Sodium (322 J) at S-LMW-FB-1, result > RL and 10x blank, no qualification necessary. Sodium (249 J) at S-LMW-FB-2, result > RL and 10x blank, no qualification necessary.

Laboratory control samples (LCS):

3772676: LCS recovery high for alkalinity, associated with samples -92001, -002 and -727001, -002. Results qualified as estimates.

Field duplicates:

S-LMW-DUP-1 @ S-LMW-7S: RPD within control limits for all constituents.

S-LMW-DUP-2 @ S-LMW-9S: RPD within control limits for all constituents.

Lab duplicates:

3773933: RPD exceeds limits for alkalinity, associated with unrelated sample.

3769113: RPD exceeds limits for TDS, associated with unrelated sample.

3770462: RPD exceeds limits for TDS, associated with unrelated sample.

MS/MSD:

3768609/3768610: MS recovery high for calcium, MSD and RPD within limits. No qualification necessary.

3769394/3769395: MSD recovery low for calcium, MSD and RPD within limits. No qualification necessary.

3771455/3771456: MS and MSD recovery low for calcium, RPD within limits. Associated with sample -727006, result qualified as an estimate.

3771457: MS recovery low for calcium, associated with unrelated sample.

3777716/3777717: MS and MSD recovery low for chloride, RPD within limits. Associated with unrelated sample.



December 22, 2025

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

RE: Project: AMEREN SCPB-VERIFICATION
Pace Project No.: 60487097

Dear Mark Haddock:

Enclosed are the analytical results for sample(s) received by the laboratory on December 05, 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



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



CERTIFICATIONS

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60487097

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



SAMPLE SUMMARY

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60487097

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60487097001	S-LMW-5S	Water	12/03/25 14:27	12/05/25 07:39
60487097002	S-LMW-9S	Water	12/04/25 12:05	12/05/25 07:39
60487097003	S-LMW-DUP-1	Water	12/03/25 00:00	12/05/25 07:39
60487097004	S-LMW-FB-1	Water	12/03/25 14:21	12/05/25 07:39

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



SAMPLE ANALYTE COUNT

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60487097

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60487097001	S-LMW-5S	EPA 300.0	GTS	2	PASI-K
60487097002	S-LMW-9S	EPA 300.0	GTS	2	PASI-K
60487097003	S-LMW-DUP-1	EPA 300.0	GTS	2	PASI-K
60487097004	S-LMW-FB-1	EPA 300.0	GTS	2	PASI-K

PASI-K = Pace Analytical Services - Kansas City

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60487097

Sample: S-LMW-5S Lab ID: 60487097001 Collected: 12/03/25 14:27 Received: 12/05/25 07:39 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	24.1	mg/L	5.0	3.8	5		12/18/25 17:56	16887-00-6	
Fluoride	0.50	mg/L	0.20	0.16	1		12/18/25 00:11	16984-48-8	M1

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60487097

Sample: S-LMW-9S Lab ID: 60487097002 Collected: 12/04/25 12:05 Received: 12/05/25 07:39 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	67.6	mg/L	20.0	15.3	20		12/18/25 01:11	16887-00-6	
Fluoride	0.41	mg/L	0.20	0.16	1		12/18/25 00:47	16984-48-8	M1

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60487097

Sample: S-LMW-DUP-1 Lab ID: 60487097003 Collected: 12/03/25 00:00 Received: 12/05/25 07:39 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	25.5	mg/L	20.0	15.3	20		12/18/25 02:10	16887-00-6	
Fluoride	0.52	mg/L	0.20	0.16	1		12/18/25 01:58	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



ANALYTICAL RESULTS

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60487097

Sample: S-LMW-FB-1 Lab ID: 60487097004 Collected: 12/03/25 14:21 Received: 12/05/25 07:39 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		12/18/25 02:22	16887-00-6	
Fluoride	<0.16	mg/L	0.20	0.16	1		12/18/25 02:22	16984-48-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60487097

QC Batch:	958927	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: 60487097001, 60487097002, 60487097003, 60487097004

METHOD BLANK: 3800357 Matrix: Water
 Associated Lab Samples: 60487097001, 60487097002, 60487097003, 60487097004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.77	1.0	0.77	12/17/25 21:35	
Fluoride	mg/L	<0.16	0.20	0.16	12/17/25 21:35	

LABORATORY CONTROL SAMPLE: 3800358

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	2.6	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3800359 3800360

Parameter	Units	60487097001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	24.1	5	5	32.6	32.7	137	139	80-120	0	15	E,M1
Fluoride	mg/L	0.50	2.5	2.5	3.5	3.7	121	126	80-120	4	15	M1

MATRIX SPIKE SAMPLE: 3800361

Parameter	Units	60487097002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	67.6	100	175	107	80-120	
Fluoride	mg/L	0.41	2.5	3.9	140	80-120	M1

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60487097

QC Batch: 959113	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: 60487097001

METHOD BLANK: 3801038 Matrix: Water

Associated Lab Samples: 60487097001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.77	1.0	0.77	12/18/25 16:38	

LABORATORY CONTROL SAMPLE: 3801039

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3801040 3801041

Parameter	Units	3801040		3801041		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	24.1	25	52.3	51.2	113	109	80-120	2	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.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALIFIERS

Project: AMEREN SCPB-VERIFICATION

Pace Project No.: 60487097

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.

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN SCPB-VERIFICATION
Pace Project No.: 60487097

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60487097001	S-LMW-5S	EPA 300.0	958927		
60487097001	S-LMW-5S	EPA 300.0	959113		
60487097002	S-LMW-9S	EPA 300.0	958927		
60487097003	S-LMW-DUP-1	EPA 300.0	958927		
60487097004	S-LMW-FB-1	EPA 300.0	958927		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



DC#_Title: ENV-FRM-LENE-0009_Sample C

Revision: 3

Effective Date: 09/22/2025

WO#: 60487097



Client Name: Roussmith beoengineering

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 ziplock

Thermometer Used: T301 Type of Ice: Wet Blue None

Cooler Temperature (°C): As-read 1.1 Corr. Factor 0.0 Corrected 1.1

Date and initials of person examining contents: 12-5 DP

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix: <u>WT</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers requiring pH preservation in compliance? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, Radium) LOT#:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Potassium iodide test strip turns blue/purple? (Preserve)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Samples from USDA Regulated Area: State:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____



CHAIN-OF-CUSTODY / Analytical Request Document

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

66487097

Section A Required Client Information: Company: Rocksmith Geoen지니어링, LLC Address: 5233 Roanoke Drive St. Charles, MO 63304 Email To: mark.haddock@rocksmithgeo.com Pno 314-974-5678 Requested Due Date/AT: Standard	Section B Required Project Information: Report To: Mark Haddock Copy To: Jeffrey Ingram, Grant Morey Purchase Order No.: COC #1 Project Name: Ameren SCPB - Verification Sampling Project Number: COC#
Section C Invoice Information: Attention: Company Name: Rocksmith Address:	Regulatory Agency: NPDES GROUND WATER UST RCRA DRINKING WATER O

Section D Required Client Information: Valid Matrix Codes: DRINKING WATER: DW, WT WATER: W, P WASTE WATER: SW, OL FRESH WATER: FW, GN SOLID: S, TS OIL: OIL	Requested Analysis Filtered (Y/N) Fluoride: N Chloride: N Residual Chlorine (Y/N)
--	--

ITEM #	SAMPLER ID (A-Z, 0-9 / .)	MATRIX CODE (see valid codes to)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test		Requested Analysis Filtered (Y/N)	Temp in °C	Received on Custody Sealed Cooler	Samples Intact (Y/N)	
				DATE	TIME			H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	Fluoride	Chloride					
1	S-LMW-5S	WT G	G	12/3/25	1427	1427	1									X	X				
2	S-LMW-9S	WT G	G	12/4/25	1205	1205	1									X	X				
3	S-LMW-DUP-1	WT G	G	12/3/25			1									X	X				
4	S-LMW-FB-1	WT G	G		1421	1421	1									X	X				
5	S-LMW-MS-1	WT G	G		1427	1427	1									X	X				
6	S-LMW-MSD-1	WT G	G		1427	1427	1									X	X				
7		WT G	G																		
8		WT G	G																		
9		WT G	G																		
10		WT G	G																		
11		WT G	G																		
12		WT G	G																		

Section E ADDITIONAL COMMENTS: Daniel Duck PSC	ACCEPTED BY / AFFILIATION: DP DFC DATE: 12-5-25 TIME: 0739 1.1
---	---

SAMPLER NAME AND SIGNATURE: PRINT Name of SAMPLER: Daniel Duck SIGNATURE of SAMPLER: <i>[Signature]</i>	DATE Signed (MM/DD/YY): 12-4-25
---	---------------------------------

Client: Rock Smith's Bioengineering Profile/EZ # 15856, 1
 Site: Ameren SCPB Verification Sampling Notes: _____

Site: Ameren SCPB Verification Sampling Notes: _____

Line Item	COC	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																															
3																															
4																															
5																															
6																															
7																															
8																															
9																															
10																															
11																															
12																															

Container Codes

	Glass	Plastic	Misc.	Matrix
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar	
DG9H	40mL HCl amber 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	
		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 unpreserved plastic	
				WT
				SL
				NAL
				OL
				WP
				DW

WO# : 60487097
 PM: JLS Due Date: 12/19/25
 CLIENT: Rocksmith

Work Order Number



Memorandum

December 23, 2025

To: Project File
Rocksmith Geoengineering, LLC

Project Number: 23009-25

CC: Mark Haddock, Jeffrey Ingram

From: Valerie Hurt

Email: Valerie.Hurt@Rocksmithgeo.com

RE: **Data Validation Summary, Sioux Energy Center – SCPB – Data Package 60487097**

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 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 Name: Ameren SCPB-Verification
 Reviewer: V. Hurt

Project Manager: J. Ingram
 Project Number: 23009-25
 Validation Date: 12/23/2025

Laboratory: Pace Analytical

SDG #: 60487097

Analytical Method (type and no.): EPA 300.0 (Anions);

Matrix: Air Soil/Sed. Water Waste

Sample Names S-LMW-5S, S-LMW-9S, S-LMW-DUP-1, and S-LMW-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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>12/3/2025 and 12/4/2025</u>
b) Sampling team indicated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>JTR & JDQ</u>
c) Sample location noted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
d) Sample depth indicated (Soils)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u></u>
e) Sample type indicated (grab/composite)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Grab</u>
f) Field QC noted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>See Notes</u>
g) Field parameters collected (note types)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>pH, Spec Cond, Turb, Temp, DO, ORP</u>
h) Field Calibration within control limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
i) Notations of unacceptable field conditions/performances from field logs or field notes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u></u>
j) Does the laboratory narrative indicate deficiencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>No lab narrative.</u>

Note Deficiencies:

Chain-of-Custody (COC)	YES	NO	NA	COMMENTS
a) Was the COC properly completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
b) Was the COC signed by both field and laboratory personnel?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>
c) Were samples received in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u></u>

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

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Blanks	YES	NO	NA	COMMENTS
a) Were analytes detected in the method blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b) Were analytes detected in the field blank(s)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	S-LMW-FB-1 @ S-LMW-5S
c) Were analytes detected in the equipment blank(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d) Were analytes detected in the trip blank(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Laboratory Control Sample (LCS)	YES	NO	NA	COMMENTS
a) Was a LCS analyzed once per SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) Were the proper analytes included in the LCS?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) Was the LCS accuracy criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Duplicates	YES	NO	NA	COMMENTS
a) Were field duplicates collected (note original and duplicate sample names)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	S-LMW-DUP-1 @ S-LMW-5S
b) Were field dup. precision criteria met (note RPD)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c) Were lab duplicates analyzed (note original and duplicate samples)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d) Were lab dup. precision criteria met (note RPD)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Blind Standards	YES	NO	NA	COMMENTS
a) Was a blind standard used (indicate name, analytes included and concentrations)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Was the %D within control limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

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

Comments/Notes:

General:

Chloride was diluted in sample -002, no qualification necessary.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Comments/Notes:

Field Blanks:

S-LMW-FB-1 @ S-LMW-5S: No detections.

Field duplicate:

S-LMW-DUP-1 @ S-LMW-5S: All analyte RPD within range.

MS/MSD:

3800359/3800360: Chloride and fluoride MS/MSD recovery high, RPD OK. Associated with sample -001, results qualified as estimates.

3800361: MS recovery high for fluoride. Associated with sample -002, result qualified as estimate.

Appendix B

Alternative Source Demonstration – November 2024 Sampling Event



Technical Memorandum

June 20, 2025

To: Ameren Missouri
1901 Chouteau Ave, St. Louis, MO 63103

Project Number: 23009-25

From: Rocksmith Geoengineering - Mark Haddock, P.E.,
R.G., Jeff Ingram, R.G., Grant Morey, R.G.

Email: jeff.ingram@rocksmithgeo.com

RE: SCPB – ALTERNATIVE SOURCE DEMONSTRATION – NOVEMBER 2024 SAMPLING EVENT

1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (CCR Rule or The Rule), Rocksmith Geoengineering, LLC (Rocksmith) has prepared this Technical Memorandum to show that Statistically Significant Increases (SSIs) identified at Ameren Missouri's (Ameren) Sioux Energy Center (SEC) fly ash surface impoundment (SCPB) are the result from an alternative source and are not related to impacts from SCPB. This SCPB Alternative Source Demonstration (ASD) satisfies the requirements of §257.94(e)(2), which allows the owner or operator to demonstrate that a source other than the CCR Unit has caused an SSI and that the apparent SSI was the result of an alternative source or resulted from errors in sampling, analysis, statistical evaluation, or natural variation in groundwater quality.

2.0 BACKGROUND

The first round of Detection Monitoring was completed during November 2017 at the SEC's SCPB CCR Unit in St. Charles County, Missouri. This sampling was completed in accordance with the CCR Rule, and SSIs were identified and verified. In February/March 2018, additional drilling and detailed analysis of results were completed, and it was determined that the SSIs in the CCR Rule groundwater monitoring wells at the SCPB were not caused by impacts from the SCPB. Based on the previous ASDs prepared for the SCPB, the SSIs observed in the SCPB wells were caused by the adjacent SCPA bottom ash surface impoundment. This conclusion was supported by lines of evidence (LOEs) as follows.

- Geochemical Signatures
- USEPA FALCON Analysis
- Groundwater Flow Directions
- Construction of the SCPB

Previous ASD reports may be found in the SCPB Annual Groundwater Monitoring and Corrective Action Reports available on Ameren's Publicly available website (<https://www.ameren.com/company/environment-and-sustainability/managing-coal-combustion/ccr-compliance-reports>).

3.0 NOVEMBER 2024 SAMPLING EVENT

A summary of the November 2024 sampling results is provided in **Table 1**. As discussed in **Section 2.0**, there are several LOEs presented in the previous ASDs that demonstrate impacts around the SCPB are caused by the SCPA and not the SCPB. Both CCR units are now capped and closed with a geomembrane cover system and the same LOEs remain. The following summarizes the LOEs that indicate exceedances in the November 2024 sampling event around the SCPB are from the SCPA and not the SCPB using current monitoring data through the November 2024 sampling event.

- **Geochemical Signatures** – As reflected on the piper diagram provided in **Figure 1**, SCPA pore-water has a distinctly different geochemical signature than the pore-water from the SCPB. CCR groundwater samples in monitoring wells with SSIs plot on the piper diagrams primarily in a location between the SCPA pore-water zone and the background groundwater zone, indicating that well water chemistry is a mixture of unaffected groundwater and groundwater impacted by the SCPA.
- **USEPA FALCON Analysis** – The United States Environmental Protection Agency (USEPA) Fingerprint Analysis of Leachate Contaminants (FALCON) method compared constituent fingerprints from the downgradient monitoring wells with those of background groundwater, SCPB pore-water, and SCPA pore-water. A Technical Memorandum summarizing the calculations and results is provided in **Appendix A**. An updated calculation using data from the November 2024 sampling event was completed and a summary of the results are provided in Table 5 of **Appendix A**. The results indicate that there is strong correlation between the downgradient monitoring wells and both the SCPA pore-water and background groundwater, while there is low correlation between downgradient monitoring well data and SCPB pore-water. These same correlations were found at depth within the alluvial aquifer.
- **Groundwater Flow Direction** – Potentiometric surface mapping demonstrates that groundwater flow direction is variable and can temporarily flow in multiple directions, but generally, groundwater flows to the east-southeast depending on the river level in the adjacent Mississippi and Missouri Rivers. Relatively low Missouri River levels from mid-2022 through early 2024 led to a predominately southward flow direction across the SEC. The potentiometric surface map for the November 2024 sampling event indicates a return to a stronger eastward component of groundwater flow, placing the SCPA upgradient of the SCPB. Typical groundwater flow direction at the site supports the conclusion that the unlined SCPA located to the west of the SCPB is the source of impacts at the downgradient monitoring wells in both the SCPA and SCPB monitoring networks.
- **SCPB Construction** - The SCPB was constructed in 1993 with an engineered liner system consisting of a 60-mil High Density Polyethylene (HDPE) geomembrane liner with a minimum bottom elevation of approximately 419 feet above mean sea level (FT MSL). The low permeability HDPE liner system in the SCPB is a barrier to the migration of CCR impacts and provides containment for CCR. The unlined SCPA began operation in 1967 and has a bottom elevation estimated to be 370 FT MSL, which is much deeper than the SCPB. In addition to the distinct pore-water fingerprint for SCPA relative to SCPB, there are elevated concentrations of CCR indicators in the shallow, intermediate (middle), and deep alluvial groundwater zones. Elevated concentrations are not isolated to the shallow zone, which would be the most likely zone influenced if leakage from the SCPB had occurred. The impacts to the intermediate and deep alluvial zones are most likely from the SCPA, where the base elevation extends into deeper groundwater zones in the aquifer.

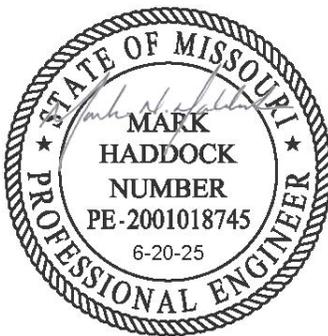
In summary, groundwater chemistry, pore-water chemistry fingerprints, cell construction, and hydrogeological evidence demonstrate that SSIs reported for the November 2024 Sampling Event for the SCPB CCR Unit were

not caused by impacts from the SCPB surface impoundment. The SCPA surface impoundment, located immediately adjacent and upgradient to the SCPB, is the source of the SSIs for groundwater in the SCPB monitoring well network.

CERTIFICATION STATEMENT

This *SCPB – Alternative Source Demonstration – November 2024 Sampling Event* has been prepared to comply with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule under the direction of a licensed professional engineer with Golder Associates Inc.

I hereby certify that this *SCPB – Alternative Source Demonstration – November 2024 Sampling Event* located at 8501 Missouri 94, West Alton, Missouri 63386 has been prepared to meet the requirements of 40 CFR §257.94(e)(2).



Rocksmith Geoengineering, LLC

Mark Haddock, PE, RG

Principal Engineer, Senior Partner

Attachments: Table 1 – November 2024 Detection Monitoring Results
Figure 1 – SCPB Piper Diagram for November 2024
Appendix A – FALCON Analysis Calculation Package

Tables

Table 1
November 2024 Detection Monitoring Results
SCPB Surface Impoundment
Sioux Energy Center, St. Charles County, MO

ANALYTE	UNITS	PREDICTION LIMITS	BACKGROUND		GROUNDWATER MONITORING WELLS									
			BMW-1S	BMW-3S	LMW-1S	LMW-2S	LMW-3S	LMW-4S	LMW-5S	LMW-6S	LMW-7S	LMW-8S	LMW-9S	
November 2024 Detection Monitoring Event														
DATE	NA	NA	11/20/2024	11/20/2024	11/14/2024	11/19/2024	11/19/2024	11/19/2024	11/15/2024	11/15/2024	11/15/2024	11/15/2024	11/15/2024	
pH	SU	6.515-7.42	6.57	6.72	7.26	6.97	6.58	6.83	6.65	6.50	6.75	6.36	6.24	
BORON, TOTAL	µg/L	118	61.9 J	57.3 J	1,240	9,060	151	310	17,700	17,800	3,700	7,410	986	
CALCIUM, TOTAL	µg/L	174,465	175,000	113,000	142,000	172,000	143,000	220,000	236,000	259,000	213,000	342,000 J	201,000	
CHLORIDE, TOTAL	mg/L	13.65	14.2	13.1	175 J	137	13.3	3.3	10.6 J	6.4 J	31.6	205	39.2	
FLUORIDE, TOTAL	mg/L	0.46	ND	ND	0.34 J	ND	0.32	ND	0.37 J	0.33 J	ND	0.48 J	0.21 J	
SULFATE, TOTAL	mg/L	61.1	37.1	17.1	108 J	234	46.3	33.3	915 J	547 J	396	745	158	
TOTAL DISSOLVED SOLIDS	mg/L	608.2	613	413	713	892 J	569	785 J	1,630	1,290	998	1,870	992	
Febuary 2025 Verification Sampling Event														
DATE	NA	NA									2/6/2025		2/7/2025	2/6/2025
pH	SU	6.515-7.42									6.58		6.93	6.69
BORON, TOTAL	µg/L	118												
CALCIUM, TOTAL	µg/L	174,465												
CHLORIDE, TOTAL	mg/L	13.65												
FLUORIDE, TOTAL	mg/L	0.46											0.18 J	
SULFATE, TOTAL	mg/L	61.1												
TOTAL DISSOLVED SOLIDS	mg/L	608.2												

NOTES:

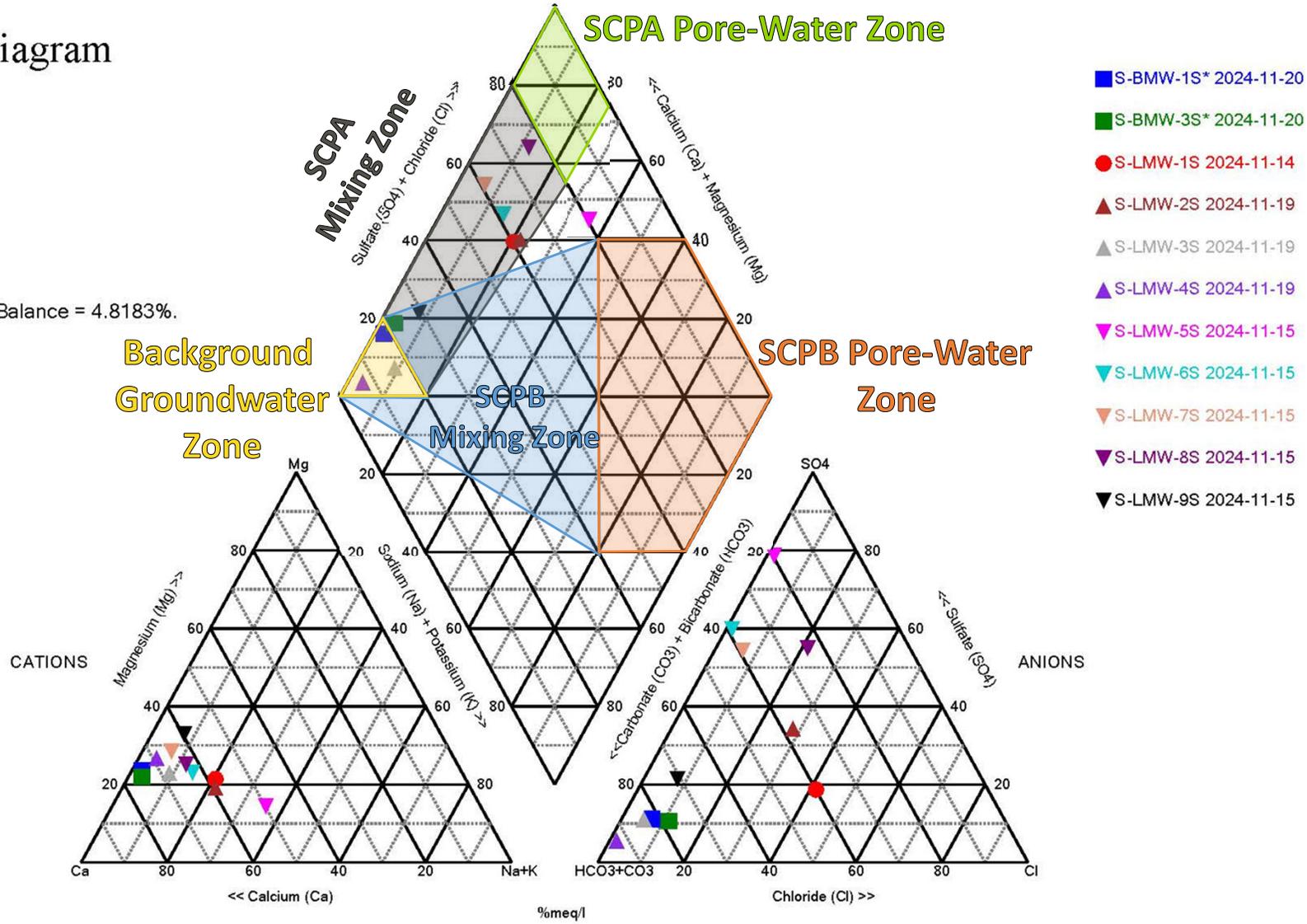
1. Unit Abbreviations: µg/L - micrograms per liter, mg/L - milligrams per liter, SU - standard units.
2. J - Result is an estimated value.
3. ND - Constituent was analyzed but was not detected above the Method Detection Limit (MDL) or the adjusted Practical Quantitation Limit (PQL) based on data validation and is considered a non-detect. Values displayed as ND.
4. NA - Not applicable.
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

Figures

Piper Diagram

Cation-Anion Balance = 4.8183%.



Notes

- 1) Piper diagram generated using Sanitas Software.
- 2) %mEq/l – milliequivalents per liter

CLIENT/PROJECT AMEREN MISSOURI SIOUX ENERGY CENTER				 		TITLE SCPB Piper Diagram for November 2024		
DRAWN GTM	CHECKED JTR	REVIEWED MNH	DATE 2025-04-04			Rev No. NA	JOB NO. 23009-25	FIGURE 1

Appendix A

FALCON Analysis Calculation Package



To: Ameren Missouri
1901 Chouteau Ave, St. Louis, MO 63103

Project Number: 23009-25

From: Rocksmith Geoengineering - Mark Haddock, P.E.,
R.G., Jeff Ingram R.G., Grant Morey

Email: jeff.ingram@rocksmithgeo.com

RE: Appendix A – SCPB Falcon Analysis Calculation Package

1.0 OBJECTIVE

The objective of this analysis is to determine if there is a correlation between the ion ratio fingerprints in the SCPA pore-water, SCPB pore-water, or background groundwater with the compliance monitoring wells samples in the alluvial aquifer at the Sioux Energy Center (SEC).

2.0 FINGERPRINT ANALYSIS OF LEACHATE CONTAMINANTS (FALCON) METHOD

The Fingerprint Analysis of Leachate Contaminants (FALCON) method was developed in 2004 by the United States Environmental Protection Agency (USEPA) as a tool to identify the source of impacts within groundwater. The FALCON method compiles ion ratios for multiple constituents in order to develop a distinctive chemical fingerprint for each possible contaminant source and un-impacted background groundwater. These fingerprints are then correlated to well sample data downgradient of the sources and are used to characterize the source of the contaminant plume. For this analysis, background groundwater quality is derived from background well samples located approximately 0.50 to 0.75 miles west of the SCPB. Source data is from pore-water collected from piezometers within the SCPA and SCPB. Fingerprints from these three sources (background groundwater, SCPA pore-water, and SCPB pore-water) are compared to data from alluvial aquifer monitoring well sampling locations at the SEC. Data from the SCPA and SCPB pore-water are from the November 2017 ASD for the SCPB, which is available in the 2018 Annual Report for the SCPB. Data from the background and compliance monitoring wells are from the November 2023 sampling event.

3.0 SELECTION OF CONSTITUENTS TO USE

The first step in completing the FALCON analysis is to select a subset of constituents that are representative of the potential source areas. When selecting these constituents, it is important to include constituents that are mobile in the hydrogeological environment and that can uniquely characterize each water type. Constituents selected included major cation and anion constituents that represent groundwater chemistry as well as key indicators of CCR impacts. Values of the three different sources were compared to see which constituents fit the criteria. A summary table of the values used for the three sources is provided in **Table 1**. The following constituents were selected to complete the FALCON analysis:

- Alkalinity
- Total Calcium
- Total Fluoride
- Total Boron
- Total Chloride
- Total Iron

- Total Magnesium
 - Total Manganese
- Total Potassium
 - Total Sodium
- Total Sulfate

4.0 DATA TABULATION AND NORMALIZATION

Once the constituents were selected, the data were tabulated, normalized and a graphical presentation of the fingerprints was produced. These steps are provided in **Table 1** for the three different sources (background groundwater, SCPA pore-water, and SCPB pore-water), as well as each monitoring well evaluated. Correlations were then completed between the different sources to determine each source’s reproducibility. Tables displaying these correlations are provided below in **Tables 2-4**.

Table 2 – Background Groundwater Correlations

Table 2 - Background Groundwater Correlations				
Well ID	S-BMW-1D	S-BMW-1S	S-BMW-3D	S-BMW-3S
S-BMW-1D				
S-BMW-1S	99.9%			
S-BMW-3D	100.0%	99.9%		
S-BMW-3S	99.9%	100.0%	99.8%	
Average Fingerprint Reproducibility			99.9%	

Table 3 – SCPB Pore-water Correlations

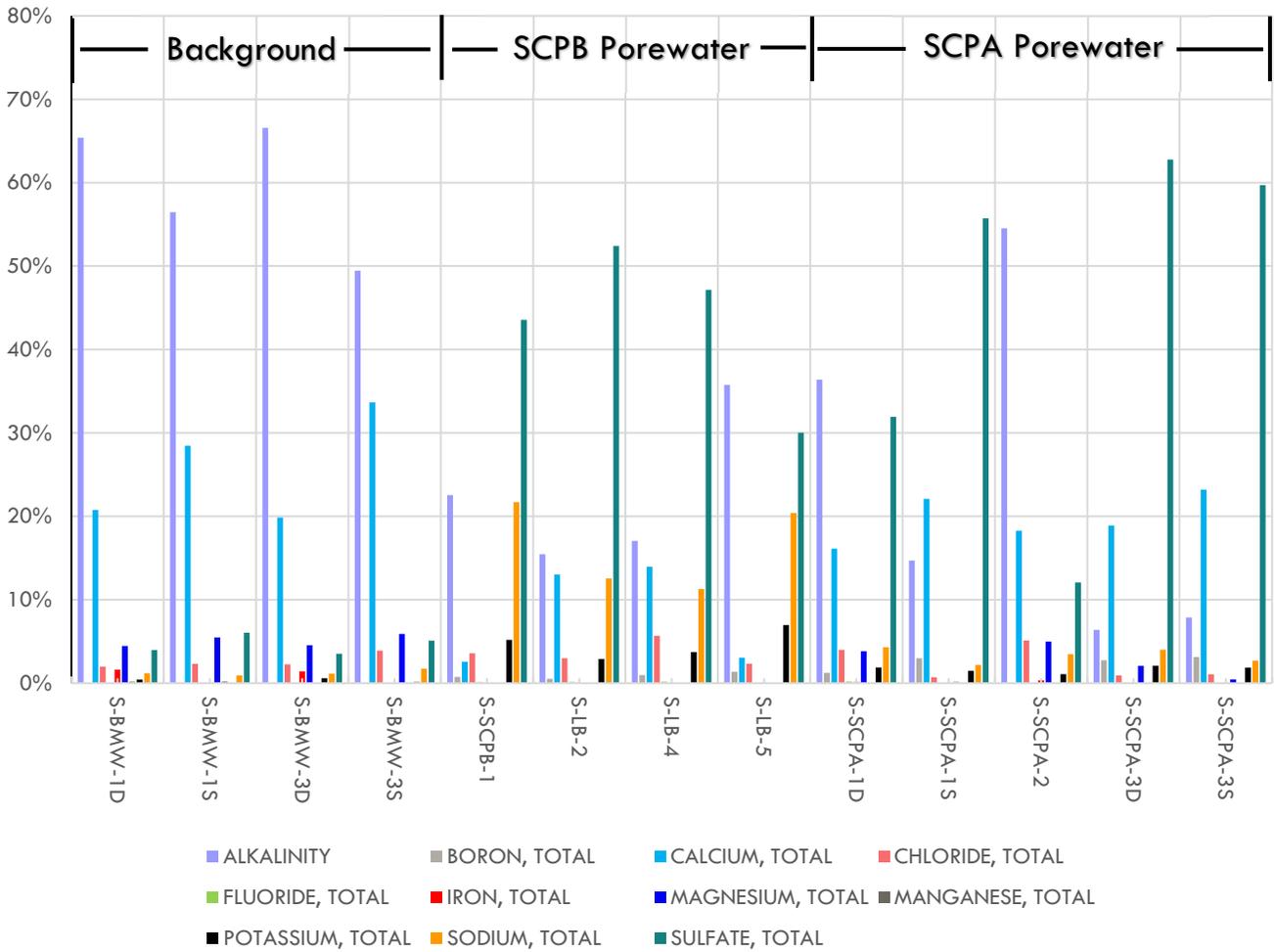
Table 3 – SCPB Pore-water Correlations				
Well ID	S-LB-2	S-LB-4	S-LB-5	S-SCPB-1
S-LB-2				
S-LB-4	99.6%			
S-LB-5	74.8%	76.9%		
S-SCPB-1	93.0%	92.8%	90.5%	
Average Fingerprint Reproducibility			87.9%	

Table 4 – SCPA Pore-water Correlations

Table 4 – SCPA Pore-water Correlations					
Well ID	S-SCPA-1D	S-SCPA-1S	S-SCPA-2	S-SCPA-3D	S-SCPA-3S
S-SCPA-1D					
S-SCPA-1S	78.8%				
S-SCPA-2	84.8%	35.6%			
S-SCPA-3D	67.8%	98.2%	19.1%		
S-SCPA-3S	70.3%	99.1%	23.4%	99.5%	
Average Fingerprint Reproducibility				67.7%	
Average Fingerprint Reproducibility (without SCPA-2)				85.6%	

Additionally, **Figure 1** below displays a histogram of the different source water normalizations.

Figure 1 – Histogram of Source Water Normalizations at the SEC



After reviewing the correlations for the SCPA pore-water, it is evident that there are different sources present within the SCPA which can be seen in the relatively poor correlation between water sampling points. This is likely caused by the historical placement of different types of ash in the CCR unit. SCPA-1 and SCPA-3 locations have a strong correlation and are both located in areas where more fly ash has been managed. SCPA-2 is located in the northern portion of the pond where primarily bottom ash was managed.

Due to differing pore-water chemistries within the SCPA, the SCPA is divided into two separate sources for comparison which include (1) an average of the southern locations (SCPA-1S, SCPA-1D, SCPA-3S, and SCPA-3D), and (2) SCPA-2. Separating the SCPA into two potential sources more accurately reflects the differing depositional conditions (and corresponding chemical characteristics) within the SCPA.

5.0 CORRELATING ALLUVIAL AQUIFER SAMPLES WITH SOURCES

A correlation between the average groundwater concentration and the different source waters was completed to demonstrate which source better correlates with each alluvial aquifer groundwater sample. Results from this correlation are provided in **Table 5** and the values used for this correlation are provided in **Table 1**. The results demonstrate that groundwater in the alluvial aquifer either correlates with the SCPA pore-water or background groundwater but shows a lower degree of correlation with the SCPB pore-water.

Table 5 – Summary of USEPA FALCON Evaluation

Piezometer or Well ID	Percent Correlation				Highest (Best) Correlation
	Background Average	SCPB Average	SCPA Average (no SCPA-2)	SCPA-2 Average	
S-AM-1D	98%	32%	19%	98%	Background
S-AM-1S	98%	41%	28%	99%	SCPA-2
S-DG-1	99%	40%	31%	99%	Background
S-DG-2	99%	39%	29%	99%	Background
S-DG-3	99%	45%	37%	100%	SCPA-2
S-DG-4	99%	41%	32%	99%	SCPA-2
S-LMW-1S	85%	51%	42%	89%	SCPA-2
S-LMW-2S	81%	75%	70%	88%	SCPA-2
S-LMW-3S	99%	40%	30%	99%	Background
S-LMW-4S	99%	35%	25%	98%	Background
S-LMW-5S	26%	96%	98%	38%	SCPA
S-LMW-6S	65%	90%	90%	74%	SCPA
S-LMW-7S	70%	86%	88%	78%	SCPA
S-LMW-8S	48%	90%	95%	59%	SCPA
S-LMW-9S	98%	50%	40%	100%	SCPA-2
S-PZ-1S	97%	55%	43%	100%	SCPA-2
S-PZ-9D	88%	73%	69%	93%	SCPA-2
S-TMW-1	99%	47%	39%	100%	SCPA-2
S-TMW-2	100%	36%	28%	99%	Background
S-TMW-3	100%	40%	32%	99%	Background
S-TP-2D	72%	84%	86%	80%	SCPA
S-TP-3D	98%	51%	44%	100%	SCPA-2
S-TP-4D	95%	60%	54%	98%	SCPA-2
S-TP-5D	84%	78%	75%	90%	SCPA-2
S-TP-6D	99%	43%	34%	100%	SCPA-2
S-TP-6S	99%	38%	29%	99%	Background
S-TP-8D	100%	40%	32%	99%	Background
S-UG-1A	97%	41%	29%	98%	SCPA-2
S-UG-2	98%	40%	26%	99%	SCPA-2
S-UG-3	98%	51%	41%	100%	SCPA-2
S-UMW-1D	86%	40%	33%	89%	SCPA-2
S-UMW-2D	61%	91%	93%	70%	SCPA
S-UMW-3D	13%	90%	98%	24%	SCPA
S-UMW-4D*	71%	87%	86%	79%	SCPB
S-UMW-5D	98%	31%	18%	97%	Background
S-UMW-6D	99%	39%	28%	99%	SCPA-2
S-TMW-4	99%	44%	35%	99%	SCPA-2
S-TMW-5	97%	56%	49%	99%	SCPA-2
S-TMW-6	99%	39%	29%	99%	Background

Notes:

- 1) Values display percent correlation between each sampling point and the SCPA Average (SCPA-1 and SCPA-3), SCPA-2 Average, SCPB Average, or Background Average fingerprints.
- 2) The higher values are shaded darker and indicate better correlation.
- 3) More information on the calculation of these numbers is provided in Table 1.
- 4) * - A review of UMW-4D data from November 2024 revealed likely outliers for several metals used in the FALCON analysis. Therefore, fingerprinting of this well may not be representative of actual conditions. Potential outliers will be analyzed in greater detail for the next statistical evaluation for the SCPA monitoring network.

Tables

Table 1
Summary of Concentrations Used for FALCON Correlation
SCPB Anterative Source Demonstration
Sioux Energy Center, St. Charles County, MO

Analyte	Units	S-AM-1D	S-AM-1S	S-BMW-1D	S-BMW-1S	S-BMW-3D	S-BMW-3S	S-DG-1
ALKALINITY	mg/L	309	203	384	347	372	166	438
BORON, TOTAL	mg/L	2.51	0.158	0.116	0.0619	0.058	0.0573	0.101
CALCIUM, TOTAL	mg/L	83.7	59.6	122	175	111	113	144
CHLORIDE, TOTAL	mg/L	28.9	32.9	11.6	14.2	12.6	13.1	7.5
FLUORIDE, TOTAL	mg/L	0.28	0.19	0.06	0.06	0.06	0.06	0.31
IRON, TOTAL	mg/L	3.00	0.563	9.55	0.121	7.9	0.03	5.01
MAGNESIUM, TOTAL	mg/L	17.9	12.2	26.2	33.7	25.4	19.8	31.1
MANGANESE, TOTAL	mg/L	0.38	1.82	0.985	1.07	0.548	0.268	0.451
POTASSIUM, TOTAL	mg/L	6.51	7.15	2.53	0.45	3.27	0.452	6.03
SODIUM, TOTAL	mg/L	21.6	18.2	6.95	5.69	6.36	5.84	5.28
SULFATE, TOTAL	mg/L	2.7	23.3	23.3	37.1	19.7	17.1	50.5
Sum		476.5	359.1	587.3	614.5	558.9	335.7	688.3
Analyte		S-AM-1D	S-AM-1S	S-BMW-1D	S-BMW-1S	S-BMW-3D	S-BMW-3S	S-DG-1
ALKALINITY		65%	57%	65%	56%	67%	49%	64%
BORON, TOTAL		0.53%	0.044%	0.02%	0.01%	0.01%	0.017%	0.015%
CALCIUM, TOTAL		18%	17%	21%	28%	20%	34%	21%
CHLORIDE, TOTAL		6.1%	9.2%	2%	2.3%	2.3%	3.9%	1.1%
FLUORIDE, TOTAL		0.059%	0.053%	0.01%	0.0098%	0.011%	0.018%	0.045%
IRON, TOTAL		0.63%	0.16%	1.6%	0.02%	1.4%	0.0086%	0.73%
MAGNESIUM, TOTAL		3.8%	3.4%	4.5%	5.5%	4.5%	5.9%	4.5%
MANGANESE, TOTAL		0.08%	0.51%	0.17%	0.17%	0.098%	0.08%	0.066%
POTASSIUM, TOTAL		1.4%	2%	0.43%	0.073%	0.59%	0.13%	0.88%
SODIUM, TOTAL		4.5%	5.1%	1.2%	0.93%	1.1%	1.7%	0.77%
SULFATE, TOTAL		0.57%	6.5%	4%	6%	3.5%	5.1%	7.3%
Sum		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes

- 1) Values for CCR Rule monitoring wells from November 2024 samples collected for the CCR Rule.
- 2) Unit abbreviations - mg/L - milligrams per liter.
- 3) One-half the value of the Method Detection Limit (MDL) is used for non -detect values.

Table 1
Summary of Concentrations Used for FALCON Correlation
SCPB Anterative Source Demonstration
Sioux Energy Center, St. Charles County, MO

Analyte	Units	S-DG-2	S-DG-3	S-DG-4	S-LMW-1S	S-LMW-2S	S-LMW-3S	S-LMW-4S
ALKALINITY	mg/L	442	474	549	300	334	450	729
BORON, TOTAL	mg/L	0.103	0.105	0.109	1.24	9.06	0.151	0.31
CALCIUM, TOTAL	mg/L	141	172	168	142	172	143	220
CHLORIDE, TOTAL	mg/L	4.5	14.7	13.0	175	137	13.3	3.3
FLUORIDE, TOTAL	mg/L	0.51	0.39	0.38	0.34	0.06	0.32	0.06
IRON, TOTAL	mg/L	1.16	3.16	0.0503	0.0396	0.023	0.0959	0.0097
MAGNESIUM, TOTAL	mg/L	31.4	33.4	48.7	32	34.3	29.5	51.5
MANGANESE, TOTAL	mg/L	0.588	0.99	1.42	0.056	0.48	0.045	0.345
POTASSIUM, TOTAL	mg/L	6.37	5.67	6.92	9.96	5.59	4.44	5.81
SODIUM, TOTAL	mg/L	4.93	5.81	6.7	51.6	69.7	19.3	10.8
SULFATE, TOTAL	mg/L	41.5	85.5	70.4	108	234	46.3	33.3
Sum		674.1	795.7	864.7	820.2	996.2	706.5	1054.4
Analyte		S-DG-2	S-DG-3	S-DG-4	S-LMW-1S	S-LMW-2S	S-LMW-3S	S-LMW-4S
ALKALINITY		66%	60%	63%	37%	34%	64%	69%
BORON, TOTAL		0.015%	0.013%	0.013%	0.15%	0.91%	0.021%	0.029%
CALCIUM, TOTAL		21%	22%	19%	17%	17%	20%	21%
CHLORIDE, TOTAL		0.67%	1.8%	1.5%	21%	14%	1.9%	0.31%
FLUORIDE, TOTAL		0.076%	0.049%	0.044%	0.041%	0.006%	0.045%	0.0057%
IRON, TOTAL		0.17%	0.4%	0.0058%	0.0048%	0.0023%	0.014%	0.00092%
MAGNESIUM, TOTAL		4.7%	4.2%	5.6%	3.9%	3.4%	4.2%	4.9%
MANGANESE, TOTAL		0.087%	0.12%	0.16%	0.0068%	0.048%	0.0064%	0.033%
POTASSIUM, TOTAL		0.95%	0.71%	0.8%	1.2%	0.56%	0.63%	0.55%
SODIUM, TOTAL		0.73%	0.73%	0.77%	6.3%	7%	2.7%	1%
SULFATE, TOTAL		6.2%	11%	8.1%	13%	23%	6.6%	3.2%
Sum		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes

- 1) Values for CCR Rule monitoring wells from November 2024 samples collected for the CCR Rule.
- 2) Unit abbreviations - mg/L - milligrams per liter.
- 3) One-half the value of the Method Detection Limit (MDL) is used for non -detect values.

Table 1
Summary of Concentrations Used for FALCON Correlation
SCPB Anterative Source Demonstration
Sioux Energy Center, St. Charles County, MO

Analyte	Units	S-LMW-5S	S-LMW-6S	S-LMW-7S	S-LMW-8S	S-LMW-9S	S-PZ-1S	S-PZ-9D
ALKALINITY	mg/L	300	459	367	424	680	270	228
BORON, TOTAL	mg/L	17.7	17.8	3.7	7.41	0.986	8.12	2.01
CALCIUM, TOTAL	mg/L	236	259	213	342	201	81.9	91.8
CHLORIDE, TOTAL	mg/L	10.6	6.40	31.6	205	39.2	23.4	5.6
FLUORIDE, TOTAL	mg/L	0.37	0.33	0.06	0.48	0.21	0.15	0.06
IRON, TOTAL	mg/L	0.0661	0.0436	0.00455	0.00455	0.0158	5.96	6.03
MAGNESIUM, TOTAL	mg/L	41.4	57.4	56.1	82.4	66.1	16.8	21.9
MANGANESE, TOTAL	mg/L	1.7	0.457	0.643	1.79	0.277	0.663	0.631
POTASSIUM, TOTAL	mg/L	4.19	4.32	4.56	5.62	3.95	1.76	3.36
SODIUM, TOTAL	mg/L	192	66.5	22.2	70.5	26.7	28.5	12
SULFATE, TOTAL	mg/L	915	547	396	745	158	73.3	139
Sum		1719.0	1418.3	1094.9	1884.2	1176.4	510.6	510.4
Analyte		S-LMW-5S	S-LMW-6S	S-LMW-7S	S-LMW-8S	S-LMW-9S	S-PZ-1S	S-PZ-9D
ALKALINITY		17%	32%	34%	23%	58%	53%	45%
BORON, TOTAL		1%	1.3%	0.34%	0.39%	0.084%	1.6%	0.39%
CALCIUM, TOTAL		14%	18%	19%	18%	17%	16%	18%
CHLORIDE, TOTAL		0.62%	0.45%	2.9%	11%	3.3%	4.6%	1.1%
FLUORIDE, TOTAL		0.022%	0.023%	0.0055%	0.025%	0.018%	0.029%	0.012%
IRON, TOTAL		0.0038%	0.0031%	0.00042%	0.00024%	0.0013%	1.2%	1.2%
MAGNESIUM, TOTAL		2.4%	4%	5.1%	4.4%	5.6%	3.3%	4.3%
MANGANESE, TOTAL		0.099%	0.032%	0.059%	0.095%	0.024%	0.13%	0.12%
POTASSIUM, TOTAL		0.24%	0.3%	0.42%	0.3%	0.34%	0.34%	0.66%
SODIUM, TOTAL		11%	4.7%	2%	3.7%	2.3%	5.6%	2.4%
SULFATE, TOTAL		53%	39%	36%	40%	13%	14%	27%
Sum		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes

- 1) Values for CCR Rule monitoring wells from November 2024 samples collected for the CCR Rule.
- 2) Unit abbreviations - mg/L - milligrams per liter.
- 3) One-half the value of the Method Detection Limit (MDL) is used for non -detect values.

Table 1
Summary of Concentrations Used for FALCON Correlation
SCPB Anternative Source Demonstration
Sioux Energy Center, St. Charles County, MO

Analyte	Units	S-TMW-1	S-TMW-2	S-TMW-3	S-TP-2D	S-TP-3D	S-TP-4D	S-TP-5D
ALKALINITY	mg/L	329	391	353	487	357	306	337
BORON, TOTAL	mg/L	0.0836	0.0872	0.0934	0.0875	0.0552	0.0568	7.8
CALCIUM, TOTAL	mg/L	118.0	134	128	281	127	115	156
CHLORIDE, TOTAL	mg/L	3.8	5.8	18.7	74.3	9.8	10	44.1
FLUORIDE, TOTAL	mg/L	0.37	0.33	0.32	0.06	0.06	0.06	0.34
IRON, TOTAL	mg/L	0.0136	2.31	1.83	17.4	8.38	6.1	11
MAGNESIUM, TOTAL	mg/L	19.9	24	23.2	73.2	30.8	27.7	38.3
MANGANESE, TOTAL	mg/L	0.331	0.462	0.667	1.27	0.714	0.395	1.28
POTASSIUM, TOTAL	mg/L	5.12	5.57	6.17	6.28	4.27	3.27	5.7
SODIUM, TOTAL	mg/L	4	4.08	4.79	21.8	7.24	6.96	36.4
SULFATE, TOTAL	mg/L	63.3	27.7	43.7	502	92	118	242
Sum		543.9	595.3	580.5	1464.4	637.3	593.5	879.9
Analyte		S-TMW-1	S-TMW-2	S-TMW-3	S-TP-2D	S-TP-3D	S-TP-4D	S-TP-5D
ALKALINITY		60%	66%	61%	33%	56%	52%	38%
BORON, TOTAL		0.015%	0.015%	0.016%	0.006%	0.0087%	0.0096%	0.89%
CALCIUM, TOTAL		22%	23%	22%	19%	20%	19%	18%
CHLORIDE, TOTAL		0.7%	0.97%	3.2%	5.1%	1.5%	1.7%	5%
FLUORIDE, TOTAL		0.068%	0.055%	0.055%	0.0041%	0.0094%	0.01%	0.039%
IRON, TOTAL		0.0025%	0.39%	0.32%	1.2%	1.3%	1%	1.3%
MAGNESIUM, TOTAL		3.7%	4%	4%	5%	4.8%	4.7%	4.4%
MANGANESE, TOTAL		0.061%	0.078%	0.11%	0.087%	0.11%	0.067%	0.15%
POTASSIUM, TOTAL		0.94%	0.94%	1.1%	0.43%	0.67%	0.55%	0.65%
SODIUM, TOTAL		0.74%	0.69%	0.83%	1.5%	1.1%	1.2%	4.1%
SULFATE, TOTAL		12%	4.7%	7.5%	34%	14%	20%	28%
Sum		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes

- 1) Values for CCR Rule monitoring wells from November 2024 samples collected for the CCR Rule.
- 2) Unit abbreviations - mg/L - milligrams per liter.
- 3) One-half the value of the Method Detection Limit (MDL) is used for non -detect values.

Table 1
Summary of Concentrations Used for FALCON Correlation
SCPB Anterative Source Demonstration
Sioux Energy Center, St. Charles County, MO

Analyte	Units	S-TP-6D	S-TP-6S	S-TP-8D	S-UG-1A	S-UG-2	S-UG-3	S-UMW-1D
ALKALINITY	mg/L	354	412	334	425	326	339	269
BORON, TOTAL	mg/L	0.0977	0.113	0.0726	0.307	0.112	0.418	0.548
CALCIUM, TOTAL	mg/L	119	135	116	160	90.8	120	121
CHLORIDE, TOTAL	mg/L	15	8.90	18.5	116.00	26.5	19.7	161
FLUORIDE, TOTAL	mg/L	0.41	0.44	0.06	0.27	0.29	0.47	0.47
IRON, TOTAL	mg/L	7.55	0.251	6.41	0.00455	0.0109	0.0149	1.24
MAGNESIUM, TOTAL	mg/L	29.2	28.1	25.3	35.7	18.8	22.1	34.4
MANGANESE, TOTAL	mg/L	0.502	0.301	0.463	0.4	0.020	0.894	0.234
POTASSIUM, TOTAL	mg/L	3.71	2.62	3.58	11.1	4.56	4.59	6.45
SODIUM, TOTAL	mg/L	5.69	5.6	6.79	51.70	36.2	24.5	21.9
SULFATE, TOTAL	mg/L	55.7	35.2	41.7	60	29.4	79.1	67.8
Sum		590.9	628.5	552.9	860.5	532.7	610.8	684.0
Analyte		S-TP-6D	S-TP-6S	S-TP-8D	S-UG-1A	S-UG-2	S-UG-3	S-UMW-1D
ALKALINITY		60%	66%	60%	49%	61%	56%	39%
BORON, TOTAL		0.017%	0.018%	0.013%	0.036%	0.021%	0.068%	0.08%
CALCIUM, TOTAL		20%	21%	21%	19%	17%	20%	18%
CHLORIDE, TOTAL		2.5%	1.4%	3.3%	13%	5%	3.2%	24%
FLUORIDE, TOTAL		0.069%	0.07%	0.011%	0.031%	0.054%	0.077%	0.069%
IRON, TOTAL		1.3%	0.04%	1.2%	0.00053%	0.002%	0.0024%	0.18%
MAGNESIUM, TOTAL		4.9%	4.5%	4.6%	4.1%	3.5%	3.6%	5%
MANGANESE, TOTAL		0.085%	0.048%	0.084%	0.046%	0.0037%	0.15%	0.034%
POTASSIUM, TOTAL		0.63%	0.42%	0.65%	1.3%	0.86%	0.75%	0.94%
SODIUM, TOTAL		0.96%	0.89%	1.2%	6%	6.8%	4%	3.2%
SULFATE, TOTAL		9.4%	5.6%	7.5%	7%	5.5%	13%	9.9%
Sum		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes

- 1) Values for CCR Rule monitoring wells from November 2024 samples collected for the CCR Rule.
- 2) Unit abbreviations - mg/L - milligrams per liter.
- 3) One-half the value of the Method Detection Limit (MDL) is used for non -detect values.

Table 1
Summary of Concentrations Used for FALCON Correlation
SCPB Anterative Source Demonstration
Sioux Energy Center, St. Charles County, MO

Analyte	Units	S-UMW-2D	S-UMW-3D	S-UMW-4D	S-UMW-5D	S-UMW-6D	S-TMW-4	S-TMW-5
ALKALINITY	mg/L	214	132	215	259	351	355	267
BORON, TOTAL	mg/L	12	32.4	1.21	5	0.162	0.1	0.0725
CALCIUM, TOTAL	mg/L	151	225	135	76.6	98	116	99.8
CHLORIDE, TOTAL	mg/L	23.3	18.4	30.9	32	5.6	2.4	1.5
FLUORIDE, TOTAL	mg/L	1	0.38	0.55	0.29	0.06	0.43	0.4
IRON, TOTAL	mg/L	0.137	0.715	0.038	3.49	7.26	0.0237	0.025
MAGNESIUM, TOTAL	mg/L	3.02	10.7	30.6	16.4	22.3	31.1	18.7
MANGANESE, TOTAL	mg/L	0.151	0.401	0.0545	0.422	0.61	0.745	0.795
POTASSIUM, TOTAL	mg/L	23.8	18.6	9.5	9.41	3.43	6.82	4.75
SODIUM, TOTAL	mg/L	34.7	90.5	48.9	20.8	6.03	5.90	3.71
SULFATE, TOTAL	mg/L	286	808	223	1.7	33.6	58.1	83.9
Sum		749.1	1337.1	694.8	425.1	528.1	576.6	480.7
Analyte		S-UMW-2D	S-UMW-3D	S-UMW-4D	S-UMW-5D	S-UMW-6D	S-TMW-4	S-TMW-5
ALKALINITY		29%	9.9%	31%	61%	66%	62%	56%
BORON, TOTAL		1.6%	2.4%	0.17%	1.2%	0.031%	0.017%	0.015%
CALCIUM, TOTAL		20%	17%	19%	18%	19%	20%	21%
CHLORIDE, TOTAL		3.1%	1.4%	4.4%	7.5%	1.1%	0.42%	0.31%
FLUORIDE, TOTAL		0.13%	0.028%	0.079%	0.068%	0.011%	0.075%	0.083%
IRON, TOTAL		0.018%	0.053%	0.0055%	0.82%	1.4%	0.0041%	0.0052%
MAGNESIUM, TOTAL		0.4%	0.8%	4.4%	3.9%	4.2%	5.4%	3.9%
MANGANESE, TOTAL		0.02%	0.03%	0.0078%	0.099%	0.12%	0.13%	0.17%
POTASSIUM, TOTAL		3.2%	1.4%	1.4%	2.2%	0.65%	1.2%	0.99%
SODIUM, TOTAL		4.6%	6.8%	7%	4.9%	1.1%	1%	0.77%
SULFATE, TOTAL		38%	60%	32%	0.4%	6.4%	10%	17%
Sum		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes

- 1) Values for CCR Rule monitoring wells from November 2024 samples collected for the CCR Rule.
- 2) Unit abbreviations - mg/L - milligrams per liter.
- 3) One-half the value of the Method Detection Limit (MDL) is used for non -detect values.

Table 1
Summary of Concentrations Used for FALCON Correlation
SCPB Anternative Source Demonstration
Sioux Energy Center, St. Charles County, MO

Analyte	Units	S-TMW-6	S-LB-2	S-LB-4	S-LB-5	S-SCPA-1D	S-SCPA-1S	S-SCPA-2
ALKALINITY	mg/L	428	133	115	468	228	549	219
BORON, TOTAL	mg/L	0.106	4.51	6.5	17.9	7.68	111	0.348
CALCIUM, TOTAL	mg/L	133	112	94.1	40.1	101	825	73.4
CHLORIDE, TOTAL	mg/L	5.1	25.7	38.2	30.5	25.0	26.0	20.5
FLUORIDE, TOTAL	mg/L	0.3	1.30	1.10	1.20	1.20	0.79	0.22
IRON, TOTAL	mg/L	0.0226	0.0062	0.057	0.0219	0.779	0.0062	1.35
MAGNESIUM, TOTAL	mg/L	27.3	0.122	0.108	0.0284	23.9	4.88	20.0
MANGANESE, TOTAL	mg/L	0.508	0.0009	0.0009	0.0009	0.0979	0.0009	0.113
POTASSIUM, TOTAL	mg/L	29.5	24.9	25.2	91.0	11.8	55.2	4.35
SODIUM, TOTAL	mg/L	4.79	108	76.1	267	27.0	81.4	13.9
SULFATE, TOTAL	mg/L	44.5	451	318	393	200	2080	48.5
Sum		673.1	860.5	674.4	1308.8	626.5	3733.3	401.7
Analyte		S-TMW-6	S-LB-2	S-LB-4	S-LB-5	S-SCPA-1D	S-SCPA-1S	S-SCPA-2
ALKALINITY		64%	15%	17%	36%	36%	15%	55%
BORON, TOTAL		0.016%	0.52%	0.96%	1.4%	1.2%	3%	0.087%
CALCIUM, TOTAL		20%	13%	14%	3.1%	16%	22%	18%
CHLORIDE, TOTAL		0.76%	3%	5.7%	2.3%	4%	0.7%	5.1%
FLUORIDE, TOTAL		0.045%	0.15%	0.16%	0.092%	0.19%	0.021%	0.055%
IRON, TOTAL		0.0034%	0.00072%	0.0085%	0.0017%	0.12%	0.00017%	0.34%
MAGNESIUM, TOTAL		4.1%	0.014%	0.016%	0.0022%	3.8%	0.13%	5%
MANGANESE, TOTAL		0.075%	0.0001%	0.00013%	0.000069%	0.016%	0.000024%	0.028%
POTASSIUM, TOTAL		4.4%	2.9%	3.7%	7%	1.9%	1.5%	1.1%
SODIUM, TOTAL		0.71%	13%	11%	20%	4.3%	2.2%	3.5%
SULFATE, TOTAL		6.6%	52%	47%	30%	32%	56%	12%
Sum		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes

- 1) Values for CCR Rule monitoring wells from November 2024; Values for pore-water samples from SCPB ASD Investigation collected in February-March 2018.
- 2) Unit abbreviations - mg/L - milligrams per liter.
- 3) One-half the value of the Method Detection Limit (MDL) is used for non -detect values.

Table 1
Summary of Concentrations Used for FALCON Correlation
SCPB Anternative Source Demonstration
Sioux Energy Center, St. Charles County, MO

Analyte	Units	S-SCPA-3D	S-SCPA-3S	S-SCPB-1
ALKALINITY	mg/L	185	170	326
BORON, TOTAL	mg/L	79.5	67.8	10.7
CALCIUM, TOTAL	mg/L	548	501	37.2
CHLORIDE, TOTAL	mg/L	27.1	23.1	51.7
FLUORIDE, TOTAL	mg/L	2.9	0.60	1.8
IRON, TOTAL	mg/L	0.138	0.0343	0.0697
MAGNESIUM, TOTAL	mg/L	60.2	9.60	0.0387
MANGANESE, TOTAL	mg/L	0.202	0.0179	0.0009
POTASSIUM, TOTAL	mg/L	60.3	40.1	74.9
SODIUM, TOTAL	mg/L	116	58.5	314
SULFATE, TOTAL	mg/L	1820	1290	630
Sum		2899.3	2160.8	1446.4
Analyte		S-SCPA-3D	S-SCPA-3S	S-SCPB-1
ALKALINITY		6.4%	7.9%	23%
BORON, TOTAL		2.7%	3.1%	0.74%
CALCIUM, TOTAL		19%	23%	2.6%
CHLORIDE, TOTAL		0.93%	1.1%	3.6%
FLUORIDE, TOTAL		0.1%	0.028%	0.12%
IRON, TOTAL		0.0048%	0.0016%	0.0048%
MAGNESIUM, TOTAL		2.1%	0.44%	0.0027%
MANGANESE, TOTAL		0.007%	0.00083%	0.000062%
POTASSIUM, TOTAL		2.1%	1.9%	5.2%
SODIUM, TOTAL		4%	2.7%	22%
SULFATE, TOTAL		63%	60%	44%
Sum		100.0%	100.0%	100.0%

Notes

- 1) Values for pore-water samples from SCPB ASD Investigation collected in February-March 2018.
- 2) Unit abbreviations - mg/L - milligrams per liter.
- 3) One-half the value of the Method Detection Limit (MDL) is used for non -detect values.

Appendix C

Alternative Source Demonstration – May 2025 Sampling Event



To: Ameren Missouri
1901 Chouteau Ave, St. Louis, MO 63103

Project Number: 23009-25

From: Rocksmith Geoengineering - Mark Haddock, P.E.,
R.G., Jeff Ingram, R.G., Grant Morey, R.G.

Email: jeff.ingram@rocksmithgeo.com

RE: SCPB – ALTERNATIVE SOURCE DEMONSTRATION – MAY 2025 SAMPLING EVENT

1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (USEPA) coal combustion residual (CCR) rule (CCR Rule or The Rule), Rocksmith Geoengineering, LLC (Rocksmith) has prepared this Technical Memorandum to show that Statistically Significant Increases (SSIs) identified at Ameren Missouri's (Ameren) Sioux Energy Center (SEC) fly ash surface impoundment (SCPB) are the result from an alternative source and are not related to impacts from SCPB. This SCPB Alternative Source Demonstration (ASD) satisfies the requirements of §257.94(e)(2), which allows the owner or operator to demonstrate that a source other than the CCR Unit has caused an SSI and that the apparent SSI was the result of an alternative source or resulted from errors in sampling, analysis, statistical evaluation, or natural variation in groundwater quality.

2.0 BACKGROUND

The first round of Detection Monitoring was completed during November 2017 at the SEC SCPB CCR Unit in St. Charles County, Missouri. This sampling was completed in accordance with the CCR Rule, and SSIs were identified and verified. In February/March 2018, additional drilling and detailed analysis of results were completed, and it was determined that the SSIs in the CCR Rule groundwater monitoring wells at the SCPB were not caused by impacts from the SCPB. Based on the previous ASDs prepared for the SCPB, the SSIs observed in the SCPB wells were caused by the adjacent SCPA bottom ash surface impoundment. This conclusion was supported by lines of evidence (LOEs) as follows.

- Geochemical Signatures
- USEPA FALCON Analysis
- Groundwater Flow Directions
- Construction of the SCPB

Previous ASD reports may be found in the SCPB Annual Groundwater Monitoring and Corrective Action Reports available on Ameren's Publicly available website (<https://www.ameren.com/sustainability/waste/ccr/compliance-reports/sioux>).

3.0 MAY 2025 SAMPLING EVENT

A summary of the May 2025 sampling results is provided in **Table 1**. As discussed in **Section 2.0**, there are several LOEs presented in the previous ASDs that demonstrate impacts around the SCPB are caused by the SCPA and not the SCPB. Both CCR units are now capped and closed with a geomembrane cover system and the same LOEs remain. The following summarizes the LOEs that indicate exceedances in the May 2025 sampling event around the SCPB are from the SCPA and not the SCPB using current monitoring data through the May 2025 sampling event.

- **Geochemical Signatures** – As reflected on the piper diagram provided in **Figure 1**, SCPA pore-water has a distinctly different geochemical signature than the pore-water from the SCPB. CCR groundwater samples in monitoring wells with SSIs plot on the piper diagrams primarily in a location between the SCPA pore-water zone and the background groundwater zone, indicating that well water chemistry is a mixture of unaffected groundwater and groundwater impacted by the SCPA.
- **USEPA FALCON Analysis** – The USEPA Fingerprint Analysis of Leachate Contaminants (FALCON) method compared constituent fingerprints from the downgradient monitoring wells with those of background groundwater, SCPB pore-water, and SCPA pore-water. A Technical Memorandum summarizing the calculations and results is provided in **Appendix A**. An updated calculation using data from the May 2025 sampling event was completed, and a summary of the results is provided in Table 5 of **Appendix A**. The results indicate that there is strong correlation between the downgradient monitoring wells and both the SCPA pore-water and background groundwater, while there is low correlation between downgradient monitoring well data and SCPB pore-water. These same correlations were found at depth within the alluvial aquifer. Of wells within the LCPB monitoring network, S-LMW-6S exhibits a relatively high correlation with both SCPA and SCPB pore-water; however, results from this well plot squarely in the SCPA mixing zone on the piper diagram discussed above. This indicates that water at S-LMW-6S is a mixture of unaffected groundwater and groundwater impacted by the SCPA.
- **Groundwater Flow Direction** – Potentiometric surface mapping demonstrates that groundwater flow direction is variable and can temporarily flow in multiple directions, but generally, groundwater flows to the east-southeast depending on the river level in the adjacent Mississippi and Missouri Rivers. Relatively low Missouri River levels from mid-2022 through early 2024 led to a predominately southward flow direction across the SEC. The potentiometric surface maps since then generally indicate a return to a stronger eastward component of groundwater flow, placing the SCPA upgradient of the SCPB. Typical groundwater flow direction at the site supports the conclusion that the unlined SCPA located to the west of the SCPB is the source of impacts at the downgradient monitoring wells in both the SCPA and SCPB monitoring networks.
- **SCPB Construction** - The SCPB was constructed in 1993 with an engineered liner system consisting of a 60-mil High Density Polyethylene (HDPE) geomembrane liner with a minimum bottom elevation of approximately 419 feet above mean sea level (FT MSL). The low permeability HDPE liner system in the SCPB is a barrier to the migration of CCR impacts and provides containment for CCR. The unlined SCPA began operation in 1967 and has a bottom elevation estimated to be 370 FT MSL, which is much deeper than the SCPB. In addition to the distinct pore-water fingerprint for SCPA relative to SCPB, there are elevated concentrations of CCR indicators in the shallow, intermediate (middle), and deep alluvial groundwater zones. Elevated concentrations are not isolated to the shallow zone, which would be the most likely zone influenced if leakage from the SCPB had occurred. The impacts to the intermediate and deep

alluvial zones are most likely from the SCPA, where the base elevation extends into deeper groundwater zones in the aquifer.

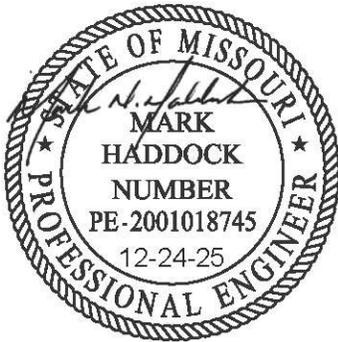
In summary, groundwater chemistry, pore-water chemistry fingerprints, cell construction, and hydrogeological evidence demonstrate that SSIs reported for the May 2025 Sampling Event for the SCPB CCR Unit were not caused by impacts from the SCPB surface impoundment. The SCPA surface impoundment, located immediately adjacent and upgradient to the SCPB, is the source of the SSIs for groundwater in the SCPB monitoring well network.

CERTIFICATION STATEMENT

This *SCPB – Alternative Source Demonstration – May 2025 Sampling Event* has been prepared to comply with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule under the direction of a licensed professional engineer with Golder Associates Inc.

I hereby certify that this *SCPB – Alternative Source Demonstration – May 2025 Sampling Event* located at 8501 Missouri 94, West Alton, Missouri 63386 has been prepared to meet the requirements of 40 CFR §257.94(e)(2).

Rocksmith Geoengineering, LLC



Mark Haddock, PE, RG
Principal Engineer, Senior Partner

Attachments: Table 1 – May 2025 Detection Monitoring Results
Figure 1 – SCPB Piper Diagram for May 2025
Appendix A – FALCON Analysis Calculation Package

Tables

Table 1
May 2025 Detection Monitoring Results
SCPB Surface Impoundment
Sioux Energy Center, St. Charles County, MO

ANALYTE	UNITS	PREDICTION LIMITS	BACKGROUND		GROUNDWATER MONITORING WELLS									
			BMW-1S	BMW-3S	LMW-1S	LMW-2S	LMW-3S	LMW-4S	LMW-5S	LMW-6S	LMW-7S	LMW-8S	LMW-9S	
May 2025 Detection Monitoring Event														
DATE	NA	NA	5/7/2025	5/7/2025	5/12/2025	5/7/2025	5/8/2025	5/9/2025	5/12/2025	5/12/2025	5/12/2025	5/12/2025	5/12/2025	5/9/2025
pH	SU	6.5152-7.3857	6.82	6.85	7.19	6.96	6.71	6.79	6.85	6.80	6.83	6.95	6.77	
BORON, TOTAL	µg/L	118	56.5 J	55.1 J	900	8,970	153	216	18,000	16,700	2,870	6,520	853	
CALCIUM, TOTAL	µg/L	176,246	177,000 J	129,000	130,000	169,000 J	144,000	230,000	221,000	248,000	185,000 J	339,000	140,000 J	
CHLORIDE, TOTAL	mg/L	14.152	11.4	10.6	130	128	22.3 J	2.6 J	9.7	3.5	50.1	194 J	58.0	
FLUORIDE, TOTAL	mg/L	0.46	0.26	0.30	ND	0.17 J	0.18 J	ND	ND	ND	ND	ND	0.23	
SULFATE, TOTAL	mg/L	42.073	35.1	24.5	93.6	219	32.7 J	31.2 J	113	684	321	660 J	113	
TOTAL DISSOLVED SOLIDS	mg/L	634.46	615	449	691	946	580	878	1,700	1,310	889	1,770	747	
July 2025 Verification Sampling Event														
DATE	NA	NA					7/9/2025							
pH	SU	6.5152-7.3857												
BORON, TOTAL	µg/L	118												
CALCIUM, TOTAL	µg/L	176246												
CHLORIDE, TOTAL	mg/L	14.152					8.6							
FLUORIDE, TOTAL	mg/L	0.46												
SULFATE, TOTAL	mg/L	42.073												
TOTAL DISSOLVED SOLIDS	mg/L	634.46												

NOTES:

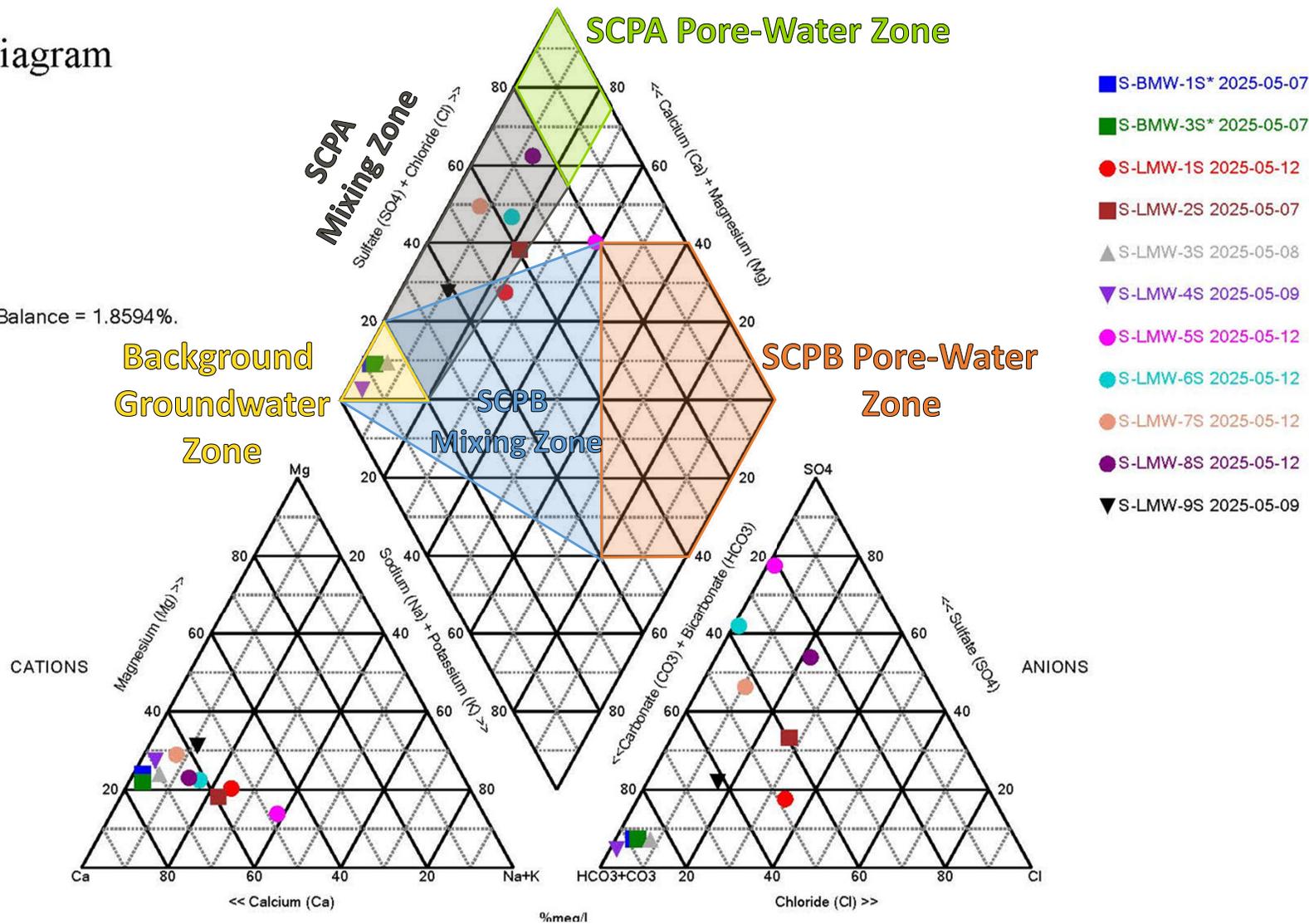
1. Unit Abbreviations: µg/L - micrograms per liter, mg/L - milligrams per liter, SU - standard units.
2. J - Result is an estimated value.
3. ND - Constituent was analyzed but was not detected above the Method Detection Limit (MDL) or the adjusted Practical Quantitation Limit (PQL) based on data validation and is considered a non-detect. Values displayed as ND.
4. NA - Not applicable.
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

Figures

Piper Diagram

Cation-Anion Balance = 1.8594%.



Notes

- 1) Piper diagram generated using Sanitas Software.
- 2) %mEq/l – milliequivalents per liter
- 3) The May 2025 sulfate result at S-LMW-5S was determined to be a low outlier; therefore, the November 2024 result at the well was substituted as a value representative of typical sulfate results.

CLIENT/PROJECT AMEREN MISSOURI SIOUX ENERGY CENTER				 		TITLE SCPB Piper Diagram for May 2025		
DRAWN GTM	CHECKED JDQ	REVIEWED MNH	DATE 2025-09-17			Rev No. NA	JOB NO. 23009-25	FIGURE 1

Appendix A

FALCON Analysis Calculation Package



To: Ameren Missouri
1901 Chouteau Ave, St. Louis, MO 63103

Project Number: 23009-25

From: Rocksmith Geoengineering - Mark Haddock, P.E.,
R.G., Jeff Ingram R.G., Grant Morey, R.G.

Email: jeff.ingram@rocksmithgeo.com

RE: **Appendix A – SCPB FALCON Analysis Calculation Package**

1.0 OBJECTIVE

The objective of this analysis is to determine if there is a correlation between the ion ratio fingerprints in the SCPA pore-water, SCPB pore-water, or background groundwater with the compliance monitoring wells samples in the alluvial aquifer at the Sioux Energy Center (SEC).

2.0 FINGERPRINT ANALYSIS OF LEACHATE CONTAMINANTS (FALCON) METHOD

The Fingerprint Analysis of Leachate Contaminants (FALCON) method was developed in 2004 by the United States Environmental Protection Agency (USEPA) as a tool to identify the source of impacts within groundwater. The FALCON method compiles ion ratios for multiple constituents in order to develop a distinctive chemical fingerprint for each possible contaminant source and un-impacted background groundwater. These fingerprints are then correlated to well sample data downgradient of the sources and are used to characterize the source of the contaminant plume. For this analysis, background groundwater quality is derived from background well samples located approximately 0.50 to 0.75 miles west of the SCPB. Source data is from pore-water collected from piezometers within the SCPA and SCPB. Fingerprints from these three sources (background groundwater, SCPA pore-water, and SCPB pore-water) are compared to data from alluvial aquifer monitoring well sampling locations at the SEC. Data from the SCPA and SCPB pore-water are from the November 2017 ASD for the SCPB, which is available in the 2018 Annual Report for the SCPB. Data from the background and compliance monitoring wells are from the May 2025 sampling event.

3.0 SELECTION OF CONSTITUENTS TO USE

The first step in completing the FALCON analysis is to select a subset of constituents that are representative of the potential source areas. When selecting these constituents, it is important to include constituents that are mobile in the hydrogeological environment and that can uniquely characterize each water type. Constituents selected included major cation and anion constituents that represent groundwater chemistry as well as key indicators of CCR impacts. Values of the three different sources were compared to see which constituents fit the criteria. A summary table of the values used for the three sources is provided in **Table 1**. The following constituents were selected to complete the FALCON analysis:

- Alkalinity
- Total Calcium
- Total Fluoride
- Total Boron
- Total Chloride
- Total Iron

- Total Magnesium
 - Total Manganese
- Total Potassium
 - Total Sodium
- Total Sulfate

4.0 DATA TABULATION AND NORMALIZATION

Once the constituents were selected, the data were tabulated, normalized and a graphical presentation of the fingerprints was produced. These steps are provided in **Table 1** for the three different sources (background groundwater, SCPA pore-water, and SCPB pore-water), as well as each monitoring well evaluated. Correlations were then completed between the different sources to determine each source’s reproducibility. Tables displaying these correlations are provided below in **Tables 2-4**.

Table 2 – Background Groundwater Correlations

Table 2 - Background Groundwater Correlations				
Well ID	S-BMW-1D	S-BMW-1S	S-BMW-3D	S-BMW-3S
S-BMW-1D				
S-BMW-1S	99.9%			
S-BMW-3D	100.0%	99.9%		
S-BMW-3S	99.9%	100.0%	99.8%	
Average Fingerprint Reproducibility			99.9%	

Table 3 – SCPB Pore-water Correlations

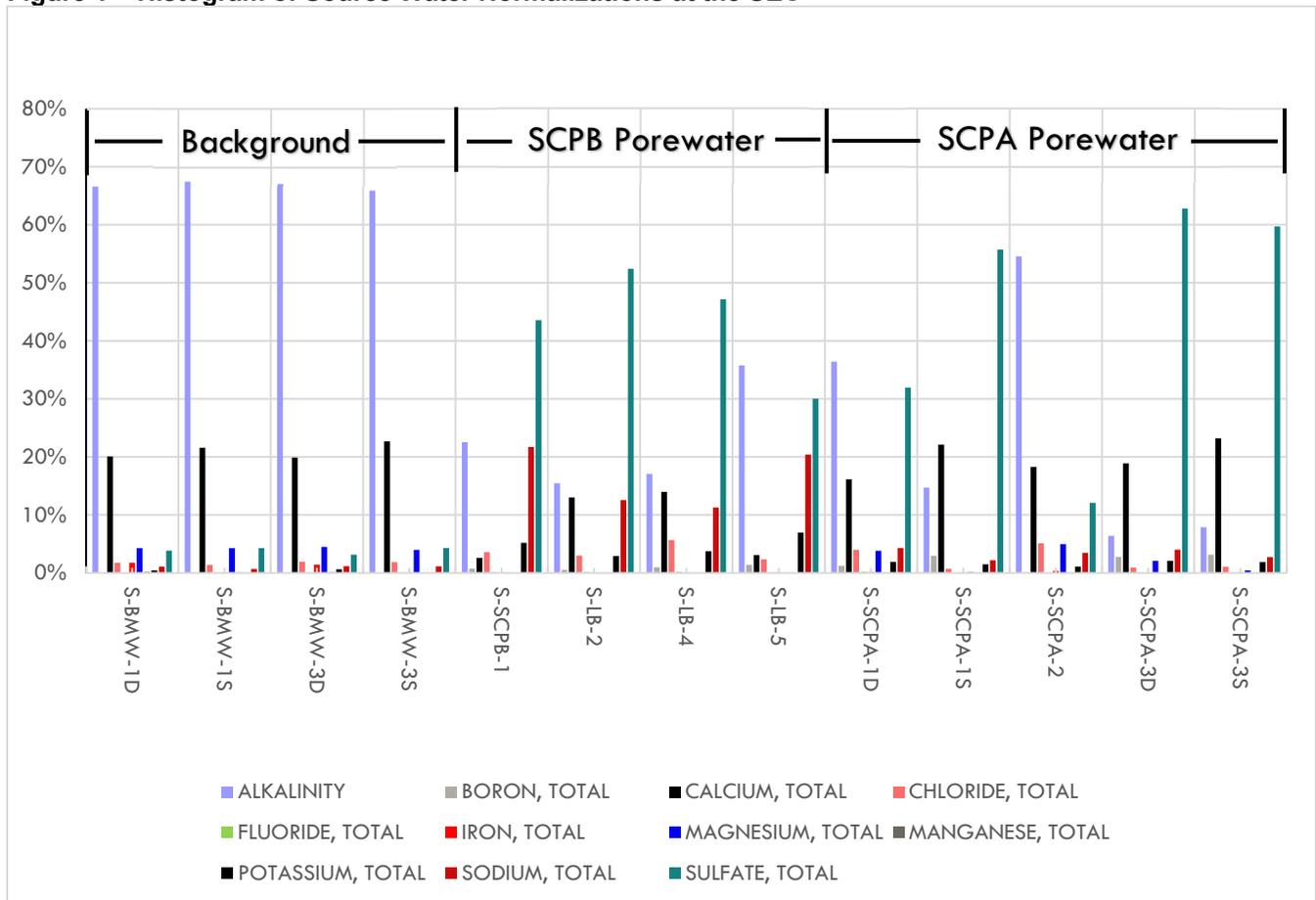
Table 3 – SCPB Pore-water Correlations				
Well ID	S-LB-2	S-LB-4	S-LB-5	S-SCPB-1
S-LB-2				
S-LB-4	99.6%			
S-LB-5	74.8%	76.9%		
S-SCPB-1	93.0%	92.8%	90.5%	
Average Fingerprint Reproducibility			87.9%	

Table 4 – SCPA Pore-water Correlations

Table 4 – SCPA Pore-water Correlations					
Well ID	S-SCPA-1D	S-SCPA-1S	S-SCPA-2	S-SCPA-3D	S-SCPA-3S
S-SCPA-1D					
S-SCPA-1S	78.8%				
S-SCPA-2	84.8%	35.6%			
S-SCPA-3D	67.8%	98.2%	19.1%		
S-SCPA-3S	70.3%	99.1%	23.4%	99.5%	
Average Fingerprint Reproducibility				67.7%	
Average Fingerprint Reproducibility (without SCPA-2)				85.6%	

Additionally, **Figure 1** below displays a histogram of the different source water normalizations.

Figure 1 – Histogram of Source Water Normalizations at the SEC



After reviewing the correlations for the SCPA pore-water, it is evident that there are different sources present within the SCPA which can be seen in the relatively poor correlation between water sampling points. This is likely caused by the historical placement of different types of ash in the CCR unit. SCPA-1 and SCPA-3 locations have a strong correlation and are both located in areas where more fly ash has been managed. SCPA-2 is located in the northern portion of the pond where primarily bottom ash was managed.

Due to differing pore-water chemistry within the SCPA, the SCPA is divided into two separate sources for comparison which include (1) an average of the southern locations (SCPA-1S, SCPA-1D, SCPA-3S, and SCPA-3D), and (2) SCPA-2. Separating the SCPA into two potential sources more accurately reflects the differing depositional conditions (and corresponding chemical characteristics) within the SCPA.

5.0 CORRELATING ALLUVIAL AQUIFER SAMPLES WITH SOURCES

A correlation between the average groundwater concentration and the different source waters was completed to demonstrate which source better correlates with each alluvial aquifer groundwater sample. Results from this correlation are provided in **Table 5** and the values used for this correlation are provided in **Table 1**. The results demonstrate that groundwater in the alluvial aquifer either correlates with the SCPA pore-water or background groundwater but shows a lower degree of correlation with the SCPB pore-water.

Table 5 – Summary of USEPA FALCON Evaluation

Piezometer or Well ID	Percent Correlation				Highest (Best) Correlation
	Background Average	SCPB Average	SCPA Average (no SCPA-2)	SCPA-2 Average	
S-AM-1D	99%	32%	19%	98%	Background
S-AM-1S	98%	49%	39%	100%	SCPA-2
S-DG-1	100%	43%	34%	99%	Background
S-DG-2	100%	40%	30%	99%	Background
S-DG-3	99%	44%	35%	100%	SCPA-2
S-DG-4	100%	43%	33%	100%	Background
S-LMW-1S	91%	51%	40%	95%	SCPA-2
S-LMW-2S	81%	74%	68%	90%	SCPA-2
S-LMW-3S	100%	37%	26%	99%	Background
S-LMW-4S	100%	34%	24%	98%	Background
S-LMW-5S	25%	97%	97%	40%	SCPA
S-LMW-6S	59%	92%	92%	70%	SCPB
S-LMW-7S	77%	81%	80%	86%	SCPA-2
S-LMW-8S	47%	89%	94%	60%	SCPA
S-LMW-9S	97%	53%	44%	100%	SCPA-2
S-PZ-1S	99%	44%	32%	99%	Background
S-PZ-9D	93%	66%	60%	97%	SCPA-2
S-TMW-1	99%	44%	35%	100%	SCPA-2
S-TMW-2	100%	37%	27%	99%	Background
S-TMW-3	100%	41%	31%	99%	Background
S-TP-2D	71%	83%	86%	81%	SCPA
S-TP-3D	99%	49%	40%	100%	SCPA-2
S-TP-4D	95%	59%	53%	98%	SCPA-2
S-TP-5D	80%	80%	77%	88%	SCPA-2
S-TP-6D	100%	43%	34%	100%	SCPA-2
S-TP-6S	100%	38%	28%	99%	Background
S-TP-8D	100%	40%	31%	99%	Background
S-UG-1A	96%	45%	33%	98%	SCPA-2
S-UG-2	100%	43%	32%	99%	Background
S-UG-3	98%	50%	42%	100%	SCPA-2
S-UMW-1D	95%	44%	35%	97%	SCPA-2
S-UMW-2D	57%	90%	94%	68%	SCPA
S-UMW-3D	17%	92%	99%	31%	SCPA
S-UMW-4D	76%	86%	80%	85%	SCPB
S-UMW-5D	99%	32%	19%	98%	Background
S-UMW-6D	100%	38%	28%	99%	Background
S-TMW-4	100%	33%	25%	98%	Background
S-TMW-5	98%	53%	46%	99%	SCPA-2
S-TMW-6	100%	41%	32%	99%	Background

Notes:

- 1) Values display percent correlation between each sampling point and the SCPA Average (SCPA-1 and SCPA-3), SCPA-2 Average, SCPB Average, or Background Average fingerprints.
- 2) The higher values are shaded darker and indicate better correlation.
- 3) Data used to calculate these correlations is provided in Table 1.

Tables

Table 1
Summary of Concentrations Used for FALCON Correlation
SCPB Anterative Source Demonstration
Sioux Energy Center, St. Charles County, MO

Analyte	Units	S-AM-1D	S-AM-1S	S-BMW-1D	S-BMW-1S	S-BMW-3D	S-BMW-3S	S-DG-1
ALKALINITY	mg/L	283	333	385	555	372	375	430
BORON, TOTAL	mg/L	2.18	0.44	0.103	0.0565	0.062	0.0551	0.0971
CALCIUM, TOTAL	mg/L	74.2	111	116	177	110	129	141
CHLORIDE, TOTAL	mg/L	29.3	41.9	10.1	11.4	10.6	10.6	8.7
FLUORIDE, TOTAL	mg/L	0.56	0.34	0.27	0.26	0.28	0.3	0.16
IRON, TOTAL	mg/L	2.74	2.23	10.1	0.0381	7.9	0.00455	9.4
MAGNESIUM, TOTAL	mg/L	16.0	23.0	24.7	35.1	24.8	22.7	31.4
MANGANESE, TOTAL	mg/L	0.35	3.67	0.964	0.749	0.577	0.249	0.383
POTASSIUM, TOTAL	mg/L	6.17	8.85	2.57	0.479	3.44	0.436	5.89
SODIUM, TOTAL	mg/L	19.4	22.0	6.31	5.54	6.45	6.42	5.26
SULFATE, TOTAL	mg/L	3.5	74	22.2	35.1	17.4	24.5	66.2
Sum		437.4	620.4	578.3	820.7	553.5	569.3	698.5
Analyte		S-AM-1D	S-AM-1S	S-BMW-1D	S-BMW-1S	S-BMW-3D	S-BMW-3S	S-DG-1
ALKALINITY		65%	54%	67%	68%	67%	66%	62%
BORON, TOTAL		0.5%	0.071%	0.018%	0.0069%	0.011%	0.0097%	0.014%
CALCIUM, TOTAL		17%	18%	20%	22%	20%	23%	20%
CHLORIDE, TOTAL		6.7%	6.8%	1.7%	1.4%	1.9%	1.9%	1.2%
FLUORIDE, TOTAL		0.13%	0.055%	0.047%	0.032%	0.051%	0.053%	0.023%
IRON, TOTAL		0.63%	0.36%	1.7%	0.0046%	1.4%	0.0008%	1.3%
MAGNESIUM, TOTAL		3.7%	3.7%	4.3%	4.3%	4.5%	4%	4.5%
MANGANESE, TOTAL		0.08%	0.59%	0.17%	0.091%	0.1%	0.044%	0.055%
POTASSIUM, TOTAL		1.4%	1.4%	0.44%	0.058%	0.62%	0.077%	0.84%
SODIUM, TOTAL		4.4%	3.5%	1.1%	0.68%	1.2%	1.1%	0.75%
SULFATE, TOTAL		0.8%	12%	3.8%	4.3%	3.1%	4.3%	9.5%
Sum		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes

- 1) Values for CCR Rule monitoring wells from May 2025 samples collected for the CCR Rule.
- 2) Unit abbreviations - mg/L - milligrams per liter.
- 3) One-half the value of the Method Detection Limit (MDL) is used for non -detect values.

Table 1
Summary of Concentrations Used for FALCON Correlation
SCPB Anterative Source Demonstration
Sioux Energy Center, St. Charles County, MO

Analyte	Units	S-DG-2	S-DG-3	S-DG-4	S-LMW-1S	S-LMW-2S	S-LMW-3S	S-LMW-4S
ALKALINITY	mg/L	462	465	530	325	333	481	800
BORON, TOTAL	mg/L	0.105	0.105	0.108	0.9	8.97	0.153	0.216
CALCIUM, TOTAL	mg/L	140	155	159	130	169	144	230
CHLORIDE, TOTAL	mg/L	5.7	25.1	16.8	130	128	22.3	2.6
FLUORIDE, TOTAL	mg/L	0.22	0.18	0.06	0.06	0.17	0.18	0.06
IRON, TOTAL	mg/L	1.9	4.07	0.0441	0.084	0.035	0.102	0.0137
MAGNESIUM, TOTAL	mg/L	33.3	31.5	46.7	29.3	30.8	29.9	54.9
MANGANESE, TOTAL	mg/L	0.486	0.756	0.361	0.066	0.376	0.0521	0.131
POTASSIUM, TOTAL	mg/L	5.79	5.42	6.59	11	6.06	3.52	5.6
SODIUM, TOTAL	mg/L	4.9	5.88	7.1	60.4	69.8	11.7	10.3
SULFATE, TOTAL	mg/L	51.1	74.8	75.9	93.6	219	32.7	31.2
Sum		705.5	767.8	842.7	780.4	965.2	725.6	1135.0
<hr/>								
Analyte		S-DG-2	S-DG-3	S-DG-4	S-LMW-1S	S-LMW-2S	S-LMW-3S	S-LMW-4S
ALKALINITY		65%	61%	63%	42%	35%	66%	70%
BORON, TOTAL		0.015%	0.014%	0.013%	0.12%	0.93%	0.021%	0.019%
CALCIUM, TOTAL		20%	20%	19%	17%	18%	20%	20%
CHLORIDE, TOTAL		0.81%	3.3%	2%	17%	13%	3.1%	0.23%
FLUORIDE, TOTAL		0.031%	0.023%	0.0071%	0.0077%	0.018%	0.025%	0.0053%
IRON, TOTAL		0.27%	0.53%	0.0052%	0.011%	0.0036%	0.014%	0.0012%
MAGNESIUM, TOTAL		4.7%	4.1%	5.5%	3.8%	3.2%	4.1%	4.8%
MANGANESE, TOTAL		0.069%	0.098%	0.043%	0.0085%	0.039%	0.0072%	0.012%
POTASSIUM, TOTAL		0.82%	0.71%	0.78%	1.4%	0.63%	0.49%	0.49%
SODIUM, TOTAL		0.69%	0.77%	0.85%	7.7%	7.2%	1.6%	0.91%
SULFATE, TOTAL		7.2%	9.7%	9%	12%	23%	4.5%	2.7%
Sum		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes

- 1) Values for CCR Rule monitoring wells from May 2025 samples collected for the CCR Rule.
- 2) Unit abbreviations - mg/L - milligrams per liter.
- 3) One-half the value of the Method Detection Limit (MDL) is used for non -detect values.

Table 1
Summary of Concentrations Used for FALCON Correlation
SCPB Anterative Source Demonstration
Sioux Energy Center, St. Charles County, MO

Analyte	Units	S-LMW-5S	S-LMW-6S	S-LMW-7S	S-LMW-8S	S-LMW-9S	S-PZ-1S	S-PZ-9D
ALKALINITY	mg/L	317	526	379	387	401	358	231
BORON, TOTAL	mg/L	18	16.7	2.87	6.52	0.853	5.66	1.8
CALCIUM, TOTAL	mg/L	221	248	185	339	140	104	86.9
CHLORIDE, TOTAL	mg/L	9.7	3.50	50.1	194	58	17.2	4.2
FLUORIDE, TOTAL	mg/L	0.06	0.06	0.06	0.06	0.23	0.45	0.06
IRON, TOTAL	mg/L	0.0265	0.0144	0.00455	0.00455	0.00455	6.73	4.95
MAGNESIUM, TOTAL	mg/L	39.2	54	50.9	74.6	45.9	22.2	21.4
MANGANESE, TOTAL	mg/L	1.57	0.431	0.607	1.2	0.0476	0.768	0.554
POTASSIUM, TOTAL	mg/L	4.02	4.28	4.45	5.51	4.09	2.12	3.18
SODIUM, TOTAL	mg/L	204	71.2	22.1	76.9	28.8	29.4	10.5
SULFATE, TOTAL	mg/L	915	684	321	660	113	50.1	107
Sum		1729.6	1608.2	1016.1	1744.8	791.9	596.6	471.5
Analyte		S-LMW-5S	S-LMW-6S	S-LMW-7S	S-LMW-8S	S-LMW-9S	S-PZ-1S	S-PZ-9D
ALKALINITY		18%	33%	37%	22%	51%	60%	49%
BORON, TOTAL		1%	1%	0.28%	0.37%	0.11%	0.95%	0.38%
CALCIUM, TOTAL		13%	15%	18%	19%	18%	17%	18%
CHLORIDE, TOTAL		0.56%	0.22%	4.9%	11%	7.3%	2.9%	0.89%
FLUORIDE, TOTAL		0.0035%	0.0037%	0.0059%	0.0034%	0.029%	0.075%	0.013%
IRON, TOTAL		0.0015%	0.0009%	0.00045%	0.00026%	0.00057%	1.1%	1%
MAGNESIUM, TOTAL		2.3%	3.4%	5%	4.3%	5.8%	3.7%	4.5%
MANGANESE, TOTAL		0.091%	0.027%	0.06%	0.069%	0.006%	0.13%	0.12%
POTASSIUM, TOTAL		0.23%	0.27%	0.44%	0.32%	0.52%	0.36%	0.67%
SODIUM, TOTAL		12%	4.4%	2.2%	4.4%	3.6%	4.9%	2.2%
SULFATE, TOTAL		53%	43%	32%	38%	14%	8.4%	23%
Sum		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes

- 1) Values for CCR Rule monitoring wells from May 2025 samples collected for the CCR Rule.
- 2) Unit abbreviations - mg/L - milligrams per liter.
- 3) One-half the value of the Method Detection Limit (MDL) is used for non -detect values.
- 4) The May 2025 sulfate result at LMW-5S is a low outlier compared to previous results at the same well; therefore, the November 2024 result was substituted.

Table 1
Summary of Concentrations Used for FALCON Correlation
SCPB Anterative Source Demonstration
Sioux Energy Center, St. Charles County, MO

Analyte	Units	S-TMW-1	S-TMW-2	S-TMW-3	S-TP-2D	S-TP-3D	S-TP-4D	S-TP-5D
ALKALINITY	mg/L	359	392	375	483	379	323	305
BORON, TOTAL	mg/L	0.0753	0.0784	0.0835	0.0954	0.0575	0.0625	7.27
CALCIUM, TOTAL	mg/L	118.0	112	121	282	122	121	147
CHLORIDE, TOTAL	mg/L	10.8	6.4	16.8	72.1	7.6	9.1	42.4
FLUORIDE, TOTAL	mg/L	0.34	0.22	0.16	0.06	0.06	0.06	0.16
IRON, TOTAL	mg/L	0.0164	0.911	0.644	17.3	8.1	6.82	10.1
MAGNESIUM, TOTAL	mg/L	22.2	20.4	22.2	72.5	29.6	28.5	36.8
MANGANESE, TOTAL	mg/L	0.371	0.202	0.193	1.24	0.682	0.455	1.06
POTASSIUM, TOTAL	mg/L	4.56	4.72	5.99	6.29	4.16	3.52	5.09
SODIUM, TOTAL	mg/L	4.05	3.52	4.55	21.7	6.97	7.14	35.1
SULFATE, TOTAL	mg/L	57.3	27.2	45	486	83.8	120	237
Sum		576.7	567.7	591.6	1442.3	642.0	619.7	827.0
Percentage of Total Concentration								
Analyte		S-TMW-1	S-TMW-2	S-TMW-3	S-TP-2D	S-TP-3D	S-TP-4D	S-TP-5D
ALKALINITY		62%	69%	63%	33%	59%	52%	37%
BORON, TOTAL		0.013%	0.014%	0.014%	0.0066%	0.009%	0.01%	0.88%
CALCIUM, TOTAL		20%	20%	20%	20%	19%	20%	18%
CHLORIDE, TOTAL		1.9%	1.1%	2.8%	5%	1.2%	1.5%	5.1%
FLUORIDE, TOTAL		0.059%	0.039%	0.027%	0.0042%	0.0093%	0.0097%	0.019%
IRON, TOTAL		0.0028%	0.16%	0.11%	1.2%	1.3%	1.1%	1.2%
MAGNESIUM, TOTAL		3.8%	3.6%	3.8%	5%	4.6%	4.6%	4.4%
MANGANESE, TOTAL		0.064%	0.036%	0.033%	0.086%	0.11%	0.073%	0.13%
POTASSIUM, TOTAL		0.79%	0.83%	1%	0.44%	0.65%	0.57%	0.62%
SODIUM, TOTAL		0.7%	0.62%	0.77%	1.5%	1.1%	1.2%	4.2%
SULFATE, TOTAL		9.9%	4.8%	7.6%	34%	13%	19%	29%
Sum		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes

- 1) Values for CCR Rule monitoring wells from May 2025 samples collected for the CCR Rule.
- 2) Unit abbreviations - mg/L - milligrams per liter.
- 3) One-half the value of the Method Detection Limit (MDL) is used for non -detect values.

Table 1
Summary of Concentrations Used for FALCON Correlation
SCPB Anterative Source Demonstration
Sioux Energy Center, St. Charles County, MO

Analyte	Units	S-TP-6D	S-TP-6S	S-TP-8D	S-UG-1A	S-UG-2	S-UG-3	S-UMW-1D
ALKALINITY	mg/L	365	436	350	376	289	379	285
BORON, TOTAL	mg/L	0.0689	0.112	0.0772	0.365	0.137	0.282	0.598
CALCIUM, TOTAL	mg/L	122	133	118	131	84.9	137	114
CHLORIDE, TOTAL	mg/L	13.6	8.10	14.3	110.00	5.5	24.8	98.1
FLUORIDE, TOTAL	mg/L	0.06	0.06	0.06	0.23	0.3	0.06	0.06
IRON, TOTAL	mg/L	7.66	0.205	6.35	0.00455	0.00455	0.00455	1.21
MAGNESIUM, TOTAL	mg/L	30.5	28.4	25.9	31.4	18.6	26.6	32.2
MANGANESE, TOTAL	mg/L	0.482	0.273	0.458	0.248	0.010	0.414	0.217
POTASSIUM, TOTAL	mg/L	3.62	2.29	3.55	8.27	3.81	4.02	6.68
SODIUM, TOTAL	mg/L	5.16	5.47	6.3	49.00	7.61	18.5	22.1
SULFATE, TOTAL	mg/L	56.7	35.3	42.1	70.6	38.2	89.7	62
Sum		604.9	649.2	567.1	777.1	448.1	680.4	622.2
<hr/>								
Analyte		S-TP-6D	S-TP-6S	S-TP-8D	S-UG-1A	S-UG-2	S-UG-3	S-UMW-1D
ALKALINITY		60%	67%	62%	48%	64%	56%	46%
BORON, TOTAL		0.011%	0.017%	0.014%	0.047%	0.031%	0.041%	0.096%
CALCIUM, TOTAL		20%	20%	21%	17%	19%	20%	18%
CHLORIDE, TOTAL		2.2%	1.2%	2.5%	14%	1.2%	3.6%	16%
FLUORIDE, TOTAL		0.0099%	0.0092%	0.011%	0.03%	0.067%	0.0088%	0.0096%
IRON, TOTAL		1.3%	0.032%	1.1%	0.00059%	0.001%	0.00067%	0.19%
MAGNESIUM, TOTAL		5%	4.4%	4.6%	4%	4.2%	3.9%	5.2%
MANGANESE, TOTAL		0.08%	0.042%	0.081%	0.032%	0.0023%	0.061%	0.035%
POTASSIUM, TOTAL		0.6%	0.35%	0.63%	1.1%	0.85%	0.59%	1.1%
SODIUM, TOTAL		0.85%	0.84%	1.1%	6.3%	1.7%	2.7%	3.6%
SULFATE, TOTAL		9.4%	5.4%	7.4%	9.1%	8.5%	13%	10%
Sum		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes

- 1) Values for CCR Rule monitoring wells from May 2025 samples collected for the CCR Rule.
- 2) Unit abbreviations - mg/L - milligrams per liter.
- 3) One-half the value of the Method Detection Limit (MDL) is used for non -detect values.

Table 1
Summary of Concentrations Used for FALCON Correlation
SCPB Anterative Source Demonstration
Sioux Energy Center, St. Charles County, MO

Analyte	Units	S-UMW-2D	S-UMW-3D	S-UMW-4D	S-UMW-5D	S-UMW-6D	S-TMW-4	S-TMW-5
ALKALINITY	mg/L	213	154	225	319	359	297	295
BORON, TOTAL	mg/L	12.5	29.9	15.6	5.49	0.187	0.0814	0.0784
CALCIUM, TOTAL	mg/L	159	214	98.6	89.6	107	106	108
CHLORIDE, TOTAL	mg/L	23.2	33.7	27	46.6	6	2.4	1.7
FLUORIDE, TOTAL	mg/L	1.0	0.06	0.71	0.56	0.06	0.06	0.06
IRON, TOTAL	mg/L	0.23	0.594	4.75	3.88	7.64	0.0192	0.0184
MAGNESIUM, TOTAL	mg/L	3.35	6.65	14	19.5	25	24.4	19.8
MANGANESE, TOTAL	mg/L	0.162	0.368	1.12	0.459	0.607	0.14	0.311
POTASSIUM, TOTAL	mg/L	25	17.8	10.9	10.4	3.66	5.13	5.03
SODIUM, TOTAL	mg/L	32.5	90.1	41.7	24.3	6.31	4.11	3.73
SULFATE, TOTAL	mg/L	298	650	192	8	33.2	11.2	81.8
Sum		767.9	1197.2	631.4	527.8	548.7	450.5	515.5
Analyte		S-UMW-2D	S-UMW-3D	S-UMW-4D	S-UMW-5D	S-UMW-6D	S-TMW-4	S-TMW-5
ALKALINITY		28%	13%	36%	60%	65%	66%	57%
BORON, TOTAL		1.6%	2.5%	2.5%	1%	0.034%	0.018%	0.015%
CALCIUM, TOTAL		21%	18%	16%	17%	20%	24%	21%
CHLORIDE, TOTAL		3%	2.8%	4.3%	8.8%	1.1%	0.53%	0.33%
FLUORIDE, TOTAL		0.13%	0.005%	0.11%	0.11%	0.011%	0.013%	0.012%
IRON, TOTAL		0.03%	0.05%	0.75%	0.74%	1.4%	0.0043%	0.0036%
MAGNESIUM, TOTAL		0.44%	0.56%	2.2%	3.7%	4.6%	5.4%	3.8%
MANGANESE, TOTAL		0.021%	0.031%	0.18%	0.087%	0.11%	0.031%	0.06%
POTASSIUM, TOTAL		3.3%	1.5%	1.7%	2%	0.67%	1.1%	0.98%
SODIUM, TOTAL		4.2%	7.5%	6.6%	4.6%	1.2%	0.91%	0.72%
SULFATE, TOTAL		39%	54%	30%	1.5%	6.1%	2.5%	16%
Sum		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes

- 1) Values for CCR Rule monitoring wells from May 2025 samples collected for the CCR Rule.
- 2) Unit abbreviations - mg/L - milligrams per liter.
- 3) One-half the value of the Method Detection Limit (MDL) is used for non -detect values.

Table 1
Summary of Concentrations Used for FALCON Correlation
SCPB Anterative Source Demonstration
Sioux Energy Center, St. Charles County, MO

Analyte	Units	S-TMW-6	S-LB-2	S-LB-4	S-LB-5	S-SCPA-1D	S-SCPA-1S	S-SCPA-2
ALKALINITY	mg/L	424	133	115	468	228	549	219
BORON, TOTAL	mg/L	0.0889	4.51	6.5	17.9	7.68	111	0.348
CALCIUM, TOTAL	mg/L	143	112	94.1	40.1	101	825	73.4
CHLORIDE, TOTAL	mg/L	19.4	25.7	38.2	30.5	25.0	26.0	20.5
FLUORIDE, TOTAL	mg/L	0.06	1.30	1.10	1.20	1.20	0.79	0.22
IRON, TOTAL	mg/L	0.00455	0.0062	0.057	0.0219	0.779	0.0062	1.35
MAGNESIUM, TOTAL	mg/L	27.7	0.122	0.108	0.0284	23.9	4.88	20.0
MANGANESE, TOTAL	mg/L	0.118	0.0009	0.0009	0.0009	0.0979	0.0009	0.113
POTASSIUM, TOTAL	mg/L	8.11	24.9	25.2	91.0	11.8	55.2	4.35
SODIUM, TOTAL	mg/L	5.51	108	76.1	267	27.0	81.4	13.9
SULFATE, TOTAL	mg/L	51.5	451	318	393	200	2080	48.5
Sum		679.5	860.5	674.4	1308.8	626.5	3733.3	401.7
Analyte		S-TMW-6	S-LB-2	S-LB-4	S-LB-5	S-SCPA-1D	S-SCPA-1S	S-SCPA-2
ALKALINITY		62%	15%	17%	36%	36%	15%	55%
BORON, TOTAL		0.013%	0.52%	0.96%	1.4%	1.2%	3%	0.087%
CALCIUM, TOTAL		21%	13%	14%	3.1%	16%	22%	18%
CHLORIDE, TOTAL		2.9%	3%	5.7%	2.3%	4%	0.7%	5.1%
FLUORIDE, TOTAL		0.0088%	0.15%	0.16%	0.092%	0.19%	0.021%	0.055%
IRON, TOTAL		0.00067%	0.00072%	0.0085%	0.0017%	0.12%	0.00017%	0.34%
MAGNESIUM, TOTAL		4.1%	0.014%	0.016%	0.0022%	3.8%	0.13%	5%
MANGANESE, TOTAL		0.017%	0.0001%	0.00013%	0.000069%	0.016%	0.000024%	0.028%
POTASSIUM, TOTAL		1.2%	2.9%	3.7%	7%	1.9%	1.5%	1.1%
SODIUM, TOTAL		0.81%	13%	11%	20%	4.3%	2.2%	3.5%
SULFATE, TOTAL		7.6%	52%	47%	30%	32%	56%	12%
Sum		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes

- 1) Values for CCR Rule monitoring wells from May 2025; Values for pore-water samples from SCPB ASD Investigation collected in February-March 2018.
- 2) Unit abbreviations - mg/L - milligrams per liter.
- 3) One-half the value of the Method Detection Limit (MDL) is used for non -detect values.

Table 1
Summary of Concentrations Used for FALCON Correlation
SCPB Anternative Source Demonstration
Sioux Energy Center, St. Charles County, MO

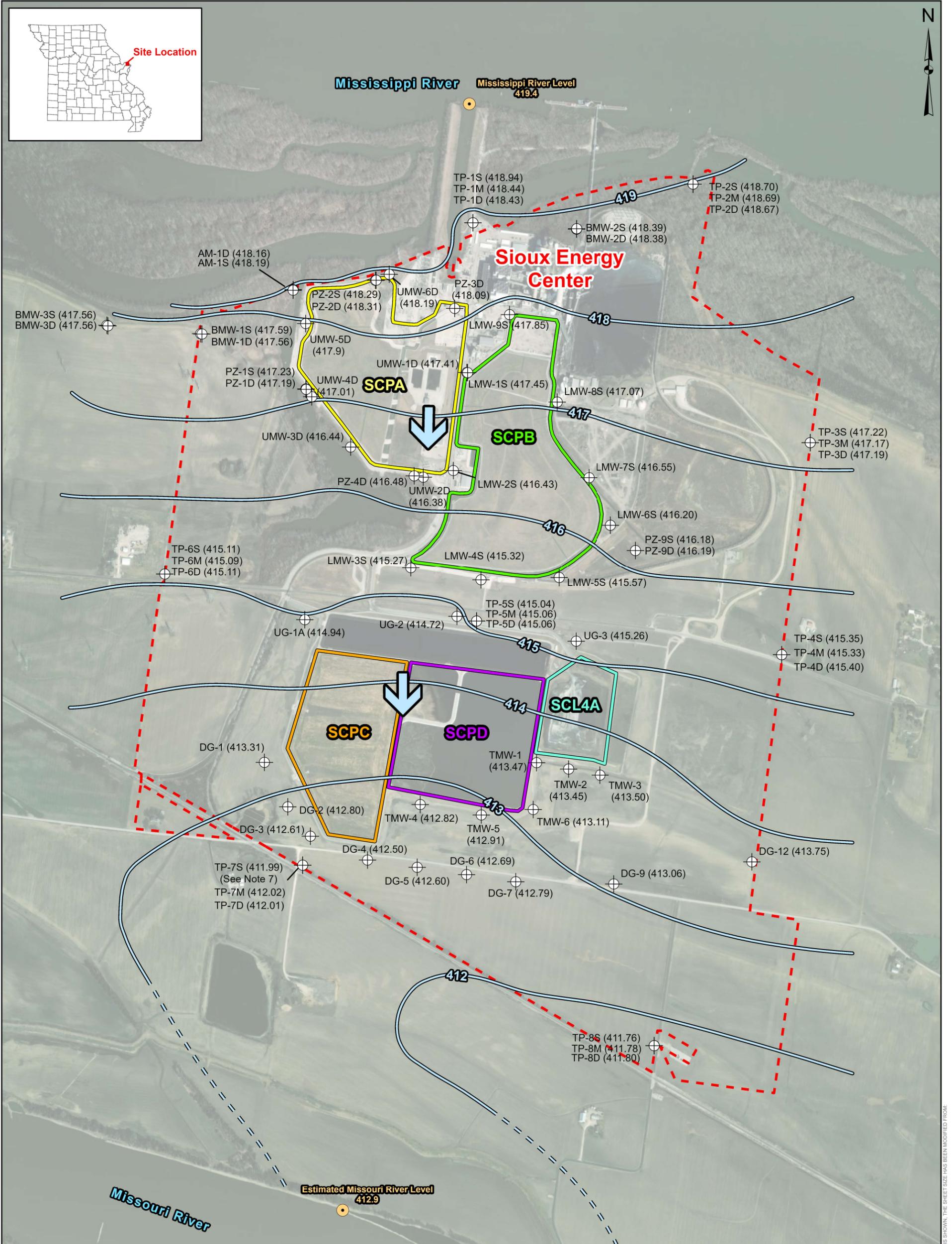
Analyte	Units	S-SCPA-3D	S-SCPA-3S	S-SCPB-1
ALKALINITY	mg/L	185	170	326
BORON, TOTAL	mg/L	79.5	67.8	10.7
CALCIUM, TOTAL	mg/L	548	501	37.2
CHLORIDE, TOTAL	mg/L	27.1	23.1	51.7
FLUORIDE, TOTAL	mg/L	2.9	0.60	1.8
IRON, TOTAL	mg/L	0.138	0.0343	0.0697
MAGNESIUM, TOTAL	mg/L	60.2	9.60	0.0387
MANGANESE, TOTAL	mg/L	0.202	0.0179	0.0009
POTASSIUM, TOTAL	mg/L	60.3	40.1	74.9
SODIUM, TOTAL	mg/L	116	58.5	314
SULFATE, TOTAL	mg/L	1820	1290	630
Sum		2899.3	2160.8	1446.4
Analyte		S-SCPA-3D	S-SCPA-3S	S-SCPB-1
ALKALINITY		6.4%	7.9%	23%
BORON, TOTAL		2.7%	3.1%	0.74%
CALCIUM, TOTAL		19%	23%	2.6%
CHLORIDE, TOTAL		0.93%	1.1%	3.6%
FLUORIDE, TOTAL		0.1%	0.028%	0.12%
IRON, TOTAL		0.0048%	0.0016%	0.0048%
MAGNESIUM, TOTAL		2.1%	0.44%	0.0027%
MANGANESE, TOTAL		0.007%	0.00083%	0.000062%
POTASSIUM, TOTAL		2.1%	1.9%	5.2%
SODIUM, TOTAL		4%	2.7%	22%
SULFATE, TOTAL		63%	60%	44%
Sum		100.0%	100.0%	100.0%

Notes

- 1) Values for pore-water samples from SCPB ASD Investigation collected in February-March 2018.
- 2) Unit abbreviations - mg/L - milligrams per liter.
- 3) One-half the value of the Method Detection Limit (MDL) is used for non -detect values.

Appendix D

2025 Potentiometric Surface Maps



LEGEND

CCR Units

- Sioux Energy Center Property Boundary
- SCPA - Bottom Ash Surface Impoundment (Closed)
- SCPB - Fly Ash Surface Impoundment (Closed)
- SCPC - WFGD Surface Impoundment (Closed)
- SCL4A - Dry CCR Disposal Area
- SCPD - FGD Surface Impoundment

Groundwater Elevation Contour (FT MSL)

- Groundwater Elevation Contour (FT MSL)
- Inferred Groundwater Elevation Contour (FT MSL)

Ground/Surface Water Measurement Locations

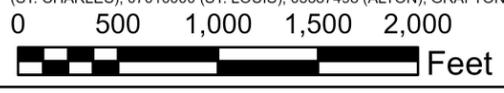
- River Gauge Location
- ⊕ Monitoring Well or Piezometer
- ➔ Groundwater Flow Direction

NOTES

- 1.) ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.
- 2.) GROUNDWATER AND SURFACE WATER ELEVATIONS DISPLAYED IN FEET ABOVE MEAN SEA LEVEL (FT MSL).
- 3.) GROUNDWATER ELEVATION MEASUREMENTS OBTAINED BY ROCKSMITH.
- 4.) MISSOURI RIVER ELEVATION ESTIMATED BASED ON NEARBY UNITED STATES GEOLOGICAL SURVEY (USGS) RIVER GAUGING LOCATIONS.
- 5.) MISSISSIPPI RIVER ELEVATION PROVIDED BY AMEREN MISSOURI.
- 6.) FGD - FLUE GAS DESULFURIZATION.
- 7.) WELL TP-7S NOT USED IN POTENTIOMETRIC SURFACE CONTOURING DUE TO LOCALIZED VERTICAL GRADIENT.

REFERENCES

- 1.) ST CHARLES COUNTY, MISSOURI GEO-DATA & MAPPING HUB, PARCEL DATASET, UPDATED APRIL 2025.
- 2.) COORDINATE SYSTEM: NAD 1983 STATE PLANE MISSOURI EAST FIPS 2,401 FEET.
- 3.) USGS NATIONAL WATER INFORMATION SYSTEM, USGS GAUGES 06935965 (ST. CHARLES), 07010000 (ST. LOUIS), 05587498 (ALTON), GRAFTON (05587450).



TITLE
FEBRUARY 6, 2025 POTENTIOMETRIC SURFACE MAP

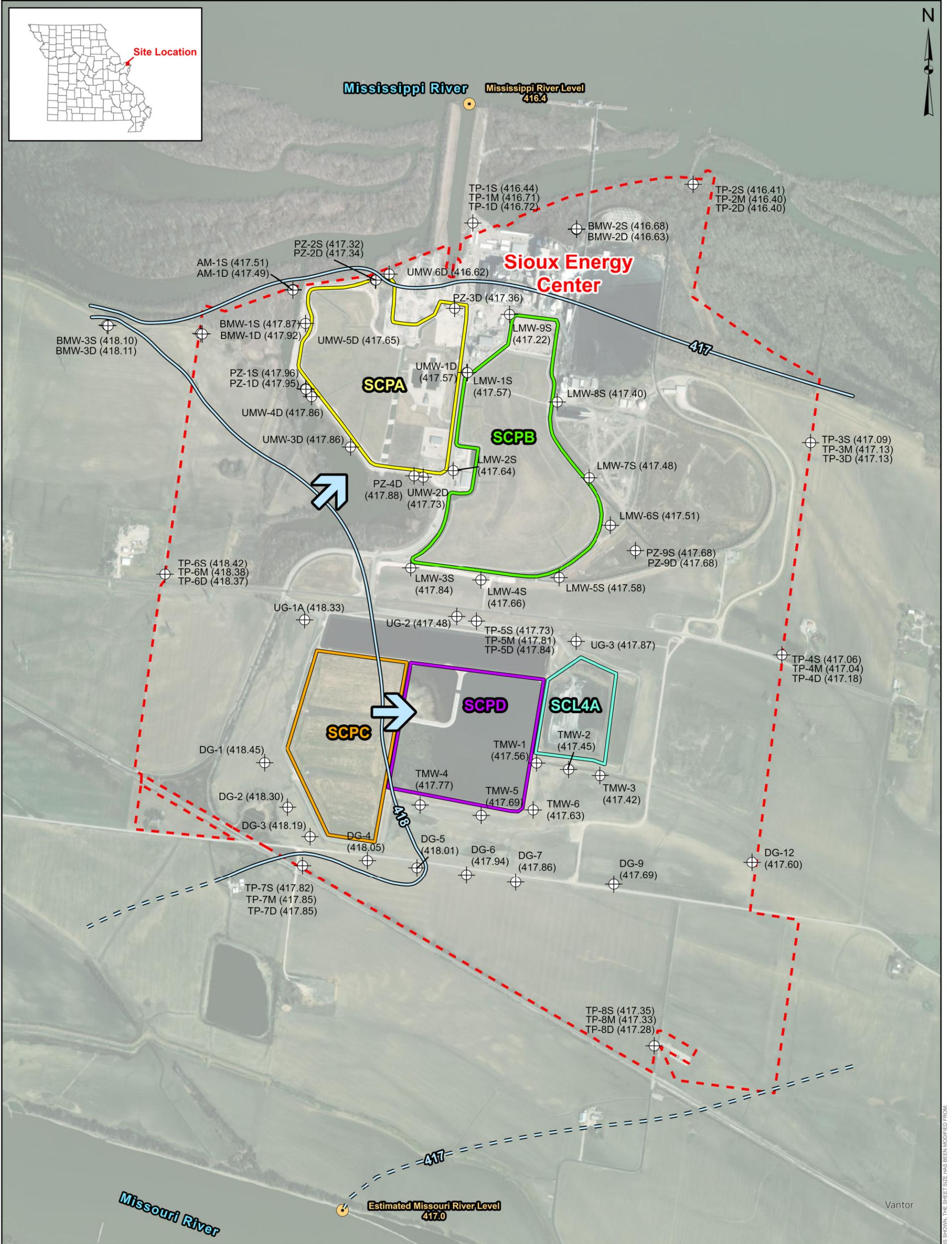
PROJECT
CCR GROUNDWATER MONITORING PROGRAM

CLIENT
AMEREN MISSOURI
SIOUX ENERGY CENTER

DESIGN	GTM	YYYY-MM-DD	2025-03-28
PREPARED	JTR	PROJECT No.	23009-25
REVIEW	JDQ	FIGURE D1	
APPROVED	MNH		



IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 11in



LEGEND

	Sioux Energy Center Property Boundary
CCR Units	
	SCPA - Bottom Ash Surface Impoundment (Closed)
	SCPB - Fly Ash Surface Impoundment (Closed)
	SCPC - WFGD Surface Impoundment (Closed)
	SCL4A - Dry CCR Disposal Area
	SCPD - FGD Surface Impoundment

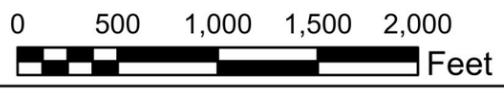
	Groundwater Elevation Contour (FT MSL)
	Inferred Groundwater Elevation Contour (FT MSL)
Ground/Surface Water Measurement Locations	
	River Gauge Location
	Monitoring Well or Piezometer
	Groundwater Flow Direction

NOTES

- 1.) ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.
- 2.) GROUNDWATER AND SURFACE WATER ELEVATIONS DISPLAYED IN FEET ABOVE MEAN SEA LEVEL (FT MSL).
- 3.) GROUNDWATER ELEVATION MEASUREMENTS OBTAINED BY ROCKSMITH.
- 4.) MISSOURI RIVER ELEVATION ESTIMATED BASED ON NEARBY UNITED STATES GEOLOGICAL SURVEY (USGS) RIVER GAUGING LOCATIONS.
- 5.) MISSISSIPPI RIVER ELEVATION PROVIDED BY AMEREN MISSOURI.
- 6.) FGD - FLUE GAS DESULFURIZATION.

REFERENCES

- 1.) ST CHARLES COUNTY, MISSOURI GEO-DATA & MAPPING HUB, PARCEL DATASET, UPDATED APRIL 2025.
- 2.) COORDINATE SYSTEM: NAD 1983 STATE PLANE MISSOURI EAST FIPS 2,401 FEET.
- 3.) USGS NATIONAL WATER INFORMATION SYSTEM, USGS GAUGES 06935965 (ST. CHARLES), 07010000 (ST. LOUIS), 05587498 (ALTON), GRAFTON (05587450).



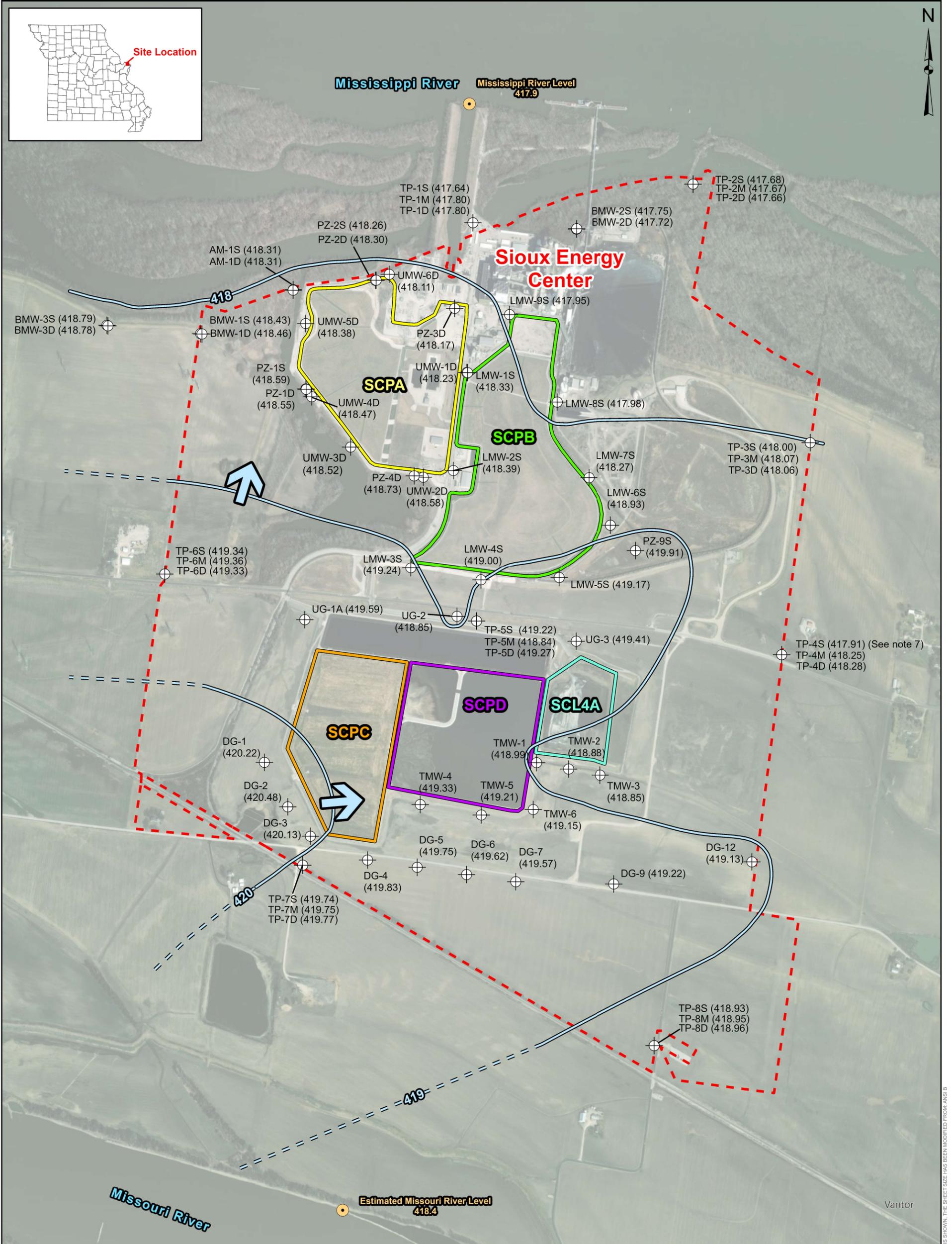
TITLE
MAY 7, 2025 POTENTIOMETRIC SURFACE MAP

PROJECT
CCR GROUNDWATER MONITORING PROGRAM

CLIENT
AMEREN MISSOURI
SIOUX ENERGY CENTER

	DESIGN	GTM	YYYY-MM-DD	2025-05-19
	PREPARED	JDQ	PROJECT No.	23009-25
	REVIEW	JTR	FIGURE D2	
	APPROVED	MNH		

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 11in



- LEGEND**
- - - Sioux Energy Center Property Boundary
 - CCR Units**
 - SCPA - Bottom Ash Surface Impoundment (Closed)
 - SCPB - Fly Ash Surface Impoundment (Closed)
 - SPCG - WFGD Surface Impoundment (Closed)
 - SCL4A - Dry CCR Disposal Area
 - SPCD - FGD Surface Impoundment
 - Groundwater Elevation Contour (FT MSL)
 - - - Inferred Groundwater Elevation Contour (FT MSL)
 - Ground/Surface Water Measurement Locations**
 - River Gauge Location
 - ⊕ Monitoring Well or Piezometer
 - ➔ Groundwater Flow Direction

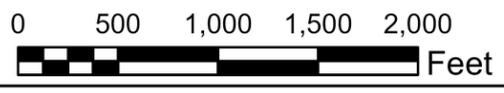
- NOTES**
- 1.) ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.
 - 2.) GROUNDWATER AND SURFACE WATER ELEVATIONS DISPLAYED IN FEET ABOVE MEAN SEA LEVEL (FT MSL).
 - 3.) GROUNDWATER ELEVATION MEASUREMENTS OBTAINED BY ROCKSMITH.
 - 4.) MISSOURI RIVER ELEVATION ESTIMATED BASED ON NEARBY UNITED STATES GEOLOGICAL SURVEY (USGS) RIVER GAUGING LOCATIONS.
 - 5.) MISSISSIPPI RIVER ELEVATION PROVIDED BY AMEREN MISSOURI.
 - 6.) FGD - FLUE GAS DESULFURIZATION.
 - 7.) TP-4S NOT USED IN POTENTIOMETRIC SURFACE CALCULATION DUE TO LOCALIZED VERTICAL GRADIENT.
- REFERENCES**
- 1.) ST CHARLES COUNTY, MISSOURI GEO-DATA & MAPPING HUB, PARCEL DATASET, UPDATED APRIL 2025.
 - 2.) COORDINATE SYSTEM: NAD 1983 STATE PLANE MISSOURI EAST FIPS 2,401 FEET.
 - 3.) USGS NATIONAL WATER INFORMATION SYSTEM, USGS GAUGES 06935965 (ST. CHARLES), 07010000 (ST. LOUIS), 05587498 (ALTON), GRAFTON (05587450).

TITLE
JULY 9, 2025 POTENTIOMETRIC SURFACE MAP

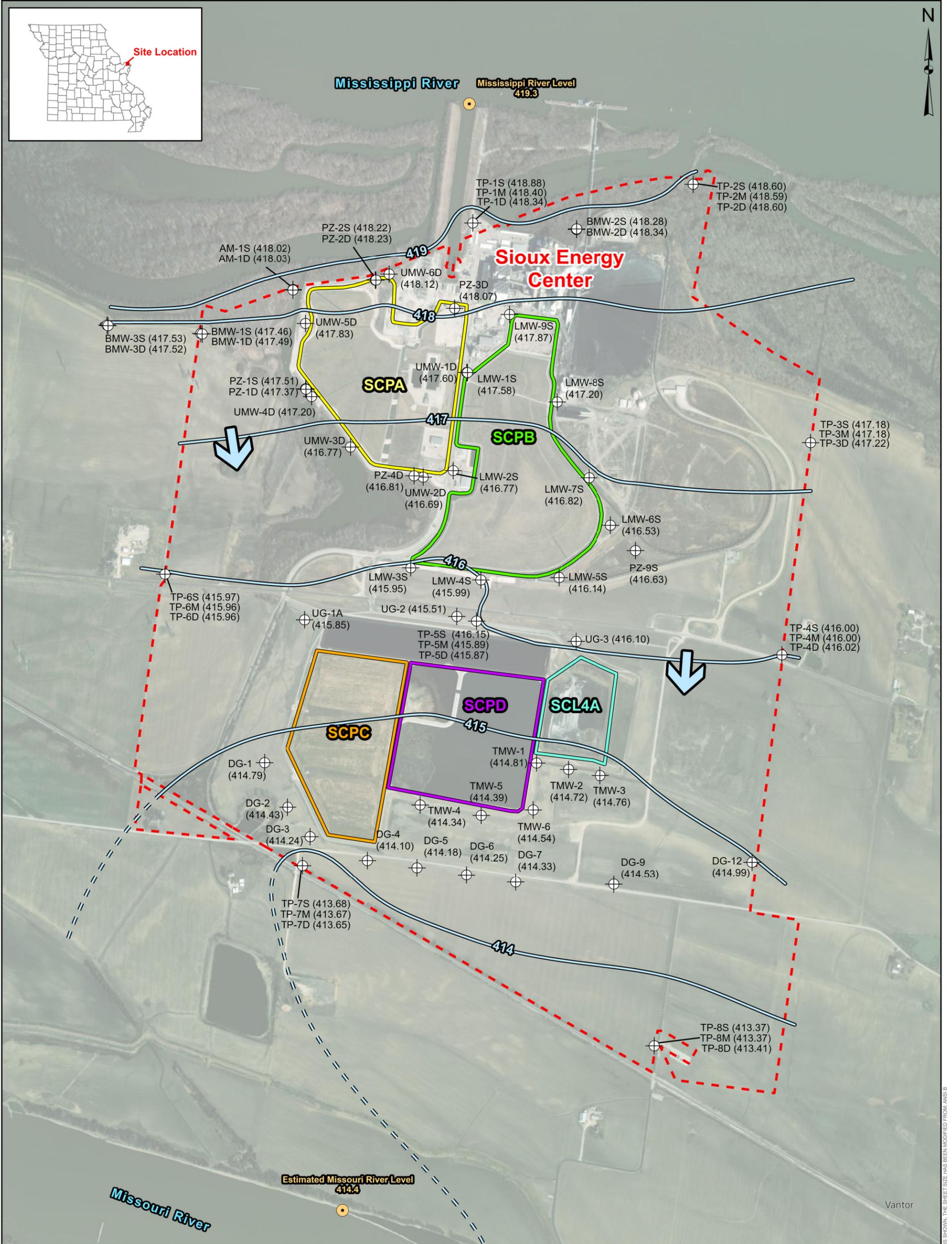
PROJECT
 CCR GROUNDWATER MONITORING PROGRAM

CLIENT
 AMEREN MISSOURI
 SIOUX ENERGY CENTER

DESIGN	GTM	YYYY-MM-DD	2025-08-15
PREPARED	JDQ	PROJECT No.	23009-25
REVIEW	JTR	FIGURE D3	
APPROVED	MNH		



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



LEGEND

CCR Units

- Sioux Energy Center Property Boundary
- SCPA - Bottom Ash Surface Impoundment (Closed)
- SCPB - Fly Ash Surface Impoundment (Closed)
- SCPC - WFGD Surface Impoundment (Closed)
- SCL4A - Dry CCR Disposal Area
- SCPD - FGD Surface Impoundment

Groundwater Elevation Contour (FT MSL)

- Groundwater Elevation Contour (FT MSL)
- Inferred Groundwater Elevation Contour (FT MSL)

Ground/Surface Water Measurement Locations

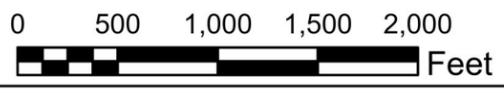
- River Gauge Location
- Monitoring Well or Piezometer
- Groundwater Flow Direction

NOTES

- 1.) ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.
- 2.) GROUNDWATER AND SURFACE WATER ELEVATIONS DISPLAYED IN FEET ABOVE MEAN SEA LEVEL (FT MSL).
- 3.) GROUNDWATER ELEVATION MEASUREMENTS OBTAINED BY ROCKSMITH.
- 4.) MISSOURI RIVER ELEVATION ESTIMATED BASED ON NEARBY UNITED STATES GEOLOGICAL SURVEY (USGS) RIVER GAUGING LOCATIONS.
- 5.) MISSISSIPPI RIVER ELEVATION PROVIDED BY AMEREN MISSOURI.
- 6.) FGD - FLUE GAS DESULFURIZATION.

REFERENCES

- 1.) ST CHARLES COUNTY, MISSOURI GEO-DATA & MAPPING HUB, PARCEL DATASET, UPDATED APRIL 2025.
- 2.) COORDINATE SYSTEM: NAD 1983 STATE PLANE MISSOURI EAST FIPS 2,401 FEET.
- 3.) USGS NATIONAL WATER INFORMATION SYSTEM, USGS GAUGES 06935965 (ST. CHARLES), 07010000 (ST. LOUIS), 05587498 (ALTON), GRAFTON (05587450).



TITLE

OCTOBER 2, 2025 POTENTIOMETRIC SURFACE MAP

PROJECT

CCR GROUNDWATER MONITORING PROGRAM

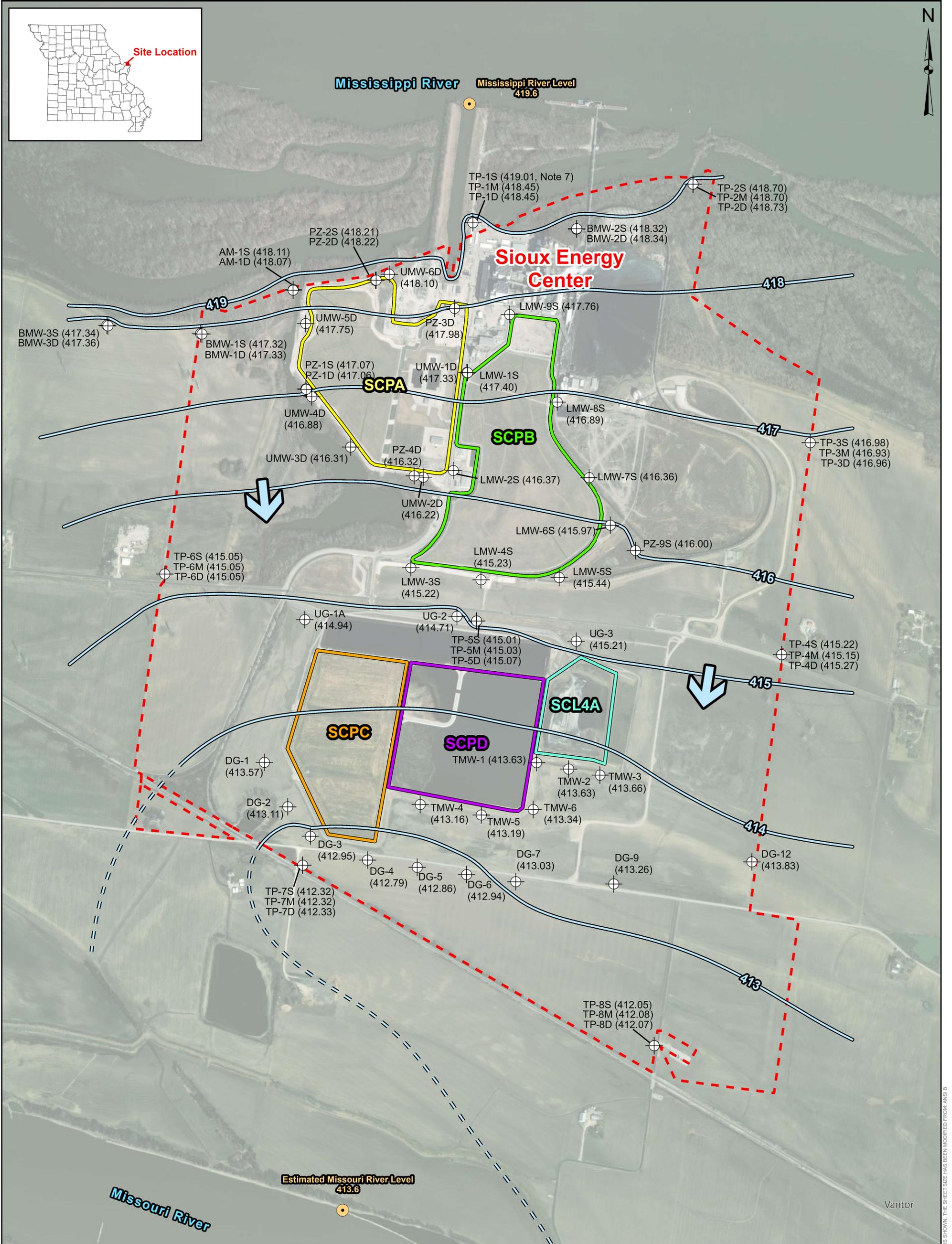
CLIENT

AMEREN MISSOURI
SIOUX ENERGY CENTER

DESIGN	GTM	YYYY-MM-DD	2025-12-18
PREPARED	JDQ	PROJECT No.	23009-25
REVIEW	JTR	FIGURE D4	
APPROVED	MNH		



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



LEGEND

CCR Units

- SCPA - Bottom Ash Surface Impoundment (Closed)
- SCPB - Fly Ash Surface Impoundment (Closed)
- SCPC - WFGD Surface Impoundment (Closed)
- SCL4A - Dry CCR Disposal Area
- SCPD - FGD Surface Impoundment

Groundwater Elevation Contour (FT MSL)

- Groundwater Elevation Contour (FT MSL)
- Inferred Groundwater Elevation Contour (FT MSL)

Ground/Surface Water Measurement Locations

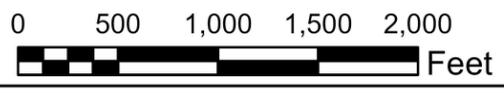
- River Gauge Location
- Monitoring Well or Piezometer
- Groundwater Flow Direction

NOTES

- 1.) ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.
- 2.) GROUNDWATER AND SURFACE WATER ELEVATIONS DISPLAYED IN FEET ABOVE MEAN SEA LEVEL (FT MSL).
- 3.) GROUNDWATER ELEVATION MEASUREMENTS OBTAINED BY ROCKSMITH.
- 4.) MISSOURI RIVER ELEVATION ESTIMATED BASED ON NEARBY UNITED STATES GEOLOGICAL SURVEY (USGS) RIVER GAUGING LOCATIONS.
- 5.) MISSISSIPPI RIVER ELEVATION PROVIDED BY AMEREN MISSOURI.
- 6.) FGD - FLUE GAS DESULFURIZATION.
- 7.) TP-1S IS NOT USED FOR POTENTIOMETRIC SURFACE CONTOURING.

REFERENCES

- 1.) ST CHARLES COUNTY, MISSOURI GEO-DATA & MAPPING HUB, PARCEL DATASET, UPDATED APRIL 2025.
- 2.) COORDINATE SYSTEM: NAD 1983 STATE PLANE MISSOURI EAST FIPS 2,401 FEET.
- 3.) USGS NATIONAL WATER INFORMATION SYSTEM, USGS GAUGES 06935965 (ST. CHARLES), 07010000 (ST. LOUIS), 05587498 (ALTON), GRAFTON (05587450).



TITLE
DECEMBER 2, 2025 POTENTIOMETRIC SURFACE MAP

PROJECT
CCR GROUNDWATER MONITORING PROGRAM

CLIENT
AMEREN MISSOURI
SIOUX ENERGY CENTER

DESIGN	GTM	YYYY-MM-DD	2025-12-11
PREPARED	JDQ	PROJECT No.	23009-25
REVIEW	GTM	FIGURE D5	
APPROVED	MNH		



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