REPORT

2025 Annual Groundwater Monitoring and Corrective Action Report

LCL1 – Utility Waste Landfill Cell 1, Labadie Energy Center, Franklin County, Missouri, USA

January 31, 2026

Project Number: 23007-25

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 LCL1 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 Utility Waste Landfill (UWL) at the Labadie Energy Center (LEC) is subject to the requirements of the CCR Rule. The UWL currently only operates LCL1 (Cell 1), which is an on-site landfill cell and manages Coal Combustion Residuals (CCR) from the facility. This Annual Report for the LCL1 describes CCR Rule groundwater monitoring activities from January 1, 2025 through December 31, 2025, including results related to late 2024 sampling.

Throughout 2025, the LCL1 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 sampling event to determine if there are any values that represent a Statistically Significant Increase (SSI) over background concentrations. There were no SSIs verified during the October 2024 or April 2025 sampling events. A summary of the sampling events and SSIs for the past year is provided in **Table 1**.

Table 1 - Summary of LCL1 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
October 2024 Sampling Event	Detection Monitoring, October 28-31, 2024	December 23, 2024	Appendix III, Major Cations and Anions	None	March 21, 2025	NA
	Verification Sampling, February 4, 2025	February 18, 2025	Detected Appendix III parameters (See Note 1)			
April2025 Sampling Event	Detection Monitoring, April 24-28, 2025	June 12, 2025	Appendix III, Major Cations and Anions	None	September 10, 2025	NA
	No Verification Sampling was required. No initial exceedances were observed in the April 2025 sampling event.					
October 2025 Sampling Event	Detection Monitoring October 20-21, 2025	November 22, 2025	Appendix III, Major Cations and Anions	**Chloride:** TMW-2	January 31, 2026	To be evaluated in 2026
	December 8, 2025	December 23, 2025	Detected Appendix III parameters (See Note 1)			

Notes:
1) Only analytes/wells that were detected above the prediction limit were tested during Verification Sampling.
2) SSI – Statistically Significant Increase.
3) ASD – Alternative Source Demonstration.
4) NA – Not Applicable.

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.

Chloride at well TMW-2 was 8.8 J mg/L in October 2025 sampling and 8.3 mg/L during verification sampling conducted in December 2025. Both results are slightly above the prediction limit of 7.471 mg/L for chloride at TMW-2. Alternative Source Demonstrations (ASDs) have previously been conducted for chloride SSIs at this well, with the most recent chloride SSI and ASD for November 2023 results. An ASD for the chloride SSI identified during the October 2025 sampling event will be evaluated in 2026.

There were no changes made to the monitoring system in 2025 with no new wells being installed or decommissioned.

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1.0 INSTALLATION OR DECOMISSIONING OF MONITORING WELLS

In accordance with the CCR Rule, a groundwater monitoring system has been installed to monitor the LCL1. The groundwater monitoring system consists of six groundwater monitoring wells screened in the uppermost aquifer and is displayed in **Figure 1**. No new monitoring wells were installed or decommissioned in 2025 as a part of the CCR Rule monitoring program for the LCL1. For more information on the groundwater monitoring well network, details are provided in the previous Annual Groundwater Monitoring Reports for the LCL1.

2.0 GROUNDWATER SAMPLING RESULTS AND DISCUSSION

The following sections discuss the sampling events completed for the LCL1 CCR Unit in 2025. **Table 2** below provides a summary of the groundwater samples collected in 2025 including the number of samples, the date of sample collection, and the monitoring program.

Table 2 – Summary of Groundwater Sampling Dates

Sampling Event	Groundwater Monitoring Wells						Monitoring Program
	BMW-1S	BMW-2S	MW-26	TMW-1	TMW-2	TMW-3	
	Date of Sample Collection						
February 2025 Verification Sampling	-	-	2/4/2025	-	2/4/2025	-	Detection
April 2025 Sampling Event	4/24/2025	4/24/2025	4/30/2025	4/28/2025	4/28/2025	4/28/2025	Detection
October 2025 Sampling Event	10/21/2025	10/21/2025	10/21/2025	10/20/2025	10/20/2025	10/20/2025	Detection
December 2025 Verification Sampling	-	-	-	-	12/8/2025	-	Detection
Total Number of Samples Collected	2	2	3	2	4	2	NA

Notes:
1) Detection Monitoring events tested for Appendix III Parameters.
2) Only analytes/wells that were detected above the prediction limit were tested during verification sampling.
3) No verification sampling associated with the April 2025 sampling event was required.
4) "-" No sample collected.
5) NA – Not applicable.

2.1 Detection Monitoring Program

A Detection Monitoring groundwater sampling event was completed October 28-31, 2024. Verification sampling and the statistical analysis to evaluate for SSIs for the October 2024 event were not completed until 2025 and are therefore included in this report. Detections of some Appendix III analytes above their respective prediction limits triggered a verification sampling event, which was completed on February 4, 2025. No SSIs were verified, and therefore, no Alternative Source Demonstration (ASD) was produced for this event. **Table 3** summarizes the results and the statistical analysis of the October 2024 Detection Monitoring event. Laboratory analytical data from the February 2025 verification sampling event and other sampling events conducted in 2025 are provided in **Appendix A**.

Detection Monitoring groundwater samples were collected April 24-30, 2025, and testing was completed for all Appendix III analytes, as well as major cations and anions. There were no initial exceedances observed in the April 2025 event and no verification sampling was necessary. **Table 4** summarizes the results and statistical analysis of the April 2025 Detection Monitoring event.

A Detection Monitoring groundwater sampling event was completed October 20-21, 2025 and testing was performed 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 October 2025 sampling event, the statistical limits used to determine an SSI were updated according to the Statistical Analysis Plan. An initial exceedance for chloride at TMW-2 triggered verification sampling, which was completed December 8, 2025 and verified chloride as an SSI. Both the October result (8.8 J) and December result (8.3 mg/L) only slightly exceeded the prediction limit of 7.471 mg/L. **Table 5** summarizes the results and statistical analysis of the October 2025 Detection Monitoring event. Historically, ASDs have been conducted for chloride SSIs at TMW-2, with the most recent chloride SSI and ASD for November 2023 results. An ASD for this SSI 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 B**. 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 nearby Missouri River. Water flows into and out of the alluvial aquifer because of fluctuating river water levels that produce “bank recharge” and “bank discharge” conditions. Overall, based on the potentiometric surface maps, a general flow direction from the south/southwest (bluffs area) to the north/northeast (Missouri River) is observed under normal river conditions. However, during periods of high river levels, groundwater flow can temporarily reverse, as was observed in April 2025. During these times of high river stage and temporary flow direction changes, horizontal groundwater gradients generally decrease, and little net movement of groundwater occurs. Based on quarterly water level measurements, groundwater across the LEC exhibited typical flow towards the Missouri River throughout much of 2025, except in April, when groundwater temporarily flowed to the southeast.

Groundwater flow direction and hydraulic gradient were estimated for the alluvial aquifer wells at the Labadie Energy Center (LEC) using commercially available software to evaluate data since 2016. Results from this assessment indicate that while groundwater flow direction is variable, the overall net groundwater flow in the alluvial aquifer at the LEC is from the bluffs toward the river. Horizontal gradients calculated by the program range from 0.0001 to 0.0009 feet/foot with an estimated net annual groundwater movement of approximately 18 feet per year in the prevailing downgradient direction. Groundwater flow at the LCL1 generally follows the site-wide flow rates and direction.

2.3 Sampling Issues

No notable sampling issues were encountered at the LCL1 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. An ASD for the SSI associated with the October 2025 sampling event will be evaluated in 2026.

Tables

Table 3
October 2024 Detection Monitoring Results
LCL1 - Utility Waste Landfill Cell 1
Labadie Energy Center, Franklin County, MO

		BACKGROUND		GROUNDWATER MONITORING WELLS							
ANALYTE	UNITS	BMW-1S	BMW-2S	Prediction Limit MW-26	MW-26	Prediction Limit TMW-1	TMW-1	Prediction Limit TMW-2	TMW-2	Prediction Limit TMW-3	TMW-3
October 2024 Detection Monitoring Event											
DATE	NA	10/28/2024	10/28/2024	NA	10/30/2024	NA	10/31/2024	NA	10/31/2024	NA	10/30/2024
pH	SU	6.47	6.92	6.685-7.272	6.67	6.58-7.16	6.82	6.547-7.255	6.73	6.602-7.053	6.68
BORON, TOTAL	µg/L	84.8 J	45.4 J	99.63	61.4 J	124.4	121	132.9	126	137.4	89.4 J
CALCIUM, TOTAL	µg/L	202,000	121,000	155,608	157,000	183,798	159,000	205,487	216,000	209,613	124,000
CHLORIDE, TOTAL	mg/L	4.5	1.8	14.49	17.7	5.559	3.7	7.142	10.3 J	9.478	2.4
FLUORIDE, TOTAL	mg/L	ND	ND	0.24	ND	0.2888	ND	0.2521	ND	0.2743	ND
SULFATE, TOTAL	mg/L	95.1	13.7	41.04	28.5	128	55	115.5	95.7	101	27.3
TOTAL DISSOLVED SOLIDS	mg/L	744	436	564.1	572	733.5	619	815.4	769	820.6	428
February 2025 Verification Sampling Event											
DATE	NA				2/4/2025				2/4/2025		
pH	SU				6.72						
BORON, TOTAL	µg/L										
CALCIUM, TOTAL	µg/L				137,000				192,000 J		
CHLORIDE, TOTAL	mg/L				8.4				6.8		
FLUORIDE, TOTAL	mg/L										
SULFATE, TOTAL	mg/L										
TOTAL DISSOLVED SOLIDS	mg/L				532						

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

Prepared By: GTM
Checked By: JTR
Reviewed By: JSI

Table 4
April 2025 Detection Monitoring Results
LCL1 - Utility Waste Landfill Cell 1
Labadie Energy Center, Franklin County, MO

		BACKGROUND		GROUNDWATER MONITORING WELLS							
ANALYTE	UNITS	BMW-1S	BMW-2S	Prediction Limit MW-26	MW-26	Prediction Limit TMW-1	TMW-1	Prediction Limit TMW-2	TMW-2	Prediction Limit TMW-3	TMW-3
April 2025 Detection Monitoring Event											
DATE	NA	4/24/2025	4/24/2025	NA	4/30/2025	NA	4/28/2025	NA	4/28/2025	NA	4/28/2025
pH	SU	6.98	7.26	6.685-7.272	6.94	6.58-7.16	6.84	6.547-7.255	6.86	6.602-7.053	6.94
BORON, TOTAL	µg/L	103	56.7 J	99.63	76.6 J	124.4	107	132.9	104	137.4	83.1 J
CALCIUM, TOTAL	µg/L	204,000	143,000	155,608	136,000 J	183,798	158,000	205,487	193,000	209,613	121,000
CHLORIDE, TOTAL	mg/L	7.2	3.5	14.49	7.3	5.559	3.6 J	7.142	4.4 J	9.478	1.8 J
FLUORIDE, TOTAL	mg/L	ND	ND	0.24	ND	0.2888	ND	0.2521	ND	0.2743	ND
SULFATE, TOTAL	mg/L	77.8	71.6	41.04	29.3	128	55.1	115.5	73.8	101	25.6
TOTAL DISSOLVED SOLIDS	mg/L	831	531	564.1	522	733.5	588	815.4	767	820.6	455

NOTES:
1. Unit Abbreviations: µg/L - micrograms per liter, mg/L - milligrams per liter, SU - standard units.
2. J - Result is an estimated value.
3. NA - Not applicable.
4. ND - Constituent was analyzed but was not detected above the Method Detection Limit (MDL) or the adjusted Practical Quantitation Limit (PQL) based on data validation and is consi non-detect. Values displayed as ND.
5. Prediction Limits calculated using Sanitas Software.
6. There were no initial exceedances from the April 2025 Detection Monitoring sampling event, therefore no Verification Sampling was conducted.

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

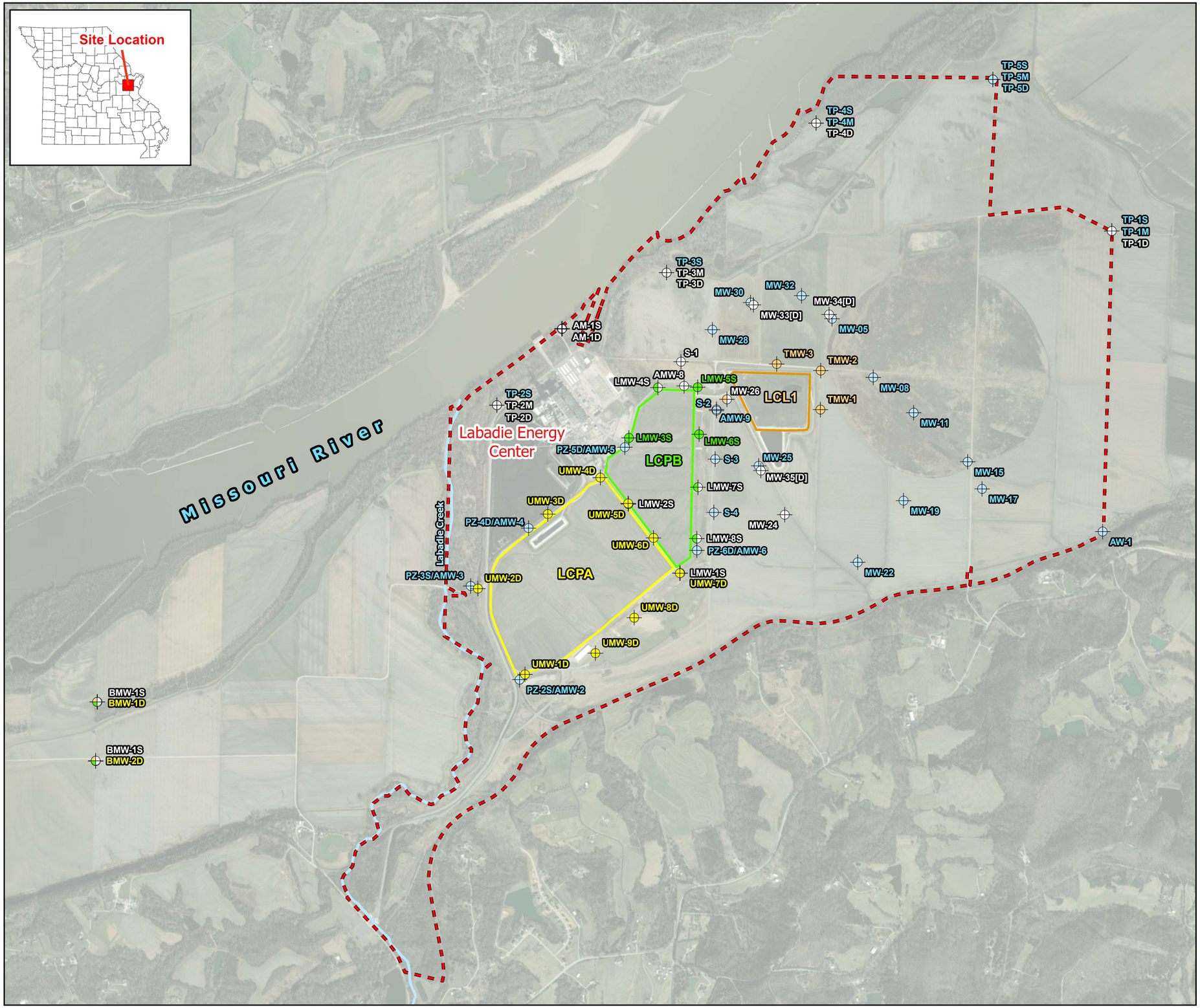
Table 5
October 2025 Detection Monitoring Results
LCL1 - Utility Waste Landfill Cell 1
Labadie Energy Center, Franklin County, MO

		BACKGROUND		GROUNDWATER MONITORING WELLS							
ANALYTE	UNITS	BMW-1S	BMW-2S	Prediction Limit MW-26	MW-26	Prediction Limit TMW-1	TMW-1	Prediction Limit TMW-2	TMW-2	Prediction Limit TMW-3	TMW-3
October 2025 Detection Monitoring Event											
DATE	NA	10/21/2025	10/21/2025	NA	10/21/2025	NA	10/20/2025	NA	10/20/2025	NA	10/20/2025
pH	SU	6.68	6.96	6.686-7.22	6.85	6.58-7.16	6.77	6.55-7.217	6.59	6.598-7.052	6.63
BORON, TOTAL	µg/L	83.9 J	51.5 J	96.91	66.1 J	126	116	141.4	125	140.4	92.7 J
CALCIUM, TOTAL	µg/L	191,000	130,000	162,000	128,000	182,682	141,000	210,713	202,000	210,306	130,000
CHLORIDE, TOTAL	mg/L	5.3	1.4	15.19	6.2	5.407	4.8	7.471	8.8 J	9.348	3.1
FLUORIDE, TOTAL	mg/L	0.075 J	0.14	0.24	0.12	0.33	0.14	0.2404	0.16	0.2404	0.17
SULFATE, TOTAL	mg/L	57.7	13.4	41.01	17.2	113.1	43.7	116.6	110	97.38	35.7
TOTAL DISSOLVED SOLIDS	mg/L	660	466	565.6	469	729.6	567	829	785	836.6	485
December 2025 Verification Sampling Event											
DATE	NA								12/8/2025		
pH	SU										
BORON, TOTAL	µg/L										
CALCIUM, TOTAL	µg/L										
CHLORIDE, TOTAL	mg/L								8.3		
FLUORIDE, TOTAL	mg/L										
SULFATE, TOTAL	mg/L										
TOTAL DISSOLVED SOLIDS	mg/L										

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

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

Figures



TITLE

LABADIE ENERGY CENTER GROUNDWATER MONITORING PROGRAMS AND MONITORING WELL LOCATION MAP

Legend

Approximate Property Boundary

Labadie Energy Center CCR Units

- LCPA - Closed Bottom Ash Surface Impoundment
- LCPB - Closed Fly Ash Surface Impoundment
- LCL1 - Utility Waste Landfill Cell 1

Monitoring Well Network

- Corrective Action Monitoring Well
- LCPA Monitoring Well
- LCPB Monitoring Well
- LCPB and Corrective Action Monitoring Well
- LCL1 Monitoring Well
- LCL1 and Corrective Action Monitoring Well
- Background Well Used for LCPA, Corrective Action, LCPB, and LCL1 Monitoring
- Monitoring Well Used for Water Level Elevation Measurements Only

NOTES

1. All locations and boundaries are approximate.

REFERENCES

1. Zahner and Associates, Inc. 2016. Lot Consolidation Plat of "Labadie Energy Center" - Prepared for Ameren Missouri. Revised June 15, 2016.
2. USGS (United States Geological Survey), National Water Information System, USGS Gauge 06935550 Missouri River near Labadie, MO.

0 700 1,400 2,800 4,200 5,600 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

CLIENT
AMEREN MISSOURI
LABADIE ENERGY CENTER

ROCKSMITH GEOENGINEERING

DESIGN	JSI	YYYY-MM-DD	2026-01-12
PREPARED	JSI	PROJECT No.	23007-25
REVIEW	GTM		
APPROVED	MNH		

FIGURE 1

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

Path: C:\Users\JackRasmussen\Rocksmith Geoengineering LLC\23007 - Ameren GW - Documents\400 - Drawings, Figures\4.1 LEC\4.1.2 - Production\Other Maps\Annual Report Figure 1.aprx

Appendix A
Laboratory Analytical Data

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

February 18, 2025

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

RE: Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60469039

Dear Mark Haddock:

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

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

- Pace Analytical Services - Kansas City

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

Sincerely,

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

Enclosures

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

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CERTIFICATIONS

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60469039

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

Pace Analytical Services, LLC
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SAMPLE SUMMARY

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60469039

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60469039001	**L-TMW-2**	Water	02/04/25 13:34	02/06/25 05:45
60469039002	**L-MW-26**	Water	02/04/25 12:11	02/06/25 05:45
60469039003	**L-UWL-DUP-1**	Water	02/04/25 00:00	02/06/25 05:45
60469039004	**L-UWL-FB-1**	Water	02/04/25 12:28	02/06/25 05:45

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60469039

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60469039001	**L-TMW-2**	EPA 200.7	ARMN	1	PASI-K
		SM 2540C	TML	1	PASI-K
		EPA 300.0	AAA	1	PASI-K
60469039002	**L-MW-26**	EPA 200.7	ARMN	1	PASI-K
		SM 2540C	TML	1	PASI-K
		EPA 300.0	AAA	1	PASI-K
60469039003	**L-UWL-DUP-1**	EPA 200.7	ARMN	1	PASI-K
		SM 2540C	TML	1	PASI-K
		EPA 300.0	AAA	1	PASI-K
60469039004	**L-UWL-FB-1**	EPA 200.7	ARMN	1	PASI-K
		SM 2540C	TML	1	PASI-K
		EPA 300.0	AAA	1	PASI-K

PASI-K = Pace Analytical Services - Kansas City

Pace Analytical Services, LLC
9608 Loiret Blvd.
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ANALYTICAL RESULTS

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60469039

Sample: L-TMW-2 **Lab ID: 60469039001** Collected: 02/04/25 13:34 Received: 02/06/25 05:45 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								
Calcium	**192000**	ug/L	200	26.9	1	02/10/25 08:27	02/11/25 21:04	7440-70-2	M1,P6
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**825**	mg/L	50.0	50.0	1		02/10/25 15:12		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**6.8**	mg/L	2.0	1.1	2		02/12/25 21:11	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60469039

Sample: L-MW-26 **Lab ID: 60469039002** Collected: 02/04/25 12:11 Received: 02/06/25 05:45 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								
Calcium	**137000**	ug/L	200	26.9	1	02/10/25 08:27	02/11/25 18:11	7440-70-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**532**	mg/L	13.3	13.3	1		02/10/25 15:12		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**8.4**	mg/L	1.0	0.53	1		02/12/25 14:01	16887-00-6	

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60469039

Sample: L-UWL-DUP-1 **Lab ID: 60469039003** Collected: 02/04/25 00:00 Received: 02/06/25 05:45 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								
Calcium	**138000**	ug/L	200	26.9	1	02/10/25 08:27	02/11/25 18:12	7440-70-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**513**	mg/L	13.3	13.3	1		02/10/25 15:12		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**8.4**	mg/L	1.0	0.53	1		02/12/25 14:16	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
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ANALYTICAL RESULTS

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60469039

Sample: L-UWL-FB-1 **Lab ID: 60469039004** Collected: 02/04/25 12:28 Received: 02/06/25 05:45 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								
Calcium	**180J**	ug/L	200	26.9	1	02/10/25 08:27	02/11/25 18:20	7440-70-2	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**6.0**	mg/L	5.0	5.0	1		02/10/25 15:12		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**<0.53**	mg/L	1.0	0.53	1		02/12/25 16:59	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60469039

QC Batch: 924483
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60469039002, 60469039003, 60469039004

METHOD BLANK: 3661259 Matrix: Water
Associated Lab Samples: 60469039002, 60469039003, 60469039004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	ug/L	37.2J	200	26.9	02/11/25 17:35	

LABORATORY CONTROL SAMPLE: 3661260

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	ug/L	10000	9640	96	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3661261 3661262

Parameter	Units	60469085001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	ug/L	4910	10000	10000	15100	14200	102	93	70-130	6	20	

MATRIX SPIKE SAMPLE: 3661263

Parameter	Units	60469010002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Calcium	ug/L	125000	10000	103000	-217	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

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

QUALITY CONTROL DATA

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60469039

QC Batch: 924484
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60469039001

METHOD BLANK: 3661264 Matrix: Water
Associated Lab Samples: 60469039001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	ug/L	28.8J	200	26.9	02/11/25 21:00	

LABORATORY CONTROL SAMPLE: 3661265

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	ug/L	10000	9740	97	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3661266 3661267

Parameter	Units	60469039001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	ug/L	192000	10000	10000	197000	196000	51	35	70-130	1	20	M1

MATRIX SPIKE SAMPLE: 3661268

Parameter	Units	60469213006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Calcium	ug/L	122000	10000	128000	59	70-130	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3661291 3661292

Parameter	Units	60469215002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	ug/L	159000	10000	10000	160000	182000	4	233	70-130	13	20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3661293 3661294

Parameter	Units	60469213004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	ug/L	112000	10000	10000	120000	118000	82	62	70-130	2	20	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

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

QUALITY CONTROL DATA

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60469039

QC Batch: 924571
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60469039001, 60469039002, 60469039003, 60469039004

METHOD BLANK: 3661620 Matrix: Water
Associated Lab Samples: 60469039001, 60469039002, 60469039003, 60469039004

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

LABORATORY CONTROL SAMPLE: 3661621

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

SAMPLE DUPLICATE: 3661622

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

SAMPLE DUPLICATE: 3661623

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

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

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

QUALITY CONTROL DATA

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60469039

QC Batch: 924755
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60469039001, 60469039002, 60469039003, 60469039004

METHOD BLANK: 3662198 Matrix: Water
Associated Lab Samples: 60469039001, 60469039002, 60469039003, 60469039004

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

LABORATORY CONTROL SAMPLE: 3662199

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3662200 3662201

Parameter	Units	60469030001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	48.0	100	100	148	175	100	127	80-120	17	15	M1,R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3662203 3662204

Parameter	Units	60469036001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	25.1	100	100	113	111	88	86	80-120	2	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3662206 3662207

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

SAMPLE DUPLICATE: 3662202

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

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60469039

SAMPLE DUPLICATE: 3662205

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

SAMPLE DUPLICATE: 3662208

Parameter	Units	60469039001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	6.8	6.8	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

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

QUALIFIERS

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60469039

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.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
R1	RPD value was outside control limits.

Pace Analytical Services, LLC
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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60469039

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60469039001	**L-TMW-2**	EPA 200.7	924484	EPA 200.7	924512
60469039002	**L-MW-26**	EPA 200.7	924483	EPA 200.7	924511
60469039003	**L-UWL-DUP-1**	EPA 200.7	924483	EPA 200.7	924511
60469039004	**L-UWL-FB-1**	EPA 200.7	924483	EPA 200.7	924511
60469039001	**L-TMW-2**	SM 2540C	924571		
60469039002	**L-MW-26**	SM 2540C	924571		
60469039003	**L-UWL-DUP-1**	SM 2540C	924571		
60469039004	**L-UWL-FB-1**	SM 2540C	924571		
60469039001	**L-TMW-2**	EPA 300.0	924755		
60469039002	**L-MW-26**	EPA 300.0	924755		
60469039003	**L-UWL-DUP-1**	EPA 300.0	924755		
60469039004	**L-UWL-FB-1**	EPA 300.0	924755		

WO# : 60469039

60469039

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

Client Name: Rocksmith Brewing

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

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

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

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

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

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

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

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☑No ☐N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) **LOT#:** 88127	☑Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☐No ☑N/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Qualtrax Document ID: 30468

Page 1 of 1

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:

Company:	Rocksmith Geoengineering, LLC
Address:	5233 Roanoke Drive
	St. Charles, MO 63304
Email To:	mark.haddock@rocksmithgeo.com
Phone: 314-974-5678	Fax:
Requested Due Date/TAT:	Standard

Section B Required Project Information:

Report To:	Mark Haddock
Copy To:	Jeffery Ingram, Grant Morey
Purchase Order No.:	COC #9
Project Name:	Ameren LCL1 - Verification Sampling
Project Number:	COC#9

Section C Invoice Information:

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

REGULATORY AGENCY

NPDES ☑ GROUND WATER ☐ DRINKING WATER

UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MO

Section D Required Client Information

Valid Matrix Codes

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

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Calcium	Chloride	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	L-TMW-2	WT	G			2-4-25	1314		2	1		1							X	X	X		60469039
2	L-MW-26	WT	G				1211		2	1		1							X	X	X		
3	L-UWL-DUP-1	WT	G				—		2	1		1							X	X	X		
4	L-UWL-FB-1	WT	G				1228		2	1		1							X	X	X		
5	L-UWL-MS-1	WT	G				1314		2	1		1							X	X	X		(Collected @ L-TMW-2
6	L-UWL-MSD-1	WT	G				1314		2	1		1							X	X	X		
7		WT	G																				
8		WT	G																				
9		WT	G																				
10		WT	G																				
11		WT	G																				
12		WT	G																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Rocksmith	2/5/25	1945		2/6	0545	1.7	Y	Y	Y

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

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

Client: Rocksmith Geoeng Profile/EZ # 15856-1

Site: Notes

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

Container Codes

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

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

Misc.	
I	Wipe/Swab
SP5T	125mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

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

Work Order Number: 60469039

Memorandum

March 14, 2024

To:	Project File Rocksmith Geoengineering, LLC	**Project Number:**	23007-24
CC:	Mark Haddock, Jeffrey Ingram		
From:	Grant Morey	**Email:**	grant.morey@rocksmithgeo.com
RE:	**Data Validation Summary, Labadie Energy Center – LCL1 Verification – Data Package 60469039**		

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).
- 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).

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Company Name: Rocksmith Geoengineering
Project Manager: J. Ingram
Project Name: Ameren LEC - LCL1 Verification
Project Number: 23007-24
Reviewer: G. Morey
Validation Date: 03/14/2025

Laboratory: Pace Analytical Services
SDG #: 60469039
Analytical Method (type and no.): SM2540C (TDS); EPA 300.0 (Chloride), 200.7 (Metals)
Matrix: ☐ Air ☐ Soil/Sed. ■ Water ☐ Waste ☐ _____
Sample Names L-TMW-2, L-MW-26, L-UWL-DUP-1, L-UWL-FB-1

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

Field Information	YES	NO	NA	COMMENTS
a) Sampling dates noted?	x			2/4/2025
b) Sampling team indicated?	x			GTM/JTR
c) Sample location noted?	x			
d) Sample depth indicated (Soils)?			x	
e) Sample type indicated (grab/composite)?	x			Grab
f) Field QC noted?	x			See notes.
g) Field parameters collected (note types)?	x			pH, Sp.Cond, ORP, Temp, DO, Turb
h) Field Calibration within control limits?	x			See notes.
i) Notations of unacceptable field conditions/performances from field logs or field notes?		x		
j) Does the laboratory narrative indicate deficiencies?		x		No lab narrative.

Note Deficiencies: _____

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

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

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

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

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

Duplicates	YES	NO	NA	COMMENTS
a) Were field duplicates collected (note original and duplicate sample names)?	x			L-UWL-DUP-1 @ L-MW-26
b) Were field dup. precision criteria met (note RPD)?	x			Fluoride RPD: 0% TDS RPD: 6%; Calcium RPD: 1%
c) Were lab duplicates analyzed (note original and duplicate samples)?	x			TDS Max RPD: 10%
d) Were lab dup. precision criteria met (note RPD)?	x			

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

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

Comments/Notes:

General:

Chloride diluted in one sample, no qualification necessary.

Method Blanks:

3661259: calcium (37.2J), associated with samples -002, -003 and -004. Sample -004 result less than 10x blank and reporting limit, qualified as non-detect at RL. Samples -002 and -003 result > reporting limit and 10x blank, no qualification necessary.

3661264: calcium (28.8J), associated with sample -001. Result > RL and 10x blank, no qualification necessary.

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Comments/Notes:

Field Blank:

L-UWL-FB-1 @ L-MW-26: calcium (180J), TDS (6.0). Results > reporting limit and 10x blank, no qualification necessary.

MS/MSD:

3661263: MS recovery low for calcium, associated with unrelated sample. No qualification necessary.

3661266/3661267: MS/MSD recovery low for calcium, RPD within control limit. Associated with sample -001, result qualified as estimate.

3661268: MS recovery low for calcium. Associated with unrelated sample, no qualification necessary.

3661291/3661292: MS recovery low and MSD recovery high for calcium, RPD within control limits. Associated with unrelated sample, no qualification necessary.

3661293/3661294: MSD recovery low for calcium and RPD exceeds control limits. Associated with unrelated sample, no qualification necessary.

3662200/3662201: MSD recovery high for chloride and RPD exceeds control limits. Associated with unrelated sample, no qualification necessary.

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Data Qualification:

Sample Name	Constituent(s)	Result	Qualifier	Reason
L-UWL-FB-1	Calcium	200	U	Detected in blank, result < 10x blank and RL
L-TMW-2	Calcium	192000	J-	MS/MSD recovery low, RPD within control limits

Signature: Grant Morey Date: 03/14/2024

Pace Analytical Services, LLC
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October 30, 2025

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

RE: Project: AMEREN LCL1
Pace Project No.: 60474050

Dear Mark Haddock:

Enclosed are the analytical results for sample(s) received by the laboratory between April 26, 2025 and May 02, 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

Report revised to remove parameters not required under the CCR Rule

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

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: AMEREN LCL1
Pace Project No.: 60474050

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219
EPA Lab Code: KS00021
Arkansas Certification #: 88-00679
Illinois Certification #: 200030
Colorado Division of Oil and Public Safety
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Oklahoma Certification #: 9205
Texas Certification #: T104704407
Utah Certification #: KS0002125-15
UDSA_CA : #KS-SC-DOM-25-01

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SAMPLE SUMMARY

Project: AMEREN LCL1
Pace Project No.: 60474050

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60474050001	**L-TMW-1**	Water	04/28/25 11:00	04/30/25 07:30
60474050002	**L-TMW-2**	Water	04/28/25 09:20	04/30/25 07:30
60474050003	**L-TMW-3**	Water	04/28/25 12:05	04/30/25 07:30
60474050004	**L-UWL-DUP-1**	Water	04/28/25 00:00	04/30/25 07:30
60474050005	**L-UWL-FB-1**	Water	04/28/25 12:10	04/30/25 07:30
60474050006	**L-UML-MS-1**	Water	04/28/25 09:20	04/30/25 07:30
60474050007	**L-UML-MSD-1**	Water	04/28/25 09:20	04/30/25 07:30
60473874001	**L-BMW-1S**	Water	04/24/25 11:50	04/26/25 06:47
60473874002	**L-BMW-2S**	Water	04/24/25 14:15	04/26/25 06:47
60473874028	**L-MW-26**	Water	04/30/25 12:22	05/02/25 07:00

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SAMPLE ANALYTE COUNT

Project: AMEREN LCL1
Pace Project No.: 60474050

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60474050001	**L-TMW-1**	EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474050002	**L-TMW-2**	EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474050003	**L-TMW-3**	EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474050004	**L-UWL-DUP-1**	EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60474050005	**L-UWL-FB-1**	EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60473874001	**L-BMW-1S**	EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60473874002	**L-BMW-2S**	EPA 200.7	ARMN	7	PASI-K
		SM 2320B	EFM	1	PASI-K
		SM 2540C	CAR	1	PASI-K
		EPA 300.0	AAA	3	PASI-K
60473874028	**L-MW-26**	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

PASI-K = Pace Analytical Services - Kansas City

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: AMEREN LCL1
Pace Project No.: 60474050

Sample: L-TMW-1 **Lab ID: 60474050001** Collected: 04/28/25 11:00 Received: 04/30/25 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	**107**	ug/L	100	6.4	1	05/01/25 13:06	05/23/25 11:47	7440-42-8	
Calcium	**158000**	ug/L	200	26.9	1	05/01/25 13:06	05/23/25 11:47	7440-70-2	
Iron	**48.9J**	ug/L	50.0	9.1	1	05/01/25 13:06	05/23/25 11:47	7439-89-6	
Magnesium	**42000**	ug/L	50.0	20.1	1	05/01/25 13:06	05/23/25 11:47	7439-95-4	
Manganese	**1740**	ug/L	5.0	0.39	1	05/01/25 13:06	05/23/25 11:47	7439-96-5	
Potassium	**5080**	ug/L	500	69.7	1	05/01/25 13:06	05/23/25 11:47	7440-09-7	
Sodium	**10000**	ug/L	500	115	1	05/01/25 13:06	05/23/25 11:47	7440-23-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**515**	mg/L	20.0	10.5	1		05/12/25 14:02		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**588**	mg/L	13.3	13.3	1		05/05/25 14:47		MW
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**3.6**	mg/L	1.0	0.53	1		05/22/25 22:58	16887-00-6	B
Fluoride	**<0.12**	mg/L	0.20	0.12	1		05/22/25 22:58	16984-48-8	
Sulfate	**55.1**	mg/L	10.0	5.5	10		05/22/25 23:12	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AMEREN LCL1
Pace Project No.: 60474050

Sample: L-TMW-2 **Lab ID: 60474050002** Collected: 04/28/25 09:20 Received: 04/30/25 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	**104**	ug/L	100	6.4	1	05/01/25 13:06	05/23/25 11:49	7440-42-8	
Calcium	**193000**	ug/L	200	26.9	1	05/01/25 13:06	05/23/25 11:49	7440-70-2	M1,P6
Iron	**1580**	ug/L	50.0	9.1	1	05/01/25 13:06	05/23/25 11:49	7439-89-6	
Magnesium	**43600**	ug/L	50.0	20.1	1	05/01/25 13:06	05/23/25 11:49	7439-95-4	
Manganese	**3130**	ug/L	5.0	0.39	1	05/01/25 13:06	05/23/25 11:49	7439-96-5	
Potassium	**6720**	ug/L	500	69.7	1	05/01/25 13:06	05/23/25 11:49	7440-09-7	
Sodium	**10500**	ug/L	500	115	1	05/01/25 13:06	05/23/25 11:49	7440-23-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**603**	mg/L	20.0	10.5	1		05/12/25 14:10		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**767**	mg/L	13.3	13.3	1		05/05/25 14:48		MW
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**4.4**	mg/L	1.0	0.53	1		05/22/25 17:27	16887-00-6	B
Fluoride	**<0.12**	mg/L	0.20	0.12	1		05/22/25 17:27	16984-48-8	
Sulfate	**73.8**	mg/L	20.0	11.0	20		05/22/25 17:41	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AMEREN LCL1
Pace Project No.: 60474050

Sample: L-TMW-3 **Lab ID: 60474050003** Collected: 04/28/25 12:05 Received: 04/30/25 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	**83.1J**	ug/L	100	6.4	1	05/01/25 13:06	05/23/25 11:54	7440-42-8	
Calcium	**121000**	ug/L	200	26.9	1	05/01/25 13:06	05/23/25 11:54	7440-70-2	
Iron	**85.2**	ug/L	50.0	9.1	1	05/01/25 13:06	05/23/25 11:54	7439-89-6	
Magnesium	**21900**	ug/L	50.0	20.1	1	05/01/25 13:06	05/23/25 11:54	7439-95-4	
Manganese	**70.3**	ug/L	5.0	0.39	1	05/01/25 13:06	05/23/25 11:54	7439-96-5	
Potassium	**5230**	ug/L	500	69.7	1	05/01/25 13:06	05/23/25 11:54	7440-09-7	
Sodium	**5240**	ug/L	500	115	1	05/01/25 13:06	05/23/25 11:54	7440-23-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**365**	mg/L	20.0	10.5	1		05/12/25 14:37		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**455**	mg/L	10.0	10.0	1		05/05/25 14:48		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**1.8**	mg/L	1.0	0.53	1		05/22/25 23:26	16887-00-6	B
Fluoride	**<0.12**	mg/L	0.20	0.12	1		05/22/25 23:26	16984-48-8	
Sulfate	**25.6**	mg/L	10.0	5.5	10		05/22/25 23:40	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AMEREN LCL1
Pace Project No.: 60474050

Sample: L-UWL-DUP-1 **Lab ID: 60474050004** Collected: 04/28/25 00:00 Received: 04/30/25 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	**108**	ug/L	100	6.4	1	05/01/25 13:06	05/23/25 11:58	7440-42-8	
Calcium	**155000**	ug/L	200	26.9	1	05/01/25 13:06	05/23/25 11:58	7440-70-2	
Iron	**32.7J**	ug/L	50.0	9.1	1	05/01/25 13:06	05/23/25 11:58	7439-89-6	
Magnesium	**41300**	ug/L	50.0	20.1	1	05/01/25 13:06	05/23/25 11:58	7439-95-4	
Manganese	**1810**	ug/L	5.0	0.39	1	05/01/25 13:06	05/23/25 11:58	7439-96-5	
Potassium	**5020**	ug/L	500	69.7	1	05/01/25 13:06	05/23/25 11:58	7440-09-7	
Sodium	**9870**	ug/L	500	115	1	05/01/25 13:06	05/23/25 11:58	7440-23-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**517**	mg/L	20.0	10.5	1		05/12/25 14:44		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**613**	mg/L	13.3	13.3	1		05/05/25 14:48		MW
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**3.6**	mg/L	1.0	0.53	1		05/22/25 23:54	16887-00-6	B
Fluoride	**<0.12**	mg/L	0.20	0.12	1		05/22/25 23:54	16984-48-8	
Sulfate	**59.4**	mg/L	20.0	11.0	20		05/23/25 00:08	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AMEREN LCL1
Pace Project No.: 60474050

Sample: L-UWL-FB-1 **Lab ID: 60474050005** Collected: 04/28/25 12:10 Received: 04/30/25 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	**<6.4**	ug/L	100	6.4	1	05/01/25 13:06	05/23/25 12:03	7440-42-8	
Calcium	**<26.9**	ug/L	200	26.9	1	05/01/25 13:06	05/23/25 12:03	7440-70-2	
Iron	**11.3J**	ug/L	50.0	9.1	1	05/01/25 13:06	05/23/25 12:03	7439-89-6	
Magnesium	**<20.1**	ug/L	50.0	20.1	1	05/01/25 13:06	05/23/25 12:03	7439-95-4	
Manganese	**<0.39**	ug/L	5.0	0.39	1	05/01/25 13:06	05/23/25 12:03	7439-96-5	
Potassium	**<69.7**	ug/L	500	69.7	1	05/01/25 13:06	05/23/25 12:03	7440-09-7	
Sodium	**<115**	ug/L	500	115	1	05/01/25 13:06	05/23/25 12:03	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		05/12/25 14:48		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**9.0**	mg/L	5.0	5.0	1		05/05/25 14:48		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**0.59J**	mg/L	1.0	0.53	1		05/22/25 22:31	16887-00-6	B
Fluoride	**<0.12**	mg/L	0.20	0.12	1		05/22/25 22:31	16984-48-8	
Sulfate	**<0.55**	mg/L	1.0	0.55	1		05/22/25 22:31	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AMEREN LCL1
Pace Project No.: 60474050

Sample: L-BMW-1S **Lab ID: 60473874001** Collected: 04/24/25 11:50 Received: 04/26/25 06:47 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	**103**	ug/L	100	6.4	1	04/30/25 07:50	05/23/25 13:18	7440-42-8	
Calcium	**204000**	ug/L	200	26.9	1	04/30/25 07:50	05/23/25 13:18	7440-70-2	
Iron	**25700**	ug/L	50.0	9.1	1	04/30/25 07:50	05/23/25 13:18	7439-89-6	
Magnesium	**51800**	ug/L	50.0	20.1	1	04/30/25 07:50	05/23/25 13:18	7439-95-4	
Manganese	**2500**	ug/L	5.0	0.39	1	04/30/25 07:50	05/23/25 13:18	7439-96-5	
Potassium	**5780**	ug/L	500	69.7	1	04/30/25 07:50	05/23/25 13:18	7440-09-7	
Sodium	**20200**	ug/L	500	115	1	04/30/25 07:50	05/23/25 13:18	7440-23-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**668**	mg/L	20.0	10.5	1		05/08/25 14:11		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**831**	mg/L	13.3	13.3	1		05/01/25 13:34		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**7.2**	mg/L	1.0	0.53	1		05/15/25 17:20	16887-00-6	
Fluoride	**<0.12**	mg/L	0.20	0.12	1		05/15/25 17:20	16984-48-8	
Sulfate	**77.8**	mg/L	10.0	5.5	10		05/15/25 17:34	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AMEREN LCL1
Pace Project No.: 60474050

Sample: L-BMW-2S **Lab ID: 60473874002** Collected: 04/24/25 14:15 Received: 04/26/25 06:47 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	**56.7J**	ug/L	100	6.4	1	04/30/25 07:50	05/23/25 13:20	7440-42-8	
Calcium	**143000**	ug/L	200	26.9	1	04/30/25 07:50	05/23/25 13:20	7440-70-2	
Iron	**<9.1**	ug/L	50.0	9.1	1	04/30/25 07:50	05/23/25 13:20	7439-89-6	
Magnesium	**23000**	ug/L	50.0	20.1	1	04/30/25 07:50	05/23/25 13:20	7439-95-4	
Manganese	**2.6J**	ug/L	5.0	0.39	1	04/30/25 07:50	05/23/25 13:20	7439-96-5	
Potassium	**6070**	ug/L	500	69.7	1	04/30/25 07:50	05/23/25 13:20	7440-09-7	
Sodium	**4550**	ug/L	500	115	1	04/30/25 07:50	05/23/25 13:20	7440-23-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**372**	mg/L	20.0	10.5	1		05/08/25 14:17		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**531**	mg/L	10.0	10.0	1		05/01/25 13:34		
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		05/15/25 17:48	16887-00-6	
Fluoride	**<0.12**	mg/L	0.20	0.12	1		05/15/25 17:48	16984-48-8	
Sulfate	**71.6**	mg/L	10.0	5.5	10		05/15/25 18:02	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: AMEREN LCL1
Pace Project No.: 60474050

Sample: L-MW-26 **Lab ID: 60473874028** Collected: 04/30/25 12:22 Received: 05/02/25 07:00 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	**76.6J**	ug/L	100	6.4	1	05/06/25 08:42	05/22/25 20:17	7440-42-8	
Calcium	**136000**	ug/L	200	26.9	1	05/06/25 08:42	05/22/25 20:17	7440-70-2	M1,P6
Iron	**34.3J**	ug/L	50.0	9.1	1	05/06/25 08:42	05/22/25 20:17	7439-89-6	B
Magnesium	**24900**	ug/L	50.0	20.1	1	05/06/25 08:42	05/22/25 20:17	7439-95-4	
Manganese	**151**	ug/L	5.0	0.39	1	05/06/25 08:42	05/22/25 20:17	7439-96-5	
Potassium	**4740**	ug/L	500	69.7	1	05/06/25 08:42	05/22/25 20:17	7440-09-7	
Sodium	**10900**	ug/L	500	115	1	05/06/25 08:42	05/22/25 20:17	7440-23-5	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**432**	mg/L	20.0	10.5	1		05/14/25 19:37		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**522**	mg/L	10.0	10.0	1		05/07/25 15:12		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**7.3**	mg/L	1.0	0.53	1		05/23/25 18:14	16887-00-6	
Fluoride	**<0.12**	mg/L	0.20	0.12	1		05/23/25 18:14	16984-48-8	
Sulfate	**29.3**	mg/L	20.0	11.0	20		05/23/25 18:55	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60474050

QC Batch: 933297
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60473874001, 60473874002

METHOD BLANK: 3697620 Matrix: Water
Associated Lab Samples: 60473874001, 60473874002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	ug/L	<6.4	100	6.4	05/23/25 12:51	
Calcium	ug/L	<26.9	200	26.9	05/23/25 12:51	
Iron	ug/L	<9.1	50.0	9.1	05/23/25 12:51	
Magnesium	ug/L	<20.1	50.0	20.1	05/23/25 12:51	
Manganese	ug/L	<0.39	5.0	0.39	05/23/25 12:51	
Potassium	ug/L	<69.7	500	69.7	05/23/25 12:51	
Sodium	ug/L	<115	500	115	05/23/25 12:51	

LABORATORY CONTROL SAMPLE: 3697621

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	1000	914	91	85-115	
Calcium	ug/L	10000	10000	100	85-115	
Iron	ug/L	10000	9960	100	85-115	
Magnesium	ug/L	10000	9700	97	85-115	
Manganese	ug/L	1000	984	98	85-115	
Potassium	ug/L	10000	9760	98	85-115	
Sodium	ug/L	10000	9640	96	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3697622 3697623

Parameter	Units	60473868003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	ug/L	11800	1000	1000	12600	12600	78	78	70-130	0	20	
Calcium	ug/L	104000	10000	10000	112000	112000	81	80	70-130	0	20	
Iron	ug/L	17.2J	10000	10000	9880	9950	99	99	70-130	1	20	
Magnesium	ug/L	36.2J	10000	10000	9420	9440	94	94	70-130	0	20	
Manganese	ug/L	12.2	1000	1000	982	999	97	99	70-130	2	20	
Potassium	ug/L	17200	10000	10000	26700	27000	95	97	70-130	1	20	
Sodium	ug/L	96600	10000	10000	104000	104000	79	78	70-130	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60474050

QC Batch: 933650
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474050001, 60474050002, 60474050003, 60474050004, 60474050005

METHOD BLANK: 3698971 Matrix: Water
Associated Lab Samples: 60474050001, 60474050002, 60474050003, 60474050004, 60474050005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	ug/L	<6.4	100	6.4	05/23/25 11:23	
Calcium	ug/L	<26.9	200	26.9	05/23/25 11:23	
Iron	ug/L	<9.1	50.0	9.1	05/23/25 11:23	
Magnesium	ug/L	<20.1	50.0	20.1	05/23/25 11:23	
Manganese	ug/L	<0.39	5.0	0.39	05/23/25 11:23	
Potassium	ug/L	<69.7	500	69.7	05/23/25 11:23	
Sodium	ug/L	<115	500	115	05/23/25 11:23	

LABORATORY CONTROL SAMPLE: 3698972

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	1000	920	92	85-115	
Calcium	ug/L	10000	10000	100	85-115	
Iron	ug/L	10000	9990	100	85-115	
Magnesium	ug/L	10000	9760	98	85-115	
Manganese	ug/L	1000	994	99	85-115	
Potassium	ug/L	10000	9770	98	85-115	
Sodium	ug/L	10000	9730	97	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3698973 3698974

Parameter	Units	60474050002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	ug/L	104	1000	1000	1040	1040	94	93	70-130	0	20	
Calcium	ug/L	193000	10000	10000	202000	196000	89	28	70-130	3	20	M1
Iron	ug/L	1580	10000	10000	12100	11900	105	103	70-130	1	20	
Magnesium	ug/L	43600	10000	10000	53300	51900	97	83	70-130	3	20	
Manganese	ug/L	3130	1000	1000	4070	4010	95	89	70-130	1	20	
Potassium	ug/L	6720	10000	10000	16800	16700	101	99	70-130	1	20	
Sodium	ug/L	10500	10000	10000	20300	20000	98	95	70-130	2	20	

MATRIX SPIKE SAMPLE: 3698975

Parameter	Units	60474050003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	83.1J	1000	1030	95	70-130	
Calcium	ug/L	121000	10000	130000	91	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60474050

MATRIX SPIKE SAMPLE: 3698975

Parameter	Units	60474050003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	85.2	10000	10200	101	70-130	
Magnesium	ug/L	21900	10000	31700	97	70-130	
Manganese	ug/L	70.3	1000	1080	101	70-130	
Potassium	ug/L	5230	10000	15500	103	70-130	
Sodium	ug/L	5240	10000	15200	100	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60474050

QC Batch: 934063
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60473874028

METHOD BLANK: 3700770 Matrix: Water
Associated Lab Samples: 60473874028

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	ug/L	<6.4	100	6.4	05/22/25 19:50	
Calcium	ug/L	34.5J	200	26.9	05/22/25 19:50	
Iron	ug/L	20.1J	50.0	9.1	05/22/25 19:50	
Magnesium	ug/L	<20.1	50.0	20.1	05/22/25 19:50	
Manganese	ug/L	1.0J	5.0	0.39	05/22/25 19:50	
Potassium	ug/L	<69.7	500	69.7	05/22/25 19:50	
Sodium	ug/L	<115	500	115	05/22/25 19:50	

LABORATORY CONTROL SAMPLE: 3700771

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	1000	883	88	85-115	
Calcium	ug/L	10000	9850	98	85-115	
Iron	ug/L	10000	9810	98	85-115	
Magnesium	ug/L	10000	9580	96	85-115	
Manganese	ug/L	1000	994	99	85-115	
Potassium	ug/L	10000	9470	95	85-115	
Sodium	ug/L	10000	9630	96	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3700773 3700774

Parameter	Units	60473870005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	ug/L	299	1000	1000	1200	1200	90	90	70-130	0	20	
Calcium	ug/L	95200	10000	10000	105000	103000	99	83	70-130	2	20	
Iron	ug/L	13900	10000	10000	23900	24000	100	101	70-130	0	20	
Magnesium	ug/L	17600	10000	10000	27100	26700	96	92	70-130	1	20	
Manganese	ug/L	1070	1000	1000	2010	2040	94	97	70-130	2	20	
Potassium	ug/L	4170	10000	10000	13700	14000	96	98	70-130	2	20	
Sodium	ug/L	5790	10000	10000	15500	15500	97	97	70-130	0	20	

MATRIX SPIKE SAMPLE: 3700775

Parameter	Units	60473874028 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	76.6J	1000	964	89	70-130	
Calcium	ug/L	136000	10000	143000	62	70-130	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60474050

MATRIX SPIKE SAMPLE: 3700775

Parameter	Units	60473874028 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	34.3J	10000	9780	97	70-130	
Magnesium	ug/L	24900	10000	33700	89	70-130	
Manganese	ug/L	151	1000	1130	98	70-130	
Potassium	ug/L	4740	10000	14400	97	70-130	
Sodium	ug/L	10900	10000	20200	93	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60474050

QC Batch: 934386
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60473874001, 60473874002

METHOD BLANK: 3702446 Matrix: Water
Associated Lab Samples: 60473874001, 60473874002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	05/08/25 13:29	

LABORATORY CONTROL SAMPLE: 3702447

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	499	100	90-110	

SAMPLE DUPLICATE: 3702448

Parameter	Units	60473866001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	661	657	0	10	

SAMPLE DUPLICATE: 3702449

Parameter	Units	60474532001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	253	253	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60474050

QC Batch: 934756
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474050001, 60474050002, 60474050003, 60474050004, 60474050005

METHOD BLANK: 3704361 Matrix: Water
Associated Lab Samples: 60474050001, 60474050002, 60474050003, 60474050004, 60474050005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	05/12/25 11:58	

LABORATORY CONTROL SAMPLE: 3704362

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	499	100	90-110	

SAMPLE DUPLICATE: 3704363

Parameter	Units	60473941001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	231	229	1	10	

SAMPLE DUPLICATE: 3704364

Parameter	Units	60473953001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	33.8	33.0	2	10	

SAMPLE DUPLICATE: 3704365

Parameter	Units	60474050002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	603	616	2	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60474050

QC Batch: 935136
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60473874028

METHOD BLANK: 3706237 Matrix: Water
Associated Lab Samples: 60473874028

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	05/14/25 19:11	

LABORATORY CONTROL SAMPLE: 3706238

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	512	102	90-110	

SAMPLE DUPLICATE: 3706239

Parameter	Units	60473870005 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	319	319	0	10	

SAMPLE DUPLICATE: 3706240

Parameter	Units	60474215001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	126	130	3	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60474050

QC Batch: 933633
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60473874001, 60473874002

METHOD BLANK: 3698856 Matrix: Water
Associated Lab Samples: 60473874001, 60473874002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	05/01/25 13:33	

LABORATORY CONTROL SAMPLE: 3698857

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	1040	104	80-120	

SAMPLE DUPLICATE: 3698858

Parameter	Units	60473868003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	795	805	1	10	

SAMPLE DUPLICATE: 3698859

Parameter	Units	60473874005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	529	530	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60474050

QC Batch: 933971
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474050001, 60474050002, 60474050003, 60474050004, 60474050005

METHOD BLANK: 3700463 Matrix: Water
Associated Lab Samples: 60474050001, 60474050002, 60474050003, 60474050004, 60474050005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	05/05/25 14:45	

LABORATORY CONTROL SAMPLE: 3700464

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	1050	105	80-120	

SAMPLE DUPLICATE: 3700465

Parameter	Units	60473736001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	12800	12800	1	10	H1

SAMPLE DUPLICATE: 3700466

Parameter	Units	60474050002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	767	724	6	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60474050

QC Batch: 934269
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60473874028

METHOD BLANK: 3701859 Matrix: Water
Associated Lab Samples: 60473874028

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	05/07/25 15:10	

LABORATORY CONTROL SAMPLE: 3701860

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	1030	103	80-120	

SAMPLE DUPLICATE: 3701861

Parameter	Units	60474170001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	3270	3230	1	10	

SAMPLE DUPLICATE: 3701862

Parameter	Units	60473870005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	370	377	2	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60474050

QC Batch: 935142
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60473874001, 60473874002

METHOD BLANK: 3706253 Matrix: Water
Associated Lab Samples: 60473874001, 60473874002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.53	1.0	0.53	05/15/25 05:11	
Fluoride	mg/L	<0.12	0.20	0.12	05/15/25 05:11	
Sulfate	mg/L	<0.55	1.0	0.55	05/15/25 05:11	

LABORATORY CONTROL SAMPLE: 3706254

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	96	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	5	5.1	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3706255 3706256

Parameter	Units	60473868003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	27.6	100	100	113	114	85	86	80-120	1	15	
Fluoride	mg/L	<0.12	2.5	2.5	2.2	2.5	87	99	80-120	13	15	
Sulfate	mg/L	407	250	250	669	657	105	100	80-120	2	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3706257 3706258

Parameter	Units	60473874005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.8	5	5	8.5	8.0	93	85	80-120	5	15	
Fluoride	mg/L	<0.12	2.5	2.5	2.7	2.4	106	94	80-120	11	15	
Sulfate	mg/L	20.7	10	10	30.7	30.5	100	98	80-120	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

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

QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60474050

QC Batch: 936168
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60474050001, 60474050002, 60474050003, 60474050004, 60474050005

METHOD BLANK: 3711067 Matrix: Water
Associated Lab Samples: 60474050001, 60474050002, 60474050003, 60474050004, 60474050005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.59J	1.0	0.53	05/22/25 16:59	
Fluoride	mg/L	<0.12	0.20	0.12	05/22/25 16:59	
Sulfate	mg/L	<0.55	1.0	0.55	05/22/25 16:59	

LABORATORY CONTROL SAMPLE: 3711068

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	95	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: 3711069 3711070

Parameter	Units	60474050002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.4	5	5	9.5	8.8	101	88	80-120	7	15	
Fluoride	mg/L	<0.12	2.5	2.5	2.7	2.4	107	93	80-120	14	15	
Sulfate	mg/L	73.8	100	100	176	179	102	105	80-120	2	15	

MATRIX SPIKE SAMPLE: 3711071

Parameter	Units	60474050005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	0.59J	5	4.9	85	80-120	
Fluoride	mg/L	<0.12	2.5	2.5	101	80-120	
Sulfate	mg/L	<0.55	5	4.9	93	80-120	

SAMPLE DUPLICATE: 3711201

Parameter	Units	60474050002 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	4.4	4.3	2	15	
Fluoride	mg/L	<0.12	<0.12		15	
Sulfate	mg/L	73.8	72.6	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

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

QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60474050

QC Batch: 936176
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60473874028

METHOD BLANK: 3711108 Matrix: Water
Associated Lab Samples: 60473874028

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.53	1.0	0.53	05/23/25 06:08	
Fluoride	mg/L	<0.12	0.20	0.12	05/23/25 06:08	
Sulfate	mg/L	<0.55	1.0	0.55	05/23/25 06:08	

LABORATORY CONTROL SAMPLE: 3711109

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	95	90-110	
Fluoride	mg/L	2.5	2.6	102	90-110	
Sulfate	mg/L	5	5.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3711236 3711237

Parameter	Units	60473874017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	9.9	5	5	14.5	15.4	92	109	80-120	6	15	
Fluoride	mg/L	<0.12	2.5	2.5	2.4	2.8	95	109	80-120	13	15	
Sulfate	mg/L	112	100	100	208	208	96	96	80-120	0	15	

MATRIX SPIKE SAMPLE: 3711239

Parameter	Units	60473874022 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	<0.53	5	4.8	97	80-120	
Fluoride	mg/L	<0.12	2.5	2.6	103	80-120	
Sulfate	mg/L	<0.55	5	5.0	95	80-120	

SAMPLE DUPLICATE: 3711238

Parameter	Units	60473874017 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	9.9	9.9	0	15	
Fluoride	mg/L	<0.12	<0.12		15	
Sulfate	mg/L	112	109	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

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

QUALIFIERS

Project: AMEREN LCL1
Pace Project No.: 60474050

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.
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.
MW	Due to matrix interference, achieving a constant weight is not possible.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN LCL1
Pace Project No.: 60474050

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60473874001	**L-BMW-1S**	EPA 200.7	933297	EPA 200.7	933530
60473874002	**L-BMW-2S**	EPA 200.7	933297	EPA 200.7	933530
60474050001	**L-TMW-1**	EPA 200.7	933650	EPA 200.7	933723
60474050002	**L-TMW-2**	EPA 200.7	933650	EPA 200.7	933723
60474050003	**L-TMW-3**	EPA 200.7	933650	EPA 200.7	933723
60474050004	**L-UWL-DUP-1**	EPA 200.7	933650	EPA 200.7	933723
60474050005	**L-UWL-FB-1**	EPA 200.7	933650	EPA 200.7	933723
60473874028	**L-MW-26**	EPA 200.7	934063	EPA 200.7	934134
60473874001	**L-BMW-1S**	SM 2320B	934386		
60473874002	**L-BMW-2S**	SM 2320B	934386		
60474050001	**L-TMW-1**	SM 2320B	934756		
60474050002	**L-TMW-2**	SM 2320B	934756		
60474050003	**L-TMW-3**	SM 2320B	934756		
60474050004	**L-UWL-DUP-1**	SM 2320B	934756		
60474050005	**L-UWL-FB-1**	SM 2320B	934756		
60473874028	**L-MW-26**	SM 2320B	935136		
60473874001	**L-BMW-1S**	SM 2540C	933633		
60473874002	**L-BMW-2S**	SM 2540C	933633		
60474050001	**L-TMW-1**	SM 2540C	933971		
60474050002	**L-TMW-2**	SM 2540C	933971		
60474050003	**L-TMW-3**	SM 2540C	933971		
60474050004	**L-UWL-DUP-1**	SM 2540C	933971		
60474050005	**L-UWL-FB-1**	SM 2540C	933971		
60473874028	**L-MW-26**	SM 2540C	934269		
60473874001	**L-BMW-1S**	EPA 300.0	935142		
60473874002	**L-BMW-2S**	EPA 300.0	935142		
60474050001	**L-TMW-1**	EPA 300.0	936168		
60474050002	**L-TMW-2**	EPA 300.0	936168		
60474050003	**L-TMW-3**	EPA 300.0	936168		
60474050004	**L-UWL-DUP-1**	EPA 300.0	936168		
60474050005	**L-UWL-FB-1**	EPA 300.0	936168		
60473874028	**L-MW-26**	EPA 300.0	936176		

WO# : 60474050

60474050

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_Sample C		
	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 3.6/1.9/4.9 Corr. Factor +0.1 Corrected 3.7/2.0/4.5 1.4.9

Temperature should be above freezing to 6°C 1.4.8

Date and initials of person examining contents: JW 4/30/25

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

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

CHAIN-OF-CUSTODY Analytical Request Document

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

LAB USE ONLY- Affix Workorder/Login Label Here

60474050

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road, Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:	COC# 4		
Project Name:	AMEREN LCL1	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri

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

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

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

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

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

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

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	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	Sample Comment	Preservation non-conformance identified for sample.
Specify Container Size **										1	1	3	3	3	3	3	1		
Identify Container Preservative Type***										1	1	3	2	2	2	3	2		
L-TMW-1	WT	G	-	-	04/28/25	1100	6			X	X	X	X	X	X	X	X		
L-TMW-2	WT	G	-	-	04/28/25	0970	6			X	X	X	X	X	X	X	X		
L-TMW-3	WT	G	-	-	04/28/25	1205	6			X	X	X	X	X	X	X	X		
L-UWL-DUP-1	WT	G	-	-	04/28/25	-	6			X	X	X	X	X	X	X	X		
L-UWL-FB-1	WT	G	-	-	4/28/25	1210	6			X	X	X	X	X	X	X	X		
L-UWL-MS-1	WT	G	-	-	04/28/25	0970	6			X	X	X	X	X	X	X	X	Collected@L-TMW-2	
L-UWL-MSD-1	WT	G	-	-	04/28/25	0970	6			X	X	X	X	X	X	X	X		

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

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

Lab Use Only
Proj. Mgr: Jamie Church
AcctNum / Client ID:
Table #:
Profile / Template: 15857
Prelog / Bottle Ord. ID: EZ 3244557

Additional Instructions from Pace®:
*** App III and Cat/An Metals* - EPA 200.7: Fe, Mg, Mn, K, Na, Ca, B**
****App IV Metals -EPA 200.7: Ba,Be,Co,Pb, Li,Mo & 200.8 Metals - Sb, As, Cd, Cr, Se,Tl +7470 Hg**
*****UWL Metals - 200.7: Al, Cu, Ni, Ag, Zn + Hardness**

Collected By:
(Printed Name) Grant Morey
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
4	T-301	+0.1		3.7/2.0/4.5	

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
Grant Morey/Rocksmith	4-29-25/1600		4/30/25 07:30	14.9
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In- Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 1

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

CHAIN-OF-CUSTODY Analytical Request Document

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

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60474050

Scan QR Code for instructions

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road, Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:	COC# 4		
Project Name:	AMEREN LCL1	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri

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

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

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

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

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

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

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	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			Sample Comment
Specify Container Size **										1	1	3	3	3	3	3	1			
Identify Container Preservative Type***										1	1	3	2	2	2	3	2			
L-TMW-1	WT																			
L-TMW-2	WT																			
L-TMW-3	WT																			
L-UWL-DUP-1	WT																			
L-UWL-FB-1	WT																			
L-UWL-MS-1	WT																			
L-UWL-MSD-1	WT																			
L-BMW-15	WT	G			4-24-25	1150	6			✓	✓	✓	✓	✓	✓	✓	✓			
L-BMW-25	WT	G			4-24-25	1415	6			✓	✓	✓	✓	✓	✓	✓	/			

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

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

Lab Use Only
- Proj. Mgr: **Jamie Church**
- AcctNum / Client ID:
- Table #:
- Profile / Template: **15857**
- Prelog / Bottle Ord. ID: **EZ 3244557**

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:
*** App III and Cat/An Metals* - EPA 200.7: Fe, Mg, Mn, K, Na, Ca, B**
****App IV Metals -EPA 200.7: Ba,Be,Co,Pb, Li,Mo & 200.8 Metals - Sb, As, Cd, Cr, Se,Tl +7470 Hg**
*****UWL Metals - 200.7: Al, Cu, Ni, Ag, Zn + Hardness**

Collected By:
(Printed Name) Grant Morey
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
Grant Morey / Rocksmith	4-25-25 1600			
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In- Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 1

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

Client: Rocksmith Geoeng Profile/BZ #: 3244557

Site: Notes

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

(Only Log RAD)

Container Codes

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

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

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

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

Work Order Number: 60474050

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

CHAIN-OF-CUSTODY Analytical Request Document

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

WO# : 60474050

60474050

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road, Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:	COC# 4		
Project Name:	AMEREN LCL1	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	

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

County / State origin of sample(s): Missouri

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

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

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

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

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

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

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

Identify Container Preservative Type***: 1 1 3 2 2 2 3 2

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

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

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	Analysis Requested: 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			Sample Comment	Preservation non-conformance identified for sample.
L-TMW-1	WT																				
L-TMW-2	WT																				
L-TMW-3	WT																				
L-UWL-DUP-1	WT																				
L-UWL-FB-1	WT																				
L-UWL-MS-1	WT																				
L-UWL-MSD-1	WT																				
L-MW-26	WT	G			4-30-25	1222	6			✓	✓	✓	✓	✓	✓	✓	✓				

Lab Use Only
Proj. Mgr: **Jamie Church**
AcctNum / Client ID:
Table #:
Profile / Template: **15857**
Prelog / Bottle Ord. ID: **EZ 3244557**

Additional Instructions from Pace®:
*** App III and Cat/An Metals* - EPA 200.7: Fe, Mg, Mn, K, Na, Ca, B**
****App IV Metals -EPA 200.7: Ba,Be,Co,Pb, Li,Mo & 200.8 Metals - Sb, As, Cd, Cr, Se,Tl +7470 Hg**
*****UWL Metals - 200.7: Al, Cu, Ni, Ag, Zn + Hardness**

Collected By: (Printed Name) Grant Morey
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
Rocksmith	5-1-25/0800			
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In- Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 1

Internal Transfer Chain of Custody

K193

☐ Rush Multiplier_____X
☐ Samples Pre-Logged into eCOC

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

Workorder: 60474050 **Workorder Name:** AMEREN LCL1

Owner Received Date: 4/30/2025 **Results Requested By:** 5/21/2025

Report To	Subcontract To
Jamie Church Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 314-838-7223	Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858

L1853856

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: H2SO4						Requested Analysis: Total Organic Halogens	LAB USE ONLY
1	L-TMW-1	PS	4/28/2025 11:00	60474050001	Water	1	0	40	5/1/25			X	
2	L-TMW-2	RQS	4/28/2025 09:20	60474050002	Water	1	2					X	-01
3	L-TMW-3	PS	4/28/2025 12:05	60474050003	Water	1						X	-02
4	L-UWL-DUP-1	PS	4/28/2025 00:00	60474050004	Water	1						X	-03
5	L-UWL-FB-1	PS	4/28/2025 12:10	60474050005	Water	1						X	-04

Transfers	Released By	Date/Time	Received By	Date/Time
1	JAPace	4/30/25 1700	Easton Dean	5/1/25 0900
2				
3				

Comments

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

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

4453 8931 0145

2.7 +0.4 = 3.1 TMP

Sample Receipt Checklist

COC Seal Present/Intact:	Y N NP	If Applicable VOA Zero Headspace:	Y N
COC Signed/Accurate:	Y N	Pres. Correct/Check:	Y N
Bottles arrive intact:	Y N		
Correct bottles used:	Y N	Condition: NCF OK	
Sufficient volume sent:	Y N		
RA Screen <0.5 mR/hr:	Y N		

Internal Transfer Chain of Custody

☐ Rush Multiplier_____X
☒ Samples Pre-Logged into eCOC

State Of Origin: MO
Cert. Needed: ☐ Yes ☒ No
Owner Received Date: 4/30/2025 **Results Requested By:** 5/21/2025

Workorder: 60474050 **Workorder Name:** AMEREN LCL1

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

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3						Requested Analysis Radium 226	Radium 228											LAB USE ONLY
1	L-TMW-1	PS	4/28/2025 11:00	60474050001	Water	2						X	X											001
2	L-TMW-2	RQS	4/28/2025 09:20	60474050002	Water	2						X	X											002
3	L-TMW-3	PS	4/28/2025 12:05	60474050003	Water	2						X	X											003
4	L-UWL-DUP-1	PS	4/28/2025 00:00	60474050004	Water	2						X	X											004
5	L-UWL-FB-1	PS	4/28/2025 12:10	60474050005	Water	2						X	X											005
6	L-UML-MS-1	PS	4/28/2025 09:20	60474050006	Water	2						X	X											006
7	L-UML-MSD-1	PS	4/28/2025 09:20	60474050007	Water	2						X	X											007

Transfers	Released By	Date/Time	Received By	Date/Time
1	JAPale	5/1/25 1700	[signature] S	5/2/25 9:40
2				
3				

Comments
***Note: Primary samples for 006/007 MS/MSD is sample 002.

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

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

WO# : 30775928
30775928

DC#_Title: ENV-FRM-GBUR-0088 v07_Sample Condition Upon Receipt-Greensburg

Effective Date: 01/04/2024

WO#: 30775928

PM: CMC Due Date: 05/14/25

CLIENT: PACE_60_LEKS

Client Name: Pace-KS

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

Tracking Number: 4453 8931 0720

Initial / Date

Examined By: PS 5/2/25

Labeled By: PS 5/2/25

Temped By:

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

Thermometer Used: —

Type of Ice: Wet Blue (None)

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

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 100324	D.P.D. Residual Chlorine Lot #
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC		✓			
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC:	✓			5.	
-Includes date/time/ID Matrix:	WT				
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dichlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation:	✓			16.	
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				PHc2	
All containers meet method preservation requirements:	✓			Initial when completed PS	Date/Time of Preservation
				Lot# of added Preservative	
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.	
624.1: Headspace in VOA Vials (0mm)			✓	18.	
Radon: Headspace in RAD Vials (0mm)			✓	19.	
Trip Blank Present:			✓	Trip blank custody seal present? YES or NO	
Rad Samples Screened <.05 mrem/hr.	✓			Initial when completed PS	Date: 5/2/25 Survey Meter SN: 25014380

Comments:

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

Qualtrax ID: 55680

Memorandum

October 30, 2025

To:	Project File Rocksmith Geoengineering, LLC	**Project Number:**	23007-25
CC:	Mark Haddock, Jeffrey Ingram		
From:	Valerie Hurt	**Email:**	Valerie.Hurt@Rocksmithgeo.com
RE:	**Data Validation Summary, Labadie Energy Center – LCL1 – Data Package 60474050**		

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 sample result between the Method Detection Limit (MDL) and Practical Quantification Limit (PQL), the results were recorded at the detection value and qualified as estimates (J).
- When a duplicate criterion was not met, the associated sample result was qualified as an estimate (J for detects, UJ for non-detects).
- When a 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).

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Company Name: Rocksmith Geoengineering
Project Manager: J. Ingram
Project Name: Ameren LCL1
Project Number: 23007-25
Reviewer: V. Hurt
Validation Date: 10/30/2025

Laboratory: Pace Analytical
SDG #: 60474050
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 L-TMW-1, L-TMW-2, L-TMW-3, L-UWL-DUP-1, L-UWL-FB-1, L-UML-MS-1, L-UML-MSD-1, L-MW-26, L-BMW-1S, L-BMW-2S

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

Field Information	YES	NO	NA	COMMENTS
a) Sampling dates noted?	x			4/24/2025-4/30/2025
b) Sampling team indicated?	x			VAH/GTM
c) Sample location noted?	x			
d) Sample depth indicated (Soils)?			x	
e) Sample type indicated (grab/composite)?	x			Grab
f) Field QC noted?	x			See Notes
g) Field parameters collected (note types)?	x			pH, Spec Cond, Turb, Temp, DO, ORP
h) Field Calibration within control limits?	x			
i) Notations of unacceptable field conditions/performances from field logs or field notes?		x		
j) Does the laboratory narrative indicate deficiencies?			x	No lab narrative.

Note Deficiencies:

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

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

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

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

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

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

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

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

Comments/Notes:

General:

Sulfate was diluted in several samples; no qualification necessary.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Comments/Notes:

Method Blank:

3700770: Calcium (34.5J ug/L), iron (20.1J ug/L), and manganese (1.0J ug/L) detected. Associated with sample -028.

Results < reporting limit and 10x blank, therefore no qualification necessary.

3711067: Chloride (0.59J mg/L) detected. Associated with samples -001 through -005. Results -001 through -004 > than reporting limit and 10x blank.

Results qualified as estimates. -005 result < reporting limit, results qualified as non detect.

Field blank:

L-UWL-FB-1 and associated sample L-TMW-3:

Iron detected (11.3 ug/L). Result > reporting limit & < 10x method blank. Result qualified as estimate.

TDS (9.0 mg/L), result < reporting limit. Result qualified as non detect.

Field Duplicate:

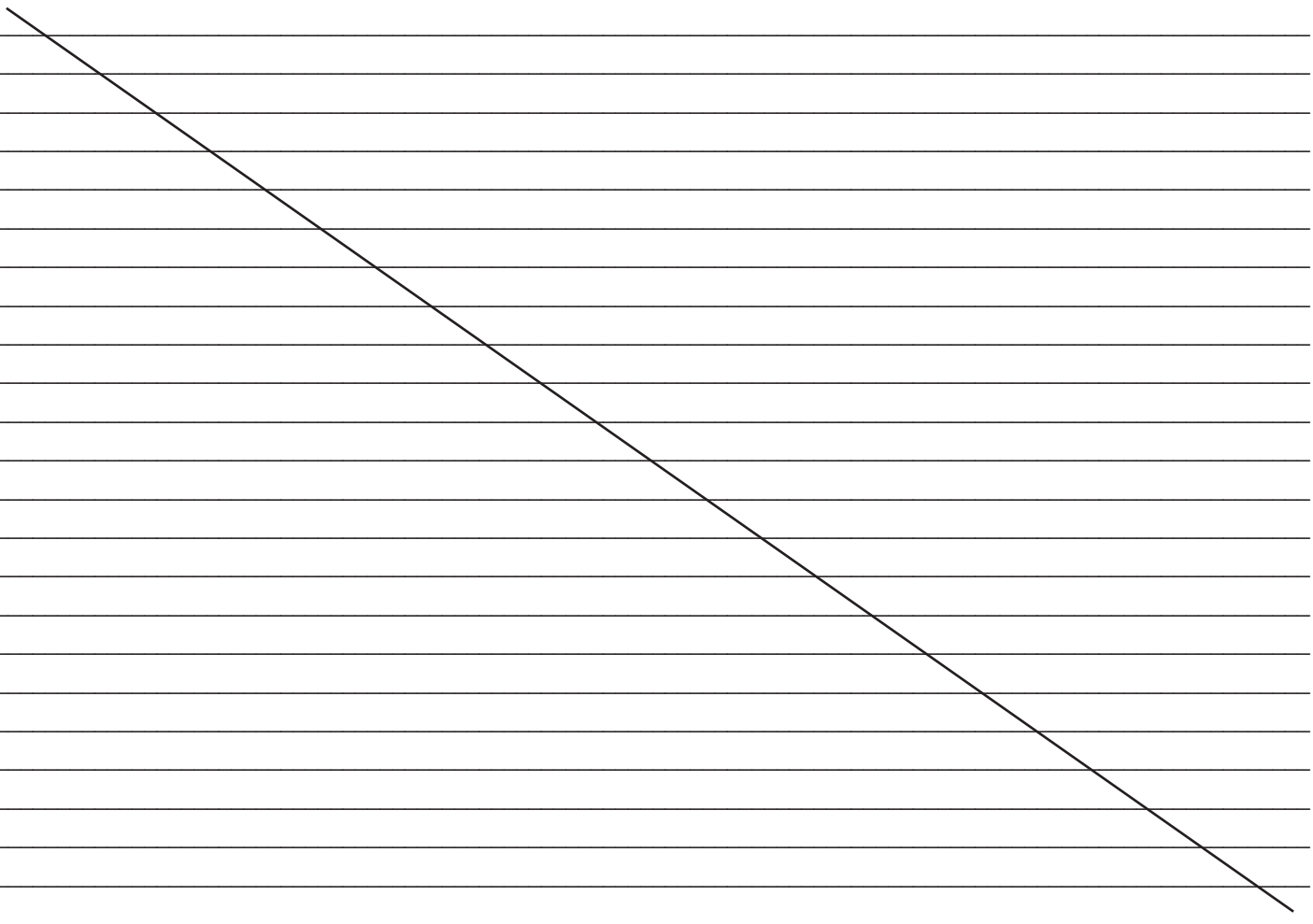
L-UWL-DUP-1 @ L-TMW-1

RPD exceeds control limit (20%) for iron. Result qualified as estimate.

Matrix Spike/Matrix Spike Duplicate

3698973/3698974: MSD low for calcium. MS and RPD OK. No qualification necessary.

3700775: MS recovery low for calcium. RPD OK. Associated with unrelated sample, therefore no qualification necessary.



QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Data Qualification:

Sample Name	Constituent(s)	Result	Qualifier	Reason
L-MW-26	Iron	50.0	U	Detected in method blank, result < RL
L-TMW-1	Chloride	3.6	J	Result > Reporting limit & Result < 10x method blank.
L-TMW-2	"	4.4	J	"
L-TMW-3	"	1.8	J	"
L-UWL-DUP-1	"	3.6	J	"
L-UWL-FB-1	"	1.0	U	Detection in method blank. Result < RL
L-TMW-3	Iron	85.2	J	Result > RL & < 10x field blank
L-TMW-1	"	48.9	J	RPD exceeds control
L-UWL-DUP-1	"	32.7	J	"

Signature: _____ Date: 10/30/2025

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

December 16, 2025

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

RE: Project: AMEREN LCL1
Pace Project No.: 60484583

Dear Mark Haddock:

Enclosed are the analytical results for sample(s) received by the laboratory on October 22, 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: Report revised to remove parameters not required under the CCR Rule.

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

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

CERTIFICATIONS

Project: AMEREN LCL1
Pace Project No.: 60484583

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

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

SAMPLE SUMMARY

Project: AMEREN LCL1
Pace Project No.: 60484583

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60484583001	**L-TMW-1**	Water	10/20/25 12:32	10/22/25 08:50
60484583002	**L-TMW-2**	Water	10/20/25 11:01	10/22/25 08:50
60484583003	**L-TMW-3**	Water	10/20/25 09:56	10/22/25 08:50
60484583004	**L-UWL-DUP-1**	Water	10/20/25 00:00	10/22/25 08:50
60484583005	**L-UWL-FB-1**	Water	10/20/25 12:54	10/22/25 08:50
60484583006	**L-UWL-MS-1**	Water	10/20/25 11:01	10/22/25 08:50
60484583007	**L-UWL-MSD-1**	Water	10/20/25 11:01	10/22/25 08:50
60484431017	**L-MW-26**	Water	10/21/25 12:02	10/22/25 08:50
60484431013	**L-BMW-1S**	Water	10/21/25 11:06	10/22/25 08:50
60484431014	**L-BMW-2S**	Water	10/21/25 09:05	10/22/25 08:50

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

SAMPLE ANALYTE COUNT

Project: AMEREN LCL1
Pace Project No.: 60484583

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60484583001	**L-TMW-1**	EPA 200.7	ARMN	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484583002	**L-TMW-2**	EPA 200.7	ARMN	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484583003	**L-TMW-3**	EPA 200.7	ARMN	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484583004	**L-UWL-DUP-1**	EPA 200.7	ARMN	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484583005	**L-UWL-FB-1**	EPA 200.7	ARMN	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	AJWM	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484431017	**L-MW-26**	EPA 200.7	ARMN	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484431013	**L-BMW-1S**	EPA 200.7	ARMN	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K
60484431014	**L-BMW-2S**	EPA 200.7	ARMN	7	PASI-K
		EPA 300.0	MLL	3	PASI-SA
		SM 2320B	EMB	1	PASI-K
		SM 2540C	DLJ	1	PASI-K

PASI-K = Pace Analytical Services - Kansas City
PASI-SA = Pace Analytical Services - Salina

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ANALYTICAL RESULTS

Project: AMEREN LCL1
Pace Project No.: 60484583

Sample: L-TMW-1 **Lab ID: 60484583001** Collected: 10/20/25 12:32 Received: 10/22/25 08:50 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	**116**	ug/L	100	33.2	1	10/23/25 09:34	11/11/25 12:29	7440-42-8	
Calcium	**141000**	ug/L	200	45.3	1	10/23/25 09:34	11/11/25 12:29	7440-70-2	
Iron	**56.1**	ug/L	50.0	15.4	1	10/23/25 09:34	11/11/25 12:29	7439-89-6	
Magnesium	**37200**	ug/L	50.0	21.1	1	10/23/25 09:34	11/11/25 12:29	7439-95-4	
Manganese	**136**	ug/L	5.0	0.42	1	10/23/25 09:34	11/11/25 12:29	7439-96-5	
Potassium	**5310**	ug/L	500	45.2	1	10/23/25 09:34	11/11/25 12:29	7440-09-7	
Sodium	**9200**	ug/L	500	31.8	1	10/23/25 09:34	11/11/25 12:29	7440-23-5	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**4.8**	mg/L	1.0	0.18	1		10/28/25 11:57	16887-00-6	
Fluoride	**0.14**	mg/L	0.10	0.040	1		10/28/25 11:57	16984-48-8	
Sulfate	**43.7**	mg/L	5.0	0.48	5		10/28/25 18:18	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**470**	mg/L	20.0	10.5	1		10/31/25 16:53		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**567**	mg/L	10.0	10.0	1		10/27/25 10:56		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AMEREN LCL1
Pace Project No.: 60484583

Sample: L-TMW-2 **Lab ID: 60484583002** Collected: 10/20/25 11:01 Received: 10/22/25 08:50 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	**125**	ug/L	100	33.2	1	10/23/25 09:34	11/11/25 12:23	7440-42-8	
Calcium	**202000**	ug/L	200	45.3	1	10/23/25 09:34	11/11/25 12:23	7440-70-2	M1,P6
Iron	**261**	ug/L	50.0	15.4	1	10/23/25 09:34	11/11/25 12:23	7439-89-6	
Magnesium	**48500**	ug/L	50.0	21.1	1	10/23/25 09:34	11/11/25 12:23	7439-95-4	
Manganese	**2420**	ug/L	5.0	0.42	1	10/23/25 09:34	11/11/25 12:23	7439-96-5	
Potassium	**6610**	ug/L	500	45.2	1	10/23/25 09:34	11/11/25 12:23	7440-09-7	
Sodium	**12300**	ug/L	500	31.8	1	10/23/25 09:34	11/11/25 12:23	7440-23-5	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**8.8**	mg/L	1.0	0.18	1		10/28/25 12:09	16887-00-6	M1
Fluoride	**0.16**	mg/L	0.10	0.040	1		10/28/25 12:09	16984-48-8	
Sulfate	**110**	mg/L	10.0	0.96	10		10/28/25 18:55	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**654**	mg/L	20.0	10.5	1		10/31/25 16:52		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**785**	mg/L	13.3	13.3	1		10/27/25 10:56		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AMEREN LCL1
Pace Project No.: 60484583

Sample: L-TMW-3 **Lab ID: 60484583003** Collected: 10/20/25 09:56 Received: 10/22/25 08:50 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	**92.7J**	ug/L	100	33.2	1	10/23/25 09:34	11/11/25 12:31	7440-42-8	
Calcium	**130000**	ug/L	200	45.3	1	10/23/25 09:34	11/11/25 12:31	7440-70-2	
Iron	**72.3**	ug/L	50.0	15.4	1	10/23/25 09:34	11/11/25 12:31	7439-89-6	
Magnesium	**25200**	ug/L	50.0	21.1	1	10/23/25 09:34	11/11/25 12:31	7439-95-4	
Manganese	**527**	ug/L	5.0	0.42	1	10/23/25 09:34	11/11/25 12:31	7439-96-5	
Potassium	**5340**	ug/L	500	45.2	1	10/23/25 09:34	11/11/25 12:31	7440-09-7	
Sodium	**5100**	ug/L	500	31.8	1	10/23/25 09:34	11/11/25 12:31	7440-23-5	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**3.1**	mg/L	1.0	0.18	1		10/28/25 12:46	16887-00-6	
Fluoride	**0.17**	mg/L	0.10	0.040	1		10/28/25 12:46	16984-48-8	
Sulfate	**35.7**	mg/L	5.0	0.48	5		10/28/25 19:32	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**426**	mg/L	20.0	10.5	1		10/31/25 16:53		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**485**	mg/L	10.0	10.0	1		10/27/25 10:59		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AMEREN LCL1
Pace Project No.: 60484583

Sample: L-UWL-DUP-1 **Lab ID: 60484583004** Collected: 10/20/25 00:00 Received: 10/22/25 08:50 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	**94.5J**	ug/L	100	33.2	1	10/23/25 09:34	11/11/25 12:33	7440-42-8	
Calcium	**133000**	ug/L	200	45.3	1	10/23/25 09:34	11/11/25 12:33	7440-70-2	
Iron	**67.5**	ug/L	50.0	15.4	1	10/23/25 09:34	11/11/25 12:33	7439-89-6	
Magnesium	**26000**	ug/L	50.0	21.1	1	10/23/25 09:34	11/11/25 12:33	7439-95-4	
Manganese	**533**	ug/L	5.0	0.42	1	10/23/25 09:34	11/11/25 12:33	7439-96-5	
Potassium	**5590**	ug/L	500	45.2	1	10/23/25 09:34	11/11/25 12:33	7440-09-7	
Sodium	**5280**	ug/L	500	31.8	1	10/23/25 09:34	11/11/25 12:33	7440-23-5	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**3.2**	mg/L	1.0	0.18	1		10/28/25 12:58	16887-00-6	
Fluoride	**0.16**	mg/L	0.10	0.040	1		10/28/25 12:58	16984-48-8	
Sulfate	**35.7**	mg/L	5.0	0.48	5		10/28/25 19:45	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**432**	mg/L	20.0	10.5	1		10/31/25 16:53		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**487**	mg/L	10.0	10.0	1		10/27/25 10:59		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AMEREN LCL1
Pace Project No.: 60484583

Sample: L-UWL-FB-1 **Lab ID: 60484583005** Collected: 10/20/25 12:54 Received: 10/22/25 08:50 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	10/23/25 09:34	11/11/25 12:34	7440-42-8	
Calcium	**<45.3**	ug/L	200	45.3	1	10/23/25 09:34	11/11/25 12:34	7440-70-2	
Iron	**<15.4**	ug/L	50.0	15.4	1	10/23/25 09:34	11/11/25 12:34	7439-89-6	
Magnesium	**<21.1**	ug/L	50.0	21.1	1	10/23/25 09:34	11/11/25 12:34	7439-95-4	
Manganese	**<0.42**	ug/L	5.0	0.42	1	10/23/25 09:34	11/11/25 12:34	7439-96-5	
Potassium	**<45.2**	ug/L	500	45.2	1	10/23/25 09:34	11/11/25 12:34	7440-09-7	
Sodium	**<31.8**	ug/L	500	31.8	1	10/23/25 09:34	11/11/25 12:34	7440-23-5	
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		10/28/25 13:10	16887-00-6	
Fluoride	**<0.040**	mg/L	0.10	0.040	1		10/28/25 13:10	16984-48-8	
Sulfate	**<0.096**	mg/L	1.0	0.096	1		10/28/25 13:10	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		10/31/25 16:53		
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		10/27/25 11:00		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AMEREN LCL1
Pace Project No.: 60484583

Sample: L-MW-26 **Lab ID: 60484431017** Collected: 10/21/25 12:02 Received: 10/22/25 08:50 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	**66.1J**	ug/L	100	33.2	1	10/23/25 09:34	11/11/25 10:45	7440-42-8	
Calcium	**128000**	ug/L	200	45.3	1	10/23/25 09:34	11/11/25 10:45	7440-70-2	
Iron	**<15.4**	ug/L	50.0	15.4	1	10/23/25 09:34	11/11/25 10:45	7439-89-6	
Magnesium	**22300**	ug/L	50.0	21.1	1	10/23/25 09:34	11/11/25 10:45	7439-95-4	
Manganese	**17.4**	ug/L	5.0	0.42	1	10/23/25 09:34	11/11/25 10:45	7439-96-5	
Potassium	**4510**	ug/L	500	45.2	1	10/23/25 09:34	11/11/25 10:45	7440-09-7	
Sodium	**8100**	ug/L	500	31.8	1	10/23/25 09:34	11/11/25 10:45	7440-23-5	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**6.2**	mg/L	1.0	0.18	1		11/01/25 14:35	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	0.040	1		11/01/25 14:35	16984-48-8	
Sulfate	**17.2**	mg/L	1.0	0.096	1		11/01/25 14:35	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**409**	mg/L	20.0	10.5	1		11/04/25 21:53		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**469**	mg/L	10.0	10.0	1		10/28/25 10:57		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AMEREN LCL1
Pace Project No.: 60484583

Sample: L-BMW-1S **Lab ID: 60484431013** Collected: 10/21/25 11:06 Received: 10/22/25 08:50 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	**83.9J**	ug/L	100	33.2	1	10/23/25 09:34	11/11/25 10:32	7440-42-8	
Calcium	**191000**	ug/L	200	45.3	1	10/23/25 09:34	11/11/25 10:32	7440-70-2	
Iron	**24100**	ug/L	50.0	15.4	1	10/23/25 09:34	11/11/25 10:32	7439-89-6	
Magnesium	**34500**	ug/L	50.0	21.1	1	10/23/25 09:34	11/11/25 10:32	7439-95-4	
Manganese	**2540**	ug/L	5.0	0.42	1	10/23/25 09:34	11/11/25 10:32	7439-96-5	
Potassium	**5230**	ug/L	500	45.2	1	10/23/25 09:34	11/11/25 10:32	7440-09-7	
Sodium	**8740**	ug/L	500	31.8	1	10/23/25 09:34	11/11/25 10:32	7440-23-5	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**5.3**	mg/L	1.0	0.18	1		11/01/25 13:46	16887-00-6	
Fluoride	**0.075J**	mg/L	0.10	0.040	1		11/01/25 13:46	16984-48-8	
Sulfate	**57.7**	mg/L	5.0	0.48	5		11/01/25 20:54	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**575**	mg/L	20.0	10.5	1		11/04/25 21:32		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**660**	mg/L	13.3	13.3	1		10/28/25 10:56		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: AMEREN LCL1
Pace Project No.: 60484583

Sample: L-BMW-2S **Lab ID: 60484431014** Collected: 10/21/25 09:05 Received: 10/22/25 08:50 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	**51.5J**	ug/L	100	33.2	1	10/23/25 09:34	11/11/25 10:34	7440-42-8	
Calcium	**130000**	ug/L	200	45.3	1	10/23/25 09:34	11/11/25 10:34	7440-70-2	
Iron	**36.3J**	ug/L	50.0	15.4	1	10/23/25 09:34	11/11/25 10:34	7439-89-6	
Magnesium	**19300**	ug/L	50.0	21.1	1	10/23/25 09:34	11/11/25 10:34	7439-95-4	
Manganese	**4.0J**	ug/L	5.0	0.42	1	10/23/25 09:34	11/11/25 10:34	7439-96-5	
Potassium	**5390**	ug/L	500	45.2	1	10/23/25 09:34	11/11/25 10:34	7440-09-7	
Sodium	**4280**	ug/L	500	31.8	1	10/23/25 09:34	11/11/25 10:34	7440-23-5	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Salina								
Chloride	**1.4**	mg/L	1.0	0.18	1		11/01/25 13:58	16887-00-6	
Fluoride	**0.14**	mg/L	0.10	0.040	1		11/01/25 13:58	16984-48-8	
Sulfate	**13.4**	mg/L	1.0	0.096	1		11/01/25 13:58	14808-79-8	
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Kansas City								
Alkalinity, Total as CaCO3	**378**	mg/L	20.0	10.5	1		11/04/25 21:39		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Kansas City								
Total Dissolved Solids	**466**	mg/L	10.0	10.0	1		10/28/25 10:56		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60484583

QC Batch: 952613
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484431013, 60484431014, 60484431017

METHOD BLANK: 3775499 Matrix: Water
Associated Lab Samples: 60484431013, 60484431014, 60484431017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	ug/L	<33.2	100	33.2	11/11/25 10:21	
Calcium	ug/L	<45.3	200	45.3	11/11/25 10:21	
Iron	ug/L	<15.4	50.0	15.4	11/11/25 10:21	
Magnesium	ug/L	<21.1	50.0	21.1	11/11/25 10:21	
Manganese	ug/L	<0.42	5.0	0.42	11/11/25 10:21	
Potassium	ug/L	<45.2	500	45.2	11/11/25 10:21	
Sodium	ug/L	<31.8	500	31.8	11/11/25 10:21	

LABORATORY CONTROL SAMPLE: 3775500

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	1000	952	95	85-115	
Calcium	ug/L	10000	10000	100	85-115	
Iron	ug/L	10000	10100	101	85-115	
Magnesium	ug/L	10000	9750	97	85-115	
Manganese	ug/L	1000	999	100	85-115	
Potassium	ug/L	10000	9860	99	85-115	
Sodium	ug/L	10000	9810	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3775501 3775502

Parameter	Units	60484431021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	ug/L	1020	1000	1000	1950	2010	94	100	70-130	3	20	
Calcium	ug/L	119000	10000	10000	126000	129000	72	96	70-130	2	20	
Iron	ug/L	3800	10000	10000	13700	14200	99	104	70-130	4	20	
Magnesium	ug/L	18400	10000	10000	27700	28200	92	97	70-130	2	20	
Manganese	ug/L	503	1000	1000	1470	1510	97	101	70-130	3	20	
Potassium	ug/L	7250	10000	10000	16800	17500	95	103	70-130	4	20	
Sodium	ug/L	74300	10000	10000	82300	83700	80	94	70-130	2	20	

SAMPLE DUPLICATE: 3785256

Parameter	Units	60484431020 Result	Dup Result	RPD	Max RPD	Qualifiers
Boron	ug/L	51.2J	50.9J		20	
Calcium	ug/L	137000	137000	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

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60484583

SAMPLE DUPLICATE: 3785256

Parameter	Units	60484431020 Result	Dup Result	RPD	Max RPD	Qualifiers
Iron	ug/L	8570	8710	2	19	
Magnesium	ug/L	34000	34000	0	20	
Manganese	ug/L	269	270	1	12	
Potassium	ug/L	4250	4200	1	20	
Sodium	ug/L	10600	10600	0	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60484583

QC Batch: 952630
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484583001, 60484583002, 60484583003, 60484583004, 60484583005

METHOD BLANK: 3775555 Matrix: Water
Associated Lab Samples: 60484583001, 60484583002, 60484583003, 60484583004, 60484583005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	ug/L	<33.2	100	33.2	11/11/25 12:20	
Calcium	ug/L	<45.3	200	45.3	11/11/25 12:20	
Iron	ug/L	<15.4	50.0	15.4	11/11/25 12:20	
Magnesium	ug/L	<21.1	50.0	21.1	11/11/25 12:20	
Manganese	ug/L	<0.42	5.0	0.42	11/11/25 12:20	
Potassium	ug/L	<45.2	500	45.2	11/11/25 12:20	
Sodium	ug/L	<31.8	500	31.8	11/11/25 12:20	

LABORATORY CONTROL SAMPLE: 3775556

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	ug/L	1000	950	95	85-115	
Calcium	ug/L	10000	9980	100	85-115	
Iron	ug/L	10000	9800	98	85-115	
Magnesium	ug/L	10000	9690	97	85-115	
Manganese	ug/L	1000	981	98	85-115	
Potassium	ug/L	10000	9780	98	85-115	
Sodium	ug/L	10000	9760	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3775557 3775558

Parameter	Units	60484583002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	ug/L	125	1000	1000	1090	1110	96	98	70-130	2	20	
Calcium	ug/L	202000	10000	10000	212000	209000	98	67	70-130	1	20	M1
Iron	ug/L	261	10000	10000	10200	10300	99	101	70-130	2	20	
Magnesium	ug/L	48500	10000	10000	58000	57400	95	89	70-130	1	20	
Manganese	ug/L	2420	1000	1000	3380	3310	95	89	70-130	2	20	
Potassium	ug/L	6610	10000	10000	16800	16700	101	101	70-130	0	20	
Sodium	ug/L	12300	10000	10000	22000	22000	97	97	70-130	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60484583

QC Batch: 953128
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Salina
Associated Lab Samples: 60484583001, 60484583002, 60484583003, 60484583004, 60484583005

METHOD BLANK: 3777712 Matrix: Water
Associated Lab Samples: 60484583001, 60484583002, 60484583003, 60484583004, 60484583005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.18	1.0	0.18	10/28/25 08:56	
Fluoride	mg/L	<0.040	0.10	0.040	10/28/25 08:56	
Sulfate	mg/L	<0.096	1.0	0.096	10/28/25 08:56	

LABORATORY CONTROL SAMPLE: 3777713

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	98	90-110	
Fluoride	mg/L	2.5	2.7	108	90-110	
Sulfate	mg/L	5	5.1	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3777714 3777715

Parameter	Units	60483723002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	16.4	10	10	25.6	25.8	91	94	80-120	1	15	
Fluoride	mg/L	0.30	2.5	2.5	2.8	2.8	101	99	80-120	2	15	
Sulfate	mg/L	44.9	25	25	69.1	69.8	97	100	80-120	1	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3777716 3777717

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

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REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60484583

QC Batch: 953722
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Salina
Associated Lab Samples: 60484431013, 60484431014, 60484431017

METHOD BLANK: 3779885 Matrix: Water
Associated Lab Samples: 60484431013, 60484431014, 60484431017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.18	1.0	0.18	11/01/25 10:41	
Fluoride	mg/L	<0.040	0.10	0.040	11/01/25 10:41	
Sulfate	mg/L	<0.096	1.0	0.096	11/01/25 10:41	

LABORATORY CONTROL SAMPLE: 3779886

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	95	90-110	
Fluoride	mg/L	2.5	2.6	103	90-110	
Sulfate	mg/L	5	4.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3779887 3779888

Parameter	Units	60484431006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	21.0	10	10	29.8	29.2	89	83	80-120	2	15	
Fluoride	mg/L	0.23	2.5	2.5	2.7	2.7	101	100	80-120	1	15	
Sulfate	mg/L	178	100	100	274	278	97	100	80-120	1	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3779889 3779890

Parameter	Units	60484431020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.9	5	5	9.4	9.3	90	88	80-120	1	15	
Fluoride	mg/L	0.16	2.5	2.5	2.7	2.7	100	100	80-120	1	15	
Sulfate	mg/L	17.6	10	10	27.1	26.8	94	92	80-120	1	15	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60484583

QC Batch: 953708 | Analysis Method: SM 2320B
QC Batch Method: SM 2320B | Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484583001, 60484583002, 60484583003, 60484583004, 60484583005

METHOD BLANK: 3779855 Matrix: Water
Associated Lab Samples: 60484583001, 60484583002, 60484583003, 60484583004, 60484583005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	10/31/25 16:51	

LABORATORY CONTROL SAMPLE: 3779856

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	496	99	90-110	

SAMPLE DUPLICATE: 3779857

Parameter	Units	60484431007 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	104	102	2	10	

SAMPLE DUPLICATE: 3779858

Parameter	Units	60484583002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	654	632	3	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60484583

QC Batch: 954127
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484431013, 60484431014, 60484431017

METHOD BLANK: 3781518 Matrix: Water
Associated Lab Samples: 60484431013, 60484431014, 60484431017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<10.5	20.0	10.5	11/04/25 21:17	

LABORATORY CONTROL SAMPLE: 3781519

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	484	97	90-110	

SAMPLE DUPLICATE: 3781520

Parameter	Units	60484433004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	144	262	58	10	D6

SAMPLE DUPLICATE: 3781521

Parameter	Units	60484432009 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	64.4	57.9	11	10	D6

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60484583

QC Batch: 953036
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484583001, 60484583002, 60484583003, 60484583004, 60484583005

METHOD BLANK: 3777331 Matrix: Water
Associated Lab Samples: 60484583001, 60484583002, 60484583003, 60484583004, 60484583005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	10/27/25 10:55	

LABORATORY CONTROL SAMPLE: 3777332

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

SAMPLE DUPLICATE: 3777333

Parameter	Units	60484431028 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	<5.0	<5.0		10	

SAMPLE DUPLICATE: 3777334

Parameter	Units	60484583002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	785	787	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: AMEREN LCL1
Pace Project No.: 60484583

QC Batch: 953151
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60484431013, 60484431014, 60484431017

METHOD BLANK: 3777820 Matrix: Water
Associated Lab Samples: 60484431013, 60484431014, 60484431017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<5.0	5.0	5.0	10/28/25 10:56	

LABORATORY CONTROL SAMPLE: 3777821

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

SAMPLE DUPLICATE: 3777822

Parameter	Units	60484433004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	639	645	1	10	

SAMPLE DUPLICATE: 3777823

Parameter	Units	60484432009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1060	1060	0	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: AMEREN LCL1
Pace Project No.: 60484583

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

Pace Analytical Services, LLC
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Lenexa, KS 66219
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN LCL1
Pace Project No.: 60484583

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60484431013	**L-BMW-1S**	EPA 200.7	952613	EPA 200.7	952704
60484431014	**L-BMW-2S**	EPA 200.7	952613	EPA 200.7	952704
60484431017	**L-MW-26**	EPA 200.7	952613	EPA 200.7	952704
60484583001	**L-TMW-1**	EPA 200.7	952630	EPA 200.7	952709
60484583002	**L-TMW-2**	EPA 200.7	952630	EPA 200.7	952709
60484583003	**L-TMW-3**	EPA 200.7	952630	EPA 200.7	952709
60484583004	**L-UWL-DUP-1**	EPA 200.7	952630	EPA 200.7	952709
60484583005	**L-UWL-FB-1**	EPA 200.7	952630	EPA 200.7	952709
60484431013	**L-BMW-1S**	EPA 300.0	953722		
60484431014	**L-BMW-2S**	EPA 300.0	953722		
60484431017	**L-MW-26**	EPA 300.0	953722		
60484583001	**L-TMW-1**	EPA 300.0	953128		
60484583002	**L-TMW-2**	EPA 300.0	953128		
60484583003	**L-TMW-3**	EPA 300.0	953128		
60484583004	**L-UWL-DUP-1**	EPA 300.0	953128		
60484583005	**L-UWL-FB-1**	EPA 300.0	953128		
60484431013	**L-BMW-1S**	SM 2320B	954127		
60484431014	**L-BMW-2S**	SM 2320B	954127		
60484431017	**L-MW-26**	SM 2320B	954127		
60484583001	**L-TMW-1**	SM 2320B	953708		
60484583002	**L-TMW-2**	SM 2320B	953708		
60484583003	**L-TMW-3**	SM 2320B	953708		
60484583004	**L-UWL-DUP-1**	SM 2320B	953708		
60484583005	**L-UWL-FB-1**	SM 2320B	953708		
60484431013	**L-BMW-1S**	SM 2540C	953151		
60484431014	**L-BMW-2S**	SM 2540C	953151		
60484431017	**L-MW-26**	SM 2540C	953151		
60484583001	**L-TMW-1**	SM 2540C	953036		
60484583002	**L-TMW-2**	SM 2540C	953036		
60484583003	**L-TMW-3**	SM 2540C	953036		
60484583004	**L-UWL-DUP-1**	SM 2540C	953036		
60484583005	**L-UWL-FB-1**	SM 2540C	953036		

WO# : 60484583

60484583

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

Client Name: Rocksmith Geoeng

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

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

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐ Cooling process has begun ☐

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

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

Cooler Temperature (°C): As-read 0.9/1.5 Corr. Factor 0.0 Corrected 0.9/1.5

Temperature should be above freezing to 6°C 1.9/16.2 1.9/16.2

Date and initials of person examining contents: PM 10/22/25

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

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

CHAIN-OF-CUSTODY Analytical Request Document

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

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

6a184583

Company Name:	Rocksmith Geoengineering, LLC.	Contact/Report To:	Mark Haddock
Street Address:	2320 Creve Coeur Mill Road Maryland Heights, MO 63043	Phone #:	314-974-6578
		E-Mail:	mark.haddock@rocksmithgeo.com
		Cc E-Mail:	
Customer Project #:			
Project Name:	AMEREN LCL1	Invoice To:	Mark Haddock
		Invoice E-Mail:	mark.haddock@rocksmithgeo.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET		County / State origin of sample(s):	Missouri
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other	Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No	Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other	DW PWSID # or WW Permit # as applicable:
	Date Results Requested:	Field Filtered (if applicable): [ ] Yes [ ] No	Analysis:

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

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	App III and Cat/An Metals*	App IV Metals**	UWL Metals***	COD & TOC	Cl/F/SO4/TDS/Alkalinity	Radium 226/228	Total Organic Halogens				Sample Comment
L-TMW-1	WT	G			10/20/25	1232	6			✓	✓	✓	✓	✓	✓	✓				
L-TMW-2	WT	G			10/20/25	1101	6			✓	✓	✓	✓	✓	✓	✓				
L-TMW-3	WT	G			10/20/25	0956	6			✓	✓	✓	✓	✓	✓	✓				
L-UWL-DUP-1	WT	G			10/20/25	—	6			✓	✓	✓	✓	✓	✓	✓				
L-UWL-FB-1	WT	G			10/20/25	1254	6			✓	✓	✓	✓	✓	✓	✓				
L-UML-MS-1	WT	G			10/20/25	1101	6			✓	✓	✓	✓	✓	✓	✓				Taken @ TMW-2
L-UML-MSD-1	WT	G			10/20/25	1101	6			✓	✓	✓	✓	✓	✓	✓				
L-BMW-1S	WT	G			10/21/25	1106	6			✓	✓	✓	✓	✓	✓	✓				
L-BMW-2S	WT	G			10/21/25	0905	6			✓	✓	✓	✓	✓	✓	✓				
L-MW-26	WT	G			10/21/25	1202	6			✓	✓	✓	✓	✓	✓	✓				

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

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

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

Lab Use Only

Proj. Mgr: Jamie Church

AcctNum / Client ID:

Table #:

Profile / Template: 15857

Prelog / Bottle Ord. ID: EZ 3303689

Preservation non-conformance identified for sample

Additional Instructions from Pace®:
* App III and Cat/An Metals* - EPA 200.7: Ba, Ca, Fe, Mg, Mn, K, Na
**App IV Metals -EPA 200.7: Ba,Be,Co,Pb, Li,Mo and 200.8 Metals - Sb, As, Cd, Cr, Se,Tl +7470 Hg
***UWL Metals - 200.7: Al, Cu, Ni, Ag, Zn + Hardness

Collected By: (Printed Name) John Rem

Signature:

Customer Remarks / Special Conditions / Possible Hazards:

PM 10/22/25

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
3 4	T-301	0.0	0.9	0.9	

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
	10/21/25 1600		10/22/25 0850	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In- Person [ ] Courier [ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 1

Client: Rocksmith Geoeng Profile/EZ #: 3303689

Site: Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3B	BP3Z	WPDU	ZPLC	Other		
1	WT												2						1			2	1									
2	↓												6						3			↓	3									
3													2						1				1									
4													↓						↓				↓									
5																																
6													(ON 14 109 RAD)																			
7																																
8	↓												(DO NOT LOG)									↓										
9																																
10																																
11																																
12																																

Container Codes

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

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

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

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

Work Order Number: 6c484583

Internal Transfer Chain of Custody

I073

Rush Multiplier____X

Samples Pre-Logged into eCOC

State Of Origin: MO

Cert. Needed: ☐ Yes ☒ No

Workorder: 60484583 **Workorder Name:** AMEREN LCL1

Owner Received Date: 10/22/2025 **Results Requested By:** 11/5/2025

Report To	Subcontract To
Jamie Church Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 314-838-7223	Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: H2SO4						Requested Analysis: Total Organic Halogens												LAB USE ONLY
1	L-TMW-1	PS	10/20/2025 12:32	60484583001	Water	1						X												01
2	L-TMW-2	RQS	10/20/2025 11:01	60484583002	Water	3						X												02
3	L-TMW-3	PS	10/20/2025 09:56	60484583003	Water	1						X												03
4	L-UWL-DUP-1	PS	10/20/2025 00:00	60484583004	Water	1						X												04
5	L-UWL-FB-1	PS	10/20/2025 12:54	60484583005	Water	1						X												05

Transfers	Released By	Date/Time	Received By	Date/Time
1	DF Pace	10/24 1700		10-25-25 0830
2				
3				

Comments

LOCATION: 60-R28-S1

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

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

4453 8939 0083 0.270=0.2 TLAG

Sample Receipt Checklist

COC Seal Present/Intact:	__Y__N__NP	If Applicable	
COC Signed/Accurate:	__Y__N	VOA Zero Headspace:	__Y__N
Bottles arrive intact:	__Y__N	Pres. Correct/Check:	__Y__N
Correct bottles used:	__Y__N		
Sufficient volume sent:	__Y__N	Condition: ___NCF ___OK	
RA Screen <0.5 mR/hr:	__Y__N		

INTER_LABORATORY WORK ORDER # 60484583
(To be completed by sending lab)

Ship To:
Pace National
12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone (615) 758-5858

Sending Project No:	60484583
Receiving Project No:	
Check Box for Consolidated Invoice:	☐
Date Prepared:	10/22/25
REQUESTED COMPLETION DATE:	**11/5/2025**

Sending Region	IR60-Kansas	Sending Project Mgr.	Jamie Church
Receiving Region	IR850-Pace National	External Client	Rocksmith Geoengineering, LLC.
State of Sample Origin	MO	QC Deliverable	STD REPORT

All questions should be addressed to sending project manager.

Requested Reportable Units _____ Report Wet or Dry Weight? _____ ☐ IRWO Lab Need to run? Cert. Needed No-MO

WORK REQUESTED

Method Description	Container Type	Quantity of containers	Preservative	Quantity of Samples	Acode	Acode Desc
Total Organic Halogens	AG3S	7	H2SO4	5	SI-21WET	SUB PASI WET

Special Requirements: Report D, QC Limits, MDLs (D),Golder Ameren (1010)

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region: ☐ Yes ☒ No

DISPOSITION of FORM

Original sent to the receiving lab - Copy kept at the sending lab.

When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

Internal Transfer Chain of Custody

Pace

☐ Rush Multiplier____X
☒ Samples Pre-Logged into eCOC

State Of Origin: MO
Cert. Needed: ☐ Yes ☒ No
Owner Received Date: 10/22/2025 **Results Requested By:** 11/5/2025

Workorder: 60484583 **Workorder Name:** AMEREN LCL1

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

WO# : 30821131

30821131

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3	Requested Analysis Radium 226	Radium 228	LAB USE ONLY
1	L-TMW-1	PS	10/20/2025 12:32	60484583001	Water	2	X	X	001
2	L-TMW-2	RQS	10/20/2025 11:01	60484583002	Water	2	X	X	002
3	L-TMW-3	PS	10/20/2025 09:56	60484583003	Water	2	X	X	003
4	L-UWL-DUP-1	PS	10/20/2025 00:00	60484583004	Water	2	X	X	004
5	L-UWL-FB-1	PS	10/20/2025 12:54	60484583005	Water	2	X	X	005
6	L-UWL-MS-1	PS	10/20/2025 11:01	60484583006	Water	2	X	X	006
7	L-UWL-MSD-1	PS	10/20/2025 11:01	60484583007	Water	2	X	X	007

Transfers	Released By	Date/Time	Received By	Date/Time
1	JAPale	10/24/25 1700	[signature]	10/27/25 9:10
2				
3				

Comments

*Note: Parent sample for MS/MSD (006/007) is 002.

LOCATION: RECEIVING

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

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

DC#_Title: ENV-FRM-GBUR-0088 v0 Greensburg	WO#: 30821131
Effective Date: 06/24/2025	PM: CMC Due Date: 11/17/25
	CLIENT: PACE_60_LEKS

Client Name: Pace KS

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

Tracking Number: 4453 8938 9804

Initial / Date

Examined By: ES 10-27-25

Labeled By: ES 10-27-25

Temped By: —

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

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

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

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 10043241 / D.P.D. Residual Chlorine Lot # —
Chain of Custody Present	/			1.
Chain of Custody Filled Out:	/			2.
-Were client corrections present on COC		/		
Chain of Custody Relinquished	/			3.
Sampler Name & Signature on COC:		/		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	/			5.
Samples Arrived within Hold Time:	/			6.
Short Hold Time Analysis (<72hr remaining):		/		7.
Rush Turn Around Time Requested:		/		8.
Sufficient Volume:	/			9.
Correct Containers Used:	/			10.
-Pace Containers Used	/			
Containers Intact:	/			11.
Orthophosphate field filtered:			/	12.
Hex Cr Aqueous samples field filtered:			/	13.
Organic Samples checked for dechlorination			/	14:
Filtered volume received for dissolved tests: **Cr6+, Orthophosphate, DOC, Metals**			/	15:
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, TOX, LL Hg, Radon, non-aqueous matrix	/			16. pH < 2
All containers meet method preservation requirements:	/			Initial when completed ES / Date/Time of Preservation / Lot# of added Preservative
8260C/D: Headspace in VOA Vials (> 6mm)			/	17.
624.1: Headspace in VOA Vials (0mm)			/	18.
Radon: Headspace in RAD Vials (0mm)			/	19.
Trip Blank Present:			/	Trip blank custody seal present? YES or NO
Rad Samples Screened <.05 mrem/hr.	/			Initial when completed PS / Date: 10/27/25 / Survey Meter SN: ZS014380

Comments:

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

Memorandum

December 17, 2025

To:	Project File Rocksmith Geoengineering, LLC	**Project Number:**	23007-25
CC:	Mark Haddock, Jeffrey Ingram		
From:	Valerie Hurt	**Email:**	Valerie.Hurt@Rocksmithgeo.com
RE:	**Data Validation Summary, Labadie Energy Center – LCL1 – Data Package 60484583**		

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). When the associated sample result was a non-detect, and matrix spike recovery was below 10%, the result was rejected (R).

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Company Name: Rocksmith Geoengineering
Project Manager: J. Ingram
Project Name: Ameren LCL1
Project Number: 23007-25
Reviewer: V. Hurt
Validation Date: 12/17/2025

Laboratory: Pace Analytical
SDG #: 60484583
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 L-TMW-1, L-TMW-2, L-TMW-3, L-UWL-DUP-1, L-UWL-FB-1, L-UWL-MS-1, L-UWL-MSD-1, L-MW-26, L-BMW-1S, L-BMW-2S

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

Field Information	YES	NO	NA	COMMENTS
a) Sampling dates noted?	x			10/20/2025-10/21/2025
b) Sampling team indicated?	x			JTR/JDQ/VAH
c) Sample location noted?	x			
d) Sample depth indicated (Soils)?			x	
e) Sample type indicated (grab/composite)?	x			Grab
f) Field QC noted?	x			See Notes
g) Field parameters collected (note types)?	x			pH, Spec Cond, Turb, Temp, DO, ORP
h) Field Calibration within control limits?	x			
i) Notations of unacceptable field conditions/performances from field logs or field notes?		x		
j) Does the laboratory narrative indicate deficiencies?			x	No lab narrative.

Note Deficiencies:

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

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

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

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

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

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

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

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

Comments/Notes:

General:

Sulfate diluted in some samples, no qualification necessary.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Comments/Notes:

Field Blanks:

L-UWL-FB-1 @ L-TMW-1: No detects.

Field Duplicates:

L-UWL-DUP-1 @ L-TMW-3: Duplicate RPD's within control limits.

Lab Duplicates:

3781520: RPD exceeds limit of 10% for Alkalinity (58%), associated with an unrelated sample, no qualification necessary.

3781521: RPD exceeds limit of 10% for Alkalinity (11%), associated with an unrelated sample, no qualification necessary.

MS/MSD:

3775557/3775558: MSD recovery low for calcium, MS and RPD okay. Associated with sample -002, no qualification necessary.

3777716/3777717: MS/MSD recovery low for chloride, RPD okay. Associated with sample -002, result qualified as estimate.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Data Qualification:

Sample Name	Constituent(s)	Result	Qualifier	Reason
L-TMW-2	Chloride	8.8	J-	MS/MSD recovery low, RPD OK

Signature: _____ Date: 12/17/2025

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

December 23, 2025

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

RE: Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60487253

Dear Mark Haddock:

Enclosed are the analytical results for sample(s) received by the laboratory on December 09, 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

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

CERTIFICATIONS

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60487253

Pace Analytical Services Kansas

9608 Loiret Boulevard, Lenexa, KS 66219
EPA Lab Code: KS00021
Arkansas Certification #: 88-00679
Illinois Certification #: 200030
Colorado Division of Oil and Public Safety
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Oklahoma Certification #: 9205
Texas Certification #: T104704407
Utah Certification #: KS0002125-15
UDSA_CA : #KS-SC-DOM-25-01

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

SAMPLE SUMMARY

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60487253

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60487253001	**L-TMW-2**	Water	12/08/25 09:11	12/09/25 07:44
60487253002	**L-UWL-DUP-1**	Water	12/08/25 00:00	12/09/25 07:44
60487253003	**L-UWL-FB-1**	Water	12/08/25 09:26	12/09/25 07:44

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

SAMPLE ANALYTE COUNT

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60487253

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60487253001	**L-TMW-2**	EPA 300.0	GTS	1	PASI-K
60487253002	**L-UWL-DUP-1**	EPA 300.0	GTS	1	PASI-K
60487253003	**L-UWL-FB-1**	EPA 300.0	GTS	1	PASI-K

PASI-K = Pace Analytical Services - Kansas City

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

ANALYTICAL RESULTS

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60487253

Sample: L-TMW-2 **Lab ID: 60487253001** Collected: 12/08/25 09:11 Received: 12/09/25 07:44 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								
Chloride	**8.3**	mg/L	1.0	0.77	1		12/20/25 18:42	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60487253

Sample: L-UWL-DUP-1 **Lab ID: 60487253002** Collected: 12/08/25 00:00 Received: 12/09/25 07:44 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								
Chloride	**8.1**	mg/L	1.0	0.77	1		12/20/25 19:15	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60487253

Sample: L-UWL-FB-1 **Lab ID: 60487253003** Collected: 12/08/25 09:26 Received: 12/09/25 07:44 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								
Chloride	**<0.77**	mg/L	1.0	0.77	1		12/20/25 19:26	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60487253

QC Batch: 959321
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60487253001, 60487253002, 60487253003

METHOD BLANK: 3802006 Matrix: Water
Associated Lab Samples: 60487253001, 60487253002, 60487253003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<0.77	1.0	0.77	12/20/25 14:16	

LABORATORY CONTROL SAMPLE: 3802007

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.5	91	90-110	

MATRIX SPIKE SAMPLE: 3802010

Parameter	Units	60487593003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	204	250	397	77	80-120	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3802011 3802012

Parameter	Units	60487253001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	8.3	5	5	14.0	14.0	113	113	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

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

QUALIFIERS

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60487253

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.

Pace Analytical Services, LLC
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: AMEREN LCL1-VERIFICATION
Pace Project No.: 60487253

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60487253001	**L-TMW-2**	EPA 300.0	959321		
60487253002	**L-UWL-DUP-1**	EPA 300.0	959321		
60487253003	**L-UWL-FB-1**	EPA 300.0	959321		

	DC#_Title: ENV-FRM-LENE-0009_Sam	WO# : 60487253
Pace ANALYTICAL SERVICES	Revision: 3	Effective Date: 09/22/2

60487253

Client Name: RockSmith Geoengineering 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 ☐ Cooling process has begun ☐

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

Thermometer Used: T301 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): As-read 1.1 Corr. Factor 0.0 Corrected 1.1 / 0.9

Date and initials of person examining contents: 12/9/25 SA

Temperature should be above freezing to 6°C 0.9

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Pace Analytical™
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A — **Required** Client Information:

Company:	Rocksmith Geoengineering, LLC
Address:	5233 Roanoke Drive
	St. Charles, MO 63304
Email To:	mark.haddock@rocksmithgeo.com
Pho	314-974-5678 Fax
Requested Due Date/TAT:	Standard

Section B — **Required** Project Information:

Report To:	Mark Haddock
Copy To:	Jeffery Ingram, Grant Morey
Purchase Order No.:	COC #3
Project Name:	Ameren LCL1 - Verification Sampling
Project Number:	

Section C — Invoice Information:

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

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER

UST RCRA O _____

Site Location STATE: MO

Section D — **Required** Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRA DATE	COLLECTED COMPOSITE END/GRA TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis Filtered (Y/N): Y/N	Analysis Test: Chloride	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		N			60487253
1	L-TMW-2	WT	G			12/8/25	0911		1	1									X		
2	L-UWL-MS-1	WT	G				0911		1	1									X		Collected @ L-TMW-2
3	L-UWL-MSD-1	WT	G				0911		1	1									X		
4	L-UWL-DUP-1	WT	G						1	1									X		
5	L-UWL-FB-1	WT	G				0926		1	1									X		
6		WT	G																		
7		WT	G																		
8		WT	G																		
9		WT	G																		
10		WT	G																		
11		WT	G																		
12		WT	G																		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Daniel Quick RSG	12-8-25	1340	JAPace	12/9/25	0744	1.1 Y Y Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Daniel Quick

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 12-8-25

Temp in °C | Received on Custody Sealed Cooler | Samples Intact (Y/N)

Client: Rocksmith Geoengineering, LLC

Profile/EZ # 15856, line 1

Site: Ameren LCL1 - verification sampling

Notes samples 1, 2, 3 should be logged as 1 sample

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

Container Codes

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

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

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

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

Work Order Number: 60487253

Memorandum

December 29, 2025

To:	Project File Rocksmith Geoengineering, LLC	**Project Number:**	23007-25
CC:	Mark Haddock, Jeffrey Ingram		
From:	Valerie Hurt	**Email:**	Valerie.Hurt@Rocksmithgeo.com
RE:	**Data Validation Summary, Labadie Energy Center – LCL1 – Data Package 60487253**		

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

- None.

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

Company Name: Rocksmith Geoengineering
Project Manager: J. Ingram
Project Name: Ameren LCL1
Project Number: 23007-25
Reviewer: V. Hurt
Validation Date: 12/29/2025

Laboratory: Pace Analytical
SDG #: 60487253
Analytical Method (type and no.): EPA 300.0 (Chloride)
Matrix: ☐ Air ☐ Soil/Sed. ■ Water ☐ Waste ☐ _____
Sample Names L-TMW-2, L-TMW-3, L-UWL-DUP-1, L-UWL-FB-1

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

Field Information	YES	NO	NA	COMMENTS
a) Sampling dates noted?	x			12/08/25
b) Sampling team indicated?	x			JTR/JDQ
c) Sample location noted?	x			
d) Sample depth indicated (Soils)?			x	
e) Sample type indicated (grab/composite)?	x			Grab
f) Field QC noted?	x			See Notes
g) Field parameters collected (note types)?	x			pH, Spec Cond, Turb, Temp, DO, ORP
h) Field Calibration within control limits?	x			
i) Notations of unacceptable field conditions/performances from field logs or field notes?		x		
j) Does the laboratory narrative indicate deficiencies?			x	No lab narrative.

Note Deficiencies: _____

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

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

QA LEVEL II - INORGANIC DATA EVALUATION CHECKLIST

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

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

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

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

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

Comments/Notes:

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Comments/Notes:

Field Blanks:

L-UWL-FB-1 @ L-TMW-2: No detections

MS/MSD:

3802010: MS recovery low for chloride. Associated with an unrelated sample, no qualification necessary.

QA LEVEL IV - INORGANIC DATA EVALUATION CHECKLIST

Data Qualification:

Sample Name	Constituent(s)	Result	Qualifier	Reason

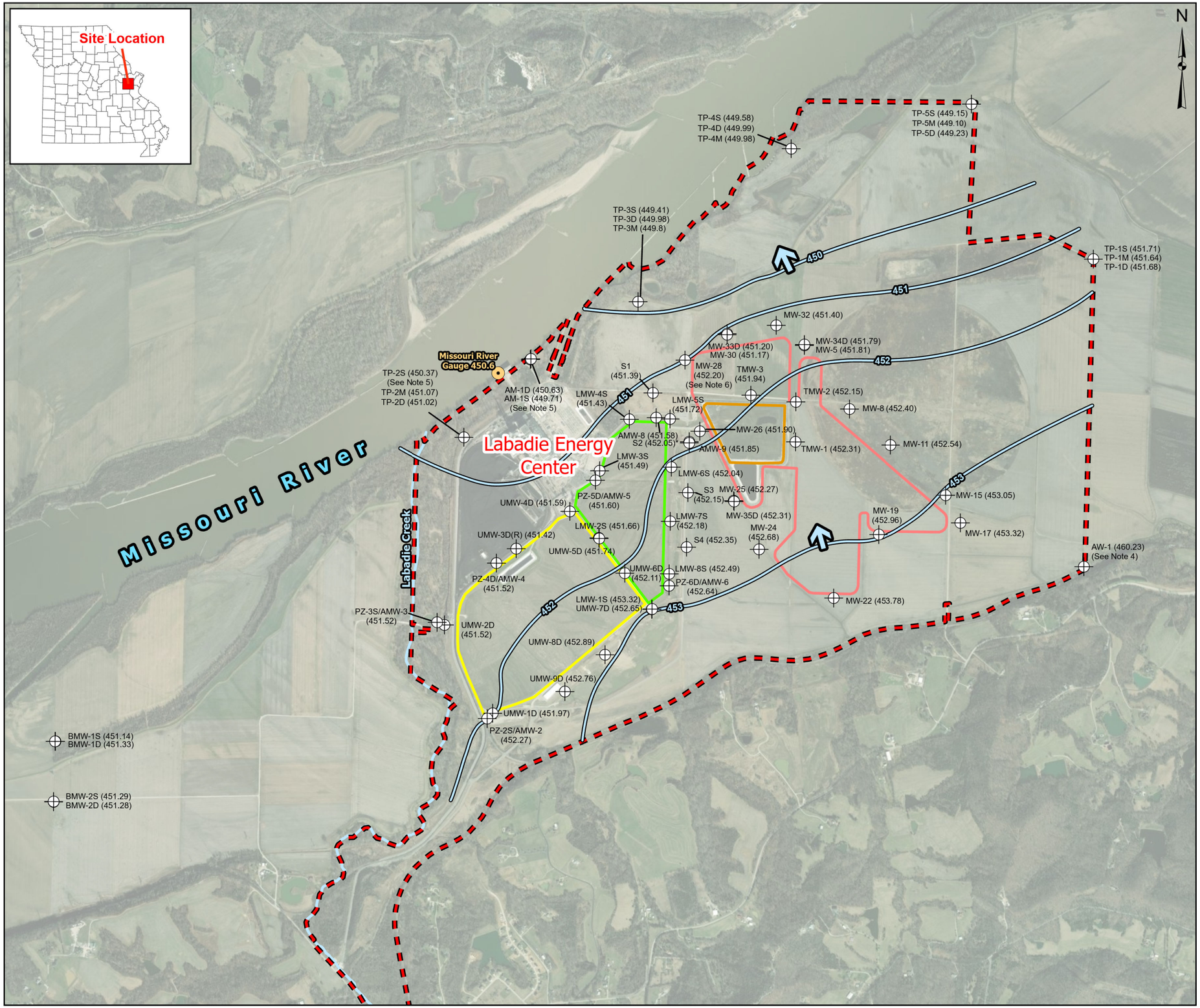
Signature: _____ Date: 12/29/2025

Appendix B

2025 Potentiometric Surface Maps

TITLE

FEBRUARY 4, 2025 POTENTIOMETRIC SURFACE MAP



Legend

- Labadie Energy Center Property Boundary

CCR Units

- LCPA - Closed Bottom Ash Surface Impoundment
- LCPB - Closed Fly Ash Surface Impoundment
- LCL1 - Utility Waste Landfill Cell 1
- Proposed Final UWL Fence Perimeter

Monitoring Well or Piezometer

- Monitoring Well or Piezometer

Surface Water Elevation Measurement Location

- Missouri River Gauge

Groundwater Elevation Contours

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

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Missouri River Level obtained from USGS Labadie gauge 06935550.
4. AW-1 was not used used in potentiometric surface contouring due to localized conditions causing an artificially high potentiometric elevation.
5. Wells TP-2S and AM-1S not used for potentiometric surface contouring due to localized vertical gradients.
6. MW-28 not used for potentiometric surface contouring due to localized vertical gradients.

REFERENCES

1. Zahner and Associates, Inc. 2016. Lot Consolidation Plat of "Labadie Energy Center" - Prepared for Ameren Missouri. Revised June 15, 2016.
2. USGS (United States Geological Survey), National Water Information System, USGS Gauge 06935550 Missouri River near Labadie, MO.

0 500 1,000 2,000 3,000 4,000 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

CLIENT
AMEREN MISSOURI
LABADIE ENERGY CENTER

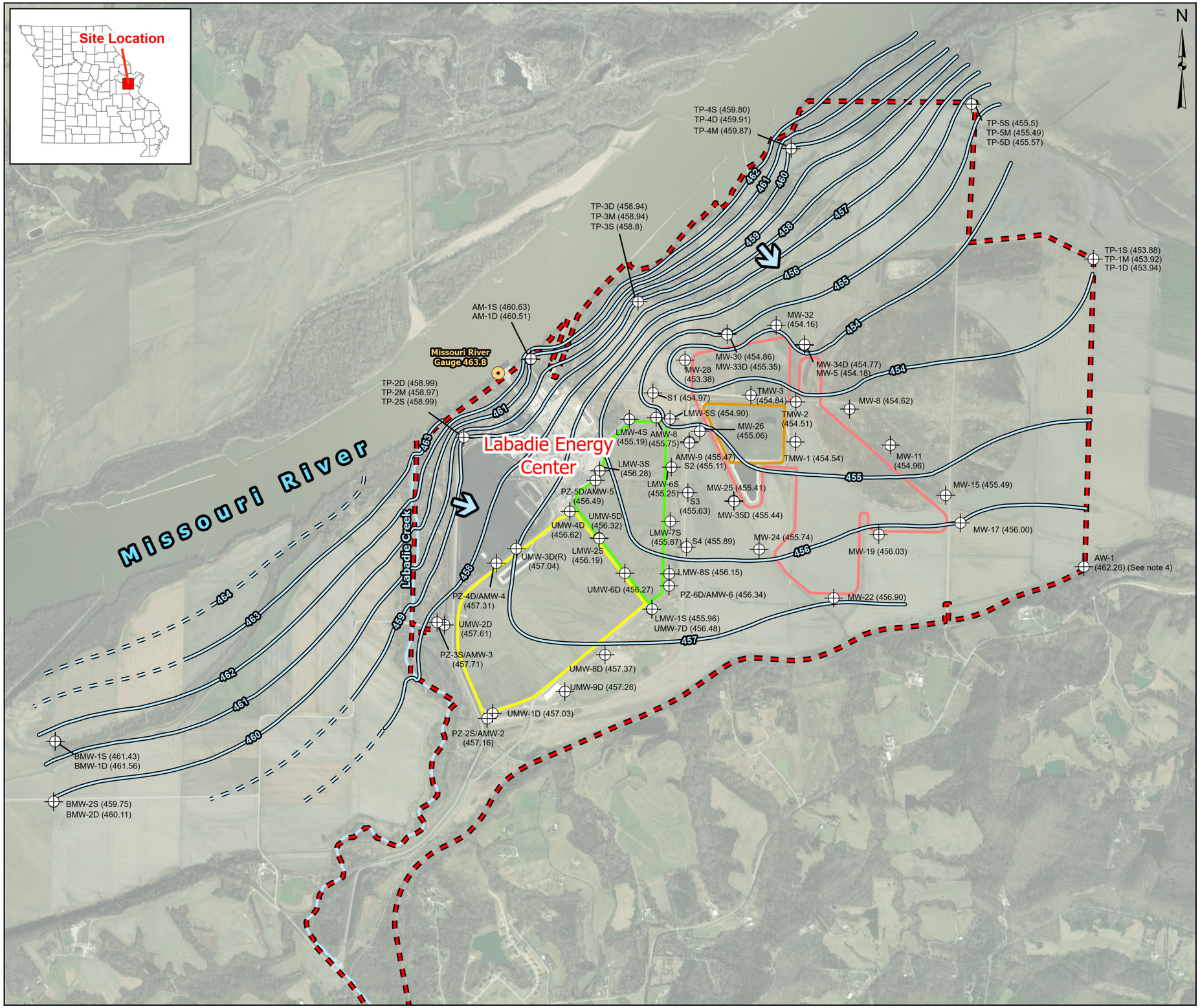
ROCKSMITH GEOENGINEERING

DESIGN	JSI	YYYY-MM-DD	2025-07-18
PREPARED	JDQ	PROJECT No.	23007-25
REVIEW	JTR		
APPROVED	MNH		

FIGURE B1

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

Path: C:\Users\DanielQuick\Rocksmith Geoengineering LLC\23007 - Ameren GW - Documents\400 - Drawings, Figures\4.1 LEC\4.1.2 - Production\POT MAPS\2025 Annual Report\250204_FebLEC_PM.aprx



TITLE

APRIL 23, 2025 POTENTIOMETRIC SURFACE MAP

Legend

- Labadie Energy Center Property Boundary

CCR Units

- LCPA - Closed Bottom Ash Surface Impoundment
- LCPB - Closed Fly Ash Surface Impoundment
- LCL1 - Utility Waste Landfill Cell 1
- Proposed Final UWL Fence Perimeter

Monitoring Well or Piezometer

- Monitoring Well or Piezometer

Surface Water Elevation Measurement Location

- Missouri River Gauge

Groundwater Elevation Contours

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

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Missouri River Level obtained from USGS Labadie gauge 06935550.
4. AW-1 was not used used in potentiometric surface contouring due to localized conditions causing an artificially high potentiometric elevation.

REFERENCES

1. Zahner and Associates, Inc. 2016. Lot Consolidation Plat of "Labadie Energy Center" - Prepared for Ameren Missouri. Revised June 15, 2016.
2. USGS (United States Geological Survey), National Water Information System, USGS Gauge 06935550 Missouri River near Labadie, MO.

0 5001,000 2,000 3,000 4,000 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

CLIENT
AMEREN MISSOURI
LABADIE ENERGY CENTER

ROCKSMITH GEOENGINEERING

DESIGN	JSI	YYYY-MM-DD	2025-12-22
PREPARED	JDQ/JTR	PROJECT No.	23007-25
REVIEW	JTR		
APPROVED	MNH		

FIGURE B2

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

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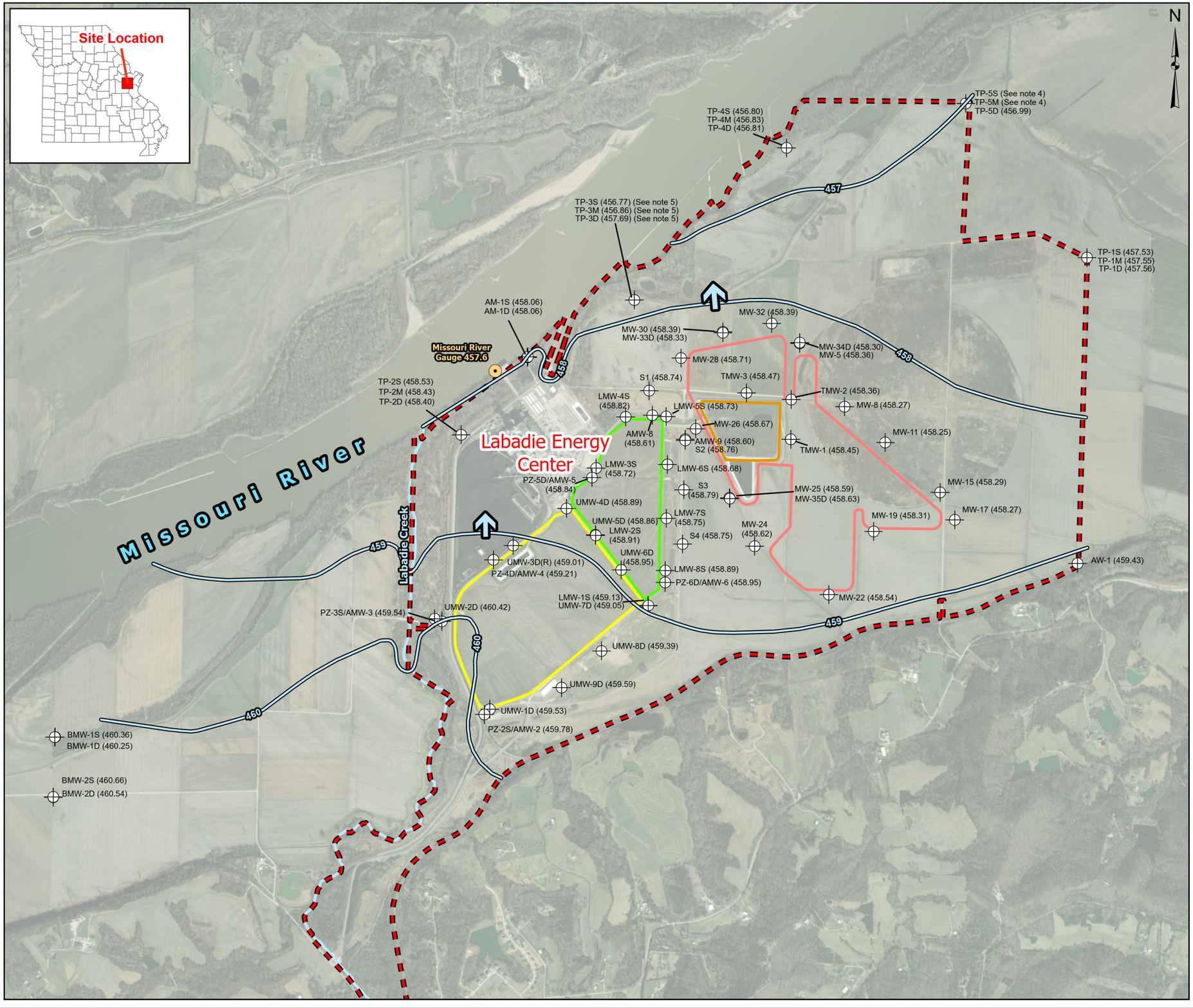

TITLE

JULY 8, 2025 POTENTIOMETRIC SURFACE MAP

Legend

- Labadie Energy Center Property Boundary

CCR Units

- LCPA - Closed Bottom Ash Surface Impoundment
- LCPB - Closed Fly Ash Surface Impoundment
- LCL1 - Utility Waste Landfill Cell 1
- Proposed Final UWL Fence Perimeter

Monitoring Well or Piezometer

- Monitoring Well or Piezometer

Surface Water Elevation Measurement Location

- Missouri River Gauge

Groundwater Elevation Contours

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

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Missouri River Level obtained from USGS Labadie gauge 06935550.
4. TP-5S and TP-5M were not used in potentiometric surface contouring due to measurement error.
5. TP-3S, TP-3M, and TP-3D were not used in potentiometric surface contouring due to localized vertical gradient.

REFERENCES

1. Zahner and Associates, Inc. 2016. Lot Consolidation Plat of "Labadie Energy Center" - Prepared for Ameren Missouri. Revised June 15, 2016.
2. USGS (United States Geological Survey), National Water Information System, USGS Gauge 06935550 Missouri River near Labadie, MO.

0 500 1,000 2,000 3,000 4,000 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

CLIENT
AMEREN MISSOURI
LABADIE ENERGY CENTER

ROCKSMITH GEOENGINEERING

DESIGN	JSI	YYYY-MM-DD	2025-12-18
PREPARED	JDQ	PROJECT No.	23007-25
REVIEW	JTR		
APPROVED	MNH		**FIGURE B3**

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

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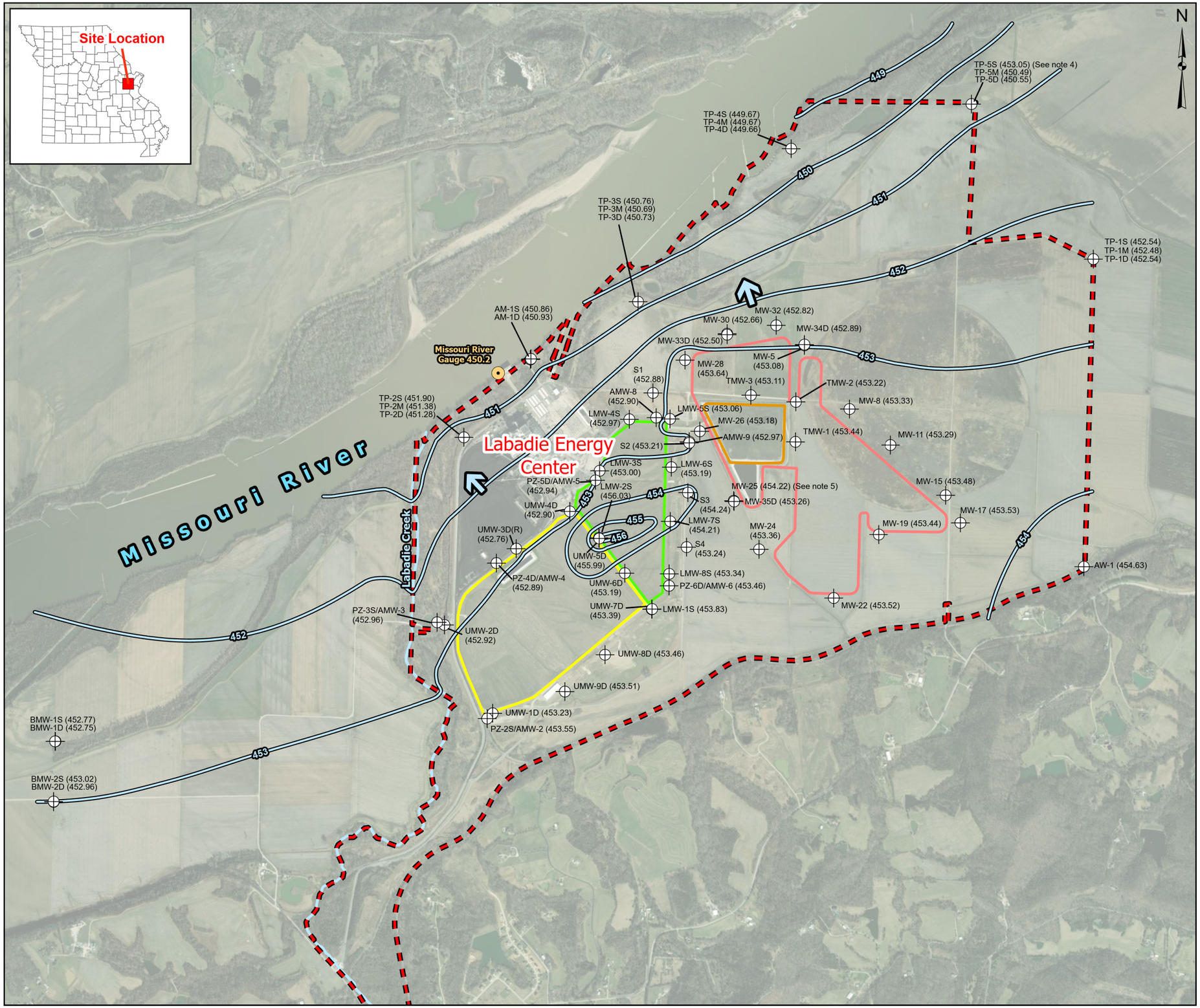

TITLE

OCTOBER 16, 2025 POTENTIOMETRIC SURFACE MAP

Legend

- Labadie Energy Center Property Boundary

CCR Units

- LCPA - Closed Bottom Ash Surface Impoundment
- LCPB - Closed Fly Ash Surface Impoundment
- LCL1 - Utility Waste Landfill Cell 1
- Proposed Final UWL Fence Perimeter

Monitoring Well or Piezometer

- Monitoring Well or Piezometer

Surface Water Elevation Measurement Location

- Missouri River Gauge

Groundwater Elevation Contours

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

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Missouri River Level obtained from USGS Labadie gauge 06935550.
4. TP-5S not used in potentiometric surface contouring due to localized vertical gradient.
5. MW-25 not used in potentiometric surface contouring due to localized vertical gradient.

REFERENCES

1. Zahner and Associates, Inc. 2016. Lot Consolidation Plat of "Labadie Energy Center" - Prepared for Ameren Missouri. Revised June 15, 2016.
2. USGS (United States Geological Survey), National Water Information System, USGS Gauge 06935550 Missouri River near Labadie, MO.

0 500 1,000 2,000 3,000 4,000

Feet

PROJECT

CCR RULE GROUNDWATER MONITORING PROGRAM

CLIENT

AMEREN MISSOURI
LABADIE ENERGY CENTER

ROCKSMITH GEOENGINEERING

DESIGN	JSI	YYYY-MM-DD	2025-12-15
PREPARED	JDQ	PROJECT No.	23007-25
REVIEW	JTR		
APPROVED	MNH		

FIGURE B4

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

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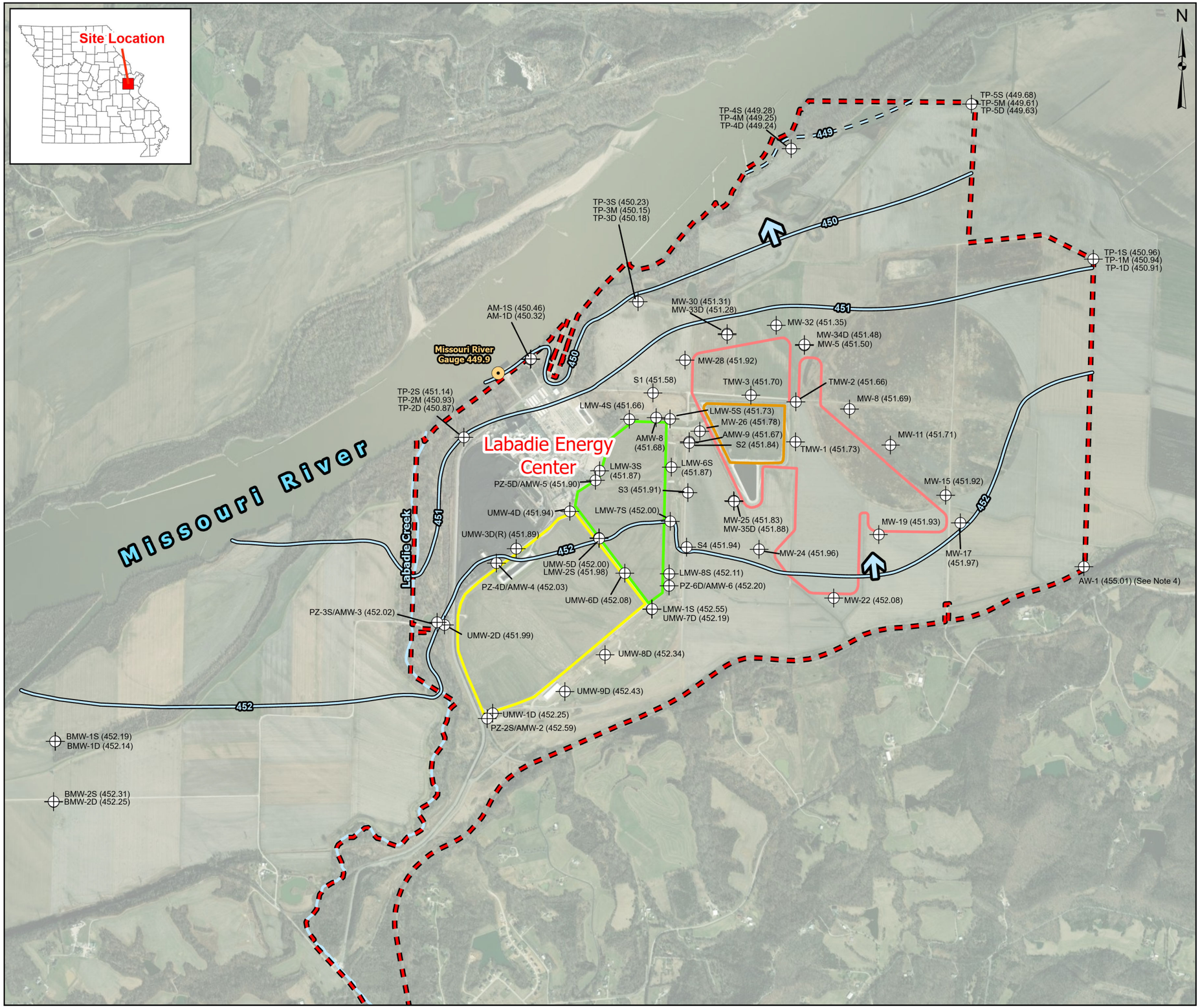

TITLE

DECEMBER 5, 2025 POTENTIOMETRIC SURFACE MAP

Legend

- Labadie Energy Center Property Boundary

CCR Units

- LCPA - Closed Bottom Ash Surface Impoundment
- LCPB - Closed Fly Ash Surface Impoundment
- LCL1 - Utility Waste Landfill Cell 1
- Proposed Final UWL Fence Perimeter

Monitoring Well or Piezometer

- Monitoring Well or Piezometer

Surface Water Elevation Measurement Location

- Missouri River Gauge

Groundwater Elevation Contours

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

NOTES

1. All locations and boundaries are approximate.
2. Groundwater elevations displayed in FT MSL (Feet above Mean Sea Level).
3. Missouri River Level obtained from USGS Labadie gauge 06935550.
4. AW-1 was not used in potentiometric surface contouring due to localized conditions causing an artificially high potentiometric elevation.

REFERENCES

1. Zahner and Associates, Inc. 2016. Lot Consolidation Plat of "Labadie Energy Center" - Prepared for Ameren Missouri. Revised June 15, 2016.
2. USGS (United States Geological Survey), National Water Information System, USGS Gauge 06935550 Missouri River near Labadie, MO.

0 500 1,000 2,000 3,000 4,000 Feet

PROJECT
CCR RULE GROUNDWATER MONITORING PROGRAM

CLIENT
AMEREN MISSOURI
LABADIE ENERGY CENTER

ROCKSMITH GEOENGINEERING

DESIGN	JSI	YYYY-MM-DD	2025-12-11
PREPARED	JDQ	PROJECT No.	23007-25
REVIEW	GTM		
APPROVED	MNH		

FIGURE B5

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

1 in

0

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