

**Entergy Arkansas, LLC
Independence Steam Electric Station
Landfill Cells 12-15**

2023 Annual Groundwater Monitoring and Corrective Action Report

**Prepared in Compliance with the EPA Final Rule for the Disposal of
Coal Combustion Residuals Title 40 CFR Part 257**

Prepared for:



**PO Box 551
Little Rock, Arkansas 72203**

Prepared by:



**8550 United Plaza Blvd. Suite 502
Baton Rouge, LA 70809**

January 31, 2024

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
1. INTRODUCTION	2
2. GROUNDWATER MONITORING SYSTEM	3
3. INSTALLED OR DECOMMISSIONED WELLS DURING 2023	4
4. GROUNDWATER MONITORING DATA	5
5. STATUS SUMMARY OF THE 2023 GROUNDWATER MONITORING PROGRAM	6
6. PROJECTED ACTIVITIES FOR 2024	7

LIST OF APPENDICES

APPENDIX A: Site Map

APPENDIX B: Groundwater Monitoring Data

EXECUTIVE SUMMARY

Entergy Arkansas, LLC (Entergy), operates a coal ash disposal landfill (Landfill) for the disposal of coal combustion residuals (CCR) at the Independence Steam Electric Station (Plant) located near Newark, Arkansas. The Landfill receives CCR generated from the combustion of coal at the Plant. Management of CCR at the Landfill is performed pursuant to national criteria established in Title 40 of the Code of Federal Regulations (40 CFR), Part 257 (CCR Rule), effective April 19, 2015, and subsequent revisions to the CCR Rule.

The Plant conducted two semi-annual detection monitoring events in 2023 for the Landfill CCR Unit monitoring well network per 40 CFR §257.94. The statistical analyses completed for the second semi-annual 2022 and the first semi-annual 2023 monitoring events did not identify any statistically significant exceedances. The Landfill CCR unit operated under the detection monitoring program (40 CFR § 257.94) during the duration of 2023.

1. INTRODUCTION

Entergy Arkansas, LLC (Entergy), operates the Landfill for the disposal of CCR at the Plant located near Newark, Arkansas (Lat: 35.67826 / Long: -91.408848). The Landfill receives CCR generated from the combustion of coal at the Plant. The CCR Landfill is managed in accordance with the national criteria established in the CCR Rule. Entergy installed a groundwater monitoring system at the Landfill that is subject to the groundwater monitoring and corrective action requirements provided under §257.90 through §257.98 of the CCR rule. In accordance with §257.90(e) of the CCR rule, Entergy must prepare an annual report that provides information regarding the groundwater monitoring and corrective action program at the Landfill.

2. GROUNDWATER MONITORING SYSTEM

The Landfill's groundwater monitoring system consists of 14 monitoring wells as shown on Figure 1 included in Appendix A. Pursuant to §257.91(f) of the CCR Rule, a qualified Arkansas-registered professional engineer has certified the groundwater monitoring system, which was designed and constructed to meet the requirements of §257.91.

3. INSTALLED OR DECOMMISSIONED WELLS DURING 2023

Entergy installed four new wells (MW-14, MW-15, MW-16 and MW-17) in 2022 and added them in the certified groundwater monitoring system during 2023.

4. GROUNDWATER MONITORING DATA

In accordance with §257.90(e)(3), all monitoring data obtained under §257.90 through §257.98 during 2023 are provided in Appendix B. Data include:

- Summary of the number of groundwater samples that were collected for analysis for each background and downgradient well;
- Dates the samples were collected; and
- Whether the sample was collected as part of detection or assessment monitoring.

5. STATUS SUMMARY OF THE 2023 GROUNDWATER MONITORING PROGRAM

Groundwater monitoring was performed in accordance with the detection monitoring requirements of §257.94. A summary of activities related to groundwater detection monitoring performed during 2022 is provided in the list below:

- In accordance with §257.94(b), semiannual detection monitoring was performed during the first half (June) and second half (November) of 2023 for analysis of Appendix III parameters (boron, calcium, chloride, fluoride, pH, sulfate and total dissolved solids (TDS)).
- Statistical evaluation of the semiannual detection monitoring data was performed in accordance with the statistical method certified by a qualified Arkansas-registered professional engineer. The certified statistical method has been posted to Entergy's CCR Rule Compliance Data and Information website.
- Statistical evaluation of the second half 2022 semi-annual detection monitoring event was completed in 2023 and no statistically significant increases (SSIs) were identified; therefore, Entergy did not prepare an alternative source demonstration (ASD) per §257.94(e)(2) for the detection monitoring event for the CADL CCR Unit.
- The first-half 2023 detection monitoring sampling was performed during June 2023. Based on statistical evaluation of the data, resampling was not required, and no SSIs were identified.
- The second-half 2023 detection monitoring sampling was performed during November 2023. Statistical evaluation of the data will be performed in 2024 to determine if any SSIs are identified in accordance with §257.93(h).
- No problems were encountered during 2023 regarding the detection monitoring and corrective action system. Therefore, no actions were required to modify the system.
- The Landfill CCR unit remained in detection monitoring during the duration of 2023.

6. PROJECTED ACTIVITIES FOR 2024

Planned activities for the program during 2024 are listed below:

- Statistical evaluation of the second half 2023 and first-half 2024 detection monitoring sampling data will be performed during 2024 to determine if any SSIs are identified.
- Semiannual detection monitoring is planned for June and November 2024.

APPENDIX A

SITE MAP



LEGEND

- PROPOSED MONITORING WELL LOCATIONS
- CADL MONITORING WELLS
- LANDFILL BOUNDARY

NOTES

- BASE MAP IMAGERY FROM ESRI/DIGITAL GLOBE, 2016.

0 900 1,800 Feet
1" = 900'
1:10,800

PROJECT: ENTERGY INDEPENDENCE PLANT 555 POINT FERRY ROAD NEWARK, ARKANSAS	
TITLE: NEW MONITORING WELL LOCATIONS FOR CCR GROUNDWATER MONITORING NETWORK	
DRAWN BY: D. STITCHER	PROJ. NO.: 419735
CHECKED BY: J. HOUSE	FIGURE 1
APPROVED BY: J. HOUSE	
DATE: OCTOBER 2020	
Two United Plaza 8550 United Plaza Blvd., Suite 502 Baton Rouge, LA Phone: 225.216.7483	
FILE NO.: 419735-ph1-03232022.mxd	

APPENDIX B
GROUNDWATER MONITORING DATA

Sampling Schedule, Entergy Independence CADL Network			
Well ID	Detection Monitoring Sampling Dates and Wells Sampled		Number of Samples Collected
	6/13-14/2023	11/06-08/2023	
MW-1R	X	X	2
MW-3	X	X	2
MW-6	X	X	2
MW-7	X	X	2
MW-8	X	X	2
MW-9	X	X	2
MW-10	X	X	2
MW-11	X	X	2
MW-13	¹	¹	0
MW-14	X	X	2
MW-15	X	X	2
MW-16	X	X	2
MW-17	X	X	2
MW-18	¹	¹	0

Notes: All samples collected in 2023 were part of the detection monitoring program. No samples collected in 2023 were part of an assessment monitoring program.

¹ Wells MW-13 and MW-18 are background wells collected for comparison purposes only. These wells were not accessible during 2023.

Field pH data collected during 2023, Entergy Independence CADL network		
Well ID	Date Collected	pH (su)
MW-1R	06/13/2023	5.07
	11/08/2023	6.31
MW-3	06/14/2023	6.53
	11/08/2023	6.45
MW-6	06/12/2023	3.55
	11/06/2023	6.33
MW-7	06/13/2023	5.30
	11/09/2023	6.91
MW-8	06/13/2023	4.63
	11/07/2023	6.38
MW-9	06/13/2023	4.32
	11/07/2023	6.39
MW-10	06/12/2023	3.72
	11/06/2023	6.55
MW-11	06/13/2023	5.47
	11/09/2023	6.38
MW-13	Not Sampled	N/A
	Not Sampled	N/A
MW-14	06/14/2023	7.02
	11/08/2023	6.74
MW-15	06/14/2023	7.43
	11/08/2023	6.54
MW-16	06/14/2023	2.62
	11/08/2023	6.98
MW-17	06/14/2023	2.01
	11/08/2023	6.82
MW-18	Not Sampled	N/A
	Not Sampled	N/A

GBMc & Associates - Bryant, AR

Sample Delivery Group: L1626813
Samples Received: 06/16/2023
Project Number: 1145-21-081
Description: Entergy ISES
Site: ISES
Report To: Will Glenn
219 Brown Lane
Little Rock, AR 72022

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Entire Report Reviewed By:



Brittnie L Boyd
Project Manager

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

Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	6
Sr: Sample Results	7
MW-1R L1626813-01	7
MW-2 L1626813-02	8
MW-3 L1626813-03	9
MW-6 L1626813-04	10
MW-7 L1626813-05	11
MW-8 L1626813-06	12
MW-9 L1626813-07	13
MW-10 L1626813-08	14
MW-11 L1626813-09	15
MW-14 L1626813-10	16
MW-15 L1626813-11	17
MW-16 L1626813-12	18
MW-17 L1626813-13	19
FIELD BLANK 1 L1626813-14	20
Qc: Quality Control Summary	21
Gravimetric Analysis by Method 2540 C-2011	21
Wet Chemistry by Method 9056A	26
Metals (ICP) by Method 6010B	28
Metals (ICPMS) by Method 6020	29
Gl: Glossary of Terms	30
Al: Accreditations & Locations	31
Sc: Sample Chain of Custody	32

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

SAMPLE SUMMARY

MW-1R L1626813-01 GW

Collected by
Will Glenn

Collected date/time
06/13/23 14:25

Received date/time
06/16/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2079925	1	06/19/23 09:41	06/19/23 10:53	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2088392	1	07/02/23 21:33	07/02/23 21:33	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2088392	5	07/02/23 21:45	07/02/23 21:45	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2080027	1	06/19/23 13:57	06/30/23 01:20	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2080507	1	06/20/23 10:58	06/20/23 15:50	LD	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

MW-2 L1626813-02 GW

Collected by
Will Glenn

Collected date/time
06/13/23 09:10

Received date/time
06/16/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2079926	1	06/18/23 15:27	06/19/23 12:52	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2088392	1	07/02/23 22:24	07/02/23 22:24	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2080027	1	06/19/23 13:57	06/30/23 01:22	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2080507	1	06/20/23 10:58	06/20/23 15:54	LD	Mt. Juliet, TN

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

MW-3 L1626813-03 GW

Collected by
Will Glenn

Collected date/time
06/14/23 15:45

Received date/time
06/16/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2080356	1	06/20/23 08:11	06/20/23 09:45	AS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2088392	1	07/02/23 22:37	07/02/23 22:37	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2080027	1	06/19/23 13:57	06/30/23 01:25	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2080507	1	06/20/23 10:58	06/20/23 15:37	LD	Mt. Juliet, TN

⁹ Sc

MW-6 L1626813-04 GW

Collected by
Will Glenn

Collected date/time
06/12/23 17:20

Received date/time
06/16/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2079496	1	06/17/23 02:37	06/18/23 14:21	AS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2088392	1	07/02/23 22:49	07/02/23 22:49	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2080027	1	06/19/23 13:57	06/30/23 01:28	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2080507	1	06/20/23 10:58	06/20/23 15:57	LD	Mt. Juliet, TN

MW-7 L1626813-05 GW

Collected by
Will Glenn

Collected date/time
06/13/23 15:15

Received date/time
06/16/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2079926	1	06/18/23 15:27	06/19/23 12:52	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2088392	1	07/02/23 23:02	07/02/23 23:02	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2080027	1	06/19/23 13:57	06/30/23 01:36	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2080507	1	06/20/23 10:58	06/20/23 16:00	LD	Mt. Juliet, TN

MW-8 L1626813-06 GW

Collected by
Will Glenn

Collected date/time
06/13/23 13:50

Received date/time
06/16/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2079926	1	06/18/23 15:27	06/19/23 12:52	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2088392	1	07/02/23 23:15	07/02/23 23:15	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2080027	1	06/19/23 13:57	06/30/23 01:38	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2080507	1	06/20/23 10:58	06/20/23 16:12	LD	Mt. Juliet, TN

ACCOUNT:

GBMc & Associates - Bryant, AR

PROJECT:

1145-21-081

SDG:

L1626813

DATE/TIME:

08/10/23 15:04

PAGE:

3 of 35

SAMPLE SUMMARY

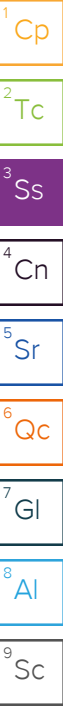
MW-9 L1626813-07 GW

Collected by
Will Glenn

Collected date/time
06/13/23 13:00

Received date/time
06/16/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2079926	1	06/18/23 15:27	06/19/23 12:52	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2088392	1	07/02/23 23:28	07/02/23 23:28	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2080027	1	06/19/23 13:57	06/30/23 01:41	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2080507	1	06/20/23 10:58	06/20/23 16:15	LD	Mt. Juliet, TN



MW-10 L1626813-08 GW

Collected by
Will Glenn

Collected date/time
06/12/23 14:30

Received date/time
06/16/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2079496	1	06/17/23 02:37	06/18/23 14:21	AS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2088392	1	07/02/23 23:41	07/02/23 23:41	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2080027	1	06/19/23 13:57	06/30/23 01:44	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2080507	1	06/20/23 10:58	06/20/23 16:18	LD	Mt. Juliet, TN

MW-11 L1626813-09 GW

Collected by
Will Glenn

Collected date/time
06/13/23 16:40

Received date/time
06/16/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2079925	1	06/19/23 09:41	06/19/23 10:53	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2088392	1	07/02/23 23:53	07/02/23 23:53	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2080027	1	06/19/23 13:57	06/30/23 01:46	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2080507	1	06/20/23 10:58	06/20/23 16:22	LD	Mt. Juliet, TN

MW-14 L1626813-10 GW

Collected by
Will Glenn

Collected date/time
06/14/23 13:10

Received date/time
06/16/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2081545	1	06/21/23 09:41	06/21/23 10:42	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2088392	1	07/03/23 00:06	07/03/23 00:06	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2080027	1	06/19/23 13:57	06/30/23 01:09	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2080507	1	06/20/23 10:58	06/20/23 16:25	LD	Mt. Juliet, TN

MW-15 L1626813-11 GW

Collected by
Will Glenn

Collected date/time
06/14/23 14:00

Received date/time
06/16/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2081545	1	06/21/23 09:41	06/21/23 10:42	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2088392	1	07/03/23 00:19	07/03/23 00:19	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2080027	1	06/19/23 13:57	06/30/23 01:49	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2080507	1	06/20/23 10:58	06/20/23 16:28	LD	Mt. Juliet, TN

MW-16 L1626813-12 GW

Collected by
Will Glenn

Collected date/time
06/14/23 11:35

Received date/time
06/16/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2080356	1	06/20/23 08:11	06/20/23 09:45	AS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2088392	1	07/03/23 00:57	07/03/23 00:57	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2080027	1	06/19/23 13:57	06/30/23 01:52	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2080507	1	06/20/23 10:58	06/20/23 16:32	LD	Mt. Juliet, TN

SAMPLE SUMMARY

MW-17 L1626813-13 GW

Collected by
Will Glenn

Collected date/time
06/14/23 10:30

Received date/time
06/16/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2080356	1	06/20/23 08:11	06/20/23 09:45	AS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2088392	1	07/03/23 01:10	07/03/23 01:10	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2080027	1	06/19/23 13:57	06/30/23 01:54	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2080507	1	06/20/23 10:58	06/20/23 16:35	LD	Mt. Juliet, TN

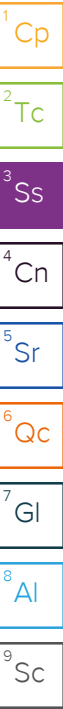
FIELD BLANK 1 L1626813-14 GW

Collected by
Will Glenn

Collected date/time
06/13/23 10:30

Received date/time
06/16/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2079926	1	06/18/23 15:27	06/19/23 12:52	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2088392	1	07/03/23 01:23	07/03/23 01:23	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2080027	1	06/19/23 13:57	06/30/23 01:57	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2080507	1	06/20/23 10:58	06/20/23 16:38	LD	Mt. Juliet, TN



CASE NARRATIVE

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



Brittnie L Boyd
Project Manager

Report Revision History

Level II Report - Version 1: 07/05/23 14:21

Project Narrative

Samples received in several coolers at the following temperatures (in degrees Celsius): 13.8, 17.8, 11.7, 8.1, 8.7, 9.8, 5.6
Added EDD



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	868		20.0	1	06/19/2023 10:53	WG2079925

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	150		1.00	1	07/02/2023 21:33	WG2088392
Fluoride	ND		0.150	1	07/02/2023 21:33	WG2088392
Sulfate	232		25.0	5	07/02/2023 21:45	WG2088392

Sample Narrative:

L1626813-01 WG2088392: Dilution due to matrix.

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	ND		0.200	1	06/30/2023 01:20	WG2080027

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	110		1.00	1	06/20/2023 15:50	WG2080507

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	695		13.3	1	06/19/2023 12:52	WG2079926

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	11.4		1.00	1	07/02/2023 22:24	WG2088392
Fluoride	ND		0.150	1	07/02/2023 22:24	WG2088392
Sulfate	252	E	5.00	1	07/02/2023 22:24	WG2088392

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	ND		0.200	1	06/30/2023 01:22	WG2080027

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	110		1.00	1	06/20/2023 15:54	WG2080507

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	383		10.0	1	06/20/2023 09:45	WG2080356

1
Cp2
Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	36.4		1.00	1	07/02/2023 22:37	WG2088392
Fluoride	ND		0.150	1	07/02/2023 22:37	WG2088392
Sulfate	64.4		5.00	1	07/02/2023 22:37	WG2088392

3
Ss4
Cn5
Sr

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	ND		0.200	1	06/30/2023 01:25	WG2080027

6
Qc7
Gl

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	54.8		1.00	1	06/20/2023 15:37	WG2080507

8
Al9
Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	405		10.0	1	06/18/2023 14:21	WG2079496

1
Cp2
Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	29.1		1.00	1	07/02/2023 22:49	WG2088392
Fluoride	ND		0.150	1	07/02/2023 22:49	WG2088392
Sulfate	107		5.00	1	07/02/2023 22:49	WG2088392

3
Ss4
Cn5
Sr

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	ND		0.200	1	06/30/2023 01:28	WG2080027

6
Qc7
Gl

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	62.5		1.00	1	06/20/2023 15:57	WG2080507

8
Al9
Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	489		10.0	1	06/19/2023 12:52	WG2079926

1 Cp

2 Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	16.7		1.00	1	07/02/2023 23:02	WG2088392
Fluoride	0.536		0.150	1	07/02/2023 23:02	WG2088392
Sulfate	52.3		5.00	1	07/02/2023 23:02	WG2088392

3 Ss

4 Cn

5 Sr

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	ND		0.200	1	06/30/2023 01:36	WG2080027

6 Qc

7 Gl

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	44.0		1.00	1	06/20/2023 16:00	WG2080507

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	785		13.3	1	06/19/2023 12:52	WG2079926

1 Cp

2 Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	110		1.00	1	07/02/2023 23:15	WG2088392
Fluoride	ND		0.150	1	07/02/2023 23:15	WG2088392
Sulfate	241	E	5.00	1	07/02/2023 23:15	WG2088392

3 Ss

4 Cn

5 Sr

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	0.231		0.200	1	06/30/2023 01:38	WG2080027

6 Qc

7 Gl

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	101		1.00	1	06/20/2023 16:12	WG2080507

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	717		13.3	1	06/19/2023 12:52	WG2079926

1
Cp2
Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	46.1		1.00	1	07/02/2023 23:28	WG2088392
Fluoride	ND		0.150	1	07/02/2023 23:28	WG2088392
Sulfate	275	E	5.00	1	07/02/2023 23:28	WG2088392

3
Ss4
Cn5
Sr

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	0.607		0.200	1	06/30/2023 01:41	WG2080027

6
Qc7
Gl

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	92.0		1.00	1	06/20/2023 16:15	WG2080507

8
Al9
Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	392		10.0	1	06/18/2023 14:21	WG2079496

1 Cp

2 Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	56.2		1.00	1	07/02/2023 23:41	WG2088392
Fluoride	ND		0.150	1	07/02/2023 23:41	WG2088392
Sulfate	79.9		5.00	1	07/02/2023 23:41	WG2088392

3 Ss

4 Cn

5 Sr

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	ND		0.200	1	06/30/2023 01:44	WG2080027

6 Qc

7 Gl

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	61.0		1.00	1	06/20/2023 16:18	WG2080507

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	469		10.0	1	06/19/2023 10:53	WG2079925

1
Cp2
Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	49.6		1.00	1	07/02/2023 23:53	WG2088392
Fluoride	ND		0.150	1	07/02/2023 23:53	WG2088392
Sulfate	85.7		5.00	1	07/02/2023 23:53	WG2088392

3
Ss4
Cn5
Sr

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	0.253		0.200	1	06/30/2023 01:46	WG2080027

6
Qc7
Gl

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	69.6		1.00	1	06/20/2023 16:22	WG2080507

8
Al9
Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	620		13.3	1	06/21/2023 10:42	WG2081545

1
Cp2
Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	51.3		1.00	1	07/03/2023 00:06	WG2088392
Fluoride	0.167		0.150	1	07/03/2023 00:06	WG2088392
Sulfate	152		5.00	1	07/03/2023 00:06	WG2088392

3
Ss4
Cn5
Sr

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	0.399		0.200	1	06/30/2023 01:09	WG2080027

6
Qc7
Gl

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	77.2		1.00	1	06/20/2023 16:25	WG2080507

8
Al9
Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	714		20.0	1	06/21/2023 10:42	WG2081545

1
Cp2
Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	128		1.00	1	07/03/2023 00:19	WG2088392
Fluoride	0.321		0.150	1	07/03/2023 00:19	WG2088392
Sulfate	141		5.00	1	07/03/2023 00:19	WG2088392

3
Ss4
Cn5
Sr

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	ND		0.200	1	06/30/2023 01:49	WG2080027

6
Qc7
Gl

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	74.7		1.00	1	06/20/2023 16:28	WG2080507

8
Al9
Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	898		20.0	1	06/20/2023 09:45	WG2080356

1
Cp2
Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	31.4		1.00	1	07/03/2023 00:57	WG2088392
Fluoride	0.322		0.150	1	07/03/2023 00:57	WG2088392
Sulfate	189		5.00	1	07/03/2023 00:57	WG2088392

3
Ss4
Cn5
Sr

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	0.447		0.200	1	06/30/2023 01:52	WG2080027

6
Qc7
Gl

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	77.8		1.00	1	06/20/2023 16:32	WG2080507

8
Al9
Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	458		10.0	1	06/20/2023 09:45	WG2080356

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	52.5		1.00	1	07/03/2023 01:10	WG2088392
Fluoride	ND		0.150	1	07/03/2023 01:10	WG2088392
Sulfate	80.4		5.00	1	07/03/2023 01:10	WG2088392

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	ND		0.200	1	06/30/2023 01:54	WG2080027

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	61.1		1.00	1	06/20/2023 16:35	WG2080507

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

FIELD BLANK 1

Collected date/time: 06/13/23 10:30

SAMPLE RESULTS - 14

L1626813

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	ND		10.0	1	06/19/2023 12:52	WG2079926

1 Cp

2 Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	ND	P1	1.00	1	07/03/2023 01:23	WG2088392
Fluoride	ND		0.150	1	07/03/2023 01:23	WG2088392
Sulfate	ND		5.00	1	07/03/2023 01:23	WG2088392

3 Ss

4 Cn

5 Sr

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	ND		0.200	1	06/30/2023 01:57	WG2080027

6 Qc

7 Gl

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	ND		1.00	1	06/20/2023 16:38	WG2080507

8 Al

9 Sc

Method Blank (MB)

(MB) R3938639-1 06/18/23 14:21

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U	⬇	10.0	10.0

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1624592-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1624592-02 06/18/23 14:21 • (DUP) R3938639-3 06/18/23 14:21

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	463	482	1	4.02		5

L1626773-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1626773-04 06/18/23 14:21 • (DUP) R3938639-4 06/18/23 14:21

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	447	465	1	3.95		5

Laboratory Control Sample (LCS)

(LCS) R3938639-2 06/18/23 14:21

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8290	94.2	77.3-123	

Method Blank (MB)

(MB) R3939692-1 06/19/23 10:53

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U	⬇	10.0	10.0

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L1625745-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1625745-02 06/19/23 10:53 • (DUP) R3939692-3 06/19/23 10:53

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	468	466	1	0.428		5

L1626773-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1626773-02 06/19/23 10:53 • (DUP) R3939692-4 06/19/23 10:53

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	787	787	1	0.000		5

Laboratory Control Sample (LCS)

(LCS) R3939692-2 06/19/23 10:53

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8750	99.4	77.3-123	

Method Blank (MB)

(MB) R3939686-1 06/19/23 12:52

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1625745-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1625745-03 06/19/23 12:52 • (DUP) R3939686-3 06/19/23 12:52

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	374	370	1	1.08		5

L1626289-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1626289-01 06/19/23 12:52 • (DUP) R3939686-4 06/19/23 12:52

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	509	507	1	0.394		5

Laboratory Control Sample (LCS)

(LCS) R3939686-2 06/19/23 12:52

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8530	96.9	77.3-123	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3939744-1 06/20/23 09:45

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1626169-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1626169-08 06/20/23 09:45 • (DUP) R3939744-3 06/20/23 09:45

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	591	606	1	2.51		5

L1626773-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1626773-11 06/20/23 09:45 • (DUP) R3939744-4 06/20/23 09:45

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	544	561	1	3.08		5

Laboratory Control Sample (LCS)

(LCS) R3939744-2 06/20/23 09:45

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8870	101	77.3-123	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3940270-1 06/21/23 10:42

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1626123-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1626123-05 06/21/23 10:42 • (DUP) R3940270-3 06/21/23 10:42

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	311	310	1	0.322		5

L1626851-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1626851-06 06/21/23 10:42 • (DUP) R3940270-4 06/21/23 10:42

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	290	293	1	1.03		5

Laboratory Control Sample (LCS)

(LCS) R3940270-2 06/21/23 10:42

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8730	99.2	77.3-123	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3944327-1 07/02/23 19:50

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Chloride	U		0.379	1.00
Fluoride	U		0.0640	0.150
Sulfate	U		0.594	5.00

L1626808-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1626808-06 07/02/23 20:16 • (DUP) R3944327-3 07/02/23 20:28

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	7.16	7.01	1	1.99		15
Fluoride	ND	ND	1	0.000		15
Sulfate	5.14	5.02	1	2.31		15

L1626813-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1626813-14 07/03/23 01:23 • (DUP) R3944327-6 07/03/23 01:36

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	ND	ND	1	200	P1	15
Fluoride	ND	ND	1	0.000		15
Sulfate	ND	ND	1	0.000		15

Laboratory Control Sample (LCS)

(LCS) R3944327-2 07/02/23 20:03

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Chloride	40.0	39.1	97.6	80.0-120	
Fluoride	8.00	8.04	100	80.0-120	
Sulfate	40.0	40.0	99.9	80.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1626808-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1626808-06 07/02/23 20:16 • (MS) R3944327-4 07/02/23 20:41 • (MSD) R3944327-5 07/02/23 20:54

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Chloride	50.0	7.16	55.4	55.1	96.5	95.8	1	80.0-120			0.645	15
Fluoride	5.00	ND	5.07	4.99	101	99.8	1	80.0-120			1.56	15
Sulfate	50.0	5.14	55.3	55.5	100	101	1	80.0-120			0.352	15

L1626813-14 Original Sample (OS) • Matrix Spike (MS)

(OS) L1626813-14 07/03/23 01:23 • (MS) R3944327-7 07/03/23 01:49

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Chloride	50.0	ND	48.8	96.9	1	80.0-120	
Fluoride	5.00	ND	4.98	99.7	1	80.0-120	
Sulfate	50.0	ND	50.0	100	1	80.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3943220-1 06/30/23 01:04

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron	U		0.0200	0.200

Laboratory Control Sample (LCS)

(LCS) R3943220-2 06/30/23 01:07

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron	1.00	1.00	100	80.0-120	

L1626813-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1626813-10 06/30/23 01:09 • (MS) R3943220-4 06/30/23 01:14 • (MSD) R3943220-5 06/30/23 01:17

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron	1.00	0.399	1.43	1.41	103	102	1	75.0-125			0.791	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3938983-1 06/20/23 15:30

Analyte	MB Result mg/l	<u>MB Qualifier</u>	MB MDL mg/l	MB RDL mg/l
Calcium	U		0.0936	1.00

Laboratory Control Sample (LCS)

(LCS) R3938983-2 06/20/23 15:34

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Calcium	5.00	4.86	97.1	80.0-120	

L1626813-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1626813-03 06/20/23 15:37 • (MS) R3938983-4 06/20/23 15:44 • (MSD) R3938983-5 06/20/23 15:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Calcium	5.00	54.8	59.6	59.4	96.9	92.7	1	75.0-125			0.346	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

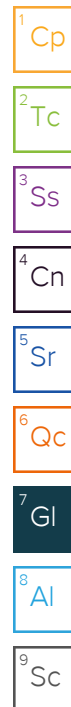
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

Abbreviations and Definitions

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

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.



ACCREDITATIONS & LOCATIONS

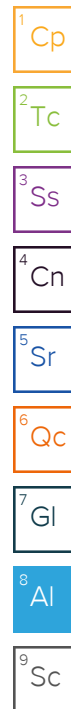
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

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

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

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



Company Name/Address: GBMc & Associates - Bryant, AR 219 Brown Lane Little Rock, AR 72022				Billing Information: Accounts Payable 219 Brown Ln. Bryant, AR 72022				Analysis / Container / Preservative PH-10BDH4321 TRC 214414 CR6-220221V				Chain of Custody Page ____ of ____	
Report to: Will Glenn				Email To: Will.Glenn@AllianceTG.com; Jonathan.Brown@				Pres Chk 22 22				 MT JULIET, TN 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf	
Project Description: Entergy ISES		City/State Collected:		Please Circle: PT MT CT ET									
Phone: 501-847-7077		Client Project # 1145-21-081		Lab Project # GBMCBAR-ENTERGYISES									
Collected by (print): <i>Will Glenn</i>		Site/Facility ID # ISES		P.O. #									
Collected by (signature):		Rush? (Lab MUST Be Notified) ☐ Same Day ☐ Five Day ☐ Next Day ☐ 5 Day (Rad Only) ☐ Two Day ☐ 10 Day (Rad Only) ☐ Three Day		Quote #									
Immediately Packed on Ice N ☐ Y ☒				Date Results Needed									
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs						
MW-1R	Grab	GW			6-13-23	1425	5	X	X	X	X		
MW-2		GW			6-13-23	910	1						
MW-3		GW			6-14-23	1545	1						
MW-6		GW			6-12-23	1720	1						
MW-7		GW			6-13-23	1515	1						
MW-8		GW			6-13-23	1350	1						
MW-9		GW			6-13-23	1300	1						
MW-10		GW			6-12-23	1430	1						
MW-11		GW			6-13-23	1640	1						
MW-14		GW			6-14-23	1310	1						
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____		Remarks:				pH _____ Temp _____ Flow _____ Other _____				Sample Receipt Checklist COC Seal Present/Intact: ☒ NP ☐ N COC Signed/Accurate: ☒ ☐ N Bottles arrive intact: ☒ ☐ N Correct bottles used: ☒ ☐ N Sufficient volume sent: ☒ ☐ N If Applicable VOA Zero Headspace: ☒ ☐ N Preservation Correct/Checked: ☒ ☐ N RAD Screen <0.5 mR/hr: ☒ ☐ N			
Samples returned via: ☐ UPS ☒ FedEx ☐ Courier _____		Tracking #											
Relinquished by : (Signature) <i>Will Glenn</i>		Date: 6-15-23	Time: 1055	Received by: (Signature)		Trip Blank Received: Yes / (No) HCL / MeOH TBR							
Relinquished by : (Signature)		Date:	Time:	Received by: (Signature)		Temp: °C		Bottles Received: 70		If preservation required by Login: Date/Time			
Relinquished by : (Signature)		Date:	Time:	Received for lab by: (Signature) <i>Lawrence</i>		Date: 6/16/23		Time: 0915		Hold: Condition: NCF / OK			

Company Name/Address: GBMc & Associates - Bryant, AR 219 Brown Lane Little Rock, AR 72022				Billing Information: Accounts Payable 219 Brown Ln. Bryant, AR 72022				Analysis / Container / Preservative Pres Chk				Chain of Custody Page ____ of ____ PEOPLE ADVANCING SCIENCE MT JULIET, TN 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf								
Report to: Will Glenn				Email To: Will.Glenn@AllianceTG.com; Jonathan.Brown@																
Project Description: Entergy ISES			City/State Collected:		Please Circle: PT MT CT ET															
Phone: 501-847-7077		Client Project # 1145-21-081		Lab Project # GBMCBAR-ENTERGYISES																
Collected by (print): <i>Will Glenn</i>		Site/Facility ID # ISES		P.O. #																
Collected by (signature): <i>Will Glenn</i>		Rush? (Lab MUST Be Notified) ___ Same Day ___ Five Day ___ Next Day ___ 5 Day (Rad Only) ___ Two Day ___ 10 Day (Rad Only) ___ Three Day		Quote #																
Immediately Packed on Ice N ___ Y ☒		Date Results Needed		No. of Cntrs																
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time															
MW-15		GW		6-14-23	1400	5	X	X	X	X										
MW-16		GW		6-14-23	1135	1	↓	↓	↓	↓										
MW-17		GW		6-14-23	1030	1	↓	↓	↓	↓										
FIELD BLANK 1		GW		6-13-23	1030		↓	↓	↓	↓										
DUPLICATE 1		GW																		
FIELD BLANK 4		GW																		
		GW																		
		GW																		
		GW																		
		GW																		

* Matrix:

SS - Soil AIR - Air F - Filter

GW - Groundwater B - Bioassay

WW - WasteWater

DW - Drinking Water

OT - Other _____

Remarks:

Samples returned via:
 ___ UPS ☒ FedEx ___ Courier

Tracking #

Relinquished by : (Signature)
Will Glenn

Relinquished by : (Signature)

Relinquished by : (Signature)

Date: 6-15-23 Time: 1055

Date: Time:

Date: Time:

Received by: (Signature)

Received by: (Signature)

Received for lab by: (Signature)
Lamar

Trip Blank Received: Yes / No
HCL / MeOH
TBR

Temp: °C Bottles Received:

Date: Time:

Hold:

Condition:
NCF ☒ OK

Sample Receipt Checklist

COC Seal Present/Intact: ☒ NP ☒ N

COC Signed/Accurate: ☒ N

Bottles arrive intact: ☒ N

Correct bottles used: ☒ N

Sufficient volume sent: ☒ N

If Applicable

VOA Zero Headspace: ☒ Y ☒ N

Preservation Correct/Checked: ☒ Y ☒ N

RAD Screen <0.5 mR/hr: ☒ Y ☒ N



MT JULIET, TN

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

SDG # *UL026813*

Table #

Acctnum: **GBMCBAR**

Template: **T231228**

Prelogin: **P1003292**

PM: **829 - Brittne L Boyd**

PB: *5-30-2023 G*

Shipped Via: **FedEX Ground**

Remarks Sample # (lab only)

7.43 -11

2.62* -12

2.01* -13

 -14

Sample Receipt Checklist

COC Seal Present/Intact: ☒ NP ☒ N

COC Signed/Accurate: ☒ N

Bottles arrive intact: ☒ N

Correct bottles used: ☒ N

Sufficient volume sent: ☒ N

If Applicable

VOA Zero Headspace: ☒ Y ☒ N

Preservation Correct/Checked: ☒ Y ☒ N

RAD Screen <0.5 mR/hr: ☒ Y ☒ N

If preservation required by Login: Date/Time

LI020813

Tracking		G.BA7	
Numbers		Temperature	
6525	5564 0059		13.8 + 0 = 13.8
6337	2251 9688		17.8 + 0 = 17.8
6337	2251 9136		11.7 + 0 = 11.7
6525	5564 0048		8.1 + 0 = 8.1
6525	5564 0037		8.7 + 0 = 8.7
6525	5564 0060		9.8 + 0 = 9.8
6525	5564 0070		5.6 + 0 = 5.6

6/16-NCF-L1626813 GBMCBAR

R5

Time estimate: 0h

Time spent: 0h

Members



Hailey Melson (responsible)



Brittnie Boyd

Due on 20 June 2023 8:00 AM for target Done

- ☐ Parameter(s) past holding time
- ☒ Temperature not in range
- ☐ Improper container type
- ☐ pH not in range
- ☐ Insufficient sample volume
- ☐ Sample is biphasic
- ☐ Vials received with headspace
- ☐ Broken container
- ☐ Sufficient sample remains
- ☐ If broken container: Insufficient packing material around container
- ☐ If broken container: Insufficient packing material inside cooler
- ☐ If broken container: Improper handling by carrier: _____
- ☐ If broken container: Sample was frozen
- ☐ If broken container: Container lid not intact
- ☒ Client informed by Call
- ☐ Client informed by Email
- ☐ Client informed by Voicemail
- ☒ Date/Time: 06/16 1624 _____
- ☒ PM initials: BB _____
- ☒ Client Contact: Will Glenn _____

Comments

Hailey Melson

16 June 2023 4:21 PM

All but 1 cooler received out of temp. Temp are 13.8, 17.8, 11.7, 8.1, 8.7, 9.8, 5.6
Unfortunately we are unsure which samples came out of the cooler that was still in temp.
Water was present in each cooler indicating that Ice had been in the cooler when shipped.

Brittnie Boyd

16 June 2023 4:24 PM

Please run as received

Hailey Melson

16 June 2023 4:37 PM

Done

Alliance Technical Group - Bryant, AR

Sample Delivery Group: L1676962
Samples Received: 11/11/2023
Project Number: 1145-21-081
Description: Entergy ISES
Site: ISES
Report To: Jonathan Brown
219 Brown Lane
Little Rock, AR 72022

Entire Report Reviewed By:



Brittanie L Boyd
Project Manager

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

Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	6
Sr: Sample Results	7
MW-1R L1676962-01	7
MW-2 L1676962-02	8
MW-3 L1676962-03	9
MW-6 L1676962-04	10
MW-7 L1676962-05	11
MW-8 L1676962-06	12
MW-9 L1676962-07	13
MW-10 L1676962-08	14
MW-11 L1676962-09	15
MW-14 L1676962-10	16
MW-15 L1676962-11	17
MW-16 L1676962-12	18
MW-17 L1676962-13	19
FIELD BLANK 1 L1676962-14	20
DUPLICATE 1 (702S) L1676962-15	21
Qc: Quality Control Summary	22
Gravimetric Analysis by Method 2540 C-2011	22
Wet Chemistry by Method 9040C	27
Wet Chemistry by Method 9056A	29
Metals (ICP) by Method 6010B	35
Metals (ICPMS) by Method 6020	36
Gl: Glossary of Terms	37
Al: Accreditations & Locations	38
Sc: Sample Chain of Custody	39

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

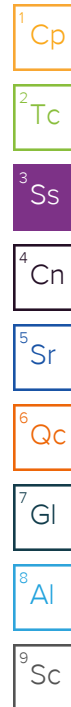
SAMPLE SUMMARY

MW-1R L1676962-01 GW

Collected by
Collected date/time
Received date/time

11/08/23 08:50 11/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2170979	1	11/14/23 14:56	11/15/23 16:14	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2173737	1	11/18/23 15:00	11/18/23 15:00	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174470	1	11/22/23 05:58	11/22/23 05:58	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174470	5	11/22/23 06:13	11/22/23 06:13	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2169904	1	11/19/23 16:16	11/20/23 16:36	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2169915	1	11/19/23 16:15	11/20/23 14:50	LD	Mt. Juliet, TN



MW-2 L1676962-02 GW

Collected by
Collected date/time
Received date/time

11/07/23 09:26 11/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2170056	1	11/13/23 07:24	11/13/23 08:00	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2173737	1	11/18/23 15:00	11/18/23 15:00	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174470	1	11/22/23 06:28	11/22/23 06:28	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174470	5	11/22/23 06:43	11/22/23 06:43	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2169904	1	11/19/23 16:16	11/20/23 16:39	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2169915	1	11/19/23 16:15	11/20/23 14:54	LD	Mt. Juliet, TN

MW-3 L1676962-03 GW

Collected by
Collected date/time
Received date/time

11/08/23 12:25 11/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2170979	1	11/14/23 14:56	11/15/23 16:14	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2173737	1	11/18/23 15:00	11/18/23 15:00	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174470	1	11/22/23 06:58	11/22/23 06:58	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2169904	1	11/19/23 16:16	11/20/23 16:42	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2169915	1	11/19/23 16:15	11/20/23 14:57	LD	Mt. Juliet, TN

MW-6 L1676962-04 GW

Collected by
Collected date/time
Received date/time

11/06/23 16:55 11/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2169665	1	11/12/23 18:18	11/12/23 22:33	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2173737	1	11/18/23 15:00	11/18/23 15:00	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174470	1	11/22/23 07:12	11/22/23 07:12	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2169904	1	11/19/23 16:16	11/20/23 16:45	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2169915	1	11/19/23 16:15	11/20/23 15:00	LD	Mt. Juliet, TN

MW-7 L1676962-05 GW

Collected by
Collected date/time
Received date/time

11/09/23 09:15 11/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2172381	1	11/16/23 14:27	11/16/23 17:07	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2173737	1	11/18/23 15:00	11/18/23 15:00	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174507	1	11/22/23 23:11	11/22/23 23:11	ASM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2169904	1	11/19/23 16:16	11/20/23 16:53	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2169915	1	11/19/23 16:15	11/20/23 15:10	LD	Mt. Juliet, TN

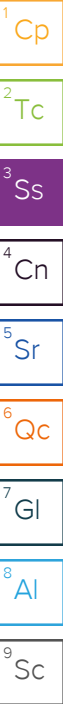
SAMPLE SUMMARY

MW-8 L1676962-06 GW

Collected by
Collected date/time
Received date/time

11/07/23 15:20 11/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2170056	1	11/13/23 07:24	11/13/23 08:00	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2173740	1	11/18/23 15:00	11/18/23 15:00	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174512	1	11/21/23 13:43	11/21/23 13:43	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2169904	1	11/19/23 16:16	11/20/23 16:56	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2169915	1	11/19/23 16:15	11/20/23 15:13	LD	Mt. Juliet, TN



MW-9 L1676962-07 GW

Collected by
Collected date/time
Received date/time

11/07/23 16:00 11/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2170056	1	11/13/23 07:24	11/13/23 08:00	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2173740	1	11/18/23 15:00	11/18/23 15:00	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174512	1	11/21/23 14:34	11/21/23 14:34	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174512	5	11/21/23 15:12	11/21/23 15:12	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2169904	1	11/19/23 16:16	11/20/23 16:59	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2169915	1	11/19/23 16:15	11/20/23 15:16	LD	Mt. Juliet, TN

MW-10 L1676962-08 GW

Collected by
Collected date/time
Received date/time

11/06/23 16:00 11/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2169665	1	11/12/23 18:18	11/12/23 22:33	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2173740	1	11/18/23 15:00	11/18/23 15:00	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174512	1	11/21/23 15:25	11/21/23 15:25	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2169904	1	11/19/23 16:16	11/20/23 17:02	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2169915	1	11/19/23 16:15	11/20/23 15:20	LD	Mt. Juliet, TN

MW-11 L1676962-09 GW

Collected by
Collected date/time
Received date/time

11/09/23 08:30 11/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2171597	1	11/15/23 11:37	11/15/23 17:53	NTG	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2173740	1	11/18/23 15:00	11/18/23 15:00	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174512	1	11/21/23 15:50	11/21/23 15:50	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2169904	1	11/19/23 16:16	11/20/23 17:04	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2169915	1	11/19/23 16:15	11/20/23 15:23	LD	Mt. Juliet, TN

MW-14 L1676962-10 GW

Collected by
Collected date/time
Received date/time

11/08/23 15:55 11/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2170979	1	11/14/23 14:56	11/15/23 16:14	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2173740	1	11/18/23 15:00	11/18/23 15:00	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174512	1	11/21/23 16:15	11/21/23 16:15	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2169904	1	11/19/23 16:16	11/20/23 17:07	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2169915	1	11/19/23 16:15	11/20/23 15:26	LD	Mt. Juliet, TN

ACCOUNT:

Alliance Technical Group - Bryant, AR

PROJECT:

1145-21-081

SDG:

L1676962

DATE/TIME:

11/27/23 14:53

PAGE:

4 of 41

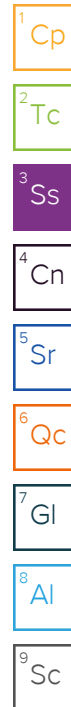
SAMPLE SUMMARY

MW-15 L1676962-11 GW

Collected by
Collected date/time
Received date/time

11/08/23 10:15 11/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2170979	1	11/14/23 14:56	11/15/23 16:14	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2173740	1	11/18/23 15:00	11/18/23 15:00	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174512	1	11/21/23 16:41	11/21/23 16:41	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2169904	1	11/19/23 16:16	11/20/23 17:10	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2169915	1	11/19/23 16:15	11/20/23 15:29	LD	Mt. Juliet, TN



MW-16 L1676962-12 GW

Collected by
Collected date/time
Received date/time

11/08/23 14:55 11/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2170979	1	11/14/23 14:56	11/15/23 16:14	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2173740	1	11/18/23 15:00	11/18/23 15:00	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174512	1	11/21/23 17:06	11/21/23 17:06	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2169904	1	11/19/23 16:16	11/20/23 17:13	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2169915	1	11/19/23 16:15	11/20/23 15:32	LD	Mt. Juliet, TN

MW-17 L1676962-13 GW

Collected by
Collected date/time
Received date/time

11/08/23 13:45 11/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2170979	1	11/14/23 14:56	11/15/23 16:14	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2173740	1	11/18/23 15:00	11/18/23 15:00	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174512	1	11/21/23 17:45	11/21/23 17:45	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2169904	1	11/19/23 16:16	11/20/23 17:16	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2169915	1	11/19/23 16:15	11/20/23 15:36	LD	Mt. Juliet, TN

FIELD BLANK 1 L1676962-14 GW

Collected by
Collected date/time
Received date/time

11/07/23 10:00 11/11/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2170056	1	11/13/23 07:24	11/13/23 08:00	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2173740	1	11/18/23 15:00	11/18/23 15:00	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174512	1	11/21/23 18:10	11/21/23 18:10	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2169904	1	11/19/23 16:16	11/20/23 17:19	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2169915	1	11/19/23 16:15	11/20/23 15:49	LD	Mt. Juliet, TN

DUPLICATE 1 (702S) L1676962-15 GW

Collected by
Collected date/time
Received date/time

11/07/23 09:27 11/11/23 09:00

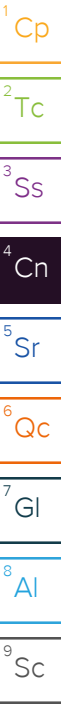
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2170056	1	11/13/23 07:24	11/13/23 08:00	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2173740	1	11/18/23 15:00	11/18/23 15:00	EPW	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174512	1	11/21/23 18:23	11/21/23 18:23	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2174512	5	11/21/23 18:36	11/21/23 18:36	GEB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2169904	1	11/19/23 16:16	11/20/23 17:27	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2169915	1	11/19/23 16:15	11/20/23 15:52	LD	Mt. Juliet, TN

CASE NARRATIVE

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



Brittnie L Boyd
Project Manager



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	910		20.0	1	11/15/2023 16:14	WG2170979

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	6.96	T8	1	11/18/2023 15:00	WG2173737

Sample Narrative:

L1676962-01 WG2173737: 6.96 at 18.1C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	119		1.00	1	11/22/2023 05:58	WG2174470
Fluoride	0.190		0.150	1	11/22/2023 05:58	WG2174470
Sulfate	246		25.0	5	11/22/2023 06:13	WG2174470

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	0.217		0.200	1	11/20/2023 16:36	WG2169904

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	107		1.00	1	11/20/2023 14:50	WG2169915

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	614		10.0	1	11/13/2023 08:00	WG2170056

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.35	T8	1	11/18/2023 15:00	WG2173737

Sample Narrative:

L1676962-02 WG2173737: 7.35 at 18.2C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	8.65		1.00	1	11/22/2023 06:28	WG2174470
Fluoride	0.209		0.150	1	11/22/2023 06:28	WG2174470
Sulfate	204		25.0	5	11/22/2023 06:43	WG2174470

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	ND		0.200	1	11/20/2023 16:39	WG2169904

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	95.0		1.00	1	11/20/2023 14:54	WG2169915

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	352	B	10.0	1	11/15/2023 16:14	WG2170979

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	6.87	T8	1	11/18/2023 15:00	WG2173737

Sample Narrative:

L1676962-03 WG2173737: 6.87 at 18.2C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	36.0		1.00	1	11/22/2023 06:58	WG2174470
Fluoride	0.159		0.150	1	11/22/2023 06:58	WG2174470
Sulfate	54.0		5.00	1	11/22/2023 06:58	WG2174470

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	ND		0.200	1	11/20/2023 16:42	WG2169904

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	53.4		1.00	1	11/20/2023 14:57	WG2169915

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	378		10.0	1	11/12/2023 22:33	WG2169665

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	6.70	T8	1	11/18/2023 15:00	WG2173737

Sample Narrative:

L1676962-04 WG2173737: 6.7 at 18.2C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	29.0		1.00	1	11/22/2023 07:12	WG2174470
Fluoride	ND		0.150	1	11/22/2023 07:12	WG2174470
Sulfate	92.6		5.00	1	11/22/2023 07:12	WG2174470

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	ND		0.200	1	11/20/2023 16:45	WG2169904

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	60.3		1.00	1	11/20/2023 15:00	WG2169915

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	506		10.0	1	11/16/2023 17:07	WG2172381

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.64	T8	1	11/18/2023 15:00	WG2173737

Sample Narrative:

L1676962-05 WG2173737: 7.64 at 18.5C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	24.9		1.00	1	11/22/2023 23:11	WG2174507
Fluoride	0.401		0.150	1	11/22/2023 23:11	WG2174507
Sulfate	40.9		5.00	1	11/22/2023 23:11	WG2174507

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	ND		0.200	1	11/20/2023 16:53	WG2169904

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	52.9		1.00	1	11/20/2023 15:10	WG2169915

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	625		10.0	1	11/13/2023 08:00	WG2170056

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	6.82	T8	1	11/18/2023 15:00	WG2173740

Sample Narrative:

L1676962-06 WG2173740: 6.82 at 18.3C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	55.1	J6	1.00	1	11/21/2023 13:43	WG2174512
Fluoride	ND	P1	0.150	1	11/21/2023 13:43	WG2174512
Sulfate	172	V	5.00	1	11/21/2023 13:43	WG2174512

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	0.353		0.200	1	11/20/2023 16:56	WG2169904

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	81.9		1.00	1	11/20/2023 15:13	WG2169915

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	813		13.3	1	11/13/2023 08:00	WG2170056

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	6.82	T8	1	11/18/2023 15:00	WG2173740

Sample Narrative:

L1676962-07 WG2173740: 6.82 at 18.7C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	55.9		1.00	1	11/21/2023 14:34	WG2174512
Fluoride	0.183		0.150	1	11/21/2023 14:34	WG2174512
Sulfate	251		25.0	5	11/21/2023 15:12	WG2174512

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	0.572		0.200	1	11/20/2023 16:59	WG2169904

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	96.8		1.00	1	11/20/2023 15:16	WG2169915

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	492		10.0	1	11/12/2023 22:33	WG2169665

1
Cp

2
Tc

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	6.86	T8	1	11/18/2023 15:00	WG2173740

3
Ss

4
Cn

Sample Narrative:

L1676962-08 WG2173740: 6.86 at 18.3C

5
Sr

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	60.1		1.00	1	11/21/2023 15:25	WG2174512
Fluoride	0.184		0.150	1	11/21/2023 15:25	WG2174512
Sulfate	72.1		5.00	1	11/21/2023 15:25	WG2174512

6
Qc

7
Gl

8
Al

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	ND		0.200	1	11/20/2023 17:02	WG2169904

9
Sc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	64.5		1.00	1	11/20/2023 15:20	WG2169915

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	408	B	10.0	1	11/15/2023 17:53	WG2171597

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	6.99	T8	1	11/18/2023 15:00	WG2173740

Sample Narrative:

L1676962-09 WG2173740: 6.99 at 18.6C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	37.5		1.00	1	11/21/2023 15:50	WG2174512
Fluoride	0.219		0.150	1	11/21/2023 15:50	WG2174512
Sulfate	54.0		5.00	1	11/21/2023 15:50	WG2174512

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	ND		0.200	1	11/20/2023 17:04	WG2169904

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	63.8		1.00	1	11/20/2023 15:23	WG2169915

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	492		10.0	1	11/15/2023 16:14	WG2170979

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	6.98	T8	1	11/18/2023 15:00	WG2173740

Sample Narrative:

L1676962-10 WG2173740: 6.98 at 18.6C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	42.1		1.00	1	11/21/2023 16:15	WG2174512
Fluoride	0.219		0.150	1	11/21/2023 16:15	WG2174512
Sulfate	101		5.00	1	11/21/2023 16:15	WG2174512

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	0.292		0.200	1	11/20/2023 17:07	WG2169904

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	66.6		1.00	1	11/20/2023 15:26	WG2169915

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	474	B	10.0	1	11/15/2023 16:14	WG2170979

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.15	T8	1	11/18/2023 15:00	WG2173740

Sample Narrative:

L1676962-11 WG2173740: 7.15 at 19.3C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	57.9		1.00	1	11/21/2023 16:41	WG2174512
Fluoride	0.219		0.150	1	11/21/2023 16:41	WG2174512
Sulfate	98.4		5.00	1	11/21/2023 16:41	WG2174512

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	0.225		0.200	1	11/20/2023 17:10	WG2169904

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	63.9		1.00	1	11/20/2023 15:29	WG2169915

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	768		13.3	1	11/15/2023 16:14	WG2170979

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.26	T8	1	11/18/2023 15:00	WG2173740

Sample Narrative:

L1676962-12 WG2173740: 7.26 at 18.6C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	34.7		1.00	1	11/21/2023 17:06	WG2174512
Fluoride	0.367		0.150	1	11/21/2023 17:06	WG2174512
Sulfate	157		5.00	1	11/21/2023 17:06	WG2174512

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	0.497		0.200	1	11/20/2023 17:13	WG2169904

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	70.3		1.00	1	11/20/2023 15:32	WG2169915

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	569		10.0	1	11/15/2023 16:14	WG2170979

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.03	T8	1	11/18/2023 15:00	WG2173740

Sample Narrative:

L1676962-13 WG2173740: 7.03 at 18.4C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	48.5		1.00	1	11/21/2023 17:45	WG2174512
Fluoride	0.256		0.150	1	11/21/2023 17:45	WG2174512
Sulfate	113		5.00	1	11/21/2023 17:45	WG2174512

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	0.824		0.200	1	11/20/2023 17:16	WG2169904

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	77.6		1.00	1	11/20/2023 15:36	WG2169915

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	ND		10.0	1	11/13/2023 08:00	WG2170056

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	4.55	T8	1	11/18/2023 15:00	WG2173740

Sample Narrative:

L1676962-14 WG2173740: 4.55 at 20.8C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	ND		1.00	1	11/21/2023 18:10	WG2174512
Fluoride	ND		0.150	1	11/21/2023 18:10	WG2174512
Sulfate	ND		5.00	1	11/21/2023 18:10	WG2174512

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	ND		0.200	1	11/20/2023 17:19	WG2169904

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	ND		1.00	1	11/20/2023 15:49	WG2169915

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	631		10.0	1	11/13/2023 08:00	WG2170056

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.40	T8	1	11/18/2023 15:00	WG2173740

Sample Narrative:

L1676962-15 WG2173740: 7.4 at 20.7C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chloride	8.39		1.00	1	11/21/2023 18:23	WG2174512
Fluoride	0.206		0.150	1	11/21/2023 18:23	WG2174512
Sulfate	191		25.0	5	11/21/2023 18:36	WG2174512

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Boron	ND		0.200	1	11/20/2023 17:27	WG2169904

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Calcium	95.6		1.00	1	11/20/2023 15:52	WG2169915

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3999795-1 11/12/23 22:33

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1675612-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1675612-02 11/12/23 22:33 • (DUP) R3999795-3 11/12/23 22:33

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	241	252	1	4.46		5

L1675947-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1675947-04 11/12/23 22:33 • (DUP) R3999795-4 11/12/23 22:33

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	373	380	1	1.86		5

Laboratory Control Sample (LCS)

(LCS) R3999795-2 11/12/23 22:33

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8610	97.8	85.0-115	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4000434-1 11/13/23 08:00

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1676022-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1676022-01 11/13/23 08:00 • (DUP) R4000434-3 11/13/23 08:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	780	808	1	3.53		5

L1676962-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1676962-02 11/13/23 08:00 • (DUP) R4000434-4 11/13/23 08:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	614	632	1	2.89		5

Laboratory Control Sample (LCS)

(LCS) R4000434-2 11/13/23 08:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8770	99.7	85.0-115	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4001548-1 11/15/23 16:14

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	49.0		10.0	10.0

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1676962-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1676962-10 11/15/23 16:14 • (DUP) R4001548-4 11/15/23 16:14

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	492	510	1	3.59		5

L1676450-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1676450-01 11/15/23 16:14 • (DUP) R4001548-3 11/15/23 16:14

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	387	389	1	0.515		5

Laboratory Control Sample (LCS)

(LCS) R4001548-2 11/15/23 16:14

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8690	98.8	85.0-115	

Method Blank (MB)

(MB) R4001584-1 11/15/23 17:53

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	90.0		10.0	10.0

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

L1676385-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1676385-07 11/15/23 17:53 • (DUP) R4001584-3 11/15/23 17:53

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	425	443	1	4.15		5

⁷Gl

⁸Al

Laboratory Control Sample (LCS)

(LCS) R4001584-2 11/15/23 17:53

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8750	99.4	85.0-115	

⁹Sc

Method Blank (MB)

(MB) R4001974-1 11/16/23 17:07

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1676962-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1676962-05 11/16/23 17:07 • (DUP) R4001974-3 11/16/23 17:07

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Dissolved Solids	506	500	1	1.19		5

Laboratory Control Sample (LCS)

(LCS) R4001974-2 11/16/23 17:07

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/l	mg/l	%	%	
Dissolved Solids	8800	8340	94.8	85.0-115	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1676813-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1676813-02 11/18/23 15:00 • (DUP) R4001837-2 11/18/23 15:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.14	8.14	1	0.000		1

Sample Narrative:

OS: 8.14 at 18C

DUP: 8.14 at 18.3C

L1678963-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1678963-01 11/18/23 15:00 • (DUP) R4001837-3 11/18/23 15:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.62	7.63	1	0.131		1

Sample Narrative:

OS: 7.62 at 18.4C

DUP: 7.63 at 18.9C

Laboratory Control Sample (LCS)

(LCS) R4001837-1 11/18/23 15:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	10.0	100	99.0-101	

Sample Narrative:

LCS: 10.02 at 19.7C



L1676309-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1676309-01 11/18/23 15:00 • (DUP) R4001818-2 11/18/23 15:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	6.89	6.94	1	0.723		1

Sample Narrative:

OS: 6.89 at 19.4C

DUP: 6.94 at 23C

L1677499-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1677499-01 11/18/23 15:00 • (DUP) R4001818-3 11/18/23 15:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	7.48	7.50	1	0.267		1

Sample Narrative:

OS: 7.48 at 18.6C

DUP: 7.5 at 23C

Laboratory Control Sample (LCS)

(LCS) R4001818-1 11/18/23 15:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	su	su	%	%	
pH	10.0	10.0	100	99.0-101	

Sample Narrative:

LCS: 10 at 19.4C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4003367-1 11/22/23 00:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.379	1.00
Fluoride	U		0.0640	0.150
Sulfate	U		0.594	5.00

L1676941-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1676941-06 11/22/23 02:14 • (DUP) R4003367-3 11/22/23 02:59

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	20.9	20.8	1	0.627		15
Fluoride	ND	ND	1	9.59		15
Sulfate	9.03	8.90	1	1.39		15

L1677050-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1677050-07 11/22/23 08:12 • (DUP) R4003367-6 11/22/23 08:57

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	992	1010	1	1.88	E	15
Fluoride	ND	ND	1	2.10		15
Sulfate	52.5	51.7	1	1.50		15

Laboratory Control Sample (LCS)

(LCS) R4003367-2 11/22/23 00:15

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	40.7	102	80.0-120	
Fluoride	8.00	8.46	106	80.0-120	
Sulfate	40.0	41.7	104	80.0-120	

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

L1676941-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1676941-06 11/22/23 02:14 • (MS) R4003367-4 11/22/23 03:14 • (MSD) R4003367-5 11/22/23 03:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Chloride	40.0	20.9	57.1	57.7	90.3	92.0	1	80.0-120			1.18	15
Fluoride	8.00	ND	8.23	8.34	101	103	1	80.0-120			1.29	15
Sulfate	40.0	9.03	47.9	48.2	97.2	97.8	1	80.0-120			0.527	15

L1677050-07 Original Sample (OS) • Matrix Spike (MS)

(OS) L1677050-07 11/22/23 08:12 • (MS) R4003367-7 11/22/23 09:12

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Chloride	40.0	992	829	0.000	1	80.0-120	<u>E V</u>
Fluoride	8.00	ND	8.36	104	1	80.0-120	
Sulfate	40.0	52.5	86.1	84.1	1	80.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4004023-1 11/22/23 15:01

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.379	1.00
Fluoride	U		0.0640	0.150
Sulfate	U		0.594	5.00

L1677224-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1677224-01 11/22/23 23:25 • (DUP) R4004023-3 11/22/23 23:39

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	6.39	6.44	1	0.820		15
Fluoride	0.229	0.231	1	1.13		15
Sulfate	44.4	44.8	1	1.05		15

L1678372-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1678372-07 11/23/23 03:18 • (DUP) R4004023-6 11/23/23 04:00

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	6.89	6.91	1	0.270		15
Fluoride	0.298	0.316	1	5.74		15
Sulfate	33.7	33.8	1	0.154		15

Laboratory Control Sample (LCS)

(LCS) R4004023-2 11/22/23 15:15

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	40.1	100	80.0-120	
Fluoride	8.00	7.94	99.2	80.0-120	
Sulfate	40.0	39.6	99.1	80.0-120	

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

L1677224-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1677224-01 11/22/23 23:25 • (MS) R4004023-4 11/22/23 23:52 • (MSD) R4004023-5 11/23/23 00:06

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	6.39	45.7	45.8	98.3	98.6	1	80.0-120			0.238	15
Fluoride	8.00	0.229	8.47	8.51	103	103	1	80.0-120			0.416	15
Sulfate	40.0	44.4	74.6	74.8	75.7	76.1	1	80.0-120	J6	J6	0.202	15

L1678372-07 Original Sample (OS) • Matrix Spike (MS)

(OS) L1678372-07 11/23/23 03:18 • (MS) R4004023-7 11/23/23 04:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40.0	6.89	45.6	96.7	1	80.0-120	
Fluoride	8.00	0.298	8.41	101	1	80.0-120	
Sulfate	40.0	33.7	65.8	80.2	1	80.0-120	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4003407-1 11/21/23 10:47

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.379	1.00
Fluoride	U		0.0640	0.150
Sulfate	U		0.594	5.00

L1676962-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1676962-06 11/21/23 13:43 • (DUP) R4003407-3 11/21/23 13:55

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	55.1	55.3	1	0.341		15
Fluoride	ND	0.186	1	41.5	P1	15
Sulfate	172	172	1	0.213		15

L1676987-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1676987-08 11/21/23 20:56 • (DUP) R4003407-6 11/21/23 21:08

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	34.9	34.6	1	1.01		15
Fluoride	0.152	ND	1	7.00		15
Sulfate	50.7	50.4	1	0.635		15

Laboratory Control Sample (LCS)

(LCS) R4003407-2 11/21/23 11:00

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	39.4	98.5	80.0-120	
Fluoride	8.00	8.12	102	80.0-120	
Sulfate	40.0	38.8	96.9	80.0-120	

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

L1676962-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1676962-06 11/21/23 13:43 • (MS) R4003407-4 11/21/23 14:08 • (MSD) R4003407-5 11/21/23 14:21

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	55.1	85.3	84.8	75.5	74.2	1	80.0-120	<u>J6</u>	<u>J6</u>	0.611	15
Fluoride	8.00	ND	8.10	8.31	99.7	102	1	80.0-120			2.63	15
Sulfate	40.0	172	180	179	20.3	18.4	1	80.0-120	<u>V</u>	<u>V</u>	0.414	15

L1676987-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L1676987-08 11/21/23 20:56 • (MS) R4003407-7 11/21/23 21:21

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40.0	34.9	68.4	83.6	1	80.0-120	
Fluoride	8.00	0.152	8.18	100	1	80.0-120	
Sulfate	40.0	50.7	80.0	73.3	1	80.0-120	<u>J6</u>

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4002534-1 11/20/23 16:19

Analyte	MB Result mg/l	<u>MB Qualifier</u>	MB MDL mg/l	MB RDL mg/l
Boron	U		0.0200	0.200

Laboratory Control Sample (LCS)

(LCS) R4002534-2 11/20/23 16:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Boron	1.00	0.952	95.2	80.0-120	

L1676987-23 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1676987-23 11/20/23 16:25 • (MS) R4002534-4 11/20/23 16:30 • (MSD) R4002534-5 11/20/23 16:33

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Boron	1.00	ND	0.984	0.967	98.4	96.7	1	75.0-125			1.76	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R4002349-1 11/20/23 14:31

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Calcium	0.126	⬇	0.0936	1.00

Laboratory Control Sample (LCS)

(LCS) R4002349-2 11/20/23 14:34

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium	5.00	5.14	103	80.0-120	

L1677224-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1677224-04 11/20/23 14:37 • (MS) R4002349-4 11/20/23 14:44 • (MSD) R4002349-5 11/20/23 14:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Calcium	5.00	15.8	20.7	20.8	98.9	101	1	75.0-125			0.534	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

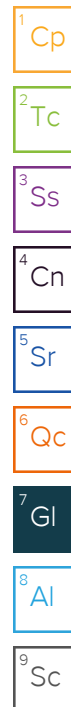
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.



ACCREDITATIONS & LOCATIONS

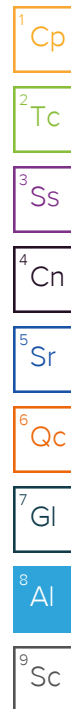
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

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

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

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



Company Name/Address: GBMc & Associates - Bryant, AR <i>Alliance</i> 219 Brown Lane Little Rock, AR 72022				Billing Information: Accounts Payable 219 Brown Ln. Bryant, AR 72022				Analysis / Container / Preservative				Chain of Custody Page ____ of ____	
								Pres Chk 22 22					
Report to: Joathan Brown <i>Jonathan</i>				Email To: Jonathan.Brown@AllianceTG.com; Brett.Galland				 MT JULIET, TN 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubs/pas-standard-terms.pdf					
Project Description: Entergy ISES		City/State Collected:		Please Circle: PT MT CT ET									
Phone: 501-847-7077		Client Project # 1145-21-081		Lab Project # GBMCBAR-ENTERGYISES		BICP 250mlHDPE-HNO3 CAG 250mlHDPE-HNO3 Cl, F, SO4 125mlHDPE-NoPres TDS 1L-HDPE NoPres							
Collected by (print):		Site/Facility ID # ISES		P.O. #									
Collected by (signature): <i>[Signature]</i>		Rush? (Lab MUST Be Notified) ☐ Same Day ☐ Five Day ☐ Next Day ☐ 5 Day (Rad Only) ☐ Two Day ☐ 10 Day (Rad Only) ☐ Three Day		Quote #									
Immediately Packed on Ice N ☐ Y ☒		Date Results Needed		No. of Cntrs									
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time							
MW-1R		G	GW		11/9/23	0850	5						
MW-2		G	GW		11/7/23	0924	5						
MW-3		G	GW		11/8/23	1225	5						
MW-6		G	GW		11/6/23	1655	5						
MW-7		G	GW		11/9/23	0915	5						
MW-8		G	GW		11/7/23	1520	5						
MW-9		G	GW		11/7/23	1600	5						
MW-10		G	GW		11/6/23	1600	5						
MW-11		G	GW		11/9/23	0830	5						
MW-14		G	GW		11/8/23	1555	5						
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____		Remarks:										pH _____ Temp _____ Flow _____ Other _____	
Samples returned via: ☐ UPS ☐ FedEx ☐ Courier		Tracking #										Sample Receipt Checklist COC Seal Present/Intact: ☒ NP ☐ N COC Signed/Accurate: ☒ Y ☐ N Bottles arrive intact: ☒ Y ☐ N Correct bottles used: ☒ Y ☐ N Sufficient volume sent: ☒ Y ☐ N If Applicable VOA Zero Headspace: ☒ Y ☐ N Preservation Correct/Checked: ☒ Y ☐ N RAD Screen <0.5 mR/hr: ☒ Y ☐ N	
Relinquished by: (Signature) <i>[Signature]</i>		Date: 11/10/23	Time: 1100	Received by: (Signature) <i>[Signature]</i>				Trip Blank Received: Yes/No HCL / MeOH TBR				PH-10BDH4321 TRC 23623F2 CR6-20221V	
Relinquished by: (Signature)		Date:	Time:	Received by: (Signature)				Temp: °C Bottles Received: 75				Date/Time	
Relinquished by: (Signature)		Date:	Time:	Received for lab by: (Signature) <i>[Signature]</i>				Date: 11/11/23 Time: 9:00				Hold: Condition: NCF / OK	

Company Name/Address: GBMc & Associates - Bryant, AR <i>Alliance</i> 219 Brown Lane Little Rock, AR 72022				Billing Information: Accounts Payable 219 Brown Ln. Bryant, AR 72022				Chain of Custody Page <u> </u> of <u> </u>  MT JULIET, TN 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf																							
Report to: Joathan Brown <i>Jonathan</i>				Email To: Jonathan.Brown@AllianceTG.com; Brett Gelland				Analysis / Container / Preservative <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%;">Pres Chk</td> <td style="width:10%;">2</td> <td style="width:10%;">2</td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> </tr> <tr> <td></td> <td>BICP 250mlHDPE-HNO3</td> <td>CAG 250mlHDPE-HNO3</td> <td>Cl, F, SO4 125mlHDPE-NoPres</td> <td>TDS 1L-HDPE NoPres</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>				Pres Chk	2	2									BICP 250mlHDPE-HNO3	CAG 250mlHDPE-HNO3	Cl, F, SO4 125mlHDPE-NoPres	TDS 1L-HDPE NoPres					
Pres Chk	2	2																													
	BICP 250mlHDPE-HNO3	CAG 250mlHDPE-HNO3	Cl, F, SO4 125mlHDPE-NoPres	TDS 1L-HDPE NoPres																											
Project Description: Entergy ISES		City/State Collected: 		Please Circle: PT MT CT ET																											
Phone: 501-847-7077		Client Project # 1145-21-081		Lab Project # GBMCBAR-ENTERGYISES																											
Collected by (print):		Site/Facility ID # ISES		P.O. #																											
Collected by (signature): <i>[Signature]</i>		Rush? (Lab MUST Be Notified) ☐ Same Day ☐ Five Day ☐ Next Day ☐ 5 Day (Rad Only) ☐ Two Day ☐ 10 Day (Rad Only) ☐ Three Day		Quote #																											
Immediately Packed on Ice N ☐ Y ☒		Date Results Needed		No. of Cntrs																											
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time																										
MW-15	G	GW		11/8/23	1015																										
MW-16	G	GW		11/9/23	1455																										
MW-17	G	GW		11/8/23	1345																										
FIELD BLANK 1		GW		11/7/23	1000																										
DUPLICATE 1 (7025)		GW		11/7/23	0927																										
		GW																													
		GW																													
		GW																													
		GW																													
		GW																													

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
☐ UPS ☐ FedEx ☐ Courier _____

Tracking # _____

Relinquished by : (Signature) <i>[Signature]</i>	Date: 11/10/23	Time: 1100	Received by: (Signature) <i>[Signature]</i>	Trip Blank Received: Yes ☒ No ☐ HCL / MeOH TBR	Bottles Received: 75
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by (Signature) <i>Carol Kemp</i>	Date: 11/11/23	Time: 9:00

Sample Receipt Checklist

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

