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

2025 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:

700 Highlander Blvd
Suite 210
Arlington, TX 76015

January 31, 2026

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EXECUTIVE SUMMARY

Entergy Arkansas, LLC (EAL), 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 2025 for the Landfill CCR unit groundwater monitoring well network per 40 CFR §257.94. The statistical analyses completed for the second semi-annual 2024 identified potential statistically significant increases (SSIs); therefore, an alternate source demonstration (ASD) was performed for this semi-annual detection monitoring event and is attached to this report. No potential SSIs were identified for the semi-annual detection monitoring events in 2025; therefore, no ASDs were performed for these sampling events. The Landfill CCR unit operated under the detection monitoring program (40 CFR § 257.94) during the duration of 2025.

1. INTRODUCTION

Entergy Arkansas, LLC (EAL), 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. EAL 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, EAL 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 15 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 DECOMISSIONED WELLS DURING 2025

EAL installed a new well MW-20R to replace MW-20 in January 2025, which was replaced due to its location relative to the location of construction of new CCR Cell 16.

EAL decommissioned three monitoring wells MW-8 (MW-708S), MW-9 (MW-709M and MW-709D), and one groundwater pump test well (PW-1) in June 2025 due to their location relative to the location of construction of new CCR Cell 16.

4. GROUNDWATER MONITORING DATA

In accordance with §257.90(e)(3), all monitoring data obtained under §257.90 through §257.98 during 2025 are provided in Appendix B and C. Monitoring data includes:

- Groundwater level measurements and groundwater flow characteristics;
- Summary of the number of groundwater samples that were collected for analysis for each background and downgradient well;
- Dates the samples were collected;
- Whether the sample was collected as part of detection or assessment monitoring; and
- Summary of CCR Rule constituent results.

5. STATUS SUMMARY OF THE 2025 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 2025 is provided in the list below:

- In accordance with §257.94(b), semiannual detection monitoring was performed during the first half (May) and second half (September) of 2025 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 EAL's CCR Rule Compliance Data and Information website.

- Statistical evaluation of the second half 2024 semi-annual detection monitoring event was completed in 2025. Based on statistical evaluation of the data, two potential statistically significant increases (SSIs) were identified. EAL completed a successful alternative source demonstration (ASD) per §257.94 for this detection monitoring event for the CADL CCR Unit (Appendix E).

- Statistical evaluations of the first half 2025 (May) and the second half 2025 (September) semi-annual detection monitoring event were completed in 2025 and no SSIs were identified; therefore, EAL did not prepare an ASD per §257.94(e)(2) for the detection monitoring event for the CADL CCR Unit.

- Problems were encountered during 2025 regarding the detection monitoring and corrective action system with the locations of four groundwater monitoring wells (MW-20, MW-708S, MW-709M and MW-709D due to their proximity to the area of disturbance for construction of new CCR Cell 16. All four wells were closed and a new well MW-20R was installed during 2025.

- The Landfill CCR unit remained in detection monitoring during the duration of 2025.

6. PROJECTED ACTIVITIES FOR 2026

Planned activities for the program during 2026 are listed below:

- Semiannual detection monitoring is planned for the first (May) and second (September) halves 2026.
- Statistical evaluations of the first half and second half of 2026 detection monitoring sampling data will be performed during 2026 to determine if any SSIs are identified.
- Recertification of the groundwater monitoring system is planned for 2026.

7. CERTIFICATION

I hereby certify that this Annual Groundwater Monitoring Report for the Entergy Independence Plant Coal Ash Disposal Landfill CCR Unit has been prepared in accordance with the requirements of Title 40 CFR §257.94(e) 2 of the Federal CCR Rule. This report is accurate to the best of my knowledge and has been developed using sound engineering practices, including the consideration of applicable industry standards and the requirements of Title 40 CFR §257.94(e) 2.

Name: Wenbo Xie P.E. **Expiration Date:** 12/31/2026

Company: TRC Environmental Corporation **Date:** 01/31/2026

APPENDIX A
WELL LOCATIONS

LEGEND

- NEW CADL MONITORING WELLS
- CADL MONITORING WELLS
- REMOVED MONITORING CADL WELLS IN JUNE 2025
- LANDFILL BOUNDARY

NOTES

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

N

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.:	635880.0000.00000
CHECKED BY:	W. XIE		
APPROVED BY:	E. GAINES		**FIGURE 1**
DATE:	NOVEMBER 2025		

TRC
700 HIGHLANDER BLVD.
SUITE 210
ARLINGTON, TX 76015
(817) 522-1000

FILE NO.: Entergy_ISES_new_wells_20251110.mxd

Plot Date: 11/14/2025, 13:51:27 PM by DSTITCHER – LAYOUT: ANSI B (11"x17")
Path: T:\arcgispro\1-PROJECTS\ENTERGY\MadisonLegacy\Projects\Arkansas\2025\Entergy_ISES_new_wells_20251110.mxd
Coordinate System: NAD 1983 StatePlane Arkansas North FIPS 0301 Feet (Foot US)
Map Rotation: 0

TRC - GIS

APPENDIX B
GROUNDWATER LEVEL DATA

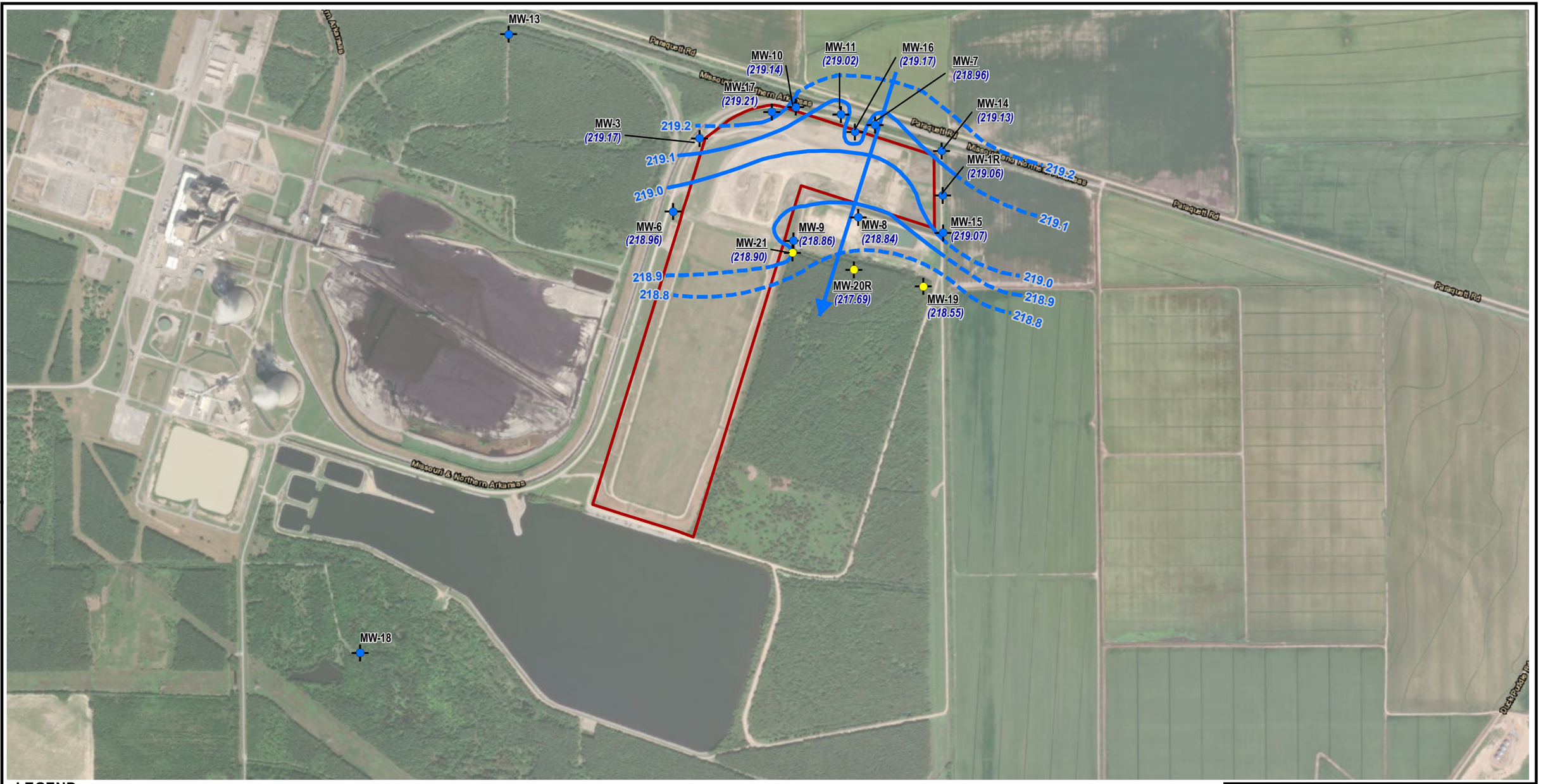
Water Level Measurements 2025					
Well ID	TOC Elevation (ft NAVD88)	April 22, 2025		September 15, 2025	
		Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft NAVD88)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft NAVD88)
MW-1R	241.76	22.70	219.06	31.67	210.09
MW-3	241.97	22.80	219.17	31.70	210.27
MW-6	239.39	20.43	218.96	29.14	210.25
MW-7	239.09	20.13	218.96	29.03	210.06
MW-8	240.11	21.27	218.84	NM	NM
MW-9	239.08	20.22	218.86	NM	NM
MW-10	242.04	22.90	219.14	31.85	210.19
MW-11	241.66	22.64	219.02	31.54	210.12
MW-14	241.79	22.66	219.13	31.72	210.07
MW-15	240.37	21.30	219.07	30.26	210.11
MW-16	242.62	23.45	219.17	32.45	210.17
MW-17	241.94	22.73	219.21	31.74	210.20
MW-19	235.44	16.89	218.55	25.48	209.96
MW-20R	236.10	18.41	217.69	26.23	209.87
MW-21	236.42	17.52	218.90	26.86	209.56

Notes:

1. Wells MW-13 and MW-18 were not sampled during 2025.
2. Wells MW-8 and MW-9 were removed during June 2025.

TOC – Top of Casing

NM – Not Measured



LEGEND

- NEW CADL MONITORING WELLS
- CADL MONITORING WELLS
- LANDFILL BOUNDARY
- GROUNDWATER CONTOUR: 0.1' INTERVAL (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

NOTES

1. BASE MAP IMAGERY FROM ESRI/DIGITAL GLOBE, 2016.
2. WATER LEVELS COLLECTED MAY 12, 2025.
3. MW-13 AND MW-18 WERE NOT SAMPLED.

N

0 900 1,800 Feet

1 " = 900 '
1:10,800

PROJECT:
ENTERGY INDEPENDENCE PLANT
555 POINT FERRY ROAD
NEWARK, ARKANSAS

TITLE:
1ST HALF 2025 POTENTIOMETRIC MAP

DRAWN BY:	D. STITCHER	PROJ. NO.:	635880
CHECKED BY:	W. XIE		
APPROVED BY:	E. GAINES		**FIGURE 2.1**
DATE:	NOVEMBER 2025		

TRC
700 HIGHLANDER BLVD.
SUITE 210
ARLINGTON, TX 76015
(817) 522-1000

FILE NO.: Entergy_ISES_CCR_1H25_Fig_2.1_20251110.mxd

Plot Date: 11/14/2025, 13:46:31 PM by DSTITCHER – LAYOUT: ANSI B (11"x17")
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Coordinate System: NAD 1983 StatePlane Arkansas North FIPS 0301 Feet (Foot US)
Map Rotation: 0

TRC – GIS

TRC - GIS

Coordinate System: NAD 1983 StatePlane Arkansas North FIPS 0301 Feet (Foot US)
Map Rotation: 0
Data Frames: Fig_2.2_20251110.mxd
Plot Date: 11/14/2025, 13:47:46 PM by DSTITCHER – LAYOUT: ANSI B (11"x17")
Path: T:\arcgispro\1-PROJECTS\ENTERGY\MadisonLegacy\Projects\Arkansas\2025\2025 2nd Half\Entergy_ISES_CCR_2H25_Fig_2.2_20251110.mxd

MW-13
MW-10 (210.19)
MW-11 (210.12)
MW-16 (210.17)
MW-7 (210.06)
MW-17 (210.20)
MW-14 (210.07)
MW-3 (210.27)
MW-6 (210.25)
MW-1R (210.09)
MW-15 (210.11)
MW-21 (209.56)
MW-19 (209.96)
MW-20R (209.87)
MW-18
210.2
210.1
210.0
209.9
209.8
209.7
Missouri & Northern Arkansas
Paraquat Rd

LEGEND

- NEW CADL MONITORING WELLS
- CADL MONITORING WELLS
- LANDFILL BOUNDARY
- GROUNDWATER CONTOUR: 0.1' INTERVAL (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

NOTES

1. BASE MAP IMAGERY FROM ESRI/DIGITAL GLOBE, 2016.
2. WATER LEVELS COLLECTED SEPTEMBER 22, 2025.
3. MW-13 AND MW-18 WERE NOT SAMPLED.

N

0 900 1,800 Feet

1 " = 900 '
1:10,800

PROJECT:
ENTERGY INDEPENDENCE PLANT
555 POINT FERRY ROAD
NEWARK, ARKANSAS

TITLE:
2ND HALF 2025 POTENTIOMETRIC MAP

DRAWN BY:	D. STITCHER	PROJ. NO.:	635880
CHECKED BY:	W. XIE		
APPROVED BY:	E. GAINES		**FIGURE 2.2**
DATE:	NOVEMBER 2025		

TRC
700 HIGHLANDER BLVD.
SUITE 210
ARLINGTON, TX 76015
(817) 522-1000

FILE NO.: Entergy_ISES_CCR_2H25_Fig_2.2_20251110.mxd

APPENDIX C
GROUNDWATER QUALITY DATA

Sampling Schedule, Entergy Independence CADL Network			
Well ID	Detection Monitoring Sampling Dates and Wells Sampled		
	5/13-15/2025	9/23-24/2025	Number of Samples Collected
MW-1R	X	X	2
MW-3	X	X	2
MW-6	X	X	2
MW-7	X	X	2
MW-8	X	–[2]	1
MW-9	X	–[2]	1
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
MW-19	X	X	2
MW-20-R	X	X	2
MW-21	X	X	2

Notes:

All samples collected in 2025 were part of the detection monitoring program. No samples collected in 2025 were part of an assessment monitoring program.

– No sample collected for this monitoring period.

[1] Wells MW-13 and MW-18 are background wells collected for comparison purposes only. These wells were not accessible during 2025.

[2] Wells MW-8 and MW-9 were removed in June 2025.

Summary of Analytical Results - First Half 2025								
Well ID	**Date**	**Boron (mg/L)**	**Calcium (mg/L)**	**Chloride (mg/L)**	**Fluoride (mg/L)**	**Sulfate (mg/L)**	**TDS (mg/L)**	**pH (s.u.)**
MW-1R	05/13/2025	<0.200	70.7	64.3	0.164	121	551	6.38
MW-3	05/14/2025	0.288	58.5	32.5	0.22	71.2	443	6.39
MW-6	05/13/2025	<0.200	59.3	25.8	<0.150	90.7	401	6.38
MW-7	05/13/2025	<0.200	44.4	1.36	0.717	36.6	534	7.14
MW-8	05/14/2025	0.357	88.9	80.0	0.196	189	648	6.44
MW-9	05/14/2025	0.503	99.2	54.5	0.192	228	700	6.48
MW-10	05/13/2025	0.520	66.2	44.2	0.198	99.6	482	6.43
MW-11	05/13/2025	<0.200	51.7	21.9	0.238	14.4	290	6.62
MW-14	05/14/2025	0.361	90.2	48.2	0.237	132	631	6.85
MW-15	05/14/2025	0.215	60.9	45.2	<0.150	94.9	446	6.95
MW-16	05/14/2025	0.270	84.6	34.8	0.458	249	980	6.93
MW-17	05/14/2025	0.639	72.4	41.1	0.214	110	531	6.76
MW-19	5/15/2025	0.204	84.7	59.3	0.157	181	591	6.34
MW-20R	5/15/2025	< 0.200	106	115	< 0.150	128	629	6.42
MW-21	5/14/2025	0.367	85.2	48.6	0.207	203	688	6.63
DUP-1	05/13/2025	<0.200	60.1	25.3	<0.150	87.7	397	6.38
DUP-3	05/15/2025	0.204	83.6	58.1	<0.150	182	592	6.34
FB	05/15/2025	<0.200	<1.00	<1.00	<0.150	<5.00	<10.0	–

Notes:

mg/L – Milligrams per liter

s.u. – Standard Unit

DUP-1 was a duplicate sample of MW-6.

DUP-3 was a duplicate sample of MW-19.

FB was a field blank.

Summary of Analytical Results - Second Half 2025								
Well ID	**Date**	**Boron (mg/L)**	**Calcium (mg/L)**	**Chloride (mg/L)**	**Fluoride (mg/L)**	**Sulfate (mg/L)**	**TDS (mg/L)**	**pH (s.u.)**
MW-1R	09/23/2025	0.203	72.7	62.2	<0.150	134	557	6.49
MW-3	09/23/2025	0.202	57.8	27.6	<0.150	64.2	429	6.54
MW-6	09/23/2025	<0.200	63.0	22.6	<0.150	90.9	427	6.43
MW-7	09/23/2025	<0.200	54.7	20.1	0.470	58.1	503	7.03
MW-10	09/23/2025	0.476	61.7	37.2	<0.150	94.8	460	6.14
MW-11	09/23/2025	<0.200	60.7	15.2	0.185	39.5	365	6.69
MW-14	09/23/2025	<0.200	87.0	64.6	0.172	120	661	6.75
MW-15	09/23/2025	0.211	70.7	43.6	<0.150	133	504	6.54
MW-16	09/23/2025	0.527	71.1	34.1	0.324	108	640	6.84
MW-17	09/23/2025	<0.200	55.1	38.4	<0.150	60.7	380	6.47
MW-19	09/23/2025	0.201	78.0	51.7	0.197	195	599	6.41
MW-20R	09/24/2025	<0.200	112	135	<0.150	226	857	6.44
MW-21	09/24/2025	0.369	91.1	71.3	0.172	244	759	6.44
DUP-2	09/23/2025	<0.200	58.2	26.5	<0.150	60.5	433	6.54
DUP-3	09/24/2025	0.369	91.7	73.8	0.182	251	755	6.41
FB	09/24/2025	<0.200	<1.00	<1.00	<0.150	<5.00	<10.0	–

Notes:

mg/L – Milligrams per liter

s.u. – Standard unit

DUP-2 was a duplicate sample of MW-3.

DUP-3 was a duplicate sample of MW-21.

FB was a field blank.

ANALYTICAL REPORT

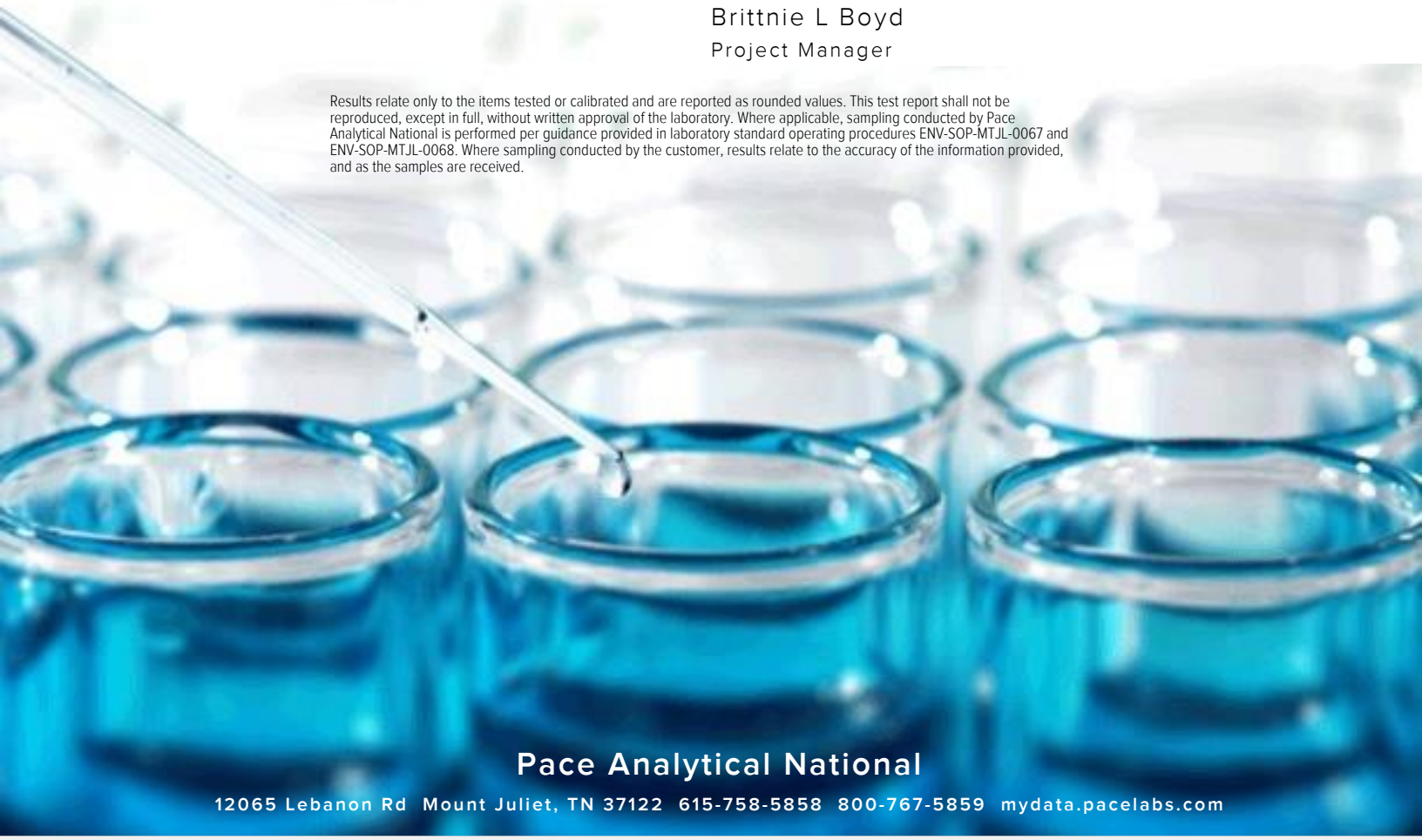
June 06, 2025

Alliance Technical Group - Bryant, AR

Sample Delivery Group:	L1860316
Samples Received:	05/17/2025
Project Number:	
Description:	Entergy - Independence
Site:	LANDFILL - CCR
Report To:	Jonathan Brown 219 Brown Lane Bryant, AR 72022

Entire Report Reviewed By:

Brittnie L Boyd
Project Manager



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

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SAMPLE SUMMARY

MW-1R L1860316-01

Collected by: Jacob Colbert | Collected date/time: 05/13/25 09:20 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519079	1	05/20/25 11:18	05/20/25 12:54	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	1	05/27/25 03:37	05/27/25 03:37	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	5	05/27/25 03:53	05/27/25 03:53	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523686	1	05/28/25 08:37	05/28/25 19:10	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523701	1	05/27/25 10:20	05/29/25 18:43	LD	Mt. Juliet, TN

MW-3 L1860316-02

Collected by: Jacob Colbert | Collected date/time: 05/14/25 11:25 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519105	1	05/21/25 11:02	05/21/25 16:20	BDC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	1	05/27/25 04:41	05/27/25 04:41	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523686	1	05/28/25 08:37	05/28/25 19:04	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523701	1	05/27/25 10:20	05/29/25 19:20	LD	Mt. Juliet, TN

MW-6 L1860316-03

Collected by: Jacob Colbert | Collected date/time: 05/13/25 15:00 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519079	1	05/20/25 11:18	05/20/25 12:54	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	1	05/27/25 05:13	05/27/25 05:13	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523686	1	05/28/25 08:37	05/28/25 19:12	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523701	1	05/27/25 10:20	05/29/25 19:23	LD	Mt. Juliet, TN

MW-7 L1860316-04

Collected by: Jacob Colbert | Collected date/time: 05/13/25 11:10 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519079	1	05/20/25 11:18	05/20/25 12:54	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	1	05/27/25 05:29	05/27/25 05:29	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523686	1	05/28/25 08:37	05/28/25 19:14	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523701	1	05/27/25 10:20	05/29/25 19:26	LD	Mt. Juliet, TN

MW-8 L1860316-05

Collected by: Jacob Colbert | Collected date/time: 05/14/25 08:55 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519105	1	05/21/25 11:02	05/21/25 16:20	BDC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	1	05/27/25 06:01	05/27/25 06:01	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	5	05/27/25 06:17	05/27/25 06:17	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523686	1	05/28/25 08:37	05/28/25 19:16	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523701	1	05/27/25 10:20	05/29/25 19:29	LD	Mt. Juliet, TN

MW-2 L1860316-06

Collected by: Jacob Colbert | Collected date/time: 05/12/25 15:50 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519079	1	05/20/25 11:18	05/20/25 12:54	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	1	05/27/25 06:33	05/27/25 06:33	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	5	05/27/25 06:49	05/27/25 06:49	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2529702	1	06/03/25 15:22	06/03/25 16:04	MAP	Mt. Juliet, TN

MW-2 L1860316-06

Collected by: Jacob Colbert | Collected date/time: 05/12/25 15:50 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2523701	1	05/27/25 10:20	05/29/25 19:33	LD	Mt. Juliet, TN

MW-9 L1860316-07

Collected by: Jacob Colbert | Collected date/time: 05/14/25 09:30 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519109	1	05/20/25 23:13	05/21/25 09:24	MDD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	1	05/27/25 07:05	05/27/25 07:05	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	5	05/27/25 07:53	05/27/25 07:53	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523686	1	05/28/25 08:37	05/28/25 19:21	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523701	1	05/27/25 10:20	05/29/25 19:36	LD	Mt. Juliet, TN

MW-10 L1860316-08

Collected by: Jacob Colbert | Collected date/time: 05/13/25 13:15 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519079	1	05/20/25 11:18	05/20/25 12:54	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	1	05/27/25 08:09	05/27/25 08:09	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	5	05/27/25 21:06	05/27/25 21:06	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523686	1	05/28/25 08:37	05/28/25 19:22	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523701	1	05/27/25 10:20	05/29/25 19:39	LD	Mt. Juliet, TN

MW-11 L1860316-09

Collected by: Jacob Colbert | Collected date/time: 05/13/25 10:20 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519079	1	05/20/25 11:18	05/20/25 12:54	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518181	1	05/27/25 20:59	05/27/25 20:59	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523686	1	05/28/25 08:37	05/28/25 19:24	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523701	1	05/27/25 10:20	05/29/25 19:42	LD	Mt. Juliet, TN

MW-14 L1860316-10

Collected by: Jacob Colbert | Collected date/time: 05/14/25 14:35 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519109	1	05/20/25 23:13	05/21/25 09:24	MDD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518181	1	05/27/25 22:04	05/27/25 22:04	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518181	5	05/27/25 22:20	05/27/25 22:20	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523686	1	05/28/25 08:37	05/28/25 19:26	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523701	1	05/27/25 10:20	05/29/25 19:45	LD	Mt. Juliet, TN

MW-15 L1860316-11

Collected by: Jacob Colbert | Collected date/time: 05/14/25 15:35 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519109	1	05/20/25 23:13	05/21/25 09:24	MDD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518181	1	05/27/25 22:37	05/27/25 22:37	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523686	1	05/28/25 08:37	05/28/25 19:27	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523701	1	05/27/25 10:20	05/29/25 20:04	LD	Mt. Juliet, TN

MW-16 L1860316-12

Collected by: Jacob Colbert | Collected date/time: 05/14/25 13:40 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519105	1	05/21/25 11:02	05/21/25 16:20	BDC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518181	1	05/27/25 23:09	05/27/25 23:09	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518181	5	05/29/25 16:02	05/29/25 16:02	DLH	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523686	1	05/28/25 08:37	05/28/25 19:29	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523701	1	05/27/25 10:20	05/29/25 20:07	LD	Mt. Juliet, TN

MW-17 L1860316-13

Collected by: Jacob Colbert | Collected date/time: 05/14/25 12:45 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519105	1	05/21/25 11:02	05/21/25 16:20	BDC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518181	1	05/27/25 23:58	05/27/25 23:58	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518181	5	05/28/25 00:14	05/28/25 00:14	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523686	1	05/28/25 08:37	05/28/25 19:31	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523701	1	05/27/25 10:20	05/29/25 20:10	LD	Mt. Juliet, TN

FIELD BLANK 1 L1860316-14

Collected by: Jacob Colbert | Collected date/time: 05/15/25 11:05 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519956	1	05/21/25 10:31	05/21/25 10:32	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518181	1	05/28/25 00:31	05/28/25 00:31	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523686	1	05/28/25 08:37	05/28/25 19:33	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523701	1	05/27/25 10:20	05/29/25 20:13	LD	Mt. Juliet, TN

DUPLICATE 1 (MW-6) L1860316-15

Collected by: Jacob Colbert | Collected date/time: 05/13/25 15:00 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519079	1	05/20/25 11:18	05/20/25 12:54	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518181	1	05/28/25 00:47	05/28/25 00:47	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523686	1	05/28/25 08:37	05/28/25 19:34	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523701	1	05/27/25 10:20	05/29/25 20:16	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

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Alkalinity (On Site)		mg/l
Dissolved Oxygen (on-site)		
Flow Measure		
pH (On Site)	6.38	su
Res. Chlorine (On Site)		mg/l
Specific Conductance (on site)		
Temperature (on-site)		
Turbidity (on-site)		NTU
Color (On Site)		pcu
Elevation-Bottom Of Well		
Elevation-Measuring Point		
Free Available Chlorine (On Site)		mg/l
Free Chlorine (on-site)		
Odor (On Site)		T.O.N.
Sampling Method		
Temperature of Water		
Well is Dry		

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	551		10.0	1	05/20/2025 12:54	WG2519079

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	64.3		1.00	1	05/27/2025 03:37	WG2518179
Fluoride	0.164		0.150	1	05/27/2025 03:37	WG2518179
Sulfate	121		25.0	5	05/27/2025 03:53	WG2518179

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	05/28/2025 19:10	WG2523686

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	70.7	V	1.00	1	05/29/2025 18:43	WG2523701

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Alkalinity (On Site)		mg/l
Dissolved Oxygen (on-site)		
Flow Measure		
pH (On Site)	6.39	su
Res. Chlorine (On Site)		mg/l
Specific Conductance (on site)		
Temperature (on-site)		
Turbidity (on-site)		NTU
Color (On Site)		pcu
Elevation-Bottom Of Well		
Elevation-Measuring Point		
Free Available Chlorine (On Site)		mg/l
Free Chlorine (on-site)		
Odor (On Site)		T.O.N.
Sampling Method		
Temperature of Water		
Well is Dry		

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	443		10.0	1	05/21/2025 16:20	WG2519105

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	32.5		1.00	1	05/27/2025 04:41	WG2518179
Fluoride	0.220		0.150	1	05/27/2025 04:41	WG2518179
Sulfate	71.2		5.00	1	05/27/2025 04:41	WG2518179

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.288		0.200	1	05/28/2025 19:04	WG2523686

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	58.5		1.00	1	05/29/2025 19:20	WG2523701

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Alkalinity (On Site)		mg/l
Dissolved Oxygen (on-site)		
Flow Measure		
pH (On Site)	6.38	su
Res. Chlorine (On Site)		mg/l
Specific Conductance (on site)		
Temperature (on-site)		
Turbidity (on-site)		NTU
Color (On Site)		pcu
Elevation-Bottom Of Well		
Elevation-Measuring Point		
Free Available Chlorine (On Site)		mg/l
Free Chlorine (on-site)		
Odor (On Site)		T.O.N.
Sampling Method		
Temperature of Water		
Well is Dry		

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	401		10.0	1	05/20/2025 12:54	WG2519079

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	25.8		1.00	1	05/27/2025 05:13	WG2518179
Fluoride	ND		0.150	1	05/27/2025 05:13	WG2518179
Sulfate	90.7		5.00	1	05/27/2025 05:13	WG2518179

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	05/28/2025 19:12	WG2523686

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	59.3		1.00	1	05/29/2025 19:23	WG2523701

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Alkalinity (On Site)		mg/l
Dissolved Oxygen (on-site)		
Flow Measure		
pH (On Site)	7.14	su
Res. Chlorine (On Site)		mg/l
Specific Conductance (on site)		
Temperature (on-site)		
Turbidity (on-site)		NTU
Color (On Site)		pcu
Elevation-Bottom Of Well		
Elevation-Measuring Point		
Free Available Chlorine (On Site)		mg/l
Free Chlorine (on-site)		
Odor (On Site)		T.O.N.
Sampling Method		
Temperature of Water		
Well is Dry		

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	534		10.0	1	05/20/2025 12:54	WG2519079

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	1.36		1.00	1	05/27/2025 05:29	WG2518179
Fluoride	0.717		0.150	1	05/27/2025 05:29	WG2518179
Sulfate	36.6		5.00	1	05/27/2025 05:29	WG2518179

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	05/28/2025 19:14	WG2523686

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	44.4		1.00	1	05/29/2025 19:26	WG2523701

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Alkalinity (On Site)		mg/l
Dissolved Oxygen (on-site)		
Flow Measure		
pH (On Site)	6.44	su
Res. Chlorine (On Site)		mg/l
Specific Conductance (on site)		
Temperature (on-site)		
Turbidity (on-site)		NTU
Color (On Site)		pcu
Elevation-Bottom Of Well		
Elevation-Measuring Point		
Free Available Chlorine (On Site)		mg/l
Free Chlorine (on-site)		
Odor (On Site)		T.O.N.
Sampling Method		
Temperature of Water		
Well is Dry		

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	648		13.3	1	05/21/2025 16:20	WG2519105

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	80.0		1.00	1	05/27/2025 06:01	WG2518179
Fluoride	0.196		0.150	1	05/27/2025 06:01	WG2518179
Sulfate	189		25.0	5	05/27/2025 06:17	WG2518179

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.357		0.200	1	05/28/2025 19:16	WG2523686

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	88.9		1.00	1	05/29/2025 19:29	WG2523701

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Alkalinity (On Site)		mg/l
Dissolved Oxygen (on-site)		
Flow Measure		
pH (On Site)	6.84	su
Res. Chlorine (On Site)		mg/l
Specific Conductance (on site)		
Temperature (on-site)		
Turbidity (on-site)		NTU
Color (On Site)		pcu
Elevation-Bottom Of Well		
Elevation-Measuring Point		
Free Available Chlorine (On Site)		mg/l
Free Chlorine (on-site)		
Odor (On Site)		T.O.N.
Sampling Method		
Temperature of Water		
Well is Dry		

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	809		13.3	1	05/20/2025 12:54	WG2519079

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	14.6		1.00	1	05/27/2025 06:33	WG2518179
Fluoride	0.220		0.150	1	05/27/2025 06:33	WG2518179
Sulfate	243		25.0	5	05/27/2025 06:49	WG2518179

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	06/03/2025 16:04	WG2529702

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	136		1.00	1	05/29/2025 19:33	WG2523701

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Alkalinity (On Site)		mg/l
Dissolved Oxygen (on-site)		
Flow Measure		
pH (On Site)	6.48	su
Res. Chlorine (On Site)		mg/l
Specific Conductance (on site)		
Temperature (on-site)		
Turbidity (on-site)		NTU
Color (On Site)		pcu
Elevation-Bottom Of Well		
Elevation-Measuring Point		
Free Available Chlorine (On Site)		mg/l
Free Chlorine (on-site)		
Odor (On Site)		T.O.N.
Sampling Method		
Temperature of Water		
Well is Dry		

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	700		13.3	1	05/21/2025 09:24	WG2519109

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	54.5		1.00	1	05/27/2025 07:05	WG2518179
Fluoride	0.192		0.150	1	05/27/2025 07:05	WG2518179
Sulfate	228		25.0	5	05/27/2025 07:53	WG2518179

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.503		0.200	1	05/28/2025 19:21	WG2523686

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	99.2		1.00	1	05/29/2025 19:36	WG2523701

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Alkalinity (On Site)		mg/l
Dissolved Oxygen (on-site)		
Flow Measure		
pH (On Site)	6.43	su
Res. Chlorine (On Site)		mg/l
Specific Conductance (on site)		
Temperature (on-site)		
Turbidity (on-site)		NTU
Color (On Site)		pcu
Elevation-Bottom Of Well		
Elevation-Measuring Point		
Free Available Chlorine (On Site)		mg/l
Free Chlorine (on-site)		
Odor (On Site)		T.O.N.
Sampling Method		
Temperature of Water		
Well is Dry		

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	482		10.0	1	05/20/2025 12:54	WG2519079

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	44.2		1.00	1	05/27/2025 08:09	WG2518179
Fluoride	0.198		0.150	1	05/27/2025 08:09	WG2518179
Sulfate	99.6		25.0	5	05/27/2025 21:06	WG2518179

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.520		0.200	1	05/28/2025 19:22	WG2523686

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	66.2		1.00	1	05/29/2025 19:39	WG2523701

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Alkalinity (On Site)		mg/l
Dissolved Oxygen (on-site)		
Flow Measure		
pH (On Site)	6.62	su
Res. Chlorine (On Site)		mg/l
Specific Conductance (on site)		
Temperature (on-site)		
Turbidity (on-site)		NTU
Color (On Site)		pcu
Elevation-Bottom Of Well		
Elevation-Measuring Point		
Free Available Chlorine (On Site)		mg/l
Free Chlorine (on-site)		
Odor (On Site)		T.O.N.
Sampling Method		
Temperature of Water		
Well is Dry		

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	290		10.0	1	05/20/2025 12:54	WG2519079

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	21.9		1.00	1	05/27/2025 20:59	WG2518181
Fluoride	0.238		0.150	1	05/27/2025 20:59	WG2518181
Sulfate	14.4		5.00	1	05/27/2025 20:59	WG2518181

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	05/28/2025 19:24	WG2523686

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	51.7		1.00	1	05/29/2025 19:42	WG2523701

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Alkalinity (On Site)		mg/l
Dissolved Oxygen (on-site)		
Flow Measure		
pH (On Site)	6.85	su
Res. Chlorine (On Site)		mg/l
Specific Conductance (on site)		
Temperature (on-site)		
Turbidity (on-site)		NTU
Color (On Site)		pcu
Elevation-Bottom Of Well		
Elevation-Measuring Point		
Free Available Chlorine (On Site)		mg/l
Free Chlorine (on-site)		
Odor (On Site)		T.O.N.
Sampling Method		
Temperature of Water		
Well is Dry		

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	631		13.3	1	05/21/2025 09:24	WG2519109

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	48.2		1.00	1	05/27/2025 22:04	WG2518181
Fluoride	0.237		0.150	1	05/27/2025 22:04	WG2518181
Sulfate	132		25.0	5	05/27/2025 22:20	WG2518181

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.361		0.200	1	05/28/2025 19:26	WG2523686

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	90.2		1.00	1	05/29/2025 19:45	WG2523701

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Alkalinity (On Site)		mg/l
Dissolved Oxygen (on-site)		
Flow Measure		
pH (On Site)	6.95	su
Res. Chlorine (On Site)		mg/l
Specific Conductance (on site)		
Temperature (on-site)		
Turbidity (on-site)		NTU
Color (On Site)		pcu
Elevation-Bottom Of Well		
Elevation-Measuring Point		
Free Available Chlorine (On Site)		mg/l
Free Chlorine (on-site)		
Odor (On Site)		T.O.N.
Sampling Method		
Temperature of Water		
Well is Dry		

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	446		10.0	1	05/21/2025 09:24	WG2519109

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	45.2		1.00	1	05/27/2025 22:37	WG2518181
Fluoride	ND		0.150	1	05/27/2025 22:37	WG2518181
Sulfate	94.9		5.00	1	05/27/2025 22:37	WG2518181

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.215		0.200	1	05/28/2025 19:27	WG2523686

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	60.9		1.00	1	05/29/2025 20:04	WG2523701

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Alkalinity (On Site)		mg/l
Dissolved Oxygen (on-site)		
Flow Measure		
pH (On Site)	6.93	su
Res. Chlorine (On Site)		mg/l
Specific Conductance (on site)		
Temperature (on-site)		
Turbidity (on-site)		NTU
Color (On Site)		pcu
Elevation-Bottom Of Well		
Elevation-Measuring Point		
Free Available Chlorine (On Site)		mg/l
Free Chlorine (on-site)		
Odor (On Site)		T.O.N.
Sampling Method		
Temperature of Water		
Well is Dry		

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	980		20.0	1	05/21/2025 16:20	WG2519105

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	34.8	J6	1.00	1	05/27/2025 23:09	WG2518181
Fluoride	0.458		0.150	1	05/27/2025 23:09	WG2518181
Sulfate	249		25.0	5	05/29/2025 16:02	WG2518181

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.270		0.200	1	05/28/2025 19:29	WG2523686

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	84.6		1.00	1	05/29/2025 20:07	WG2523701

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Alkalinity (On Site)		mg/l
Dissolved Oxygen (on-site)		
Flow Measure		
pH (On Site)	6.76	su
Res. Chlorine (On Site)		mg/l
Specific Conductance (on site)		
Temperature (on-site)		
Turbidity (on-site)		NTU
Color (On Site)		pcu
Elevation-Bottom Of Well		
Elevation-Measuring Point		
Free Available Chlorine (On Site)		mg/l
Free Chlorine (on-site)		
Odor (On Site)		T.O.N.
Sampling Method		
Temperature of Water		
Well is Dry		

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	531		10.0	1	05/21/2025 16:20	WG2519105

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	41.1		1.00	1	05/27/2025 23:58	WG2518181
Fluoride	0.214		0.150	1	05/27/2025 23:58	WG2518181
Sulfate	110		25.0	5	05/28/2025 00:14	WG2518181

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.639		0.200	1	05/28/2025 19:31	WG2523686

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	72.4		1.00	1	05/29/2025 20:10	WG2523701

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	ND		10.0	1	05/21/2025 10:32	WG2519956

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	ND		1.00	1	05/28/2025 00:31	WG2518181
Fluoride	ND		0.150	1	05/28/2025 00:31	WG2518181
Sulfate	ND		5.00	1	05/28/2025 00:31	WG2518181

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	05/28/2025 19:33	WG2523686

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	ND		1.00	1	05/29/2025 20:13	WG2523701

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Alkalinity (On Site)		mg/l
Dissolved Oxygen (on-site)		
Flow Measure		
pH (On Site)	6.38	su
Res. Chlorine (On Site)		mg/l
Specific Conductance (on site)		
Temperature (on-site)		
Turbidity (on-site)		NTU
Color (On Site)		pcu
Elevation-Bottom Of Well		
Elevation-Measuring Point		
Free Available Chlorine (On Site)		mg/l
Free Chlorine (on-site)		
Odor (On Site)		T.O.N.
Sampling Method		
Temperature of Water		
Well is Dry		

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	397		10.0	1	05/20/2025 12:54	WG2519079

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	25.3		1.00	1	05/28/2025 00:47	WG2518181
Fluoride	ND		0.150	1	05/28/2025 00:47	WG2518181
Sulfate	87.7		5.00	1	05/28/2025 00:47	WG2518181

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	05/28/2025 19:34	WG2523686

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	60.1		1.00	1	05/29/2025 20:16	WG2523701

Method Blank (MB)

(MB) R4219345-1 05/20/25 12:54

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

L1860287-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1860287-01 05/20/25 12:54 • (DUP) R4219345-3 05/20/25 12:54

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	428	440	1	2.76		10

L1860316-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1860316-15 05/20/25 12:54 • (DUP) R4219345-4 05/20/25 12:54

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	397	399	1	0.503		10

Laboratory Control Sample (LCS)

(LCS) R4219345-2 05/20/25 12:54

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8480	96.4	90.0-110	

Method Blank (MB)

(MB) R4219565-1 05/21/25 16:20

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

L1860037-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1860037-02 05/21/25 16:20 • (DUP) R4219565-3 05/21/25 16:20

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	538	527	1	2.07		10

L1860316-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1860316-13 05/21/25 16:20 • (DUP) R4219565-4 05/21/25 16:20

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	531	527	1	0.756		10

Laboratory Control Sample (LCS)

(LCS) R4219565-2 05/21/25 16:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8730	99.2	90.0-110	

Method Blank (MB)

(MB) R4219824-1 05/21/25 09:24

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

L1860037-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1860037-01 05/21/25 09:24 • (DUP) R4219824-3 05/21/25 09:24

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	516	529	1	2.49		10

L1860316-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1860316-11 05/21/25 09:24 • (DUP) R4219824-4 05/21/25 09:24

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	446	439	1	1.58		10

Laboratory Control Sample (LCS)

(LCS) R4219824-2 05/21/25 09:24

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8440	95.9	90.0-110	

Method Blank (MB)

(MB) R4220129-1 05/21/25 10:32

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

L1859604-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1859604-01 05/21/25 10:32 • (DUP) R4220129-3 05/21/25 10:32

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1920	2020	1	4.83		10

L1860316-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1860316-14 05/21/25 10:32 • (DUP) R4220129-4 05/21/25 10:32

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	ND	ND	1	0.000		10

Laboratory Control Sample (LCS)

(LCS) R4220129-2 05/21/25 10:32

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8870	101	90.0-110	

Method Blank (MB)

(MB) R4221157-1 05/26/25 19:52

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.547	1.00
Fluoride	U		0.0761	0.150
Sulfate	U		0.637	5.00

L1860299-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1860299-03 05/26/25 23:05 • (DUP) R4221157-3 05/26/25 23:20

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

L1860311-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1860311-03 05/27/25 02:17 • (DUP) R4221157-6 05/27/25 02:33

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

Laboratory Control Sample (LCS)

(LCS) R4221157-2 05/26/25 20:08

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	38.9	97.2	80.0-120	
Fluoride	8.00	8.00	100	80.0-120	
Sulfate	40.0	39.9	99.9	80.0-120	

L1860299-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1860299-03 05/26/25 23:05 • (MS) R4221157-4 05/26/25 23:37 • (MSD) R4221157-5 05/26/25 23:53

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	ND	39.5	39.4	98.8	98.5	1	80.0-120			0.327	15
Fluoride	8.00	ND	8.14	8.10	102	101	1	80.0-120			0.479	15
Sulfate	40.0	ND	40.5	40.4	101	101	1	80.0-120			0.141	15

L1860311-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1860311-03 05/27/25 02:17 • (MS) R4221157-7 05/27/25 02:49

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40.0	ND	39.3	98.3	1	80.0-120	
Fluoride	8.00	ND	8.10	101	1	80.0-120	
Sulfate	40.0	ND	40.3	101	1	80.0-120	

Method Blank (MB)

(MB) R4221588-1 05/27/25 20:26

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.547	1.00
Fluoride	U		0.0761	0.150
Sulfate	U		0.637	5.00

L1860316-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1860316-09 05/27/25 20:59 • (DUP) R4221588-3 05/27/25 21:15

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	21.9	21.8	1	0.0970		15
Fluoride	0.238	0.229	1	3.56		15
Sulfate	14.4	14.3	1	0.986		15

L1860316-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1860316-12 05/27/25 23:09 • (DUP) R4221588-6 05/27/25 23:26

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	34.8	34.6	1	0.588		15
Fluoride	0.458	0.450	1	1.85		15

L1860316-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1860316-12 05/29/25 16:02 • (DUP) R4222974-1 05/29/25 16:14

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	249	246	5	0.993		15

Laboratory Control Sample (LCS)

(LCS) R4221588-2 05/27/25 20:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	39.5	98.7	80.0-120	
Fluoride	8.00	8.30	104	80.0-120	
Sulfate	40.0	40.2	100	80.0-120	

L1860316-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1860316-09 05/27/25 20:59 • (MS) R4221588-4 05/27/25 21:31 • (MSD) R4221588-5 05/27/25 21:48

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	21.9	58.6	58.4	91.7	91.2	1	80.0-120			0.346	15
Fluoride	8.00	0.238	9.01	8.97	110	109	1	80.0-120			0.463	15
Sulfate	40.0	14.4	53.5	53.3	97.6	97.2	1	80.0-120			0.311	15

L1860316-12 Original Sample (OS) • Matrix Spike (MS)

(OS) L1860316-12 05/27/25 23:09 • (MS) R4221588-7 05/27/25 23:42

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40.0	34.8	65.8	77.7	1	80.0-120	J6
Fluoride	8.00	0.458	8.51	101	1	80.0-120	
Sulfate	40.0	240	225	0.000	1	80.0-120	E V

Method Blank (MB)

(MB) R4222065-1 05/28/25 19:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron	U		0.0233	0.200

Laboratory Control Sample (LCS)

(LCS) R4222065-2 05/28/25 19:02

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

L1860316-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1860316-02 05/28/25 19:04 • (MS) R4222065-4 05/28/25 19:07 • (MSD) R4222065-5 05/28/25 19:09

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	0.288	1.26	1.28	96.9	99.2	1	75.0-125			1.83	20

Method Blank (MB)

(MB) R4224819-1 06/03/25 16:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron	U		0.0233	0.200

Laboratory Control Sample (LCS)

(LCS) R4224819-2 06/03/25 16:02

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron	1.00	1.14	114	80.0-120	

L1860316-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1860316-06 06/03/25 16:04 • (MS) R4224819-4 06/03/25 16:07 • (MSD) R4224819-5 06/03/25 16:09

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	ND	1.09	1.07	98.6	96.8	1	75.0-125			1.67	20

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

Method Blank (MB)

(MB) R4222685-7 05/29/25 20:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Calcium	U		0.0925	1.00

Laboratory Control Sample (LCS)

(LCS) R4222685-2 05/29/25 18:40

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium	5.00	4.95	98.9	80.0-120	

L1860316-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1860316-01 05/29/25 18:43 • (MS) R4222685-4 05/29/25 18:49 • (MSD) R4222685-5 05/29/25 18:52

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	70.7	77.9	76.2	143	111	1	75.0-125	V		2.12	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

MDL	Method Detection Limit.
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).
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

Company Name/Address:
Alliance Technical Group - Bryant, AR

219 Brown Lane
Bryant, AR 72022

Billing Information:
Accounts Payable
219 Brown Ln.
Bryant, AR 72022

Pres Chk

Report to:
Jonathan Brown 501-847-7077

Email To:
Jonathan.brown@alliancetg.com;jacob.colbert

Project Description:
Entergy - Independence

City/State Collected: Newark, AR

Please Circle: PT MT CT ET

Regulatory Program(DOD,RCRA,DW,etc):

Client Project #

Lab Project #
GBMCBAR-ENTERGYINDY

Collected by (print):
Jacob Colbert

Site/Facility ID #
LANDFILL - CCR

P.O. #

Collected by (signature):

Immediately Packed on Ice N___ Y_X_

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	B, Ca 250mlHDPE-HNO3	Cl, F, [illegible], SO4, TDS 250mlHDPE-NoPres	pH	Remarks	Sample # (lab only)
MW-1R	G	GW		5-13-25	0920	2	X	X	6.38		-01
MW-3	G	GW		5-14-25	1125	2	X	X	6.39		-02
MW-6	G	GW		5-13-25	1500	2	X	X	6.38		-03
MW-7	G	GW		5-13-25	1110	2	X	X	7.14		-04
MW-8	G	GW		5-14-25	0855	2	X	X	6.44		-05
MW-2	G	GW		5-12-25	1550	2	X	X	6.84		-06
MW-9	G	GW		5-14-25	0930	2	X	X	6.48		-07
MW-10	G	GW		5-13-25	1315	2	X	X	6.43		-08
MW-11	G	GW		5-13-25	1020	2	X	X	6.62		-09
MW-14	G	GW		5-14-25	1435	2	X	X	6.85		-10

Chain of Custody Page ___ of ___

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PEOPLE ADVANCING SCIENCE

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

SDG # L1560316

Table # 15507

Acctnum: GBMCBAR

Template:T198839

Prelogin: P1149384

PM: 829 - Brittnie L Boyd

PB: 5/2/25 BK

Shipped Via: FedEX 2nd Day

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
Jacob Colbert	5-16-25	1430			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 30	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5-17-25 Time: 0900	Hold: Condition: NCF / OK

Company Name/Address:
Alliance Technical Group - Bryant, AR

219 Brown Lane
Bryant, AR 72022

Billing Information:
Accounts Payable
219 Brown Ln.
Bryant, AR 72022

Pres Chk

Report to:
Jonathan Brown 501-847-7077

Email To:
Jonathan.brown@alliancetg.com;jacob.colbert

Project Description:
Entergy - Independence

City/State Collected: McHak, AR

Please Circle: PT MT CT ET

Regulatory Program(DOD,RCRA,DW,etc):

Client Project #

Lab Project #
GBMCBAR-ENTERGYINDY

Collected by (print):
Jacob Colbert

Site/Facility ID #
LANDFILL - CCR

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	B, Ca 250mlHDPE-HNO3	Cl, F, SO4, TDS 250mlHDPE-NoPres	Remarks	Sample # (lab only)
MW-15	G	GW		5-14-25	1535	2	X	X	pH 6.95	-11
MW-16	G	GW		5-14-25	1340	2	X	X	6.93	-12
MW-17	G	GW		5-14-25	1245	2	X	X	6.76	-13
~~MW-19~~		GW								
~~MW-20R~~		GW								
~~MW-21~~		GW								
FIELD BLANK 1	G	GW		5-15-25	1105	2	X	X	—	-14
DUPLICATE 1 (MW-6)	G	GW		5-13-25	1500	2	X	X	6.38	-15
		GW								

Chain of Custody Page ___ of ___

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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 #

Table # U160316

Acctnum: GBMCBAR

Template: T198839

Prelogin: P1149384

PM: 829 - Brittnie L Boyd

PB: 5/2/25 BK

Shipped Via: FedEx 2nd Day

* 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)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR	
Jacob Colbert	5-16-25	1430			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 30	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5-17-25 Time: 0900	Hold: / Condition: NCF / (OK)

Multiple Parcel Form

L# L18603116

Parcel Tracking Number	Infrared Thermometer ID	Temperature Reading (°C)	Correction Factor (°C)	Corrected Temperature (°C)	Custody Seal Intact
4544 7726 3210	TLA9	3.9	0.4	4.3	Yes / No / Not Present
4544 7726 3150		3.7		4.1	Yes / No / Not Present
4544 7726 3139		1.6		2.0	Yes / No / Not Present
4544 7726 3183		3.6		4.0	Yes / No / Not Present
4544 7726 3194		1.0		1.4	Yes / No / Not Present
4544 7726 3209		2.3		2.7	Yes / No / Not Present
4439 2457 2616		0.5		0.9	Yes / No / Not Present
4439 2457 2605		0.2		0.6	Yes / No / Not Present
4544 7726 3161		0.6		1.0	Yes / No / Not Present
4544 7726 3172		4.1		4.5	Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present

Name Jmmcm

5-17-25
Date

ANALYTICAL REPORT

June 03, 2025

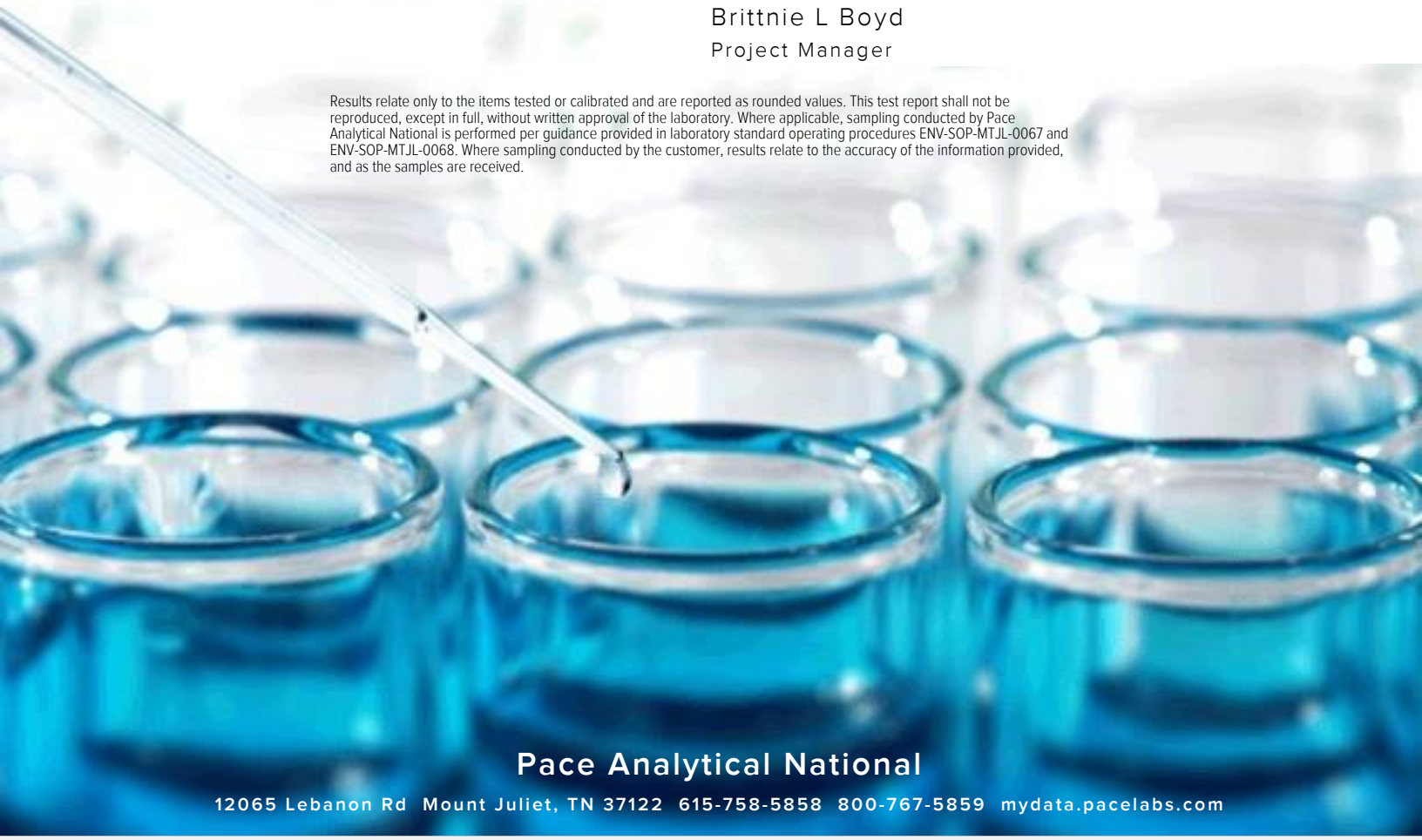
Alliance Technical Group - Bryant, AR

Sample Delivery Group:	L1860299
Samples Received:	05/17/2025
Project Number:	
Description:	Landfill-CCR - Entergy - Independence

Report To: Jonathan Brown
219 Brown Lane
Bryant, AR 72022

Entire Report Reviewed By:

Brittnie L Boyd
Project Manager



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

TABLE OF CONTENTS

MW-20R L1860299-01

Collected by: Jacob Colbert | Collected date/time: 05/15/25 10:30 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2518412	1	05/19/25 12:29	05/22/25 08:00	BDC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	1	05/26/25 22:00	05/26/25 22:00	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	5	05/26/25 22:16	05/26/25 22:16	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523685	1	05/27/25 23:24	05/28/25 13:23	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523699	1	05/26/25 20:08	05/31/25 00:48	UNP	Mt. Juliet, TN

DUPLICATE 3 (MW-19) L1860299-02

Collected by: Jacob Colbert | Collected date/time: 05/15/25 08:50 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519109	1	05/20/25 23:13	05/21/25 09:24	MDD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	1	05/26/25 22:33	05/26/25 22:33	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	5	05/26/25 22:49	05/26/25 22:49	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523685	1	05/27/25 23:24	05/28/25 13:50	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523699	1	05/26/25 20:08	05/31/25 00:26	UNP	Mt. Juliet, TN

FIELD BLANK L1860299-03

Collected by: Jacob Colbert | Collected date/time: 05/15/25 11:05 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2518412	1	05/19/25 12:29	05/22/25 08:00	BDC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	1	05/26/25 23:05	05/26/25 23:05	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523685	1	05/27/25 23:24	05/28/25 13:52	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523699	1	05/26/25 20:08	05/31/25 00:29	UNP	Mt. Juliet, TN

MW-19 L1860299-04

Collected by: Jacob Colbert | Collected date/time: 05/15/25 08:50 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519183	1	05/21/25 23:11	05/22/25 09:23	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	1	05/27/25 00:09	05/27/25 00:09	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	5	05/27/25 00:57	05/27/25 00:57	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523685	1	05/27/25 23:24	05/28/25 13:54	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523699	1	05/26/25 20:08	05/31/25 00:32	UNP	Mt. Juliet, TN

MW-21 L1860299-05

Collected by: Jacob Colbert | Collected date/time: 05/14/25 10:15 | Received date/time: 05/17/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2519771	1	05/21/25 07:03	05/21/25 14:07	BDC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	1	05/27/25 01:13	05/27/25 01:13	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2518179	5	05/27/25 01:29	05/27/25 01:29	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2523685	1	05/27/25 23:24	05/28/25 13:56	BAG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2523699	1	05/26/25 20:08	05/31/25 00:35	UNP	Mt. Juliet, TN

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

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	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	629		13.3	1	05/22/2025 08:00	WG2518412

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	115		5.00	5	05/26/2025 22:16	WG2518179
Fluoride	ND		0.150	1	05/26/2025 22:00	WG2518179
Sulfate	128		25.0	5	05/26/2025 22:16	WG2518179

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	05/28/2025 13:23	WG2523685

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	106		1.00	1	05/31/2025 00:48	WG2523699

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	592		10.0	1	05/21/2025 09:24	WG2519109

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	58.1		1.00	1	05/26/2025 22:33	WG2518179
Fluoride	ND		0.150	1	05/26/2025 22:33	WG2518179
Sulfate	182		25.0	5	05/26/2025 22:49	WG2518179

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.204		0.200	1	05/28/2025 13:50	WG2523685

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	83.6		1.00	1	05/31/2025 00:26	WG2523699

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	ND	P1	10.0	1	05/22/2025 08:00	WG2518412

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	ND		1.00	1	05/26/2025 23:05	WG2518179
Fluoride	ND		0.150	1	05/26/2025 23:05	WG2518179
Sulfate	ND		5.00	1	05/26/2025 23:05	WG2518179

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	05/28/2025 13:52	WG2523685

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	ND		1.00	1	05/31/2025 00:29	WG2523699

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	591		10.0	1	05/22/2025 09:23	WG2519183

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	59.3		1.00	1	05/27/2025 00:09	WG2518179
Fluoride	0.157		0.150	1	05/27/2025 00:09	WG2518179
Sulfate	181		25.0	5	05/27/2025 00:57	WG2518179

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.204		0.200	1	05/28/2025 13:54	WG2523685

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	84.7		1.00	1	05/31/2025 00:32	WG2523699

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	688		13.3	1	05/21/2025 14:07	WG2519771

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	48.6		1.00	1	05/27/2025 01:13	WG2518179
Fluoride	0.207		0.150	1	05/27/2025 01:13	WG2518179
Sulfate	203		25.0	5	05/27/2025 01:29	WG2518179

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.367		0.200	1	05/28/2025 13:56	WG2523685

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	85.2		1.00	1	05/31/2025 00:35	WG2523699

Method Blank (MB)

(MB) R4220093-1 05/22/25 08:00

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

L1859287-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1859287-05 05/22/25 08:00 • (DUP) R4220093-3 05/22/25 08:00

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	120	117	1	2.53		10

L1860299-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1860299-03 05/22/25 08:00 • (DUP) R4220093-4 05/22/25 08:00

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	ND	ND	1	200	P1	10

Laboratory Control Sample (LCS)

(LCS) R4220093-2 05/22/25 08:00

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8390	95.3	90.0-110	

Method Blank (MB)

(MB) R4219824-1 05/21/25 09:24

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

L1860037-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1860037-01 05/21/25 09:24 • (DUP) R4219824-3 05/21/25 09:24

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	516	529	1	2.49		10

L1860316-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1860316-11 05/21/25 09:24 • (DUP) R4219824-4 05/21/25 09:24

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	446	439	1	1.58		10

Laboratory Control Sample (LCS)

(LCS) R4219824-2 05/21/25 09:24

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8440	95.9	90.0-110	

Method Blank (MB)

(MB) R4220243-1 05/22/25 09:23

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

L1859595-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1859595-01 05/22/25 09:23 • (DUP) R4220243-3 05/22/25 09:23

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	784	732	1	6.86		10

L1860187-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1860187-08 05/22/25 09:23 • (DUP) R4220243-4 05/22/25 09:23

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	ND	ND	1	54.5	P1	10

Laboratory Control Sample (LCS)

(LCS) R4220243-2 05/22/25 09:23

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8660	98.4	90.0-110	

Method Blank (MB)

(MB) R4220074-1 05/21/25 14:07

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

L1860648-18 Original Sample (OS) • Duplicate (DUP)

(OS) L1860648-18 05/21/25 14:07 • (DUP) R4220074-3 05/21/25 14:07

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	2340	2310	1	1.29		10

L1860903-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1860903-02 05/21/25 14:07 • (DUP) R4220074-4 05/21/25 14:07

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	4120	4030	1	2.21		10

Laboratory Control Sample (LCS)

(LCS) R4220074-2 05/21/25 14:07

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8780	99.8	90.0-110	

Method Blank (MB)

(MB) R4221157-1 05/26/25 19:52

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.547	1.00
Fluoride	U		0.0761	0.150
Sulfate	U		0.637	5.00

L1860299-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1860299-03 05/26/25 23:05 • (DUP) R4221157-3 05/26/25 23:20

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

L1860311-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1860311-03 05/27/25 02:17 • (DUP) R4221157-6 05/27/25 02:33

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

Laboratory Control Sample (LCS)

(LCS) R4221157-2 05/26/25 20:08

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	38.9	97.2	80.0-120	
Fluoride	8.00	8.00	100	80.0-120	
Sulfate	40.0	39.9	99.9	80.0-120	

L1860299-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1860299-03 05/26/25 23:05 • (MS) R4221157-4 05/26/25 23:37 • (MSD) R4221157-5 05/26/25 23:53

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	ND	39.5	39.4	98.8	98.5	1	80.0-120			0.327	15
Fluoride	8.00	ND	8.14	8.10	102	101	1	80.0-120			0.479	15
Sulfate	40.0	ND	40.5	40.4	101	101	1	80.0-120			0.141	15

L1860311-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1860311-03 05/27/25 02:17 • (MS) R4221157-7 05/27/25 02:49

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40.0	ND	39.3	98.3	1	80.0-120	
Fluoride	8.00	ND	8.10	101	1	80.0-120	
Sulfate	40.0	ND	40.3	101	1	80.0-120	

Method Blank (MB)

(MB) R4222114-1 05/28/25 13:19

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron	U		0.0233	0.200

Laboratory Control Sample (LCS)

(LCS) R4222114-2 05/28/25 13:21

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron	1.00	0.967	96.7	80.0-120	

L1860299-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1860299-01 05/28/25 13:23 • (MS) R4222114-4 05/28/25 13:26 • (MSD) R4222114-5 05/28/25 13:28

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	ND	1.01	1.01	94.6	94.2	1	75.0-125			0.401	20

Method Blank (MB)

(MB) R4223333-1 05/30/25 23:07

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Calcium	U		0.0925	1.00

Laboratory Control Sample (LCS)

(LCS) R4223333-2 05/30/25 23:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium	5.00	5.26	105	80.0-120	

L1860287-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1860287-17 05/30/25 23:13 • (MS) R4223333-4 05/30/25 23:20 • (MSD) R4223333-5 05/30/25 23:23

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	85.5	90.3	89.8	95.6	86.4	1	75.0-125			0.514	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

MDL	Method Detection Limit.
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
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:
Alliance Technical Group - Bryant, AR

219 Brown Lane
Bryant, AR 72022

Billing Information:
Accounts Payable
219 Brown Ln.
Bryant, AR 72022

Report to:
Jonathan Brown 501-847-7077

Email To:
Jonathan.brown@alliancetg.com;jacob.colbert

Project Description:
Landfill-CCR - Entergy - Independence

City/State Collected: Newark, AR

Please Circle: PT MT CT ET

Regulatory Program(DOD,RCRA,DW,etc):

Client Project #

Lab Project #
GBMCBAR-ENTERGYINDY

Collected by (print):
Jacob Colbert

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Pres Chk ✓

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	B (6010), Ca (6020) 250mlHDPE-HNO3	Cl, F, SO4 250mlHDPE-NoPres	TDS 1L-HDPE NoPres	Remarks	Sample # (lab only)
MW-20R	G	GW		5-15-25	1030	3	X	X	X	pH 6.42	-01
DUPLICATE 3 (MW-19)	G	GW		5-15-25	0850	3	X	X	X	6.34	-02
FIELD BLANK	G	GW		5-15-25	1105	3	X	X	X	—	-03
~~TRIP BLANK~~		GW									
MW-19	G			5-15-25	0850	2	X	X	X	6.34	-04
MW-21	G			5-14-25	1015	2	X	X	X	6.63	-05

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

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

SDG # U810299
Table # 1550H
Acctnum: GBMCBAR
Template: T271904
Prelogin: P1149429
PM: 829 - Brittnie L Boyd
PB: 5/2/25 BK
Shipped Via: FedEX 2nd Day

* 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)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR	If preservation required by Login: Date/Time
Jacob Colbert	5-16-25	1430			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 15	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5-17-25 Time: 0900	Hold: / Condition: NCF / (OK)

DC#_Title: Excel Form Template
Effective Date:

Multiple Parcel Form

L# UL600299

Parcel Tracking Number	Infrared Thermometer ID	Temperature Reading (°C)	Correction Factor (°C)	Corrected Temperature (°C)	Custody Seal Intact
4544 7726 3210	TLA9	3.9	0.4	4.3	Yes / No / Not Present
4544 7726 3150		3.7		4.1	Yes / No / Not Present
4544 7726 3139		1.6		2.0	Yes / No / Not Present
4544 7726 3183		3.6		4.0	Yes / No / Not Present
4544 7726 3194		1.0		1.4	Yes / No / Not Present
4544 7726 3209		2.3		2.7	Yes / No / Not Present
4439 2457 2616		0.5		0.9	Yes / No / Not Present
4439 2457 2605		0.2		0.6	Yes / No / Not Present
4544 7726 3161		0.6		1.0	Yes / No / Not Present
4544 7726 3172		4.1		4.5	Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present

Name: Jamieem

Date: 5-17-25

ANALYTICAL REPORT

October 28, 2025

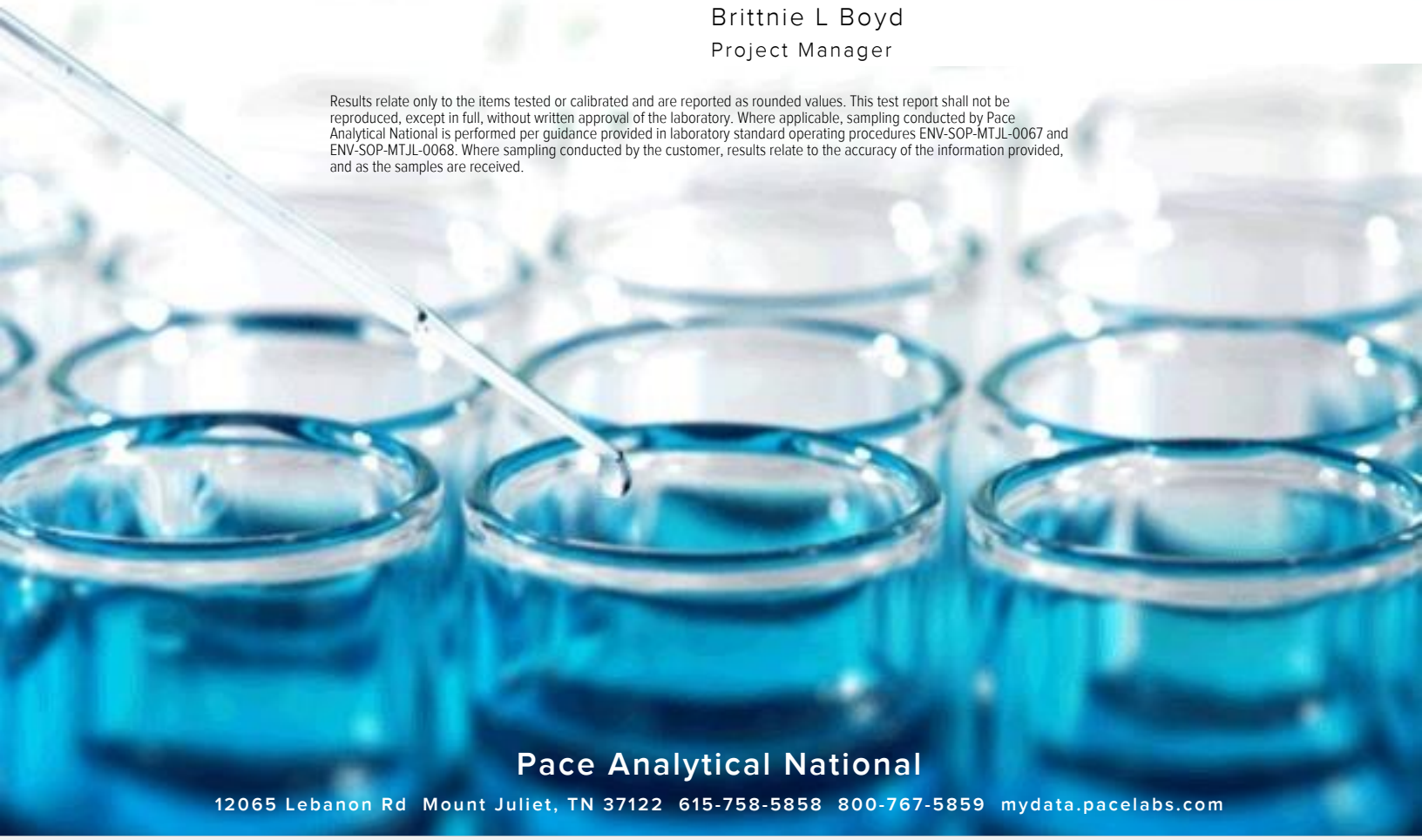
Alliance Technical Group - Bryant, AR

Sample Delivery Group:	L1902063
Samples Received:	09/26/2025
Project Number:	1145-21-081
Description:	Entergy - Independence

Report To: Jonathan Brown
219 Brown Lane
Bryant, AR 72022

Entire Report Reviewed By:

Brittnie L Boyd
Project Manager



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

TABLE OF CONTENTS

SAMPLE SUMMARY

MW-1R L1902063-01

Collected by: Jacob Colbert | Collected date/time: 09/23/25 09:35 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609261	1	09/27/25 01:29	09/28/25 09:09	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	1	09/27/25 12:06	09/27/25 12:06	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	10	09/27/25 12:57	09/27/25 12:57	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608946	1	09/28/25 15:22	09/28/25 22:44	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2610044	1	09/30/25 09:35	10/28/25 11:11	SJM	Mt. Juliet, TN

MW-2 L1902063-02

Collected by: Jacob Colbert | Collected date/time: 09/23/25 10:15 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609261	1	09/27/25 01:29	09/28/25 09:09	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	5	09/27/25 13:23	09/27/25 13:23	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608946	1	09/28/25 15:22	09/28/25 22:51	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2610044	1	09/30/25 09:35	10/28/25 11:15	SJM	Mt. Juliet, TN

MW-3 L1902063-03

Collected by: Jacob Colbert | Collected date/time: 09/23/25 11:10 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609261	1	09/27/25 01:29	09/28/25 09:09	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	1	09/27/25 13:49	09/27/25 13:49	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608946	1	09/28/25 15:22	09/28/25 22:53	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2610044	1	09/30/25 09:35	10/28/25 11:18	SJM	Mt. Juliet, TN

MW-6 L1902063-04

Collected by: Jacob Colbert | Collected date/time: 09/23/25 15:20 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609261	1	09/27/25 01:29	09/28/25 09:09	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	1	09/27/25 14:53	09/27/25 14:53	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608946	1	09/28/25 15:22	09/28/25 22:55	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2610044	1	09/30/25 09:35	10/28/25 11:21	SJM	Mt. Juliet, TN

MW-7 L1902063-05

Collected by: Jacob Colbert | Collected date/time: 09/23/25 08:20 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609261	1	09/27/25 01:29	09/28/25 09:09	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	1	09/27/25 15:19	09/27/25 15:19	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608946	1	09/28/25 15:22	09/28/25 22:56	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2610044	1	09/30/25 09:35	10/28/25 11:36	SJM	Mt. Juliet, TN

MW-10 L1902063-06

Collected by: Jacob Colbert | Collected date/time: 09/22/25 17:20 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609261	1	09/27/25 01:29	09/28/25 09:09	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	1	09/27/25 16:10	09/27/25 16:10	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608946	1	09/28/25 15:22	09/28/25 23:01	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2610044	1	09/30/25 09:35	10/28/25 11:39	SJM	Mt. Juliet, TN

MW-11 L1902063-07

Collected by: Jacob Colbert | Collected date/time: 09/23/25 09:00 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609261	1	09/27/25 01:29	09/28/25 09:09	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	1	09/27/25 16:36	09/27/25 16:36	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608946	1	09/28/25 15:22	09/28/25 23:03	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2610044	1	09/30/25 09:35	10/28/25 11:42	SJM	Mt. Juliet, TN

MW-14 L1902063-08

Collected by: Jacob Colbert | Collected date/time: 09/23/25 13:05 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609261	1	09/27/25 01:29	09/28/25 09:09	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	1	09/27/25 17:02	09/27/25 17:02	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	10	09/27/25 17:15	09/27/25 17:15	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608946	1	09/28/25 15:22	09/28/25 23:05	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2610044	1	09/30/25 09:35	10/28/25 11:46	SJM	Mt. Juliet, TN

MW-15 L1902063-09

Collected by: Jacob Colbert | Collected date/time: 09/23/25 14:00 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609261	1	09/27/25 01:29	09/28/25 09:09	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	1	09/27/25 17:28	09/27/25 17:28	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	10	09/27/25 17:40	09/27/25 17:40	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608946	1	09/28/25 15:22	09/28/25 23:06	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2610044	1	09/30/25 09:35	10/28/25 11:49	SJM	Mt. Juliet, TN

MW-16 L1902063-10

Collected by: Jacob Colbert | Collected date/time: 09/23/25 12:25 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609261	1	09/27/25 01:29	09/28/25 09:09	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	1	09/27/25 17:53	09/27/25 17:53	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	5	09/27/25 18:06	09/27/25 18:06	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608946	1	09/28/25 15:22	09/28/25 23:08	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2610044	1	09/30/25 09:35	10/28/25 11:52	SJM	Mt. Juliet, TN

MW-17 L1902063-11

Collected by: Jacob Colbert | Collected date/time: 09/23/25 11:50 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609261	1	09/27/25 01:29	09/28/25 09:09	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	1	09/27/25 18:45	09/27/25 18:45	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608946	1	09/28/25 15:22	09/28/25 23:10	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2610044	1	09/30/25 09:35	10/28/25 11:55	SJM	Mt. Juliet, TN

DUPLICATE 1 (MW-2) L1902063-12

Collected by: Jacob Colbert | Collected date/time: 09/23/25 10:15 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609261	1	09/27/25 01:29	09/28/25 09:09	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	1	09/27/25 19:11	09/27/25 19:11	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	10	09/27/25 19:23	09/27/25 19:23	ZSA	Mt. Juliet, TN

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

DUPLICATE 1 (MW-2) L1902063-12

Collected by: Jacob Colbert | Collected date/time: 09/23/25 10:15 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2608946	1	09/28/25 15:22	09/28/25 23:12	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2610044	1	09/30/25 09:35	10/28/25 11:58	SJM	Mt. Juliet, TN

DUPLICATE 2 (MW-3) L1902063-13

Collected by: Jacob Colbert | Collected date/time: 09/23/25 11:10 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609261	1	09/27/25 01:29	09/28/25 09:09	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	1	09/27/25 19:36	09/27/25 19:36	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608946	1	09/28/25 15:22	09/28/25 23:13	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2610044	1	09/30/25 09:35	10/28/25 12:01	SJM	Mt. Juliet, TN

FIELD BLANK 2 L1902063-14

Collected by: Jacob Colbert | Collected date/time: 09/24/25 12:30 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609671	1	09/28/25 14:55	09/29/25 11:16	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608908	1	09/27/25 20:02	09/27/25 20:02	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608946	1	09/28/25 15:22	09/28/25 23:15	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2610044	1	09/30/25 09:35	10/28/25 12:05	SJM	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

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	6.49	su

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	557		10.0	1	09/28/2025 09:09	WG2609261

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	62.2	J6	1.00	1	09/27/2025 12:06	WG2608908
Fluoride	ND		0.150	1	09/27/2025 12:06	WG2608908
Sulfate	134		50.0	10	09/27/2025 12:57	WG2608908

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.203		0.200	1	09/28/2025 22:44	WG2608946

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	72.7		1.00	1	10/28/2025 11:11	WG2610044

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	6.91	su

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	696		13.3	1	09/28/2025 09:09	WG2609261

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	10.8		5.00	5	09/27/2025 13:23	WG2608908
Fluoride	ND		0.750	5	09/27/2025 13:23	WG2608908
Sulfate	212		25.0	5	09/27/2025 13:23	WG2608908

Sample Narrative:

L1902063-02 WG2608908: Dilution due to matrix impact on instrumentation at lower dilution

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	09/28/2025 22:51	WG2608946

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	106		1.00	1	10/28/2025 11:15	WG2610044

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	6.54	su

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	429		10.0	1	09/28/2025 09:09	WG2609261

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	27.6		1.00	1	09/27/2025 13:49	WG2608908
Fluoride	ND		0.150	1	09/27/2025 13:49	WG2608908
Sulfate	64.2	J6	5.00	1	09/27/2025 13:49	WG2608908

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.202		0.200	1	09/28/2025 22:53	WG2608946

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	57.8		1.00	1	10/28/2025 11:18	WG2610044

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	6.43	su

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	427		10.0	1	09/28/2025 09:09	WG2609261

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	22.6		1.00	1	09/27/2025 14:53	WG2608908
Fluoride	ND		0.150	1	09/27/2025 14:53	WG2608908
Sulfate	90.9		5.00	1	09/27/2025 14:53	WG2608908

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	09/28/2025 22:55	WG2608946

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	63.0		1.00	1	10/28/2025 11:21	WG2610044

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	7.03	su

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	503		10.0	1	09/28/2025 09:09	WG2609261

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	20.1		1.00	1	09/27/2025 15:19	WG2608908
Fluoride	0.470		0.150	1	09/27/2025 15:19	WG2608908
Sulfate	58.1		5.00	1	09/27/2025 15:19	WG2608908

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	09/28/2025 22:56	WG2608946

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	54.7		1.00	1	10/28/2025 11:36	WG2610044

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	6.14	su

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	460		10.0	1	09/28/2025 09:09	WG2609261

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	37.2		1.00	1	09/27/2025 16:10	WG2608908
Fluoride	ND		0.150	1	09/27/2025 16:10	WG2608908
Sulfate	94.8		5.00	1	09/27/2025 16:10	WG2608908

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.476		0.200	1	09/28/2025 23:01	WG2608946

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	61.7		1.00	1	10/28/2025 11:39	WG2610044

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	6.69	su

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	365		10.0	1	09/28/2025 09:09	WG2609261

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	15.2		1.00	1	09/27/2025 16:36	WG2608908
Fluoride	0.185		0.150	1	09/27/2025 16:36	WG2608908
Sulfate	39.5		5.00	1	09/27/2025 16:36	WG2608908

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	09/28/2025 23:03	WG2608946

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	60.7		1.00	1	10/28/2025 11:42	WG2610044

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	6.75	su

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	661		13.3	1	09/28/2025 09:09	WG2609261

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	64.6		1.00	1	09/27/2025 17:02	WG2608908
Fluoride	0.172		0.150	1	09/27/2025 17:02	WG2608908
Sulfate	120		50.0	10	09/27/2025 17:15	WG2608908

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	09/28/2025 23:05	WG2608946

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	87.0		1.00	1	10/28/2025 11:46	WG2610044

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	6.54	su

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	504		10.0	1	09/28/2025 09:09	WG2609261

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	43.6		1.00	1	09/27/2025 17:28	WG2608908
Fluoride	ND		0.150	1	09/27/2025 17:28	WG2608908
Sulfate	133		50.0	10	09/27/2025 17:40	WG2608908

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.211		0.200	1	09/28/2025 23:06	WG2608946

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	70.7		1.00	1	10/28/2025 11:49	WG2610044

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	6.84	su

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	640		13.3	1	09/28/2025 09:09	WG2609261

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	34.1		1.00	1	09/27/2025 17:53	WG2608908
Fluoride	0.324		0.150	1	09/27/2025 17:53	WG2608908
Sulfate	108		25.0	5	09/27/2025 18:06	WG2608908

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.527		0.200	1	09/28/2025 23:08	WG2608946

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	71.1		1.00	1	10/28/2025 11:52	WG2610044

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	6.47	su

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	380		10.0	1	09/28/2025 09:09	WG2609261

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	38.4		1.00	1	09/27/2025 18:45	WG2608908
Fluoride	ND		0.150	1	09/27/2025 18:45	WG2608908
Sulfate	60.7		5.00	1	09/27/2025 18:45	WG2608908

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	09/28/2025 23:10	WG2608946

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	55.1		1.00	1	10/28/2025 11:55	WG2610044

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	6.91	su

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	681		13.3	1	09/28/2025 09:09	WG2609261

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	10.5		1.00	1	09/27/2025 19:11	WG2608908
Fluoride	0.168		0.150	1	09/27/2025 19:11	WG2608908
Sulfate	218		50.0	10	09/27/2025 19:23	WG2608908

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	09/28/2025 23:12	WG2608946

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	108		1.00	1	10/28/2025 11:58	WG2610044

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	6.54	su

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	433		10.0	1	09/28/2025 09:09	WG2609261

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	26.5		1.00	1	09/27/2025 19:36	WG2608908
Fluoride	ND		0.150	1	09/27/2025 19:36	WG2608908
Sulfate	60.5		5.00	1	09/27/2025 19:36	WG2608908

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.200		0.200	1	09/28/2025 23:13	WG2608946

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	58.2		1.00	1	10/28/2025 12:01	WG2610044

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	ND		10.0	1	09/29/2025 11:16	WG2609671

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	ND		1.00	1	09/27/2025 20:02	WG2608908
Fluoride	ND		0.150	1	09/27/2025 20:02	WG2608908
Sulfate	ND		5.00	1	09/27/2025 20:02	WG2608908

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	09/28/2025 23:15	WG2608946

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	ND		1.00	1	10/28/2025 12:05	WG2610044

Method Blank (MB)

(MB) R4279869-1 09/28/25 09:09

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

L1902063-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1902063-01 09/28/25 09:09 • (DUP) R4279869-3 09/28/25 09:09

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Dissolved Solids	557	557	1	0.000		10

L1902080-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1902080-01 09/28/25 09:09 • (DUP) R4279869-4 09/28/25 09:09

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Dissolved Solids	599	590	1	1.51		10

Laboratory Control Sample (LCS)

(LCS) R4279869-2 09/28/25 09:09

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/l	mg/l	%	%	
Dissolved Solids	8800	8560	97.3	90.0-110	

Method Blank (MB)

(MB) R4280416-1 09/29/25 11:16

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

L1901971-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1901971-02 09/29/25 11:16 • (DUP) R4280416-3 09/29/25 11:16

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	47.0	45.0	1	4.35		10

L1902457-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1902457-03 09/29/25 11:16 • (DUP) R4280416-4 09/29/25 11:16

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	6520	6660	1	2.12		10

Laboratory Control Sample (LCS)

(LCS) R4280416-2 09/29/25 11:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8430	95.8	90.0-110	

Method Blank (MB)

(MB) R4282052-1 09/27/25 11:40

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.547	1.00
Fluoride	U		0.0761	0.150
Sulfate	U		0.637	5.00

L1902063-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1902063-01 09/27/25 12:06 • (DUP) R4282052-3 09/27/25 12:19

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	62.2	64.7	1	3.81		15
Fluoride	ND	ND	1	4.27		15

L1902063-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1902063-01 09/27/25 12:57 • (DUP) R4282052-6 09/27/25 13:10

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	134	132	10	1.47		15

L1902063-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1902063-03 09/27/25 13:49 • (DUP) R4282052-7 09/27/25 14:02

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	27.6	28.6	1	3.71		15
Fluoride	ND	0.152	1	5.54		15
Sulfate	64.2	66.0	1	2.81		15

Laboratory Control Sample (LCS)

(LCS) R4282052-2 09/27/25 11:53

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	39.0	97.4	80.0-120	
Fluoride	8.00	7.73	96.6	80.0-120	
Sulfate	40.0	38.2	95.4	80.0-120	

L1902063-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1902063-01 09/27/25 12:06 • (MS) R4282052-4 09/27/25 12:31 • (MSD) R4282052-5 09/27/25 12:44

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	62.2	89.9	95.4	69.1	82.8	1	80.0-120	J6		5.93	15
Fluoride	8.00	ND	7.50	7.78	91.9	95.5	1	80.0-120			3.75	15
Sulfate	40.0	101	125	127	59.7	66.2	1	80.0-120	E J6	E J6	2.05	15

L1902063-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1902063-03 09/27/25 13:49 • (MS) R4282052-8 09/27/25 14:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40.0	27.6	63.3	89.3	1	80.0-120	
Fluoride	8.00	ND	7.78	95.5	1	80.0-120	
Sulfate	40.0	64.2	88.6	61.1	1	80.0-120	J6

Method Blank (MB)

(MB) R4279563-1 09/28/25 22:41

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron	U		0.0233	0.200

Laboratory Control Sample (LCS)

(LCS) R4279563-2 09/28/25 22:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron	1.00	0.992	99.2	80.0-120	

L1902063-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1902063-01 09/28/25 22:44 • (MS) R4279563-4 09/28/25 22:48 • (MSD) R4279563-5 09/28/25 22:49

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	0.203	1.18	1.19	97.6	98.6	1	75.0-125			0.869	20

Method Blank (MB)

(MB) R4292879-1 10/28/25 10:47

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Calcium	U		0.0925	1.00

Laboratory Control Sample (LCS)

(LCS) R4292879-2 10/28/25 10:50

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium	5.00	5.03	101	80.0-120	

L1902201-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1902201-05 10/28/25 10:59 • (MS) R4292879-4 10/28/25 11:05 • (MSD) R4292879-5 10/28/25 11:08

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	44.0	47.7	48.3	74.7	85.8	1	75.0-125	V		1.15	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

MDL	Method Detection Limit.
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.
U (Radiochemistry)	Result + Error < MDA.
J (Radiochemistry)	Result < MDA; Result + Error > MDA.
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).
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

Company Name/Address:
Alliance Technical Group - Bryant, AR

219 Brown Lane
Bryant, AR 72022

Billing Information:
Accounts Payable
219 Brown Ln.
Bryant, AR 72022

Pres Chk

Report to:
Jonathan Brown 501-847-7077

Email To:
Jonathan.Brown@AllianceTG.com;wxie@trccom

Project Description:
Entergy - Independence

City/State Collected: Newark, AR

Please Circle: PT MT CT ET

Regulatory Program(DOD,RCRA,DW,etc):

Client Project #
1145-21-081

Lab Project #
GBMCBAR-ENTERGYINDY

Collected by (print):
Jacob Colbert

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	B, Ca 250mlHDPE-HNO3	Cl, F, SO4 250mlHDPE-NoPres	TDS 1L-HDPE NoPres	pH 125mlHDPE-NoPres	Remarks	Sample # (lab only)
MW-1R	G	GW		9-23-25	0935	3	X	X	X		pH 6.49	-01
MW-2	G	GW		9-23-25	1015	3	X	X	X		6.91	02
MW-3	G	GW		9-23-25	1110	3	X	X	X		6.54	03
MW-6	G	GW		9-23-25	1520	3	X	X	X		6.43	04
MW-7	G	GW		9-23-25	0820	3	X	X	X		7.03	05
MW-10	G	GW		9-22-25	1720	3	X	X	X		6.14	06
MW-11	G	GW		9-23-25	0900	3	X	X	X		6.69	07
MW-14	G	GW		9-23-25	1305	3	X	X	X		6.75	08
MW-15	G	GW		9-23-25	1400	3	X	X	X		6.54	09
MW-16	G	GW		9-23-25	1225	3	X	X	X		6.84	10

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

Remarks:

PH – 10BDH05021
TRC – 5090A93

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Jacob Colbert	9-25-25	1340	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C Bottles Received: 42

Date: 9/26/25 Time: 900

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

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

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

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

SDG # L1902063

T **J114**

Acctnum: **GBMCBAR**
Template: **T280205**
Prelogin: **P1179700**
PM: **829 - Brittnie L Boyd**
PB:
Shipped Via: **FedEX Ground**

Company Name/Address:
Alliance Technical Group - Bryant, AR

219 Brown Lane
Bryant, AR 72022

Billing Information:
Accounts Payable
219 Brown Ln.
Bryant, AR 72022

Pres Chk

Report to:
Jonathan Brown 501-847-7077

Email To:
Jonathan.Brown@AllianceTG.com;wxie@trccom

Project Description:
Entergy - Independence

City/State Collected: Newark, AR

Please Circle: PT MT CT ET

Regulatory Program(DOD,RCRA,DW,etc):

Client Project # 1145-21-081

Lab Project # **GBMCBAR-ENTERGYINDY**

Collected by (print): Jacob Colbert

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	B, Ca 250mlHDPE-HNO3	Cl, F, SO4 250mlHDPE-NoPres	TDS 1L-HDPE NoPres	pH 125mlHDPE-NoPres	Remarks	Sample # (lab only)
MW-17	G	GW		9-23-25	1150	3	X	X	X		PN 6.47	-11
DUPLICATE 1 (MW-2)	G	GW		9-23-25	1015	3	x	x	x		6.91	12
~~FIELD BLANK 1~~		GW										
DUPLICATE 2 (MW-3)	G	GW		9-23-25	1110	3	x	x	x		6.54	13
FIELD BLANK 2	G	GW		9-23-25	1230	3	x	x	x		-	14
		GW										
		GW										
		GW										

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

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

SDG # L1902063

Table #

Acctnum: **GBMCBAR**
Template: **T280205**
Prelogin: **P1179700**
PM: **829 - Brittnie L Boyd**
PB:

Shipped Via: **FedEX Ground**

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Jacob Colbert	9-25-25	1340	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C Bottles Received: 12

Date: 9/26/25 Time: 900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Multiple Parcel Form

L# L1902063

Parcel Tracking Number	Infrared Thermometer ID	Temperature Reading (°C)	Correction Factor (°C)	Corrected Temperature (°C)	Custody Seal Intact
474682731453	A9	2.1	-0.1	= 2.0	Yes / No / Not Present
474682731431	|	0.3	|	= 0.2	Yes / No / Not Present
474682731464	|	4.6	|	= 4.5	Yes / No / Not Present
474682731442	|	1.2	|	= 1.1	Yes / No / Not Present
~~474682731~~	|	0.2	|	= 0.1	Yes / No / Not Present
477892733558					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present

Name

Date

ANALYTICAL REPORT

October 27, 2025

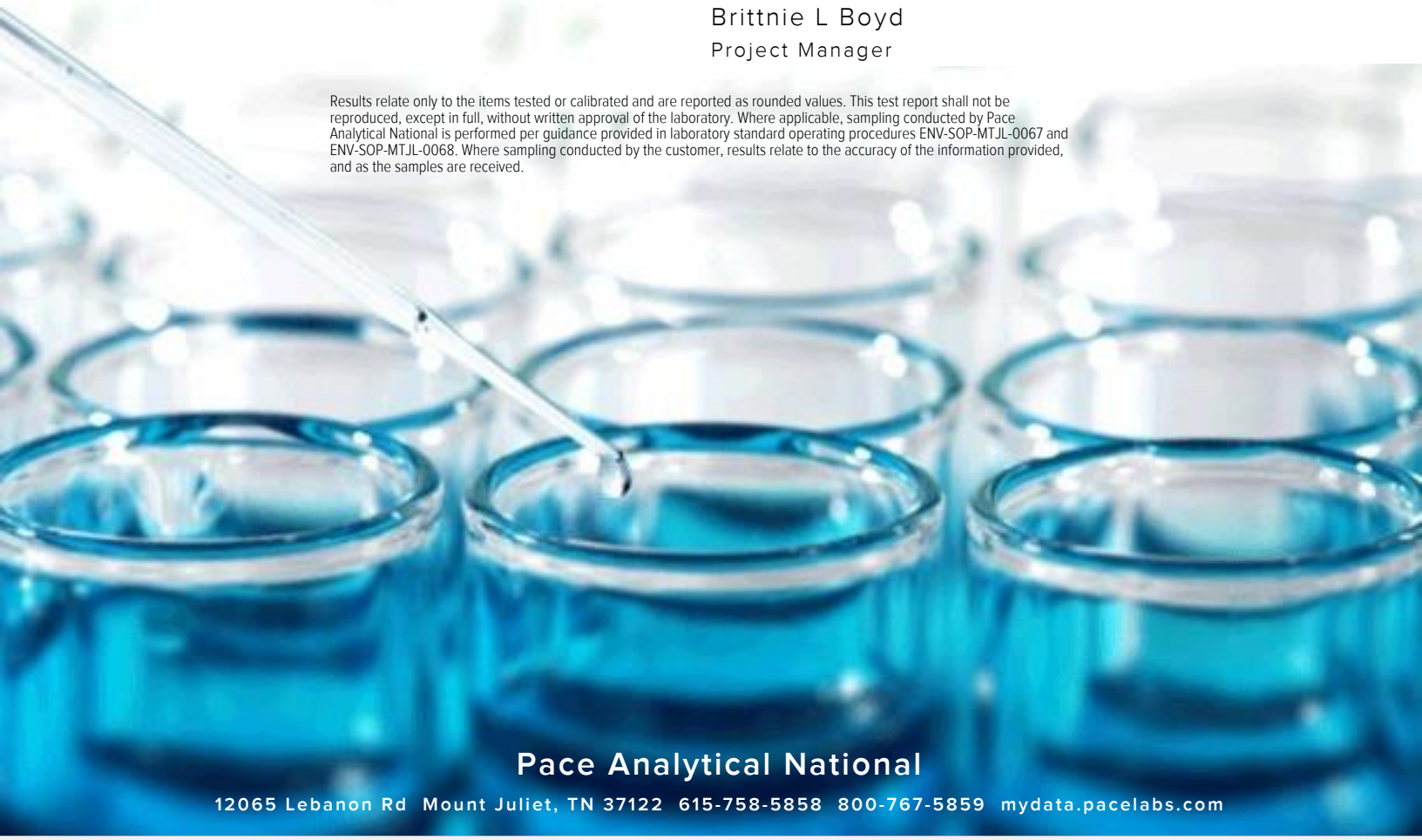
Alliance Technical Group - Bryant, AR

Sample Delivery Group:	L1902080
Samples Received:	09/26/2025
Project Number:	1145-21-081
Description:	Entergy ISES - Cell 16

Report To: Jonathan Brown
219 Brown Lane
Little Rock, AR 72022

Entire Report Reviewed By:

Brittnie L Boyd
Project Manager



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MW-19 L1902080-01

Collected by: Jacob Colbert | Collected date/time: 09/23/25 16:25 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609261	1	09/27/25 01:29	09/28/25 09:09	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608922	1	09/27/25 19:50	09/27/25 19:50	AJC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608922	10	09/27/25 20:05	09/27/25 20:05	AJC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608949	1	09/28/25 17:10	09/29/25 02:38	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2608981	1	09/28/25 20:25	10/26/25 15:52	LD	Mt. Juliet, TN

MW-20R L1902080-02

Collected by: Jacob Colbert | Collected date/time: 09/24/25 11:45 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609671	1	09/28/25 14:55	09/29/25 11:16	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608922	1	09/27/25 20:20	09/27/25 20:20	AJC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608922	10	09/27/25 20:36	09/27/25 20:36	AJC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608949	1	09/28/25 17:10	09/29/25 02:45	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2608981	1	09/28/25 20:25	10/26/25 15:56	LD	Mt. Juliet, TN

MW-21 L1902080-03

Collected by: Jacob Colbert | Collected date/time: 09/24/25 09:45 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609671	1	09/28/25 14:55	09/29/25 11:16	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608922	1	09/27/25 20:51	09/27/25 20:51	AJC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608922	10	09/27/25 21:06	09/27/25 21:06	AJC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608949	1	09/28/25 17:10	09/29/25 02:47	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2608981	1	09/28/25 20:25	10/26/25 15:59	LD	Mt. Juliet, TN

DUPLICATE 3 (MW-21) L1902080-04

Collected by: Jacob Colbert | Collected date/time: 09/24/25 09:45 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609671	1	09/28/25 14:55	09/29/25 11:16	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608922	1	09/27/25 21:21	09/27/25 21:21	AJC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608922	10	09/27/25 21:37	09/27/25 21:37	AJC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608949	1	09/28/25 17:10	09/29/25 02:49	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2608981	1	09/28/25 20:25	10/26/25 16:02	LD	Mt. Juliet, TN

FIELD BLANK L1902080-05

Collected by: Jacob Colbert | Collected date/time: 09/24/25 12:30 | Received date/time: 09/26/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2609671	1	09/28/25 14:55	09/29/25 11:16	AMG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2608922	1	09/27/25 21:52	09/27/25 21:52	AJC	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2608949	1	09/28/25 17:10	09/29/25 02:50	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2608981	1	09/28/25 20:25	10/26/25 16:05	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

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	6.41	su

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	599		10.0	1	09/28/2025 09:09	WG2609261

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	51.7		1.00	1	09/27/2025 19:50	WG2608922
Fluoride	0.197		0.150	1	09/27/2025 19:50	WG2608922
Sulfate	195		50.0	10	09/27/2025 20:05	WG2608922

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.201		0.200	1	09/29/2025 02:38	WG2608949

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	78.0		1.00	1	10/26/2025 15:52	WG2608981

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	6.44	su

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	857		13.3	1	09/29/2025 11:16	WG2609671

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	135		10.0	10	09/27/2025 20:36	WG2608922
Fluoride	ND		0.150	1	09/27/2025 20:20	WG2608922
Sulfate	226		50.0	10	09/27/2025 20:36	WG2608922

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	09/29/2025 02:45	WG2608949

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	112		1.00	1	10/26/2025 15:56	WG2608981

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	6.44	su

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	759		13.3	1	09/29/2025 11:16	WG2609671

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	71.3		1.00	1	09/27/2025 20:51	WG2608922
Fluoride	0.172		0.150	1	09/27/2025 20:51	WG2608922
Sulfate	244		50.0	10	09/27/2025 21:06	WG2608922

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.369		0.200	1	09/29/2025 02:47	WG2608949

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	91.1		1.00	1	10/26/2025 15:59	WG2608981

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	6.41	su

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	755		13.3	1	09/29/2025 11:16	WG2609671

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	73.8		1.00	1	09/27/2025 21:21	WG2608922
Fluoride	0.182		0.150	1	09/27/2025 21:21	WG2608922
Sulfate	251		50.0	10	09/27/2025 21:37	WG2608922

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.369		0.200	1	09/29/2025 02:49	WG2608949

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	91.7		1.00	1	10/26/2025 16:02	WG2608981

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	ND		10.0	1	09/29/2025 11:16	WG2609671

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	ND		1.00	1	09/27/2025 21:52	WG2608922
Fluoride	ND		0.150	1	09/27/2025 21:52	WG2608922
Sulfate	ND		5.00	1	09/27/2025 21:52	WG2608922

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	09/29/2025 02:50	WG2608949

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	ND		1.00	1	10/26/2025 16:05	WG2608981

Method Blank (MB)

(MB) R4279869-1 09/28/25 09:09

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

L1902063-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1902063-01 09/28/25 09:09 • (DUP) R4279869-3 09/28/25 09:09

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	557	557	1	0.000		10

L1902080-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1902080-01 09/28/25 09:09 • (DUP) R4279869-4 09/28/25 09:09

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	599	590	1	1.51		10

Laboratory Control Sample (LCS)

(LCS) R4279869-2 09/28/25 09:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8560	97.3	90.0-110	

Method Blank (MB)

(MB) R4280416-1 09/29/25 11:16

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

L1901971-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1901971-02 09/29/25 11:16 • (DUP) R4280416-3 09/29/25 11:16

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Dissolved Solids	47.0	45.0	1	4.35		10

L1902457-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1902457-03 09/29/25 11:16 • (DUP) R4280416-4 09/29/25 11:16

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Dissolved Solids	6520	6660	1	2.12		10

Laboratory Control Sample (LCS)

(LCS) R4280416-2 09/29/25 11:16

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/l	mg/l	%	%	
Dissolved Solids	8800	8430	95.8	90.0-110	

Method Blank (MB)

(MB) R4279410-1 09/27/25 14:08

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.547	1.00
Fluoride	U		0.0761	0.150
Sulfate	U		0.637	5.00

L1902067-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1902067-08 09/27/25 14:38 • (DUP) R4279410-3 09/27/25 14:57

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	20.0	21.1	1	5.49		15
Fluoride	0.710	0.589	1	18.6	P1	15

L1902067-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1902067-09 09/27/25 15:49 • (DUP) R4279410-6 09/27/25 16:04

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

L1902067-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1902067-08 09/29/25 00:05 • (DUP) R4279963-1 09/29/25 00:17

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	132	131	5	0.173		15

Laboratory Control Sample (LCS)

(LCS) R4279410-2 09/27/25 14:23

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	40.9	102	80.0-120	
Fluoride	8.00	8.61	108	80.0-120	
Sulfate	40.0	41.7	104	80.0-120	

L1902067-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1902067-08 09/27/25 14:38 • (MS) R4279410-4 09/27/25 15:15 • (MSD) R4279410-5 09/27/25 15:33

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	20.0	60.0	58.9	100	97.5	1	80.0-120			1.74	15
Fluoride	8.00	0.710	9.21	9.02	106	104	1	80.0-120			2.11	15
Sulfate	40.0	131	157	153	66.2	56.5	1	80.0-120	E J6	E J6	2.51	15

L1902067-09 Original Sample (OS) • Matrix Spike (MS)

(OS) L1902067-09 09/27/25 15:49 • (MS) R4279410-7 09/27/25 16:19

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40.0	ND	41.2	103	1	80.0-120	
Fluoride	8.00	ND	8.66	108	1	80.0-120	
Sulfate	40.0	ND	42.2	106	1	80.0-120	

Method Blank (MB)

(MB) R4279569-1 09/29/25 02:34

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Boron	U		0.0233	0.200

Laboratory Control Sample (LCS)

(LCS) R4279569-2 09/29/25 02:36

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron	1.00	0.968	96.8	80.0-120	

L1902080-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1902080-01 09/29/25 02:38 • (MS) R4279569-4 09/29/25 02:42 • (MSD) R4279569-5 09/29/25 02:43

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	0.201	1.19	1.20	98.7	99.9	1	75.0-125			1.02	20

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

Method Blank (MB)

(MB) R4292113-1 10/26/25 15:04

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Calcium	0.108	J	0.0925	1.00

Laboratory Control Sample (LCS)

(LCS) R4292113-2 10/26/25 15:08

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium	5.00	4.94	98.9	80.0-120	

L1901888-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1901888-01 10/26/25 15:11 • (MS) R4292113-4 10/26/25 15:17 • (MSD) R4292113-5 10/26/25 15:21

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 %
Calcium	5.00	49.0	53.3	52.9	84.9	76.4	1	75.0-125			0.802	20

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

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.
U (Radiochemistry)	Result + Error < MDA.
J (Radiochemistry)	Result < MDA; Result + Error > MDA.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
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	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

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

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

Company Name/Address:
Alliance Technical Group - Bryant, AR

219 Brown Lane
Little Rock, AR 72022

Billing Information:
Accounts Payable
219 Brown Ln.
Bryant, AR 72022

Pres Chk

Report to:
Jonathan Brown 501-847-7077

Email To:
Jonathan.Brown@AllianceTG.com;jacob.colbert

Project Description:
Entergy ISES - Cell 16

City/State Collected: Newark, AR

Please Circle: PT MT CT ET

Regulatory Program(DOD,RCRA,DW,etc):

Client Project # 1145-21-081

Lab Project # **GBMCBAR-ENTERGYISES**

Collected by (print): Jacob Colbert

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	B, Ca 250mlHDPE-HNO3	Cl, F, SO4 125mlHDPE-NoPres	TDS 1L-HDPE NoPres	Remarks	Sample # (lab only)
MW-19	G	GW		9-23-25	1625	3	X	X	X	pH 6.41	-01
MW-20R	G	GW		9-24-25	1145	3	X	X	X	6.44	02
MW-21	G	GW		9-24-25	0945	3	X	X	X	6.41	03
DUPLICATE 3 (MW-21)	G	GW		9-24-25	0945	3	X	X	X	6.41	04
TRIP BLANK		GW									
FIELD BLANK	G	GW		9-24-25	1230	3	X	X	X	-	05
		GW									
		GW									
		GW									
		GW									

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

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

SDG # L1902080

Table #

Acctnum: **GBMCBAR**
Template: **T274782**
Prelogin: **P1172796**
PM: **829 - Brittnie L Boyd**
PB: BF 8/21/25
Shipped Via: **FedEX Ground**

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Jacob Colbert	9-25-25	1340			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 15	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 9/26/25 Time: 900	Hold: / Condition: NCF / OK

Multiple Parcel Form

L# L1902080

Parcel Tracking Number	Infrared Thermometer ID	Temperature Reading (°C)	Correction Factor (°C)	Corrected Temperature (°C)	Custody Seal Intact
477682731453	A9	2.1	-0.1	= 2.0	Yes / No / Not Present
477682731431	|	0.3	|	= 0.2	Yes / No / Not Present
477682731464	|	4.6	|	= 4.5	Yes / No / Not Present
477682731442	|	1.2	|	= 1.1	Yes / No / Not Present
~~477682731~~	|	0.2	|	= 0.1	Yes / No / Not Present
477682733558					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present

Name

Date

APPENDIX D
FIELD SAMPLING FORMS

3/12 320 mL/min

GROUNDWATER SAMPLING LOG

SITE NAME:	Independence	SITE LOCATION:	Newark, Ar.	
WELL NO:	701S	SAMPLE ID:	701S	DATE: 5/13/25

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	TOTAL WATER DEPTH (feet):	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	1/8"	39.91	22.85	BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet):	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
Built in pump		0900	0920	1.69

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
0905	.4225	.4225	.0845	22.89	6.39	18.86	845	2.80	234	81.7	
0910	.4225	.845			6.37	18.76	849	2.02	234	1.2	
0915	.4225	1.27			6.39	18.80	851	2.10	234	0.9	
0920	.4225	1.69		22.89	6.38	18.82	852	2.14	234	0.2	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
MSD / JLC	MSD	0920	0937

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
Built in pump			

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
			—	SEE	COC	—			

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

130mL/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independance	SITE LOCATION: Newark, Ar	
WELL NO: 7035	SAMPLE ID: 7035	DATE: 5/14/25

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/8"	TOTAL WATER DEPTH (feet): 46.20	STATIC DEPTH TO WATER (feet): 22.95	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) N/A

= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) N/A

= gallons + (gallons/foot X feet) + gallons = gallons

PUMP OR TUBING DEPTH IN WELL (feet): 30'	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1105	PURGING ENDED AT: 1125	TOTAL VOLUME PURGED (gallons): .686

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1110	.1715	.1715	.0343	22.95	6.45	24.83	574	3.00	192	7.6	
1115	.1715	.343			6.37	23.09	557	3.06	204	1.8	
1120	.1715	.5145			6.41	22.86	550	2.95	206	0.0	
1125	.1715	.686		22.98	6.39	22.75	554	3.01	207	0.0	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC/MSD	SAMPLER(S) SIGNATURE(S): MSD	SAMPLING INITIATED AT: 1125	SAMPLING ENDED AT: 1144
PUMP OR TUBING DEPTH IN WELL (feet): 30'	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				SEE COC					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, Ar.	
WELL NO: 7055	SAMPLE ID: 7055	DATE: 5/12/25

350mL L2

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/8"	TOTAL WATER DEPTH (feet): 37.11	STATIC DEPTH TO WATER (feet): 20.08	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1610	PURGING ENDED AT: 1630	TOTAL VOLUME PURGED (gallons): 1.85

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1615	.462	.462	.0924	20.60	6.31	17.56	759	1.81	202	2.6	
1620	.462	.924	"		6.33	17.74	771	1.74	210	1.0	
1625	.462	1.39	"		6.24	17.56	771	1.75	210	0.0	
1630	.462	1.85	"	20.60	6.34	17.65	766	1.75	211	2.1	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC/MSD	SAMPLER(S) SIGNATURE(S): MSD	SAMPLING INITIATED AT: 1630	SAMPLING ENDED AT: 1640
PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
			—	SEE	COC	—			

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

350mL/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, Ar.	
WELL NO: 706S	SAMPLE ID: 706S	DATE: 5/13/25

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/8"	TOTAL WATER DEPTH (feet): 38.70	STATIC DEPTH TO WATER (feet): 20.43	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1440	PURGING ENDED AT: 1500	TOTAL VOLUME PURGED (gallons): 1.85

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1445	.4623	.4623	.0924	20.43	6.36	18.51	1022	2.62	226	0.4	
1450	.4623	.9246			6.37	18.32	624	2.15	229	0.2	
1455	.4623	1.39			6.38	18.38	1026	2.13	231	0.1	
1500	.4623	1.85		20.43	6.38	18.41	625	2.12	231	0.2	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC/MSD	SAMPLER(S) SIGNATURE(S): MSD	SAMPLING INITIATED AT: 1500	SAMPLING ENDED AT: 1510
PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: (Y) N MW-6	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				SEE COC					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

275 mL/min

SITE NAME: Independence	SITE LOCATION: Newark, Ar.	
WELL NO: 7075	SAMPLE ID: 7075	DATE: 5/13/25

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/8"	TOTAL WATER DEPTH (feet): 36.78	STATIC DEPTH TO WATER (feet): 20.13	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1050	PURGING ENDED AT: 1110	TOTAL VOLUME PURGED (gallons): 1.45

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1055	.3635	.3635	.0727	20.13	7.10	19.51	804	5.41	215	4.9	
1100	.3635	.727			7.08	19.38	808	4.04	222	1.7	
1105	.3635	1.09			7.14	19.36	808	4.01	224	1.7	
1110	.3635	1.45		20.13	7.14	19.37	808	4.01	228	2.0	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: MSD/ILC	SAMPLER(S) SIGNATURE(S): MSD	SAMPLING INITIATED AT: 1110	SAMPLING ENDED AT: 1141
PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
			—	SEE COC	—				

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

370mL/min IRC

GROUNDWATER SAMPLING LOG

24

SITE NAME: Independence	SITE LOCATION: Newark, Ar	
WELL NO: 708S	SAMPLE ID: 708S	DATE: 5/14/25

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/8"	TOTAL WATER DEPTH (feet): 35.74	STATIC DEPTH TO WATER (feet): 21.27	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) N/A

= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) N/A

= gallons + (gallons/foot X feet) + gallons = gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 0835	PURGING ENDED AT: 0855	TOTAL VOLUME PURGED (gallons): 1.95

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
0840	.4885	.4885	.0977	21.27	6.39	19.18	1020	4.81	211	0.0	
0845	.4885	.977			6.43	19.28	1030	4.90	214	0.0	
0850	.4885	1.47			6.45	19.18	1030	4.89	217	0.0	
0855	.4885	1.95		21.29	6.44	18.92	1030	4.90	218	0.0	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC/MSD	SAMPLER(S) SIGNATURE(S): MSD	SAMPLING INITIATED AT: 0855	SAMPLING ENDED AT: 0902
PUMP OR TUBING DEPTH IN WELL (feet): Built in Pump	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
			____	SEE COC	____				

REMARKS: Horiba calibrated prior to purging

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

300 mL/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, Ar	
WELL NO: 709S	SAMPLE ID: 709S	DATE: 5/14/25

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	TOTAL WATER DEPTH (feet): 40.29	STATIC DEPTH TO WATER (feet): 20.22	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in Pump	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 0910	PURGING ENDED AT: 0930	TOTAL VOLUME PURGED (gallons): 1.59

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
0915	.3965	.3965	.0793	20.22	6.47	22.03	1050	2.57	199	0.3	
0920	.3965	.793			6.48	21.92	1050	2.42	203	0.0	
0925	.3965	1.19			6.48	22.04	1050	2.41	205	0.0	
0930	.3965	1.59		20.22	6.48	22.23	1050	2.41	207	0.0	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: MSD LLC	SAMPLER(S) SIGNATURE(S): MSD	SAMPLING INITIATED AT: 0930	SAMPLING ENDED AT: 0940
PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
		—		SEE COC	—				

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

300mL/min

SITE NAME: Independence	SITE LOCATION: Newark, Ar	
WELL NO: 710S	SAMPLE ID: 710S	DATE: 5/13/25

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/8"	TOTAL WATER DEPTH (feet): 41.16	STATIC DEPTH TO WATER (feet): 23.04	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1255	PURGING ENDED AT: 1315	TOTAL VOLUME PURGED (gallons): 1.59

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1300	.3965	.3965	.0793	23.04	6.45	19.24	785	2.44	229	48	
1305	.3965	.793			6.49	19.04	781	2.38	226	0.5	
1310	.3965	1.19			6.44	18.95	787	2.25	229	1.2	
1315	.3965	1.59		23.04	6.43	19.17	781	2.20	233	0.0	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC / MSD	SAMPLER(S) SIGNATURE(S): MSD	SAMPLING INITIATED AT: 1315	SAMPLING ENDED AT: 1335
PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
			—	SEE COC	—				

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

255mL/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, Ar.	
WELL NO: 711S	SAMPLE ID: 711S	DATE: 5/13/25

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/8"	TOTAL WATER DEPTH (feet): 42.27	STATIC DEPTH TO WATER (feet): 22.64	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) N/A

= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 0945	PURGING ENDED AT: 1020	TOTAL VOLUME PURGED (gallons): 2.36

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
0950	.337	.337	.0107	22.74	6.74	18.10	462	8.78	228	130	
0955	.337	.674			6.50	17.65	477	5.11	230	59.7	
1000	.337	1.01			6.59	17.64	479	3.22	220	14.6	
1005	.337	1.35		22.76	6.61	17.55	482	1.74	216	9.5	
1010	.337	1.69			6.61	17.55	481	1.76	213	5.6	
1015	.337	2.02			6.61	17.61	479	1.81	212	5.1	
1020	.337	2.36		22.77	6.62	17.62	476	1.75	211	5.2	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: MSD/JLC	SAMPLER(S) SIGNATURE(S): MSD	SAMPLING INITIATED AT: 1020	SAMPLING ENDED AT: 1042
PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
			—	SEE COC	—				

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

350 ml/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, AR.	
WELL NO: 7125	SAMPLE ID: 7125	DATE: 5/13/25

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/8"	TOTAL WATER DEPTH (feet): 43.23	STATIC DEPTH TO WATER (feet): 22.34	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) N/A

= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) N/A

= gallons + (gallons/foot X feet) + gallons = gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1150	PURGING ENDED AT: 1235	TOTAL VOLUME PURGED (gallons): 4.16

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1155	.4623	.4623	.0924	22.34	6.50	18.17	822	2.33	225	21.60	
1200	.4623	.9246			6.59	18.15	820	1.68	220	26.40	
1205	.4623	1.39			6.57	17.94	824	1.61	220	20.50	
1210	.4623	1.85		22.34	6.61	18.19	823	1.63	218	15.40	
1215	.4623	2.31			6.60	18.20	820	1.62	217	12.30	
1220	.4623	2.77			6.59	18.31	820	1.60	215	11.2	
1225	.4623	3.24		22.34	6.59	18.60	817	1.36	212	8.7	
1230	.4623	3.70			6.57	18.58	817	1.39	213	8.8	
1235	.4623	4.16		22.34	6.52	18.55	819	1.37	213	8.1	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC/MSD	SAMPLER(S) SIGNATURE(S): MSD	SAMPLING INITIATED AT: 1235	SAMPLING ENDED AT: 1245
PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				SEE COC					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

350mL/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, Ar.	
WELL NO: 7135	SAMPLE ID: 7135	DATE: 5/13/25

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/8"	TOTAL WATER DEPTH (feet): 42.35	STATIC DEPTH TO WATER (feet): 23.56	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1350	PURGING ENDED AT: 1410	TOTAL VOLUME PURGED (gallons): 1.85

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1355	.4623	.4623	.0924	23.56	6.72	18.92	894	.87	212	0.4	
1400	.4623	.9246			6.68	18.77	883	0.91	211	1.2	
1405	.4623	1.39			6.69	18.84	891	0.92	208	2.9	
1410	.4623	1.85		23.56	6.64	18.53	891	0.87	206	2.7	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC/MSD	SAMPLER(S) SIGNATURE(S): MSD	SAMPLING INITIATED AT: 1410	SAMPLING ENDED AT: 1422
PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				SEE COC					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

100mL/Min

GROUNDWATER SAMPLING LOG

SITE NAME:	Independence	SITE LOCATION:	Newark, AR	
WELL NO:	7145	SAMPLE ID:	7145	DATE: 5/14/25

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	TOTAL WATER DEPTH (feet):	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
4"	1/8"	44.48	22.95	BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) N/A

= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) N/A

= gallons + (gallons/foot X feet) + gallons = gallons

PUMP OR TUBING DEPTH IN WELL (feet):	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
33'		1410	1435	.66

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1415	.132	.132	.0264	22.95	6.86	23.36	1100	3.52	192	2.2	
1420	.132	.264			6.86	23.07	1050	2.96	197	0.0	
1425	.132	.396			6.87	22.48	1040	2.36	198	0.0	
1430	.132	.528		22.95	6.90	22.61	1030	2.36	200	0.0	
1435	.132	.66		22.95	6.85	23.09	1040	2.37	200	0.0	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
JLC/MSD	MJD	1435	1456

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
33'			

FIELD DECONTAMINATION: PUMP (Y) N TUBING (Y) N (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				SEE COC					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

100mL/min

SITE NAME:	Independence	SITE LOCATION:	Newark, Ar.	
WELL NO:	715S	SAMPLE ID:	715S	DATE: 5/14/25

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	TOTAL WATER DEPTH (feet):	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
4"	1/8"	49.10	21.6	BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) N/A

= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) N/A

= gallons + (gallons/foot X feet) + gallons = gallons

PUMP OR TUBING DEPTH IN WELL (feet):	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
32'		1510	1535	.66

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1515	.132	.132	.0264	21.60	7.03	26.54	697	3.34	192	9.2	
1520	.132	.264			7.03	26.20	709	3.07	199	6.5	
1525	.132	.396			7.02	25.93	713	3.02	204	4.1	
1530	.132	.528		21.62	7.01	25.86	713	3.10	207	3.6	
1535	.132	.66		21.62	6.95	25.88	705	2.95	209	2.7	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
JLC/MSD	MSD	1535	1552

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
32'			

FIELD DECONTAMINATION: PUMP (Y) N TUBING (Y) N (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
			SEE COC						

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

100 mL/min

SITE NAME: Independence	SITE LOCATION: Newark, Ar.	
WELL NO: 716S	SAMPLE ID: 716S	DATE: 5/14/25

PURGING DATA

WELL DIAMETER (inches): 4"	TUBING DIAMETER (inches): 1/8"	TOTAL WATER DEPTH (feet): 49.48	STATIC DEPTH TO WATER (feet): 23.70	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 33'	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1315	PURGING ENDED AT: 1340	TOTAL VOLUME PURGED (gallons): .66

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1320	.132	.132	.0264	23.70	6.92	23.78	1430	2.43	190	0.0	
1325	.132	.264			6.94	23.69	1440	2.09	193	0.0	
1330	.132	.396			6.93	23.07	1450	2.07	195	0.0	
1335	.132	.528		23.71	6.94	23.05	1450	2.12	196	0.0	
1340	.132	.66		23.71	6.93	23.32	1450	2.08	197	0.0	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: MSD/JLC	SAMPLER(S) SIGNATURE(S): MSD	SAMPLING INITIATED AT: 1340	SAMPLING ENDED AT: 1359
PUMP OR TUBING DEPTH IN WELL (feet): 33'	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				SEE COC					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

100mL/min

GROUNDWATER SAMPLING LOG

SITE NAME:	Independence	SITE LOCATION:	Newark, Ar
WELL NO:	7175	SAMPLE ID:	7175
		DATE:	5-14-25

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	TOTAL WATER DEPTH (feet):	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
4"	1/8"	55.12	22.97	

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) N/A

= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) N/A

= gallons + (gallons/foot X feet) + gallons = gallons

PUMP OR TUBING DEPTH IN WELL (feet):	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
30'		1200	1245	1.1

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1205	.132	.132	.0264	22.97	7.60	23.82	868	4.36	172	0.5	
1210	.132	.264			7.49	22.45	891	4.44	178	0.0	
1215	.132	.396			7.23	22.69	889	3.45	195	0.0	
1220	.132	.528		22.99	6.94	22.13	890	2.64	196	0.0	
1225	.132	.66			6.88	22.10	883	2.61	198	0.0	
1230	.132	.79			6.79	22.08	885	2.69	197	0.0	
1235	.132	.92		22.99	6.78	21.87	883	2.30	200	0.0	
1240	.132	1.06			6.79	22.02	890	2.27	200	0.0	
1245	.132	1.19		23.01	6.76	22.09	882	2.20	200	0.0	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
MSD / JLC	MSD	1245	1304

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
30'			

FIELD DECONTAMINATION: PUMP (Y) N TUBING (Y) N (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				SEE COC					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

100mL/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, Ar.	
WELL NO: MW-19	SAMPLE ID: MW-19	DATE: 5/15/25

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/8"	TOTAL WATER DEPTH (feet): 35.41	STATIC DEPTH TO WATER (feet): 16.89	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) N/A

= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 28'	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 0830	PURGING ENDED AT: 0850	TOTAL VOLUME PURGED (gallons): .528

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
0835	.132	.132	.0264	16.89	6.20	22.5	952	2.33	237	5.9	
0840	.132	.264	1		6.29	21.66	927	1.55	222	3.3	
0845	.132	.396	1		6.31	21.70	916	1.56	218	2.7	
0850	.132	.528	1	16.91	6.34	21.61	916	1.48	217	3.4	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JC / MJD	SAMPLER(S) SIGNATURE(S): MJD	SAMPLING INITIATED AT: 0850	SAMPLING ENDED AT: 0936
PUMP OR TUBING DEPTH IN WELL (feet): 28'	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: (Y) N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				SEE COC					

REMARKS: Horiba calibrated prior to sampling

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

100mL/min

GROUNDWATER SAMPLING LOG

SITE NAME:	Independence	SITE LOCATION:	Newark, Ar	
WELL NO:	MW-20R	SAMPLE ID:	MW-20	DATE: 5/15/25

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	TOTAL WATER DEPTH (feet):	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	1/8"	41.20	18.41	BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) N/A

= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) N/A

= gallons + (gallons/foot X feet) + gallons = gallons

PUMP OR TUBING DEPTH IN WELL (feet):	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
28'		1000	1030	.792

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1005	.132	.132	.0264	18.41	6.42	22.90	1060	1.49	10	42.1	
1010	.132	.264			6.39	22.42	1060	0.74	3	38.4	
1015	.132	.396			6.41	22.42	1060	0.52	-2	49.2	
1020	.132	.528		18.41	6.42	21.95	1060	0.45	-4	76.0	
1025	.132	.660			6.42	21.99	1060	0.42	-5	77.8	
1030	.132	.792		18.41	6.42	21.67	1060	0.39	-5	72.1	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
MD / JLC	MSD	1030	1054

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
28'			

FIELD DECONTAMINATION: PUMP (Y) N TUBING (Y) N (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				Set 10C					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

90mL/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, Ar	
WELL NO: MW-21	SAMPLE ID: MW-21	DATE: 5/14/25

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/8"	TOTAL WATER DEPTH (feet): 39.15	STATIC DEPTH TO WATER (feet): 17.52	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) N/A

= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) N/A

= gallons + (gallons/foot X feet) + gallons = gallons

PUMP OR TUBING DEPTH IN WELL (feet): 25'	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 0955	PURGING ENDED AT: 1015	TOTAL VOLUME PURGED (gallons): .476

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1000	.119	.119	.0238	17.52	6.60	24.34	1040	4.06	198	1.0	
1005	.119	.238	"		6.60	24.21	1030	4.09	201	0.9	
1010	.119	.357	"		6.63	24.33	1040	4.01	201	1.8	
1015	.119	.476	"	17.55	6.63	24.08	1040	4.09	202	3.8	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: ILC/MSD	SAMPLER(S) SIGNATURE(S): MSD	SAMPLING INITIATED AT: 1015	SAMPLING ENDED AT: 1037
PUMP OR TUBING DEPTH IN WELL (feet): 25'	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp			
				SEE COC					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

100mL/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, Ar	
WELL NO: MW-20R	SAMPLE ID: MW-20	DATE: 5/15/25

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/8"	TOTAL WATER DEPTH (feet): 41.20	STATIC DEPTH TO WATER (feet): 18.41	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) N/A

= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 28'	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1000	PURGING ENDED AT: 1030	TOTAL VOLUME PURGED (gallons): .792

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1005	.132	.132	.0264	18.41	6.42	22.90	1060	1.49	10	42.1	
1010	.132	.264			6.39	22.42	1060	0.74	3	38.4	
1015	.132	.396			6.41	22.42	1060	0.52	-2	49.2	
1020	.132	.528		18.41	6.42	21.95	1060	0.45	-4	76.0	
1025	.132	.660			6.42	21.99	1060	0.42	-5	77.8	
1030	.132	.792		18.41	6.42	21.67	1060	0.39	-5	72.1	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: MSD/JLC	SAMPLER(S) SIGNATURE(S): MSD	SAMPLING INITIATED AT: 1030	SAMPLING ENDED AT: 1054
PUMP OR TUBING DEPTH IN WELL (feet): 28'	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				Set TOC					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

100mL/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, Ar.	
WELL NO: MW-19	SAMPLE ID: MW-19	DATE: 5/15/25

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/8"	TOTAL WATER DEPTH (feet): 35.41	STATIC DEPTH TO WATER (feet): 16.89	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) N/A

= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 28'	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 0830	PURGING ENDED AT: 0850	TOTAL VOLUME PURGED (gallons): .528

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
0835	.132	.132	0264	16.89	6.20	22.5	952	2.33	237	5.9	
0840	.132	.264	1		6.29	21.66	927	1.55	222	3.3	
0845	.132	.396	1		6.31	21.70	916	1.56	218	2.7	
0850	.132	.528	1	16.91	6.34	21.61	916	1.48	217	3.4	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JC / MJD	SAMPLER(S) SIGNATURE(S): MJD	SAMPLING INITIATED AT: 0850	SAMPLING ENDED AT: 0936
PUMP OR TUBING DEPTH IN WELL (feet): 28'	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: (Y) N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				SEE COC					
		—							

REMARKS: Horiba calibrated prior to sampling

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

90mL/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, Ar	
WELL NO: MW-21	SAMPLE ID: MW-21	DATE: 5/14/25

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/8"	TOTAL WATER DEPTH (feet): 39.15	STATIC DEPTH TO WATER (feet): 17.52	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) N/A

= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) N/A

= gallons + (gallons/foot X feet) + gallons = gallons

PUMP OR TUBING DEPTH IN WELL (feet): 25'	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 0955	PURGING ENDED AT: 1015	TOTAL VOLUME PURGED (gallons): .476

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1000	.119	.119	.0238	17.52	6.60	24.34	1040	4.06	198	1.0	
1005	.119	.238	"		6.60	24.21	1030	4.09	201	0.9	
1010	.119	.357	"		6.63	24.33	1040	4.01	201	1.8	
1015	.119	.476	"	17.55	6.63	24.08	1040	4.09	202	3.8	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: ILC/MSD	SAMPLER(S) SIGNATURE(S): MSD	SAMPLING INITIATED AT: 1015	SAMPLING ENDED AT: 1037
PUMP OR TUBING DEPTH IN WELL (feet): 25'	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				SEE COC					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

350 ml/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Mount Ayr, IA
WELL NO: MW-1R	SAMPLE ID: MW-1R
	DATE: 9-23-25

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	TOTAL WATER DEPTH (feet): 39.91	STATIC DEPTH TO WATER (feet): 31.75	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 0915	PURGING ENDED AT: 0935	TOTAL VOLUME PURGED (gallons): 1.84

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
0920	0.46	0.46	0.092	31.75	6.54	19.36	898	3.22	263	1.9	Clear
0925	0.46	0.92			6.50	19.81	894	2.54	266	2.1	"
0930	0.46	1.38			6.49	19.87	897	2.63	269	2.9	"
0935	0.46	1.84		31.76	6.49	19.89	902	2.72	271	3.6	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC / BLS	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0935	SAMPLING ENDED AT: 0940
PUMP OR TUBING DEPTH IN WELL (feet): Built in	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP Y N	TUBING Y N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				– See COC –					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

100 ml/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, AR	
WELL NO: MW3	SAMPLE ID: MW3	DATE: 9-23-25

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	TOTAL WATER DEPTH (feet): 46.20	STATIC DEPTH TO WATER (feet): 31.75	PURGE PUMP TYPE OR BAILER: B

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 37'	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1045	PURGING ENDED AT: 1110	TOTAL VOLUME PURGED (gallons): 0.65

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1050	0.13	0.13	0.026	31.75	6.57	24.03	722	3.90	250	13.7	Clear
1055	0.13	0.26			6.55	23.86	720	4.15	250	14.6	
1100	0.13	0.39			6.54	23.74	720	4.15	252	12.8	
1105	0.13	0.52		31.76	6.54	23.87	719	3.90	259	12.0	
1110	0.13	0.65		31.76	6.54	24.01	717	3.91	261	12.5	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC/BLS	SAMPLER(S) SIGNATURE(S): Sarah Collins	SAMPLING INITIATED AT: 1110	SAMPLING ENDED AT: 1121
PUMP OR TUBING DEPTH IN WELL (feet): 37'	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING Y (N) (replaced)	DUPLICATE: (Y) N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				See COC					

REMARKS: Dup2 taken

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

350 ml/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, AR	
WELL NO: MW-6	SAMPLE ID: MW-6	DATE: 9-23-25

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	TOTAL WATER DEPTH (feet): 38.70	STATIC DEPTH TO WATER (feet): 29.26	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1500	PURGING ENDED AT: 1520	TOTAL VOLUME PURGED (gallons): 1.84

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1505	0.46	0.46	0.092	29.28	6.40	19.10	686	3.96	227	14.3	Clear
1510	0.46	0.92			6.44	19.07	685	2.83	227	14.6	
1515	0.46	1.38			6.43	19.03	682	3.04	229	13.3	
1520	0.46	1.84		29.31	6.43	18.91	683	3.06	233	13.6	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: SLC/BLS	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1520	SAMPLING ENDED AT: 1525
PUMP OR TUBING DEPTH IN WELL (feet): Built in	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP Y N	TUBING Y N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				See COC					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential**: ± 10 millivolts

350 in/air

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, AR	
WELL NO: 7075 (MW-7)	SAMPLE ID: MW-7	DATE: 9.23.25

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): 36.78	STATIC DEPTH TO WATER (feet): 29.03	PURGE PUMP TYPE OR BAILER: LP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 0800	PURGING ENDED AT: 0820	TOTAL VOLUME PURGED (gallons): 1.84

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
0805	0.46	0.46	0.092	29.03	6.99	18.95	803	2.82	231	12.3	clear
0810	0.46	0.92			7.02	18.90	816	2.81	193	8.4	
0815	0.46	1.38			7.02	18.80	835	2.90	191	8.6	
0820	0.46	1.84		29.05	7.03	18.63	841	2.89	194	8.3	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC / BLS	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0820	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet): Built in	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP Y N	TUBING Y N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				See COC					

REMARKS: Horiba Calibrated prior to Sampling

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

300 ml/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, AR	
WELL NO: 7105	SAMPLE ID: 7105	DATE: 9.22.25

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	TOTAL WATER DEPTH (feet): 41.16	STATIC DEPTH TO WATER (feet): 31.85	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1700	PURGING ENDED AT: 1720	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1705	0.39	0.39	0.078	31.85	6.12	19.28	738	2.69	285	2.1	clear
1710	0.39	0.78	|		6.12	19.12	737	2.44	291	2.2	|
1715	0.39	1.17	|		6.13	19.12	739	2.36	294	1.1	|
1720	0.39	1.56	|	31.85	6.14	19.21	740	2.39	295	1.1	|

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: SLC/BLS	SAMPLER(S) SIGNATURE(S): Jacob Wilson	SAMPLING INITIATED AT: 1720	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet): Built in	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP Y N	TUBING Y N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				- See COC -					

REMARKS: Horiba Calibrated prior to purging

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential**: ± 10 millivolts

2 L on 1 min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, NY	
WELL NO: MW-11 (7115)	SAMPLE ID: MW-11	DATE: 9-23-25

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	TOTAL WATER DEPTH (feet): 42.27	STATIC DEPTH TO WATER (feet): 31.54	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 0830	PURGING ENDED AT: 0900	TOTAL VOLUME PURGED (gallons): 2.10

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
0835	0.35	0.35	0.06a	31.54	7.00	18.98	618	3.22	234	89.8	Turbid
0840	0.35	0.70			6.70	19.47	613	1.43	240	33.0	
0845	0.35	1.05			6.70	16.41	605	1.39	237	12.8	clear
0850	0.35	1.40		31.58	6.69	18.40	598	1.33	239	6.1	
0855	0.35	1.75			6.69	18.40	596	1.37	240	6.4	
0900	0.35	2.10		31.63	6.69	18.35	592	1.41	240	6.3	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC/BLS	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0900	SAMPLING ENDED AT: 0905
PUMP OR TUBING DEPTH IN WELL (feet): Built in	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP Y N	TUBING Y N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				See COC					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

100 ml/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, AR	
WELL NO: MW 14	SAMPLE ID: MW 14	DATE: 9-23-25

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 1/8	TOTAL WATER DEPTH (feet): 44.28	STATIC DEPTH TO WATER (feet): 31.78	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 38'	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1240	PURGING ENDED AT: 1305	TOTAL VOLUME PURGED (gallons): 0.65

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1245	0.13	0.13	0.026	31.85	7.39	27.90	1,050	5.33	244	13.0	Clear
1250	0.13	0.26			6.78	25.33	1,060	2.64	253	6.0	
1255	0.13	0.39			6.75	25.34	1,060	2.76	253	5.0	
1300	0.13	0.52		31.85	6.75	25.15	1,060	2.75	253	4.9	
1305	0.13	0.65		31.85	6.75	24.99	1,050	2.67	252	4.4	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: SLC / BLS	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1305	SAMPLING ENDED AT: 1312
PUMP OR TUBING DEPTH IN WELL (feet): 38'	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				- See COC -					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

100 ml/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, AR	
WELL NO: MW 15	SAMPLE ID: MW15	DATE: 9-23-25

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 1/8	TOTAL WATER DEPTH (feet): 49.10	STATIC DEPTH TO WATER (feet): 30.48	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 36'	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1325	PURGING ENDED AT: 1400	TOTAL VOLUME PURGED (gallons): 0.91

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1330	0.13	0.13	0.026	30.51	6.57	25.94	822	1.16	50	20.0	Clear
1335	0.13	0.26			6.54	25.40	802	0.84	41	18.0	
1340	0.13	0.39			6.54	25.19	796	0.64	37	17.9	
1345	0.13	0.52		30.51	6.52	24.78	799	0.69	21	16.2	
1350	0.13	0.65			6.53	25.13	791	0.66	6	14.8	
1355	0.13	0.78			6.54	24.92	791	0.62	-1	14.8	
1400	0.13	0.91		30.51	6.54	25.02	787	0.59	-5	14.1	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: SLC / BLS	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1400	SAMPLING ENDED AT: 1405
PUMP OR TUBING DEPTH IN WELL (feet): 36'	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
			- See COC -						

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential**: ± 10 millivolts

100ml/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, AR	
WELL NO: MW16	SAMPLE ID: MW16	DATE: 9-23-25

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 1/8	TOTAL WATER DEPTH (feet): 49.48	STATIC DEPTH TO WATER (feet): 32.52	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 37'	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1205	PURGING ENDED AT: 1225	TOTAL VOLUME PURGED (gallons): 0.52

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1210	0.13	013	0.026	32.56	7.10	28.30	924	2.68	258	64	Clear
1215	0.13	0.26			6.85	25.81	1,020	3.41	254	5.0	
1220	0.13	0.39			6.84	25.38	1,040	3.56	251	3.6	
1225	0.13	0.52		32.57	6.84	25.16	1,050	3.52	249	3.1	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: SLC / BLS	SAMPLER(S) SIGNATURE(S): Jacob Collum	SAMPLING INITIATED AT: 1225	SAMPLING ENDED AT: 1237
PUMP OR TUBING DEPTH IN WELL (feet): 37'	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				– See COC –					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

50 ml/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, AR	
WELL NO: MW17	SAMPLE ID: MW17	DATE: 9-23-25

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 1/8	TOTAL WATER DEPTH (feet): 55.12	STATIC DEPTH TO WATER (feet): 31.78	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 38'	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1130	PURGING ENDED AT: 1150	TOTAL VOLUME PURGED (gallons): 0.26

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1135	0.065	0.065	0.013	31.80	6.52	26.01	672	3.27	263	10.4	Clear
1140	0.13	0.13	|		6.49	25.31	655	2.41	262	7.5	|
1145	0.195	0.196	|		6.48	25.33	650	2.34	259	6.9	|
1150	0.26	0.26	|	31.80	6.47	24.77	655	2.44	257	6.9	|

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: SLC / BLS	SAMPLER(S) SIGNATURE(S): Sarah Collins	SAMPLING INITIATED AT: 1150	SAMPLING ENDED AT: 1157
PUMP OR TUBING DEPTH IN WELL (feet): 38'	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				→ See COC					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential**: ± 10 millivolts

100 ml/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, AR	
WELL NO: MW-19	SAMPLE ID: MW19	DATE: 9-23-25

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	TOTAL WATER DEPTH (feet): 35.41	STATIC DEPTH TO WATER (feet): 25.48	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 29'	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1550	PURGING ENDED AT: 1625	TOTAL VOLUME PURGED (gallons): 0.91

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1555	0.13	0.13	0.026	25.48	6.70	24.64	855	7.13	107	107	Turb 6.2
1600	0.13	0.26			6.47	23.62	874	2.65	134	313	
1605	0.13	0.39			6.42	22.68	883	2.07	194	269	
1610	0.13	0.52		25.48	6.42	22.00	885	2.18	214	231	
1615	0.13	0.65			6.41	21.46	891	2.04	229	181	
1620	0.13	0.78			6.41	21.87	881	1.91	234	169	
1625	0.13	0.91		25.48	6.41	21.76	881	2.01	235	162	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: SLC / BLS	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1625	SAMPLING ENDED AT: 1655
PUMP OR TUBING DEPTH IN WELL (feet): 29	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				See COC					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

100 ml/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, AR	
WELL NO: MW-20	SAMPLE ID: MW-20	DATE: 9-24-25

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	TOTAL WATER DEPTH (feet): 41.20	STATIC DEPTH TO WATER (feet): 26.86	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 30'	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1110	PURGING ENDED AT: 1145	TOTAL VOLUME PURGED (gallons): 0.91

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1115	0.13	0.13	0.026	26.87	6.45	23.22	1,270	1.00	70	69.3	Turb.
1120	0.13	0.26			6.44	23.34	1,270	0.64	58	46.5	
1125	0.13	0.39			6.43	23.21	1,280	0.50	48	34.5	
1130	0.13	0.52		26.87	6.44	24.03	1,290	0.45	45	28.4	Clear
1135	0.13	0.65			6.44	24.07	1,290	0.40	43	23.3	
1140	0.13	0.78			6.44	23.66	1,280	0.34	42	21.1	
1145	0.13	0.91		26.87	6.44	23.63	1,270	0.32	42	21.7	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: SLC/BLS	SAMPLER(S) SIGNATURE(S): Sarah Colbert	SAMPLING INITIATED AT: 1145	SAMPLING ENDED AT: 1210
PUMP OR TUBING DEPTH IN WELL (feet): 30'	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp			
				– See COC –					

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

100ml/min

GROUNDWATER SAMPLING LOG

SITE NAME: Independence	SITE LOCATION: Newark, AR	
WELL NO: MW-21	SAMPLE ID: MW-21	DATE: 9-24-25

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	TOTAL WATER DEPTH (feet): 39.15	STATIC DEPTH TO WATER (feet): 26.23	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 30	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 0905	PURGING ENDED AT: 0945	TOTAL VOLUME PURGED (gallons): 1.04

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
0910	0.13	0.13	0.026	26.23	6.28	21.92	1,140	4.69	259	26.0	Clear
0915	0.13	0.26	"		6.40	21.92	1,120	3.69	234	24.3	"
0920	0.13	0.39			6.41	21.22	1,130	3.22	235	36.7	"
0925	0.13	0.52		26.25	6.42	21.17	1,130	3.40	243	50.3	Turbid
0930	0.13	0.65			6.42	21.03	1,120	3.71	253	82.0	"
0935	0.13	0.78			6.42	20.99	1,130	3.36	258	94.3	"
0940	0.13	0.91		26.25	6.42	21.14	1,130	3.62	261	96.0	"
0945	0.13	1.04		26.25	6.41	21.26	1,130	3.36	265	98.0	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: SLC/BLS	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 0945	SAMPLING ENDED AT: 1043
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: N/A µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING Y (N) (replaced)	DUPLICATE: (Y) N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				See COC					

REMARKS: Horiba calibrated prior to purging. Dup. Taken.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

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APPENDIX E
ALTERNATE SOURCE DEMONSTRATION

Alternate Source Demonstration

2nd Half 2024 Sampling Event

Independence Steam Electric Station
Coal Ash Disposal Landfill
Newark, Arkansas

May 2025

Prepared For
Entergy Arkansas, LLC
Independence Steam Electric Station
Point Ferry Road
Newark, Arkansas 72562

Submitted By
TRC Environmental Corporation
4545 Sherwood Common Boulevard
Building 3, Suite A
Baton Rouge, LA 70809

Jason S. House
Senior Project Manager

Nakia A. Addison, P.E.
Operations Manager

Executive Summary

Entergy Arkansas, LLC (EAL) owns and operates the Entergy Independence Steam Electric Station (Station), a coal-fired power plant, to generate electricity. The Station is located at Point Ferry Road near Newark, Independence County, Arkansas. The Station has been generating electricity since the early 1980s. As a byproduct of electrical generation, coal combustion residuals (CCRs) historically generated at the Station have been managed at the:

- On-Site Coal Ash Disposal Landfill (CADL); and
- Water Recycle Ponds – East and West (Ponds).

EAL performed the most recent semiannual detection monitoring sampling (2nd Half 2024) in November 2024 for the coal ash disposal landfill (CADL) pursuant to the *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule*, 40 CFR Part 257 (CCR Rule). The CADL constitutes the coal combustion residuals (CCR) Unit per the CCR Rule. Per 40 CFR 257.94, the samples were analyzed for the Appendix III detection monitoring parameters. Upon receipt of the laboratory analytical results, statistical analysis was performed.

In accordance with the statistical analyses, the following statistically significant increases (SSIs) above background concentrations were identified in monitoring wells MW-1R and MW-8, based on intrawell prediction limits statistical analyses:

- Boron (MW-1R);
- Boron (MW-8).

The information provided in this report serves as Entergy's alternate source demonstration (ASD) prepared in accordance with 40 CFR 257.94(e)(2) and successfully demonstrates that the SSIs are not due to a release from the CCR Unit to groundwater, but are due to the following:

- Natural groundwater geochemistry conditions such as pH, electrical conductivity (EC), oxidation-reduction potential (ORP) and the natural occurrence of sulfide minerals; and/or
- Natural variation in groundwater quality.

Therefore, based on the information provided in this ASD report, Entergy will continue to conduct semi-annual detection monitoring for Appendix III constituents in accordance with 40 CFR 257.94 at the certified groundwater monitoring well system (Certified Monitoring Well Network) for the CCR Unit and will continue to implement improvements to stormwater management practices at the CADL.

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Section 1
Introduction

1.1 Background

Entergy Arkansas, LLC (EAL) owns and operates the Entergy Independence Steam Electric Station (Station), a coal-fired power plant, to generate electricity. The Station is located at Point Ferry Road near Newark, Independence County, Arkansas (**Figure 1**). The Station is located at approximate latitude 35˚40'39" N, longitude 91˚24'42" W (front gate).

The Station has been generating electricity since the early 1980s. As a byproduct of electrical generation, coal combustion residuals (CCRs) historically generated at the Station have been managed at the Station at the:

- On-Site Coal Ash Disposal Landfill (CADL); and
- Water Recycle Ponds – East and West (Ponds).

The *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule,* 40 CFR Part 257 (CCR Rule) became effective on October 19, 2015, and established national criteria for the management of CCR at electrical generating facilities. EAL initially identified the CADL as a CCR Unit when the CCR Rule became effective on October 19, 2015.

1.2 Groundwater Monitoring and Statistical Analysis

1.2.1 Groundwater Monitoring System

In accordance with 40 CFR 257.90 through 257.94, EAL installed a groundwater monitoring system for CADL and has collected samples from the Certified Monitoring Well Network for laboratory analysis for CCR constituents and performed statistical analysis of the collected samples. Entergy installed a Certified Monitoring Well Network for the CCR Unit in accordance with 40 CFR 257.90 and 257.91. The Certified Monitoring Well Network consists of 14 wells. All monitoring wells at the landfill are screened in the underlying alluvial aquifer, which is the uppermost aquifer and the zone of compliance for groundwater monitoring.

Pursuant to 40 CFR 257.91(f), the groundwater monitoring system was certified by a Registered Arkansas P.E. that stated that the network was designed and constructed to meet the requirements of 40 CFR 257.91 (see Groundwater Monitoring System Certification, (TRC, 2019b)).

A groundwater sampling and analysis program including selection of statistical procedures to evaluate groundwater analytical data was prepared per the CCR Rule (see Groundwater Sampling and Analysis Plan (FTN, 2019)). Eight quarterly background CCR detection monitoring events were initially performed from July 2016 through May 2018 in accordance with 40 CFR 257.93(d) and 257.94(b). The eight quarterly detection monitoring background samples were analyzed for the Appendix III to Part 257 – Constituents for Detection Monitoring and the Appendix IV to Part 257 – Constituents for Assessment Monitoring per 40 CFR 257.94(b). After completion of the initial eight background monitoring events

and establishment of background groundwater quality, EAL implemented a semi-annual Detection Monitoring Program with laboratory analysis for the Appendix III to Part 257 – Constituents for Detection Monitoring per the requirements of 40 CFR 257.94.

1.2.2 Statistical Analytical Method

Statistical analysis of the semi-annual detection monitoring analytical data was performed per 40 CFR Part 297.93(f). As described in the Statistical Methods Certification (TRC, October 16, 2017), intrawell statistical evaluation was performed due to the low groundwater velocities for the uppermost aquifer system. As described in the certification:

- "Intrawell statistical evaluations are within well comparisons. In the case of intrawell prediction limits, historical data from within a given well for a given parameter will be used to construct a limit. Compliance points will be compared to the limit to determine whether a change is occurring on a per-well/per-parameter basis. If the assumption of normality is not rejected for the background data set, then a parametric prediction limit will be calculated. If the assumption of normality is rejected for the background data set, then a non-parametric prediction limit will be calculated, in which case, the prediction limit will be based on the highest value in the background data set. For pH, both upper and lower prediction limits will be used for intrawell evaluations."

After completion of each semiannual detection monitoring event, the Appendix III laboratory analytical data were statistically evaluated to identify potential SSIs for Appendix III constituents above background levels. In accordance with 40 CFR 257.93(f)(6), Entergy obtained certification by a qualified Arkansas-registered P.E. stating that the selected statistical method is appropriate for evaluating the groundwater monitoring data for the CCR Unit (see Statistical Methods Certification, TRC, October 16, 2017).

Pursuant to 40 CFR 257.93(h), statistical analysis of the laboratory analytical data was performed to identify potential SSIs for the 2nd Half 2024 semiannual detection monitoring event. Two SSIs were identified for Boron.

Section 2
Objectives and Purpose

Pursuant to 40 CFR 257.94(e)(2), Entergy may demonstrate that a source other than the CCR Unit caused the potential SSIs identified or that the potential SSIs resulted from errors in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. The purpose of this report is to provide written documentation of the successful ASD for the potential SSIs identified for the 2nd Half 2024 semiannual detection monitoring event, pursuant to 40 CFR 257.94(e)(2) of the CCR Rule.

Section 3
Hydrogeology and Background Groundwater Quality

3.1 Site Hydrogeology

From the ground surface down, a description of the stratigraphic units and hydrogeology of the stratigraphic units underlying the CADL are as follows:

- **Upper Confining Unit**. An upper confining unit consisting of clays and silts is present at the ground surface down to 23 to 28 feet below ground surface (bgs). Vertical hydraulic conductivity of the upper confining unit is estimated to range from 4.0×10^{-9} to 7.8×10^{-7} centimeters per second (cm/s) based on flexible wall permeability tests (FTN Associates, Ltd. (FTN) 2001, FTN and Golder Associates Inc. 2017).
- **Alluvial Aquifer**. An alluvial aquifer consisting of fine to medium grained sandy sub rounded to sub angular chert gravel with varying amounts of silt and clay is present beneath the upper confining unit. The alluvial aquifer is the uppermost laterally continuous water bearing zone beneath the Ponds and represents the uppermost aquifer pursuant to the CCR Rule. The alluvial aquifer extends to depths of 85 to 90 feet bgs. Hydraulic conductivity of the alluvial aquifer is estimated to range from 2.1×10^{-2} to 6×10^{-2} cm/s (FTN 2015).
- **Bedrock**. Pennsylvanian aged bedrock consisting of chert, limestone, sandstone, and carbonaceous shale and associated residuum at the bedrock surface are present beneath the alluvial aquifer (Albin, 1965). The top of the bedrock is approximately 85 to 90 feet bgs.

3.2 Groundwater Geochemistry

Understanding the geochemistry of groundwater is essential to examining the groundwater monitoring data, explaining the relationships between the characteristics, and analyzing natural as well as anthropogenic impacts on groundwater systems. Source apart, geochemical processes play an important role in controlling the chemical composition of groundwater, including carbonate equilibrium, oxidation-reduction reactions and adsorption-desorption processes. Based on the site geological conditions, a discussion of boron is presented below.

3.2.1 Boron in Groundwater

Boron is normally considered as a minor constituent in groundwater as it is generally present in low concentrations (Palmucci & Rusi, 2014). Source apart, the primary origin of boron in groundwater is the process of sorption and desorption to the mineral surfaces including rocks and soils (Ravenscroft & McArthur, 2004). The regulatory guideline values of boron in drinking water are given at 0.5 mg/L by WHO and 0.9 mg/L by the U.S. Environmental Protetion Agency (USEPA) in human consumption for long-term exposure (WHO, 2008; USEPA, 2008). Boron is often cited as contamination tracer and usually occurs

as a non-ionized form as H_3BO_3 in soils at pH<8.5, but above this pH, it exists as an anion, $B(OH)_4^-$ (Upadhyaya et al., 2014).

The factors that may influence boron concentration in groundwater include weathering, human activity, evaporative concentration, ion-exchange, electrical conductivity (EC), and pH. Ravenscroft & McArthur (2004) studied the mechanism of regional boron enrichment groundwater and the results indicated that the main process caused high boron enriched in groundwater was the flushing by fresh groundwater other than geological setting, climate or age. The desorption of boron from mineral surfaces could be affected by pH, ionic strength, salinity and HCO_3/CO_3. Decreasing of pH will increase the dissolution of boron from the mineral surfaces. Boron adsorption favors high pH and boron desorption favors low pH on rocks, soils and organic matters (Hollis et al., 1988; Keren & Communar, 2009; Tabelin et al., 2014).

A few more research studies confirmed that the presence of boron in groundwater depends on the EC (salinity), such that it increases with increasing EC. Halim et al. (2010) reported that the increasing of Cl^- concentration contributes to increase in EC value since a strong linear correlation ($R^2 = 0.88$) between EC and Cl^- was observed. Palmucci & Rusi (2014) observed a clear correlation between the high concentrations of boron and the chloride-sodium facies, which are characterized by high saline content, negative redox potential, and low value of the SO_4^{2-}/Cl^- ratio. Rodriguez-Espinosa et al. (2020) found that the boron concentration in groundwater was related to the SO_4^{2-} and age affect.

Regarding the boron concentration level on the sites, the main source of boron is more natural than anthropogenic. Therefore, the detected increases of boron concentration are likely due to the geochemistry condition changes, such as pH, ion exchanges, EC and salinity.

Section 4
Alternate Source Demonstration

Pursuant to 40 CFR 257.94(e)(2), EAL may demonstrate that a source other than the CCR Unit caused the SSI or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. As discussed previously, the 2nd Half 2024 semiannual detection monitoring event was performed in November 2024. Statistical analysis of the 2nd Half 2024 semiannual detection monitoring data was performed pursuant to 40 CFR 257.93(f) and (g) and in accordance with the Statistical Methods Certification (TRC 2017b) and the Statistical Analysis Plan (FTN 2017a). Based on intrawell prediction limits statistical analyses, the following SSIs were identified:

- Boron (MW-1R);
- Boron (MW-8).

The laboratory analytical results for both monitoring events and intrawell prediction limits for each of the potential SSIs are summarized in the table below.

Table 1 SSIs – November 2024 Semiannual Groundwater Detection Monitoring Event

Well	Constituent	2H24 Results (mg/L)	Intrawell Prediction Limit (mg/L)
MW-1R	Boron	0.281	0.165
MW-8	Boron	0.391	0.387

Other Appendix III constituent concentrations were within their trends at 98% confidence levels using Sen's slope test and/or intrawell prediction limits in the CCR Rule groundwater monitoring system wells.

Likely causes for the potential SSIs and associated lines of reasoning demonstrate that the SSIs were not caused by a release of CCR constituents from the CADL to groundwater are provided in the subsections below.

4.1 Boron at MW-1R

Boron at MW-1R was detected at a concentration of 0.281 mg/L in November 2024, which exceeds the intrawell prediction limit for boron at MW-1R of 0.165 mg/L. The slightly elevated concentration of boron at MW-1R observed in November 2024 is likely due to natural variation in groundwater quality and seasonal geochemistry conditions change in groundwater, based on the following lines of reasoning:

- The USEPA has set a health reference level (HRL) of 1.4 mg/L for boron in drinking water; therefore, the concentration for boron at MW-1R was significantly less than USEPA HRL;
- The groundwater protection standard (GWPS) for boron for this CADL is 0.75 mg/L.; therefore, the highest boron concentration for MW-1R is lower than the GWPS; and
- Seasonal geochemistry conditions change in groundwater. As discussed in Section 3.2, the main factors that may influence boron concentration in groundwater are pH and EC. Decreasing pH will increase the dissolution of boron from the mineral surfaces. Boron in groundwater will increase with the increasing of EC. The historical data review shows the stable neutral pH values in MW-1R area, which indicates pH is not the factor causing the boron increasing. High EC in the groundwater favors the boron dissolution from soil and mineral surface. The slight increase of boron could be a result of ion concentrations variation in the natural geochemistry conditions.

4.2 Boron at MW-8

Boron at MW-8 was detected at a concentration of 0.391 mg/L in November 2024, which exceeds the intrawell prediction limit for boron at MW-8 of 0.387 mg/L. The slightly elevated concentration of boron at MW-8 observed in November 2024 is likely due to natural variation in groundwater quality and seasonal geochemistry conditions change in groundwater, based on the following lines of reasoning:

- The USEPA has set a health reference level (HRL) of 1.4 mg/L for boron in drinking water; therefore, the concentration for boron at MW-8 was significantly less than USEPA HRL;
- The groundwater protection standard (GWPS) for boron for this CADL is 0.75 mg/L.; therefore, the highest boron concentration for MW-8 is lower than the GWPS; and
- Seasonal geochemistry conditions change in groundwater. As discussed in Section 3.2, the main factors that may influence boron concentration in groundwater are pH and EC. Decreasing pH will increase the dissolution of boron from the mineral surfaces. Boron in groundwater will increase with the increasing of EC. The historical data review shows the stable neutral pH values in MW-8 area, which indicates pH is not the factor causing the boron increasing. High EC in the groundwater favors the boron dissolution from soil and mineral surface. The concentration of TDS at MW-8 decreased from 671 mg/L (June 2024) to 595 mg/L (November 2024), while sulfate concentration increased from 126 mg/L (June 2024) to 168 mg/L (November 2024). The slight increase of boron could be a result of ion concentrations variation in the natural geochemistry conditions.

Section 5
Conclusions

The information provided in this ASD was prepared in accordance with 40 CFR 257.94(e)(2) of the CCR Rule. The potential SSIs observed during the 2nd Half 2024 semiannual detection monitoring event were likely due to natural variation in groundwater quality and seasonal geochemistry conditions change in groundwater, based on the following lines of reasoning:

- The USEPA HRL for boron are significantly greater than the maximum concentrations for boron observed at MW-1R and MW-8;
- The GWPS for this CADL are greater than the highest boron concentration detected for MW-1R and MW-8; and
- Natural variations in groundwater quality, which may be related to fluctuations in seasonal geochemistry conditions in the uppermost aquifer system associated with EC, ion strength, ORP, pH, and TDS.

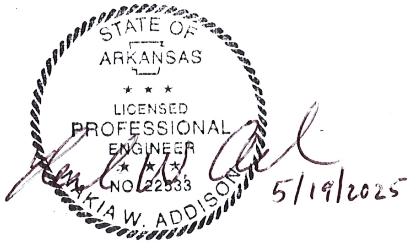
Based on this ASD successfully documenting that natural variation in groundwater quality is the cause for the exceedances of intrawell prediction limits, EAL will continue to conduct semiannual detection monitoring in accordance with 40 CFR 257.94 at the Certified Monitoring Well Network for the CCR Unit.

Section 6
Certification

I hereby certify that the alternative source demonstration presented within this document for the Entergy Independence Plant Coal Ash Disposal Landfill CCR Unit has been prepared to meet the requirements of Title 40 CFR §257.94(e) 2 of the Federal CCR Rule. This document is accurate and has been prepared in accordance with good engineering practices, including the consideration of applicable industry standards, and with the requirements of Title 40 CFR §257.94(e) 2.

Name: Nakia W. Addison P.E. **Expiration Date:** 12/31/2025

Company: TRC Environmental Corporation **Date:** 05/19/2025



Section 7
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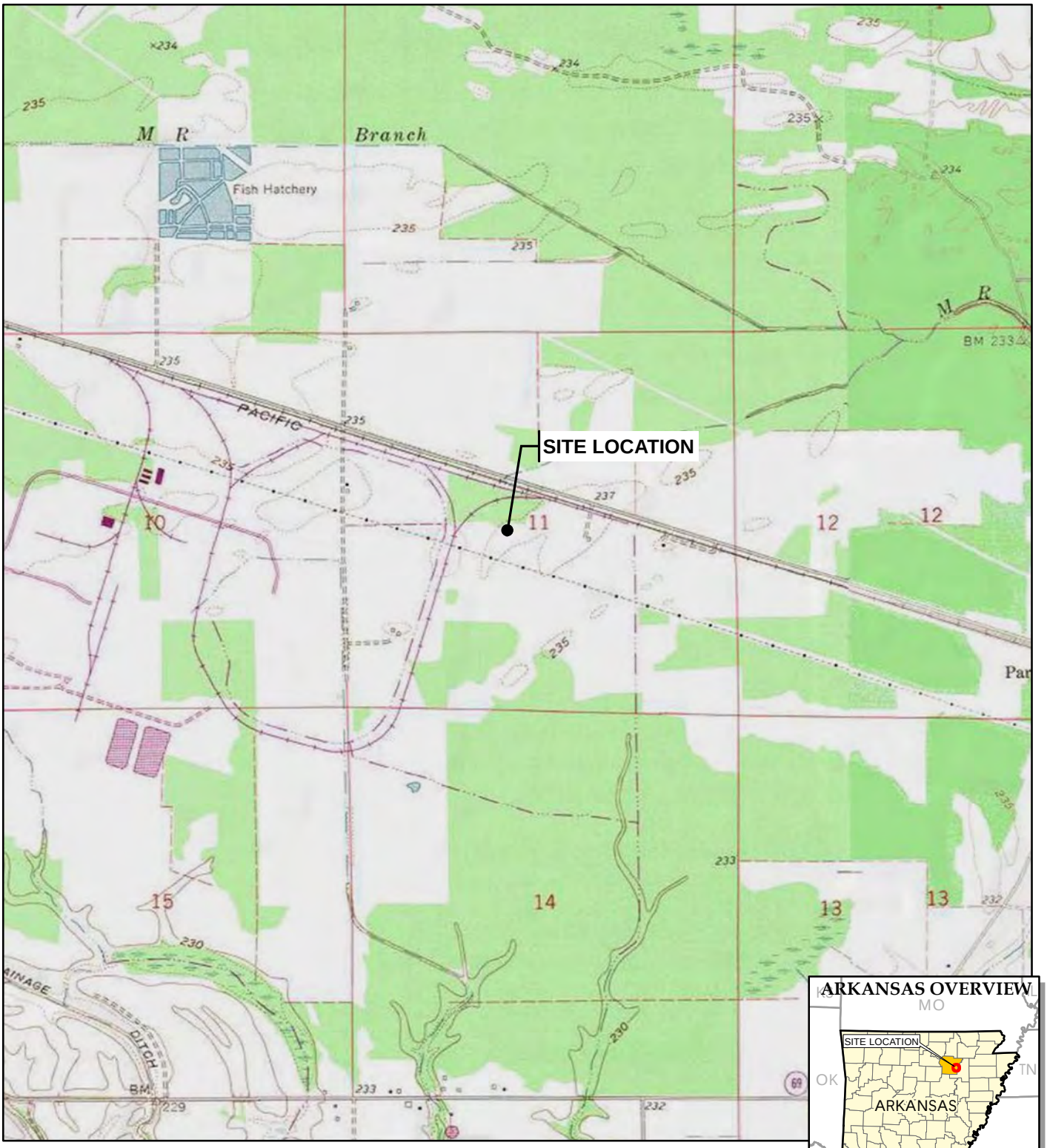

BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.

N

1 " = 2,000 '
1:24,000

0 2,000 4,000
FEET

TRC
Two United Plaza
8550 United Plaza Blvd. Suite 502
Baton Rouge, LA
Phone: 734.971.7080
TRC - GIS

PROJECT:

ENTERGY INDEPENDENCE PLANT
555 POINT FERRY ROAD
NEWARK, ARKANSAS

TITLE:

SITE LOCATION MAP

DRAWN BY:	S. MAJOR
CHECKED BY:	J. HOUSE
APPROVED BY:	J. HOUSE
DATE:	SEPTEMBER 2022
PROJ. NO.:	341479
FILE:	341479-001slmIND.mxd

FIGURE 1

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LEGEND

- NEW CADL MONITORING WELLS
- CADL MONITORING WELLS
- LANDFILL BOUNDARY

NOTES

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

N

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.:	591543.0000.00000
CHECKED BY:	J. HOUSE	**FIGURE 2**	
APPROVED BY:	W. XIE		
DATE:	JANUARY 2025		

TRC

Two United Plaza
8550 United Plaza Blvd., Suite 502
Baton Rouge, LA
Phone: 225.216.7483

FILE NO.: 419735-002IND_new_wells_20250114.mxd

TRC - GIS

Coordinate System: NAD 1983 StatePlane Arkansas North FIPS 0301 Feet (Foot US)

Plot Date: 1/14/2025, 12:42:56 PM by DSTITCHER -- LAYOUT: ANSI B(11"x17")
Path: T:\1-PROJECTS\ENTERGY\MadisonLegacyProjects\Arkansas\2018_270853\419735-002IND_new_wells.mxd

APPENDIX 1

Historical Data

Well	Date	Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	TDS (mg/L)	Fluoride (mg/L)	pH (s.u.)	Sulfate (mg/L)
MW-1R	2/4/2016	0.0969(J)	n/a	217	918(B)	n/a	6.9	232
701S-R	4/18/2016	0.0782(J)	135	196	958	0.127	6.5	208
	7/20/2016	0.0906(BJ)	146	236	1140(B)	0.106	6.3	230
	10/11/2016	0.11(BJ)	116	159	836	0.127	6.6	171
	1/17/2017	0.085(J)	130	207	964	0.148	6.1	215
	4/19/2017	0.0931(J)	103	106	633	0.125	6.5	132
	7/11/2017	0.0966(J)	121	173	756	0.112	6.5	186
	10/16/2017	0.0848(J)	136	206	860	0.132	6.5	196
	2/7/2018	0.095(J)	130	183	854	0.152	6.5	204
	5/9/2018	0.111(J)	87.6	108	632	0.154	6.5	144
	8/21/2018	0.15(J)	136	189	882	0.155	6.4	238
	10/30/2018	0.108(J)	143	206	958	0.134	6.4	280
	3/4/2019	0.126(BJ)	104	132	719	0.145	6.6	182
	6/6/2019	0.131(J)	128	177	842	0.15	6.3	242
	8/28/2019	0.0817(J)	114	150	765	0.173	5.9	199
	11/13/2019	0.0669(J)	127	169	814	0.103	6.6	222
	3/17/2020	0.0722(J)	117	172	885	0.16	6.39	232
	6/15/2020	0.0657(J)	129	198	1030	0.141(J)	6.46	255
	9/10/2020	0.11(J)	81.3	89.5	604	0.143(J)	6.3	142
	12/15/2020	n/a	n/a	n/a	n/a	n/a	6.7	n/a
	12/16/2020	0.0685(J)	120	172	977	0.164	n/a	257
	6/18/2021	0.0901(J)	135	171	1010	0.198	6.74	255
	11/16/2021	<0.02	123	142	921	<0.064	7.06	243
	06/07/2022	<0.200	85.9	100	639	<0.150	7.03	170
	11/30/2022	<0.200	128	177	918	0.195	6.89	281
	06/13/2023	<0.200	110	150	868	<0.150	5.07	232
	11/08/2023	0.217	107	119	910	0.19	6.31	246
	06/11/2024	0.242	104	136	926	<0.150	6.72	238
	11/05/2024	0.281	96.3	101	836	<0.150	6.59	218

B: analyte was detected in associated QA/QC sample.

J: analyte was detected below the RDL; value is an estimate.

O: value is a statistical outlier.

R: value was rejected due to suspected error; not used in statistics.

Well	Date	Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	TDS (mg/L)	Fluoride (mg/L)	pH (s.u.)	Sulfate (mg/L)
MW-3	10/16/2013	<0.11	47.1	52.7	470(B)	n/a	6.3	77.9
703S	4/30/2014	0.275	67.1(B)	41.6	480	n/a	6.5	78.7
	10/15/2014	0.075	80.1	46.3	460(B)	n/a	6.2	67.8
	2/10/2015	0.0659	16.1	43.7	430	n/a	6.3	75.8
	5/18/2015	n/a	71	48(B)	540	n/a	6.4	120
	8/6/2015	0.287	64.6	37.5	459	n/a	6.7	80.2
	10/22/2015	0.371	n/a	44	455	n/a	6.4	97.3
	1/26/2016	2.1	n/a	35.3	732	n/a	n/a	243
	4/18/2016	0.501	80.1	47.9	628	0.165	6.6	136
	7/19/2016	0.621(B)	59.6	32.3	601(B)	0.234	6.4	99.2
	10/11/2016	0.348	73.2	50.3	537	0.153	6.7	105
	1/17/2017	0.143(J)	69.8	50.1	495	0.108	6	93.3
	4/18/2017	0.11(J)	67.7	48.2	443	0.111	6.3	73.3
	7/10/2017	0.644	70.6	43.3	521	0.146	6.5	132
	10/12/2017	0.515	71.9	51.2	478	<0.1	6.5	104
	2/6/2018	0.206	71.5	51.2	465	0.127	6.5	87.6
	5/9/2018	0.398	57.4	38	438	0.159	6.5	89.1
	8/15/2018	0.349	73.4	44.5	504	0.14	6.4	112
	10/26/2018	0.335	72.2	51.6	525	0.157	6.4	103
	2/22/2019	1.04	70.5	37.8	561	0.193	6.5	132
	6/5/2019	0.432	73.7	37.9	592	0.244	6.5	122
	8/26/2019	0.356	59.7	30.9	441	0.232	6.4	76.9
	11/13/2019	0.18(J)	65.5	40.8	403	0.136(B)	6.5	80.7
	3/12/2020	0.259	57.4	36.2	421	0.15	6.45	80.5
	6/16/2020	0.396	55.5	21.2	469	0.242	6.59	89.6
	9/10/2020	0.128(J)	58.6	42.4	409	0.164	6.4	68.9
	12/15/2020	n/a	n/a	n/a	n/a	n/a	6.7	n/a
	12/17/2020	0.171(J)	66.2	46.9	508	0.176	n/a	97.4
	6/18/2021	0.396	68.3	21.7	593	0.324	7.09	90.8
	11/16/2021	<0.02	70.6	55.6	513	0.169	7.26	91.1
	06/08/2022	0.275	62.7	39.2	483	0.182	7.51	93.9
	12/01/2022	<0.200	61.9	46.8	443	0.164	6.67	83.3
	06/14/2023	<0.200	54.8	36.4	383	<0.150	6.53	64.4
	11/08/2023	<0.200	53.4	36	352	0.159	6.45	54
	06/11/2024	0.322	53.3	26.5	423	0.164	6.72	56.7
	11/07/2024	<0.200	53.6	34.4	358	<0.150	6.36	54.3

B: analyte was detected in associated QA/QC sample.

J: analyte was detected below the RDL; value is an estimate.

O: value is a statistical outlier.

R: value was rejected due to suspected error; not used in statistics.

Well	Date	Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	TDS (mg/L)	Fluoride (mg/L)	pH (s.u.)	Sulfate (mg/L)
MW-6	7/19/2016	0.0785(BJ)	64.8	36.3	420(B)	0.119	6.1	102
706S	10/11/2016	0.105(BJ)	69.8	35.6	406	0.0661(J)	5.5	103
	1/17/2017	0.122(J)	65.9	35	420	0.0868(J)	5.8	99.3
	4/19/2017	0.0885(J)	66.7	34.1	387	0.0955(J)	6.4	86.9
	7/10/2017	0.0986(J)	66.2	35.4	397	0.121	6.3	102
	10/12/2017	0.133(BJ)	70.6	35.3	408	<0.1	6.1	104
	2/6/2018	0.0984(J)	65.2	31.6	383	<0.1	6.4	91.6
	5/9/2018	0.109(J)	59.4	32.4	375	0.0968(J)	6.3	91.9
	8/15/2018	0.0493(J)	76.4	36.6	462	0.113	6.2	126
	10/26/2018	0.0923(J)	70.2	33.1	420	0.0774(J)	6.3	124
	2/22/2019	0.174(J)	75.1	34.2	489	0.143	6.3	136
	6/5/2019	0.317	77.4	33.6	552	0.136	6.2	165
	8/26/2019	0.0577(J)	66.9	30.3	391	0.154	5.8	99.9
	11/13/2019	0.0624(J)	73.6	34.6	430	0.105(B)	6.3	130
	3/12/2020	0.134(J)	64.2	31	422	0.106(B)	6.33	115
	6/16/2020	0.0905(J)	62.6	32.2	408	0.104(J)	6.27	114
	9/11/2020	0.0626(J)	63.8	30.3	412	0.131(J)	6.33	103
	12/15/2020	n/a	n/a	n/a	n/a	n/a	6.4	n/a
	12/17/2020	0.0678(J)	60.9	30.3	409	0.117(J)	n/a	107
	6/18/2021	0.0808(J)	63.9	31.7	396	0.145(J)	6.57	93.4
	11/16/2021	<0.02	67.2	30.3	426	<0.064	6.62	97.2
	06/08/2022	<0.200	61.9	30	388	<0.150	7.09	105
	12/01/2022	<0.200	62.9	31.5	416	0.153	6.75	116
	06/12/2023	<0.200	62.5	29.1	405	<0.150	3.55	107
	11/06/2023	<0.200	60.3	29	378	<0.150	6.33	92.6
	06/11/2024	<0.200	55.9	28.1	353	<0.150	6.39	80.4
	11/05/2024	<0.200	58.4	25.4	374	<0.150	6.39	85.4

B: analyte was detected in associated QA/QC sample.

J: analyte was detected below the RDL; value is an estimate.

O: value is a statistical outlier.

R: value was rejected due to suspected error; not used in statistics.

Well	Date	Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	TDS (mg/L)	Fluoride (mg/L)	pH (s.u.)	Sulfate (mg/L)
MW-7	7/19/2016	0.0884(BJ)	58.6	44.4	548(B)	0.49	7	74.5
707S	10/11/2016	0.107(BJ)	51.1	24.8	536	0.577	6.6	63.7
	1/17/2017	0.0743(J)	48.5	23.5	580	0.624	7.4	60
	4/19/2017	0.0716(J)	51.5	15.8	604	0.659	6.8	68.8
	7/11/2017	0.0933(J)	69.6	73.6	707	0.616	7.3	99.3
	10/16/2017	0.0939(J)	74.7	97.8	735	0.574	7.2	110
	2/7/2018	0.0992(J)	72.8	96.6	723	0.513	7.2	94
	5/10/2018	0.105(J)	51.2	47.4	648	0.726	7.3	70.8
	8/21/2018	0.118(J)	60.4	37.7	437	0.422	6.9	42.5
	10/30/2018	0.0894(J)	55.4	38.5	461	0.51	7.1	44.9
	2/25/2019	0.104(J)	48.5	3.95	597	0.653	6.9	62.6
	6/6/2019	0.101(J)	52.2	19.9	575	0.722	6.8	66.2
	8/27/2019	0.0431(J)	78.5	86.2	771	0.49	7.2	105
	11/14/2019	0.0509(J)	57.2	22.8	703	0.76	7.3	93.8
	3/12/2020	0.0873(J)	46.2	21.4	586	0.742	7.21	65.3
	6/16/2020	0.0538(J)	41.9	6.84	499	0.71	7.2	61.6
	9/10/2020	0.0661(J)	48.9	18.7	565	0.615	7.2	64
	12/15/2020	n/a	n/a	n/a	n/a	n/a	7.4	n/a
	12/17/2020	0.0479(J)	40.4	7.67	552	0.803	n/a	59.2
	6/18/2021	0.0608(J)	46	9.99	511	0.639	7.55	48
	11/15/2021	<0.02	69	95.2	583	0.604	7.48	74.5
	06/07/2022	<0.200	47.5	29.8	510	0.666	8.33	51.3
	12/01/2022	<0.200	41.3	18.3	495	0.66	7.64	49.7
	06/13/2023	<0.200	44	16.7	489	0.536	5.3	52.3
	11/09/2023	<0.200	52.9	24.9	506	0.401	6.91	40.9
	06/11/2024	<0.200	41	6.72	480	0.629	7.36	44.5
	11/05/2024	<0.200	50.2	13.2	426	0.369	7.17	35.9

B: analyte was detected in associated QA/QC sample.

J: analyte was detected below the RDL; value is an estimate.

O: value is a statistical outlier.

R: value was rejected due to suspected error; not used in statistics.

Well	Date	Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	TDS (mg/L)	Fluoride (mg/L)	pH (s.u.)	Sulfate (mg/L)
MW-8	7/19/2016	0.223(B)	102	99.3	785(B)	0.171	5.9	201
708S	10/11/2016	0.259	100	84.8	724	0.159	6.4	199
	1/17/2017	0.261	107	113	768	0.181	6.1	224
	4/20/2017	0.25	103	83	711	0.152	6.4	179
	7/12/2017	0.241	104	93.6	736	0.146	6.4	224
	10/16/2017	0.283	109	97.3	731	0.159	6.5	237
	2/7/2018	0.242	110	104	753	0.173	6.5	219
	5/10/2018	0.254	91.6	84.7	703	0.156	6.5	215
	8/21/2018	0.322	99.1	65	621	0.159	6.3	200
	10/30/2018	0.341	92.3	61.6	616	0.0978(J)	6.4	181
	2/25/2019	0.325	92.2	64.2	616	0.177	6.1	180
	6/6/2019	0.263	103	93.1	677	0.186	6.4	216
	8/28/2019	0.263	97.3	71.5	704	0.195	6.1	195
	11/14/2019	0.212	111	109	743	0.173(B)	6.5	239
	3/17/2020	0.193	105	130	809	0.198	6.34	273
	6/16/2020	0.182(J)	117	154	936	0.152	6.38	273
	9/10/2020	0.239	96.4	93	720	0.162	6.4	199
	12/15/2020	n/a	n/a	n/a	n/a	n/a	6.6	n/a
	12/16/2020	0.191(J)	118	168	952	0.19	n/a	280
	6/17/2021	0.187(J)	137	169	1020	0.205	6.2	284
	11/16/2021	0.205	127	141	888	0.152	6.96	252
	06/08/2022	<0.200	115	141	839	0.16	8.33	268
	11/29/2022	0.211	104	117	764	0.209	7.03	215
	06/13/2023	0.231	101	110	785	<0.150	4.63	241
	11/07/2023	0.353	81.9	55.1	625	<0.150	6.38	172
	06/11/2024	0.335	84.3	56.5	671	<0.150	6.56	126
	11/04/2024	0.391	79	53.8	595	<0.150	6.93	168

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Well	Date	Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	TDS (mg/L)	Fluoride (mg/L)	pH (s.u.)	Sulfate (mg/L)
MW-9	7/19/2016	0.305(B)	87.3	56.2	685(B)	0.124	5.9	215
709S	10/11/2016	0.418	102	52.2	761	0.139	6.1	249
	1/17/2017	0.536	117	59.4	909	0.168	6.5	359
	4/20/2017	0.578	121	57.6	929	0.143	6.5	345
	7/12/2017	0.351	90.8	51.5	639	0.116	6.4	222
	10/16/2017	0.495	109	61.3	757	0.14	6.4	285
	2/7/2018	0.535	113	64	825	0.157	6.5	333
	5/10/2018	0.326	89.1	61	668	0.16	6.4	241
	8/21/2018	0.394	86.7	33.9	552	0.148	6.2	208
	10/30/2018	0.649	115	58.9	815	0.145	6.4	307
	2/25/2019	0.342	84.3	37.5	524	0.142	6	195
	6/6/2019	0.346	87.8	49.3	553	0.132	6.1	217
	8/28/2019	0.384	98.7	0.407(J)	711	<0.1*	6.2	0.992(J)
	11/14/2019	0.373	97.9	48.7	675	0.168(B)	6.5	250
	3/13/2020	0.515	90	45.5	745	0.156	6.41	253
	6/16/2020	0.444	94.4	50	780	0.131(J)	6.35	290
	9/10/2020	0.366	82.4	40	636	0.134(J)	6.3	227
	12/15/2020	n/a	n/a	n/a	n/a	n/a	6.5	n/a
	12/16/2020	0.679	117	49.8	908	0.178	n/a	378
	6/17/2021	0.635	116	48.9	908	0.194	6.24	366
	11/16/2021	0.771	112	45.5	869	0.175	7.02	320
	06/08/2022	0.593	102	52.5	789	<0.150	7.31	311
	11/30/2022	0.728	101	34.6	795	<0.150	6.78	193
	06/13/2023	0.607	92	46.1	717	<0.150	4.32	275
	11/07/2023	0.572	96.8	55.9	813	0.183	6.39	251
	06/11/2024	0.496	83.1	54.8	695	<0.150	6.54	227
	11/05/2024	0.566	91.3	45.7	753	<0.150	6.48	238

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Well	Date	Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	TDS (mg/L)	Fluoride (mg/L)	pH (s.u.)	Sulfate (mg/L)
MW-10	12/7/2017	0.12(J)	78.5	77.4	588	0.168	6.5	96.8
710S	2/6/2018	0.135(J)	82.8	80.3	603	0.183	6.6	107
	5/9/2018	5.81	175	10.6	1320	0.528	6.9	590
	8/15/2018	1.16	96.4	53.9	676	0.288	6.5	214
	10/26/2018	0.677	83.9	58.8	578	0.146	6.5	139
	2/22/2019	4.94	164	21.7	1090	0.421	6.7	443
	6/5/2019	0.95	72.4	29.2	472	0.316	6.5	128
	8/27/2019	4.99	183	15	1330	0.422	6.6	570
	11/13/2019	3.16	139	31.4	1010	0.337	6.8	415
	3/12/2020	1.01	75	50.8	597	0.232	6.51	172
	6/16/2020	2.99	121	33	945	0.307	6.67	356
	9/10/2020	1.56	99.3	54.9	749	0.238	6.6	239
	12/15/2020	n/a	n/a	n/a	n/a	n/a	6.7	n/a
	12/17/2020	0.0629(J)	72.9	69.4	542	0.183	n/a	92.7
	6/18/2021	3.93	143	18.6	1030	0.375	7.1	396
	11/15/2021	<0.02	68.9	59.6	496	0.16	7.24	79
	06/08/2022	1.21	81.2	47.5	604	0.186	7.52	178
	11/30/2022	<0.200	65.7	61	458	0.183	6.75	83.4
	06/12/2023	<0.200	61	56.2	392	<0.150	3.72	79.9
	11/06/2023	<0.200	64.5	60.1	492	0.184	6.55	72.1
	06/11/2024	<0.200	60.1	61.1	479	<0.150	6.62	83.5
	11/05/2024	<0.200	62.8	51.9	475	0.16	6.57	71.7

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Well	Date	Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	TDS (mg/L)	Fluoride (mg/L)	pH (s.u.)	Sulfate (mg/L)
MW-11	4/19/2017	0.0792(J)	48	17	263	0.167	6.7	19.9
711S	7/11/2017	0.0943(J)	85.3	87.6	516	0.183	6.8	59.4
	10/12/2017	0.349	84.9	61.6	487	0.185	6.6	97.7
	2/5/2018	0.211	83.6	61.4	516	0.188	6.7	97
	5/10/2018	0.264	63.8	45.7	422	0.214	6.6	78.3
	8/16/2018	0.0356(J)	78.2	42	379	0.195	6.6	27.2
	10/26/2018	0.0847(J)	73.6	47.3	393	0.154	6.6	39.9
	2/25/2019	0.0882(J)	46.4	21	236	0.213	6.3	16.3
	6/5/2019	0.124(J)	76.5	47.1	420	0.199	6.6	54
	8/27/2019	0.0547(J)	90.5	77.6	516	0.231	6.7	61
	11/14/2019	0.0818(J)	67.7	46.8	379	0.331(O)	6.9	45
	3/12/2020	0.0514(J)	63.5	43.8	369	0.236	6.7	33.6
	6/16/2020	0.0424(J)	49.7	29.6	308	0.226	6.75	27.8
	9/10/2020	0.0783(J)	54.7	28.4	316	0.229	6.7	36.9
	12/15/2020	n/a	n/a	n/a	n/a	n/a	6.7	n/a
	12/17/2020	0.09(J)	65.2	40.9	395	0.226	n/a	49.6
	6/18/2021	0.0725(J)	90.6	45.8	405	0.2	6.94	39.2
	11/15/2021	58.5	0.175	1.09	n/a	0.00287	6.42	n/a
	06/07/2022	<0.200	62	39.7	360	0.217	7.73	35.3
	12/01/2022	0.381	68.7	45.1	442	0.241	7	110
	06/13/2023	0.253	69.6	49.6	469	<0.150	5.47	85.7
	11/09/2023	<0.200	63.8	37.5	408	0.219	6.38	54
	06/11/2024	<0.200	58.7	33.8	361	0.185	6.89	42.1
	11/05/2024	<0.200	54.6	19.9	305	0.202	6.66	25

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Well	Date	Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	TDS (mg/L)	Fluoride (mg/L)	pH (s.u.)	Sulfate (mg/L)
MW-13	1/26/2016	0.0728(J)	60.1	26.3	320(B)	0.0955(J)	6.6	46.7
	4/18/2016	0.238	71.8	18.1	1320	0.177	6.5	62.3
	7/26/2016	0.26	77.6	17.8	444(B)	0.201	6.8	87.3
	10/11/2016	0.335	75.7	10.1	425(B)	0.281	7	86.3
	1/16/2017	0.301	66.6	10.2	430(B)	0.23	6.8	81.2
	3/7/2017	0.337	72.5	11.1	425	0.242	7	81.3
	5/9/2017	0.0749(J)	57.6	19.2	328	0.151	6.6	43.1
	7/11/2017	0.294	74.4	13.6	410	0.188	6.9	70.7
	8/23/2017	0.379	75.9	9	409	0.217	6.9	94.1
	3/27/2018	0.439	73.6	8.08	439	0.335	6.5	78.6
	8/15/2018	0.384	76.2	10.4	692	0.234	6.7	81.2
	3/5/2019	0.069(J)	58.2	22.7	309	0.128	6.2	44.1
	9/9/2019	0.463	81.2	8.35	494	0.313	7.2	110
	3/13/2020	0.0745	72.8	23.6	398	0.187	n/a	62.3
	12/16/2020	0.162(J)	74.7	14.9	443	0.221	n/a	80.1
	6/18/2021	0.364	81	11.7	485	0.297	5.76	98.4
	11/15/2021	0.346	74.5	9.97	427	0.276	6.52	96.2
	06/08/2022	<0.200	72.9	20.4	397	0.166	7.64	72.7
	12/1/2022	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	06/14/2023	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	11/09/2023	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	6/11/2024	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	11/5/2024	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MW-14	06/14/2023	0.399	77.2	51.3	620	0.167	7.02	152
	11/08/2023	0.292	66.6	42.1	492	0.219	6.74	101
	06/12/2024	0.474	73.3	50.5	566	0.202	6.88	131
	11/06/2024	0.228	70.5	47.4	523	0.211	6.52	106
MW-15	06/14/2023	<0.200	74.7	128	714	0.321	7.43	141
	11/08/2023	0.225	63.9	57.9	474	0.219	6.54	98.4
	06/12/2024	0.227	80.6	148	683	0.169	6.9	129
	11/06/2024	0.219	65.5	43.7	456	<0.150	6.56	99
MW-16	06/14/2023	0.447	77.8	31.4	898	0.322	2.62	189
	11/08/2023	0.497	70.3	34.7	768	0.367	6.98	157
	06/12/2024	0.241	77.5	28.7	952	<1.50	7.12	230
	11/06/2024	0.366	69.9	24.2	812	0.456	6.9	188

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Well	Date	Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	TDS (mg/L)	Fluoride (mg/L)	pH (s.u.)	Sulfate (mg/L)
MW-17	1/26/2016	0.169(J)	21.3	0.903(J)	171(B)	0.099(J)	6.4	16.6
	4/18/2016	0.109(J)	46.2	5.99	216(B)	0.0879(J)	6.3	19.9
	7/26/2016	0.0939(J)	41.8	4.32	195(B)	0.0678(J)	6.1	17.9
	10/11/2016	0.0594(J)	54.8	6.16	222(B)	0.0689(J)	5.2	18.9
	1/16/2017	0.0668(J)	48.2	5.79	195	0.0649(J)	6.4	18.5
	3/7/2017	0.0878(J)	48.8	5.09	206	0.0876(J)	6.3	18.4
	5/8/2017	0.0903(J)	40.3	4.08	195	0.0964(J)	6.3	17.8
	7/10/2017	0.12(J)	31.6	2.52	190(B)	0.115	5.9	17.7
	8/22/2017	0.0633(BJ)	48.4	5.64	211	0.0941(J)	6.3	17.1
	3/26/2018	0.0747(J)	43.1	4.54	203	0.101	5.9	18.5
	8/22/2018	0.0615(BJ)	51	6.1	218	0.0487(J)	6.1	19.6
	2/26/2019	0.154(J)	30.7	0.608(J)	182	0.0797(J)	6	25.2
	5/29/2019	n/a	n/a	n/a	n/a	n/a	5.7	23.8
	9/9/2019	<0.2*	49.1	6.05	222	0.0877(J)	6.4	17.8
	3/10/2020	0.022(J)	45.8	6.24	209	0.1	n/a	19.8
	12/15/2020	0.0573(J)	34.8	3.2	193	0.088(J)	n/a	20.4
	6/17/2021	0.0693(J)	35.5	2.53	187	0.102(J)	6.8	20.6
	11/17/2021	<0.02	47.4	5.52	214	<0.15	6.81	18.6
	06/07/2022	<0.200	41.6	5.48	209	<0.150	6.97	18.4
	12/1/2022	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	06/14/2023	<0.200	61.1	52.5	458	<0.150	2.01	80.4
	11/08/2023	0.824	77.6	48.5	569	0.256	6.82	113
	06/12/2024	<0.200	65.9	67.4	452	<0.150	6.65	95.6
	11/06/2024	<0.200	63.4	48.1	463	0.185	6.44	71.7

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Well	Date	Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	TDS (mg/L)	Fluoride (mg/L)	pH (s.u.)	Sulfate (mg/L)
MW-18	1/26/2016	0.0666(J)	56.1	5.68	233(B)	0.075(J)	6.7	23.6
	4/18/2016	0.0909(J)	59	5.84	253	0.0803(J)	6.4	26.3
	7/26/2016	0.0608(J)	79.1	6.98	332(B)	0.0626(J)	6.3	44.9
	10/11/2016	0.0605(J)	69.9	5.58	268(B)	0.0659(J)	6.5	31.1
	1/16/2017	0.0658(J)	79.2	7	359(B)	0.0704(J)	6.4	52.3
	3/7/2017	0.0649(J)	87.5	7.27	383	0.0932(J)	6.4	53.5
	5/9/2017	0.0512(J)	59.2	6.07	247	0.0907(J)	6.9	24.5
	7/11/2017	0.0469(J)	56.9	5.58	256	0.0646(J)	6.5	25
	8/22/2017	0.0546(J)	60.2	5.33	249	0.0834(J)	6.4	28.4
	3/26/2018	0.0433(J)	65	6.28	281	0.108	6.2	32.9
	8/22/2018	0.0547(BJ)	63.3	5.39	265	0.0409(J)	6.5	27.6
	2/26/2019	0.0628(J)	58	5.55	233	0.0728(J)	6.4	24.9
	9/9/2019	0.0256(J)	69.1	6.04	302	0.0773(J)	6.5	35.9
	3/11/2020	<0.2	56.8	5.4	244	0.0851(J)	n/a	27.3
	12/17/2020	<0.2*	70	5.97	327	0.0877(J)	n/a	41.4
	6/18/2021	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	11/16/2021	<0.02	74	5.76	334	<0.15	6.94	45.9
	6/7/2022	<0.200	57.3	5.12	260	<0.150	7.25	29.7
	12/1/2022	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	06/14/2023	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	11/08/2023	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	6/11/2024	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	11/5/2024	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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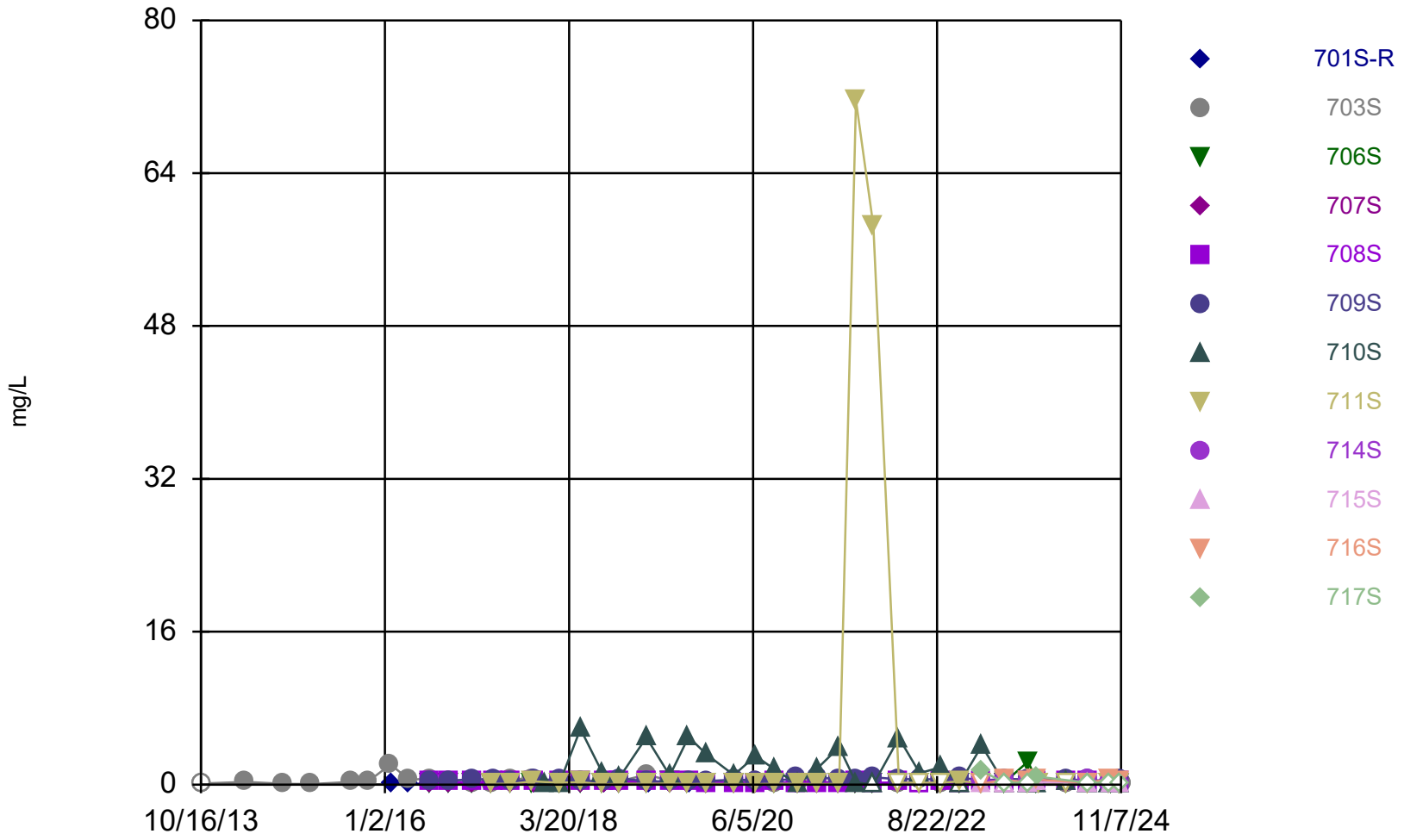
APPENDIX 2

Time Series

Sanitas™ v.10.0.10 Software licensed to TRC. UG
Hollow symbols indicate censored values.

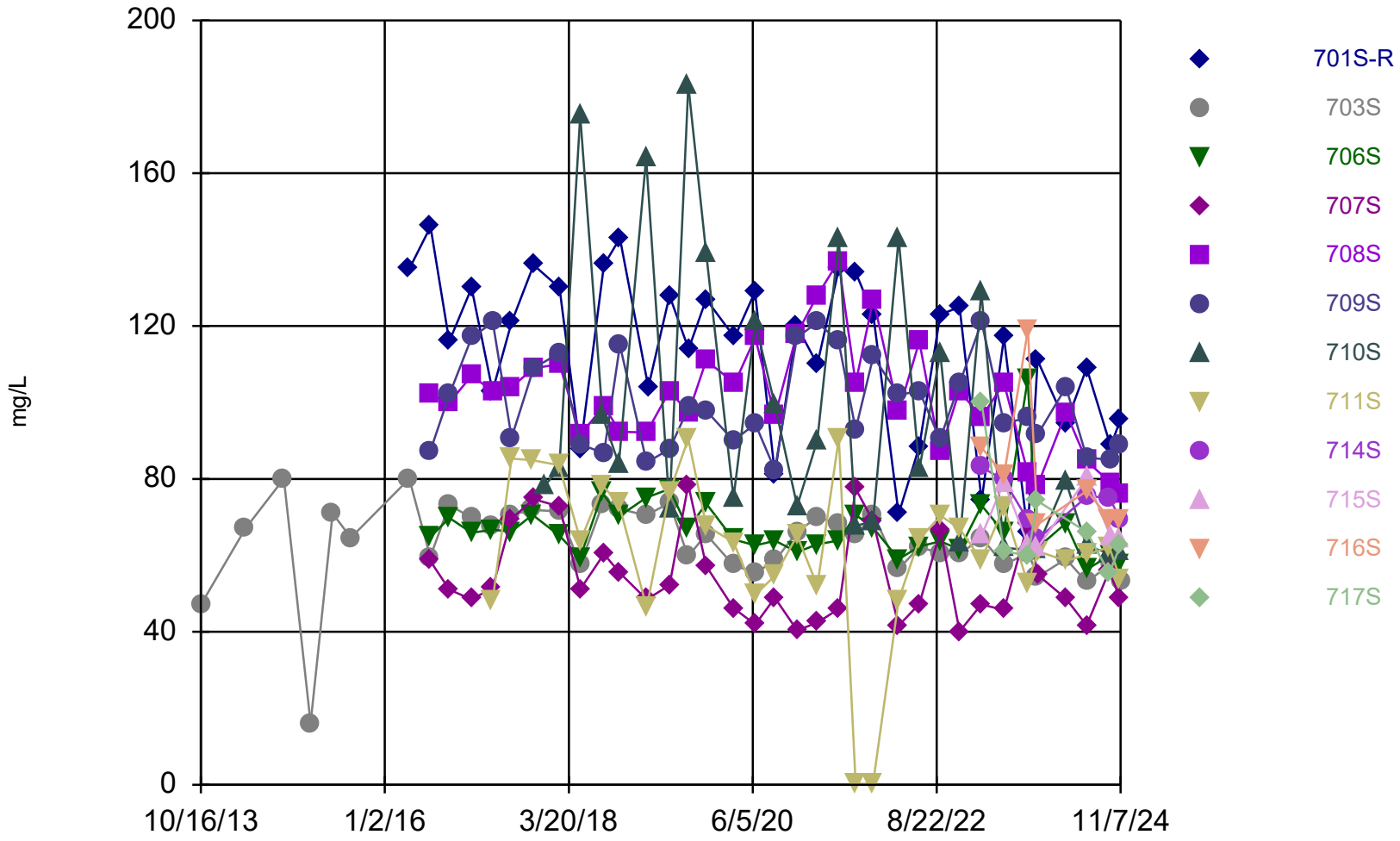
Time Series



Constituent: Boron Analysis Run 4/22/2025 10:08 PM

Independence Data: Independence ADEQ Database 2H2024

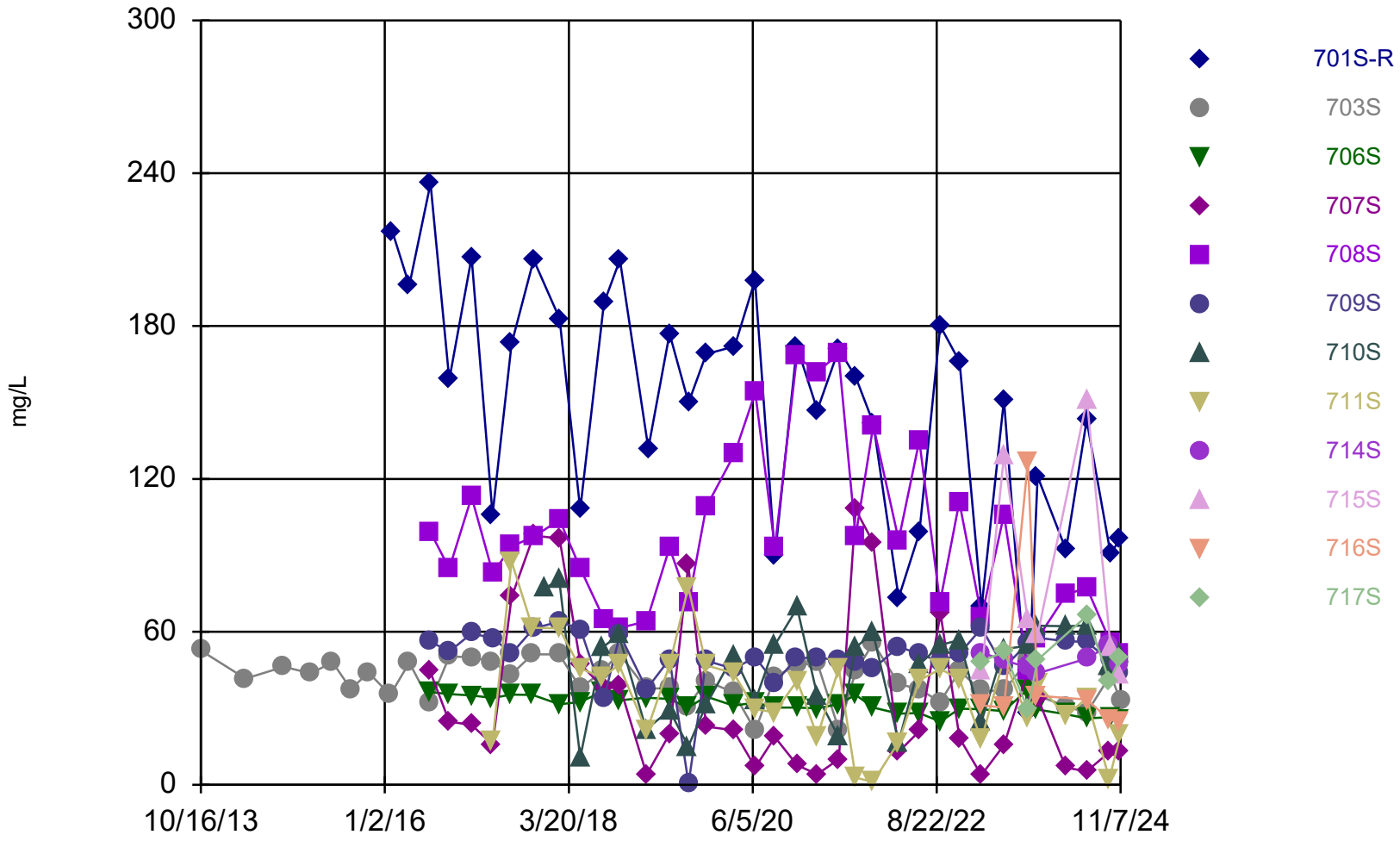
Time Series



Constituent: Calcium Analysis Run 4/22/2025 10:08 PM

Independence Data: Independence ADEQ Database 2H2024

Time Series



Constituent: Chloride Analysis Run 4/22/2025 10:08 PM

Independence Data: Independence ADEQ Database 2H2024

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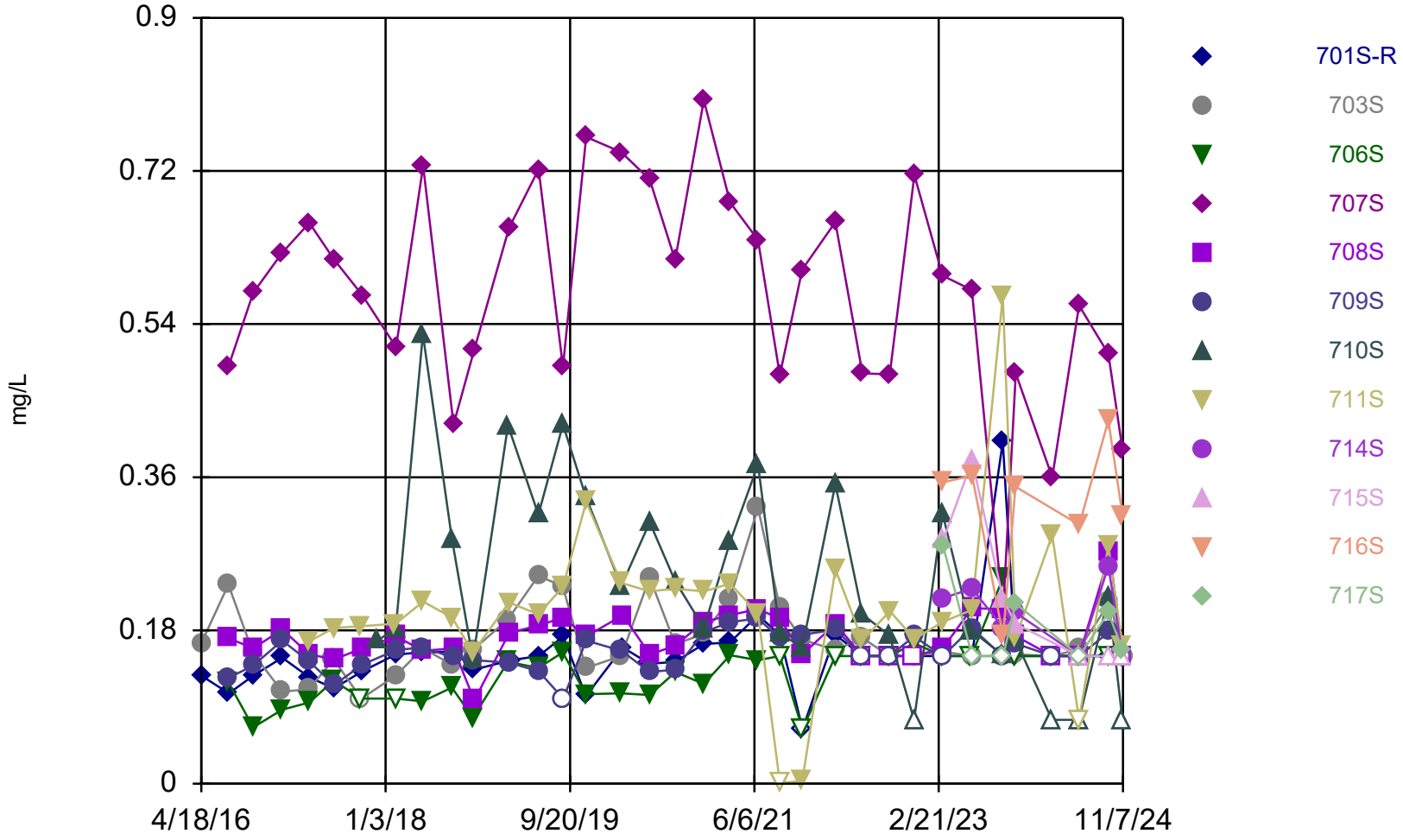
Hollow symbols indicate censored values.

Time Series



Constituent: Fluoride Analysis Run 4/22/2025 10:08 PM

Independence Data: Independence ADEQ Database 2H2024

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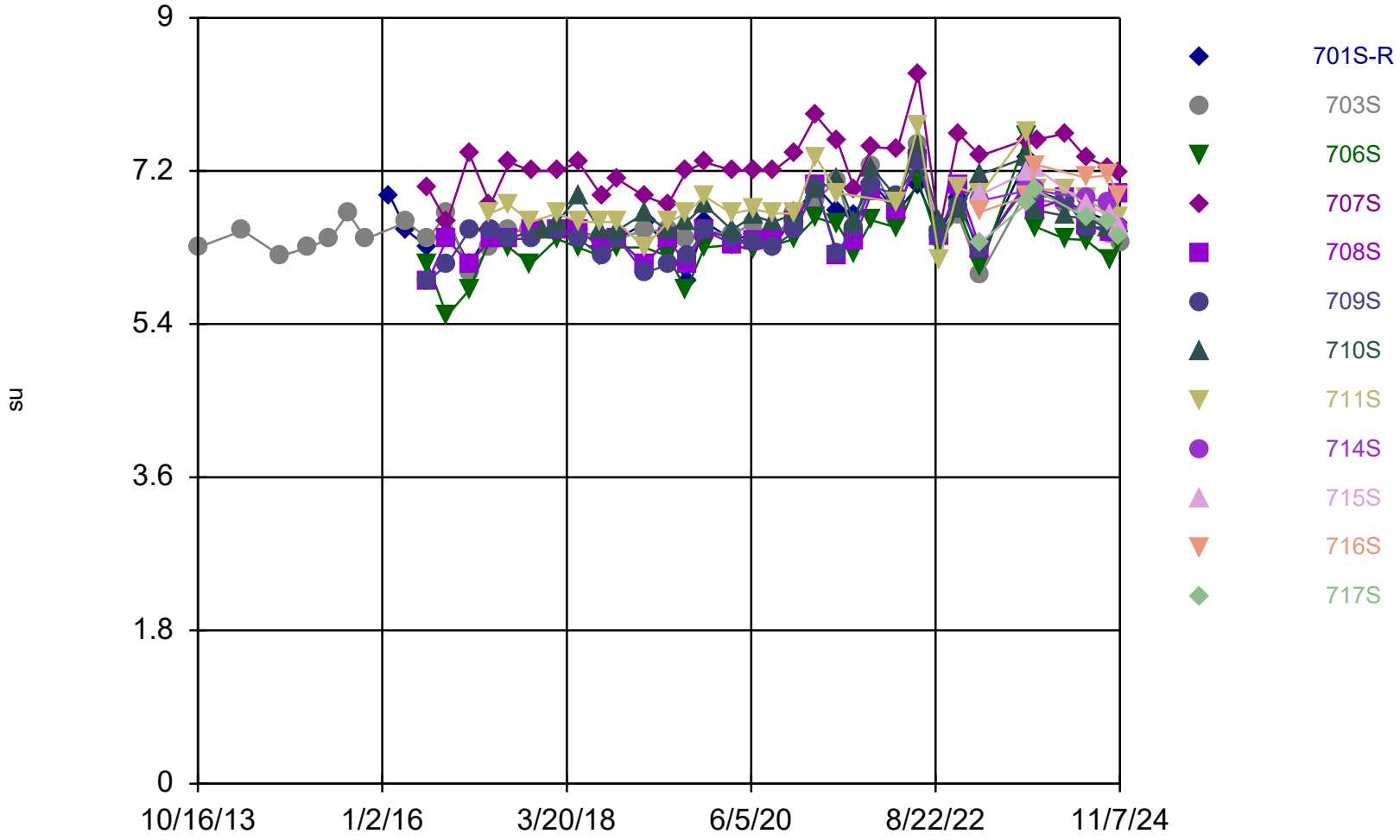
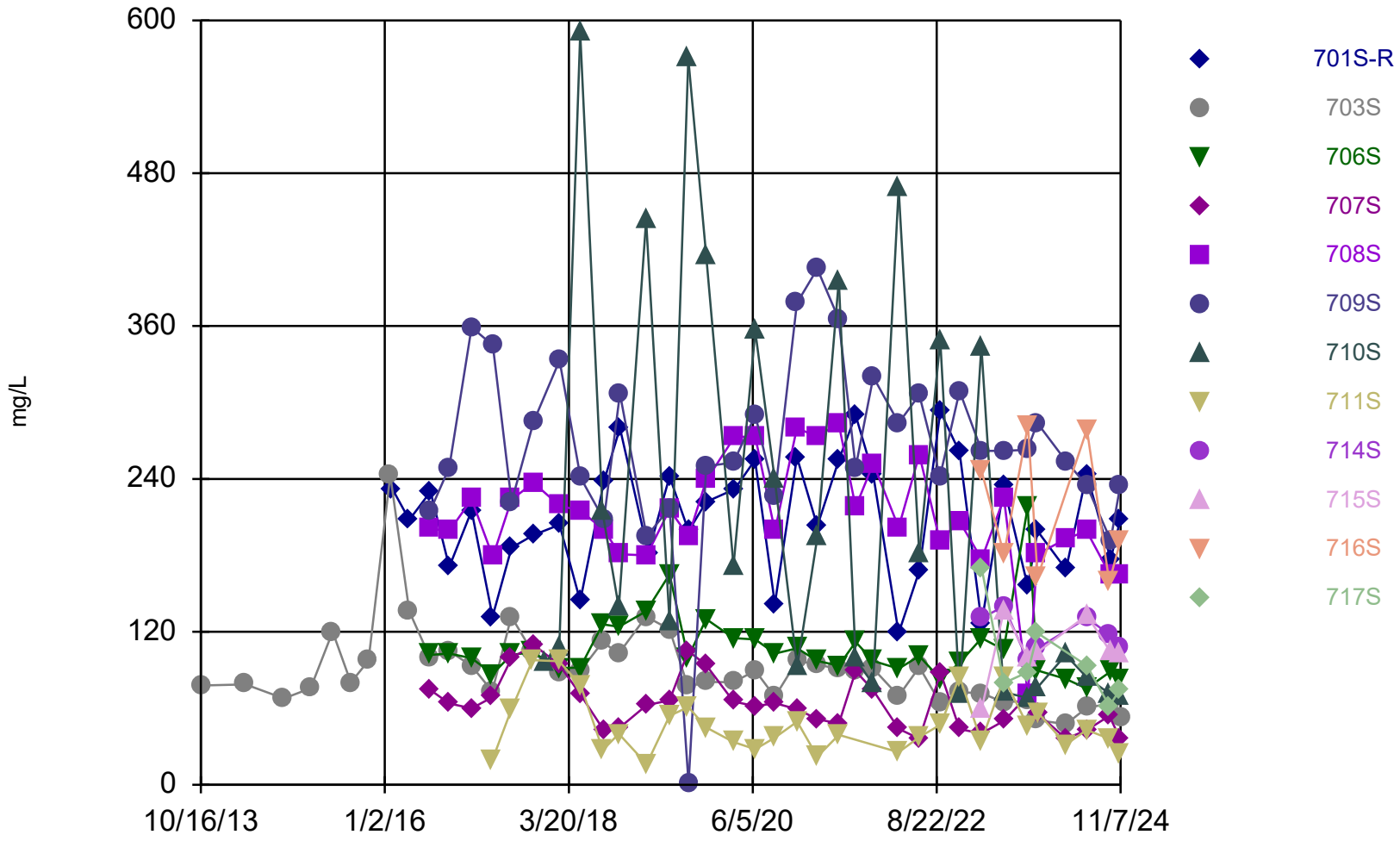


Constituent: pH Analysis Run 4/22/2025 10:09 PM

Independence Data: Independence ADEQ Database 2H2024

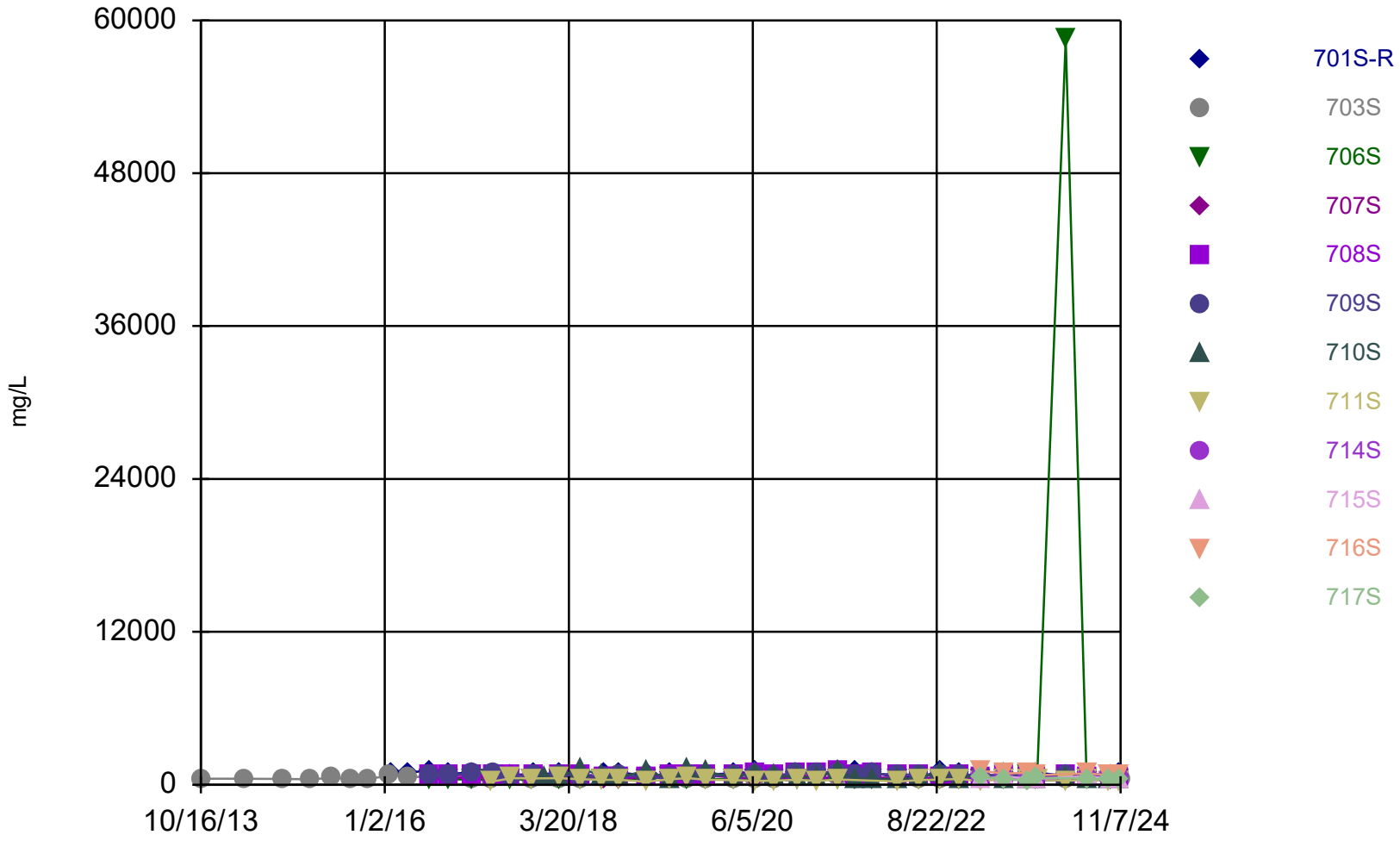
Time Series



Constituent: Sulfate Analysis Run 4/22/2025 10:09 PM

Independence Data: Independence ADEQ Database 2H2024

Time Series



Constituent: TDS Analysis Run 4/22/2025 10:09 PM

Independence Data: Independence ADEQ Database 2H2024

APPENDIX 3

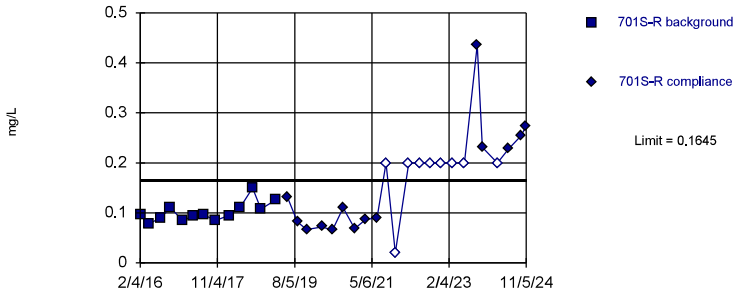
Statistic Analysis - Prediction Limit Analysis

Sanitas™ v.10.0.10 Software licensed to TRC. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1019, Std. Dev.=0.01942, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.891, critical = 0.814. Kappa = 3.221 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

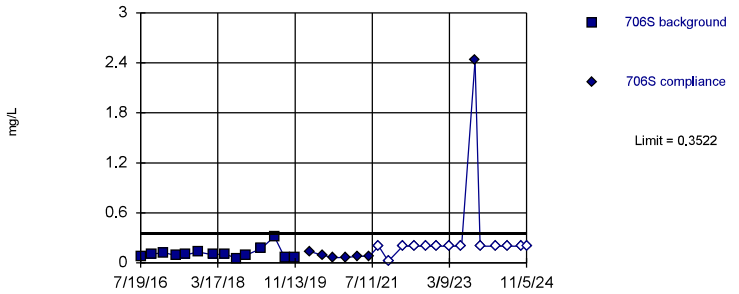
Constituent: Boron Analysis Run 4/22/2025 10:10 PM
Independence Data: Independence ADEQ Database 2H2024

Sanitas™ v.10.0.10 Software licensed to TRC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.3264, Std. Dev.=0.08513, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.856, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

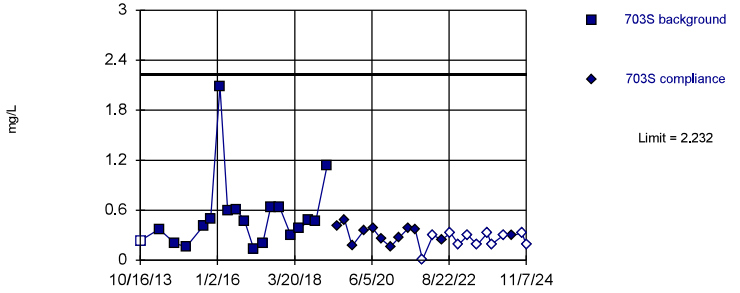
Constituent: Boron Analysis Run 4/22/2025 10:10 PM
Independence Data: Independence ADEQ Database 2H2024

Sanitas™ v.10.0.10 Software licensed to TRC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=0.7037, Std. Dev.=0.2129, n=19, 5.263% NDs. Seasonality was detected with 95% confidence and data were deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9046, critical = 0.863. Kappa = 2.833 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

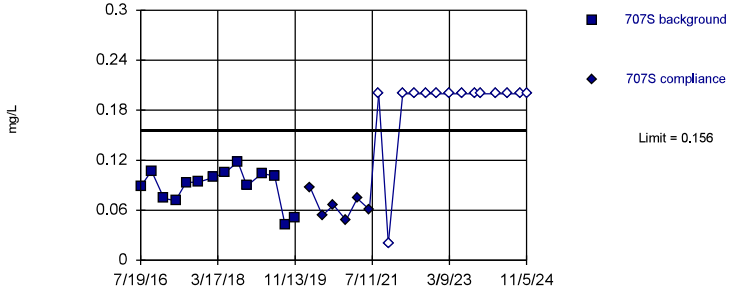
Constituent: Boron Analysis Run 4/22/2025 10:10 PM
Independence Data: Independence ADEQ Database 2H2024

Sanitas™ v.10.0.10 Software licensed to TRC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.08851, Std. Dev.=0.0215, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9061, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

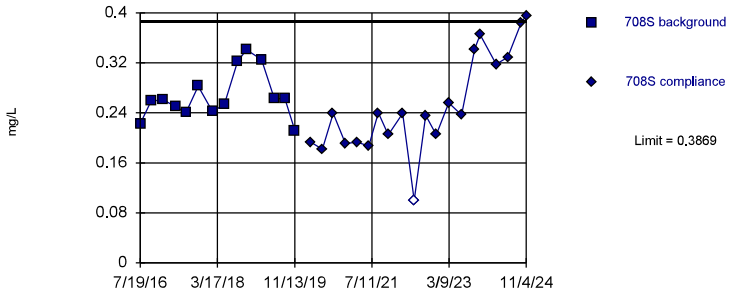
Constituent: Boron Analysis Run 4/22/2025 10:10 PM
Independence Data: Independence ADEQ Database 2H2024

Sanitas™ v.10.0.10 Software licensed to TRC. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.2671, Std. Dev.=0.0382, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9074, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Boron Analysis Run 4/22/2025 10:10 PM

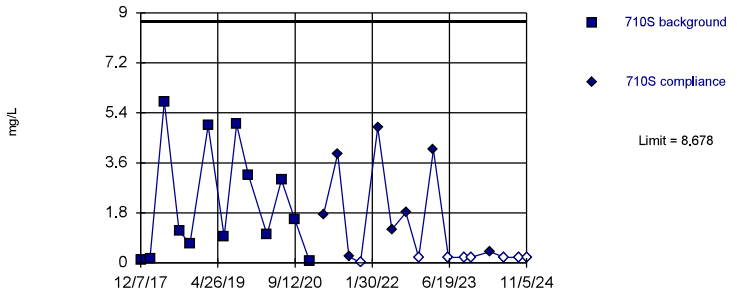
Independence Data: Independence ADEQ Database 2H2024

Sanitas™ v.10.0.10 Software licensed to TRC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.12, Std. Dev.=2.036, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8589, critical = 0.814. Kappa = 3.221 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Boron Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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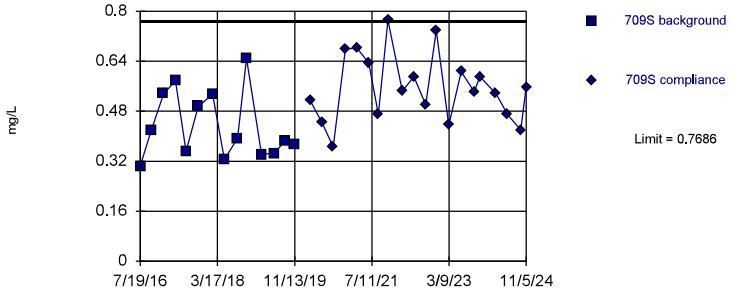
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.4309, Std. Dev.=0.1076, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8961, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Boron Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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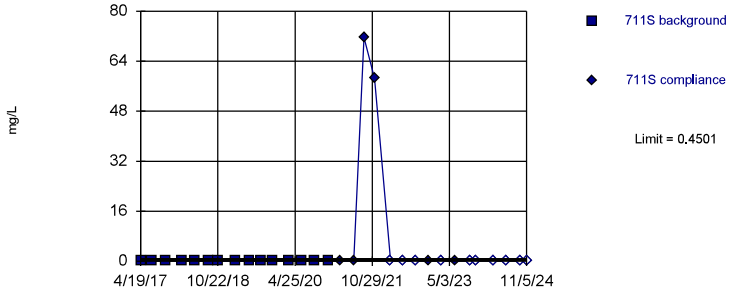
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.3209, Std. Dev.=0.1146, n=15. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8481, critical = 0.835. Kappa = 3.054 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

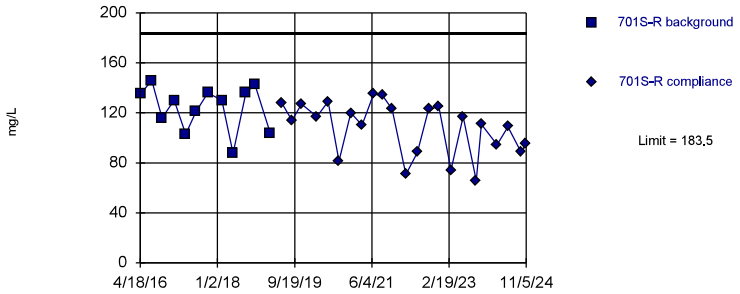
Constituent: Boron Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=124, Std. Dev.=18, n=12. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9193, critical = 0.805. Kappa = 3.305 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Calcium Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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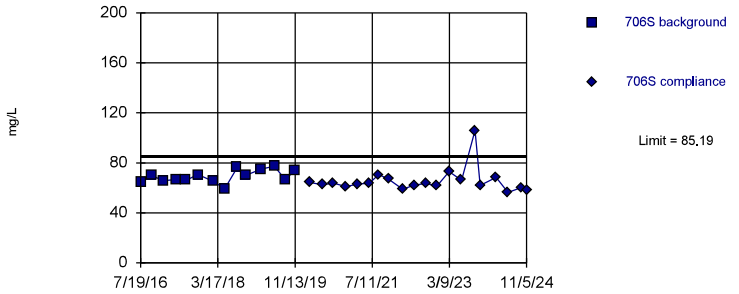
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=69.16, Std. Dev.=5.109, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.954, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Calcium Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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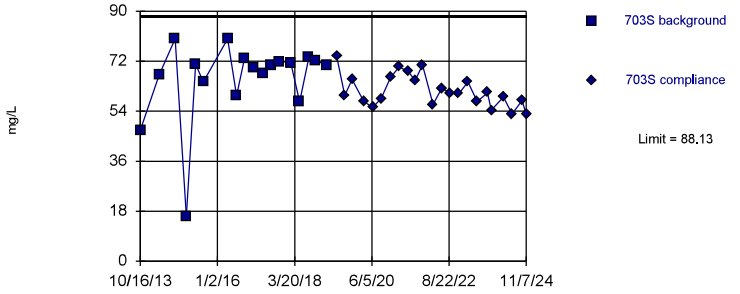
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube transformation): Mean=317825, Std. Dev.=127359, n=18. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9151, critical = 0.858. Kappa = 2.879 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Calcium Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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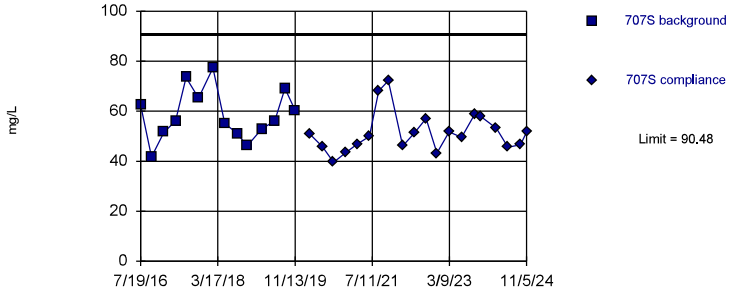
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=58.5, Std. Dev.=10.19, n=14. Seasonality was detected with 95% confidence and data were deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9739, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

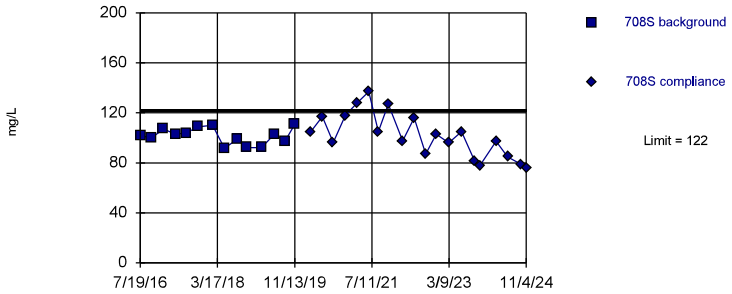
Constituent: Calcium Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=101.5, Std. Dev.=6.533, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9369, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Calcium Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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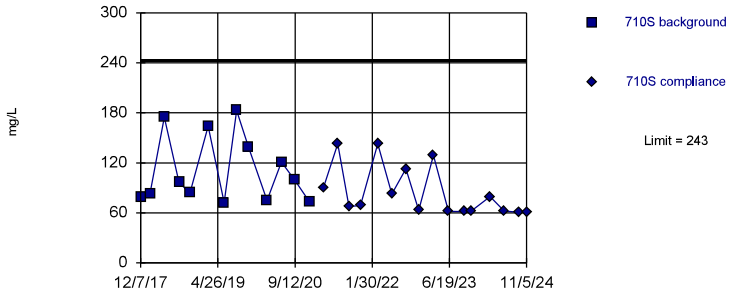
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=111, Std. Dev.=40.97, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8394, critical = 0.814. Kappa = 3.221 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Calcium Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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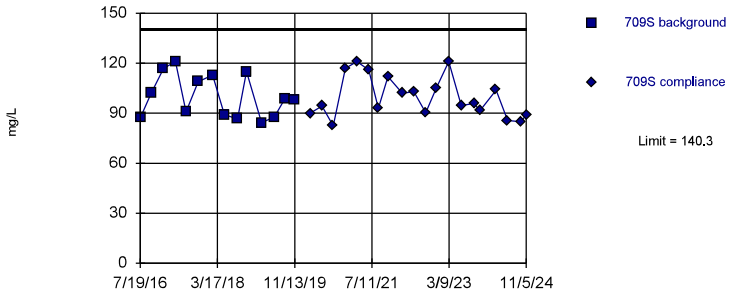
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=99.97, Std. Dev.=12.87, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8988, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Calcium Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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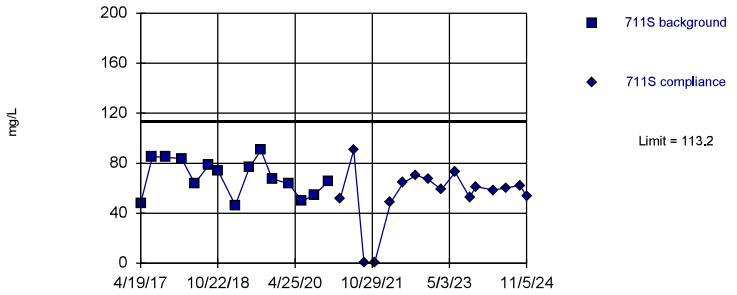
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=68.77, Std. Dev.=14.53, n=15. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9399, critical = 0.835. Kappa = 3.054 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

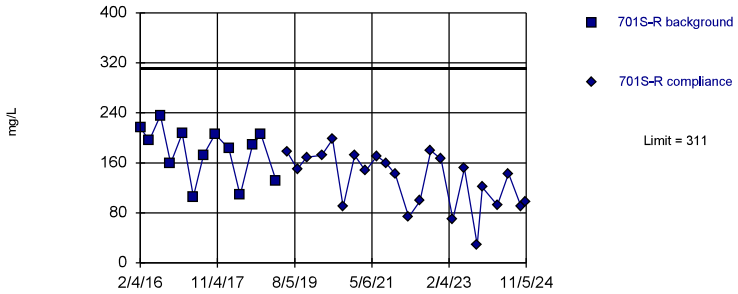
Constituent: Calcium Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=178.3, Std. Dev.=41.18, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9136, critical = 0.814. Kappa = 3.221 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Chloride Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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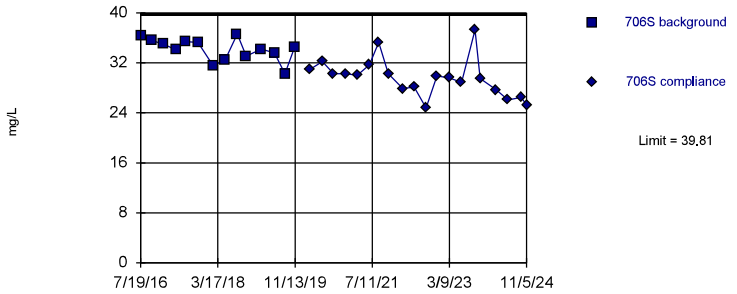
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=34.15, Std. Dev.=1.805, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.954, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Chloride Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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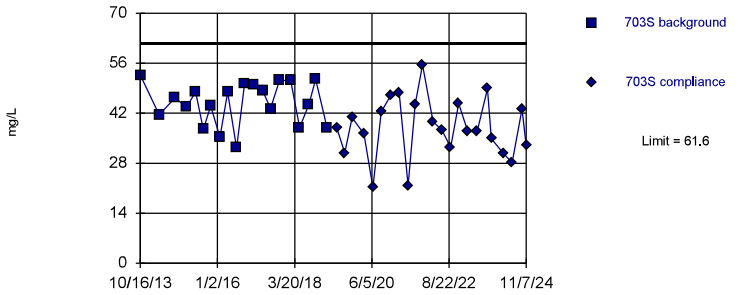
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=44.78, Std. Dev.=6.035, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9322, critical = 0.868. Kappa = 2.788 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Chloride Analysis Run 4/22/2025 10:10 PM

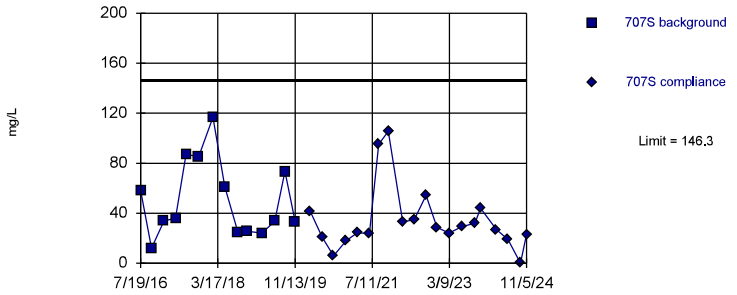
Independence Data: Independence ADEQ Database 2H2024

Sanitas™ v.10.0.10 Software licensed to TRC. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=50.37, Std. Dev.=30.59, n=14. Seasonality was detected with 95% confidence and data were deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.901, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

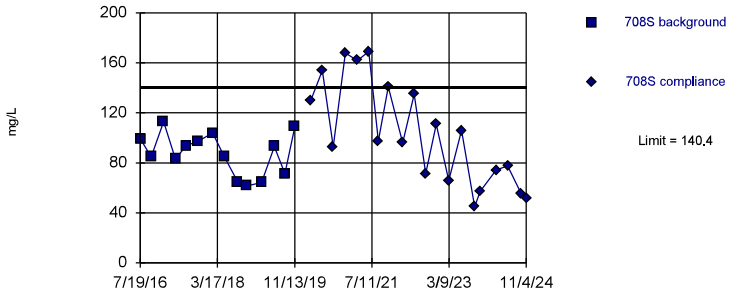
Constituent: Chloride Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=87.44, Std. Dev.=16.87, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9433, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Chloride Analysis Run 4/22/2025 10:10 PM

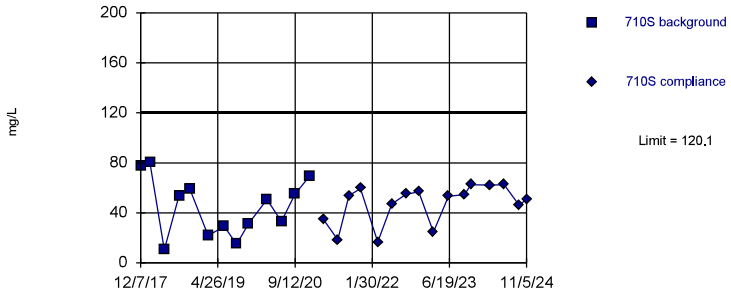
Independence Data: Independence ADEQ Database 2H2024

Sanitas™ v.10.0.10 Software licensed to TRC. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=45.11, Std. Dev.=23.27, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9452, critical = 0.814. Kappa = 3.221 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Chloride Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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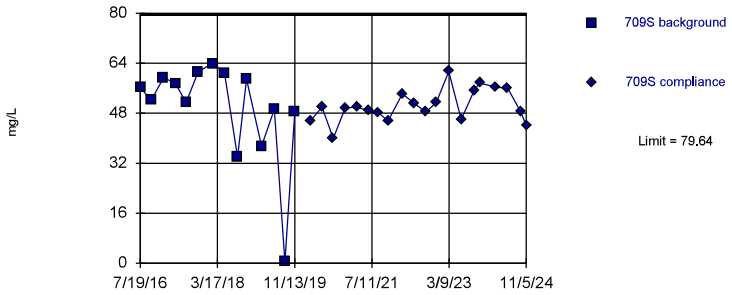
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=2699, Std. Dev.=1161, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9043, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Chloride Analysis Run 4/22/2025 10:10 PM

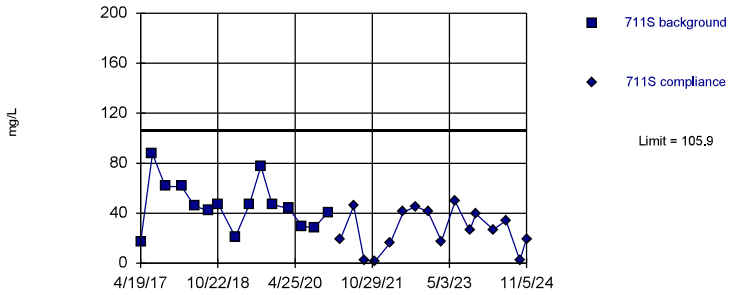
Independence Data: Independence ADEQ Database 2H2024

Sanitas™ v.10.0.10 Software licensed to TRC. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=46.52, Std. Dev.=19.46, n=15. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9449, critical = 0.835. Kappa = 3.054 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Chloride Analysis Run 4/22/2025 10:10 PM

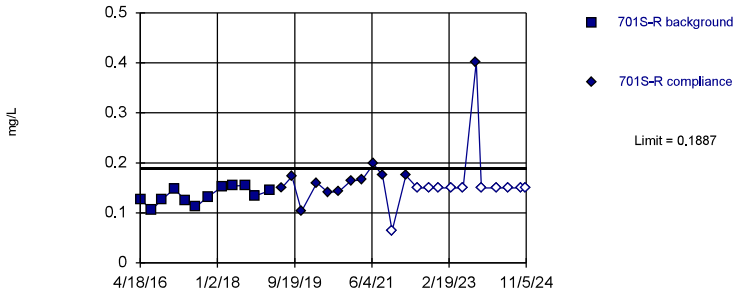
Independence Data: Independence ADEQ Database 2H2024

Sanitas™ v.10.0.10 Software licensed to TRC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1348, Std. Dev.=0.01631, n=12. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9305, critical = 0.805. Kappa = 3.305 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Fluoride Analysis Run 4/22/2025 10:10 PM

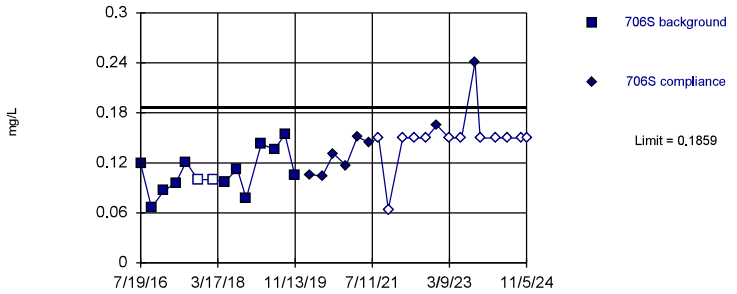
Independence Data: Independence ADEQ Database 2H2024

Sanitas™ v.10.0.10 Software licensed to TRC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1081, Std. Dev.=0.02481, n=14, 14.29% NDs. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9777, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Fluoride Analysis Run 4/22/2025 10:10 PM

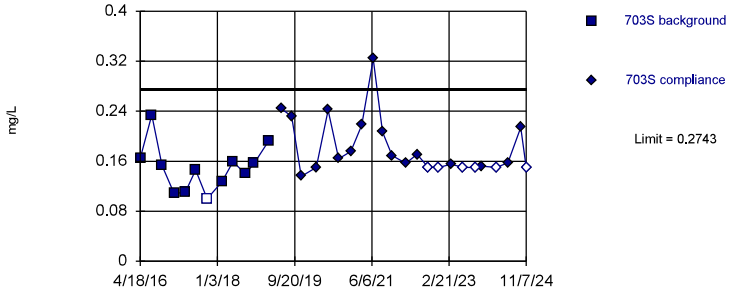
Independence Data: Independence ADEQ Database 2H2024

Sanitas™ v.10.0.10 Software licensed to TRC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1494, Std. Dev.=0.03777, n=12, 8.333% NDs. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9353, critical = 0.805. Kappa = 3.305 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Fluoride Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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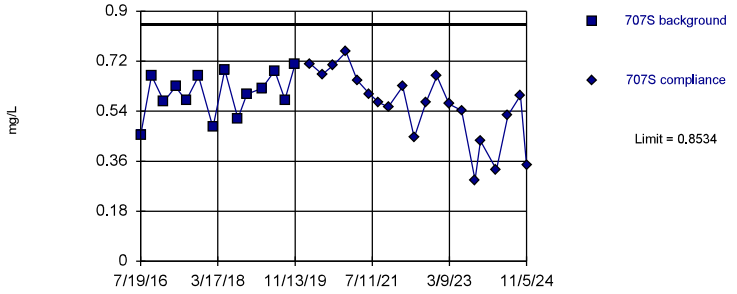
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.6042, Std. Dev.=0.07943, n=14. Seasonality was detected with 95% confidence and data were deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9419, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Fluoride Analysis Run 4/22/2025 10:10 PM

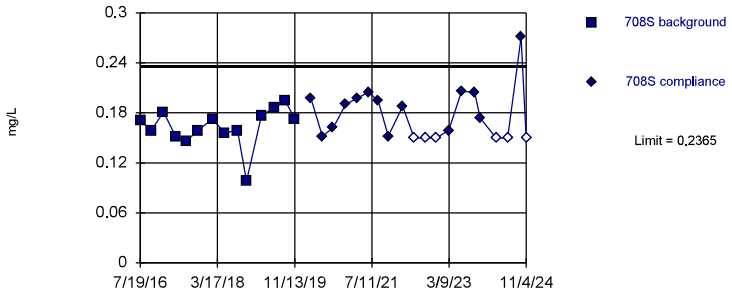
Independence Data: Independence ADEQ Database 2H2024

Sanitas™ v.10.0.10 Software licensed to TRC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1632, Std. Dev.=0.02336, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8636, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Fluoride Analysis Run 4/22/2025 10:10 PM

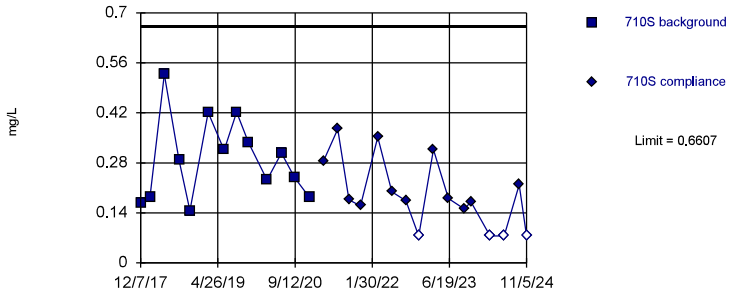
Independence Data: Independence ADEQ Database 2H2024

Sanitas™ v.10.0.10 Software licensed to TRC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.2899, Std. Dev.=0.1151, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9362, critical = 0.814. Kappa = 3.221 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Fluoride Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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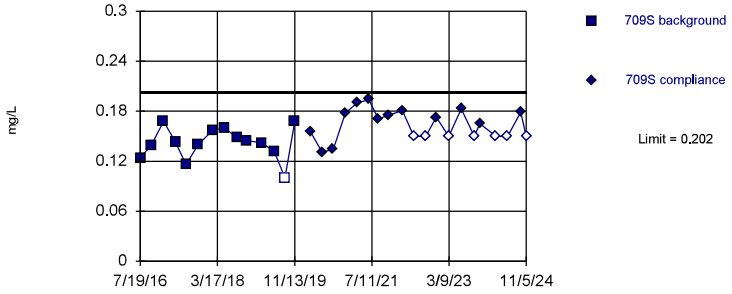
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1416, Std. Dev.=0.01926, n=14, 7.143% NDs. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9541, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Fluoride Analysis Run 4/22/2025 10:10 PM

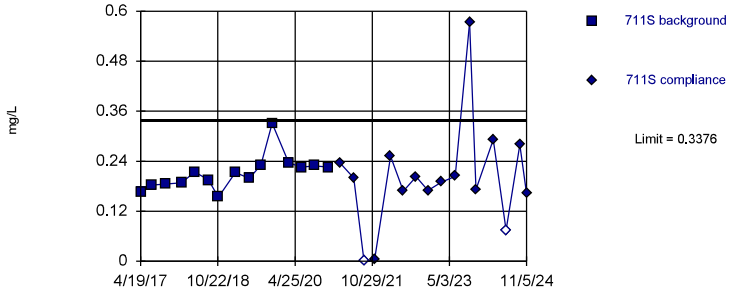
Independence Data: Independence ADEQ Database 2H2024

Sanitas™ v.10.0.10 Software licensed to TRC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.2118, Std. Dev.=0.04121, n=15. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8567, critical = 0.835. Kappa = 3.054 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

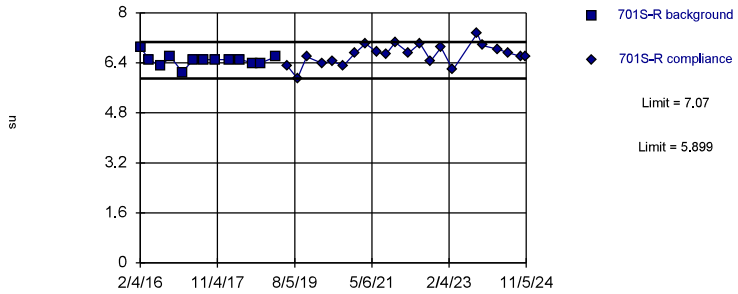
Constituent: Fluoride Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.485, Std. Dev.=0.1819, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8883, critical = 0.814. Kappa = 3.221 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: pH Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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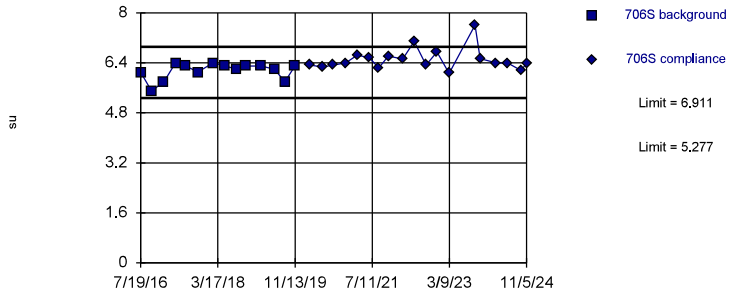
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=37.8, Std. Dev.=3.174, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8285, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: pH Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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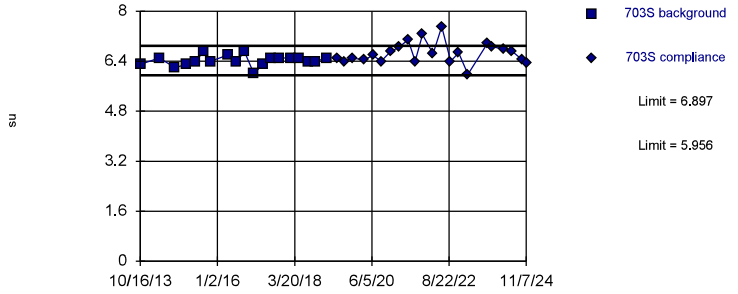
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.426, Std. Dev.=0.1661, n=19. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9311, critical = 0.863. Kappa = 2.833 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: pH Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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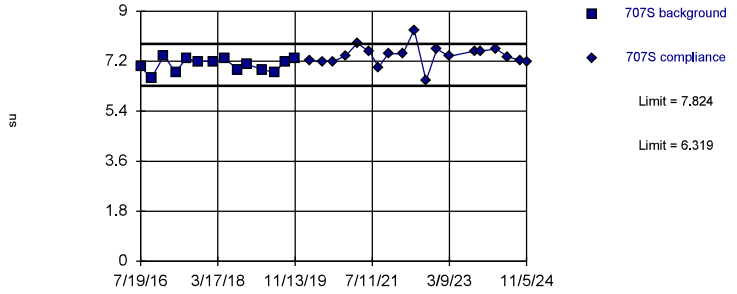
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.071, Std. Dev.=0.24, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9319, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

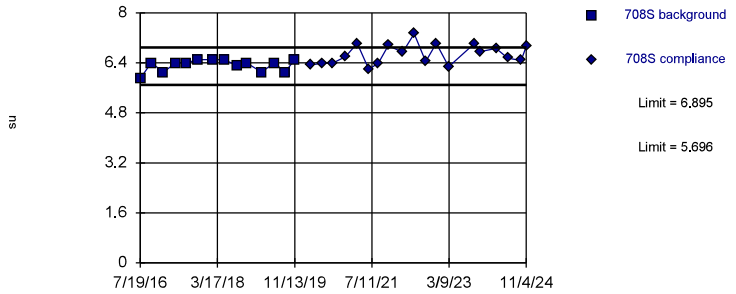
Constituent: pH Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=40, Std. Dev.=2.406, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8262, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

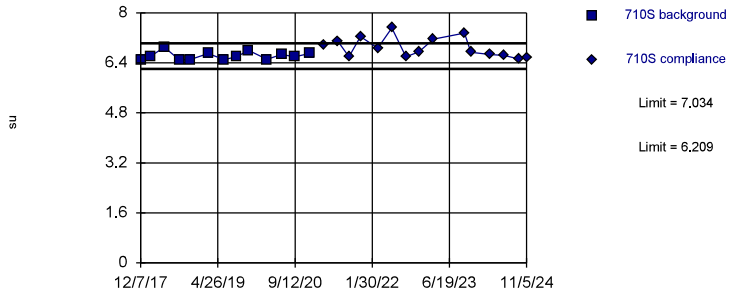
Constituent: pH Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.622, Std. Dev.=0.1281, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8705, critical = 0.814. Kappa = 3.221 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

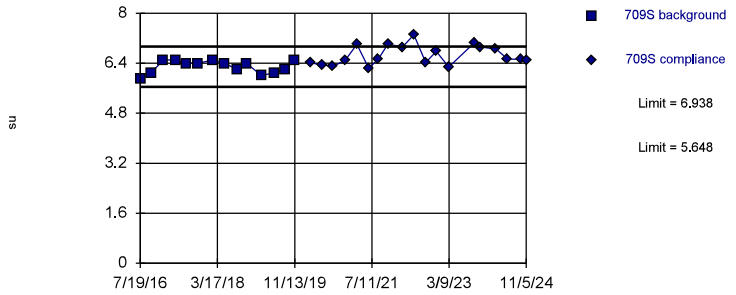
Constituent: pH Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.293, Std. Dev.=0.2056, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8687, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

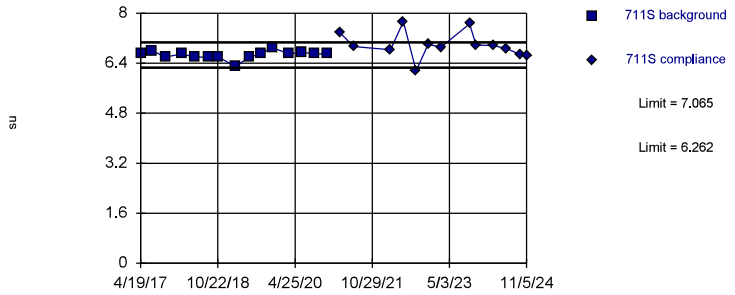
Constituent: pH Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.663, Std. Dev.=0.1316, n=15. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8493, critical = 0.835. Kappa = 3.054 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

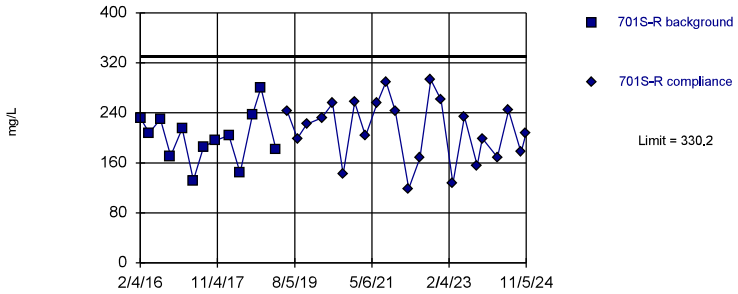
Constituent: pH Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=201.4, Std. Dev.=39.98, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9827, critical = 0.814. Kappa = 3.221 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Sulfate Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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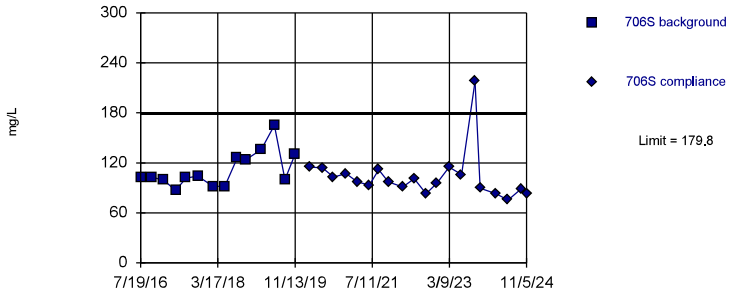
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=111.5, Std. Dev.=21.75, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8686, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Sulfate Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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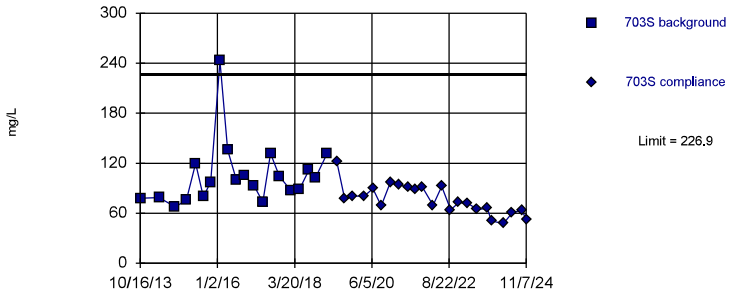
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=4.611, Std. Dev.=0.2917, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8976, critical = 0.868. Kappa = 2.788 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Sulfate Analysis Run 4/22/2025 10:10 PM

Independence Data: Independence ADEQ Database 2H2024

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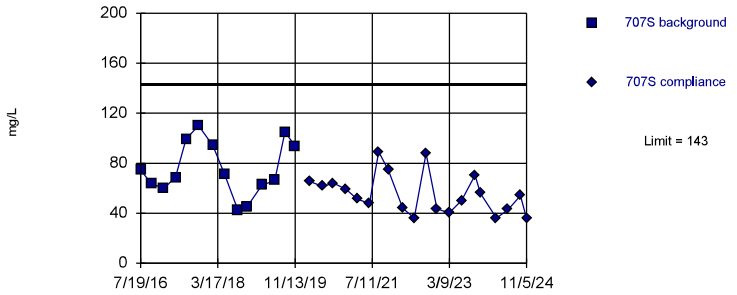
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=75.44, Std. Dev.=21.54, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9352, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

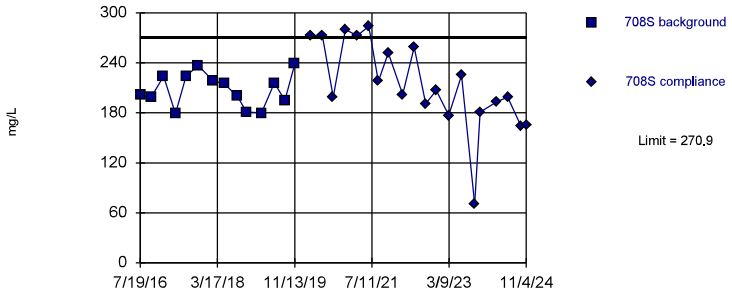
Constituent: Sulfate Analysis Run 4/22/2025 10:11 PM

Independence Data: Independence ADEQ Database 2H2024

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=207.8, Std. Dev.=20.12, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9362, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Sulfate Analysis Run 4/22/2025 10:11 PM

Independence Data: Independence ADEQ Database 2H2024

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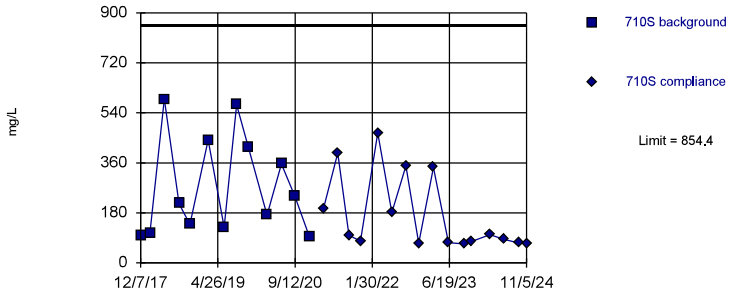
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=274, Std. Dev.=180.2, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8675, critical = 0.814. Kappa = 3.221 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Sulfate Analysis Run 4/22/2025 10:11 PM

Independence Data: Independence ADEQ Database 2H2024

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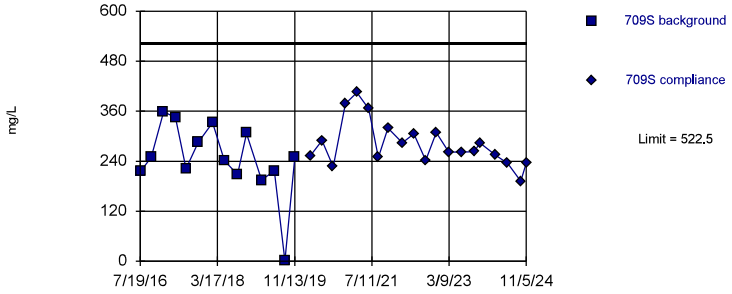
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=244.8, Std. Dev.=88.52, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8587, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: Sulfate Analysis Run 4/22/2025 10:11 PM

Independence Data: Independence ADEQ Database 2H2024

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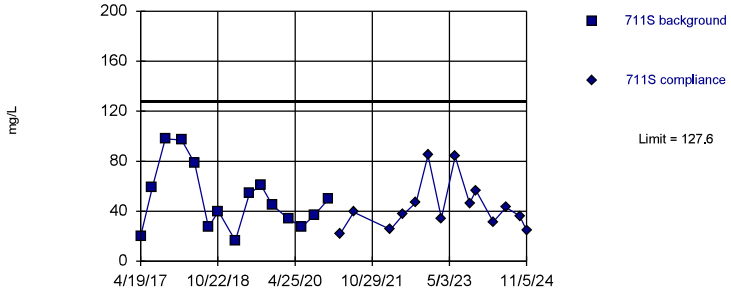
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=49.57, Std. Dev.=25.54, n=15. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9232, critical = 0.835. Kappa = 3.054 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

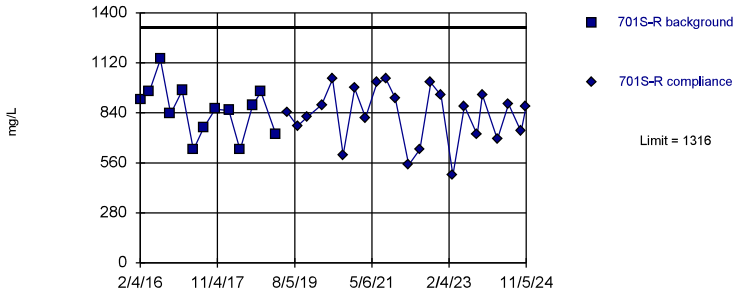
Constituent: Sulfate Analysis Run 4/22/2025 10:11 PM

Independence Data: Independence ADEQ Database 2H2024

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=854.6, Std. Dev.=143.4, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9532, critical = 0.814. Kappa = 3.221 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: TDS Analysis Run 4/22/2025 10:11 PM

Independence Data: Independence ADEQ Database 2H2024

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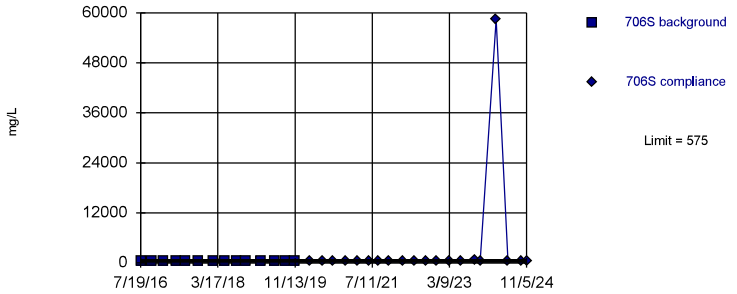
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=424.3, Std. Dev.=48.03, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8299, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: TDS Analysis Run 4/22/2025 10:11 PM

Independence Data: Independence ADEQ Database 2H2024

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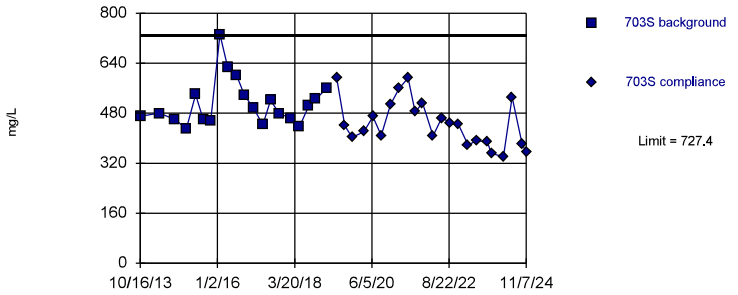
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=22.55, Std. Dev.=1.584, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8813, critical = 0.868. Kappa = 2.788 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: TDS Analysis Run 4/22/2025 10:11 PM

Independence Data: Independence ADEQ Database 2H2024

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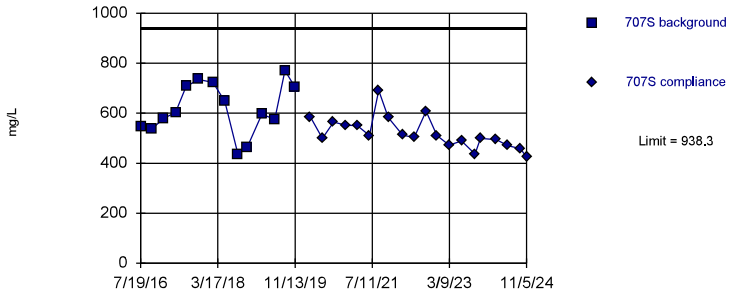
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=616.1, Std. Dev.=102.7, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9556, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: TDS Analysis Run 4/22/2025 10:11 PM

Independence Data: Independence ADEQ Database 2H2024

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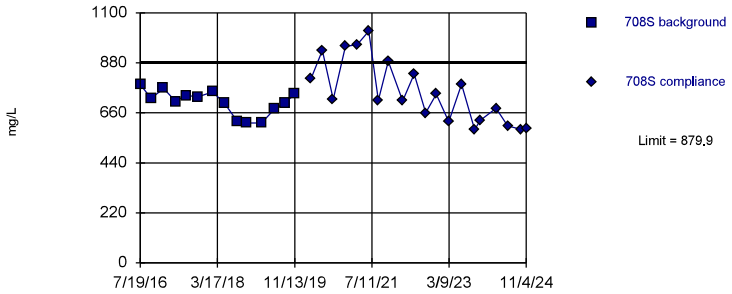
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=706.3, Std. Dev.=55.34, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9058, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: TDS Analysis Run 4/22/2025 10:11 PM

Independence Data: Independence ADEQ Database 2H2024

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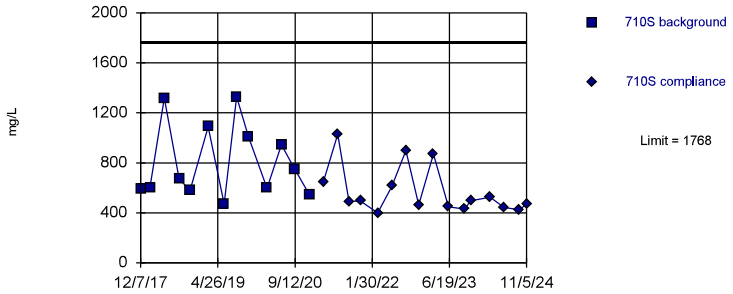
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=807.7, Std. Dev.=298.1, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8647, critical = 0.814. Kappa = 3.221 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: TDS Analysis Run 4/22/2025 10:11 PM

Independence Data: Independence ADEQ Database 2H2024

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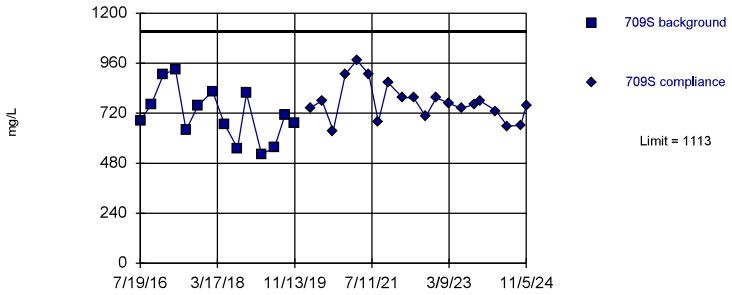
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=714.5, Std. Dev.=126.9, n=14. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9588, critical = 0.825. Kappa = 3.138 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: TDS Analysis Run 4/22/2025 10:11 PM

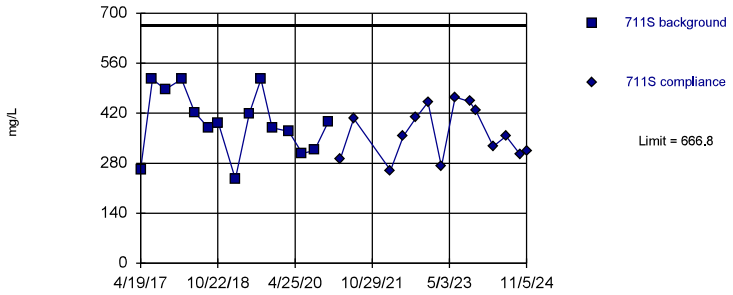
Independence Data: Independence ADEQ Database 2H2024

Sanitas™ v.10.0.10 Software licensed to TRC. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=394.3, Std. Dev.=89.22, n=15. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9381, critical = 0.835. Kappa = 3.054 (c=20, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001549.

Constituent: TDS Analysis Run 4/22/2025 10:11 PM

Independence Data: Independence ADEQ Database 2H2024

APPENDIX 4

Analytical Results

ANALYTICAL REPORT

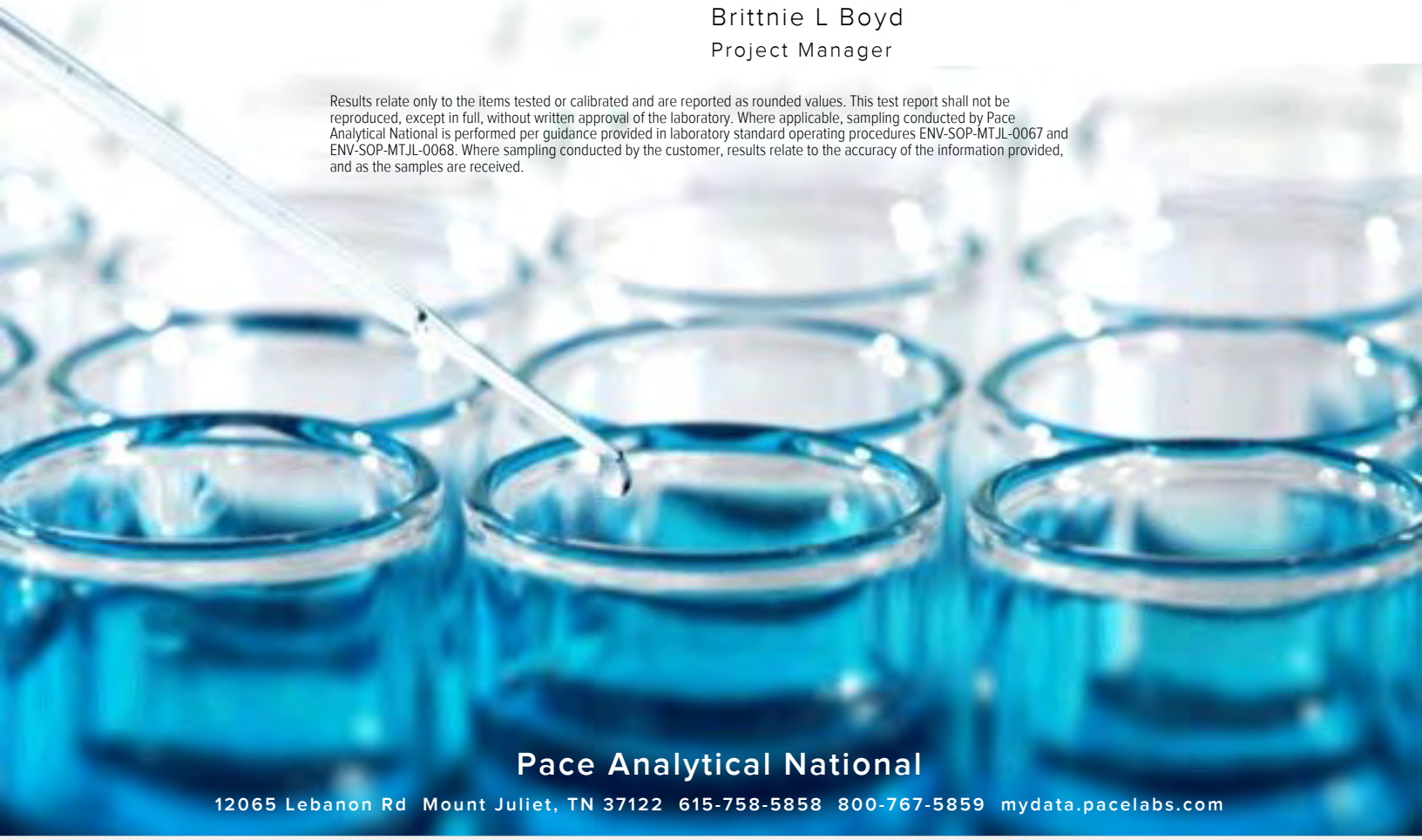
November 21, 2024

Alliance Technical Group - Bryant, AR

Sample Delivery Group:	L1798033
Samples Received:	11/09/2024
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:

Brittnie L Boyd
Project Manager



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

TABLE OF CONTENTS

MW-1R L1798033-01 GW

Collected by: JLC/BLS | Collected date/time: 11/05/24 10:30 | Received date/time: 11/09/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2399008	1	11/10/24 08:13	11/10/24 12:41	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399039	1	11/15/24 06:28	11/15/24 06:28	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399039	5	11/18/24 17:26	11/18/24 17:26	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2401700	1	11/20/24 10:54	11/20/24 18:05	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2401727	1	11/18/24 12:55	11/18/24 23:58	UNP	Mt. Juliet, TN

MW-2 L1798033-02 GW

Collected by: JLC/BLS | Collected date/time: 11/04/24 14:15 | Received date/time: 11/09/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2399008	1	11/10/24 08:13	11/10/24 12:41	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399039	1	11/15/24 06:41	11/15/24 06:41	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399039	5	11/15/24 06:53	11/15/24 06:53	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2401700	1	11/20/24 10:54	11/20/24 18:07	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2401727	1	11/18/24 12:55	11/19/24 00:01	UNP	Mt. Juliet, TN

MW-3 L1798033-03 GW

Collected by: JLC/BLS | Collected date/time: 11/07/24 12:10 | Received date/time: 11/09/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2399008	1	11/10/24 08:13	11/10/24 12:41	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399039	1	11/15/24 07:06	11/15/24 07:06	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2401700	1	11/20/24 10:54	11/20/24 18:08	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2401727	1	11/18/24 12:55	11/19/24 00:04	UNP	Mt. Juliet, TN

MW-6 L1798033-04 GW

Collected by: JLC/BLS | Collected date/time: 11/05/24 16:35 | Received date/time: 11/09/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2399008	1	11/10/24 08:13	11/10/24 12:41	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399039	1	11/15/24 07:19	11/15/24 07:19	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2401700	1	11/20/24 10:54	11/20/24 18:10	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2401727	1	11/18/24 12:55	11/19/24 00:07	UNP	Mt. Juliet, TN

MW-7 L1798033-05 GW

Collected by: JLC/BLS | Collected date/time: 11/05/24 12:40 | Received date/time: 11/09/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2399008	1	11/10/24 08:13	11/10/24 12:41	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399039	1	11/15/24 07:32	11/15/24 07:32	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2401700	1	11/20/24 10:54	11/20/24 18:15	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2401729	1	11/18/24 12:59	11/18/24 19:31	LD	Mt. Juliet, TN

MW-8 L1798033-06 GW

Collected by: JLC/BLS | Collected date/time: 11/04/24 17:05 | Received date/time: 11/09/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2399015	1	11/10/24 08:33	11/10/24 15:19	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399039	1	11/15/24 08:10	11/15/24 08:10	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2401700	1	11/20/24 10:54	11/20/24 18:17	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2401729	1	11/18/24 12:59	11/18/24 19:35	LD	Mt. Juliet, TN

MW-9 L1798033-07 GW

Collected by: JLC/BLS | Collected date/time: 11/05/24 09:40 | Received date/time: 11/09/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2399018	1	11/10/24 08:41	11/11/24 10:18	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399039	1	11/15/24 08:23	11/15/24 08:23	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399039	5	11/15/24 08:36	11/15/24 08:36	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2401700	1	11/20/24 10:54	11/20/24 18:18	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2401729	1	11/18/24 12:59	11/18/24 19:38	LD	Mt. Juliet, TN

MW-10 L1798033-08 GW

Collected by: JLC/BLS | Collected date/time: 11/05/24 15:10 | Received date/time: 11/09/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2399018	1	11/10/24 08:41	11/11/24 10:18	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399039	1	11/15/24 08:49	11/15/24 08:49	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2401700	1	11/20/24 10:54	11/20/24 18:20	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2401729	1	11/18/24 12:59	11/18/24 19:41	LD	Mt. Juliet, TN

MW-11 L1798033-09 GW

Collected by: JLC/BLS | Collected date/time: 11/05/24 14:20 | Received date/time: 11/09/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2399015	1	11/10/24 08:33	11/10/24 15:19	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399039	1	11/15/24 09:02	11/15/24 09:02	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2401700	1	11/20/24 10:54	11/20/24 18:22	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2401729	1	11/18/24 12:59	11/18/24 19:54	LD	Mt. Juliet, TN

MW-14 L1798033-10 GW

Collected by: JLC/BLS | Collected date/time: 11/06/24 14:35 | Received date/time: 11/09/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2399015	1	11/10/24 08:33	11/10/24 15:19	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399043	1	11/13/24 11:50	11/13/24 11:50	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2401700	1	11/20/24 10:54	11/20/24 18:23	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2401729	1	11/18/24 12:59	11/18/24 19:57	LD	Mt. Juliet, TN

MW-15 L1798033-11 GW

Collected by: JLC/BLS | Collected date/time: 11/06/24 13:10 | Received date/time: 11/09/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2399886	1	11/12/24 08:07	11/12/24 12:39	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399043	1	11/13/24 12:58	11/13/24 12:58	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2401700	1	11/20/24 10:54	11/20/24 18:25	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2401729	1	11/18/24 12:59	11/18/24 20:00	LD	Mt. Juliet, TN

MW-16 L1798033-12 GW

Collected by: JLC/BLS | Collected date/time: 11/06/24 15:55 | Received date/time: 11/09/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2399890	1	11/12/24 08:14	11/12/24 11:49	JEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399043	1	11/13/24 13:48	11/13/24 13:48	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2401700	1	11/20/24 10:54	11/20/24 18:27	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2401729	1	11/18/24 12:59	11/18/24 20:03	LD	Mt. Juliet, TN

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

MW-17 L1798033-13 GW

Collected by: JLC/BLS | Collected date/time: 11/06/24 17:20 | Received date/time: 11/09/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2399890	1	11/12/24 08:14	11/12/24 11:49	JEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399043	1	11/13/24 14:05	11/13/24 14:05	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2401700	1	11/20/24 10:54	11/20/24 17:58	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2401729	1	11/18/24 12:59	11/18/24 20:06	LD	Mt. Juliet, TN

FIELD BLANK 1 L1798033-14 GW

Collected by: JLC/BLS | Collected date/time: 11/07/24 10:00 | Received date/time: 11/09/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2399890	1	11/12/24 08:14	11/12/24 11:49	JEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399043	1	11/13/24 14:22	11/13/24 14:22	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2401700	1	11/20/24 10:54	11/20/24 18:29	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2401729	1	11/18/24 12:59	11/18/24 20:09	LD	Mt. Juliet, TN

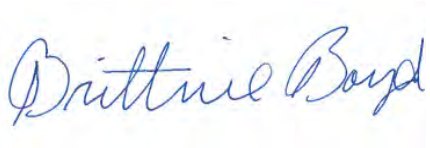
DUPLICATE 1 (MW-16) L1798033-15 GW

Collected by: JLC/BLS | Collected date/time: 11/06/24 15:55 | Received date/time: 11/09/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2399890	1	11/12/24 08:14	11/12/24 11:49	JEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2399043	1	11/13/24 14:39	11/13/24 14:39	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2401700	1	11/20/24 10:54	11/20/24 18:30	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2401729	1	11/18/24 12:59	11/18/24 20:13	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	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	836		20.0	1	11/10/2024 12:41	WG2399008

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	101		1.00	1	11/15/2024 06:28	WG2399039
Fluoride	ND		0.150	1	11/15/2024 06:28	WG2399039
Sulfate	218		25.0	5	11/18/2024 17:26	WG2399039

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.281		0.200	1	11/20/2024 18:05	WG2401700

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	96.3		1.00	1	11/18/2024 23:58	WG2401727

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	631		10.0	1	11/10/2024 12:41	WG2399008

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	9.00		1.00	1	11/15/2024 06:41	WG2399039
Fluoride	0.160		0.150	1	11/15/2024 06:41	WG2399039
Sulfate	197		25.0	5	11/15/2024 06:53	WG2399039

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.217		0.200	1	11/20/2024 18:07	WG2401700

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	93.4		1.00	1	11/19/2024 00:01	WG2401727

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	358		10.0	1	11/10/2024 12:41	WG2399008

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	34.4		1.00	1	11/15/2024 07:06	WG2399039
Fluoride	ND		0.150	1	11/15/2024 07:06	WG2399039
Sulfate	54.3		5.00	1	11/15/2024 07:06	WG2399039

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	11/20/2024 18:08	WG2401700

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	53.6		1.00	1	11/19/2024 00:04	WG2401727

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	374		10.0	1	11/10/2024 12:41	WG2399008

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	25.4		1.00	1	11/15/2024 07:19	WG2399039
Fluoride	ND		0.150	1	11/15/2024 07:19	WG2399039
Sulfate	85.4		5.00	1	11/15/2024 07:19	WG2399039

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	11/20/2024 18:10	WG2401700

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	58.4		1.00	1	11/19/2024 00:07	WG2401727

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	426		10.0	1	11/10/2024 12:41	WG2399008

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	13.2		1.00	1	11/15/2024 07:32	WG2399039
Fluoride	0.369		0.150	1	11/15/2024 07:32	WG2399039
Sulfate	35.9		5.00	1	11/15/2024 07:32	WG2399039

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	11/20/2024 18:15	WG2401700

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	50.2		1.00	1	11/18/2024 19:31	WG2401729

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	595		10.0	1	11/10/2024 15:19	WG2399015

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	53.8		1.00	1	11/15/2024 08:10	WG2399039
Fluoride	ND		0.150	1	11/15/2024 08:10	WG2399039
Sulfate	168		5.00	1	11/15/2024 08:10	WG2399039

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.391		0.200	1	11/20/2024 18:17	WG2401700

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	79.0		1.00	1	11/18/2024 19:35	WG2401729

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	753		13.3	1	11/11/2024 10:18	WG2399018

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	45.7		1.00	1	11/15/2024 08:23	WG2399039
Fluoride	ND		0.150	1	11/15/2024 08:23	WG2399039
Sulfate	238		25.0	5	11/15/2024 08:36	WG2399039

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.566		0.200	1	11/20/2024 18:18	WG2401700

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	91.3		1.00	1	11/18/2024 19:38	WG2401729

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	475		10.0	1	11/11/2024 10:18	WG2399018

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	51.9		1.00	1	11/15/2024 08:49	WG2399039
Fluoride	0.160		0.150	1	11/15/2024 08:49	WG2399039
Sulfate	71.7		5.00	1	11/15/2024 08:49	WG2399039

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	11/20/2024 18:20	WG2401700

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	62.8		1.00	1	11/18/2024 19:41	WG2401729

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	305		10.0	1	11/10/2024 15:19	WG2399015

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	19.9		1.00	1	11/15/2024 09:02	WG2399039
Fluoride	0.202		0.150	1	11/15/2024 09:02	WG2399039
Sulfate	25.0		5.00	1	11/15/2024 09:02	WG2399039

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	11/20/2024 18:22	WG2401700

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	54.6		1.00	1	11/18/2024 19:54	WG2401729

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	523		10.0	1	11/10/2024 15:19	WG2399015

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	47.4	J6	1.00	1	11/13/2024 11:50	WG2399043
Fluoride	0.211		0.150	1	11/13/2024 11:50	WG2399043
Sulfate	106	J6	5.00	1	11/13/2024 11:50	WG2399043

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.228		0.200	1	11/20/2024 18:23	WG2401700

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	70.5		1.00	1	11/18/2024 19:57	WG2401729

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	456		10.0	1	11/12/2024 12:39	WG2399886

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	43.7	J6	1.00	1	11/13/2024 12:58	WG2399043
Fluoride	ND		0.150	1	11/13/2024 12:58	WG2399043
Sulfate	99.0	J6	5.00	1	11/13/2024 12:58	WG2399043

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.219		0.200	1	11/20/2024 18:25	WG2401700

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	65.5		1.00	1	11/18/2024 20:00	WG2401729

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	812		20.0	1	11/12/2024 11:49	WG2399890

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	24.2		1.00	1	11/13/2024 13:48	WG2399043
Fluoride	0.456		0.150	1	11/13/2024 13:48	WG2399043
Sulfate	188		5.00	1	11/13/2024 13:48	WG2399043

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.366		0.200	1	11/20/2024 18:27	WG2401700

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	69.9		1.00	1	11/18/2024 20:03	WG2401729

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	463		10.0	1	11/12/2024 11:49	WG2399890

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	48.1		1.00	1	11/13/2024 14:05	WG2399043
Fluoride	0.185		0.150	1	11/13/2024 14:05	WG2399043
Sulfate	71.7		5.00	1	11/13/2024 14:05	WG2399043

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	11/20/2024 17:58	WG2401700

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	63.4		1.00	1	11/18/2024 20:06	WG2401729

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	ND		10.0	1	11/12/2024 11:49	WG2399890

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	ND		1.00	1	11/13/2024 14:22	WG2399043
Fluoride	ND		0.150	1	11/13/2024 14:22	WG2399043
Sulfate	ND		5.00	1	11/13/2024 14:22	WG2399043

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	ND		0.200	1	11/20/2024 18:29	WG2401700

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	ND		1.00	1	11/18/2024 20:09	WG2401729

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	800		20.0	1	11/12/2024 11:49	WG2399890

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	24.2		1.00	1	11/13/2024 14:39	WG2399043
Fluoride	0.451		0.150	1	11/13/2024 14:39	WG2399043
Sulfate	188		5.00	1	11/13/2024 14:39	WG2399043

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Boron	0.384		0.200	1	11/20/2024 18:30	WG2401700

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	69.9		1.00	1	11/18/2024 20:13	WG2401729

Method Blank (MB)

(MB) R4146065-1 11/10/24 12:41

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

L1797235-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1797235-01 11/10/24 12:41 • (DUP) R4146065-3 11/10/24 12:41

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	16400	16600	1	1.70		10

L1798033-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1798033-05 11/10/24 12:41 • (DUP) R4146065-4 11/10/24 12:41

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	426	423	1	0.707		10

Laboratory Control Sample (LCS)

(LCS) R4146065-2 11/10/24 12:41

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8940	102	85.0-115	

Method Blank (MB)

(MB) R4146087-1 11/10/24 15:19

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

L1798028-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1798028-04 11/10/24 15:19 • (DUP) R4146087-3 11/10/24 15:19

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	551	553	1	0.362		10

L1798166-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1798166-10 11/10/24 15:19 • (DUP) R4146087-4 11/10/24 15:19

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	514	512	1	0.390		10

Laboratory Control Sample (LCS)

(LCS) R4146087-2 11/10/24 15:19

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8850	101	85.0-115	

Method Blank (MB)

(MB) R4145994-1 11/11/24 10:18

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

L1796724-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1796724-01 11/11/24 10:18 • (DUP) R4145994-3 11/11/24 10:18

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	56800	59500	1	4.64		10

L1798033-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1798033-08 11/11/24 10:18 • (DUP) R4145994-4 11/11/24 10:18

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	475	472	1	0.634		10

Laboratory Control Sample (LCS)

(LCS) R4145994-2 11/11/24 10:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	9000	102	85.0-115	

Method Blank (MB)

(MB) R4146133-1 11/12/24 12:39

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

L1797808-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1797808-02 11/12/24 12:39 • (DUP) R4146133-3 11/12/24 12:39

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1510	1500	1	0.664		10

L1798191-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1798191-02 11/12/24 12:39 • (DUP) R4146133-4 11/12/24 12:39

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	247	241	1	2.46		10

Laboratory Control Sample (LCS)

(LCS) R4146133-2 11/12/24 12:39

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8830	100	85.0-115	

Method Blank (MB)

(MB) R4146271-1 11/12/24 11:49

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

L1797993-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1797993-01 11/12/24 11:49 • (DUP) R4146271-3 11/12/24 11:49

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	3430	3440	1	0.291		10

L1798191-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1798191-03 11/12/24 11:49 • (DUP) R4146271-4 11/12/24 11:49

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	256	258	1	0.778		10

Laboratory Control Sample (LCS)

(LCS) R4146271-2 11/12/24 11:49

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

Method Blank (MB)

(MB) R4147043-1 11/15/24 01:21

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.547	1.00
Fluoride	U		0.0761	0.150
Sulfate	U		0.637	5.00

L1798028-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1798028-20 11/15/24 01:46 • (DUP) R4147043-3 11/15/24 01:59

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	24.7	24.8	1	0.294		15
Fluoride	0.314	0.420	1	28.9	P1	15

L1798028-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1798028-20 11/15/24 02:25 • (DUP) R4147043-5 11/15/24 02:37

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	191	191	5	0.0754		15

L1798028-21 Original Sample (OS) • Duplicate (DUP)

(OS) L1798028-21 11/15/24 02:50 • (DUP) R4147043-6 11/15/24 03:03

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	49.6	49.4	1	0.302		15
Fluoride	0.157	ND	1	8.23		15
Sulfate	75.0	74.9	1	0.128		15

Laboratory Control Sample (LCS)

(LCS) R4147043-2 11/15/24 01:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	39.0	97.4	80.0-120	
Fluoride	8.00	8.06	101	80.0-120	
Sulfate	40.0	39.2	98.1	80.0-120	

L1798028-20 Original Sample (OS) • Matrix Spike (MS)

(OS) L1798028-20 11/15/24 01:46 • (MS) R4147043-4 11/15/24 02:12

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40.0	24.7	60.3	89.0	1	80.0-120	
Fluoride	8.00	0.314	8.46	102	1	80.0-120	
Sulfate	40.0	201	198	0.000	1	80.0-120	V

L1798028-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1798028-21 11/15/24 02:50 • (MS) R4147043-7 11/15/24 03:16 • (MSD) R4147043-8 11/15/24 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 %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	49.6	79.9	79.9	75.8	75.7	1	80.0-120	J6	J6	0.0826	15
Fluoride	8.00	0.157	7.88	8.24	96.5	101	1	80.0-120			4.50	15
Sulfate	40.0	75.0	99.9	100	62.4	62.6	1	80.0-120	J6	J6	0.0933	15

Method Blank (MB)

(MB) R4146192-1 11/13/24 11:16

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.547	1.00
Fluoride	U		0.0761	0.150
Sulfate	U		0.637	5.00

L1798033-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1798033-10 11/13/24 11:50 • (DUP) R4146192-3 11/13/24 12:07

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	47.4	47.4	1	0.128		15
Fluoride	0.211	0.227	1	7.13		15
Sulfate	106	106	1	0.206		15

L1798033-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1798033-11 11/13/24 12:58 • (DUP) R4146192-6 11/13/24 13:15

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	43.7	43.7	1	0.0664		15
Fluoride	ND	ND	1	0.000		15
Sulfate	99.0	98.6	1	0.467		15

Laboratory Control Sample (LCS)

(LCS) R4146192-2 11/13/24 11:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	37.4	93.6	80.0-120	
Fluoride	8.00	7.66	95.8	80.0-120	
Sulfate	40.0	38.5	96.3	80.0-120	

L1798033-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1798033-10 11/13/24 11:50 • (MS) R4146192-4 11/13/24 12:24 • (MSD) R4146192-5 11/13/24 12:41

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	47.4	74.8	74.7	68.7	68.4	1	80.0-120	J6	J6	0.160	15
Fluoride	8.00	0.211	7.28	7.66	88.4	93.1	1	80.0-120			5.11	15
Sulfate	40.0	106	123	123	42.9	42.6	1	80.0-120	J6	J6	0.0877	15

L1798033-11 Original Sample (OS) • Matrix Spike (MS)

(OS) L1798033-11 11/13/24 12:58 • (MS) R4146192-7 11/13/24 13:31

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40.0	43.7	72.0	70.6	1	80.0-120	J6
Fluoride	8.00	ND	7.19	89.9	1	80.0-120	
Sulfate	40.0	99.0	116	43.4	1	80.0-120	J6

Method Blank (MB)

(MB) R4148626-1 11/20/24 17:55

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) R4148626-2 11/20/24 17:56

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron	1.00	0.965	96.5	80.0-120	

L1798033-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1798033-13 11/20/24 17:58 • (MS) R4148626-4 11/20/24 18:01 • (MSD) R4148626-5 11/20/24 18:03

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	ND	1.13	1.13	95.1	96.0	1	75.0-125			0.724	20

Method Blank (MB)

(MB) R4147510-1 11/18/24 22:35

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Calcium	U		0.0925	1.00

Laboratory Control Sample (LCS)

(LCS) R4147510-2 11/18/24 22:38

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/l	mg/l	%	%	
Calcium	5.00	4.83	96.5	80.0-120	

L1798031-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1798031-01 11/18/24 22:41 • (MS) R4147510-4 11/18/24 22:48 • (MSD) R4147510-5 11/18/24 22:51

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Calcium	5.00	80.3	84.1	84.1	74.8	75.1	1	75.0-125	V		0.0207	20

Method Blank (MB)

(MB) R4147471-1 11/18/24 19:12

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Calcium	U		0.0925	1.00

Laboratory Control Sample (LCS)

(LCS) R4147471-2 11/18/24 19:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium	5.00	4.99	99.9	80.0-120	

L1798046-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1798046-01 11/18/24 19:19 • (MS) R4147471-4 11/18/24 19:25 • (MSD) R4147471-5 11/18/24 19:28

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	74.7	79.0	79.0	86.2	85.6	1	75.0-125			0.0325	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

MDL	Method Detection Limit.
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
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.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

Company Name/Address:
Alliance Technical Group - Bryant, AR

219 Brown Lane
Little Rock, AR 72022

Billing Information:
Accounts Payable
219 Brown Ln.
Bryant, AR 72022

Pres Chk

Report to:
Jonathan Brown

Email To:
Jonathan.Brown@AllianceTG.com;jacob.colbert

Project Description:
Entergy ISES

City/State Collected: Newport, AR

Please Circle: PT MT CT ET

Phone: 501-847-7077

Client Project #
1145-21-081

Lab Project #
GBMCBAR-ENTERGYISES

Collected by (print):
JLC/BLS

Site/Facility ID #
ISES

P.O. #

Collected by (signature):
Jacob Colbert

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	B, Ca 250mlHDPE-HNO3	Cl, F, SO4 250mlHDPE-NoPres	TDS 1L-HDPE NoPres								Remarks	Sample # (lab only)
MW-1R		GW		11-8-24	1030	3	X	X	X								6.59	-01
MW-2		GW		11-4-24	1415												7.35	-02
MW-3		GW		11-7-24	1210												6.36	-03
MW-6		GW		11-5-24	1635												6.39	-04
MW-7		GW		11-5-24	1240												7.17	-05
MW-8		GW		11-4-24	1705												6.93	-06
MW-9		GW		11-5-24	0949												6.48	-07
MW-10		GW		11-5-24	1510												6.57	-08
MW-11		GW		11-5-24	1420												6.66	-09
MW-14		GW		11-6-24	1455												6.52	-10

* 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) Jacob Colbert | Date: 11-8-24 | Time: 1340 | Received by: (Signature)

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

Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) Donyale

Trip Blank Received: Yes / No — HCL / MeoH TBR

Temp: °C Bottles Received: 45

Date: 11/9/24 PG Time: 0900

If pre... Time

Hold:

Condition: NCF / OK

Sample Receipt Checklist

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

Chain of Custody Page ___ of ___

Pace
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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 # L1498033
A027

Acctnum: GBMCBAR
Template: T210389
Prelogin: P1107822
PM: 829 - Brittnie L Boyd
PB:

Shipped Via: FedEx Ground

PH - 10BDH0941
TRC - 3327A333

Company Name/Address:
Alliance Technical Group - Bryant, AR

219 Brown Lane
Little Rock, AR 72022

Billing Information:
Accounts Payable
219 Brown Ln.
Bryant, AR 72022

Pres Chk

Report to:
Jonathan Brown

Email To:
Jonathan.Brown@AllianceTG.com;jacob.colbert

Project Description:
Entergy ISES

City/State Collected: Vevay, AR

Please Circle: PT MT CT ET

Phone: **501-847-7077**

Client Project #
1145-21-081

Lab Project #
GBMCBAR-ENTERGYISES

Collected by (print):
JL / BLS

Site/Facility ID #
ISES

P.O. #

Collected by (signature):
Jacob Colbert

Immediately Packed on Ice N ___ Y ___

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

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	B, Ca 250mlHDPE-HNO3	Cl, F, SO4 250mlHDPE-NoPres	TDS 1L-HDPE NoPres	Remarks	Sample # (lab only)
MW-15	G	GW		11-6-24	1310	3	x	x	x	pH 6.56	-11
MW-16		GW		11-6-24	1555					6.90	-12
MW-17		GW		11-6-24	1720					6.44	-13
FIELD BLANK 1		GW		11-7-24	1000					-	-14
DUPLICATE 1 (MW-16)		GW		11-6-24	1555					6.90	-15
		GW									
		GW									
		GW									
		GW									
		GW									

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

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

SDG # L1498033

Table #

Acctnum: **GBMCBAR**

Template: **T210389**

Prelogin: **P1107822**

PM: **829 - Brittnie L Boyd**

PB:

Shipped Via: **FedEX Ground**

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist

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

Relinquished by : (Signature) Jacob Colbert	Date: 11-8-24	Time: 1340	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR —
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 45
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Damaris	Date: 11.9.24 Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

L1798033

Fed Ex tracking #	Gun ID	Temperature
417169164309	TLAG	0.6 to 0.6
417169164277	TLAG	0.4 to 0.4
417169167227	TLAG	1.8 to 1.8
417169164397	TLAG	0.9 to 0.9
417169164261	TLAG	1.7 to 1.7
417169164331	TLAG	0.2 to 0.2
417169164283	TLAG	0.5 to 0.5
417169167076	TLAG	0.1 to 0.1
417169164310	TLAG	3.3 to 3.3
417169164294	TLAG	1.0 to 1.0
417169164370	TLAG	1.1 to 1.1

Dewang
Name

11.9.24
Date

APPENDIX 5

Field Sampling Forms

GROUNDWATER SAMPLING LOG

SITE NAME: ISES	SITE LOCATION: Newark, AR	
WELL NO: 511 S	SAMPLE ID: 511 S	DATE: 11-4-24

PURGING DATA

WELL DIAMETER (inches): 2in	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): —	STATIC DEPTH TO WATER (feet): 30.65	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): N/A	WELL SCREEN INTERVAL DEPTH: — feet to — feet	PURGING INITIATED AT: 1310	PURGING ENDED AT: 1335	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1325					7.09	18.57	359	1.55	306	4.4	Clear
1330					7.10	18.60	361	1.59	305	0.0	"
1335					7.14	18.62	360	1.58	304	1.3	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC, BLS / ATC	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1335	SAMPLING ENDED AT: 1345
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS: Marks calibrated prior to purging

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

* Built in bladder. No decon.

GROUNDWATER SAMPLING LOG

SITE NAME: JSES	SITE LOCATION: Newark, AR	
WELL NO: 6035	SAMPLE ID: 6035	DATE: 11-6-24

PURGING DATA

WELL DIAMETER (inches): 2.0	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): —	STATIC DEPTH TO WATER (feet): 32.26	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): N/A - built in	WELL SCREEN INTERVAL DEPTH: — feet to — feet	PURGING INITIATED AT: 1017	PURGING ENDED AT: 1045	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1035					6.66	18.63	1,000	8.36	361	291	slight turbid
1040					6.66	18.74	1,000	8.97	358	292	"
1045					6.67	18.67	998	8.36	357	295	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC, BLS - ATG	SAMPLER(S) SIGNATURE(S): David Cahoon	SAMPLING INITIATED AT: 1045	SAMPLING ENDED AT: 1058
PUMP OR TUBING DEPTH IN WELL (feet): N/A - built in	TUBING MATERIAL CODE: —	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential**: ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: TSES	SITE LOCATION: Newark, AR	
WELL NO: 6045	SAMPLE ID: 6045	DATE: 11-4-24

PURGING DATA

WELL DIAMETER (inches): 2in	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): —	STATIC DEPTH TO WATER (feet): 30.44	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) N/A = (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) N/A = gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Bailer in	WELL SCREEN INTERVAL DEPTH: — feet to — feet	PURGING INITIATED AT: 1512	PURGING ENDED AT: 1540	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1530					6.69	17.41	825	1.12	351	4.8	Clear
1535					6.70	17.57	824	1.09	351	3.0	"
1540					6.73	17.63	819	1.06	354	2.0	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLL, BLS / ATG	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1540	SAMPLING ENDED AT: 1548
PUMP OR TUBING DEPTH IN WELL (feet): Bailer in	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp			

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: TSES	SITE LOCATION: Newark, AR	
WELL NO: 605 S	SAMPLE ID: 605 S	DATE: 11-4-24

PURGING DATA

WELL DIAMETER (inches): 2 in	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): -	STATIC DEPTH TO WATER (feet): 30.02	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) N/A = (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) N/A = gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in	WELL SCREEN INTERVAL DEPTH: – feet to – feet	PURGING INITIATED AT: 1555	PURGING ENDED AT: 1625	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1615					6.90	17.71	823	0.50	316	10.3	Clear
1620					6.88	17.72	813	0.43	314	9.8	"
1625					6.89	17.71	806	0.40	311	10.1	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: SLC TSES / ATL	SAMPLER(S) SIGNATURE(S): Samuel Collins	SAMPLING INITIATED AT: 1625	SAMPLING ENDED AT: 1633
PUMP OR TUBING DEPTH IN WELL (feet): Built in	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: ISES	SITE LOCATION: Newark, AR	
WELL NO: 6065	SAMPLE ID: 6065	DATE: 11-7-24

PURGING DATA

WELL DIAMETER (inches): 2in	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): ~	STATIC DEPTH TO WATER (feet): 30.45	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 32 ft	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 0925	PURGING ENDED AT: 1000	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
0925					6.46	17.14	738	3.30	263	5.0	Clear
0930					6.46	17.17	734	3.02	259	4.8	"
0935					6.46	17.19	730	2.85	259	3.6	"
0940					6.47	17.19	726	1.91	259	1.8	"
0945					6.46	17.12	722	1.16	258	2.3	"
0950					6.45	17.17	719	1.07	255	4.4	"
0955					6.43	17.20	716	1.01	253	4.7	"
1000					6.43	17.17	711	0.98	250	4.6	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC / BLS / ATG	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1000	SAMPLING ENDED AT: 1011
PUMP OR TUBING DEPTH IN WELL (feet): 32 ft	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING Y N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS: Horiba re-calibrated prior to purging/sampling

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: ISES	SITE LOCATION: Newark, AR
WELL NO: 7015-R MW-1	SAMPLE ID: 7015-R MW-1
	DATE: 11-5-24

PURGING DATA

WELL DIAMETER (inches): 2in	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): —	STATIC DEPTH TO WATER (feet): 33.89	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Build in	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1005	PURGING ENDED AT: 1030	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1020					6.60	18.99	1,360	4.25	343	0.4	Clear
1025					6.60	19.07	1,350	4.41	345	1.0	"
1030					6.59	19.02	1,340	4.51	347	0.1	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: SLC / BLS / ATG	SAMPLER(S) SIGNATURE(S): David Cornell	SAMPLING INITIATED AT: 1030	SAMPLING ENDED AT: 1045
PUMP OR TUBING DEPTH IN WELL (feet): Build in	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: ISES		SITE LOCATION: Newark, Ark	
WELL NO: 7025 MW-2	SAMPLE ID: 7025 MW-2		DATE: 11-14-24

PURGING DATA

WELL DIAMETER (inches): 2 in	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): -	STATIC DEPTH TO WATER (feet): 32.53	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) N/A = (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) N/A = gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1350	PURGING ENDED AT: 1415	TOTAL VOLUME PURGED (gallons): -

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1405					7.34	18.52	968	1.24	317	0.0	Clear
1410					7.33	18.53	166	1.19	317	0.0	"
1415					7.35	18.54	962	1.17	317	0.0	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: SLL/BLS Alliance	SAMPLER(S) SIGNATURE(S): Brenda Collins	SAMPLING INITIATED AT: 1415	SAMPLING ENDED AT: 1426
PUMP OR TUBING DEPTH IN WELL (feet): Built in	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: ISES		SITE LOCATION: Newark, AR	
WELL NO: 7035 MW-3	SAMPLE ID: 7035 MW-3		DATE: 11-7-24

PURGING DATA

WELL DIAMETER (inches): 2in	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): -	STATIC DEPTH TO WATER (feet): 33.89	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 35.00	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1125	PURGING ENDED AT: 1210	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1145					6.34	17.52	614	5.61	378	6.6	clear
1150					6.25	18.33	629	5.28	376	6.3	"
1155					6.28	17.95	619	4.94	375	6.0	"
1200					6.35	17.90	599	4.09	373	3.5	"
1205					6.34	17.82	595	3.87	372	3.5	"
1210					6.36	17.82	593	3.79	374	3.6	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: SLL - BLS / ATG	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1210	SAMPLING ENDED AT: 1226
PUMP OR TUBING DEPTH IN WELL (feet): 35.00	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: _____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp			

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS
pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: ISES	SITE LOCATION: Newark, AR	
WELL NO: 7055	SAMPLE ID: 7055	DATE: 11-4-24

PURGING DATA

WELL DIAMETER (inches): 2 in	TUBING DIAMETER (inches): 1/4"	TOTAL WATER DEPTH (feet): —	STATIC DEPTH TO WATER (feet): 31.70	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) N/A = (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) N/A = gallons + (gallons/foot X feet) + gallons = gallons

PUMP OR TUBING DEPTH IN WELL (feet): Bailer	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1435	PURGING ENDED AT: 1500	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1450					6.75	17.77	794	2.01	351	1.7	Clear
1455					6.72	17.63	794	2.01	354	2.0	"
1500					6.72	17.58	791	1.95	357	0.8	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC/BLS ATG	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1500	SAMPLING ENDED AT: 1508
PUMP OR TUBING DEPTH IN WELL (feet): Bailer	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: ISES	SITE LOCATION: Newark, AR	
WELL NO: 7065 MW6	SAMPLE ID: 7065 MW6	DATE: 11-5-24

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): —	STATIC DEPTH TO WATER (feet): 31.29	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Bladder	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1610	PURGING ENDED AT: 1635	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1625					6.38	17.09	604	6.96	349	1.0	Clear
1630					6.44	17.09	601	6.76	350	0.6	"
1635					6.39	17.08	599	6.70	358	1.0	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: SLC / BLS ATC	SAMPLER(S) SIGNATURE(S): Brandy Colbert	SAMPLING INITIATED AT: 1635	SAMPLING ENDED AT: 1643

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: ISES	SITE LOCATION: Newark, DE	
WELL NO: 7075 MW-7	SAMPLE ID: 7075 MW7	DATE: 11-5-24

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches):	TOTAL WATER DEPTH (feet): –	STATIC DEPTH TO WATER (feet): 31.13	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) N/A = (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) N/A = gallons + (gallons/foot X feet) + gallons = gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1215	PURGING ENDED AT: 1240	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1230					7.17	18.31	693	13.46	333	2.3	Clear
1235					7.17	18.30	697	13.04	339	1.7	"
1240					7.17	18.27	701	13.25	342	1.4	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC, BLS / ATG	SAMPLER(S) SIGNATURE(S): Jacob Colbert	SAMPLING INITIATED AT: 1240	SAMPLING ENDED AT: 1250
PUMP OR TUBING DEPTH IN WELL (feet): Built in	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: TSES	SITE LOCATION: Newark, AR	
WELL NO: 7085 - MW8	SAMPLE ID: 7085 - MW8	DATE: 11-4-24

PURGING DATA

WELL DIAMETER (inches): 2 in	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): —	STATIC DEPTH TO WATER (feet): 32.14	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) N/A = (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) N/A = gallons + (gallons/foot X feet) + gallons = gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1640	PURGING ENDED AT: 1705	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1655					6.99	18.73	929	2.29	363	0.0	Clear
1700					6.93	18.67	927	2.39	363	0.0	"
1705					6.93	18.63	924	2.46	365	0.0	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC TSES ATG	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1705	SAMPLING ENDED AT: 1717
PUMP OR TUBING DEPTH IN WELL (feet): Built in	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD-DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: TSES		SITE LOCATION: Newark, NJ	
WELL NO: 7095 MW-9	SAMPLE ID: 7095 MW-9		DATE: 11-5-24

PURGING DATA

WELL DIAMETER (inches): 2 in	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): —	STATIC DEPTH TO WATER (feet): 31.10	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) N/A = (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) N/A = gallons + (gallons/foot X feet) + gallons = gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 0910	PURGING ENDED AT: 0940	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
0930					6.49	18.42	1,100	0.12	341	1.5	Clear
0935					6.49	18.41	1,100	0.08	343	1.8	"
0940					6.49	18.36	1,100	0.32	345	1.4	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC / BLS ATC	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0940	SAMPLING ENDED AT: 0953
PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS: Horiba re-calibrated prior to purging

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: TSES	SITE LOCATION: Newark LR	
WELL NO: 7105 MW10	SAMPLE ID: 7105 MW-10	DATE: 11-5-24

PURGING DATA

WELL DIAMETER (inches): 2 in	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): —	STATIC DEPTH TO WATER (feet): 23.90	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in Pump	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1442	PURGING ENDED AT: 1510	TOTAL VOLUME PURGED (gallons): —

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1500					6.56	18.11	781	6.63	313	0.4	Clear
1505					6.56	18.03	773	6.46	318	0.4	|
1510					6.57	18.00	763	6.23	321	0.8	|

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DLC/BLS ATS	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1510	SAMPLING ENDED AT: 1524
PUMP OR TUBING DEPTH IN WELL (feet): Built in	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: _____ μm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp			

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: ESE	SITE LOCATION: Newark, DE
WELL NO: 715 - MW-11	SAMPLE ID: 715 MW-11
DATE: 11-5-24	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches):	TOTAL WATER DEPTH (feet): —	STATIC DEPTH TO WATER (feet): 34.05	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1309	PURGING ENDED AT: 1420	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1340					6.66	17.52	496	20.10	309	9.7	clear
1345					6.69	17.59	495	16.11	306	10.4	
1350					6.66	17.61	494	14.63	305	7.0	
1355					6.72	17.61	491	14.27	302	6.0	
1400					6.67	17.58	488	12.91	306	6.5	
1405					6.66	17.58	485	11.81	303	4.1	
1410					6.72	17.58	483	10.74	306	1.9	
1415					6.67	17.58	483	10.36	310	0.0	
1420					6.66	17.63	482	10.11	309	4.6	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; 1" = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC/BLS ATC	SAMPLER(S) SIGNATURE(S): Jacob Cosbert	SAMPLING INITIATED AT: 1420	SAMPLING ENDED AT: 1433
PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: TSES	SITE LOCATION: Newark, AR	
WELL NO: 7125	SAMPLE ID: 7125	DATE: 11-5-24

PURGING DATA

WELL DIAMETER (inches): 2 in	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): —	STATIC DEPTH TO WATER (feet): 33.30	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1530	PURGING ENDED AT: 1555	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1545					6.61	18.00	808	5.55	330	2.1	clear
1550					6.65	18.02	805	5.53	329	1.5	"
1555					6.63	18.01	797	5.45	332	1.4	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC/BLS ATG	SAMPLER(S) SIGNATURE(S): Jacob Cullum	SAMPLING INITIATED AT: 1555	SAMPLING ENDED AT: 1604
PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: ISES	SITE LOCATION: Newark, AR	
WELL NO: 713S	SAMPLE ID: 713S	DATE: 11-6-24

PURGING DATA

WELL DIAMETER (inches): 2 in	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): –	STATIC DEPTH TO WATER (feet): 34.59	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 0900	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
0915					6.48	17.68	887	3.87	349	0.0	Clear
0920					6.52	17.68	883	3.66	350	0.0	)
0925					6.52	17.73	879	3.54	349	3.5	)

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC / BLS ATL	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 0925	SAMPLING ENDED AT: 0944
PUMP OR TUBING DEPTH IN WELL (feet): Built in pump	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ μm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y N (replaced)	DUPLICATE: (Y) N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp			

REMARKS: Horiba re-calibrated prior to purge. Dup 2 taken

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential**: ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: TSES	SITE LOCATION: Newark, AR	
WELL NO: 7145 MW-14	SAMPLE ID: 7145 MW-14	DATE: 11-6-24

PURGING DATA

WELL DIAMETER (inches): 2 in	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): –	STATIC DEPTH TO WATER (feet): 33.89	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 35.50	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1338	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1355					6.54	19.55	806	7.37	247	4.9	Clear
1400					6.53	19.85	805	7.37	300	6.5	
1405					6.55	19.46	807	7.16	304	8.6	
1410					6.53	19.44	813	6.67	307	9.0	
1415					6.54	19.67	719	6.36	309	5.6	
1420					6.53	19.41	823	3.78	311	5.9	
1425					6.53	19.28	825	3.58	312	4.3	
1430					6.54	19.26	825	3.50	313	3.4	
1435					6.52	19.28	824	3.45	315	2.7	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: TLC/BLS ATG	SAMPLER(S) SIGNATURE(S): Sandra Golston	SAMPLING INITIATED AT: 1435	SAMPLING ENDED AT: 1447
PUMP OR TUBING DEPTH IN WELL (feet): 35.50	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: ISES		SITE LOCATION: Newark, AR	
WELL NO: 715 S MW 15	SAMPLE ID: 715 S MW-15		DATE: 11-6-24

PURGING DATA

WELL DIAMETER (inches): 2in	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): —	STATIC DEPTH TO WATER (feet): 32.51	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 34.50	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1225	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1245					6.59	19.17	733	0.98	-45	12.0	clear
1250					6.57	19.22	726	0.88	-56	13.4	
1255					6.58	18.88	714	0.83	-60	14.6	
1300					6.57	18.77	703	0.76	-63	8.5	
1305					6.58	18.86	714	0.76	-63	9.3	
1310					6.56	19.07	706	0.74	-66	8.6	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: SLC / BLS ATG	SAMPLER(S) SIGNATURE(S): Brandi Cobbs	SAMPLING INITIATED AT: 1310	SAMPLING ENDED AT: 1326
PUMP OR TUBING DEPTH IN WELL (feet): 34.50	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING Y (N replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: TSES	SITE LOCATION: Newark, AR	
WELL NO: 7165 MW-16	SAMPLE ID: 7165 MW-16	DATE: 11-6-24

PURGING DATA

WELL DIAMETER (inches): 2 in	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): —	STATIC DEPTH TO WATER (feet): 34.60	PURGE PUMP TYPE OR BAILER: Bailer

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 36.50	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1501	PURGING ENDED AT: 1555	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1520					6.94	18.67	1,410	7.02	325	20.9	clear
1525					6.93	18.61	1,380	6.46	327	21.2	clear
1530					6.92	18.58	1,370	6.19	327	20.2	"
1535					6.92	18.44	1,350	5.84	328	17.4	"
1540					6.91	18.58	1,340	5.54	328	15.3	"
1545					6.91	18.42	1,320	5.26	328	12.3	"
1550					6.91	18.26	1,310	5.11	329	11.8	"
1555					6.90	18.32	1,300	5.01	330	12.2	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FL): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: SLC / BLS ATG	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1555	SAMPLING ENDED AT: 1615
PUMP OR TUBING DEPTH IN WELL (feet): 36.50	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: (Y) N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp			

REMARKS: Duplicate 1 taken

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: TS125		SITE LOCATION: Newark, AR	
WELL NO: 7175 MW-17	SAMPLE ID: 7175 MW-17		DATE: 11-6-24

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): -	STATIC DEPTH TO WATER (feet): 33.87	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 36.60	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1625	PURGING ENDED AT: 1720	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1645					6.58	19.06	661	7.18	354	0.6	Clear
1650					6.57	17.95	660	7.02	357	0.8	"
1655					6.52	17.92	671	5.98	360	0.8	"
1700					6.48	17.85	677	5.58	360	0.3	"
1705					6.47	18.21	724	4.74	358	1.8	"
1710					6.44	17.90	751	4.26	358	2.8	"
1715					6.43	17.89	753	4.20	358	3.2	"
1720					6.44	17.81	756	3.97	357	3.2	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC / BLS ATL	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1720	SAMPLING ENDED AT: 1740
PUMP OR TUBING DEPTH IN WELL (feet): 36.00	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: ISES	SITE LOCATION: Newark, AR	
WELL NO: MW-19	SAMPLE ID: MW-19	DATE: 11-7-24

PURGING DATA

WELL DIAMETER (inches): 2in	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): —	STATIC DEPTH TO WATER (feet): 27.38	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 30.60	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1617	PURGING ENDED AT: 1720	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1645					6.30	16.94	883	1.04	372	57.6	Slightly turbid
1650					6.28	16.93	885	1.34	371	43.7	"
1655					6.29	16.92	887	1.51	372	34.3	"
1700					6.28	16.91	888	1.62	371	24.7	"
1705					6.29	16.89	889	1.69	372	21.4	"
1710					6.29	16.92	890	1.76	372	16.0	Clear
1715					6.28	16.91	892	1.75	370	15.0	"
1720					6.29	16.91	892	1.71	372	14.8	"

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: SLL, DLS ATG	SAMPLER(S) SIGNATURE(S): Daniel Gallagher	SAMPLING INITIATED AT: 1720	SAMPLING ENDED AT: 1738
PUMP OR TUBING DEPTH IN WELL (feet): 30.00	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

27.38'

GROUNDWATER SAMPLING LOG

SITE NAME: ISES	SITE LOCATION: Newark, NR	
WELL NO: MW-20	SAMPLE ID: MW-20	DATE: 11-7-24

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): –	STATIC DEPTH TO WATER (feet): 25.02	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 30.00	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1424	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1435					6.36	17.67	1,030	2.77	365	5.9	Clear
1500					6.35	17.62	1,030	2.74	365	2.9	
1505					6.33	17.61	1,030	2.75	368	1.4	
1510					6.35	17.60	1,030	2.88	363	0.7	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC, BLS ATG	SAMPLER(S) SIGNATURE(S): Brandy Colbert	SAMPLING INITIATED AT: 1510	SAMPLING ENDED AT: 1552
PUMP OR TUBING DEPTH IN WELL (feet): 30.00	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: (Y) N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS: Duplicate 3 taken.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts

GROUNDWATER SAMPLING LOG

SITE NAME: ISES	SITE LOCATION: Newark, AR	
WELL NO: MW-21	SAMPLE ID: MW-21	DATE: 11-7-24

PURGING DATA

WELL DIAMETER (inches): 2 in	TUBING DIAMETER (inches): 1/4	TOTAL WATER DEPTH (feet): ~	STATIC DEPTH TO WATER (feet): 28.96	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet − feet) X gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = N/A gallons

PUMP OR TUBING DEPTH IN WELL (feet): 30.00	WELL SCREEN INTERVAL DEPTH: feet to feet	PURGING INITIATED AT: 1249	PURGING ENDED AT: 1355	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1310					6.55	18.27	1020	4.51	374	418	Turbid
1315					6.54	18.27	1020	4.54	375	382	/
1320					6.54	18.25	1,040	4.98	375	293	/
1325					6.54	18.27	1,030	4.93	375	262	/
1330					6.54	18.29	1,030	4.83	376	256	/
1335					6.53	18.25	1,030	4.75	378	228	/
1340					6.53	18.26	1,030	4.75	378	212	/
1345					6.54	18.26	1,030	4.74	379	187	/
1350					6.54	18.24	1,030	4.76	380	178	/
1355					6.54	18.24	1,030	4.79	380	177	/

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: JLC, BLS ATG	SAMPLER(S) SIGNATURE(S): Jacob Collard	SAMPLING INITIATED AT: 1355	SAMPLING ENDED AT: 1415
PUMP OR TUBING DEPTH IN WELL (feet): 30.00	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING (Y) N (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	Final pH/ Temp			

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE** = Low Density Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** ± 3% **Specific Conductance:** ± 3% **Dissolved Oxygen:** (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) **Turbidity:** (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) **Oxidation/Reduction Potential:** ± 10 millivolts