

Entergy Arkansas, LLC White Bluff Steam Electric Station Landfill Cells 1-4

2024 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:



4545 Sherwood Common Blvd Building 3, Suite A Baton Rouge, LA 70816

January 31, 2025



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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 White Bluff Steam Electric Station (Plant) located near Redfield, Arkansas. The Landfill receives CCR generated from the combustion of coal at the Plant. Management of the 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 2024 for the Landfill CCR Unit monitoring well network per 40 CFR §257.94. The statistical analyses completed for the second semi-annual 2023 and first semi-annual 2024 sampling event analytical data identified potential statistically significant increases (SSIs); therefore, alternate source demonstrations (ASDs) were performed for both semi-annual detection monitoring events and are attached to this report. Each of the ASDs performed were successful which resulted in the Landfill continuing to operate under the detection monitoring program. The Landfill CCR Unit operated under the detection monitoring program (40 CFR § 257.94) during the duration of 2024.

As indicated above, the potential SSIs identified during the second semi -annual 2023 and first semi-annual 2024 monitoring events are detailed in the tables below.



Table 1 Potential SSIs Second Semi-annual 2023 Monitoring Event						
Stratum	Well	Date	Analyte	Confirmed SSI? (Yes/No)		
	MW-102S	11/2023	Fluoride	No		
		11/2023	Calcium	No		
	MW-106S	11/2023	Fluoride	No		
	1003	11/2023	Sulfate	No		
		11/2023	TDS	No		
	MW-110S	11/2023	Boron	No		
I		11/2023	Fluoride	No		
		11/2023	Boron	No		
		11/2023	Calcium	No		
	MW-111S	11/2023	Fluoride	No		
		11/2023	Sulfate	No		
		11/2023	TDS	No		
	MW-105D	11/2023	Fluoride	No		
		11/2023	Boron	No		
	MW-112D	11/2023	Calcium	No		
		11/2023	TDS	No		



Table 2 Potential SSIs First Semi-annual 2024 Monitoring Event						
Stratum	Well	Date	Analyte	Confirmed SSI? (Yes/No)		
		05/2024	Calcium	No		
	MW-106S	05/2024	Fluoride	No		
	10100-1003	05/2024	Sulfate	No		
		05/2024	TDS	No		
		05/2024	Boron	No		
	MW-110S	05/2024	Calcium	No		
I		05/2024	TDS	No		
		05/2024	Boron	No		
		05/2024	Calcium	No		
		05/2024	Fluoride	No		
		05/2024	Sulfate	No		
		05/2024	TDS	No		
		05/2024	Boron	No		
ш	MW-112D	05/2024	Calcium	No		
		05/2024	TDS	No		
	MW-114D	05/2024	TDS	No		



1. INTRODUCTION

Entergy Arkansas, LLC (EAL), operates the Landfill for the disposal of CCRs at the Plant located near Redfield, Arkansas (Lat: 34.421658 / Long: -92.139455). 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 by 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 23 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 2024

EAL did not install any new wells or decommission any existing wells in the certified groundwater monitoring system during 2024.



4. GROUNDWATER MONITORING DATA

In accordance with §257.90(e)(3), all monitoring data obtained under §257.90 through §257.98 during 2024 are provided in Appendix B and C. Monitoring data includes:

- 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;
- Potentiometric maps showing groundwater flow direction for each monitoring event and table of groundwater level measurements; and
- Summary table of CCR Rule constituent results.



5. STATUS SUMMARY OF THE 2024 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 2024 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 (November) of 2024 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.
- In 2024, EAL completed a successful alternate source demonstration (ASD) per §257.94(e)(2) in response to potential statistically significant increases (SSIs) identified during the statistical evaluation of the data generated from the second half 2023 semi-annual detection monitoring event. As required by §257.94(e)(2), a copy of the ASD is included in Appendix D. Based on the successful evaluation conducted and results presented in the ASD, EAL continued with detection monitoring in accordance with §257.94.
- The first half 2024 semi-annual detection monitoring sampling was performed during May 2024. Based on statistical evaluation of the data potential SSIs were identified for boron, calcium, chloride, fluoride, and total dissolved solids (TDS). EAL completed a successful an ASD per §257.94 for the detection monitoring for the CADL CCR Unit. A copy of the ASD is provided in Appendix D.
- The second half 2024 semi-annual detection monitoring sampling was performed during November 2024. Statistical evaluation of the data will be performed during 2025 to determine if any SSIs are identified in accordance with §257.93(h).
- No problems were encountered during 2024 regarding the detection monitoring and corrective action system. Therefore, no actions were required to modify the system.
- The Landfill CCR Unit remained in detection monitoring for the duration of 2024.



6. **PROJECTED ACTIVITIES FOR 2025**

Planned activities for the program during 2025 are listed below:

- Statistical evaluation of the second-half 2024 and first-half 2025 detection monitoring sampling data will be performed during 2025 to determine if any SSIs are identified.
- Semi-annual detection monitoring is planned for June and December 2025.



APPENDIX A
WELL LOCATIONS



DRAWN BY:	S. MAJOR	PROJ. NO.:	341458
CHECKED BY:	S. SELLWOOD		
APPROVED BY:	J. HOUSE	FIGURE 1	
DATE:	OCTOBER 2020		



Two United Plaza 8550 United Plaza Blvd., Suite 502 Baton Rouge, LA Phone: 225.216.7483

341458-002.mxd



APPENDIX B GROUNDWATER LEVEL DATA

>TRC

Water Level Measurements First and Second Semi-annual 2024 Detection Monitoring Event							
		May 20), 2024	Novembe	r 18, 2024		
		Depth to	Groundwater	Depth to	Groundwater		
Well	TOC Elevation	Groundwater	Elevation	Groundwater	Elevation		
ID	(ft NAVD88)	(ft below MP)	(ft NAVD88)	(ft below MP)	(ft NAVD88)		
101S	385.76	36.20	349.56	38.62	347.14		
102S	381.17	33.08	348.09	34.41	346.76		
103S	339.34	15.55	323.79	21.18	318.16		
104S	377.08	28.36	348.72	32.59	344.49		
105S	370.54	26.69	343.85	28.98	341.56		
106S	341.03	11.58	329.45	14.05	326.98		
110S	337.36	10.67	326.69	15.91	321.45		
111S	336.53	13.38	323.15	15.02	321.51		
101D	387.06	96.66	290.40	96.66	290.40		
102D	381.40	91.07	290.33	91.20	290.20		
103D	339.18	41.36	297.82	42.23	296.95		
104D	376.76	86.46	290.30	86.60	290.16		
105D	370.04	79.76	290.28	79.94	290.10		
106D	339.39	42.10	297.29	41.58	297.81		
107D	322.26	20.90	301.36	21.25	301.01		
108D	341.61	45.01	296.60	45.85	295.76		
109D	371.31	78.83	292.48	79.31	292.00		
110D	338.26	33.24	305.02	34.59	303.67		
112D	378.29	87.52	290.77	87.63	290.66		
113D	305.46	9.60	295.86	10.33	295.13		
114D	350.22	60.18	290.04	60.41	289.81		
115D	361.27	74.31	286.96	75.28	285.99		
118D	322.81	40.79	282.02	40.81	282.00		



APPENDIX C GROUNDWATER MONITORING DATA



Sampling Schedule, Entergy White Bluff CADL Network					
	Sam	pled			
	24	11/18-11/21/2024			
	/20	1/2			
	/23	1/2			
	5/20-5/23/2024	8-1			
	5/2	1/1	Number of		
		-	Samples		
Well ID MW-101S	V		Collected		
MW-1013 MW-102S	X	X	2		
MW-1023	X	X	2		
MW-1033	X	X	2		
MW-1043 MW-105S	X	X	2		
MW-1053	X	X	2		
MW-1003	X X	X X	2		
MW-1103	X	× X	2		
MW-101D	X	<u>х</u>	2		
MW-101D	X	X	2		
MW-103D	X	X	2		
MW-104D	X	X	2		
MW-105D	X	X	2		
MW-106D	Х	Х	2		
MW-107D	Х	Х	2		
MW-108D	Х	Х	2		
MW-109D	Х	Х	2		
MW-110D	Х	Х	2		
MW-112D	Х	Х	2		
MW-113D	Х	Х	2		
MW-114D	Х	Х	2		
MW-115D	Х	Х	2		
MW-118D	Х	Х	2		

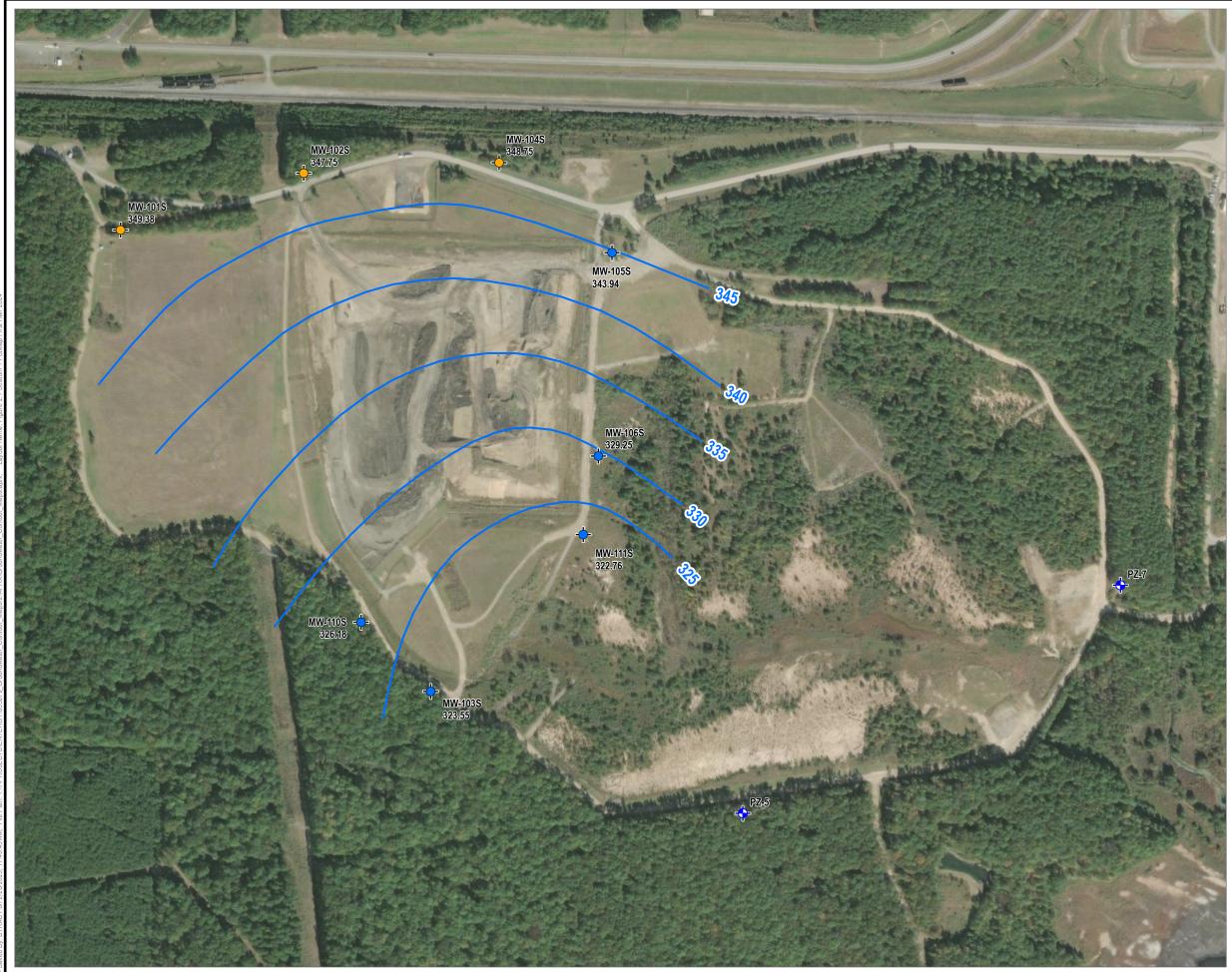
Notes: All samples collected through 2024 were part of the detection monitoring program. No samples collected through 2024 were part of an assessment monitoring program.



Summary of Analytical Results First Semi-annual 2024 Detection Monitoring Event								
Well ID	Date	Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	TDS (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	pH (s.u.)
MW-101S	05/20/2024	<0.200	17.7	7.06	206	<0.150	47.1	5.82
MW-102S	05/20/2024	<0.200	11.3	6.53	164	<0.150	19.7	5.73
MW-103S	05/22/2024	0.218	5.99	7.94	212	<0.150	50.7	4.1
MW-104S	05/21/2024	0.911	19	4.05	232	<0.150	64.5	6.88
MW-105S	05/21/2024	<0.200	17.7	3.73	179	<0.150	21.6	7.28
MW-106S	05/21/2024	7.12	38	12.5	1120	0.901	752	5.19
MW-110S	05/22/2024	2.41	8.88	5.5	475	0.294	225	6.07
MW-111S	05/20/2024	6.45	108	12.3	1270	0.957	756	3.96
MW-101D	05/20/2024	<0.200	45.3	5.66	316	<0.150	64.4	7.33
MW-102D	05/20/2024	0.301	65.7	7.64	386	<0.150	23.9	7.62
MW-103D	05/22/2024	0.312	56.1	6.67	435	<0.150	64.3	5.02
MW-104D	05/21/2024	0.26	56.7	10.1	334	<0.150	16.2	4.55
MW-105D	05/21/2024	0.293	59	8.17	339	<0.150	26.6	7.57
MW-106D	05/21/2024	0.243	36.9	4.74	184	<0.150	10.8	10.82
MW-107D	05/22/2024	0.315	77.9	19	512	<0.150	118	7.5
MW-108D	05/22/2024	0.336	66.4	12.2	481	<0.150	35.4	7.42
MW-109D	05/22/2024	0.312	48.5	6.15	361	<0.150	44.9	7.43
MW-110D	05/22/2024	0.309	46.4	6.35	352	<0.150	39.2	7.63
MW-112D	05/23/2024	0.288	42.4	6.19	327	<0.150	<5.00	7.49
MW-113D	05/23/2024	0.491	207	13.6	1090	<0.150	608	7.05
MW-114D	05/23/2024	0.275	54.5	8.23	332	<0.150	35.5	7.43
MW-115D	05/23/2024	0.339	42.7	5	352	<0.150	5.44	7.57
MW-118D	05/23/2024	0.274	89	9.1	535	<0.150	156	6.95
DUP-1 (MW- 111S)	05/20/2024	6.34	98.5	11.7	1180	1.04	814	
DUP-2 (MW- 106S)	05/21/2024	6.88	36	13.1	1000	0.941	768	
FIELD BLANK 1	05/23/2024	<0.200	<1.00	<1.00	<10.0	<0.150	<5.00	
FIELD BLANK 2	05/23/2024	<0.200	<1.00	<1.00	<10.0	<0.150	<5.00	



Summary of CCR Rule Constituent Results Second Semi-annual 2024 Detection Monitoring Event								
Well ID	Date	Boron (mg/L)	Calcium (mg/L)	Chloride (mg/L)	TDSs (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	pH (S.U)
MW-101S	11/20/2024	<0.200	15.4	7.02	204	<0.150	50.8	5.76
MW-102S	11/20/2024	<0.200	15.6	7.19	195	<0.150	27.5	5.87
MW-103S	11/22/2024	0.608	10.7	7.59	221	<0.750	92.3	4.96
MW-104S	11/19/2024	0.743	15.9	3.95	228	<0.150	71.1	5.2
MW-105S	11/19/2024	<0.200	17.9	4.9	199	<0.150	33.4	5.81
MW-106S	11/20/2024	6.84	41.7	11.9	1200	<1.50	802	4.12
MW-110S	11/18/2024	1.32	5.23	2.88	313	<0.150	149	4.78
MW-111S	11/22/2024	7.1	101	<100	1280	<15.0	768	3.92
MW-101D	11/22/2024	<0.200	56.3	6.39	382	<0.150	85.7	6.88
MW-102D	11/19/2024	0.269	76.6	7.47	556	<0.150	25.3	7.33
MW-103D	11/18/2024	0.218	42.9	6.17	435	0.217	98.3	7.69
MW-104D	11/19/2024	0.235	58.3	8.82	330	<0.150	23.1	7.37
MW-105D	11/19/2024	0.271	56.3	7.86	335	<0.150	29.8	7.5
MW-106D	11/20/2024	0.242	28.1	<10.0	184	<1.50	<50.0	10.59
MW-107D	11/22/2024	0.332	79.3	21.1	523	<0.150	128	7.52
MW-108D	11/20/2024	0.327	67.8	12	475	<0.150	34.9	7.35
MW-109D	11/21/2024	0.305	50.2	6.04	365	<0.150	45.9	7.37
MW-110D	11/18/2024	0.3	47.4	6.26	336	<0.150	40.4	7.53
MW-112D	11/22/2024	0.294	41.4	7.22	317	<0.150	5.08	7.46
MW-113D	11/21/2024	0.483	202	11.9	1170	<1.50	640	6.75
MW-114D	11/21/2024	0.27	54.5	7.17	321	<0.150	27.7	7.38
MW-115D	11/21/2024	0.329	44.8	4.2	333	<0.150	<5.00	7.45
MW-118D	11/21/2024	0.274	86	8.17	502	<0.150	141	7.16
DUP-1 (MW-106S)	11/20/2024	6.97	43.2	12	1200	<1.50	813	
DUP-2 (MW-112D)	11/22/2024	0.288	41.1	6.43	321	<0.150	<5.00	
FIELD BLANK 1	11/22/2024	<0.200	<1.00	<1.00	<10.0	<0.150	<5.00	
FIELD BLANK 2	11/22/2024	<0.200	<1.00	<1.00	<10.0	<0.150	<5.00	



÷	STRATUM I BACKROUND WELL
\	STRATUM I MW
•	STRATUM III BACKROUND WELL
\	STRATUM III MW
\	STRATUM III PIEZOMETER
	GROUNDWATER CONTOUR

BASE MAP: ESRI "WORLD IMAGERY" ONLINE SERVICE LAYER. DATA SOURCES: TRC



1:4,800 1" = 400'

400

800 FEET

PROJECT: ENTERGY WHITE BLUFF PLANT 1100 WHITE BLUFF ROAD REDFIELD, ARKANSAS TITLE: STRATUM 1 POTENTIOMETRIC MAP, FIRST HALF 2024 DRAWN BY: B. TRACY PROJ. NO.: 6

DRAWN BY:	B. TRACY	PROJ. NO.:	635879
CHECKED BY:	D. STITCHER		
APPROVED BY:	E. GAINES	FIGUR	E 2.1
DATE:	FEBRUARY 2025		
۲		BATON RO	OMMON BLVD. NG 3 - SUITE A UGE, LA 70816 E: 225.216.7483
FILE:		Groundwater	Contour Maps.aprx



- ✦ STRATUM I BACKROUND WELL
- ♦ STRATUM I MW
- ✦ STRATUM III BACKROUND WELL

- ↔ STRATUM III MW
- ♦ STRATUM III PIEZOMETER
- GROUNDWATER CONTOUR
- --- GROUNDWATER CONTOUR INFERRED

BASE MAP: ESRI "WORLD IMAGERY" ONLINE SERVICE LAYER. DATA SOURCES: TRC



1:4,900 1" = 408'

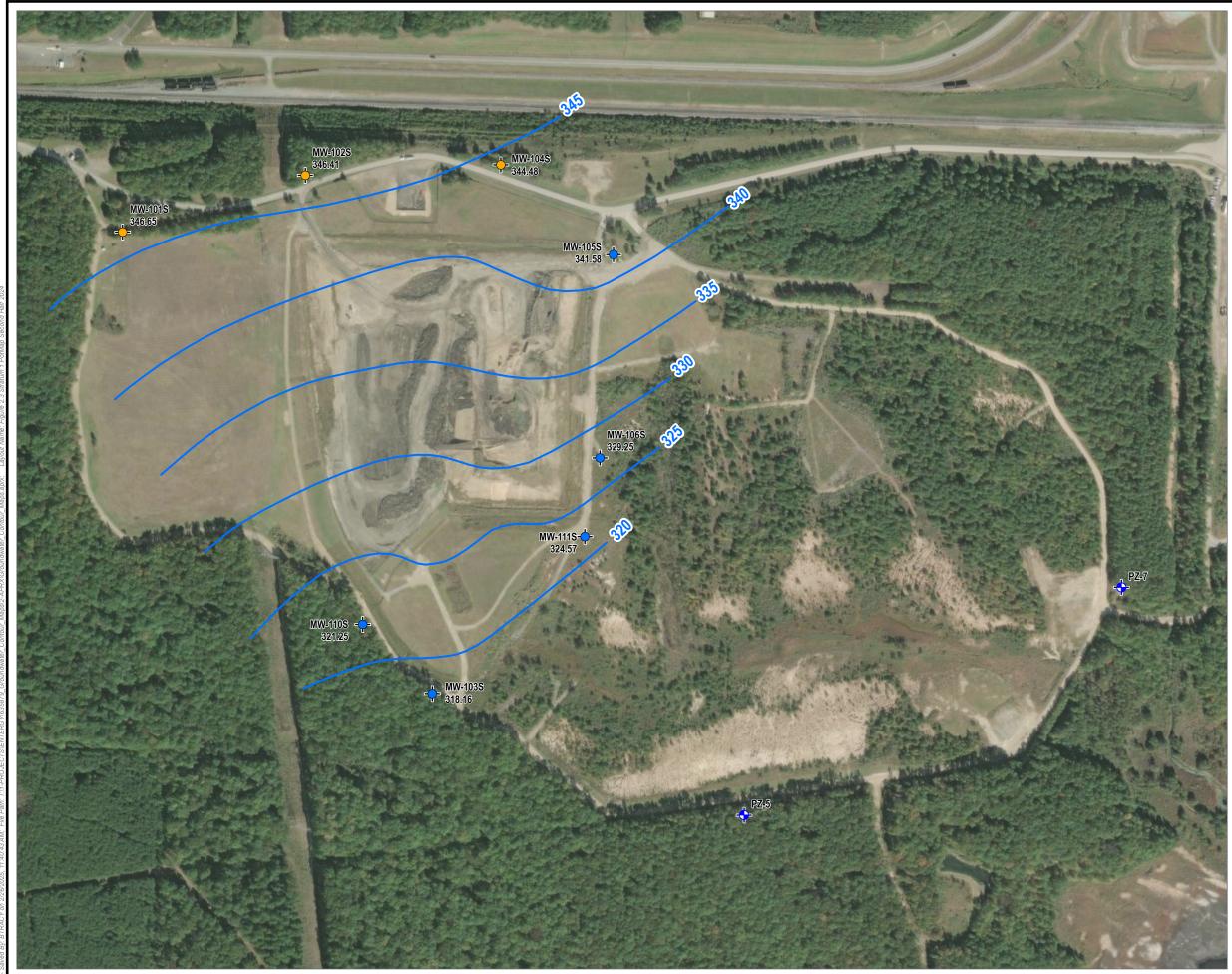
400

800 FEET

ENTERGY WHITE BLUFF PLANT 1100 WHITE BLUFF ROAD REDFIELD, ARKANSAS PROJECT:

TITLE: STRATUM 3 POTENTIOMETRIC MAP, FIRST HALF 2024

DRAWN BY:	B. TRACY	PROJ. NO.:	635879
CHECKED BY:	D. STITCHER		
APPROVED BY:	E. GAINES	FIGUF	RE 2.2
DATE:	FEBRUARY 2025		
\$ 1		BATON RO	COMMON BLVD. NG 3 - SUITE A DUGE, LA 70816 E: 225.216.7483
EU E.		Crownskie	Contaur Mana anni



STRATUM I BACKROUND WELL
 STRATUM I MW
 STRATUM III BACKROUND WELL
 STRATUM III MW
 STRATUM III PIEZOMETER
 GROUNDWATER CONTOUR

BASE MAP: ESRI "WORLD IMAGERY" ONLINE SERVICE LAYER. DATA SOURCES: TRC



1:4,800 1" = 400'

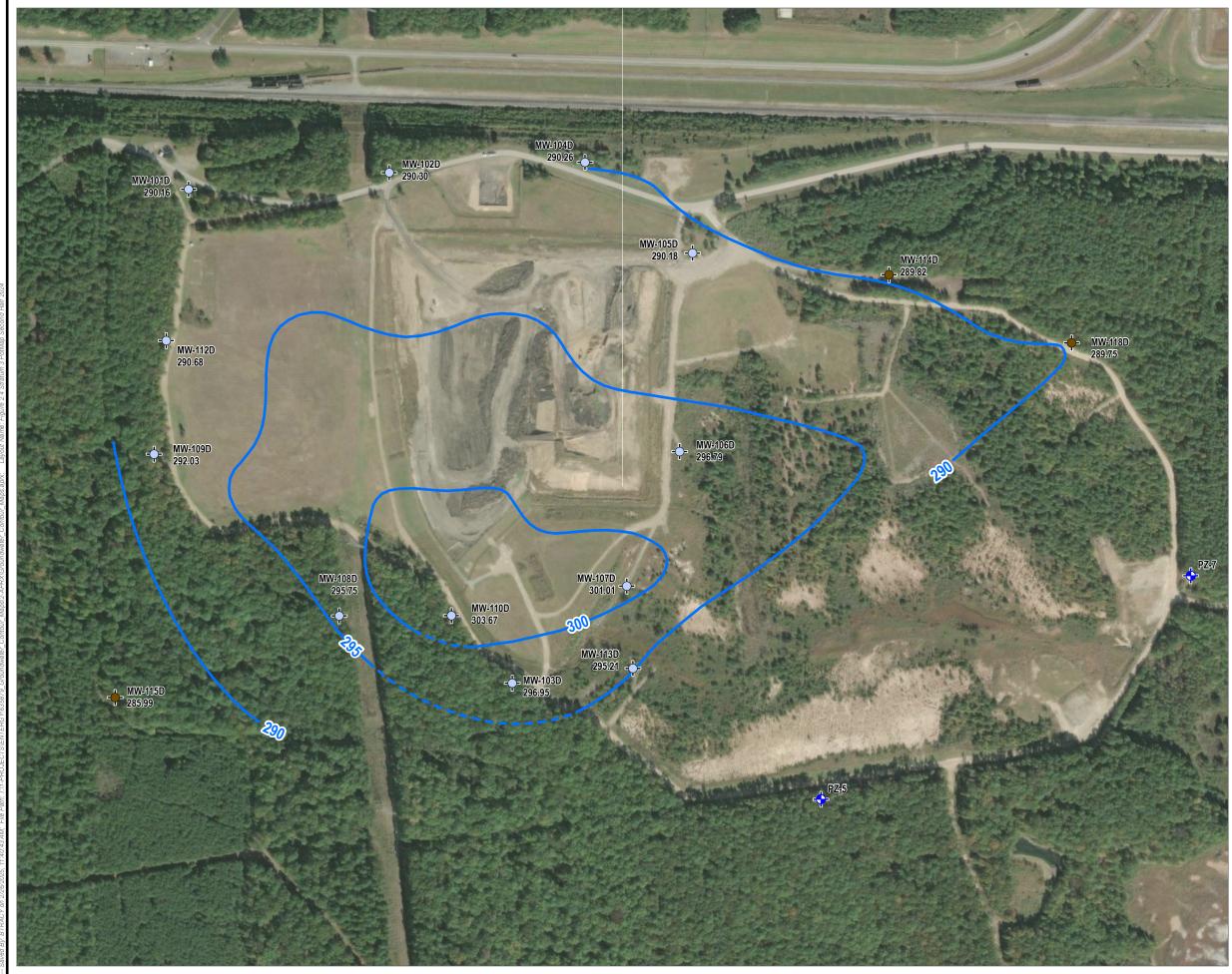
400

800 FEET

PROJECT: ENTERGY WHITE BLUFF PLANT 1100 WHITE BLUFF ROAD REDFIELD, ARKANSAS

STRATUM 1 POTENTIOMETRIC MAP, SECOND HALF 2024

DRAWN BY:	B. TRACY	PROJ. NO.:	635879
CHECKED BY:	D. STITCHER		
APPROVED BY:	E. GAINES	FIGUE	RE 2.3
DATE:	FEBRUARY 2025		
\$ 1		BATON RO	COMMON BLVD. ING 3 - SUITE A DUGE, LA 70816 E: 225.216.7483
EU E.		O	Orate Marca



♦ STRATUM I BACKROUND WELL

- ◆ STRATUM I MW
- ✦ STRATUM III BACKROUND WELL
- ↔ STRATUM III MW
- STRATUM III PIEZOMETER
- GROUNDWATER CONTOUR
- --- GROUNWATER CONTOUR INFERRED

BASE MAP: ESRI "WORLD IMAGERY" ONLINE SERVICE LAYER. DATA SOURCES: TRC



1:4,900 1" = 408'

400

800 FEET

PROJECT: ENTERGY WHITE BLUFF PLANT 1100 WHITE BLUFF ROAD REDFIELD, ARKANSAS

STRATUM 3 POTENTIOMETRIC MAP, SECOND HALF 2024

DRAWN BY:	B. TRACY	PROJ. NO.:	635879
CHECKED BY:	D. STITCHER		
APPROVED BY:	E. GAINES	FIGUE	RE 2.4
DATE:	FEBRUARY 2025		
\$ 1		BATON RO	COMMON BLVD. ING 3 - SUITE A DUGE, LA 70816 E: 225.216.7483
EH E.		Crowndwate	. Contaux Mana anni



Pace Analytical® ANALYTICAL REPORT July 15, 2024

Alliance Technical Group - Bryant, AR

Sample Delivery Group:	L1740626
Samples Received:	05/25/2024
Project Number:	1145-21-080
Description:	Entergy - White Bluff
Site:	CADL - CCR
Report To:	Jonathan Brown
	219 Brown Lane
	Little Rock, AR 72022

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Entire Report Reviewed By:

Mark W. Beasley Project Manager

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

Pace Analytical National

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

ACCOUNT: Alliance Technical Group - Bryant, AR

PROJECT: 1145-21-080

SDG: L1740626

DATE/TIME: 07/15/24 15:25

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MW-101D L1740626-	09		17
MW-102D L1740626	-10		18
MW-103D L1740626	-11		19
MW-104D L1740626	-12		20
MW-105D L1740626	-13		21
MW-106D L1740626	-14		22
MW-107D L1740626	-15		23
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Metals (ICPMS) by Me	thod 6020		49
GI: Glossary of Terms			52
Al: Accreditations & Loca	ations		53
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			Collected by				
MW-1015 L1740626-01 GW				Collected date/time 05/20/24 11:25	Received date/time 05/25/24 11:30		
Vethod	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location	
Gravimetric Analysis by Method 2540 C-2011	WG2293857	1	05/27/24 09:56	05/27/24 12:46	DLS	Mt. Juliet, TN	
Wet Chemistry by Method 9056A	WG2304430	1	06/17/24 14:33	06/17/24 14:33	КМС	Mt. Juliet, TN	
Metals (ICP) by Method 6010B	WG2297626	1	06/04/24 10:56	06/04/24 22:37	DJS	Mt. Juliet, TN	
Metals (ICPMS) by Method 6020	WG2297670	1	06/06/24 13:49	07/11/24 01:09	SJM	Mt. Juliet, TN	
MW-102S L1740626-02 GW			Collected by Jacob Colbert	Collected date/time 05/20/24 12:45	Received da 05/25/24 11:3		
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location	
			date/time	date/time			
Gravimetric Analysis by Method 2540 C-2011	WG2293857	1	05/27/24 09:56	05/27/24 12:46	DLS	Mt. Juliet, TN	
Wet Chemistry by Method 9056A	WG2304430	1	06/17/24 14:46	06/17/24 14:46	KMC	Mt. Juliet, TN	
Metals (ICP) by Method 6010B	WG2297626	1	06/04/24 10:56	06/04/24 22:40	DJS	Mt. Juliet, TN	
Metals (ICPMS) by Method 6020	WG2297688	1	06/05/24 10:22	06/14/24 19:26	JPD	Mt. Juliet, TN	
			Collected by	Collected date/time	Received da	te/time	
MW-103S L1740626-03 GW			Jacob Colbert	05/22/24 09:00	05/25/24 11:3		
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location	
			date/time	date/time			
Gravimetric Analysis by Method 2540 C-2011	WG2294503	1	05/29/24 08:48	05/29/24 15:03	JAC	Mt. Juliet, TN	
Net Chemistry by Method 9056A	WG2304430	1	06/17/24 14:59	06/17/24 14:59	KMC	Mt. Juliet, TN	
Metals (ICP) by Method 6010B	WG2297626	1	06/04/24 10:56	06/04/24 22:44	DJS	Mt. Juliet, TN	
Aetals (ICPMS) by Method 6020	WG2297688	1	06/05/24 10:22	06/14/24 19:40	JPD	Mt. Juliet, TN	
			Collected by	Collected date/time	Received da	te/time	
MW-104S L1740626-04 GW			Jacob Colbert	05/21/24 15:40	05/25/24 11:30		
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location	
			date/time	date/time			
Gravimetric Analysis by Method 2540 C-2011	WG2293955	1	05/27/24 17:13	05/28/24 09:38	MMF	Mt. Juliet, TN	
Net Chemistry by Method 9056A	WG2304430	1	06/17/24 15:24	06/17/24 15:24	КМС	Mt. Juliet, TN	
Metals (ICP) by Method 6010B	WG2297626	1	06/04/24 10:56	06/04/24 22:47	DJS	Mt. Juliet, TN	
Metals (ICPMS) by Method 6020	WG2297688	1	06/05/24 10:22	06/14/24 19:43	JPD	Mt. Juliet, TN	
			Collected by	Collected date/time	Received da	te/time	
MW-105S L1740626-05 GW			Jacob Colbert	05/21/24 12:35	05/25/24 11:3	30	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location	
Gravimetric Analysis by Method 2540 C-2011	WG2293955	1	date/time 05/27/24 17:13	date/time 05/28/24 09:38	MMF	Mt. Juliet, TN	
Net Chemistry by Method 9056A	WG2304430	1	06/17/24 15:50	06/17/24 15:50	KMC	Mt. Juliet, TN	
Metals (ICP) by Method 6010B	WG2297626	1	06/04/24 10:56	06/04/24 22:50	DJS	Mt. Juliet, TN	
Ietals (ICPMS) by Method 6020	WG2297688	1	06/05/24 10:22	06/14/24 19:46	JPD	Mt. Juliet, TN	
			Collected by	Collected date/time	Received da	ite/time	
MW-106S L1740626-06 GW			Jacob Colbert	05/21/24 08:45	05/25/24 11:3	30	
/lethod	Batch	Dilution	Preparation	Analysis	Analyst	Location	
Gravimetric Analysis by Method 2540 C-2011	WG2293955	1	date/time 05/27/24 17:13	date/time 05/28/24 09:38	MMF	Mt. Juliet, TN	
Vet Chemistry by Method 9056A	WG2304430	1	06/17/24 16:41	06/17/24 16:41	KMC	Mt. Juliet, TN	
Vet Chemistry by Method 9056A	WG2304430	10	06/17/24 16:54	06/17/24 16:54	КМС	Mt. Juliet, TN	
Metals (ICP) by Method 6010B	WG2297626	1	06/04/24 10:56	06/04/24 22:54	DJS	Mt. Juliet, TN	
Metals (ICPMS) by Method 6020	WG2297688	1	06/05/24 10:22	06/14/24 19:50	JPD	Mt. Juliet, TN	
			22.5				
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MW-110S L1740626-07 GW			Collected by Jacob Colbert	Collected date/time 05/22/24 16:45	Received da 05/25/24 11:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2294503	1	05/29/24 08:48	05/29/24 15:03	JAC	Mt. Juliet, TN
Net Chemistry by Method 9056A	WG2304430	1	06/17/24 17:07	06/17/24 17:07	КМС	Mt. Juliet, TN
Net Chemistry by Method 9056A	WG2304430	10	06/17/24 17:45	06/17/24 17:45	КМС	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2297626	1	06/04/24 10:56	06/04/24 22:57	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2297688	1	06/05/24 10:22	06/14/24 20:00	JPD	Mt. Juliet, TN
MW-111S L1740626-08 GW			Collected by Jacob Colbert	Collected date/time 05/20/24 17:15	Received da 05/25/24 11:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2293857	1	05/27/24 09:56	05/27/24 12:46	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304430	1	06/17/24 17:58	06/17/24 17:58	KMC	Mt. Juliet, TN
Net Chemistry by Method 9056A	WG2304430	10	06/17/24 18:11	06/17/24 18:11	KMC	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2297626	10	06/04/24 10:56	06/04/24 23:00	DJS	Mt. Juliet, TN
Vetals (ICPMS) by Method 6020	WG2297628	1	06/05/24 10:22	06/14/24 20:03	JPD	Mt. Juliet, TN
WW-101D L1740626-09 GW			Collected by Jacob Colbert	Collected date/time 05/20/24 16:00	Received da 05/25/24 11:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Cravimatric Analysis by Mathad 2E40 C 2011	WG2293857	1			DIC	Mt Juliot TN
Gravimetric Analysis by Method 2540 C-2011		1	05/27/24 09:56	05/27/24 12:46	DLS KMC	Mt. Juliet, TN
Vet Chemistry by Method 9056A	WG2304430 WG2297626	1	06/17/24 18:24	06/17/24 18:24	DJS	Mt. Juliet, TN
Metals (ICP) by Method 6010B Metals (ICPMS) by Method 6020	WG2297628 WG2297688	1 1	06/04/24 10:56 06/05/24 10:22	06/04/24 23:04 06/14/24 20:06	JPD	Mt. Juliet, TN Mt. Juliet, TN
MW-102D L1740626-10 GW			Collected by Jacob Colbert	Collected date/time 05/20/24 14:10	Received date/time 05/25/24 11:30	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2293857	1	05/27/24 09:56	05/27/24 12:46	DLS	Mt. Juliet, TN
Net Chemistry by Method 9056A	WG2304430	1	06/17/24 18:36	06/17/24 18:36	КМС	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2297626	1	06/04/24 10:56	06/04/24 23:14	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2297688	1	06/05/24 10:22	06/14/24 20:10	JPD	Mt. Juliet, TN
WW-103D L1740626-11 GW			Collected by Jacob Colbert	Collected date/time 05/22/24 10:00	Received date/time 05/25/24 11:30	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2294503	1	05/29/24 08:48	05/29/24 15:03	JAC	Mt. Juliet, TN
Vet Chemistry by Method 9056A	WG2304430	1	06/17/24 18:49	06/17/24 18:49	КМС	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2297626	1	06/04/24 10:56	06/04/24 23:17	DJS	Mt. Juliet, TN
Netals (ICPMS) by Method 6020	WG2297688	1	06/05/24 10:22	06/14/24 20:13	JPD	Mt. Juliet, TN
WW-104D L1740626-12 GW			Collected by Jacob Colbert	Collected date/time 05/21/24 17:05	Received da 05/25/24 11:	
/ ethod	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2293955	1	05/27/24 17:13	05/28/24 09:38	MMF	Mt. Juliet, TN
Vet Chemistry by Method 9056A	WG2304430	1	06/17/24 19:15	06/17/24 19:15	КМС	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2297626	1	06/04/24 10:56	06/04/24 23:20	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2297688	1	06/05/24 10:22	06/14/24 20:16	JPD	Mt. Juliet, TN
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MW-105D L1740626-13 GW			Collected by Jacob Colbert	Collected date/time 05/21/24 11:45	Received da 05/25/24 11::		
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location	
Gravimetric Analysis by Method 2540 C-2011	WG2293955	1	05/27/24 17:13	05/28/24 09:38	MMF	Mt. Juliet, TN	
Wet Chemistry by Method 9056A	WG2304430	1	06/17/24 19:28	06/17/24 19:28	KMC	Mt. Juliet, TN	
Metals (ICP) by Method 6010B	WG2297626	1	06/04/24 10:56	06/04/24 23:24	DJS	Mt. Juliet, TN	
Metals (ICPMS) by Method 6020	WG2297688	1	06/05/24 10:22	06/14/24 20:20	JPD	Mt. Juliet, TN	
MW-106D L1740626-14 GW			Collected by Jacob Colbert	Collected date/time 05/21/24 10:30	Received da 05/25/24 11::		
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location	
Gravimetric Analysis by Method 2540 C-2011	WG2293955	1	05/27/24 17:13	05/28/24 09:38	MMF	Mt. Juliet, TN	
Wet Chemistry by Method 9056A	WG2304430	1	06/17/24 19:41	06/17/24 19:41	KMC	Mt. Juliet, TN	
Metals (ICP) by Method 6010B	WG2297626	1	06/04/24 10:56	06/04/24 23:27	DJS	Mt. Juliet, TN	
Metals (ICPMS) by Method 6020	WG2297688	1	06/05/24 10:22	06/14/24 20:23	JPD	Mt. Juliet, TN	
MW-107D L1740626-15 GW			Collected by Jacob Colbert	Collected date/time 05/22/24 14:40		Received date/time 05/25/24 11:30	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location	
Gravimetric Analysis by Method 2540 C-2011	WG2294503	1	05/29/24 08:48	05/29/24 15:03	JAC	Mt. Juliet, TI	
Wet Chemistry by Method 9056A	WG2304430	1	06/17/24 20:32	06/17/24 20:32	KMC	Mt. Juliet, T	
Metals (ICP) by Method 6010B	WG2297627	1	06/05/24 10:46	06/07/24 18:37	JTM	Mt. Juliet, T	
Metals (ICPMS) by Method 6020	WG2297688	1	06/05/24 10:22	06/14/24 20:26	JPD	Mt. Juliet, T	
	W02237000	I	00/03/24 10:22	00/14/24 20.20	510	Wit. Juliet, Ti	
MW-108D L1740626-16 GW			Collected by Jacob Colbert	Collected date/time 05/22/24 11:10	Received date/time 05/25/24 11:30		
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location	
Gravimetric Analysis by Method 2540 C-2011	WG2294503	1	05/29/24 08:48	05/29/24 15:03	JAC	Mt. Juliet, TN	
Wet Chemistry by Method 9056A	WG2304430	1	06/17/24 20:57	06/17/24 20:57	КМС	Mt. Juliet, TN	
Metals (ICP) by Method 6010B	WG2297627	1	06/05/24 10:46	06/07/24 18:39	JTM	Mt. Juliet, TN	
Metals (ICPMS) by Method 6020	WG2297688	1	06/05/24 10:22	06/14/24 20:30	JPD	Mt. Juliet, TN	
			Collected by	Collected date/time	Received da		
MW-109D L1740626-17 GW	Datab	Dilution	Jacob Colbert	05/22/24 12:30	05/25/24 11:3		
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location	
Gravimetric Analysis by Method 2540 C-2011	WG2294503	1	05/29/24 08:48	05/29/24 15:03	JAC	Mt. Juliet, TN	
Wet Chemistry by Method 9056A	WG2304430	1	06/17/24 21:10	06/17/24 21:10	КМС	Mt. Juliet, TN	
	WCDDDFCDT	1	06/05/24 10:46	06/07/24 18:40	JTM	Mt. Juliet, TN	
	WG2297627		06/05/24 10:22	06/14/24 20:40	JPD	Mt. Juliet, TN	
Metals (ICP) by Method 6010B Metals (ICPMS) by Method 6020	WG2297627	1					
Metals (ICP) by Method 6010B Metals (ICPMS) by Method 6020		1	Collected by Jacob Colbert	Collected date/time 05/22/24 15:55	Received da 05/25/24 11::		
Metals (ICP) by Method 6010B Metals (ICPMS) by Method 6020 MW-110D L1740626-18 GW		1 Dilution	-	Collected date/time			
Metals (ICP) by Method 6010B Metals (ICPMS) by Method 6020 MW-110D L1740626-18 GW Method	WG2297688		Jacob Colbert Preparation	Collected date/time 05/22/24 15:55 Analysis	05/25/24 11:3	30 Location	
Metals (ICP) by Method 6010B Metals (ICPMS) by Method 6020 MW-110D L1740626-18 GW Method Gravimetric Analysis by Method 2540 C-2011	WG2297688 Batch	Dilution	Jacob Colbert Preparation date/time	Collected date/time 05/22/24 15:55 Analysis date/time	05/25/24 11:: Analyst	Location Mt. Juliet, TM	
Metals (ICP) by Method 6010B Metals (ICPMS) by Method 6020 MW-110D L1740626-18 GW Method	WG2297688 Batch WG2294503	Dilution	Jacob Colbert Preparation date/time 05/29/24 08:48	Collected date/time 05/22/24 15:55 Analysis date/time 05/29/24 15:03	05/25/24 11:3 Analyst JAC	30 Location	

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			Collected by	Collected date/time		
MW-112D L1740626-19 GW			Jacob Colbert	05/23/24 15:05	05/25/24 11:3	30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2295104	1	05/29/24 21:10	05/30/24 08:35	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304430	1	06/17/24 22:14	06/17/24 22:14	KMC	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2297627	1	06/05/24 10:46	06/07/24 18:47	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2297688	1	06/05/24 10:22	06/14/24 20:46	JPD	Mt. Juliet, TN
MW-113D L1740626-20 GW			Collected by Jacob Colbert	Collected date/time 05/23/24 12:25	Received da 05/25/24 11:3	
	D. i. i	D H H				
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2295292	1	05/30/24 08:57	05/30/24 13:52	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304430	1	06/17/24 22:27	06/17/24 22:27	КМС	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304430	10	06/17/24 22:40	06/17/24 22:40	KMC	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2297627	1	06/05/24 10:46	06/07/24 18:49	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2297688	1	06/05/24 10:22	06/14/24 20:50	JPD	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	
MW-114D L1740626-21 GW			Jacob Colbert	05/23/24 10:35	05/25/24 11:3	30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2295292	1	05/30/24 08:57	05/30/24 13:52	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304442	1	06/17/24 18:28	06/17/24 18:28	JDG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2297627	1	06/05/24 10:46	06/07/24 18:50	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2297688	1	06/05/24 10:22	06/14/24 20:53	JPD	Mt. Juliet, TN
MW-115D L1740626-22 GW			Collected by Jacob Colbert	Collected date/time 05/23/24 14:00	Received date/time 05/25/24 11:30	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2295104	1	05/29/24 21:10	05/30/24 08:35	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304442	1	06/17/24 19:21	06/17/24 19:21	JDG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2297627	1	06/05/24 10:46	06/07/24 18:52	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2297689	1	06/05/24 17:15	06/25/24 21:31	LD	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
MW-118D L1740626-23 GW			Jacob Colbert	05/23/24 11:30	05/25/24 11:3	30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2295096	1	05/29/24 21:35	05/30/24 09:53	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304442	1	06/17/24 19:35	06/17/24 19:35	JDG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2297627	1	06/05/24 10:46	06/07/24 18:54	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2297689	1	06/05/24 17:15	06/25/24 21:35	LD	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	
FIELD BLANK 1 L1740626-24 GW			Jacob Colbert	05/23/24 15:15	05/25/24 11:30	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2298935	1	06/05/24 11:40	06/05/24 13:45	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304442	1	06/17/24 20:02	06/17/24 20:02	JDG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2297627	1	06/05/24 10:46	06/07/24 18:55	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2297689	1	06/05/24 17:15	06/25/24 21:38	LD	Mt. Juliet, TN
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			Collected by	Collected date/time	Received date/time	
DUPLICATE1 L1740626-25 GW			Jacob Colbert	05/20/24 17:15	05/25/24 11:3	30
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Gravimetric Analysis by Method 2540 C-2011	WG2293857	1	05/27/24 09:56	05/27/24 12:46	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304442	1	06/17/24 20:15	06/17/24 20:15	JDG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304442	1	06/18/24 18:37	06/18/24 18:37	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304442	10	06/17/24 20:28	06/17/24 20:28	JDG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2297627	1	06/05/24 10:46	06/07/24 18:57	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2297689	1	06/05/24 17:15	06/25/24 21:42	LD	Mt. Juliet, TN

FIELD BLANK 2 L1740626-26 GW			Collected by Jacob Colbert	Collected date/time 05/23/24 15:15	Received da 05/25/24 11:3	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Gravimetric Analysis by Method 2540 C-2011	WG2295096	1	05/29/24 21:35	05/30/24 09:53	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304442	1	06/17/24 21:09	06/17/24 21:09	JDG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2297627	1	06/05/24 10:46	06/07/24 18:59	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2297689	1	06/05/24 17:15	06/25/24 21:54	LD	Mt. Juliet, TN

DUPLICATE 2 L1740626-27 GW			Collected by Jacob Colbert	Collected date/time 05/21/24 08:45	Received da 05/25/24 11:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2296707	1	06/01/24 09:59	06/02/24 09:57	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304442	1	06/17/24 21:22	06/17/24 21:22	JDG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304442	1	06/18/24 18:50	06/18/24 18:50	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2304442	10	06/17/24 21:35	06/17/24 21:35	JDG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2297627	1	06/05/24 10:46	06/07/24 19:00	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2297689	1	06/05/24 17:15	06/25/24 21:57	LD	Mt. Juliet, TN

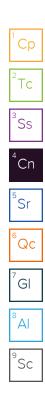
SDG: L1740626 Sc

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.

h

Mark W. Beasley Project Manager



SDG: L1740626 DATE/TIME: 07/15/24 15:25

SAMPLE RESULTS - 01 L1740626

Gravimetric Analysis by Method 2540 C-2011

	, ,							1 Cn	L
		Result	Qualifier	RDL	Dilution	Analysis	Batch	Cp	L
Analyte		mg/l		mg/l		date / time		2	i.
Dissolved Solids		206	<u>J4</u>	10.0	1	05/27/2024 12:46	WG2293857	⁻Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by	y Method 9056A	Ą					³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁴ Cn
Chloride	7.06		1.00	1	06/17/2024 14:33	WG2304430	CII
Fluoride	ND		0.150	1	06/17/2024 14:33	WG2304430	5
Sulfate	47.1		5.00	1	06/17/2024 14:33	WG2304430	Sr

Metals (ICP) by Method 6010B

Metals (ICP) by M	lethod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁷ GL
Boron	ND		0.200	1	06/04/2024 22:37	WG2297626	U

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	0
Analyte	mg/l		mg/l		date / time		Sc
Calcium	17.7		1.00	1	07/11/2024 01:09	WG2297670	

SDG: L1740626 °ΑΙ

SAMPLE RESULTS - 02 L1740626

Gravimetric Analysis by Method 2540 C-2011

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	Result	Qualifier	RDL	Dilution	Analysis	Batch	Cp	
Analyte	mg/l		mg/l		date / time		2	i
Dissolved Solids	164	<u>J4</u>	10.0	1	05/27/2024 12:46	WG2293857	⁻Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by	y Method 9056A	A Contraction of the second se					³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁴ Cn
Chloride	6.53		1.00	1	06/17/2024 14:46	WG2304430	
Fluoride	ND		0.150	1	06/17/2024 14:46	WG2304430	5
Sulfate	19.7		5.00	1	06/17/2024 14:46	WG2304430	ٌSr

Metals (ICP) by Method 6010B

Metals (ICP) by M	lethod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁷ Gl
Boron	ND		0.200	1	06/04/2024 22:40	WG2297626	

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		 Sc
Calcium	11.3		1.00	1	06/14/2024 19:26	WG2297688	

SDG: L1740626 Ă۱

SAMPLE RESULTS - 03

Collected date/time: 05/22/24 09:00

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Dissolved Solids	212		10.0	1	05/29/2024 15:03	WG2294503	
Wet Chemistry by	Method 90564	7					
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Chloride	7.94		1.00	1	06/17/2024 14:59	WG2304430	
Fluoride	ND		0.150	1	06/17/2024 14:59	WG2304430	
Sulfate	50.7		5.00	1	06/17/2024 14:59	WG2304430	
Metals (ICP) by M	ethod 6010B						
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
			ma m /l		date / time		
Analyte	mg/l		mg/l		uale / time		
Analyte Boron	mg/l 0.218		0.200	1	06/04/2024 22:44	<u>WG2297626</u>	
•	0.218		0	1		<u>WG2297626</u>	
Boron	0.218	Qualifier	0	1 Dilution		<u>WG2297626</u> Batch	
Boron	0.218 / Method 6020	Qualifier	0.200	1 Dilution	06/04/2024 22:44		

Calcium

SAMPLE RESULTS - 04

Collected date/time: 05/21/24 15:40

19.0

1.00

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	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	232		10.0	1	05/28/2024 09:38	WG2293955
Wet Chemistry by	y Method 90564	4				
	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Chloride	4.05		1.00	1	06/17/2024 15:24	WG2304430
Fluoride	ND		0.150	1	06/17/2024 15:24	WG2304430
Sulfate	64.5		5.00	1	06/17/2024 15:24	WG2304430
Metals (ICP) by M	ethod 6010B					
	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Boron	0.911		0.200	1	06/04/2024 22:47	WG2297626
Metals (ICPMS) by	y Method 6020					
	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	

06/14/2024 19:43

WG2297688

SAMPLE RESULTS - 05 L1740626

Gravimetric Analysis by Method 2540 C-2011

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	Result	Qualifier	RDL	Dilution	Analysis	Batch	Cp	
Analyte	mg/l		mg/l		date / time		2	i
Dissolved Solids	179		10.0	1	05/28/2024 09:38	WG2293955	Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by	y Method 9056A	Ą					³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁴ Cn
Chloride	3.73		1.00	1	06/17/2024 15:50	WG2304430	
Fluoride	ND	<u>P1</u>	0.150	1	06/17/2024 15:50	WG2304430	5
Sulfate	21.6		5.00	1	06/17/2024 15:50	WG2304430	Sr

Metals (ICP) by Method 6010B

Metals (ICP) by Me	thod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Boron	ND		0.200	1	06/04/2024 22:50	WG2297626	G

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		 Sc
Calcium	17.7		1.00	1	06/14/2024 19:46	WG2297688	

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SAMPLE RESULTS - 06 L1740626

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch		Cp	
Analyte	mg/l		mg/l		date / time			2	1
Dissolved Solids	1120		20.0	1	05/28/2024 09:38	WG2293955		Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by Method 9056A										
	Result	Qualifier	RDL	Dilution	Analysis	Batch				
Analyte	mg/l		mg/l		date / time			⁴ Cn		
Chloride	12.5		1.00	1	06/17/2024 16:41	WG2304430		CII		
Fluoride	0.901		0.150	1	06/17/2024 16:41	WG2304430		5		
Sulfate	752		50.0	10	06/17/2024 16:54	WG2304430		Sr		

Metals (ICP) by Method 6010B

Metals (ICP) by Method 6010B								
	Result	Qualifier	RDL	Dilution	Analysis	Batch		
Analyte	mg/l		mg/l		date / time		7	
Boron	7.12		0.200	1	06/04/2024 22:54	WG2297626	G	"

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		 Sc
Calcium	38.0		1.00	1	06/14/2024 19:50	WG2297688	

SDG: L1740626 1

SAMPLE RESULTS - 07

Collected date/time: 05/22/24 16:45

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Dissolved Solids	475		10.0	1	05/29/2024 15:03	WG2294503	
Wet Chemistry by	/ Method 9056	4					
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Chloride	5.50		1.00	1	06/17/2024 17:07	WG2304430	
Fluoride	0.294		0.150	1	06/17/2024 17:07	WG2304430	
	0.201						
Sulfate	225		50.0	10	06/17/2024 17:45	WG2304430	
	225		50.0	10	06/17/2024 17:45	<u>WG2304430</u>	
Sulfate	225	Qualifier	50.0 RDL	10 Dilution	06/17/2024 17:45 Analysis	WG2304430 Batch	
Sulfate	225 ethod 6010B	Qualifier					
Sulfate Metals (ICP) by M	225 ethod 6010B Result	Qualifier	RDL		Analysis		
Sulfate Metals (ICP) by M Analyte	225 ethod 6010B Result mg/l 2.41		RDL mg/l		Analysis date / time	Batch	
Sulfate Metals (ICP) by M Analyte Boron	225 ethod 6010B Result mg/l 2.41		RDL mg/l		Analysis date / time	Batch	
Sulfate Metals (ICP) by M Analyte Boron	225 ethod 6010B Result mg/l 2.41 y Method 6020		RDL mg/l 0.200	Dilution 1	Analysis date / time 06/04/2024 22:57	Batch WG2297626	

SAMPLE RESULTS - 08 L1740626

Gravimetric Analysis by Method 2540 C-2011

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	Result	Qualifier	RDL	Dilution	Analysis	Batch	Cp	L
Analyte	mg/l		mg/l		date / time		2	i
Dissolved Solids	1270	<u>J4</u>	20.0	1	05/27/2024 12:46	WG2293857	⁻Tc	l

Wet Chemistry by Method 9056A

Wet Chemistry by Method 9056A										
	Result	Qualifier	RDL	Dilution	Analysis	Batch				
Analyte	mg/l		mg/l		date / time		⁴ Cn			
Chloride	12.3		1.00	1	06/17/2024 17:58	<u>WG2304430</u>				
Fluoride	0.957		0.150	1	06/17/2024 17:58	WG2304430	5			
Sulfate	756		50.0	10	06/17/2024 18:11	WG2304430	Sr			

Metals (ICP) by Method 6010B

Metals (ICP) by Method 6010B									
	Result	Qualifier	RDL	Dilution	Analysis	Batch			
Analyte	mg/l		mg/l		date / time				
Boron	6.45		0.200	1	06/04/2024 23:00	WG2297626		G	

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		Sc
Calcium	108		1.00	1	06/14/2024 20:03	WG2297688	

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SAMPLE RESULTS - 09

Gravimetric Analysis by Method 2540 C-2011

							l'Cn	
	Result	Qualifier	RDL	Dilution	Analysis	Batch	Cp	I
Analyte	mg/l		mg/l		date / time		2	ī
Dissolved Solids	316	<u>J4</u>	10.0	1	05/27/2024 12:46	WG2293857	Tc	

Sample Narrative:

L1740626-09 WG2293857: QC failure, but confirms with later data

Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch	5
Analyte	mg/l		mg/l		date / time		ິSr
Chloride	5.66		1.00	1	06/17/2024 18:24	WG2304430	
Fluoride	ND		0.150	1	06/17/2024 18:24	WG2304430	
Sulfate	64.4		5.00	1	06/17/2024 18:24	WG2304430	QC

Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	8
Analyte	mg/l		mg/l		date / time		ĭΑΙ
Boron	ND		0.200	1	06/04/2024 23:04	WG2297626	

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Calcium	45.3		1.00	1	06/14/2024 20:06	WG2297688

SDG: L1740626 Ss

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SAMPLE RESULTS - 10 L1740626

Gravimetric Analysis by Method 2540 C-2011

	· · · · · · · · · · · · · · · · · · ·						Cn '	L
	Result	Qualifier	RDL	Dilution	Analysis	Batch	Ср	L
Analyte	mg/l		mg/l		date / time		2	i
Dissolved Solids	386	<u>J4</u>	10.0	1	05/27/2024 12:46	WG2293857	⁻Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by	Method 9056A	Ą					3	³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	L	
Analyte	mg/l		mg/l		date / time		2	⁴ Cn
Chloride	7.64		1.00	1	06/17/2024 18:36	WG2304430		CII
Fluoride	ND		0.150	1	06/17/2024 18:36	<u>WG2304430</u>		5
Sulfate	23.9		5.00	1	06/17/2024 18:36	WG2304430		[°] Sr

Metals (ICP) by Method 6010B

Metals (ICP) by Me	ethod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁷ GL
Boron	0.301		0.200	1	06/04/2024 23:14	WG2297626	

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	0
Analyte	mg/l		mg/l		date / time		Sc
Calcium	65.7		1.00	1	06/14/2024 20:10	WG2297688	

SDG: L1740626 ٌAI

SAMPLE RESULTS - 11

Collected date/time: 05/22/24 10:00

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Dissolved Solids	435		10.0	1	05/29/2024 15:03	WG2294503	
Wet Chemistry by	/ Method 90564	4					
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Chloride	6.67		1.00	1	06/17/2024 18:49	WG2304430	
Fluoride	ND		0.150	1	06/17/2024 18:49	<u>WG2304430</u>	
Sulfate	64.3		5.00	1	06/17/2024 18:49	WG2304430	
Metals (ICP) by M	ethod 6010B						
v = 7 = 7							
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte		Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
	Result	Qualifier		Dilution 1	•	Batch WG2297626	
Analyte	Result mg/l 0.312		mg/l	Dilution 1	date / time		
Analyte Boron	Result mg/l 0.312		mg/l	Dilution 1 Dilution	date / time		
Analyte Boron	Result mg/l 0.312 y Method 6020		mg/l 0.200	1	date / time 06/04/2024 23:17	<u>WG2297626</u>	

SAMPLE RESULTS - 12 L1740626

Gravimetric Analysis by Method 2540 C-2011

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	Result	Qualifier RDL	Dilution	Analysis	Batch	Ср	
Analyte	mg/l	mg/l		date / time		2	i
Dissolved Solids	334	10.0	1	05/28/2024 09:38	WG2293955	¯Тс	

Wet Chemistry by Method 9056A

Wet Chemistry by	Method 9056A	Ą					:	³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	[
Analyte	mg/l		mg/l		date / time			⁴ Cn
Chloride	10.1		1.00	1	06/17/2024 19:15	WG2304430		CII
Fluoride	ND		0.150	1	06/17/2024 19:15	WG2304430		5
Sulfate	16.2		5.00	1	06/17/2024 19:15	WG2304430		Sr

Metals (ICP) by Method 6010B

Metals (ICP) by N	Method 6010B						
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Boron	0.260		0.200	1	06/04/2024 23:20	WG2297626	G

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	Q
Analyte	mg/l		mg/l		date / time		Sc
Calcium	56.7		1.00	1	06/14/2024 20:16	WG2297688	

SDG: L1740626 °ΑΙ

SAMPLE RESULTS - 13 L1740626

Gravimetric Analysis by Method 2540 C-2011

							1'Cn	
	Result	Qualifier	RDL	Dilution	Analysis	Batch	Cp	
Analyte	mg/l		mg/l		date / time		2	i
Dissolved Solids	339		10.0	1	05/28/2024 09:38	WG2293955	Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by	/ Method 90564	4					³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁴ Cn
Chloride	8.17		1.00	1	06/17/2024 19:28	WG2304430	
Fluoride	ND		0.150	1	06/17/2024 19:28	WG2304430	5
Sulfate	26.6		5.00	1	06/17/2024 19:28	WG2304430	Sr

Metals (ICP) by Method 6010B

Metals (ICP) by N	lethod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Boron	0.293		0.200	1	06/04/2024 23:24	WG2297626	G

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	Q
Analyte	mg/l		mg/l		date / time		Sc
Calcium	59.0		1.00	1	06/14/2024 20:20	WG2297688	

SDG: L1740626 1

SAMPLE RESULTS - 14 L1740626

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch		Cp	
Analyte	mg/l		mg/l		date / time			2	i
Dissolved Solids	184		10.0	1	05/28/2024 09:38	WG2293955		Tc	

Wet Chemistry by Method 9056A

Wet Chemistry b	by Method 90564	7					³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁴ Cn
Chloride	4.74		1.00	1	06/17/2024 19:41	WG2304430	CII
Fluoride	ND		0.150	1	06/17/2024 19:41	WG2304430	5
Sulfate	10.8		5.00	1	06/17/2024 19:41	WG2304430	Sr

Metals (ICP) by Method 6010B

Metals (ICP) by N	Method 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		7 Cl
Boron	0.243		0.200	1	06/04/2024 23:27	WG2297626	G

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		Sc
Calcium	36.9		1.00	1	06/14/2024 20:23	WG2297688	

SDG: L1740626 1

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SAMPLE RESULTS - 15 L1740626

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch		Cp	
Analyte	mg/l		mg/l		date / time			2	i
Dissolved Solids	512		10.0	1	05/29/2024 15:03	WG2294503		Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by	/ Method 90564	Ą					³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁴ Cn
Chloride	19.0		1.00	1	06/17/2024 20:32	WG2304430	СП
Fluoride	ND		0.150	1	06/17/2024 20:32	WG2304430	5
Sulfate	118		5.00	1	06/17/2024 20:32	WG2304430	Sr

Metals (ICP) by Method 6010B

Metals (ICP) by Me	ethod 6010B						⁶ (Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch		
Analyte	mg/l		mg/l		date / time		7	
Boron	0.315		0.200	1	06/07/2024 18:37	WG2297627		GI

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		 Sc
Calcium	77.9		1.00	1	06/14/2024 20:26	WG2297688	

SDG: L1740626 1

SAMPLE RESULTS - 16 L1740626

Gravimetric Analysis by Method 2540 C-2011

	,						 1'Cn	
	Result	Qualifier	RDL	Dilution	Analysis	Batch	Cp	L
Analyte	mg/l		mg/l		date / time		2	i
Dissolved Solids	481		10.0	1	05/29/2024 15:03	WG2294503	Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by	Method 90564	4					³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁴ Cn
Chloride	12.2		1.00	1	06/17/2024 20:57	WG2304430	CIT
Fluoride	ND		0.150	1	06/17/2024 20:57	<u>WG2304430</u>	5
Sulfate	35.4		5.00	1	06/17/2024 20:57	WG2304430	ٌSr

Metals (ICP) by Method 6010B

Metals (ICP) by N	lethod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁷ GL
Boron	0.336		0.200	1	06/07/2024 18:39	WG2297627	

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		 Sc
Calcium	66.4		1.00	1	06/14/2024 20:30	WG2297688	

SDG: L1740626

SAMPLE RESULTS - 17 L1740626

Gravimetric Analysis by Method 2540 C-2011

,	,						 l'Cn	
	Result	Qualifier	RDL	Dilution	Analysis	Batch	Cp	
Analyte	mg/l		mg/l		date / time		2	i
Dissolved Solids	361		10.0	1	05/29/2024 15:03	WG2294503	Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by	Method 90564	4					³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁴ Cn
Chloride	6.15		1.00	1	06/17/2024 21:10	WG2304430	СП
Fluoride	ND		0.150	1	06/17/2024 21:10	WG2304430	5
Sulfate	44.9		5.00	1	06/17/2024 21:10	WG2304430	Sr

Metals (ICP) by Method 6010B

Metals (ICP) by N	lethod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁷ Gl
Boron	0.312		0.200	1	06/07/2024 18:40	WG2297627	

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		 Sc
Calcium	48.5		1.00	1	06/14/2024 20:40	WG2297688	

SDG: L1740626

SAMPLE RESULTS - 18 L1740626

Collected date/time: 05/22/24 15:55 Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Dissolved Solids	352		10.0	1	05/29/2024 15:03	WG2294503	

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁴ Cn
Chloride	6.35		1.00	1	06/17/2024 21:36	WG2304430	CII
Fluoride	ND		0.150	1	06/17/2024 21:36	WG2304430	5
Sulfate	39.2	<u>J6</u>	5.00	1	06/17/2024 21:36	WG2304430	ँSr

Metals (ICP) by Method 6010B

Metals (ICP) by N	/lethod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Boron	0.309		0.200	1	06/07/2024 18:42	WG2297627	

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		 Sc
Calcium	46.4		1.00	1	06/14/2024 20:43	WG2297688	

SDG: L1740626

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SAMPLE RESULTS - 19 L1740626

Gravimetric Analysis by Method 2540 C-2011

							 l'cn	
	Result	Qualifier	RDL	Dilution	Analysis	Batch	Cp	L
Analyte	mg/l		mg/l		date / time		2	i
Dissolved Solids	327		10.0	1	05/30/2024 08:35	WG2295104	Tc	

Wet Chemistry by Method 9056A

Wet Chemistry b	y Method 90564	7					³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁴ Cn
Chloride	6.19		1.00	1	06/17/2024 22:14	WG2304430	СП
Fluoride	ND		0.150	1	06/17/2024 22:14	WG2304430	5
Sulfate	ND		5.00	1	06/17/2024 22:14	WG2304430	[°] Sr

Metals (ICP) by Method 6010B

Metals (ICP) by N	lethod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		7 GL
Boron	0.288		0.200	1	06/07/2024 18:47	WG2297627	G

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		Sc
Calcium	42.4		1.00	1	06/14/2024 20:46	WG2297688	

SDG: L1740626

DATE/TIME: 07/15/24 15:25 PAGE:

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1

Calcium

SAMPLE RESULTS - 20 L1740626

Collected date/time: 05/23/24 12:25

207

1.00

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	1090		20.0	1	05/30/2024 13:52	WG2295292
Wet Chemistry b	by Method 9056	4				
	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Chloride	13.6		1.00	1	06/17/2024 22:27	WG2304430
Fluoride	ND		0.150	1	06/17/2024 22:27	<u>WG2304430</u>
Sulfate	608		50.0	10	06/17/2024 22:40	WG2304430
Metals (ICP) by N	Vethod 6010B					
	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Boron	0.491		0.200	1	06/07/2024 18:49	WG2297627
Metals (ICPMS) k	by Method 6020					
	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Calcium	207		1.00	1	06/14/2024 20:50	WG2297688

06/14/2024 20:50

WG2297688

SAMPLE RESULTS - 21 L1740626

Gravimetric Analysis by Method 2540 C-2011

Gravimetric Analy	sis by Method 2	2540 C-20)11				1
	Result	Qualifier	RDL	Dilution	Analysis	Batch	Ср
Analyte	mg/l		mg/l		date / time		2
Dissolved Solids	332		10.0	1	05/30/2024 13:52	WG2295292	Tc

Wet Chemistry by Method 9056A

Wet Chemistry b	by Method 9056A	A Contraction of the second se					³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁴ Cn
Chloride	8.23		1.00	1	06/17/2024 18:28	WG2304442	
Fluoride	ND		0.150	1	06/17/2024 18:28	WG2304442	5
Sulfate	35.5		5.00	1	06/17/2024 18:28	WG2304442	Š۲

Metals (ICP) by Method 6010B

Metals (ICP) by N	/lethod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Boron	0.275		0.200	1	06/07/2024 18:50	WG2297627	G

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		 Sc
Calcium	54.5		1.00	1	06/14/2024 20:53	WG2297688	

SDG: L1740626

DATE/TIME: 07/15/24 15:25

SAMPLE RESULTS - 22 L1740626

Collected date/time: 05/23/24 14:00 Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	352		10.0	1	05/30/2024 08:35	WG2295104
Wet Chemistry b	y Method 9056	7				
	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Chloride	5.00		1.00	1	06/17/2024 19:21	WG2304442
Fluoride	ND		0.150	1	06/17/2024 19:21	WG2304442
			5.00		06/17/2024 19:21	WG2304442

Metals (ICP) by Method 6010B

Metals (ICP) by Method 6010B								
	Result	Qualifier	RDL	Dilution	Analysis	Batch		
Analyte	mg/l		mg/l		date / time		⁷ Cl	
Boron	0.339		0.200	1	06/07/2024 18:52	WG2297627	G	

Metals (ICPMS) by Method 6020

Metals (ICPMS) by Me	thod 6020						⁸ Al
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		Sc
Calcium	42.7		1.00	1	06/25/2024 21:31	WG2297689	

SDG: L1740626

DATE/TIME: 07/15/24 15:25

SAMPLE RESULTS - 23

Collected date/time: 05/23/24 11:30

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Dissolved Solids	535		10.0	1	05/30/2024 09:53	WG2295096	
Wet Chemistry by	y Method 9056	Д					
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Chloride	9.10		1.00	1	06/17/2024 19:35	<u>WG2304442</u>	
Fluoride	ND		0.150	1	06/17/2024 19:35	WG2304442	
Sulfate	156		5.00	1	06/17/2024 19:35	WG2304442	
Metals (ICP) by M	lethod 6010B						
Metals (ICP) by M	lethod 6010B Result	Qualifier	RDL	Dilution	Analysis	Batch	
Metals (ICP) by M		Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
	Result	Qualifier		Dilution 1	•	Batch WG2297627	
Analyte	Result mg/l 0.274		mg/l	Dilution 1	date / time		
Analyte Boron	Result mg/l 0.274		mg/l	Dilution 1 Dilution	date / time		
Analyte Boron	Result mg/l 0.274 y Method 6020		mg/l 0.200	1	date / time 06/07/2024 18:54	<u>WG2297627</u>	

SAMPLE RESULTS - 24 L1740626

Gravimetric Analysis by Method 2540 C-2011

Gravimetric Analys	sis by Method	2540 C-20)11				1	L
	Result	Qualifier	RDL	Dilution	Analysis	Batch	Ср	
Analyte	mg/l		mg/l		date / time		 2	i.
Dissolved Solids	ND		10.0	1	06/05/2024 13:45	WG2298935	⁻Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by Method 9056A									
	Result	Qualifier	RDL	Dilution	Analysis	Batch			
Analyte	mg/l		mg/l		date / time			⁴ Cn	
Chloride	ND		1.00	1	06/17/2024 20:02	WG2304442		CII	
Fluoride	ND		0.150	1	06/17/2024 20:02	WG2304442		5	
Sulfate	ND		5.00	1	06/17/2024 20:02	WG2304442		Sr	

Metals (ICP) by Method 6010B

Metals (ICP) by Method 6010B								⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch		
Analyte	mg/l		mg/l		date / time			7 GI
Boron	ND		0.200	1	06/07/2024 18:55	WG2297627		G

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		 Sc
Calcium	ND		1.00	1	06/25/2024 21:38	WG2297689	

SDG: L1740626

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SAMPLE RESULTS - 25 L1740626

Gravimetric Analysis by Method 2540 C-2011

,	,						l'Cn	
	Result	Qualifier	RDL	Dilution	Analysis	Batch	Cp	
Analyte	mg/l		mg/l		date / time		2	i
Dissolved Solids	1180	<u>J4</u>	20.0	1	05/27/2024 12:46	WG2293857	⁻Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by Method 9056A 3									
	Result	Qualifier	RDL	Dilution	Analysis	Batch			
Analyte	mg/l		mg/l		date / time			⁴ Cn	
Chloride	11.7		1.00	1	06/17/2024 20:15	WG2304442		CII	
Fluoride	1.04		0.150	1	06/18/2024 18:37	WG2304442		5	
Sulfate	814		50.0	10	06/17/2024 20:28	WG2304442		ဳSr	

Metals (ICP) by Method 6010B

Metals (ICP) by M	lethod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁷ Gl
Boron	6.34		0.200	1	06/07/2024 18:57	WG2297627	U.

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	 Q
Analyte	mg/l		mg/l		date / time		Sc
Calcium	98.5		1.00	1	06/25/2024 21:42	WG2297689	

SDG: L1740626

DATE/TIME: 07/15/24 15:25 ٌAI

SAMPLE RESULTS - 26 L1740626

Gravimetric Analysis by Method 2540 C-2011

Gravimetric Analysis by Method 2540 C-2011								
	Result	Qualifier	RDL	Dilution	Analysis	Batch		Ср
Analyte	mg/l		mg/l		date / time			2
Dissolved Solids	ND		10.0	1	05/30/2024 09:53	WG2295096		Tc

Wet Chemistry by Method 9056A

Wet Chemistry by Method 9056A									
	Result	Qualifier	RDL	Dilution	Analysis	Batch			
Analyte	mg/l		mg/l		date / time			4 Cn	
Chloride	ND		1.00	1	06/17/2024 21:09	WG2304442		CII	
Fluoride	ND		0.150	1	06/17/2024 21:09	WG2304442		5	
Sulfate	ND		5.00	1	06/17/2024 21:09	WG2304442		Sr	

Metals (ICP) by Method 6010B

Metals (ICP) by Method 6010B								⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch		
Analyte	mg/l		mg/l		date / time			
Boron	ND		0.200	1	06/07/2024 18:59	WG2297627		G

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		Sc
Calcium	ND		1.00	1	06/25/2024 21:54	WG2297689	

SDG: L1740626

DATE/TIME: 07/15/24 15:25 Å

DUPLICATE 2 Collected date/time: 05/21/24 08:45

SAMPLE RESULTS - 27

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch	Ср
Analyte	mg/l		mg/l		date / time		2
Dissolved Solids	1000	Q	20.0	1	06/02/2024 09:57	<u>WG2296707</u>	Tc

Sample Narrative:

L1740626-27 WG2296707: in hold data was not valid

Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch	5
Analyte	mg/l		mg/l		date / time		ĭSr
Chloride	13.1		1.00	1	06/17/2024 21:22	<u>WG2304442</u>	
Fluoride	0.941		0.150	1	06/18/2024 18:50	WG2304442	⁶ Qc
Sulfate	768		50.0	10	06/17/2024 21:35	WG2304442	QC

Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	8
Analyte	mg/l		mg/l		date / time		Ă١
Boron	6.88		0.200	1	06/07/2024 19:00	WG2297627	

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Calcium	36.0		1.00	1	06/25/2024 21:57	WG2297689

SDG: L1740626 DATE/TIME: 07/15/24 15:25 Ss

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⁷Gl

Sc

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L1740626-04,05,06,12,13,14

Method Blank (MB)

Method Blank	IVIB)			
(MB) R4075426-1 05	5/28/24 09:38			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1739276-02 Original Sample (OS) • Duplicate (DUP)

L1739276-02 Or	iginal Sample	(OS) • Du	plicate	(DUP)			
(OS) L1739276-02 05/	/28/24 09:38 • (DU	IP) R4075426	-3 05/28/2	24 09:38			
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	UP RPD imits	
Analyte	mg/l	mg/l		%			
Dissolved Solids	1360	1430	1	5.44)	

L1739276-03 Original Sample (OS) • Duplicate (DUP)

L1739276-03 Orig	ginal Sample	(OS) • Du	plicate	(DUP)		
OS) L1739276-03 05/2	8/24 09:38 • (DU	P) R4075426-	4 05/28/2	24 09:38		
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	359	374	1	4.09		10

Laboratory Control Sample (LCS)

(LCS) R4075426-2 C	5/28/24 09:38				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8590	97.6	85.0-115	

DATE/TIME: 07/15/24 15:25

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Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY L1740626-03,07,11,15,16,17,18

Method Blank (MB)

Method Didnk (1^{1}
(MB) R4076338-1 05	5/29/24 15:03				
	MB Result	MB Qualifier	MB MDL	1B RDL	2
Analyte	mg/l		mg/l	ng/l	T
Dissolved Solids	U		10.0	0.0	
					³ Ss

L1740405-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1740405-07 05	5/29/24 15:03 • (Dl	JP) R4076338-	3 05/29/2	4 15:03		
	Original Resu	It DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	445	468	1	5.04		10

L1740405-08 Original Sample (OS) • Duplicate (DUP)

L1740405-08 Ori	iginal Sample	e (OS) • Du	plicate	(DUP)			⁷ Gl
(OS) L1740405-08 05/	29/24 15:03 • (DL	JP) R4076338-	4 05/29/2	24 15:03			
	Original Resul	t DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits	⁸ Al
Analyte	mg/l	mg/l		%		%	
Dissolved Solids	446	443	1	0.675		10	⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R4076338-2 0	05/29/24 15:03				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8530	96.9	85.0-115	

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Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY L1740626-23,26

Method Blank (MB)

(MB) R4076344-1 05/30	/24 09:53			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1740626-23 Original Sample (OS) • Duplicate (DUP)

(OS) L1740626-23 05/3	30/24 09:53 • (DL	JP) R4076344-	3 05/30/2	24 09:53		
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	535	551	1	2.95		10

L1740727-02 Original Sample (OS) • Duplicate (DUP)

L1740727-02 Or	riginal Sample	e (OS) • Du	plicate	(DUP)			⁷ Gl
(OS) L1740727-02 05	/30/24 09:53 • (DL	JP) R4076344-	-4 05/30/2	24 09:53			
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits	⁸ Al
Analyte	mg/l	mg/l		%		%	
Dissolved Solids	479	480	1	0.209		10	°Sc

Laboratory Control Sample (LCS)

(LCS) R4076344-2 0	5/30/24 09:53				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8650	98.3	85.0-115	

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Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY L1740626-19,22

Method Blank (MB)

(MB) R4076341-1 05/30)/24 08:35			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1740158-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1740158-08 05	5/30/24 08:35 • (D	JP) R4076341-3	3 05/30/2	4 08:35		
	Original Resu	It DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	367	375	1	2.16		10

L1740158-09 Original Sample (OS) • Duplicate (DUP)

L1740158-09 Or	iginal Sample	(OS) • Du	plicate (DUP)			⁷ Gl
(OS) L1740158-09 05	/30/24 08:35 • (DUF	P) R4076341-4	4 05/30/24	4 08:35			
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits	⁸ Al
Analyte	mg/l	mg/l		%		%	
Dissolved Solids	426	430	1	0.935		10	⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R4076341-2 0	5/30/24 08:35				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8630	98.1	85.0-115	

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Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY L1740626-20,21

Method Blank (MB)

(MB) R4077063-1 05/3	30/24 13:52			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1740200-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1740200-03 05/30)/24 13:52 • (DUF	P) R4077063-3	3 05/30/2	4 13:52		
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	576	591	1	2.57		10

L1740200-04 Original Sample (OS) • Duplicate (DUP)

L1740200-04 Or	iginal Sample	e (OS) • Du	iplicate	(DUP)			⁷ Gl
(OS) L1740200-04 05/	30/24 13:52 • (DU	P) R4077063-	4 05/30/2	24 13:52			
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits	⁸ Al
Analyte	mg/l	mg/l		%		%	
Dissolved Solids	401	413	1	2.95		10	⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R4077063-2 05	5/30/24 13:52				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8560	97.3	85.0-115	

DATE/TIME: 07/15/24 15:25

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Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY L1740626-27

Method Blank (MB)

(MB) R4077040-1 06/0)2/24 09:57			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1740443-01 Original Sample (OS) • Duplicate (DUP)

_1740443-01 Original Sample (OS) • Duplicate (DUP)										
(OS) L1740443-01 06/	02/24 09:57 • (DUI	P) R4077040-	3 06/02/2	24 09:57						
	Original Result	t DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits				
Analyte	mg/l	mg/l		%		%				
Dissolved Solids	1050	1090	1	3.36		10				

L1740443-02 Original Sample (OS) • Duplicate (DUP)

L1740443-02 Orig	1740443-02 Original Sample (OS) • Duplicate (DUP)											
(OS) L1740443-02 06/0	2/24 09:57 • (DU	P) R4077040-	4 06/02/2	24 09:57								
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits		⁸ Al				
Analyte	mg/l	mg/l		%		%						
Dissolved Solids	1000	1070	1	6.19		10		⁹ Sc				

Laboratory Control Sample (LCS)

(LCS) R4077040-2 0	6/02/24 09:57				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8480	96.4	85.0-115	

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Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY L1740626-24

Method Blank (MB)

(MB) R4078877-1 06/05	5/24 13:45			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1742730-01 Original Sample (OS) • Duplicate (DUP)

L1742730-01 Ori	iginal Sample	(OS) • Dur	plicate (l	DUP)						
(OS) L1742730-01 06/0	05/24 13:45 • (DUF	^י) R4078877-3	3 06/05/24	4 13:45						
	Original Result	: DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits				
Analyte	mg/l	mg/l		%		%				
Dissolved Solids	598	602	1	0.667		10				

Laboratory Control Sample (LCS)

(LCS) R4078877-2 0	06/05/24 13:45				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8580	97.5	85.0-115	

SDG: L1740626

DATE/TIME: 07/15/24 15:25

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY 1740626-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

Method Blank (MB)

(MB) R4083701-1 06/17/24 10:11

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

L1740626-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1740626-05 06/17	7/24 15:50 • (DUP) R4083701-3	06/17/24	16:03		
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	3.73	3.86	1	3.55		15
Fluoride	ND	ND	1	200	<u>P1</u>	15
Sulfate	21.6	21.6	1	0.155		15

L1740626-18 Original Sample (OS) • Duplicate (DUP)

(OS) L1740626-18 06/17/24 21:36 • (DUP) R4083701-6 06/17/24 21:49											
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits					
Analyte	mg/l	mg/l		%		%					
Chloride	6.35	6.26	1	1.41		15					
Fluoride	ND	ND	1	5.09		15					
Sulfate	39.2	39.3	1	0.343		15					

Laboratory Control Sample (LCS)

(LCS) R4083701-2 06/17/24 10:25													
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier								
Analyte	mg/l	mg/l	%	%									
Chloride	40.0	39.0	97.6	80.0-120									
Fluoride	8.00	8.24	103	80.0-120									
Sulfate	40.0	39.1	97.6	80.0-120									

ACCOUNT:										
Alliance Technical Group - Bryant, AR										

PROJECT: 1145-21-080

DATE/TIME: 07/15/24 15:25

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY L1740626-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

L1740626-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1740626-05 06/17/24 15:50 • (MS) R4083701-4 06/17/24 16:16 • (MSD) R4083701-5 06/17/24 16:28													
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%	
Chloride	40.0	3.73	40.7	40.5	92.4	91.9	1	80.0-120			0.414	15	
Fluoride	8.00	ND	7.99	7.96	99.9	99.5	1	80.0-120			0.419	15	
Sulfate	40.0	21.6	55.9	55.5	85.8	84.7	1	80.0-120			0.797	15	

L1740626-18 Original Sample (OS) • Matrix Spike (MS)

(OS) L1740626-18 06/17/	L1740626-18 06/17/24 21:36 • (MS) R4083701-7 06/17/24 22:01													
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier							
Analyte	mg/l	mg/l	mg/l	%		%								
Chloride	40.0	6.35	43.6	93.1	1	80.0-120								
Fluoride	8.00	ND	8.09	100	1	80.0-120								
Sulfate	40.0	39.2	70.6	78.7	1	80.0-120	<u>J6</u>							

DATE/TIME: 07/15/24 15:25

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY L1740626-21,22,23,24,25,26,27

Method Blank (MB)

(MB) R40832/2-1 0	6/1//24 10:06					· ·
	MB Result	MB Qualifier	MB MDL	MB RDL	2	
Analyte	mg/l		mg/l	mg/l	T	Гс
Chloride	U		0.379	1.00		
Fluoride	U		0.0640	0.150	3 c	Ss
Sulfate	U		0.594	5.00		

L1740626-21 Original Sample (OS) • Duplicate (DUP)

(OS) L1740626-21 06/17/2	i) L1740626-21 06/17/24 18:28 • (DUP) R4083272-3 06/17/24 18:41											
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits						
Analyte	mg/l	mg/l		%		%						
Chloride	8.23	8.02	1	2.57		15						
Fluoride	ND	ND	1	0.000		15						
Sulfate	35.5	35.1	1	1.20		15						

L1740754-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1740754-03 06/18/2	(OS) L1740754-03 06/18/24 00:56 • (DUP) R4083272-6 06/18/24 01:10												
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits							
Analyte	mg/l	mg/l		%		%							
Chloride	66.7	73.7	1	9.87		15							
Fluoride	ND	ND	1	12.8		15							
Sulfate	36.9	40.7	1	9.86		15							

Laboratory Control Sample (LCS)

(LCS) R4083272-2 06/17	CS) R4083272-2 06/17/24 10:19											
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier							
Analyte	mg/l	mg/l	%	%								
Chloride	40.0	40.9	102	80.0-120								
Fluoride	8.00	8.42	105	80.0-120								
Sulfate	40.0	41.5	104	80.0-120								

ACCOUNT:									
Alliance Technical Group - Bryant, AR									

PROJECT: 1145-21-080

DATE/TIME: 07/15/24 15:25 ⁺Cn

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L1740626-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1740626-21 06/17/24 18:28 • (MS) R4083272-4 06/17/24 18:54 • (MSD) R4083272-5 06/17/24 19:08												
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Chloride	40.0	8.23	47.1	46.3	97.0	95.1	1	80.0-120			1.66	15
Fluoride	8.00	ND	8.50	8.34	106	104	1	80.0-120			1.88	15
Sulfate	40.0	35.5	69.0	68.5	83.5	82.3	1	80.0-120			0.714	15

L1740754-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1740754-03 06/18	L1740754-03 06/18/24 00:56 • (MS) R4083272-7 06/18/24 01:23												
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier						
Analyte	mg/l	mg/l	mg/l	%		%							
Chloride	40.0	66.7	101	86.5	1	80.0-120							
Fluoride	8.00	ND	8.39	104	1	80.0-120							
Sulfate	40.0	36.9	73.9	92.5	1	80.0-120							

SDG: L1740626 DATE/TIME: 07/15/24 15:25 PAGE: 46 of 57 Cp ²Tc ³Ss ⁴Cn ⁵Sr ⁶Qc ⁷Gl ⁸Al ⁹Sc

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY L1740626-01.02.03.04.05.06.07.08.09.10.11.12.13.14

Method Blank (MB)

(MB) R4077414-1 06	6/04/24 21:54			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Boron	U		0.0200	0.200

Laboratory Control Sample (LCS)

(LCS) R4077414-2 06/04/24 21:57											
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier						
Analyte	mg/l	mg/l	%	%							
Boron	1.00	0.960	96.0	80.0-120							

L1740578-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1740578-01 06/04/24 22:00 • (MS) R4077414-4 06/04/24 22:07 • (MSD) R4077414-5 06/04/24 22:10												
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Boron	1.00	ND	1.01	1.03	99.1	100	1	75.0-125			1.07	20

DATE/TIME: 07/15/24 15:25

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY L1740626-15,16,17,18,19,20,21,22,23,24,25,26,27

Method Blank (MB)

Method Blar	nk (MB)				1 Cp
(MB) R4078964-1	06/07/24 18:27				Cp
	MB Result	MB Qualifier	MB MDL	MB RDL	2
Analyte	mg/l		mg/l	mg/l	⁻Tc
Boron	U		0.0200	0.200	
					³ Ss

Laboratory Control Sample (LCS)

(LCS) R4078964-2 06/	07/24 18:28				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Boron	1.00	0.962	96.2	80.0-120	

L1740630-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1740630-01 06/07/24 18:30 • (MS) R4078964-4 06/07/24 18:33 • (MSD) R4078964-5 06/07/24 18:35													
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%	
Boron	1.00	ND	1.02	1.03	98.3	99.4	1	75.0-125			1.00	20	

DATE/TIME: 07/15/24 15:25 Cn

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R4092377-1 07	7/10/24 23:43			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Calcium	U		0.0936	1.00

Laboratory Control Sample (LCS)

(LCS) R4092377-2 07/*	/10/24 23:46				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Calcium	5.00	5.03	101	80.0-120	

L1740435-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1740435-04 07/10/24 23:49 • (MS) R4092377-4 07/10/24 23:56 • (MSD) R4092377-5 07/10/24 23:59													
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%	

DATE/TIME: 07/15/24 15:25 Тс

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY 1740626-02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20,21

Method Blank (MB)

Method Bidh	K (IVID)					1 Cn
(MB) R4082014-1	06/14/24 19:20					СР
	MB Result	MB Qualifier	MB MDL	MB RDL		2
Analyte	mg/l		mg/l	mg/l	,	Tc
Calcium	U		0.0936	1.00		
					'	³ Ss

Laboratory Control Sample (LCS)

(LCS) R4082014-2 06/	6/14/24 19:23				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Calcium	5.00	4.96	99.2	80.0-120	

L1740626-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1740626-02 06/14/2	24 19:26 • (MS)	R4082014-4 0	6/14/24 19:33 •	· (MSD) R4082	06/14/24	19:36						
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Calcium	5.00	11 3	17.0	16.6	113	106	1	75.0-125			2.06	20

SDG: L1740626 DATE/TIME: 07/15/24 15:25 Cn

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Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY L1740626-22,23,24,25,26,27

Method Blank (MB)

(IVIB)					
6/25/24 21:10					
MB Result	MB Qualifier	MB MDL	MB RDL		
mg/l		mg/l	mg/l		
U		0.0936	1.00		
	6/25/24 21:10 MB Result	5/25/24 21:10 MB Result <u>MB Qualifier</u>	5/25/24 21:10 MB Result <u>MB Qualifier</u> MB MDL mg/l mg/l	5/25/24 21:10 MB Result <u>MB Qualifier</u> MB MDL MB RDL mg/l mg/l mg/l	5/25/24 21:10 MB Result MB Qualifier MB MDL MB RDL mg/l mg/l mg/l

Laboratory Control Sample (LCS)

(LCS) R4086428-2 06/2	/25/24 21:14				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Calcium	5.00	4.91	98.3	80.0-120	

L1740630-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1740630-02 06/25	/24 21:17 • (MS)	R4086428-4 C	6/25/24 21:24	• (MSD) R4086	6428-5 06/25/	24 21:28						
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Calcium			16.2	15.9				75.0-125				

DATE/TIME: 07/15/24 15:25 Cn

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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 resul 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 fo 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
J4	The associated batch QC was outside the established quality control range for accuracy.
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.
Q	Sample was prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.
V	The sample concentration is too high to evaluate accurate spike recoveries.

PROJECT: 1145-21-080

SDG: L1740626 Τс

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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
lowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky ¹⁶	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ¹⁴	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.

SDG: L1740626 Τс

Ss

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Sr

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Company Name/Address:		Billing Information:							A	nalvsis /	Contair	ner / Pres	servative			Chain of	Custody	Page of		
Alliance Technical Grou	up - Brvai	nt. AR	Accounts				Pres	N										-		
			219 Brow				Chk	V	-						enter Entert			B	200	
219 Brown Lane Little Rock, AR 72022			Bryant, A														(ADVANCING SCIENCE	
Report to: Jonathan Brown	nathan Brown				Email To: Jonathan.Brown@AllianceTG.com;Jhouse												Submitting	anon Rd Mo a sample via acknowledg	JLIET, TN unt Juliet, TN 37122 a this chain of custody gment and acceptance of the	
Project Description: Entergy - White Bluff						Please Ci PT MT C			res		1.11								ions found at: om/hubfs/pas-standard-	
Phone: 501-847-7077	ct # 080	Lab Project # GBMCBAR-ENTERGYWE					m	PE-Nol								SDG #	12	400000 39		
Collected by (print): Jocob Colbert	CR		P.O. #				ONH	250mlHDPE-NoPres	NoPres		+7	3					Acctnum: GBMCBAR			
Collected by (signature):	(Lab MUST Be	Notified)	Quote #				DPE	250	No		1.5									
Tool Color	Sandy ColberSame DayS Next DayS				Results	Needed	No. of	250mlHDPE-HNO3	SO4, PH	E Bd						100	PM: 82	Prelogin: P1076127 PM: 829 - Brittnie L Boyd PB:		
Packed on Ice N Y	Three	e Day		1			-			11-4	1000		a Ba	14				d Via: F	edEX Ground	
Sample ID	Comp/Gra	b Matrix *	Depth	Dat	e	Time	Cntrs	B, Ca	d, F,	TDS								marks	Sample # (lab only)	
MW-1015	G	GW		5.20	1.24	1125	3	×	×	×	in the second se						5.5	32	-01	
MW-1025		GW		5.20	1.24	1245	(X	×	2							5.	12	-02	
MW-1035		GW		5.22	dH	0900	11	×	×	X							5.0	2	-03	
MW-1045		GW		5.21	.24	1540		¥	×	×	1.1.5						5.1	9	-04	
MW-1055		GW		5.21	. 24	1235		~	X	X	1997						6.0	7	-05	
MW-1065		GW		5.21	24	0245		X	×	×			1.1	1-1-1-1			3.0	100	-04	
MW-1105		GW		5.22	.24	1645		A	×	×							4.		-0]	
MW-1115		GW		5.2	024	1715		×	X	×			1				Ч.		-00	
MW-101D		GW		5.20	1.04	1600	A	×	×	X								8	101	
MW-102D		GW		5.20	0.24	1410	10	×	X	X							7.5		-10	
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater	Remarks:										pH Flow		_ Temp _ Othe		-	COC Sid Bottles Correct	Sample Reco al Present/ gned/Accura s arrive in t bottles u	Intact te: tact: sed:	:NP Y N N N N	
DW - Drinking Water Samples returned via: DT - Other UPSFedEx			r		Trackir	COLT. SA	and the second s		1							VOA Ze:	ient volume <u>If Ar</u> ro Headspac vation Corr	plicab e:	<u>le</u> Y_N	
Relinquished by : (Signature)		Date: 5-24-2	тіт 4 13	e: 145	Receiv	ed by: (Signa	ature)				Trip Bla	nk Recei		HCL / Meo TBR		RAD Sc	reen <0.5 m	R/hr:	<u></u> N	
Relinquished by : (Signature)		Date:	Tim	e:	Receiv	ed by: (Signa	ature)				Temp:	•	C Bott	les Receive	ed: 81	If preser	rvation require	ed by Lo	gin: Date/Time	
Relinquished by : (Signature)		Date:	Tim	e:	Receiv	ved for lab by	1				Date: Time: Hold: 5-25-25 1130								Condition: NCF / OK	
					-		Acin	Marr)		1 and 1044								· · · · · · · · · · · · · · · · · · ·	

		Billing Information:							А	nalvsis / (ontain	Pr / Prese	rvative		-	Chain of Custody	Page of		
Company Name/Address: Alliance Technical Grou	in - Bryan	t AR					Pres					120					-		
Alliance Technical Grou	ip - Diyai			s Payable			Chk		-								B	000	
219 Brown Lane Little Rock, AR 72022			219 Brov Bryant, A			L												ADVANCING SCIENCE	
Report to: Jonathan Brown			Email To: Jonathan.E	Brown@Allian	ceTG.com;JI	ouse@	trcc										12065 Lebanon Rd Mo Submitting a sample vi	unt Juliet, TN 37122	
Project Description: Entergy - White Bluff	t Description: City/State				Please Cir												Pace Terms and Condit https://info.pacelabs.c terms.pdf	ions found at: om/hubfs/pas-standard-	
Phone: 501-847-7077	Client Project #				Lab Project # GBMCBAR-ENTERGYWB												SDG #	40124	
Collected by (print):	Tarah Calbert CADL-CCR						90 -	ONH-	250mlHDPE-NoPres	NoPres		「「					Acctnum: GBI		
Collected by (signature):	cted by (signature): Rush? (Lab MUST Be No							DPE					11				Template:T19		
Baceb Colbert Immediately Packed on Ice N_Y	Mexicological Same Day				esults Neede		No. of	a 250mlHDPE-HNO3	SO4, PH	1L-HDPE							PM: 829 - Brit PB:	n: P1076127 9 - Brittnie L Boyd	
Sample ID	Comp/Gra	b Matrix *	Depth	Date	Ti	me	Cntrs	B, Ca	d, F,	TDS 1							Remarks	edEX Ground	
MW-103D	(+	GW	T	5.22	24 100	00	3	×	X	X							7.57	-11	
MW-104D	1	GW		5.21	24 17	05	(X	x	×		10 F	1.4				7.33	-12	
MW-105D		GW	1. 19 19	5.21-	24 114	15		X	X	X		C. C			10.55		7.62	-12	
MW-106D		GW		5.21	24 10	30		×	X	×		10 144			2.25		10.82	-14	
MW-107D		GW		5.02	24 14	40		×	X	X				30	1	162	7.50	-15	
MW-108D		GW	51 1.25 1.25	5.22	.24 1)	10		X	X	X		111				-	7.42	-16	
MW-109D		GW	. Second	5.22	24 13	378	1	×	X	X					1992	1.4	7.43	-17	
MW-110D		GW	1 1 1 1	5.2	2.24 15	55		X	×	X	1	1377	1.1				7.63	-18	
MW-112D		GW	98 (a.C. 12)	5.23	24 15	05	11	×	×	×		-	9.000 and 1.000			100100	7.49	-19	
MW-113D		GW		5.2	1.24 12	25	1	×	X	X							7.0.5	-20	
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater	Remarks:		an a								pH Flow		_ Temp _ Other		COC S. Bottle Corre	eal Pr igned/ es arr ct bot	ble Receipt C resent/Intact /Accurate: rive intact: ttles used: volume sent:	· _NP	
DW - Drinking Water OT - Other	Samples return UPSFee	ned via: IEx Courie	er		Tracking #	No.						1.0	and M	/ No	VOA Z	ero He	If Applicate eadspace: on Correct/Ch	ole Y	
Relinquished by : (Signature)		Date:) Tim	ne: 242	Received by:	(Signati	ure)				Trip Blar	K Rece	Т	CL / MeoH BR	RAD S	creen	<0.5 mR/hr:	×	
Relinquished by : (Signature)		Date:		ne:	Received by:	(Signat	ure)				Temp:		C Bottle	es Received:	If pres	ervatio	n required by Lo	ogin: Date/Time	
Relinquished by : (Signature)		Date:	Tin	ne:	Received for	lab by:	1	iture)	-		Date: Time: 5-25-25 30				NCF / C			Condition: NCF / OK	

		Billing Information:					*		А	nalvsis /	Containe	r / Prese	rvative				Chain of Custody	Page of	
Company Name/Address: Alliance Technical Grou	n - Bryan	AR					Pres						1					-	
Amance recrimical Groc	ip - Diyan	, An		s Payable			Chk	100	-	1000								B	ice [°]
219 Brown Lane Little Rock, AR 72022			219 Brov Bryant, A			l		The second second		1010						the state		PEOPLE	ADVANCING SCIENCE
Report to:			Email To:	Brown@Allia	anceTG.	com;Jhouse(@trcc			100		100						12065 Lebanon Rd Mo Submitting a sample via	unt Juliet, TN 37122
Jonathan Brown	el su se el com	City/State	·			Please Cir			10	in a		-21 12						constitutes acknowledg Pace Terms and Conditi	ment and acceptance of the
Project Description: Entergy - White Bluff		Collected:	24 19	28- -	PT MT CT			192	res									https://info.pacelabs.co terms.pdf	om/hubfs/pas-standard-
Phone: 501-847-7077	:# 80		Lab Project	CBAR-ENTERGYWB		YWB		250mlHDPE-NoPres							and the second		SDG #UT	40626	
Collected by (print):	D # R		P.O. #			_	E-HNO	OmlHD	Pres								Table # Acctnum: GBI		
Collected by (signature):	Rush? (Lab MUST B	Notified)	Quote #	- 147			DPE	250	NoF								Template: T19	
Immediately Packed on Ice N Y	Day Five ay 5 Da ay 10 C Day	y (Rad Only)		Results	Needed	No. of	250mlHDPE-HNO3	250mlHl SO4, PH	1L-HDPE NoPres								Prelogin: P10 PM: 829 - Britt PB:		
Sample ID	Comp/Grab	Matrix *	Depth	Date	e	Time	Cntrs	B, Ca	d, F,	TDS 1						A Party of the second s		Shipped Via: P	Sample # (lab only
MW-114D	6- 	GW		5.23	.34	1035	3	X	×	X								7.43	-21
MW-115D		GW		5.23		1400	1	×	X	2				ALL	uild.			7.57	-22
MW-118D		GW	1. Mart	5.23	3.24	A DELETION	\square	×	×	X							营	6.95	-23
FIELD BLANK 1		GW				1515		X	1	X							inje.		-24
DUPLICATE 1		GW		5.2	0.24	1715		×	×	2				11/6				4.10	-75
FIELD BLANK 2		GW	a water	5.23	5-24	1515		×	X	X	1.1			-		1		-	-26
DUPLICATE 2		GW		5.21	1-24	0545	1	×	×	X	1	Constant of	ala.			1		3.96	-21
The states of the second	e la companya de la c	GW	12.35.94				200					the last				12	1.5-0	1 at Arian	
Start all a to the Start and Starter		GW	17.05		(2)	- the second second			25.00							-			
	6 1. S.	GW			Û, K	States		122	100								5.2	a start and a start and a start	
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater	Remarks:		Alta Ja			a A		4.2			pH Flow	·	Temp Other			COC S: Bottle Correc	eal Pr igned, es arr ct bot	ble Receipt C resent/Intact /Accurate: rive intact: ttles used:	· _NP
DW - Drinking Water OT - Other	Samples returne UPSFedB		er		Trackin	and the second			All the second		17.0.0	1.2		a / Nia	and a second	VOA Z	ero He rvatio	volume sent: <u>If Applical</u> eadspace: on Correct/Ch	ole Y
Relinquished by : (Signature)		Date: <i>5.</i> 14、	7 Tim 24 1	ne: 245	Receiv	ed by: (Signa	iture)	aça k			Trip Bla	nk Receiv	H T	ICL / Meo BR		RAD S	creen	<0.5 mR/hr:	2-
Relinquished by : (Signature)		Date:	Tim	ne:	Receiv	ed by: (Signa	ature)		19 -20 19-20		Temp: °C Bottles Received:					- Del	ervatio	n required by Lo	
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					7315	7315	7315	7315	100 miles - 400	7315	Trac
Name					3196 0117	3196 1659	3196 1681	3196 1675	3196 1692	3196 1660	Tracking Numbers
						39	1		<u>_</u>	2	2
					2.3+0.1= 2.4	0.1+0.1= 0.2	3.1 + 0, 1 = 3.2	29+0.1= 3.0	5.2+0.1=5.3	1.7+0.1= 1.8	Temperature
Date					2	sa a	\$	õ	.3	<i>\$</i>	ature



Pace Analytical® ANALYTICAL REPORT December 11, 2024

Alliance Technical Group - Bryant, AR

Sample Delivery Group:	L1803484
Samples Received:	11/23/2024
Project Number:	1145-21-080
Description:	Entergy - White Bluff
Site:	CADL - CCR
Report To:	Jonathan Brown
	219 Brown Lane
	Little Rock, AR 72022

Entire Report Reviewed By:

Drittie Boyd

Brittnie L Boyd Project Manager

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

Pace Analytical National

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

ACCOUNT: Alliance Technical Group - Bryant, AR PROJECT: 1145-21-080

SDG: L1803484

DATE/TIME: 12/11/24 10:13

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SDG: L1803484 DATE/TIME: 12/11/24 10:13

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MW-101S L1803484-01 GW			Collected by	Collected date/time 11/20/24 16:25	Received da 11/23/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407625	1	11/29/24 23:35	11/29/24 23:35	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/05/24 00:01	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411326	1	12/05/24 02:38	12/06/24 17:41	UNP	Mt. Juliet, Ti
MW-102S L1803484-02 GW			Collected by	Collected date/time 11/20/24 10:40	Received da 11/23/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407625	1	11/29/24 23:47	11/29/24 23:47	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/05/24 00:03	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411326	1	12/05/24 02:38	12/06/24 17:44	UNP	Mt. Juliet, TN
MW-104S L1803484-03 GW			Collected by	Collected date/time 11/19/24 13:00	Received da 11/23/24 09:1	
	Datab	Dilution	Droparation	Apolycic	Apoliot	Location
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TI
Wet Chemistry by Method 9056A	WG2407625	1	11/30/24 00:00	11/30/24 00:00	ZSA	Mt. Juliet, T
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/05/24 00:05	DJS	Mt. Juliet, T
Metals (ICPMS) by Method 6020B	WG2411307 WG2411326	1	12/04/24 11:15	12/06/24 18:02	UNP	Mt. Juliet, T
vietais (ICPINS) by Method 60206	WG2411320	I	12/05/24 02.58	12/00/24 16.02	UNP	ML JUNEL, T
MW-105S L1803484-04 GW			Collected by	Collected date/time 11/19/24 11:30	Received da 11/23/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407625	1	11/30/24 00:13	11/30/24 00:13	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/05/24 00:07	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411326	1	12/05/24 02:38	12/06/24 18:05	UNP	Mt. Juliet, TN
MW-106S L1803484-05 GW			Collected by	Collected date/time 11/20/24 12:00	Received da 11/23/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, Tl
Wet Chemistry by Method 9056A	WG2407625	10	11/30/24 00:26	11/30/24 00:26	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/05/24 00:12	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411326	1	12/05/24 02:38	12/06/24 18:09	UNP	Mt. Juliet, TN
MW-110S L1803484-06 GW			Collected by	Collected date/time 11/18/24 16:10	Received da 11/23/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TI
Gravimetric Analysis by Method 2540 C-2011				11/20/21 00 20		MA LUISA TA
Gravimetric Analysis by Method 2540 C-2011 Wet Chemistry by Method 9056A	WG2407625	1	11/30/24 00:38	11/30/24 00:38	ZSA	Mt. Juliet, TN
	WG2407625 WG2411307	1 1	11/30/24 00:38 12/04/24 11:15	11/30/24 00:38	ZSA DJS	Mt. Juliet, Tr Mt. Juliet, Ti

 ACCOUNT:
 PROJECT:
 SDG:
 DATE/TIME:

 Alliance Technical Group - Bryant, AR
 1145-21-080
 L1803484
 12/11/24 10:13

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MW-102D L1803484-07 GW			Collected by	Collected date/time 11/19/24 16:05	Received da 11/23/24 09:0	
Nethod	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407625	1	11/30/24 00:51	11/30/24 00:51	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/05/24 00:15	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411326	1	12/05/24 02:38	12/06/24 18:15	UNP	Mt. Juliet, TN
WW-103D L1803484-08 GW			Collected by	Collected date/time 11/18/24 13:05	Received da 11/23/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TN
Net Chemistry by Method 9056A	WG2407625	1	11/30/24 01:04	11/30/24 01:04	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/05/24 00:17	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411326	1	12/05/24 02:38	12/06/24 18:18	UNP	Mt. Juliet, TN
WW-104D L1803484-09 GW			Collected by	Collected date/time 11/19/24 14:05	Received da 11/23/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TN
Net Chemistry by Method 9056A	WG2407625	1	11/30/24 01:17	11/30/24 01:17	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/05/24 00:19	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411327	1	12/05/24 02:40	12/06/24 04:16	JPD	Mt. Juliet, TN
WW-105D L1803484-10 GW			Collected by	Collected date/time 11/19/24 10:20	Received da 11/23/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TN
Net Chemistry by Method 9056A	WG2407625	1	11/30/24 01:29	11/30/24 01:29	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/05/24 00:21	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411327	1	12/05/24 02:40	12/06/24 04:19	JPD	Mt. Juliet, TN
MW-106D L1803484-11 GW			Collected by	Collected date/time 11/20/24 13:30	Received da 11/23/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TN
Net Chemistry by Method 9056A	WG2407625	10	11/30/24 02:08	11/30/24 02:08	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/05/24 00:23	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411327	1	12/05/24 02:40	12/06/24 04:23	JPD	Mt. Juliet, TN
MW-108D L1803484-12 GW			Collected by	Collected date/time 11/20/24 15:00	Received da 11/23/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407625	1	11/30/24 02:20	11/30/24 02:20	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/05/24 00:24	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411327			12/06/24 04:26		Mt. Juliet, TN

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MW-109D L1803484-13 GW			Collected by	Collected date/time 11/21/24 16:00	Received da 11/23/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407625	1	11/30/24 02:33	11/30/24 02:33	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/05/24 00:26	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411327	1	12/05/24 02:40	12/06/24 04:04	JPD	Mt. Juliet, TN
MW-110D L1803484-14 GW			Collected by	Collected date/time 11/18/24 14:55	Received da 11/23/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407625	1	11/30/24 02:46	11/30/24 02:46	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/05/24 00:28	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411327	1	12/05/24 02:40	12/06/24 04:35	JPD	Mt. Juliet, TN
MW-113D L1803484-15 GW			Collected by	Collected date/time 11/21/24 13:15	Received da 11/23/24 09:0	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time	D · -	
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407625	10	11/30/24 02:58	11/30/24 02:58	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/05/24 00:33	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411327	1	12/05/24 02:40	12/06/24 04:38	JPD	Mt. Juliet, TN
MW-114D L1803484-16 GW			Collected by	Collected date/time 11/21/24 10:30	Received da 11/23/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407625	1	11/30/24 03:11	11/30/24 03:11	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/05/24 00:35	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411327	1	12/05/24 02:40	12/06/24 04:41	JPD	Mt. Juliet, TN
MW-115D L1803484-17 GW			Collected by	Collected date/time 11/21/24 14:40	Received da 11/23/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407625	1	11/30/24 03:24	11/30/24 03:24	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/05/24 00:37	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411327	1	12/05/24 02:40	12/06/24 04:45	JPD	Mt. Juliet, TN
MW-118D L1803484-18 GW			Collected by	Collected date/time 11/21/24 11:50	Received da 11/23/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407625	1	11/30/24 03:37	11/30/24 03:37	ZSA	Mt. Juliet, TN
Wel Chemistry by Method 3030A						
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/04/24 23:54	DJS	Mt. Juliet, TN

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DUPLICATE 1 L1803484-19 GW			Collected by	Collected date/time 11/20/24 12:00	Received dat 11/23/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2408035	1	11/25/24 12:17	11/25/24 14:41	DLS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2407625	10	11/30/24 03:49	11/30/24 03:49	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411307	1	12/04/24 11:15	12/05/24 00:39	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411327	1	12/05/24 02:40	12/06/24 04:51	JPD	Mt. Juliet, TN



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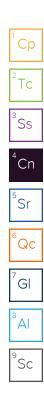
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CASE NARRATIVE

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.

Drittine Boyd

Brittnie L Boyd Project Manager



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SAMPLE RESULTS - 01 L1803484

Gravimetric Analysis by Method 2540 C-2011

Gravimetric Analysis by Method 2540 C-2011								
	Result	Qualifier	RDL	Dilution	Analysis	Batch		Ср
Analyte	mg/l		mg/l		date / time			2
Dissolved Solids	204		10.0	1	11/25/2024 14:41	WG2408035		Tc

Wet Chemistry by Method 9056A

Wet Chemistry by Method 9056A									
	Result	Qualifier	RDL	Dilution	Analysis	Batch			
Analyte	mg/l		mg/l		date / time		⁴ Cn		
Chloride	7.02		1.00	1	11/29/2024 23:35	WG2407625			
Fluoride	ND	<u>P1</u>	0.150	1	11/29/2024 23:35	WG2407625	5		
Sulfate	50.8	<u>J6</u>	5.00	1	11/29/2024 23:35	WG2407625	Sr		

Metals (ICP) by Method 6010B

Metals (ICP) by Met	hod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁷ Cl
Boron	ND		0.200	1	12/05/2024 00:01	WG2411307	GI

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	0
Analyte	mg/l		mg/l		date / time		Sc
Calcium	15.4		1.00	1	12/06/2024 17:41	WG2411326	

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SAMPLE RESULTS - 02 L1803484

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch		Cp	
Analyte	mg/l		mg/l		date / time			2	ī
Dissolved Solids	195		10.0	1	11/25/2024 14:41	WG2408035		Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by Method 9056A								
	Result	Qualifier	RDL	Dilution	Analysis	Batch		
Analyte	mg/l		mg/l		date / time			⁴ Cn
Chloride	7.19		1.00	1	11/29/2024 23:47	WG2407625		CII
Fluoride	ND		0.150	1	11/29/2024 23:47	WG2407625		5
Sulfate	27.5		5.00	1	11/29/2024 23:47	WG2407625		ँSr

Metals (ICP) by Method 6010B

Metals (ICP) by Method 6010B								⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch		
Analyte	mg/l		mg/l		date / time			
Boron	ND		0.200	1	12/05/2024 00:03	WG2411307		G

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>	0
Analyte	mg/l		mg/l		date / time		Sc
Calcium	15.6		1.00	1	12/06/2024 17:44	<u>WG2411326</u>	

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SAMPLE RESULTS - 03 L1803484

Gravimetric Analysis by Method 2540 C-2011

								1 Cn	
	Result	Qualifier	RDL	Dilution	Analysis	Batch		Cp	L
Analyte	mg/l		mg/l		date / time			2	ī
Dissolved Solids	228		10.0	1	11/25/2024 14:41	WG2408035		Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by Method 9056A								
	Result	Qualifier	RDL	Dilution	Analysis	Batch		
Analyte	mg/l		mg/l		date / time		⁴ Cn	
Chloride	3.95		1.00	1	11/30/2024 00:00	WG2407625		
Fluoride	ND		0.150	1	11/30/2024 00:00	WG2407625	5	
Sulfate	71.1		5.00	1	11/30/2024 00:00	WG2407625	Sr	

Metals (ICP) by Method 6010B

Metals (ICP) by Method 6010B							⁶ Qc	
	Result	Qualifier	RDL	Dilution	Analysis	Batch		
Analyte	mg/l		mg/l		date / time		7	
Boron	0.743		0.200	1	12/05/2024 00:05	WG2411307		G

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		Sc
Calcium	15.9		1.00	1	12/06/2024 18:02	WG2411326	

SDG: L1803484 DATE/TIME: 12/11/24 10:13

SAMPLE RESULTS - 04 L1803484

Gravimetric Analysis by Method 2540 C-2011

								Cn	L
	Result	Qualifier	RDL	Dilution	Analysis	Batch		Cp	
Analyte	mg/l		mg/l		date / time			2	1
Dissolved Solids	199		10.0	1	11/25/2024 14:41	WG2408035		Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by Method 9056A								
	Result	Qualifier	RDL	Dilution	Analysis	Batch	L	
Analyte	mg/l		mg/l		date / time		4	¹ Cn
Chloride	4.90		1.00	1	11/30/2024 00:13	WG2407625		CII
Fluoride	ND		0.150	1	11/30/2024 00:13	WG2407625	5	5
Sulfate	33.4		5.00	1	11/30/2024 00:13	WG2407625		Sr

Metals (ICP) by Method 6010B

Metals (ICP) by Method 6010B								⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch		
Analyte	mg/l		mg/l		date / time			⁷ GL
Boron	ND		0.200	1	12/05/2024 00:07	WG2411307		

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		Sc
Calcium	17.9		1.00	1	12/06/2024 18:05	WG2411326	

SDG: L1803484 DATE/TIME: 12/11/24 10:13

SAMPLE RESULTS - 05 L1803484

Gravimetric Analysis by Method 2540 C-2011

	, ,						Cn	Т
	Result	Qualifier	RDL	Dilution	Analysis	Batch		
Analyte	mg/l		mg/l		date / time		2	1
Dissolved Solids	1200		20.0	1	11/25/2024 14:41	WG2408035	⁻Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by Method 9056A								
	Result	Qualifier	RDL	Dilution	Analysis	Batch		
Analyte	mg/l		mg/l		date / time			⁴ Cn
Chloride	11.9		10.0	10	11/30/2024 00:26	WG2407625		CII
Fluoride	ND		1.50	10	11/30/2024 00:26	WG2407625		5
Sulfate	802		50.0	10	11/30/2024 00:26	WG2407625		Sr

Sample Narrative:

L1803484-05 WG2407625: Dilution due to matrix impact on instrumentation at lower dilution

Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	8
Analyte	mg/l		mg/l		date / time		ĬAĬ
Boron	6.84		0.200	1	12/05/2024 00:12	WG2411307	

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Calcium	41.7		1.00	1	12/06/2024 18:09	WG2411326

SDG: L1803484 1

Qc

GI

SAMPLE RESULTS - 06 L1803484

Collected date/time: 11/18/24 16:10 Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	313		10.0	1	11/25/2024 14:41	WG2408035
Wet Chemistry by	Method 9056/ Result	A Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l	quanter	mg/l	Dilation	date / time	Baten
Chloride	2.88		1.00	1	11/30/2024 00:38	WG2407625
Fluoride	ND		0.150	1	11/30/2024 00:38	WG2407625
	149		5.00		11/30/2024 00:38	WG2407625

							 - ~ v
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Boron	1.32		0.200	1	12/05/2024 00:14	WG2411307	G

Metals (ICPMS) by Method 6020B

Metals (ICPMS) by	Method 6020E	3					⁸ Al
	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		Sc
Calcium	5.23		1.00	1	12/06/2024 18:12	WG2411326	

SAMPLE RESULTS - 07 L1803484

Gravimetric Analysis by Method 2540 C-2011

,	· · · · · · · · · · · · · · · · · · ·						l'Cn	
	Result	Qualifier	RDL	Dilution	Analysis	Batch	Cp	L
Analyte	mg/l		mg/l		date / time		2	1
Dissolved Solids	556		10.0	1	11/25/2024 14:41	WG2408035	⁻Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by	Method 90564	4					³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁴ Cn
Chloride	7.47		1.00	1	11/30/2024 00:51	WG2407625	CII
Fluoride	ND		0.150	1	11/30/2024 00:51	WG2407625	5
Sulfate	25.3		5.00	1	11/30/2024 00:51	WG2407625	ဳSr

Metals (ICP) by Method 6010B

Metals (ICP) by N	lethod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Boron	0.269		0.200	1	12/05/2024 00:15	WG2411307	G

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		Sc
Calcium	76.6		1.00	1	12/06/2024 18:15	WG2411326	

SDG: L1803484 DATE/TIME: 12/11/24 10:13 °ΑΙ

SAMPLE RESULTS - 08 L1803484

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch		Cp	
Analyte	mg/l		mg/l		date / time			2	i
Dissolved Solids	435		10.0	1	11/25/2024 14:41	WG2408035		⁻Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by	Method 9056A	X					³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		4 Cn
Chloride	6.17		1.00	1	11/30/2024 01:04	WG2407625	CII
Fluoride	0.217	B	0.150	1	11/30/2024 01:04	WG2407625	5
Sulfate	98.3		5.00	1	11/30/2024 01:04	WG2407625	Sr

Metals (ICP) by Method 6010B

Metals (ICP) by Me	ethod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁷ GI
Boron	0.218		0.200	1	12/05/2024 00:17	WG2411307	G

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9	4
Analyte	mg/l		mg/l		date / time			Sc
Calcium	42.9		1.00	1	12/06/2024 18:18	WG2411326		

SDG: L1803484 °ΑΙ

SAMPLE RESULTS - 09

Collected date/time: 11/19/24 14:05 Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	330		10.0	1	11/25/2024 14:41	WG2408035
Wet Chemistry b	y Method 9056	Д				
	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Chloride	8.82		1.00	1	11/30/2024 01:17	WG2407625
Fluoride	ND		0.150	1	11/30/2024 01:17	WG2407625
Sulfate	23.1		5.00	1	11/30/2024 01:17	WG2407625
Metals (ICP) by N	lethod 6010B					
	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Boron	0.235		0.200	1	12/05/2024 00:19	<u>WG2411307</u>
Metals (ICPMS) b	y Method 6020	В				

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		Sc
Calcium	58.3		1.00	1	12/06/2024 04:16	WG2411327	

SAMPLE RESULTS - 10

Collected date/time: 11/19/24 10:20

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	335		10.0	1	11/25/2024 14:41	WG2408035
Wet Chemistry by I	Method 9056	Д				
	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Chloride	7.86		1.00	1	11/30/2024 01:29	WG2407625
Fluoride	ND		0.150	1	11/30/2024 01:29	WG2407625
Sulfate	29.8		5.00	1	11/30/2024 01:29	WG2407625
Metals (ICP) by Met	hod 6010B					
	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Boron	0.271		0.200	1	12/05/2024 00:21	WG2411307
Metals (ICPMS) by I	Mothad 6020	D				

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		Sc
Calcium	56.3		1.00	1	12/06/2024 04:19	WG2411327	

SDG: L1803484 DATE/TIME: 12/11/24 10:13

SAMPLE RESULTS - 11 L1803484

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier RDL	Dilution	Analysis	Batch	 'Ср
Analyte	mg/l	mg/l		date / time		2
Dissolved Solids	184	10.0	1	11/25/2024 14:41	WG2408035	Tc

Wet Chemistry by Method 9056A

Wet Chemistry by Method 9056A									
	Result	Qualifier	RDL	Dilution	Analysis	Batch			
Analyte	mg/l		mg/l		date / time			⁴ Cn	
Chloride	ND		10.0	10	11/30/2024 02:08	WG2407625		CII	
Fluoride	ND		1.50	10	11/30/2024 02:08	WG2407625		5	
Sulfate	ND		50.0	10	11/30/2024 02:08	WG2407625		Sr	

Sample Narrative:

L1803484-11 WG2407625: Dilution due to matrix impact on instrumentation at lower dilution

Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	8
Analyte	mg/l		mg/l		date / time		ĬAĬ
Boron	0.242		0.200	1	12/05/2024 00:23	WG2411307	

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Calcium	28.1		1.00	1	12/06/2024 04:23	WG2411327

SDG: L1803484 DATE/TIME: 12/11/24 10:13 Qc

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SAMPLE RESULTS - 12 L1803484

Gravimetric Analysis by Method 2540 C-2011

							 l'Cn	L
	Result	Qualifier	RDL	Dilution	Analysis	Batch	Cp	l
Analyte	mg/l		mg/l		date / time		2	i
Dissolved Solids	475		10.0	1	11/25/2024 14:41	WG2408035	Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by Method 9056A										
	Result	Qualifier	RDL	Dilution	Analysis	Batch				
Analyte	mg/l		mg/l		date / time			⁴ Cn		
Chloride	12.0		1.00	1	11/30/2024 02:20	WG2407625		CII		
Fluoride	ND		0.150	1	11/30/2024 02:20	WG2407625		⁵ Cr		
Sulfate	34.9		5.00	1	11/30/2024 02:20	WG2407625		Sr		

Metals (ICP) by Method 6010B

Metals (ICP) by M	ethod 6010B						⁶ Q	lc
	Result	Qualifier	RDL	Dilution	Analysis	Batch		
Analyte	mg/l		mg/l		date / time		7	
Boron	0.327		0.200	1	12/05/2024 00:24	WG2411307	G	'

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		 Sc
Calcium	67.8		1.00	1	12/06/2024 04:26	WG2411327	

SDG: L1803484 DATE/TIME: 12/11/24 10:13

SAMPLE RESULTS - 13 L1803484

Gravimetric Analysis by Method 2540 C-2011

Cravinicane / analy	sis by method 2						Co	
	Result	Qualifier	RDL	Dilution	Analysis	Batch	Cp	
Analyte	mg/l		mg/l		date / time		2	i
Dissolved Solids	365		10.0	1	11/25/2024 14:41	WG2408035	Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by	Method 90564	7					³ Ss	;
	Result	Qualifier	RDL	Dilution	Analysis	Batch		
Analyte	mg/l		mg/l		date / time		⁴ Cr	
Chloride	6.04		1.00	1	11/30/2024 02:33	WG2407625		'
Fluoride	ND		0.150	1	11/30/2024 02:33	WG2407625	5	
Sulfate	45.9		5.00	1	11/30/2024 02:33	WG2407625	ٌSr	

Metals (ICP) by Method 6010B

Metals (ICP) by Me	thod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>	
Analyte	mg/l		mg/l		date / time		⁷ CI
Boron	0.305		0.200	1	12/05/2024 00:26	WG2411307	G

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		 Sc
Calcium	50.2		1.00	1	12/06/2024 04:04	WG2411327	

SDG: L1803484 DATE/TIME: 12/11/24 10:13

SAMPLE RESULTS - 14 L1803484

Gravimetric Analysis by Method 2540 C-2011

ordvintetric Analys	is by Method .	2010 0 20					1 Cn	
	Result	Qualifier	RDL	Dilution	Analysis	Batch	Cp	
Analyte	mg/l		mg/l		date / time		2	i
Dissolved Solids	336		10.0	1	11/25/2024 14:41	WG2408035	Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by	y Method 9056A	A					³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁴ Cn
Chloride	6.26		1.00	1	11/30/2024 02:46	WG2407625	СП
Fluoride	ND		0.150	1	11/30/2024 02:46	WG2407625	5
Sulfate	40.4		5.00	1	11/30/2024 02:46	WG2407625	ٌSr

Metals (ICP) by Method 6010B

Metals (ICP) by Me	thod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>	
Analyte	mg/l		mg/l		date / time		
Boron	0.300		0.200	1	12/05/2024 00:28	WG2411307	G

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		Sc
Calcium	47.4		1.00	1	12/06/2024 04:35	WG2411327	

SDG: L1803484 DATE/TIME: 12/11/24 10:13

SAMPLE RESULTS - 15 L1803484

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch	 Ср	
Analyte	mg/l		mg/l		date / time		2	1
Dissolved Solids	1170		20.0	1	11/25/2024 14:41	WG2408035	Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by	y Method 90564	4					³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		- ⁴ Cn
Chloride	11.9		10.0	10	11/30/2024 02:58	WG2407625	
Fluoride	ND		1.50	10	11/30/2024 02:58	WG2407625	5
Sulfate	640		50.0	10	11/30/2024 02:58	WG2407625	Sr

Sample Narrative:

L1803484-15 WG2407625: Dilution due to matrix impact on instrumentation at lower dilution

Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	8
Analyte	mg/l		mg/l		date / time		٦A
Boron	0.483		0.200	1	12/05/2024 00:33	WG2411307	

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Calcium	202		1.00	1	12/06/2024 04:38	WG2411327

SDG: L1803484 1

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SAMPLE RESULTS - 16 L1803484

Gravimetric Analysis by Method 2540 C-2011

									L
	Result	Qualifier	RDL	Dilution	Analysis	Batch		Cp	L
Analyte	mg/l		mg/l		date / time			2	i
Dissolved Solids	321		10.0	1	11/25/2024 14:41	WG2408035		Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by Method 9056A 3Ss									
	Result	Qualifier	RDL	Dilution	Analysis	Batch			
Analyte	mg/l		mg/l		date / time			⁴ Cn	
Chloride	7.17		1.00	1	11/30/2024 03:11	WG2407625		СП	
Fluoride	ND		0.150	1	11/30/2024 03:11	WG2407625		5	
Sulfate	27.7		5.00	1	11/30/2024 03:11	WG2407625		ဳSr	

Metals (ICP) by Method 6010B

Metals (ICP) by Method 6010B								
	Result	Qualifier	RDL	Dilution	Analysis	Batch		
Analyte	mg/l		mg/l		date / time		⁷ Cl	
Boron	0.270		0.200	1	12/05/2024 00:35	WG2411307	G	

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		Sc
Calcium	54.5		1.00	1	12/06/2024 04:41	WG2411327	

SDG: L1803484

SAMPLE RESULTS - 17 L1803484

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch		Cp	L
Analyte	mg/l		mg/l		date / time			2	ī
Dissolved Solids	333		10.0	1	11/25/2024 14:41	WG2408035		Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by Method 9056A ³ S									
	Result	Qualifier	RDL	Dilution	Analysis	Batch			
Analyte	mg/l		mg/l		date / time			⁴ Cn	
Chloride	4.20		1.00	1	11/30/2024 03:24	WG2407625		CII	
Fluoride	ND		0.150	1	11/30/2024 03:24	WG2407625		⁵ Cr	
Sulfate	ND		5.00	1	11/30/2024 03:24	WG2407625		Sr	

Metals (ICP) by Method 6010B

Metals (ICP) by M	lethod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Boron	0.329		0.200	1	12/05/2024 00:37	WG2411307	G

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		Sc
Calcium	44.8		1.00	1	12/06/2024 04:45	WG2411327	

SDG: L1803484

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SAMPLE RESULTS - 18 L1803484

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch		Cp	
Analyte	mg/l		mg/l		date / time			2	i.
Dissolved Solids	502		10.0	1	11/25/2024 14:41	WG2408035		Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by Method 9056A 3Ss									
	Result	Qualifier	RDL	Dilution	Analysis	Batch			
Analyte	mg/l		mg/l		date / time			⁴ Cn	
Chloride	8.17		1.00	1	11/30/2024 03:37	WG2407625		CII	
Fluoride	ND		0.150	1	11/30/2024 03:37	WG2407625		5	
Sulfate	141		5.00	1	11/30/2024 03:37	WG2407625		ဳSr	

Metals (ICP) by Method 6010B

Metals (ICP) by N	Method 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Boron	0.274		0.200	1	12/04/2024 23:54	WG2411307	G

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>	 9
Analyte	mg/l		mg/l		date / time		Sc
Calcium	86.0		1.00	1	12/06/2024 04:48	WG2411327	

SDG: L1803484 DATE/TIME: 12/11/24 10:13 4

SAMPLE RESULTS - 19 L1803484

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch	Ср
Analyte	mg/l		mg/l		date / time		2
Dissolved Solids	1200		20.0	1	11/25/2024 14:41	<u>WG2408035</u>	Tc

Wet Chemistry by Method 9056A

Wet Chemistry by M	lethod 90564	7					³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁴ Cn
Chloride	12.0		10.0	10	11/30/2024 03:49	WG2407625	CII
Fluoride	ND		1.50	10	11/30/2024 03:49	WG2407625	5
Sulfate	813		50.0	10	11/30/2024 03:49	WG2407625	Sr

Sample Narrative:

L1803484-19 WG2407625: Dilution due to matrix impact on instrumentation at lower dilution

Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	8
Analyte	mg/l		mg/l		date / time		ĨAĬ
Boron	6.97		0.200	1	12/05/2024 00:39	WG2411307	

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Calcium	43.2		1.00	1	12/06/2024 04:51	WG2411327

SDG: L1803484 DATE/TIME: 12/11/24 10:13 1

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WG2408035

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY L1803484-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19

Method Blank (MB)

(MB) R4151535-1 11/25	5/24 14:41				
	MB Result	MB Qualifier	MB MDL	MB RDL	
Analyte	mg/l		mg/l	mg/l	
Dissolved Solids	U		10.0	10.0	

L1803278-01 Original Sample (OS) • Duplicate (DUP)

L1803278-01 Ori	iginal Sample	∃ (OS) • Dur	plicate (,DUP)					4
(OS) L1803278-01 11/2	25/24 14:41 • (DUP)	R4151535-3 11	.1/25/24 14:	.41					
	Original Resul'	It DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits			5
Analyte	mg/l	mg/l		%		%			
Dissolved Solids	373	376	1	0.801		10			

L1803484-19 Original Sample (OS) • Duplicate (DUP)

L1803484-19 Ori	iginal Sample	e (OS) • Du	plicate (DUP)			⁷ Gl
(OS) L1803484-19 11/2	5/24 14:41 • (DUP)	R4151535-4 11	/25/24 14:4	41			
	Original Resu	It DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits	⁸ Al
Analyte	mg/l	mg/l		%		%	
Dissolved Solids	1200	1220	1	1.32		10	°Sc

Laboratory Control Sample (LCS)

(LCS) R4151535-2 11/2	5/24 14:41				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8710	99.0	85.0-115	

DATE/TIME: 12/11/24 10:13

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WG2407625

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY 1803484-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19

Method Blank (MB)

(MB) R4152117-1 11/29/	/24 23:09			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Chloride	U		0.547	1.00
Fluoride	0.0784	J	0.0761	0.150
Sulfate	U		0.637	5.00

L1803484-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1803484-01 11/29/2	24 23:35 • (DUP)	R4152117-3 1	1/30/24 05	5:44		
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	7.02	6.88	1	2.07		15
Fluoride	ND	ND	1	200	<u>P1</u>	15
Sulfate	50.8	51.1	1	0.542		15

L1803484-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1803484-02 11/29/2	4 23:47 • (DUP)	R4152117-6 1	1/30/24 06	6:22		
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	7.19	7.08	1	1.66		15
Fluoride	ND	ND	1	11.1		15
Sulfate	27.5	26.7	1	2.89		15

Laboratory Control Sample (LCS)

(LCS) R4152117-2 11/29/24 23:22								
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier			
Analyte	mg/l	mg/l	%	%				
Chloride	40.0	37.0	92.4	80.0-120				
Fluoride	8.00	7.43	92.9	80.0-120				
Sulfate	40.0	37.5	93.8	80.0-120				

SDG: L1803484 DATE/TIME: 12/11/24 10:13

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY 1803484-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19

L1803484-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803484-01 11/29/2	4 23:35 • (MS) F	24152117-4 11/3	0/24 05:57 • (MSD) R4152117-	-5 11/30/24 06	:09						
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Chloride	40.0	7.02	45.4	45.5	96.1	96.2	1	80.0-120			0.117	15
Fluoride	8.00	ND	8.12	8.10	102	101	1	80.0-120			0.301	15
Sulfate	40.0	50.8	82.2	81.7	78.4	77.3	1	80.0-120	<u>J6</u>	<u>J6</u>	0.516	15

L1803484-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1803484-02 11/29/	24 23:47 • (MS)	R4152117-7 11/3	0/24 06:35				
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Chloride	40.0	7.19	45.3	95.3	1	80.0-120	
Fluoride	8.00	ND	8.07	99.5	1	80.0-120	
Sulfate	40.0	27.5	62.9	88.4	1	80.0-120	

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Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY L1803484-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19

Method Blank (MB)

Method Blai	NK (IVIB)				
(MB) R4153817-1	12/04/24 23:51				
	MB Result	MB Qualifier	MB MDL	MB RDL	Г
Analyte	mg/l	I	mg/l	mg/l	
Boron	U	(0.0200	0.200	

Laboratory Control Sample (LCS)

(LCS) R4153817-2 12/04/	/24 23:52				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Boron	1.00	0.951	95.1	80.0-120	

L1803484-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803484-18 12/04/24	4 23:54 • (MS)	R4153817-4 12/	04/24 23:58 •	(MSD) R415381	17-5 12/05/24	00:00						
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Boron	1.00	0.274	1.22	1.22	94.8	95.0	1	75.0-125			0.164	20

SDG: L1803484 DATE/TIME: 12/11/24 10:13

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Metals (ICPMS) by Method 6020B

QUALITY CONTROL SUMMARY L1803484-01,02,03,04,05,06,07,08

Method Blank (MB)

vietnoù Biarik					
MB) R4154837-1 12/	/06/24 16:38				
	MB Result	MB Qualifier	MB MDL	MB RDL	
Analyte	mg/l		mg/l	mg/l	
Calcium	U		0.0925	1.00	

Laboratory Control Sample (LCS)

(LCS) R4154837-2 12/0	06/24 16:42				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Calcium	5.00	5.32	106	80.0-120	

L1803478-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803478-11 12/06/24	1 16:45 • (MS) R	4154837-4 12/0	06/24 16:51 • (N	MSD) R4154837	7-5 12/06/24 16	6:54						
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%

DATE/TIME: 12/11/24 10:13

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Metals (ICPMS) by Method 6020B

QUALITY CONTROL SUMMARY L1803484-09,10,11,12,13,14,15,16,17,18,19

Method Blank (MB)

Method Blank	(IVIB)				
(MB) R4154551-1 12	/06/24 03:57				
	MB Result	MB Qualifier	MB MDL	MB RDL	
Analyte	mg/l		mg/l	mg/l	
Calcium	U		0.0925	1.00	

Laboratory Control Sample (LCS)

(LCS) R4154551-2 12/06	6/24 04:01				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Calcium	5.00	5.27	105	80.0-120	

L1803484-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1803484-13 12/06/2	4 04:04 • (MS)	R4154551-4 12	/06/24 04:10 •	(MSD) R41545	51-5 12/06/24	04:13						
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Calcium	5.00	50.2	55.0	54.6	96.5	87.3	1	75.0-125			0.836	20

DATE/TIME: 12/11/24 10:13

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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

Qualifier	Description
В	The same analyte is found in the associated blank.
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.

SDG: L1803484 Τс

Ss

Cn

Sr

Qc

GI

AI

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
lowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky ¹⁶	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ¹⁴	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.

SDG: L1803484 DATE/TIME: 12/11/24 10:13

Company Name/Address:			Billing Info	rmation:						A	nalysis / Co	ntainer / F	reservative			Chain of Custody	Page of	
Alliance Technical Group - Bryant, AR		Account 219 Broy	Accounts rayubic			Pres Chk								-	Pa	CC.		
Little Rock, AR 72022			1					52)		5		=	- 3	1		· PEULEA		
Report to: Jonathan Brown			Email To: Jonathan.	l To: than.Brown@AllianceTG.com;Jhouse@trcc										-	8	12065 Lebanon Rd Mour Submitting a sample via t	this chain of custody	
Project Description: Entergy - White Bluff	1.1	City/State Collected:	-	Please Circle: PT MT CT ET				12							Pace Terms and Condition https://info.paceiabs.com terms.pdf			
Phone: 501-847-7077	Client Projec 1145-21-0			Lab Proje		ITERGYWI	в	1	oPres							SDG #	H207	
Collected by (print):	Site/Facility CADL - CC			P.O. #				FONH	DPE-N	res						Table # Acctnum: GBM	ICBAR	
Collected by (signature): Immediately Packed on Ice N Y	Same	Day Five Day 5 Da Day 10 C	MUST Be Notified) Five Day 5 Day (Rad Only) 10 Day (Rad Only)		e # Date Results Needed		Ne?.	250miHDPE-HN03	so4 250mlHDPE-NoPres	1L-HDPE NoPres						Template: T198 Prelogin: P111 PM: 829 - Brittm PB: 111	2374	
Sample ID	Comp/Grat	Matrix *	Depth	Da	te	Time	Cntrs	8	a, F,	TDS 1		-1	-			Shipped Via: Fe Remarks	Sample # (lab only)	
MW-1015	6	GW	1	1012	0/24	1625	3	1	1	-		17/	1.000			5.76	-01	
MW-1025	6	GW			0/24	1040	3	10	/	-						5.87		
MW.1035.		GW	-	1.1	1					13						0.000		
MW-1045	6	GW		11/19	124	1300	3	1	-	-			1000			5.20	-3	
MW-1055	G	GW		11/1	9/24	1130	3	-	-	1						5.81	100	
MW-106S	6	GW		11/20	129	1200	3	-	-	-		-				4.12	-05	
MW-1105	6	GW		11/19	124	1610	3	-	-	-			1			4.78	-04	
MW-1115-,		GW	1	14														
MW-1010-		GW	1					1-1										
MW-102D	G	GW		11/19	1/24	1605	13	-	-	-			1			7.33	-07	
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater	Remarks:				<u></u>						pH Flow		mp	COC Bot Cor	Seal Pr Signed/ tles arr rect bot	le Receipt Ch resent/Intact: 'Accurate: rive intact: tles used:		
DW - Drinking Water OT - Other	Samples returne UPSFedB	d via: xCourie		_	Trackin	ng #		Mur	ti	-			0	VOA	Zero He	volume sent: <u>If Applicable</u> adspace:	Le IY N	
Relinquished by : (Signature)		Date:	4 11	e: UD	Receiv	ed by: (Signa	ture)				Trip Blank	Received:	Yes / No HCL / Meol TBR	RAD	Preservation Correct/Checked: Zr _N RAD Screen <0.5 mR/hr: ZY _N			
Felinquished by : (Signature)		Date:	Tim		Receiv	ed by: (Signa	iture)				Temp: Mrif:	°C ^B	lottles Receive	d: If pr	If preservation required by Login: Date/Time			
Relinquished by : (Signature)		Date:	Tim	e:	Receiv	ed for lab by Eastan (1000	ture)			Date: 11/23/2		1me: 900	Hole	d:	1	Condition: NCF / OK	

Company Name/Address:		0.0.25	Billing Info	ormation;			1		_		nalvsis /	Container	/ Preservat	ive		Chain of Custody	Page of
Alliance Technical Gro 219 Brown Lane Little Rock, AR 72022	Dryant, AK 72022					Pres Chk									- Pa	CC ADVANCING SCIENCE	
Report to: Jonathan Brown			Email To: Jonathan.	nail To: nathan.Brown@AllianceTG.com;Jhouse@trcc						-						12065 Lebanon Rd Mou	
Project Description: Entergy - White Bluff		City/State Collected:			Please Circle PT MT CT					Ē			(20	Submitting a sample via constitutes acknowledge Pace Terms and Condition https://info.pacelabs.co terms.pdf	ment and acceptance of the ans found at:
Phone: 501-847-7077	Client Proje 1145-21-		Lab Pro GBMC		NTERGYW	в		Pres	1. 1			-			SDG # US	53084	
Collected by (print):	Site/Facility			P.O. #				EONH	DPE-No	es						Table #	ACBAR
Collected by (signature): Immediately Packed on Ice N Y	Same Next Two Three	Day10 J e Day	Five Day 5 Day (Rad Only) 10 Day (Rad Only)		ot		No. of Cntrs	a 250mlHDPE-HNO	F, SO4 250mIHDPE-NoPres	1L-HDPE NoPres						Template: T19 Prelogin: P11 PM: 829 Britti PB:	8831 12374
Sample ID	Comp/Gra	b Matrix *	Depth	D	ate	Time		8, Ca	Q, F	TDS						Remarks	Sample # (lab only)
MW-103D	G	GW	-	1111	8/24	1305	3	-	-	1	1	E 3				7.69	-08
MW-104D	6	GW	-	lile	9/24	1405	3	-	-	-					-	7.37	- 1001
MW-105D	G	GW	-	ull	9/24	1020	3	-	-	-						7.50	-10
MW-106D	6	GW	-	11/2	924	1330	3		1	-				1		10.59	- 41
MW 1070		GW		11	(1.5											
MW-108D	G	GW		11/2	9/24	1500	3	1	-	1	-				100	7.35	-12
MW-109D	6	GW	-	11/2	1/24	1600	3	-	-	-	-					7.37	27
MW-110D	G	GW	-	1.1.	1	1455	3	-	-	-			-			7.53	in
MW-1120	G	GW	-	11/13	129	1935	1	-	-				-		-	1.35	
MW-113D			-	111	Jau	12.0	3			-	-		-	-	-	1070	
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water Samples returned via:						5	-	-		pH Flow		Temp	-	COC Seal COC Sign Bottles Correct	G.75 Sample Receipt CheckTist al Present/Intact: NP N N gned/Accurate: NN s arrive intact: NN t bottles used: NN ient volume sent: NN		
OT - Other Relinquished by : (Signature)	Date: Time: Received by: (Signature) 11/22/24 11/00						ture)		1.0		Trip Blan	k Received	: Yes/No HCL/M TBR		Preserva	If Applicabl b Headspace: ation Correct/Che sen <0.5 mR/hr:	_¥_ N
Belinquished by : (Signature)		Date:	Time	e;	Receiv	ed by: (Signa	ture)				Temp:	°C	Bottles Rece	ived:	If preserve	ation required by Log	in: Date/Time
Relinquished by : (Signature)		Date:	Time		Receiv	ed for lab by:	1000				Date:	124	Time: 0900	-	Hold:	-	Condition: NCF / OK

Company Name/Address:			Billing Info	ormation:				_	4	Analysis /	Containe	r / Presen	ative		Chain of Cu	stody	Page of
219 Brown Lane	Alliance Technical Group - Bryant, AR 19 Brown Lane ittle Rock, AR 72022 Accounts Payable 219 Brown Ln. Bryant, AR 72022			Pres Chk						1			- A	Pal	CC.		
Report to: Jonathan Brown		_	Email To: Jonathan.I	athan.Brown@AllianceTG.com;Jhouse@trcc											12065 Lebanon Submitting a sar	Rd Mount mple via th	JET, TN Juliet, TN 37322 is chain of custody
Project Description: Entergy - White Bluff		City/State Collected:		: 0:	Please Circle: PT MT CT ET										Pace Terms and	Conditions	ent and acceptence of the s found al: /hubls/pas-standard-
Phone: 501-847-7077	Client Project 1145-21-0		Lab		# R-ENTERG	rwв		oPres							SDG # (-18	Bran
Collected by (print):	Site/Facility			P.O. #			EONH	DPE-N	res						Table # Acctnum:	GBM	CBAR
Collected by (signature): Immediately Packed on Ice N Y Sample ID	Same D	T T	Day ay (Rad Only)		esults Needeo	No. of	25	F, SO4 250mlHDPE-NoPres	S 1L-HDPE NoPres						Shipped V	P111 Brittni III	2374 le L Boyd 24 BK dex Priority
	Comp/Grab	Watrix		Date			ŝ	ΰ	TDS				-	-	Remar		Sample # (lab only)
MW-114D	G	GW		11/21/2	4 103		and the second se		1		-	-			7.3	8	-16
MW-115D	6	GW		11/24/2	4 144			-	-			_			7.4	5	-12
MW-118D	6	GW		11/21/2	24 115	DS	5 -	-	-			1			7.10	6	1-8
FIELD BLANK 1		GW															
DUPLICATE 1 /065	6	GW		11/20/2	1 120	UB	-	-		1				-	4.12	2	-14
DUPLICATEZ		GW	+	-				-	-	-	1000	- 1		1			
		-	+					-	-			- 1		-			1
		GW	-	+			-	-	-		2-1	- 1				-	
		GW	+	+				-	-	-		-	-			-	
GW • Matrix: Remarks: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater B - Bioassay DW - Drinking Water Samples returned via: OT - Other UPS FedEx Courier										Flow Other			COC Si Bottle Correc Suffic	Sample Receipt Checklist COC Seal Present/Intact: NP Y N COC Signed/Accurate: TY N Bottles arrive intact: TY N Correct bottles used: X N Sufficient volume sent: Y N If Applicable			
Relinquished by (Signature)		Date:	Time	Time: Received by: (Signature) Trip Blank Received: Yes								/ MeoH	Preser	ro Headspace: vation Correc reen <0.5 mR/	t/Che		
Selinquished by : (Signature)	D	Date:	Time	e: Re	eceived by: (S	ignature)				Temp: °C Bottles Received:				If preservation required by Login: Date/Time			
Relinquished by : (Signature)	D	Date:	Time	e: Re	eceived for la	b by: (Sign:				Date:	124	Time:		Hold:			Condition: NCF / OK

3,1 60 = 3,1	0.1 = 0+0.1	2.3+0=2.3	////23/24 Date
TLAG	TCM	L(A)	
7354	7365	ZUM 0343 7376	Enita Organ Name
0943 7354	6480	0843	
7464	492	JUM	

Nen



Pace Analytical® ANALYTICAL REPORT December 11, 2024

Alliance Technical Group - Bryant, AR

Sample Delivery Group:	L1804133
Samples Received:	11/26/2024
Project Number:	1145-21-080
Description:	Entergy - White Bluff
Site:	CADL - CCR
Report To:	Jonathan Brown
	219 Brown Lane
	Little Rock, AR 72022

Ср
² Tc
³ Ss
⁴ Cn
⁵Sr
⁶ Qc
⁷ Gl
⁸ Al
⁰Sc

Entire Report Reviewed By:

Drittie Boyd

Brittnie L Boyd Project Manager

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

Pace Analytical National

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

ACCOUNT: Alliance Technical Group - Bryant, AR

PROJECT: 1145-21-080

SDG: L1804133

DATE/TIME: 12/11/24 10:21

PAGE: 1 of 25

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SDG: L1804133 DATE/TIME: 12/11/24 10:21

SAMPLE SUMMARY

MW-103S L1804133-01 GW			Collected by JLC/KRS	Collected date/time 11/22/24 15:30	Received da 11/26/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2409320	1	11/26/24 21:40	11/27/24 12:07	JAC	Mt. Juliet, T
Wet Chemistry by Method 9056A	WG2409502	5	11/30/24 22:13	11/30/24 22:13	ZSA	Mt. Juliet, T
Metals (ICP) by Method 6010B	WG2411848	1	12/05/24 08:50	12/05/24 14:22	MAP	Mt. Juliet, T
Metals (ICPMS) by Method 6020B	WG2411861	1	12/05/24 12:22	12/05/24 22:03	UNP	Mt. Juliet, T
			Collected by JLC/KRS	Collected date/time	Received dat 11/26/24 09:0	
MW-101D L1804133-02 GW		D # 11		11/22/24 13:15		
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2409320	1	11/26/24 21:40	11/27/24 12:07	JAC	Mt. Juliet, T
Wet Chemistry by Method 9056A	WG2409502	1	11/30/24 22:48	11/30/24 22:48	ZSA	Mt. Juliet, T
Metals (ICP) by Method 6010B	WG2411848	1	12/05/24 08:50	12/05/24 14:24	MAP	Mt. Juliet, Ti
Metals (ICPMS) by Method 6020B	WG2411861	1	12/05/24 12:22	12/05/24 21:17	UNP	Mt. Juliet, T
			Collected by	Collected date/time	Received dat	te/time
MW-111S L1804133-03 GW			JLC/KRS	11/22/24 09:55	11/26/24 09:0	00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2409320	1	11/26/24 21:40	11/27/24 12:07	JAC	Mt. Juliet, T
Wet Chemistry by Method 9056A	WG2409502	100	11/30/24 23:05	11/30/24 23:05	ZSA	Mt. Juliet, T
Metals (ICP) by Method 6010B	WG2411848	1	12/05/24 08:50	12/05/24 14:26	MAP	Mt. Juliet, T
Metals (ICPMS) by Method 6020B	WG2411861	1	12/05/24 12:22	12/05/24 21:20	UNP	Mt. Juliet, T
			Collected by	Collected date/time	Received dat	te/time
MW-107D L1804133-04 GW			JLC/KRS	11/22/24 11:25	11/26/24 09:0	00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2409320	1	11/26/24 21:40	11/27/24 12:07	JAC	Mt. Juliet, Tl
Wet Chemistry by Method 9056A	WG2409502	1	11/30/24 23:40	11/30/24 23:40	ZSA	Mt. Juliet, Tl
Metals (ICP) by Method 6010B	WG2411848	1	12/05/24 08:50	12/05/24 14:27	MAP	Mt. Juliet, Tl
Metals (ICPMS) by Method 6020B	WG2411861	1	12/05/24 12:22	12/05/24 21:23	UNP	Mt. Juliet, T
			Collected by	Collected date/time	Received dat	te/time
MW-112D L1804133-05 GW			JLC/KRS	11/22/24 14:30	11/26/24 09:0	00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2409320	1	11/26/24 21:40	11/27/24 12:07	JAC	Mt. Juliet, TI
Wet Chemistry by Method 9056A	WG2409502	1	11/30/24 23:58	11/30/24 23:58	ZSA	Mt. Juliet, Tl
Metals (ICP) by Method 6010B	WG2411848	1	12/05/24 08:50	12/05/24 14:29	MAP	Mt. Juliet, Ti
Metals (ICPMS) by Method 6020B	WG2411861	1	12/05/24 12:22	12/05/24 21:26	UNP	Mt. Juliet, TI
			Collected by	Collected date/time	Received dat	
FIELD BLANK 1 L1804133-06 GW			JLC/KRS	11/22/24 13:50	11/26/24 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
	WC2400220	1	11/26/24 21:40	11/27/24 12:07	JAC	Mt. Juliet, T
Gravimetric Analysis by Method 2540 C-2011	WG2409320					
	WG2409320 WG2409502	1	12/01/24 00:15	12/01/24 00:15	ZSA	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011 Wet Chemistry by Method 9056A Metals (ICP) by Method 6010B					ZSA MAP	Mt. Juliet, TN Mt. Juliet, TN

 ACCOUNT:
 PROJECT:
 SDG:
 DATE/TIME:

 Alliance Technical Group - Bryant, AR
 1145-21-080
 L1804133
 12/11/24 10:21

Ср

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SAMPLE SUMMARY

			Collected by	Collected date/time	Received dat	te/time
FIELD BLANK 2 L1804133-07 GW			JLC/KRS	11/22/24 13:50	11/26/24 09:0	00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Gravimetric Analysis by Method 2540 C-2011	WG2409320	1	11/26/24 21:40	11/27/24 12:07	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2409507	1	11/30/24 17:23	11/30/24 17:23	AJC	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411848	1	12/05/24 08:50	12/05/24 14:32	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411861	1	12/05/24 12:22	12/05/24 21:33	UNP	Mt. Juliet, TN

DUPLICATE 2 (MW-112D) L1804133-08 GW			Collected by JLC/KRS	Collected date/time 11/22/24 14:30	Received da 11/26/24 09:0	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Gravimetric Analysis by Method 2540 C-2011	WG2409320	1	11/26/24 21:40	11/27/24 12:07	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2409507	1	11/30/24 17:36	11/30/24 17:36	AJC	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2411848	1	12/05/24 08:50	12/05/24 14:34	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2411861	1	12/05/24 12:22	12/05/24 21:36	UNP	Mt. Juliet, TN

Ср

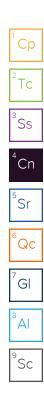
SDG: L1804133

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.

Drittine Boyd

Brittnie L Boyd Project Manager



SDG: L1804133 DATE/TIME: 12/11/24 10:21 PAGE: 5 of 25

MW-1035 Collected date/time: 1	1/22/24 15:30		1				
Additional Inform	ation - Results fo	r field and	alyses ar	e not accr	edited to ISO 1	7025	
	Result	Units					
Analyte							
pH (On Site)	4.96	su					
Gravimetric Analy	vsis by Method 2	540 C-20	011				
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Dissolved Solids	221		10.0	1	11/27/2024 12:07	WG2409320	
Wet Chemistry by	Method 9056A						
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Chloride	7.59		5.00	5	11/30/2024 22:13	WG2409502	

5

5

0.750

25.0

Sample Narrative:

Fluoride

Sulfate

L1804133-01 WG2409502: Dilution due to matrix impact on instrumentation at lower dilution

ND

92.3

Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Boron	0.608		0.200	1	12/05/2024 14:22	WG2411848

11/30/2024 22:13

11/30/2024 22:13

WG2409502

WG2409502

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Calcium	10.7		1.00	1	12/05/2024 22:03	WG2411861

SDG: L1804133 Ср

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Collected date/time: 11/22/24 13:15

SAMPLE RESULTS - 02 L1804133

Additional Inform	ation - Results fo	or field and	alyses are	e not accr	edited to ISO 1	7025	1
	Result	Units					
Analyte							2
pH (On Site)	6.88	su					
Gravimetric Analy	/sis by Method 2	2540 C-20)11				3
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		4
Dissolved Solids	382		10.0	1	11/27/2024 12:07	WG2409320	
Wet Chemistry by	/ Method 90564	4					5
	Result	Qualifier	RDL	Dilution	Analysis	Batch	6
Analyte	mg/l		mg/l		date / time		Ŭ.
Chloride	6.39		1.00	1	11/30/2024 22:48	WG2409502	
Fluoride	ND		0.150	1	11/30/2024 22:48	WG2409502	7
Sulfate	85.7		5.00	1	11/30/2024 22:48	WG2409502	
Metals (ICP) by M	ethod 6010B						8
	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		9
Boron	ND		0.200	1	12/05/2024 14:24	WG2411848	

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Calcium	56.3		1.00	1	12/05/2024 21:17	WG2411861

SDG: L1804133 Collected date/time: 11/22/24 09:55

SAMPLE RESULTS - 03 L1804133

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

	Result	Units					
Analyte							
oH (On Site)	3.92	su					
Gravimetric Analys	sis by Method 2	2540 C-20)11				
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Dissolved Solids	1280		20.0	1	11/27/2024 12:07	<u>WG2409320</u>	
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
		quanto	mg/l	2.141.011	date / time		
Analyte	mg/i						
Analyte Chloride	mg/l		100	100	11/30/2024 23:05	WG2409502	
-	-		100 15.0	100 100	11/30/2024 23:05 11/30/2024 23:05	WG2409502 WG2409502	
Chloride	ND						
Chloride Fluoride Sulfate	ND ND		15.0	100	11/30/2024 23:05	WG2409502	
Chloride	ND ND 768	moact on instrum	15.0 500	100 100	11/30/2024 23:05	WG2409502	

Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Boron	7.10		0.200	1	12/05/2024 14:26	WG2411848

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Calcium	101		1.00	1	12/05/2024 21:20	WG2411861

SDG: L1804133 Collected date/time: 11/22/24 11:25

SAMPLE RESULTS - 04 L1804133

Additional Information	ation - Results f	or field and	alyses are	e <mark>not acc</mark> r	redited to ISO 1	7025	1
	Result	Units					 Ср
Analyte							2
pH (On Site)	7.52	SU					⁻Tc
Gravimetric Analy	vsis by Method 2	2540 C-20	011				³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁴ Cn
Dissolved Solids	523		10.0	1	11/27/2024 12:07	WG2409320	CII
Wet Chemistry by	/ Method 9056/	Д					⁵ Sr
	Result	Qualifier	RDL	Dilution	Analysis	Batch	 6
Analyte	mg/l		mg/l		date / time		ČQc
Chloride	21.1		1.00	1	11/30/2024 23:40	WG2409502	
Fluoride	ND		0.150	1	11/30/2024 23:40	WG2409502	⁷ GI
Sulfate	128		5.00	1	11/30/2024 23:40	WG2409502	0
Metals (ICP) by M	ethod 6010B						⁸ Al
	Result	Qualifier	RDL	Dilution	Analysis	Batch	 9
Analyte	mg/l		mg/l		date / time		°Sc
Boron	0.332		0.200	1	12/05/2024 14:27	WG2411848	

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Calcium	79.3		1.00	1	12/05/2024 21:23	WG2411861

SDG: L1804133 Collected date/time: 11/22/24 14:30

SAMPLE RESULTS - 05 L1804133

Additional Informa	tion - Results fo	field analyses ar	e not accredite	d to ISO 17025	
	Result	Units			
Analyte					
pH (On Site)	7.46	su			

Gravimetric Analysis by Method 2540 C-2011

Gravimetric Analy	Gravimetric Analysis by Method 2540 C-2011									
	Result	Qualifier	RDL	Dilution	Analysis	Batch				
Analyte	mg/l		mg/l		date / time			4 Cn		
Dissolved Solids	317		10.0	1	11/27/2024 12:07	WG2409320		CII		

Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch	6
Analyte	mg/l		mg/l		date / time		ٽQc
Chloride	7.22		1.00	1	11/30/2024 23:58	WG2409502	
Fluoride	ND		0.150	1	11/30/2024 23:58	WG2409502	⁷ GI
Sulfate	5.08		5.00	1	11/30/2024 23:58	WG2409502	G

Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l	quamer	mg/l	Bliddon	date / time	Bateri	Sc
Boron	0.294		0.200	1	12/05/2024 14:29	WG2411848	

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Calcium	41.4		1.00	1	12/05/2024 21:26	WG2411861

SDG: L1804133 DATE/TIME: 12/11/24 10:21 Ср

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SAMPLE RESULTS - 06 L1804133

Gravimetric Analysis by Method 2540 C-2011

Gravimetric Analysis by Method 2540 C-2011										
	Result	Qualifier	RDL	Dilution	Analysis	Batch		Cp		
Analyte	mg/l		mg/l		date / time			2	i	
Dissolved Solids	ND		10.0	1	11/27/2024 12:07	WG2409320		⁻Tc		

Wet Chemistry by Method 9056A

Wet Chemistry by	Method 90564	Ą					³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		4 Cn
Chloride	ND		1.00	1	12/01/2024 00:15	WG2409502	CII
Fluoride	ND		0.150	1	12/01/2024 00:15	WG2409502	5
Sulfate	ND		5.00	1	12/01/2024 00:15	WG2409502	ဳSr

Metals (ICP) by Method 6010B

Metals (ICP) by N	Method 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		7 Cl
Boron	ND		0.200	1	12/05/2024 14:31	WG2411848	G

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	9
Analyte	mg/l		mg/l		date / time		Sc
Calcium	ND		1.00	1	12/05/2024 21:30	WG2411861	

SDG: L1804133 DATE/TIME: 12/11/24 10:21 °ΑΙ

SAMPLE RESULTS - 07 L1804133

Gravimetric Analysis by Method 2540 C-2011

,							Cn '	
	Result	Qualifier	RDL	Dilution	Analysis	Batch	Ср	
Analyte	mg/l		mg/l		date / time		2	i
Dissolved Solids	ND		10.0	1	11/27/2024 12:07	WG2409320	⁻Tc	

Wet Chemistry by Method 9056A

Wet Chemistry by Met	hod 90564	7					³ Ss
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁴ Cn
Chloride	ND	<u>P1</u>	1.00	1	11/30/2024 17:23	<u>WG2409507</u>	CII
Fluoride	ND		0.150	1	11/30/2024 17:23	WG2409507	5
Sulfate	ND		5.00	1	11/30/2024 17:23	WG2409507	ٌSr

Metals (ICP) by Method 6010B

Metals (ICP) by N	lethod 6010B						⁶ Qc
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		⁷ Gl
Boron	ND		0.200	1	12/05/2024 14:32	WG2411848	

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>	
Analyte	mg/l		mg/l		date / time		Sc
Calcium	ND		1.00	1	12/05/2024 21:33	WG2411861	

SDG: L1804133 DATE/TIME: 12/11/24 10:21 ٌAI

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

Additional Informa	ation - Results f	or field and	alyses are	e not accr	edited to ISO 1	/025	1
	Result	Units					
Analyte							2
pH (On Site)	7.46	SU					
Gravimetric Analy	vsis by Method 2	2540 C-20)11				3
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		4
Dissolved Solids	321		10.0	1	11/27/2024 12:07	WG2409320	
Wet Chemistry by	/ Method 9056/	Д					5
	Result	Qualifier	RDL	Dilution	Analysis	Batch	6
Analyte	mg/l		mg/l		date / time		Ŭ
Chloride	6.43		1.00	1	11/30/2024 17:36	WG2409507	
Fluoride	ND	P1	0.150	1	11/30/2024 17:36	WG2409507	7
Sulfate	ND		5.00	1	11/30/2024 17:36	WG2409507	
Metals (ICP) by M	ethod 6010B						8
	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		9
Boron	0.288		0.200	1	12/05/2024 14:34	WG2411848	

Metals (ICPMS) by Method 6020B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Calcium	41.1		1.00	1	12/05/2024 21:36	WG2411861

SDG: L1804133

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L1804133-01,02,03,04,05,06,07,08

Method Blank (MB)

MB MDL MB RD	
mg/l mg/l	
10.0 10.0	
	mg/l mg/l

L1803945-01 Original Sample (OS) • Duplicate (DUP)

Original Result DUP Result Dilution DUP RPD DUP Qualifier DUP RPD Limits	L1803945-01 Origin (OS) L1803945-01 11/27/24						
	nalyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	

L1804133-08 Original Sample (OS) • Duplicate (DUP)

L1804133-08 Ori	iginal Sample	(OS) • Dup	olicate (DUP)			⁷ G
(OS) L1804133-08 11/2	7/24 12:07 • (DUP)	R4152204-4 1	1/27/24 12	:07			
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits	⁸ A
Analyte	mg/l	mg/l		%		%	
Dissolved Solids	321	322	1	0.311		10	°S

Laboratory Control Sample (LCS)

(LCS) R4152204-2 11/2	27/24 12:07				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8860	101	85.0-115	

SDG: L1804133 DATE/TIME: 12/11/24 10:21

PAGE: 14 of 25

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY L1804133-01,02,03,04,05,06

Method Blank (MB)

(MB)	R4153016-1	11/30/24	14:23
(IVIB)	R4153016-1	11/30/24	14:23

Method Bidh	K (IVID)				
(MB) R4153016-1 1	1/30/24 14:23				
	MB Result	MB Qualifier	MB MDL	MB RDL	
Analyte	mg/l		mg/l	mg/l	
Chloride	U		0.547	1.00	
Fluoride	U		0.0761	0.150	
Sulfate	U		0.637	5.00	

L1804082-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1804082-01 11/30/2	24 15:15 • (DUP) I	R4153016-3 1	2/01/24 00):32		
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	43.1	43.9	1	1.74		15
Fluoride	ND	ND	1	4.53		15
Sulfate	71.5	71.5	1	0.106		15

L1804082-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1804082-02 11/30/2	24 15:33 • (DUP)	R4153016-6	12/01/24 0	1:25		
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	7.93	7.78	1	1.89		15
Fluoride	ND	ND	1	3.05		15
Sulfate	15.5	15.3	1	0.797		15

Laboratory Control Sample (LCS)

(LCS) R4153016-2 11/30/2	4 14:41				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Chloride	40.0	38.6	96.6	80.0-120	
Fluoride	8.00	8.05	101	80.0-120	
Sulfate	40.0	39.3	98.3	80.0-120	

ACCOUNT:
Alliance Technical Group - Bryant, AR

PROJECT: 1145-21-080

SDG: L1804133 DATE/TIME: 12/11/24 10:21

PAGE: 15 of 25 °Cn

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L1804082-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1804082-01 11/30/2	(OS) L1804082-01 11/30/24 15:15 • (MS) R4153016-4 12/01/24 00:50 • (MSD) R4153016-5 12/01/24 01:07											
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Chloride	40.0	43.1	74.2	74.5	77.5	78.4	1	80.0-120	<u>J6</u>	<u>J6</u>	0.496	15
Fluoride	8.00	ND	8.26	8.30	102	103	1	80.0-120			0.470	15
Sulfate	40.0	71.5	97.6	97.9	65.0	65.9	1	80.0-120	<u>J6</u>	<u>J6</u>	0.357	15

L1804082-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1804082-02 11/30/2	S) L1804082-02 11/30/24 15:33 • (MS) R4153016-7 12/01/24 01:42												
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier						
Analyte	mg/l	mg/l	mg/l	%		%							
Chloride	40.0	7.93	45.6	94.2	1	80.0-120							
Fluoride	8.00	ND	8.35	103	1	80.0-120							
Sulfate	40.0	15.5	52.8	93.3	1	80.0-120							

DATE/TIME: 12/11/24 10:21 PAGE: 16 of 25

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY L1804133-07,08

Method Blank (MB)

(MB) R4153173-1	11/30/24 16:57

1B) R4153173-1-11/s	MB Result	MB Qualifier	MB MDL	MB RDL	
Analyte	mg/l		mg/l	mg/l	
Chloride	U		0.547	1.00	
Fluoride	U		0.0761	0.150	
Sulfate	U		0.637	5.00	

L1804133-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1804133-07 11/30/2	24 17:23 • (DUP)	R4153173-3 12	/01/24 00:	:12			
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits	
Analyte	mg/l	mg/l		%		%	
Chloride	ND	ND	1	200	<u>P1</u>	15	
Fluoride	ND	ND	1	0.000		15	
Sulfate	ND	ND	1	0.000		15	

L1804133-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1804133-08 11/30/24 17:36 • (DUP) R4153173-6 12/01/24 00:51										
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits				
Analyte	mg/l	mg/l		%		%				
Chloride	6.43	6.23	1	3.28		15				
Fluoride	ND	ND	1	16.1	<u>P1</u>	15				
Sulfate	ND	ND	1	2.14		15				

Laboratory Control Sample (LCS)

(LCS) R4153173-2 11/30/	(LCS) R4153173-2 11/30/24 17:10									
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier					
Analyte	mg/l	mg/l	%	%						
Chloride	40.0	42.7	107	80.0-120						
Fluoride	8.00	8.76	109	80.0-120						
Sulfate	40.0	43.6	109	80.0-120						

ACCOUNT:	
Alliance Technical Group - Bryant, AR	

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Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L1804133-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1804133-07 11/30/2	(OS) L1804133-07 11/30/24 17:23 • (MS) R4153173-4 12/01/24 00:25 • (MSD) R4153173-5 12/01/24 00:38											
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Chloride	40.0	ND	40.6	40.0	100	98.7	1	80.0-120			1.37	15
Fluoride	8.00	ND	8.23	8.15	103	102	1	80.0-120			0.968	15
Sulfate	40.0	ND	41.1	40.7	103	102	1	80.0-120			0.965	15

L1804133-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L1804133-08 11/30/2	5) L1804133-08 11/30/24 17:36 • (MS) R4153173-7 12/01/24 01:04												
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier						
Analyte	mg/l	mg/l	mg/l	%		%							
Chloride	40.0	6.43	47.3	102	1	80.0-120							
Fluoride	8.00	ND	8.61	106	1	80.0-120							
Sulfate	40.0	ND	46.6	105	1	80.0-120							

DATE/TIME:	

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Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY L1804133-01,02,03,04,05,06,07,08

Method Blank (MB)

(MB) R4154238-1 12/0	/05/24 14:00			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Boron	U		0.0200	0.200

Laboratory Control Sample (LCS)

(LCS) R4154238-2 12/05	5/24 14:02				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Boron	1.00	0.996	99.6	80.0-120	

L1804042-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1804042-01 12/05/2	S04042-01 12/05/24 14:04 (MS) R4154238-5 12/05/24 14:09 Spike Amount Original Result MS Result MS Result MS Rec. MSD Rec. Dilution Rec. Limits MS Qualifier MSD Qualifier RPD RPD Limits mg/l mg/l mg/l %												
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%	
Boron	1.00	ND	1.09	1.07	102	99.9	1	75.0-125			2.27	20	

DATE/TIME: 12/11/24 10:21

Metals (ICPMS) by Method 6020B

QUALITY CONTROL SUMMARY L1804133-01,02,03,04,05,06,07,08

Method Blank (MB)

Nethod Blar	NK (IVIB)				1 CD
(MB) R4154341-1	12/05/24 20:37				Cp
	MB Result	MB Qualifier	MB MDL	MB RDL	2
Analyte	mg/l		mg/l	mg/l	⁻Tc
Calcium	U		0.0925	1.00	
					³ Ss

Laboratory Control Sample (LCS)

(LCS) R4154341-2 12/05	5/24 20:40				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Calcium	5.00	4.90	98.0	80.0-120	

L1804103-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1804103-01 12/05/24	4 20:44 • (MS) I	R4154341-4 12/	05/24 20:50 •	(MSD) R415434	41-5 12/05/24	20:53 MSD Rec. Dilution Rec. Limits MS Qualifier MSD Qualifier RPD RPD Limits % % % % 90.0 1 75.0-125 0.453 20								
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits		
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%		
Calcium	5.00	162	167	166	105	90.0	1	75.0-125			0.453	20		

Cn

Sr

[°]Qc

GI

Â

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.

RPD value not applicable for sample concentrations less than 5 times the reporting limit.

P1

SDG: L1804133 Τс

Ss

Cn

Sr

Qc

GI

AI

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
lowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky ¹⁶	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ¹⁴	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.

SDG: L1804133 ² Cp ² Tc ³ Ss ⁴ Cn ⁵ Sr ⁶ Qc ⁷ Gl ⁸ Al ⁹ Sc

Company Name/Address:			Billing Info	ermation:	<u> </u>	1	1		Δ	nalysis /	Contain	er / Preserva	tive		Chain of Custody	Page of
Alliance Technical Gro 219 Brown Lane	up - Bryan	t, AR	Account 219 Brow	s Payable		Pres Chk	2								- Pau	CC.
Little Rock, AR 72022											BL. LIN	-				
Report to: Jonathan Brown			Email To: Jonathan.	Brown@AllianceTG	e@trcc									MT JUL 12065 Lebanon Rd Mount Submitting a sample via th	Juliet, TN 37122 is chain of custody	
Project Description: City/State Entergy - White Bluff Collected: Ke			Redf:	ell, AR	ircle: CT) ET									constitutes acknowledgme Pace Terms and Condition https://info.pacelabs.com/ terms.pdf	s found at:	
Phone: 501-847-7077	Client Project # 1145-21-080			Lab Project # GBMCBAR-EN	в		oPres							SDG # D011	Sourc)	
Collected by (print):	Site/Facility ID # CADL - CCR			P.O. #			HNO3	DPE-No	res						Acctnum: GBM	188413 CBAR
Collected by (signature):	Rush? (Lab MUST Be Notified) Same Day Five Day Next Day 5 Day (Rad Only) Two Day 10 Day (Rad Only)			Quote # Date Results	s Needed	No.	250mlHDPE-HNO3	SO4 250mlHDPE-NoPres	1L-HDPE NoPres						Template: T198 Prelogin: P111 PM: 829 - Brittni PB:	831 2374
Sample ID	d on Ice N Y Sample ID Comp/Grab Matrix * Depth		Depth	Date	of Cntrs	Constant of the	d, F, S(TDS 1L						Shipped Via: Fee Remarks	Sample # (lab only)	
MW-1015		GW	T			T			1999						1pm	
MW-1025		GW		1 1 1 1 1												
MW-1035	6	GW		11-22-24	1530	3	X	X	- AG						496	-21
MW-104S		GW					The lot		Sale of					Children .		
MW-105S		GW							States S					Strange .		
MW-1065		GW				1.4	- Bellin		Part of the local division of the local divi		THE REAL					
MW-1105	-	GW														
MW-1115_ MU-1010	6	GW		11-22-24	1215	3	1	×	1					MORE -	6.88	-02
MW-1010	G	GW	-	11-22-24			Contract of the	X	X					NAL THE	3.9.2	-07
MW-102D		GW		11.000			LURAR ST		Contraction Contraction			199				
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater	Remarks:				1					pH Flow		Temp Other		COC Sigr Bottles	ample Receipt Che Present/Intact: bed/Accurate: arrive intact: bottles used:	CKLIST NP W _N Zy _N Y _N
DW - Drinking Water OT - Other	Samples returned UPSFedE		r	Trackir	1	21	21	64	75	, (15	31		Sufficie VOA Zero	ent volume sent: <u>If Applicable</u> Headspace: ation Correct/Chec	
Relinquished by : (Signature)	D	ate: 11-25-	19 11	130	ed by: (Signa					Trip Blar		ved: Yes / N HCL /H TBR	MeoH	RAD Scre	en <0.5 mR/hr:	$\mathcal{X}_{\mathbf{X}} = \mathbf{N}$
Relinquished by : (Signature)		ate:	Time		ed by: (Signa	_				Temp: 3.0	-1 to	Bottles Red	ceived:	Þ.	PH 10BDH0941 TRC 3327A333	?/Time
Relinquished by : (Signature)	D	ate:	Time	e: Receive	ed for lab by	Signat	ture)	-	21	Date:	6-2	Time: U	180	Hold:		Condition: NCF / OK

Company Name/Address:		Billing Information:							A	nalvsis	/ Contair	ner / Pres	ervative	Internet		Chain of Custod	Page of	
Alliance Technical Gr 219 Brown Lane Little Rock, AR 72022	oup - Bryan	it, AR	219 Brow	s Payable wn Ln. AR 72022			Pres Chk									_	PEOPL	ACCE.
Report to: Jonathan Brown			Email To: Jonathan.	Brown@Allia	nceTG.co	m;Jhouse	@trcc										12065 Lebanon Rd M	ULIET, TN ount Juliet, TN 37122 la this chain of custody
Project Description: Entergy - White Bluff		City/State Collected:	Redt:	eld,A		Please Cir PT MT C				and a state of the							Pace Terms and Cond	Igment and acceptance of the tions found at: com/hubfs/pas-standard-
Phone: 501-847-7077		Client Project # 1145-21-080		Lab Project # GBMCBAR-ENTERGYWB		3		oPres	Ellister a		AND THE PARTY					SDG #	107995	
Collected by (print):		Site/Facility ID # CADL - CCR Rush? (Lab MUST Be Notified)). #			HNO3	SO4 250mlHDPE-NoPres	res							Table #	1804133
Collected by (signature):									Himos	E NoPres							Template: T1 Prelogin: P1	
Immediately Packed on Ice N Y	Two D				Results Ne	eeded	No. of	250mlHDPE-HNO3	S04 25	1L-HDPE							PM: 829 - Brit PB:	
Sample ID	Comp/Grab				Date Time			B, Ca	d, F,	TDS 1					Contraction of the second		Remarks	Sample # (lab only)
MW-103D		GW					1					The second					1	
1W-104D		GW								Rel La		La Haint						
NW-105D		GW										Call Office			allen et			
MW-106D		GW					1			- HELEN		and straight				1		
MW-107D	(-	GW		11-20	-14 1	125	3	X	×	1							7.52	-01
AW-108D		GW		11 20		102.1	14	and the second		and the		Colorian State			S.			
MW-109D		GW					1	1999				Ball						
MW-110D		GW					1	1988		10000		and the second						
MW-112D	(-	GW		11-22	24 1	430	3	X	X	X			-				746	-05
MW-113D		GW										The Real						
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater	Remarks:	-	-			1					pH Flov		_ Temp _ Other		COC S Bottl Corre	eal Pr igned/ es arr ct bot	le Receipt (esent/Intac Accurate: ive intact: tles used:	
DW - Drinking Water OT - Other	urg UPSFedExCourier														VOA Z	ero He	volume sent <u>If Applica</u> adspace:	ble Y, N
Relinquished by : (Signature) Date:			Tim		Received by: (Signatu						Trip Bla	ink Recei		S NO	RAD S	creen	n Correct/C <0.5 mR/hr:	
			30	Pocoised	hu (Siara	tural				-	0	Carles -	BR	Ifores	ervation	required by L	ogin: Date/Time	
Relinquished by : (Signature)						by: (Signa	,				3.410-3.4 25						required by D	
Relinquished by : (Signature) Date:		Tim	e:	Received	for lab by	Signat	Hute)	C	>	Date:	26-2	Time	0980	Hold:			Condition: NCF / OK	

ompany Name/Address:			Billing Info	ormation:	4	T				Analysis /	Contair	ner / Prese	vative		Chain of Custody	Page of	
Alliance Technical Gro 219 Brown Lane Little Rock, AR 72022	up - Bryar	nt, AR	219 Bro	s Payable wn Ln. AR 72022		Pres Chk									- People	ACCE.	
Report to: Jonathan Brown			Email To: Jonathan.	Brown@AllianceT	G.com;Jhous	e@trcc									12065 Lebanon Rd Mo Submitting a sample vi	a this chain of custody	
Project Description: Entergy - White Bluff		City/State Collected:	Relfield, AR PT MT C								a fille	North Contraction			Pace Terms and Condi https://info.pacelabs.c	gment and acceptance of the tions found at: com/hubfs/pas-standard-	
Phone: 501-847-7077	Client Project # 1145-21-080			Lab Project # GBMCBAR-ENTERGYWB				oPres							SDG #		
Collected by (print): JLC/ KRS	Site/Facility ID # CADL - CCR			P.O. #			FONH-	DPE-No	NoPres						Table #L1804133 Acctnum: GBMCBAR		
Collected by (signature):	Rush?	(Lab MUST B	e Notified)	Quote #			DPE.	HIL	NoP		A. Martin			and the second	Template: T198831		
Immediately Packed on Ice N Y	Same Day Five Day Next Day 5 Day (Rad Only) Two Day 10 Day (Rad Only) Three Day			Date Resu	ts Needed	No. of Cntrs	25	SO4 250mlHDPE-NoPres	1L-HDPE		10.00				Prelogin: P11 PM: 829 - Brit PB:	tnie L Boyd	
Sample ID	Comp/Grab	Matrix *	Date	U	d, F, S		TDS 1						Shipped Via: F Remarks	edEX Priority Sample # (lab only)			
MW-114D		GW			1	1-	8	10			Manual				144		
MW-115D		GW				-	NESSING.										
MW-118D		GW				-			-		Contemport.		HOUR	WEIGER.			
FIELD BLANK 1	G	GW		11-22-24	1350	R	1	-			and the second s			Contraction of the local division of the loc		-0,0	
DUPLICATE 1		GW		11 20121	1230	-	122000	1	- Aler				Conver -				
FIELD BLANK 2	G	GW		11-22-21	1250	12	X	X	X		1. Carlot		And Designed			-07	
DUPLICATE 2 (MU-112P)	(-	GW		11.22-24		3	Z	×	1		The second			Constant of	7.46	-08	
(Printiz V)		GW		11. 20 ch-1	1130	12									1.16		
		GW				1			Contraction of		1612845			E Carlo			
		GW					10000										
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater	Remarks:									pH Flow		_ Temp _ _ Other _		COC Sea COC Sig Bottles	Sample Receipt C 1 Present/Intact ned/Accurate: arrive intact: bottles used:	hecklist : _NP /y _N N _N	
DW - Drinking Water OT - Other		Track	ing #			14.00 M						Sufficie	ent volume sent: <u>If Applicat</u>	Fy N			
Relinquished by : (Signature) Date: Base do Colbect 11-25-24			Time	e: Recei	ved by: (Signa	ature)				Trip Bla	nk Recei	A COMPANY AND A CASE	L7 MeoH	VOA Zero Headspace: Preservation Correct/Checked: RAD Screen <0.5 mR/hr: N N N N N			
elinquished by : (Signature) Date: Time				ved by: (Signa	ature)				Temp: °C Bottles Received:					If preservation required by Login: Date/Time			
Relinquished by : (Signature) Date:		Time	e: Rece	Received for tab by: (S			(Signature)			10-	Time:	20	Hold:		Condition: NCF / OK		



APPENDIX D FIELD SAMPLING FORMS

SITE NAME:	Nhite	Pluf	F			SITE OCATION:					
WELL NO:	101	D		SAMPLE	E ID:				DATE: 4	5-20.	-24
	10				PUR	GING DA	TA				
WELL DIAMETER	(inches):	TUBING	TER (inches):	TOTAL DEPTH	(feet):		TO WA	C DEPTH ATER (feet): 77	18 0	urge pump t R Bailer:	YPE
(only fill out	if applicable)		= (feet -		feet)	X WELL CAPA X TUBING LENGT	gallons/		gallons
(only III out	if applicable)			= g	allons + (gallo	ons/foot X	fee	et) +	gallons	= gallons
PUMP OR IN WELL (f	TUBING DEPTH eet):	4	WELL SCR DEPTH:	REEN INTERV feet to	AL feet	PURGIN		D PURGING		TOTAL VOI PURGED (g	
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (^o C)	COND. (circle units) µmhos/cm or uS/cm		Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1310					6.91	33.89	398	1.07	32	217	Clear
1515	1				6.82	33.72	38	0.76	19	247	
1520		-			6.21	33.72	386	0,70	6	171	
1525					6.84	33,67	385	0.60	- 2	139	1
1530	1	F	1		6-80		383	0.49	-29	11.1	1
1535		1			6.26	33.39	385	0.45	-M1	10.5	
1540	1				6.82	33.36	389	0.42	-54	8.8	1
1345				1	6.83	33.42	388	0.39	-58	7.36	
1550					6.85	33.37	392	0.38	-62	6.25	
(555					6.85	3332	392	0.34	-68	5.94	
1600					G.88	33.24	387	0.32	-60	1 5.40	
TUBING IN PURGING	ACITY (Gallons SIDE DIA. CAP	ODES: B	Ft.): 1/8" = 0.	1" = 0.04; 0006: 3/16' BP = Bladder I SAMPLER(S)	Pump: SAMI	1/4" = 0.002 ESP = Electric PLING DA	6: 5/16" = Submersible I	0.004; 3/8" = Pump; PP =	Peristaltic Pu	imp; O = 0	12" = 5.88 5/8" = 0.016 ther (Specify)
SAMPLED	BY (PRINT) / A	FFILIATION:		SAMPLER(S) SIGNATU	RE(5):			AT:(600	SAMPLIN ENDED A	
PUMP OR	TUBING WELL (feet):			TUBING MATERIAL C	ODE:			LD-FILTERED: ation Equipment		FILTER S	IZE:μm
		DN: PUM	IP Y N		TUBING	Y N (re	eplaced)	DUPLICAT		N	
	LE CONTAINE		TION	SAMPLE	E PRESER	ATION (includ				SAMPLING	SAMPLE PUMP FLOW RATE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVAT USED		TOTAL VOL DED IN FIELD (Final pl mL) Temp	FI/ METL		CODE	(mL per minute)
REMARKS		1000)	lere d	Stab.	1:20	10	1600				
		stand all		= Clear Glass;		High Density		1000 1.	Density Polye	thulono: PP	= Polypropylene;

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

VELL NO:	0	5		SAMPLE	E ID:					DATE:	5.20.	24
					PURC	SING DA	TA					
VELL		TUBING			WATER		STAT	IC DI	EPTH R (feet): 3 km.	ZO PI	JRGE PUMP T R BAILER:	YPE
	(inches):	1 WELL VOI	TER (inches):	DEPTH		TIC DEPTH 1	TO WATER)	X	WELL CAPACI		C DAILER.	
	if applicable)						feet)			gallons/f	ont =	gallons
QUIPMEN	IT VOLUME PU	IRGE: 1 EQL	= (IIPMENT VOL.	= PUMP VO	feet LUME + (TUE	BING CAPACI			BING LENGTH)			4410110
only fill out	if applicable)			= g	allons + (gallo	ons/foot X		feet)	+	gallons	= gallons
UMP OR	TUBING DEPTH	4		EEN INTERV		PURGIN	IG AT: 10	35	PURGING		TOTAL VOI	
N WELL (fe	eet):		DEPTH:	feet to	feet			-	ENDED AT: DISSOLVED	1	PURGED (g	
TIME	VOLUME PURGED (galions)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (^o C)	COND. (circle unit µmhos/cn or µS7cn	n	OXYGEN (circle units) (mg/L) or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
045	-	1	1	1	6.2	25.25	223		1,19	142	6.26	Char
050					6.07	25.25	263		1.06	128	10.7	
055	102000				5.59	24.93	244		0.9 H	129	11.1	
100					5.84	24.82	237		2.20	128	9.39	ł
105					5.79	2526	273		1.92	127	9.55	
110		1		1	5.87	25.75	230		1.84	124	5.03	
115					5.96	25.23	227	_	1.67	124	2.88	
					581	26.03	226	1	1.56	123	4.87	
120		/				-		-			-	1
VELL CAP	ACITY (Gallons	ACITY (Gal./	Ft.): 1/8" = 0.0	0006: 3/16	5.82 1.25" = 0.0 " = 0.0014;	∂6.40 6; 2" = 0.1 1/4" = 0.002	225 6; 3" = 0. 26; 5/16"	.37; = 0.0	1.5ス 4"=0.65; 204; 3/8"=0	<u> りろう</u> 5" = 1.02; .006; 1,	6" = 1.47; 2" = 0.010;	12 " = 5.88 5/8" = 0.016
VELL CAP	ACITY (Gallons SIDE DIA. CAP EQUIPMENT C	ACITY (Gal./	Ft.): 1/8" = 0.0	1" = 0.04; 0006: 3/16 3P = Bladder	1.25" = 0.0 " = 0.0014; Pump; E	26 .4 0 6; 2" = 0.1 1/4" = 0.002 SP = Electric	225 6; 3" = 0. 26; 5/16" : Submersible	.37; = 0.0	1.5ス 4"=0.65; 204; 3/8"=0	123 5" = 1.02;	6" = 1.47; 2" = 0.010;	
NELL CAP	SIDE DIA. CAP	ODES: B	Ft.): 1/8" = 0.0	0006: 3/16 BP = Bladder	1.25" = 0.0 " = 0.0014; Pump; E	6; 2" = 0.1 1/4" = 0.002 SP = Electric LING D/	225 6; 3" = 0. 26; 5/16" : Submersible	.37; = 0.0	1. 5ス 4" = 0.65; 2004; 3/8" = 0 np; PP = Pe	123 5" = 1.02; .006; 1. eristaltic Pu	6" = 1.47; 2" = 0.010; mp; 0 = 0	5/8" = 0.016 ther (Specify)
VELL CAP UBING IN PURGING I SAMPLED	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A	ODES: B	Ft.): 1/8" = 0.0	3006: 3/16 3P = Bladder SAMPLER(S	5.82 1.25 " = 0.0 " = 0.0014; Pump; E SAMP	6; 2" = 0.1 1/4" = 0.002 SP = Electric LING D/	2.2 5 6; 3" = 0. 26; 5/16" Submersible	.37; = 0.0 e Pun	1. 5ス 4" = 0.65; 5004; 3/8" = 0 np; PP = Pe SAMPLING INITIATED A	123 5" = 1.02; .006; 1. eristaltic Pu	6" = 1.47; 2" = 0.010; mp; 0 = 0 SAMPLIN ENDED A	5/8" = 0.016 ther (Specify) IG IT:
VELL CAP UBING IN PURGING I SAMPLED	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A	ODES: B	Ft.): 1/8" = 0.0	0006: 3/16 BP = Bladder	5.82 1.25" = 0.0 " = 0.0014; Pump; E SAMP) SIGNATUR	6; 2" = 0.1 1/4" = 0.002 SP = Electric LING D/	2.2 5 6; 3" = 0. 26; 5/16" Submersible ATA	.37; = 0.0 = Pun	1. 5ス 4" = 0.65; 2004; 3/8" = 0 np; PP = Pe	123 5" = 1.02; .006; 1. eristaltic Pu T: 112 N	6" = 1.47; 2" = 0.010; mp; 0 = 0 SAMPLIN ENDED A	5/8" = 0.016 ther (Specify)
NELL CAP TUBING IN PURGING IN SAMPLED	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A TUBING	FFILIATION:	Ft.): 1/8" = 0.0	3006: 3/16 3P = Bladder SAMPLER(S TUBING MATERIAL C	5.82 1.25" = 0.0 " = 0.0014; Pump; E SAMP) SIGNATUR	26.40 6; 2" = 0.1 1/4" = 0.002 :SP = Electric LING D/ E(S):	2.2 5 6; 3" = 0. 26; 5/16" Submersible ATA	.37; = 0.0 = Pun	4" = 0.65; 2004; 3/8" = 0 np; PP = Pe INITIATED AT FILTERED: Y	1993 5" = 1.02; .006; 1/ enistaltic Pu T: 1102 T: 1102	6" = 1.47; 2" = 0.010; mp; 0 = 0 SAMPLIN ENDED A	5/8" = 0.016 ther (Specify) IG IT:
PURGING IN SAMPLED JLC PUMP OR DEPTH IN FIELD DEC	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A - / K TUBING WELL (feet): CONTAMINATIC PLE CONTAINE	PACITY (Gal./ ODES: B FFILIATION: S N: PUM R SPECIFIC	Ft.): 1/8" = 0.(= Bailer: E 1P Y N ATION	0006: 3/16 3P = Bladder SAMPLER(S TUBING MATERIAL C SAMPL	5.82 1.25" = 0.0 " = 0.0014; Pump; E SAMP) SIGNATUR :: :: :: : : : : : : : : :	26 .4 0 6; 2" = 0.1 1/4" = 0.002 SP = Electric LING D/ E(S): Y N (r ATION (include)	2.2.5 16; 3" = 0. 26; 5/16" Submersible ATA Fill eplaced) ling wet ice)	.37; = 0.0 Pun ELD- Itratio	4" = 0.65; 2004; 3/8" = 0 pp; PP = Pe SAMPLING INITIATED A FILTERED: Y on Equipment Ty DUPLICATE: INTENDI	5" = 1.02; .006; 1. eristaltic Pu T: 1/Q (N pe: Y ED	6" = 1.47; 2" = 0.010; mp; 0 = 0 SAMPLIN FILTER S N SAMPLING	5/8" = 0.016 ther (Specify) IG IT:
NELL CAP TUBING IN PURGING IN PURGING IN DURGING IN DURGINA DURGING IN DURGING IN DURGING IN DURGING IN DURGING IN DURGING IN DURGING IN DURGING IN DURGING IN DURGING IN DURGINA	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A L / KR TUBING WELL (feet): CONTAMINATIC PLE CONTAINE #	ACITY (Gal./ ODES: B FFILIATION: DN: PUM R SPECIFIC/ MATERIAL	Ft.): 1/8" = 0.(= Bailer: E 1P Y N ATION	3006; 3/16 3P = Bladder SAMPLER(S TUBING MATERIAL C	1.25" = 0.0 1.25"	26.40 6; 2" = 0.1 1/4" = 0.002 SP = Electric LING D/ E(S):	2.2 5 6; 3" = 0. 26; 5/16" Submersible ATA Fil eplaced) ling wet ice) Final	37; = 0.0 > Pun ELD- ttratio	4" = 0.65; 004; 3/8" = 0 np; PP = Pe SAMPLING INITIATED A FILTERED: Y n Equipment Ty, DUPLICATE:	5" = 1.02; .006; 1. aristaltic Pu T: 1/Q (N pe: Y ED ND/OR	6" = 1.47; 2" = 0.010; mp: 0 = 0 SAMPLIN ENDED A FILTER S	5/8" = 0.016 ther (Specify) IG IZE:μm SAMPLE PUMF
VELL CAP UBING IN UURGING IN UURGING I UURGING I UUMP OR UUMP OR UUMP OR UUMP OR UUMP OR UUMP OR UUMP OR UUMP OR SAMPLE	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A - / K TUBING WELL (feet): CONTAMINATIC PLE CONTAINE	PACITY (Gal./ ODES: B FFILIATION: S N: PUM R SPECIFIC	Ft.): 1/8" = 0.(= Bailer: E 1P Y N ATION	0006: 3/16 3P = Bladder SAMPLER(S TUBING MATERIAL C SAMPL PRESERVA	1.25" = 0.0 1.25"	26.40 6; 2" = 0.1 1/4" = 0.002 :SP = Electric LING D/ E(S): Y N (r ATION (includ TOTAL VOL	2.2 5 6; 3" = 0. 26; 5/16" Submersible ATA Fil eplaced) ling wet ice) Final	37; = 0.0 > Pun ELD- ttratio	4" = 0.65; 5004; 3/8" = 0 np; PP = Pe SAMPLING INITIATED AT FILTERED: Y on Equipment Ty DUPLICATE: INTENDI ANALYSIS A	5" = 1.02; .006; 1. aristaltic Pu T: 1/Q (N pe: Y ED ND/OR	6" = 1.47; 2" = 0.010; mp; 0 = 0 6 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5/8" = 0.016 ther (Specify) IG IZE:μm IZE:μm SAMPLE PUMF FLOW RATE
VELL CAP UBING IN URGING IN URGING I UMP OR DEPTH IN IELD DEC SAMPLE	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A L / KR TUBING WELL (feet): CONTAMINATIC PLE CONTAINE #	ACITY (Gal./ ODES: B FFILIATION: DN: PUM R SPECIFIC/ MATERIAL	Ft.): 1/8" = 0.(= Bailer: E 1P Y N ATION	0006: 3/16 3P = Bladder SAMPLER(S TUBING MATERIAL C SAMPL PRESERVA	1.25" = 0.0 1.25"	26.40 6; 2" = 0.1 1/4" = 0.002 :SP = Electric LING D/ E(S): Y N (r ATION (includ TOTAL VOL	2.2 5 6; 3" = 0. 26; 5/16" Submersible ATA Fil eplaced) ling wet ice) Final	37; = 0.0 > Pun ELD- ttratio	4" = 0.65; 5004; 3/8" = 0 np; PP = Pe SAMPLING INITIATED AT FILTERED: Y on Equipment Ty DUPLICATE: INTENDI ANALYSIS A	5" = 1.02; .006; 1. aristaltic Pu T: 1/Q (N pe: Y ED ND/OR	6" = 1.47; 2" = 0.010; mp; 0 = 0 6 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5/8" = 0.016 ther (Specify) IG IZE:μm IZE:μm SAMPLE PUMF FLOW RATE
VELL CAP UBING IN UURGING IN UURGING I UUMP OR UUMP OR UUMP OR UUMP OR UUMP OR UUMP OR SAMPLE	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A L / KR TUBING WELL (feet): CONTAMINATIC PLE CONTAINE #	ACITY (Gal./ ODES: B FFILIATION: DN: PUM R SPECIFIC/ MATERIAL	Ft.): 1/8" = 0.(= Bailer: E 1P Y N ATION	0006: 3/16 3P = Bladder SAMPLER(S TUBING MATERIAL C SAMPL PRESERVA	1.25" = 0.0 1.25"	26.40 6; 2" = 0.1 1/4" = 0.002 :SP = Electric LING D/ E(S): Y N (r ATION (includ TOTAL VOL	2.2 5 6; 3" = 0. 26; 5/16" Submersible ATA Fil eplaced) ling wet ice) Final	37; = 0.0 > Pun ELD- ttratio	4" = 0.65; 5004; 3/8" = 0 np; PP = Pe SAMPLING INITIATED AT FILTERED: Y on Equipment Ty DUPLICATE: INTENDI ANALYSIS A	5" = 1.02; .006; 1. aristaltic Pu T: 1/Q (N pe: Y ED ND/OR	6" = 1.47; 2" = 0.010; mp; 0 = 0 6 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5/8" = 0.016 ther (Specify) IG IZE:μm IZE:μm SAMPLE PUMF FLOW RATE
VELL CAP UBING IN PURGING IN PURGING IN DURGING IN DURGINA IN DURG	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A L / KR TUBING WELL (feet): CONTAMINATIC PLE CONTAINE #	ACITY (Gal./ ODES: B FFILIATION: DN: PUM R SPECIFIC/ MATERIAL	Ft.): 1/8" = 0.(= Bailer: E 1P Y N ATION	0006: 3/16 3P = Bladder SAMPLER(S TUBING MATERIAL C SAMPL PRESERVA	1.25" = 0.0 1.25"	26.40 6; 2" = 0.1 1/4" = 0.002 :SP = Electric LING D/ E(S): Y N (r ATION (includ TOTAL VOL	2.2 5 6; 3" = 0. 26; 5/16" Submersible ATA Fil eplaced) ling wet ice) Final	37; = 0.0 > Pun ELD- ttratio	4" = 0.65; 5004; 3/8" = 0 np; PP = Pe SAMPLING INITIATED AT FILTERED: Y on Equipment Ty DUPLICATE: INTENDI ANALYSIS A	5" = 1.02; .006; 1. aristaltic Pu T: 1/Q (N pe: Y ED ND/OR	6" = 1.47; 2" = 0.010; mp; 0 = 0 6 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5/8" = 0.016 ther (Specify) IG IZE:μm IZE:μm SAMPLE PUMF FLOW RATE
NELL CAP FUBING IN PURGING IN PURGING IN DURGING IN JLC DUMP OR DEPTH IN FIELD DEC	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A L / KR TUBING WELL (feet): CONTAMINATIC PLE CONTAINE #	ACITY (Gal./ ODES: B FFILIATION: DN: PUM R SPECIFIC/ MATERIAL	Ft.): 1/8" = 0.(= Bailer: E 1P Y N ATION	0006: 3/16 3P = Bladder SAMPLER(S TUBING MATERIAL C SAMPL PRESERVA	1.25" = 0.0 1.25"	26.40 6; 2" = 0.1 1/4" = 0.002 :SP = Electric LING D/ E(S): Y N (r ATION (includ TOTAL VOL	2.2 5 6; 3" = 0. 26; 5/16" Submersible ATA Fil eplaced) ling wet ice) Final	37; = 0.0 > Pun ELD- ttratio	4" = 0.65; 5004; 3/8" = 0 np; PP = Pe SAMPLING INITIATED AT FILTERED: Y on Equipment Ty DUPLICATE: INTENDI ANALYSIS A	5" = 1.02; .006; 1. aristaltic Pu T: 1/Q (N pe: Y ED ND/OR	6" = 1.47; 2" = 0.010; mp; 0 = 0 6 6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 9 8 9	5/8" = 0.016 ther (Specify) IG IZE:μm IZE:μm SAMPLE PUMF FLOW RATE
NELL CAP TUBING IN PURGING IN PURGING IN DURGING IN DEPTH IN FIELD DEC SAMPLE DO CODE	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A TUBING WELL (feet): CONTAMINATIC PLE CONTAINE CONTAINERS	ACITY (Gal./ ODES: B FFILIATION: DN: PUM R SPECIFIC/ MATERIAL	Ft.): 1/8" = 0.(= Bailer: E 1P Y N ATION	0006: 3/16 3P = Bladder SAMPLER(S TUBING MATERIAL C SAMPL PRESERVA	1.25" = 0.0 1.25"	26.40 6; 2" = 0.1 1/4" = 0.002 :SP = Electric LING D/ E(S): Y N (r ATION (includ TOTAL VOL	2.2 5 6; 3" = 0. 26; 5/16" Submersible ATA Fil eplaced) ling wet ice) Final	37; = 0.0 > Pun ELD- ttratio	4" = 0.65; 5004; 3/8" = 0 np; PP = Pe SAMPLING INITIATED AT FILTERED: Y on Equipment Ty DUPLICATE: INTENDI ANALYSIS A	5" = 1.02; .006; 1. aristaltic Pu T: 1/Q (N pe: Y ED ND/OR	6" = 1.47; 2" = 0.010; mp; 0 = 0 6 6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 9 8 9	5/8" = 0.016 ther (Specify) IG IZE:μm IZE:μm SAMPLE PUMF FLOW RATE
NELL CAP TUBING IN PURGING IN PURGING IN DEPTH IN TIELD DEC SAMPLE D CODE	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A TUBING WELL (feet): CONTAMINATIC PLE CONTAINERS	ACITY (Gal./ ODES: B FFILIATION: DN: PUM R SPECIFICA MATERIAL CODE	Ft.): 1/8" = 0.(= Bailer: E 1P Y N ATION	0006: 3/16 3P = Bladder SAMPLER(S TUBING MATERIAL C SAMPL PRESERVA	5.82 1.25" = 0.0 " = 0.0014; Pump; E SAMP) SIGNATUR CODE: TUBING E PRESERV/ TIVE ADDE	A A C 6; 2" = 0.1 1/4" = 0.002 SP = Electric 'LING D/ E(S): Y N (r ATION (includ TOTAL VOL ED IN FIELD (C	2.2 5 16; 3" = 0. 26; 5/16" Submersible ATA FII Fil eplaced) ling wet ice) Final Terr	37; = 0.0 > Pun ELD- ttratio	4" = 0.65; 204; 3/8" = 0 np; PP = Pe SAMPLING INITIATED AT FILTERED: Y n Equipment Ty; DUPLICATE: INTENDI ANALYSIS A METHO	J.D. 3 5" = 1.02; .006; 1. aristaltic Pu T: II.Q. (N pe: Y ED ND/OR D	6" = 1.47; 2" = 0.010; mp; 0 = 0 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5/8" = 0.016 ther (Specify) IG IT: IZE:μm SAMPLE PUMF FLOW RATE (mL per minute
NELL CAP TUBING IN PURGING IN PURGING IN DURGING IN DURGINA DURGING IN DURGING IN DURGING IN DURGING IN DURGING IN DURGING IN DURGING IN DURGING IN DURGING IN DURGING IN DURGINA	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A UBING WELL (feet): CONTAMINATIC PLE CONTAINERS	ACITY (Gal./ ODES: B FFILIATION: DN: PUM R SPECIFIC/ MATERIAL CODE AG = Amber	Ft.): 1/8" = 0.(= Bailer: E IP Y N ATION VOLUME Glass; CG =	2006: 3/16 3P = Bladder SAMPLER(S TUBING MATERIAL C SAMPL PRESERVA' USED	5.82 1.25" = 0.0 1.25" = 0.0 1.25" = 0.0 1.25" = 0.0 SAMP SAMP SODE: TUBING E PRESERV/ TIVE ADDE ADDE (eed), HDPE =	26.40 6; 2" = 0.1 1/4" = 0.002 :SP = Electric LING D/ E(S): Y N (r ATION (includ TOTAL VOL	2.2.5 6; 3" = 0. 26; 5/16" Submersible ATA FII eplaced) ling wet ice) (mL) Final Terr	537; = 0.0 =	4" = 0.65; 5004; 3/8" = 0 np; PP = Pe SAMPLING INITIATED AT FILTERED: Y on Equipment Ty DUPLICATE: INTENDI ANALYSIS A	5" = 1.02; .006; 1. eristaltic Pu T: 1/Q (N pe: Y ED ND/OR D	1.46 6" = 1.47; 2" = 0.010; mp; 0 = 0 SAMPLIN FILTER S N SAMPLING EQUIPMENT CODE	5/8" = 0.016 ther (Specify) IG IT: IZE:μm SAMPLE PUMF FLOW RATE (mL per minute
NELL CAP TUBING IN PURGING IN PURGINA PURGING IN PURGING IN PURGING IN PURGING IN PURGING IN	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A UBING WELL (feet): CONTAMINATIC PLE CONTAINERS	ACITY (Gal./ ODES: B FFILIATION: DN: PUM R SPECIFIC/ MATERIAL CODE AG = Amber S = Silicone; CODES: /	Ft.): 1/8" = 0.(= Bailer: E IP Y N ATION VOLUME Glass; CG = T = Teflon; APP = After (Th	2006: 3/16 3P = Bladder SAMPLER(S TUBING MATERIAL C SAMPL PRESERVA' USED Clear Glass; O = Other (prough) Perist	5.82 1.25" = 0.0 " = 0.0014; Pump; E SAMP) SIGNATURI CODE: TUBING E PRESERV/ TIVE ADDE (eed); HDPE = Specify) ratic Pump;	G. H. O 6; 2" = 0.1 1/4" = 0.000 :SP = Electric 'LING D/ E(S): Y N (r ATION (includ TOTAL VOL ED IN FIELD (High Density B = Bailer	2.2 5 6; 3" = 0. 26; 5/16" Submersible ATA FII eplaced) ling wet ice) (mL) Final Terr Polyethylene c; BP = E	537; = 0.0 ELD- Itratio	4" = 0.65; 204; 3/8" = 0 309; 3/8" = 0 np; PP = Pe SAMPLING INITIATED AT FILTERED: Y n Equipment Ty; DUPLICATE: INTENDI ANALYSIS A METHO METHO L L L L L L L L Er Pump; ES	$J \mathfrak{D} \mathfrak{Z}$ $5^{n} = 1.02;$ 0.006; 1.000;	1.46 6" = 1.47; 2" = 0.010; mp; 0 = 0 SAMPLIN FILTER S N SAMPLING EQUIPMENT CODE	5/8" = 0.016 ther (Specify) IG IZE:μm SAMPLE PUMF FLOW RATE (mL per minute
NELL CAP TUBING IN PURGING IN PURGING IN DEPTHIN FIELD DEC SAMPLE DO CODE REMARKS	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A UBING WELL (feet): CONTAMINATIC PLE CONTAINERS CONTAINERS	ACITY (Gal./ ODES: B FFILIATION: DN: PUM R SPECIFIC/ MATERIAL CODE AG = Amber S = Silicone; CODES: A	Ft.): 1/8" = 0.(= Bailer: E IP Y N ATION VOLUME Glass; CG = T = Teflon; APP = After (Th RFPP = Revers	2006: 3/16 3P = Bladder SAMPLER(S TUBING MATERIAL C SAMPL PRESERVAT USED Clear Glass; O = Other (prough) Perist	5.82 1.25" = 0.0 " = 0.0014; Pump; E SAMP) SIGNATURI CODE: TUBING E PRESERV/ TIVE ADDE (G. H. O 6; 2" = 0.1 1/4" = 0.000 :SP = Electric 'LING D/ E(S): Y N (r ATION (includ TOTAL VOL ED IN FIELD (High Density B = Bailer SM = Straw	2.2 5 6; 3" = 0. 26; 5/16" Submersible ATA FII eplaced) ling wet ice) (mL) Final Terr Polyethylene c; BP = E	537; = 0.0 ELD- Itratio	1.52 4" = 0.65; 5004; 3/8" = 0 mp; PP = Pe SAMPLING INITIATED A FILTERED: Y an Equipment Ty DUPLICATE: INTENDI ANALYSIS A METHO LÚPE = Low De	$J \mathfrak{D} \mathfrak{Z}$ $5^{n} = 1.02;$ 0.006; 1.000;	1.46 6" = 1.47; 2" = 0.010; mp; 0 = 0 SAMPLIN ENDED A FILTER S N SAMPLING EQUIPMENT CODE	5/8" = 0.016 ther (Specify) IG IZE:μm SAMPLE PUMF FLOW RATE (mL per minute

HACH merer callibrated price to measurement taken.

	1 hite	Bluft					rede:e	IL, AR			
WELL NO:	1020			SAMPLE	ID:					20.24	
	1000				PUR	GING DA	ТА				
WELL DIAMETER	(inches):	TUBING	TER (inches):	TOTAL V DEPTH	(feet):		STATIC TO WAT	ER (feet): 73.	49 OR	RGE PUMP TY BAILER:	PE
	UME PURGE: if applicable)	1 WELL VOL	.UME = (TOT = (TAL WELL DEP	PTH – STA	TIC DEPTH T	OWATER) X feet) X	WELL CAPACI	aallons/foo	ot =	gallons
	T VOLUME PU if applicable)	IRGE: 1 EQU	IPMENT VOL		UME + (TUR allons + (UBING LENGTH)		LL VOLUME	= gallons
PUMP OR T		4	WELL SC	REEN INTERV	and a state of the	PURGIN		PURGING ENDED AT:	Amath	TOTAL VOL PURGED (ga	UME
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/om	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1320	[[]]i				6.62	34.35	383	046	-64	31.4	Jurb.d
1325					6.90	33.75	hisa	0.32	-87	57.2	
1330					7.07	33.43	459	0.23	-103	97.4	1
1335					7.17	33.18	478	0,23	-114	105	
1340					7.21	33.03	482	6.22	-120		
1345					7.22	32.65	486	0.19	- 123	68.1	1
1350					7.23	32.55	500	6 22	-124	62.8	
1355					7.26	32.65	503	0.22	-129	48.7	
1400					7.26	32.61	505	0.25	-129	35.3	1
1405				2	7.28	32.56	308	0.19	- 130	33.3	
1410	1	1		1	7.28	72.55	509	0.21	-130	31.9	1
WELL CAP	ACITY (Gallon SIDE DIA. CAP	S Per Foot): I	0.75" = 0.02; Ft): 1/8" = 0	1" = 0.04; .0006: 3/16'	1.25" = 0.0 " = 0.0014:	06; 2" = 0.1 1/4" = 0.002			5" = 1.02; .006; 1/2		12" = 5.88 5/6" = 0.016
	EQUIPMENT C		= Baller;	BP = Bladder		ESP = Electric	Submersible Pr	ump; PP = P	eristaltic Purr	ip: 0 = Ot	her (Specify)
		5.8.				PLING DA	ATA			_	
SAMPLED	BY (PRINT) / A	FFILIATION:		SAMPLER(S) SIGNATUR	RE(S):		SAMPLING INITIATED A	T: 1410	SAMPLIN ENDED A	
PUMP OR	TUBING WELL (feet):			TUBING MATERIAL C	ODE:			D-FILTERED: Y tion Equipment Ty		FILTER SI	ZE:μm
	ONTAMINATIO	DN: PUM	IP Y I	N	TUBING	Y N (re	eplaced)	DUPLICATE:	Y	N	
SAMP	LE CONTAINE	R SPECIFICA	TION	SAMPLE	E PRESERV	ATION (includ	ing wet ice)	INTEND		SAMPLING	SAMPLE PUMP
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVAT		TOTAL VOL ED IN FIELD (Final pH mL) Temp	ANALYSIS A METHO		CODE	FLOW RATE (mL per minute)
1											
								-			1
REMARKS				-				1			
MATERIAL	CODES:	AG = Amber S = Silicone;	Glass; CG T = Teflon;	= Clear Glass; O = Other (High Density	Polyethylene;	LDPE = Low De		.,,	= Polypropylene;
SAMPLING	EQUIPMENT		RFPP = Reve	Through) Perist rse Flow Perist		B = Bailer SM = Straw		Ider Pump; E g Gravity Drain);		Submersible F r (Specify)	Pump;

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

SITE 1 (125	LA: to	e Bluffe		SI	TE DCATION:	Red.	R`e	13. AR			
WELL NO:	1025			SAMPLE	ID:					DATE:	5.20.2	H
	.000				PURC	GING DA						
WELL DIAMETER	(inches):		ER (inches):	TOTAL DEPTH	(feet):		ST. TO	ATIC D WATE	R (feet): 33, 4	12 PU	RGE PUMP T	/PE
(only fill out	UME PURGE: if applicable)		= 1		feet -		fee	et) X	WELL CAPACI	gallons/fc		gallons
	if applicable)				allons + (ons/foot X		feet)	+	gallons	= gallons
PUMP OR T	TUBING DEPTH	4	WELL SCR	EEN INTERV		DUDCIN			PURGING ENDED AT:		TOTAL VOI PURGED (g	
TIME	VOLUME PURGED (galions)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP, (^o C)	CON (circle u µmhos or µS/	nits) (cm	DISSOLVED OXYGEN (circle units) /mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1200			1		5.75	34.01	155		4.25	116	124	Clear
1215					5.73	33.97	152		3.83	117	18.8	1
1220		1			\$ 5.75	3399	151		3.56	119	16.3	
1225					5.72	33.74	152		3.21	119	13.0	1
1230	-				5.73	33.75	153		3.00	119	11.9	
1235	-			1.00	5.73	33.80	153		2.74	117	9.65	
12HO					5,74	34.51	152		2.50	114	10.2	
1245					5.73	34.83	151		2.47	113	8.69	
TUBING IN	ACITY (Gallons SIDE DIA. CAP	ACITY (Gal./F	Ft.): 1/8" = 0.0	1" = 0.04; 0006; 3/16 3P = Bladder	= 0.0014;	1/4" = 0.002 SP = Electric	26; 5/1	0.37; 6" = 0. ble Pur	004: 3/8" = 0	5" = 1.02; .006; 1/2 eristaltic Pur	6" = 1.47; 2" = 0.010; mp; O = O	12" = 5.88 5/8" = 0.016 ther (Specify)
						LING D	ATA					
SAMPLED	KRS	FFILIATION:		SAMPLER(S) SIGNATUR	E(S):			SAMPLING INITIATED A	1: 1245	SAMPLIN ENDED A	
PUMP OR				TUBING MATERIAL C	ODE				-FILTERED: Y on Equipment Ty	N pe:	FILTER S	IZE:μm
FIELD DEC	ONTAMINATIC	N: PUM	IP Y N		TUBING	Y N (r	eplaced)		DUPLICATE:	Y	N	
	LE CONTAINE			SAMPL		ATION (includ	•	e) al pH/	INTEND ANALYSIS A	ND/OR	SAMPLING EQUIPMENT	SAMPLE PUMP FLOW RATE
SAMPLE ID CODE	CONTAINERS	MATERIAL CODE	VOLUME	USED		ED IN FIELD		emp	METHO		CODE	(mL per minute)
					_							
												-
REMARKS	Turbid	Lity to	her	w.th	HAL	Hme	Yer	- 7				
	GODEO.	S = Silicone;	T = Teflon;	O = Other (HDPE = Specify)	High Density	Polyethyle		LDPE = Low De			e Polypropylene;
SAMPLING	EQUIPMENT	F	APP = After (T RFPP = Revers	e Flow Perist					der Pump; E Gravity Drain);		c Submersible er (Specify)	Pump;

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

	103	V			SAMP	LE ID:				DATE	1	1	
WELL						PUR	GING D	ATA		1	5-23	24	
DIAME	TER (inches):			ER (inches):	DCD	WATER		STATI	C DEPTH			_	
WELL	VOLUME PUR	GE; 1 WE	LL VOLU	IME = (TO)	TAL WELL DE	H (feet):	1710	TOW	ATER (feet): 41	38	PURGE PU		ΡE
									X WELL CAPA	CITY			
EQUIP	MENT VOLUM	E PURGE	1 EQUIP	MENT VOL	= PUMP VC	feet -	DING OLDLO	feet)		gallons	/foot =		
(Only III	out if applicabl	le)							TUBING LENGT	H) + FLOW	CELL VOLU	IME	ga
PUMP	OR TUBING DE	PTH	T	WELL SCP	EEN INTER	gallons + (ons/foot X	fee	et) +	gall	ons =	ga
IN WEL	L (feet):			DEPTH:	feet to	feet	PURGIN	NG ED AT: OON	PURGING		_	VOLUN	
	VOLUME		MUL.	DUDAN	DEPTH					and the second se	PURGE	ED (gallo	ons):
TIME	PURGE		UME RGED	PURGE RATE	ТО	pH (standard	TEMP.	COND. (circle units)	DISSOLVED OXYGEN				COLC
	(gallons)		lons)	(gpm)	WATER (feet)	units)	(°C)	µmhos/cm	(circle units) mg/L or	Redox (mV)	Turt (N1	pidity	ODC
597.	5					7	1.00	or µS/cm	% saturation		(14)	0)	(descri
94					-	1.75	22,25	604	5.19	- 89	15	7	de.
OAH .	5		-		-	745	23.33	618	4.85	-96	7.4		T
5950		-		-		7.50	23.44	620	HIST	-99	5.2		1
12155		1				7.53	23,43	620	4.07	-99	4.15		
000	-	-				7.55	23.52	621	4.01	-99		-	-
<u> </u>	1	-	-			7.57	23.61	619	3. 19	-99	3.9		4
	-							<u>viii</u>	2. 0.1	- 19	3.9	9	
	-	-								-	-	-	-
	-	-							-		-		
										2		1	
									11 I I I I I I I I I I I I I I I I I I				
										1			
ELL CA	PACITY (Gallo NSIDE DIA. CA	ns Per Foo	t): 0.75"	= 0.02;	1" = 0.04;	1.25" = 0.06;	2" = 0.16;	3 " = 0.37·	A" = 0.65;				
VELL CA UBING I URGING	PACITY (Gallo NSIDE DIA: CA	ns Per Foo PACITY (0 CODES:	t): 0.75" Gal./Ft.): B = Bai	= 0.02; 1/8" = 0.00 iler: BP	1" = 0.04; 06; 3/16" =				4 " = 0.65; 5 004; 3/8 " = 0.0	" = 1.02; 006; 1/2'	6" = 1.47; " = 0.010;	12" = 5/8" =	- 5.88
	COOPMENT	CODES:	B = Bai	= 0.02; 1/8" = 0.00 iler; BP	1" = 0.04; 06; 3/16" = = Bladder Pu	imp; ES	P = Electric Su	ubmersible Pur	510 - 0.0	" = 1.02; 206; 1/2' istaltic Pum	= 0.010;	5/8" =	0.016
	PACITY (Gallo NSIDE DIA. CA EQUIPMENT (BY (PRINT) / /	CODES:	B = Bai	iler; BP	= Bladder Pu	SAMPL	P = Electric Su	ubmersible Pur	510 - 0.0	305; 1/2	= 0.010;	12" = 5/8" = Other (\$	0.016
AMPLED	BY (PRINT) / A	CODES:	B = Bai	iler; BP	1" = 0.04; 06; 3/16" = = Bladder Pu AMPLER(S) S	SAMPL	P = Electric Su	ubmersible Pur	SAMPLING	istaltic Pum	= 0.010;	5/8" = Other (S	0.016
AMPLED	BY (PRINT) / A	CODES:	B = Bai	iler; BP	= Bladder Pu AMPLER(S) S JBING	IMP: ES	P = Electric Su	ubmersible Pur	SAMPLING INITIATED AT:	istaltic Pum	* = 0.010; p; 0 = SAMPLI ENDED	5/8" = Other (\$ NG AT:	= 0.016 Specify)
AMPLED	BY (PRINT) / A TUBING WELL (feet):		B = Bai	iler; BP	= Bladder Pu	IMP: ES	P = Electric Su	FIELD-F	SAMPLING INITIATED AT:	istaltic Pum	* = 0.010; p; 0 = SAMPLI ENDED	5/8" = Other (\$ NG AT:	0.016
AMPLED JMP OR EPTH IN ELD DEC	BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO	AFFILIATIO	B = Bai	iler; BP	= Bladder Pu AMPLER(S) S JBING ATERIAL COL	SAMPL IGNATURE (: DE: TUBING	P = Electric Su ING DAT 3): Y N (repla	FIELD-I Filtration acced)	SAMPLING INITIATED AT:	istaltic Pum	SAMPLI ENDED	5/8" = Other (\$ NG AT:	= 0.016 Specify)
AMPLED JMP OR EPTH IN ELD DEC	BY (PRINT) / A TUBING WELL (feet):	AFFILIATIC	B = Bai	iler; BP	= Bladder Pu AMPLER(S) S JBING ATERIAL COL SAMPLE P	IGNATURE (IGNATURE (DE: TUBING RESERVATION	P = Electric Su ING DAT 3): Y N (repla DN (including	FIELD-I Filtration acced)	SAMPLING INITIATED AT: ILTERED: Y n Equipment Type	istaltic Pum istaltic Pum istaltic Pum istaltic Pum N N	" = 0.010; p; 0 = SAMPLI ENDED FILTER S N	5/8" = Other (\$ NG AT: SIZE:	= 0.016 Specify) μm
AMPLED JMP OR EPTH IN ELD DEC SAMF	BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO	AFFILIATIO	B = Bai DN: PUMP	iler; BP	= Bladder Pu AMPLER(S) S JBING ATERIAL COL	IGNATURE(: DE: TUBING RESERVATION	P = Electric St ING DA1 S): Y N (repla DN (including TAL VOL	FIELD-F Filtration aced) wet ice)	SAMPLING INITIATED AT: FILTERED: Y Equipment Type DUPLICATE: INTENDED ANALYSIS ANE	istaltic Pum N Y D/OR EQ	P: O = SAMPLI ENDED FILTERS N AMPLING	5/8" = Other (S NG AT: SIZE: SIZE:	= 0.016 Specify) μm PLE PUMP W RATE
AMPLED JMP OR EPTH IN ELD DEC SAMF	BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO	DN: F MATERIAL	B = Bai	iler; BP	= Bladder Pu AMPLER(S) S JBING ATERIAL COL SAMPLE P ESERVATIVE	IGNATURE(: DE: TUBING RESERVATION	P = Electric Su ING DAT 3): Y N (repla DN (including	FIELD-F Filtration aced) wet ice)	SAMPLING INITIATED AT: FILTERED: Y Equipment Type DUPLICATE: INTENDED	istaltic Pum N Y D/OR EQ	* = 0.010; p; 0 = SAMPLI ENDED FILTER S N AMPLING	5/8" = Other (S NG AT: SIZE: SIZE:	= 0.016 Specify) μm PLE PUMP W RATE
AMPLED JMP OR EPTH IN ELD DEC SAMF	BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO	DN: F MATERIAL	B = Bai	iler; BP	= Bladder Pu AMPLER(S) S JBING ATERIAL COL SAMPLE P ESERVATIVE	IGNATURE(: DE: TUBING RESERVATION	P = Electric St ING DA1 S): Y N (repla DN (including TAL VOL	FIELD-F Filtration aced) wet ice)	SAMPLING INITIATED AT: FILTERED: Y Equipment Type DUPLICATE: INTENDED ANALYSIS ANE	istaltic Pum N Y D/OR EQ	P: O = SAMPLI ENDED FILTERS N AMPLING	5/8" = Other (S NG AT: SIZE: SIZE:	= 0.016 Specify) μm PLE PUMP W RATE
AMPLED JMP OR EPTH IN ELD DEC SAMF	BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO	DN: F MATERIAL	B = Bai	iler; BP	= Bladder Pu AMPLER(S) S JBING ATERIAL COL SAMPLE P ESERVATIVE	IGNATURE(: DE: TUBING RESERVATION	P = Electric St ING DA1 S): Y N (repla DN (including TAL VOL	FIELD-F Filtration aced) wet ice)	SAMPLING INITIATED AT: FILTERED: Y Equipment Type DUPLICATE: INTENDED ANALYSIS ANE	istaltic Pum N Y D/OR EQ	P: O = SAMPLI ENDED FILTERS N AMPLING	5/8" = Other (S NG AT: SIZE: SIZE:	= 0.016 Specify) μm PLE PUMF DW RATE
AMPLED JMP OR EPTH IN ELD DEC SAMF	BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO	DN: F MATERIAL	B = Bai	iler; BP	= Bladder Pu AMPLER(S) S JBING ATERIAL COL SAMPLE P ESERVATIVE	IGNATURE(: DE: TUBING RESERVATION	P = Electric St ING DA1 S): Y N (repla DN (including TAL VOL	FIELD-F Filtration aced) wet ice)	SAMPLING INITIATED AT: FILTERED: Y Equipment Type DUPLICATE: INTENDED ANALYSIS ANE	istaltic Pum N Y D/OR EQ	P: O = SAMPLI ENDED FILTERS N AMPLING	5/8" = Other (S NG AT: SIZE: SIZE:	<u>0.016</u> Specify) μm PLE PUMF
AMPLED JMP OR EPTH IN ELD DEC SAMF	BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO	DN: F MATERIAL	B = Bai	iler; BP	= Bladder Pu AMPLER(S) S JBING ATERIAL COL SAMPLE P ESERVATIVE	IGNATURE(: DE: TUBING RESERVATION	P = Electric St ING DA1 S): Y N (repla DN (including TAL VOL	FIELD-F Filtration aced) wet ice)	SAMPLING INITIATED AT: FILTERED: Y Equipment Type DUPLICATE: INTENDED ANALYSIS ANE	istaltic Pum istaltic Pum N Y D/OR EQ	P: O = SAMPLI ENDED FILTERS N AMPLING	5/8" = Other (S NG AT: SIZE: SIZE:	e 0.016 Specify) μm PLE PUMF DW RATE
AMPLED JMP OR EPTH IN ELD DEC SAMF	BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO	DN: F MATERIAL	B = Bai	iler; BP	= Bladder Pu AMPLER(S) S JBING ATERIAL COL SAMPLE P ESERVATIVE	IGNATURE(: DE: TUBING RESERVATION	P = Electric St ING DA1 S): Y N (repla DN (including TAL VOL	FIELD-F Filtration aced) wet ice)	SAMPLING INITIATED AT: FILTERED: Y Equipment Type DUPLICATE: INTENDED ANALYSIS ANE	istaltic Pum istaltic Pum N Y D/OR EQ	P: O = SAMPLI ENDED FILTERS N AMPLING	5/8" = Other (S NG AT: SIZE: SIZE:	e 0.016 Specify) μm PLE PUMF DW RATE
AMPLED JMP OR EPTH IN ELD DEC SAMF	BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO	DN: F MATERIAL	B = Bai	iler; BP	= Bladder Pu AMPLER(S) S JBING ATERIAL COL SAMPLE P ESERVATIVE	IGNATURE(: DE: TUBING RESERVATION	P = Electric St ING DA1 S): Y N (repla DN (including TAL VOL	FIELD-F Filtration aced) wet ice)	SAMPLING INITIATED AT: FILTERED: Y Equipment Type DUPLICATE: INTENDED ANALYSIS ANE	istaltic Pum istaltic Pum N Y D/OR EQ	P: O = SAMPLI ENDED FILTERS N AMPLING	5/8" = Other (S NG AT: SIZE: SIZE:	e 0.016 Specify) μm PLE PUMF DW RATE
AMPLED JMP OR EPTH IN ELD DEC SAMF MPLE CODE	BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO	DN: F MATERIAL	B = Bai	iler; BP	= Bladder Pu AMPLER(S) S JBING ATERIAL COL SAMPLE P ESERVATIVE	IGNATURE(: DE: TUBING RESERVATION	P = Electric St ING DA1 S): Y N (repla DN (including TAL VOL	FIELD-F Filtration aced) wet ice)	SAMPLING INITIATED AT: FILTERED: Y Equipment Type DUPLICATE: INTENDED ANALYSIS ANE	istaltic Pum istaltic Pum N Y D/OR EQ	P: O = SAMPLI ENDED FILTERS N AMPLING	5/8" = Other (S NG AT: SIZE: SIZE:	e 0.016 Specify) μm PLE PUMF DW RATE
AMPLED JMP OR EPTH IN ELD DEC SAMF MPLE CODE	BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO PLE CONTAINERS	AFFILIATIO		JME PR	= Bladder Pu AMPLER(S) S JBING ATERIAL COL SAMPLE P ESERVATIVE USED	INDE: SAMPL IGNATURE (1 IGNATURE (1 IGNA	P = Electric Su ING DAT S): Y N (repla DN (including TAL VOL N FIELD (mL)	FIELD-F Filtration aced) wet ice) Final pH/ Temp	SAMPLING INITIATED AT: FILTERED: Y Equipment Type DUPLICATE: INTENDED ANALYSIS ANE	istaltic Pum istaltic Pum N Y D/OR EQ	P: O = SAMPLI ENDED FILTERS N AMPLING	5/8" = Other (S NG AT: SIZE: SIZE:	e 0.016 Specify) μm PLE PUMF DW RATE
AMPLED JMP OR EPTH IN ELD DEC SAMF MPLE CODE	BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO PLE CONTAINERS	DN: F MATERIAL	B = Bai	S/	= Bladder Pu AMPLER(S) S JBING ATERIAL COL SAMPLE P ESERVATIVE USED	Imp: Es SAMPL IGNATURE(: IGNATURE(: IGNATURE(: DE: TUBING RESERVATION TO' ADDED I IDDED I	P = Electric St ING DA1 S): Y N (repla DN (including TAL VOL	FIELD Filtration aced) wet ice) Final pH/ Temp	SAMPLING INITIATED AT: FILTERED: Y Equipment Type DUPLICATE: INTENDED ANALYSIS ANE	istaltic Pum istaltic Pum N Y D/OR EQ	P: 0 = SAMPLI ENDED FILTER S N AMPLING UIPMENT CODE	5/8" = Other (S NG AT: SIZE: SIZE: FLO (mL p	² 0.016 Specify) μm PLE PUMI DW RATE

OF LAST THREE CONSECUTIVE READINGS

NAME:	Nhite	Bluff				SITE LOCATION:					
WELL NO:	1035			SAMPLE	ID:				DATE: 5	-22-2	14
_					PUF	RGING DA	TA				
WELL DIAMETER	R (inches):	TUBING DIAMET	[ER (inches):	TOTAL V DEPTH	(feet):		STATIC D TO WATE	ER (feet):	77 OR	RGE PUMP TY BAILER:	PE
(only fill out	LUME PURGE: t if applicable)		= (feet -		feet) X		gallons/foc		gallons
	t if applicable)			= g	allons + (gallo	ons/foot X	feet) +	gallons =	gallons
PUMP OR T	TUBING DEPTH eet):		WELL SC DEPTH:	REEN INTERV	AL feet	PURGIN	G ED AT: (S.25			TOTAL VOL PURGED (g	
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standar units)	rd TEMP. (^o C)	COND. (circle units) µmhos/cm <u>or</u> µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1845	-			-	510	1.6	152	1.67	7,12	227	Slight Th
200					5.02	2117	164	1.56	326	202	1
0955					5.02	21.00,	167	1.59	32.2	201	
19(10)					502	21.00	161	1.60	327	200	
WELL CAF	PACITY (Gallons ISIDE DIA. CAP	Per Foot): 0	0.75 " = 0.02; =(.): 1/8 " = 0	1" = 0.04; .0006; 3/16'	1.25" = 0 ' = 0.0014;	0.06; 2" = 0.1 ; 1/4" = 0.002	6; 3 " = 0.37; 6; 5/16" = 0.		Contraction of the Contraction o		12" = 5.88 //8" = 0.016
	EQUIPMENT CO		= Bailer;	BP = Bladder			Submersible Pu	mp; PP = P	eristaltic Pum	p; O = Ot	her (Specify)
						IPLING DA	ATA			-	
SAMPLED	BY (PRINT) / AF	FILIATION:		SAMPLER(S)) SIGNATU	JRE(S):		SAMPLING INITIATED A	т: ФОС	SAMPLING ENDED A	
PUMP OR	TUBING WELL (feet):			TUBING MATERIAL C	ODE		FIELD	-FILTERED: Y		FILTER SI	
	train (root).						Filtrati	on Equipment Ty	pe:		ZE:μm
FIELD DEC	CONTAMINATIO	N: PUM	IP Y M	N	TUBING	G Y N (re	Filtrati eplaced)	DUPLICATE:		N	ZE:μm
	CONTAMINATIO			N	TUBING	G Y N (re VATION (includi	eplaced)	DUPLICATE:	۲ ED ۶	SAMPLING	SAMPLE PUMP
				N	TUBING E PRESER		eplaced) ing wet ice) Final pH/	DUPLICATE:	ED S ND/OR E		
SAMF	PLE CONTAINER	R SPECIFICA	TION	N SAMPLE PRESERVAT	TUBING E PRESER	VATION (includ	eplaced) ing wet ice) Final pH/	DUPLICATE: INTEND ANALYSIS A	ED S ND/OR E	SAMPLING QUIPMENT	SAMPLE PUMP FLOW RATE
SAMF	PLE CONTAINER	R SPECIFICA	TION	N SAMPLE PRESERVAT	TUBING E PRESER	VATION (includ	eplaced) ing wet ice) Final pH/	DUPLICATE: INTEND ANALYSIS A	ED S ND/OR E	SAMPLING QUIPMENT	SAMPLE PUMP FLOW RATE
SAMPLE ID CODE	PLE CONTAINER # CONTAINERS	R SPECIFICA MATERIAL CODE	TION	N SAMPLE PRESERVAT	TUBING E PRESER	VATION (includ	eplaced) ing wet ice) Final pH/	DUPLICATE: INTEND ANALYSIS A	ED S ND/OR E	SAMPLING QUIPMENT	SAMPLE PUMP FLOW RATE
SAMF SAMPLE ID CODE	PLE CONTAINER # CONTAINERS	R SPECIFICA MATERIAL CODE	TION	N SAMPLE PRESERVAT USED	TUBING	RVATION (includi TOTAL VOL DED IN FIELD (i	pplaced) ing wet ice) Final pH/ Temp	DUPLICATE: INTEND ANALYSIS A METHO	Y ED ND/OR D U U U U U U U U U U U U U U U U U U		SAMPLE PUMP FLOW RATE
SAMF	Horbe	R SPECIFICA MATERIAL CODE	VOLUME VOLUME	N SAMPLE PRESERVAT USED		RVATION (includi TOTAL VOL DED IN FIELD (i	Peplaced) ing wet ice) Temp Temp	DUPLICATE: INTEND ANALYSIS A METHO I I I I I I I I I I I I I I I I I I I	Y ED ND/OR D D		SAMPLE PUMP FLOW RATE (mL per minute)

: d. 4 y

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

	hile B	Plack				SITE OCATION:						
WELL NO:	16412			SAMPLE	ID:					DATE: 5	5.21.24	1
	1-10				PUR	GING DA	TA					
	(inches):) FER (inches):	TOTAL V	WATER		5	STATIC D	EPTH R (feet): 86.		URGE PUMP TY R BAILER:	PE
DIAMETER	JME PURGE:	I WELL VOL	UME = (TOT			ATIC DEPTH T	TO WAT	ER) X	WELL CAPAC			
(only fill out	if applicable)		= 1		feet -			feet) X		gallons/f	foot =	gallons
	T VOLUME PUF	RGE: 1 EQU	IPMENT VOL	. = PUMP VOL	UME + (TU				JBING LENGTH			rollogo
(0)	········ /	-	-		allons + (ons/foot	X	feet) +	gallons = TOTAL VOL	
PUMP OR T	UBING DEPTH		WELL SCF DEPTH:	REEN INTERV	AL feet	PURGIN	IG ED AT:	1600	PURGING ENDED AT: DISSOLVED		PURGED (g	allons):
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (^o C)	(circle µmh	OND. e units) os/cm iS/cm	OXYGEN (circle units) mg/b_or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
620			1		7.07	20.62	46	7	6.10	-109	267	Turbid
125					7.09	20.47	46	9	0.13	-109	181	
630					17.11	20.23		10	0.14	-110	119	
Jac			-		7.19	20.40	-	10	0.09	-112	123	
1635		_			7.22	20.26	MT	1	0,18	-111	135	
			1		7.27	20.20	61-7		0.40	-101	194.2	
1655				-	7.30	20.17	47		0,49	-90	69.5	1
1655					731	20.34	47		0.39	-103	1.	
				-	7.34	20,36	47	-	0, 41	-108	55.6	
1700			1		7.33	20,20	47.	-	0.13	-107	51.5	1
TUBING IN	ACITY (Gallons SIDE DIA. CAP.	ACITY (Gal./	0.75" = 0.02; Ft.): 1/8" = 0 = Bailer;	1" = 0.04; .0006; 3/16 BP = Bladder		1/4" = 0.002 ESP = Electric	26: 4 Subme	" = 0.37; 5/16" = 0 ersible Pu	.004: 3/8" = (5" = 1.02; 0.006; 1 Peristaltic Pr	/2" = 0.010;	12" = 5.88 5/8" = 0.016 ther (Specify)
	BY (PRINT) / AP			SAMPLER(S			AIA		SAMPLING		SAMPLIN	G
SAMPLED	BY (PRINT) / AP	FILIATION,		OAM LENG	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				INITIATED A	T:1701	ENDED A	
PUMP OR	TUBING			TUBING			-		-FILTERED: Y		FILTER S	IZE:μm
DEPTH IN	WELL (feet):			MATERIAL C		V NI	anle es	1	DUPLICATE		N	
	ONTAMINATIO			N	TUBING		replaced	-			SAMPLING	SAMPLE PUMP
	LE CONTAINE		ATION			VATION (includ		tice) Final pH/		AND/OR	EQUIPMENT	FLOW RATE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVA		DED IN FIELD		Temp	METH	OD	CODE	(mL per minute
-												
							-		-			
							-	-				
							-					
					-		-					
REMARKS									1	-		
REMARKS												
MATERIAL			Glass; CG T = Teflon;	= Clear Glass; 0 = Other	,	= High Density	Polyeth	iylene;	LDPE = Low D	ensity Poly	rethylene; PP	e = Polypropylene;

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

	hile B	use			SI	CATION:					14	_
WELL NO:	104	>		SAMPLE	ID:					DATE: 5	.21-24	
	101	/		1	PURG	SING DA	TA					
WELL	(inches):	TUBING DIAMET	ER (inches)	TOTAL V DEPTH	WATER (feet):		STA TO V	TIC DE	R (feet): 0 0	3' OF	RGE PUMP TY 8 BAILER:	PE
WELL VOLU	JME PURGE: f applicable)	1 WELL VOL	UME = (TOTA = (AL WELL DEP	PTH - STA	TIC DEPTH T		x	WELL CAPACI	gallons/fo	pot =	gallons
EQUIPMEN (only fill out i	T VOLUME PUF	RGE: 1 EQUI	PMENT VOL.		UME + (TUE			TUE	BING LENGTH)		ELL VOLUME gallons =	allons
	UBING DEPTH		WELL SCR	EEN INTERV	allons + (AL feet	PURGIN		60	PURGING ENDED AT:		TOTAL VOL PURGED (ga	
IN WELL (fe	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND (circle ur µmhos/o or µSto). hits) cm	DISSOLVED OXYGEN (circle units) mg)_ or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1520	-				5.23	26.84	238		0.13	140	1.73	Clear
1525					5.23	26.45	235		0.08	133	1.47	11
1630					5.22	26.43	233		0,08	126	0.99	
1535				1.1	5.21	26.03	220		0.06	119	1.15	
1540				1	5.19	25.85	220	7	0.06	120	0.99	
PURGING IN SAMPLED PUMP OR DEPTH IN	ACITY (Gallons SIDE DIA. CAP EQUIPMENT CO BY (PRINT) / AI TUBING WELL (feet): CONTAMINATIC	ACITY (Gal./f	Ft.): 1/8" = 0:	BP = Bladder SAMPLER(S TUBING MATERIAL (SAMF SIGNATUR	1/4" = 0.002 ESP = Electric PLING DA RE(S):	26: 5/10 Submersil	FIELD-		T: 54	O = 0 SAMPLIN	.T:
	LE CONTAINE			SAMPL	E PRESERV	ATION (includ	ding wet ice	e)	INTEN		SAMPLING	SAMPLE PUM
SAMPLE ID CODE	# CONTAINERS	MATERIAL	VOLUME	PRESERVA	TIVE	TOTAL VOL ED IN FIELD	A COMPANY OF A COMPANY	al pH/ emp	ANALYSIS / METH		EQUIPMENT CODE	FLOW RATE (mL per minute
REMARKS	8											
MATERIA	L CODES: G EQUIPMENT	CODES:	Glass; CG T = Teflon; APP = After (T RFPP = Rever	= Clear Glass 0 = Other Through) Peris se Flow Peris	(Specify) staltic Pump;	= High Density B = Baile SM = Stra	er: BP	= Blado	LDPE = Low D der Pump; I g Gravity Drain);	ESP = Elect	ethylene; PF ric Submersible ther (Specify)	• = Polypropylene Pump;

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

SITE NAME:						ITE OCATION:]/			
	1050			SAMPLE	ID:				DATE: 5	-21-2	Ч
	10-2				PUR	GING DA	TA				
WELL DIAMETER	(inches):	TUBING	FR (inches):	TOTAL DEPTH	(feet):		TO WA	DEPTH TER (feet): 70	1.76 OR	RGE PUMP T BAILER:	/PE
(only fill out	if applicable)		= (feet -		feet)	X WELL CAPA	gallons/fo		gallons
	IT VOLUME PU if applicable)	RGE: 1 EQU	IPMENT VOL.		UME + (TU allons + (TY X	TUBING LENGTI	⊣) + FLOW CE et) +	gallons	= gallons
		1	WELL SCR	EEN INTERV		PURGIN		PURGING		TOTAL VOL PURGED (g	
IN WELL (fe	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1120	1				7.77	22.80	SOH	0.21	-145	20.7	Clean
1125					7.69	23.52	503	0,19	-144	15.9	
1130	1				7.67	21.48	495	6.13	-147	13.6	1
1135					7.62	21.31	497	0.09	- 149	10.7	1
1140	1				7.60	21.49	496	0.05	-152	10.3	1
1145					7.62	21.49	495	0.22	-154	9.72	1
TUBING IN PURGING	PACITY (Gallons SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A	ODES: B	Ft.): 1/8" = 0.	1" = 0.04; 0006; 3/16 BP = Bladder SAMPLER(S	Pump; SAMI	1/4" = 0.00 ESP = Electric PLING D	26; 5/16" = Submersible I	0.004; 3/8" =	Peristaltic Pur	NP; O = C SAMPLIN	
PUMP OR				TUBING				LD-FILTERED: ation Equipment	Y N		IZE:μm
	WELL (feet): CONTAMINATIC	DN: PUM	IP Y N	MATERIAL	TUBING	Y N (eplaced)	DUPLICAT		N	
			T			ATION (includ		INTEN		SAMPLING	SAMPLE PUMP
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVA		TOTAL VOL	(mL) Final p			EQUIPMENT CODE	FLOW RATE (mL per minute)
								_			
								-	_		
REMARKS	1				_			_			
REIVIARAS											
MATERIAL	CODES:	AG = Amber S = Silicone;		= Clear Glass; 0 = Other (= High Density	Polyethylene;	LDPE = Low	Density Polye		= Polypropylene;
SAMPLING	G EQUIPMENT	F	APP = After (T RFPP = Rever	se Flow Perist	altic Pump;			adder Pump; ing Gravity Drain)		c Submersible er (Specify)	Pump;

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

SITE NAME:	white	BLUFF			SI	TE DCATION:	redt	· er	IL. AR			
	105 \$			SAMPLE		14				DATE: 5	-21-24	
					PURC	GING DA	TA					
WELL	R (inches):	TUBINO	TER (inches):		(feet):		ТС	WATE	DEPTH ER (feet): 26,1 WELL CAPACI	GO OR	RGE PUMP TY BAILER:	PE
(only fill ou	t if applicable)		= (feet -		fe	et) X		gallons/for		gallons
(only fill ou	NT VOLUME PU t if applicable)	RGE: 1 EQU	JIPMENT VOL		allons + (TUE		ons/foot X		feet;		gallons :	= gallons
PUMP OR	TUBING DEPTH	ł	WELL SC	REEN INTERV feet to	AL feet	PURGIN	IG ED AT:)	205	PURGING ENDED AT:		TOTAL VOL PURGED (g	
TIME	VOLUME PURGED (galions)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP(°C)	CON (circle u µmhos <u>or</u> µS	units) s/cm	DISSOLVED OXYGEN (circle units) (100/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1225			01		6.16	28.85	189		0.48	74	3.71	alear
1230			1		6.11	28.45	188		0.32	72	7.24	
1235	-			-	6.07	28.96	188	_	0.22	73	2.43	
TUBING II PURGING	PACITY (Gallon NSIDE DIA. CAF	ODES: E	0.75" = 0.02; Ft.): 1/8" = 0 B = Bailer;	1" = 0.04; 0.0006; 3/16 BP = Bladder	" = 0.0014; Pump; I SAMF		26: 5/* Submers	= 0.37; 16" = 0 sible Pu	.004; 3/8" = 0 imp; PP = P	5" = 1.02; 0.006; 1/2 eristaltic Pun	np; 0 = 0	12" = 5.88 5/8" = 0.016 ther (Specify)
SAMPLED	BY (PRINT) / A	FFILIATION:		SAMPLER	JSIGNATOR	(2(3).		_	SAMPLING INITIATED A	т: 1235	SAMPLIN ENDED A	
PUMP OR	TUBING WELL (feet):			TUBING MATERIAL C	ODE:)-FILTERED: Y ion Equipment Ty		FILTER S	IZE:μm
	CONTAMINATIO	DN: PUN	/PY	N	TUBING	Y N (r	replaced)		DUPLICATE	: Y	N	
SAM	PLE CONTAINE	R SPECIFIC	ATION	SAMPL	E PRESERV	ATION (includ	ding wet id	ce)	INTEND		SAMPLING	SAMPLE PUMP FLOW RATE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVAT	ADD	TOTAL VOL ED IN FIELD		nal pH/ Temp	ANALYSIS A		CODE	(mL per minute)
												N
REMARK	S:											
MATERIA	LCODES	AG = Amber S = Silicone;	Glass; CG T = Teflon;	= Clear Glass; O = Other (High Density	Polyethyl	ene;	LDPE = Low D	ensity Polyet	hylene; PP	= Polypropylene;
SAMPLIN	G EQUIPMENT	CODES:	RFPP = Reve	Through) Perist	altic Pump;				der Pump; E g Gravity Drain);		c Submersible er (Specify)	Pump;

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

SITE NAME	White	Bluff				BITE OCATION:					_
WELL NO:	106D)		SAMPLE	ID:				DATE: 5	-21-2	24
					PUR	GING DA	TA				
WELL DIAMETER	R (inches):	TUBING	ER (inches):	TOTAL V DEPTH	(feet):			Lit (loot).	OF	IRGE PUMP TY R BAILER:	'PE
(only fill out	t if applicable)		= (feet -		feet) X	WELL CAPAC	gallons/fc		gallons
	NT VOLUME PU t if applicable)	IRGE: 1 EQU	IPMENT VOL		UME + (TU allons + (TY X T	UBING LENGTH		ELL VOLUME	= gallons
PUMP OR IN WELL (f	TUBING DEPTH	1	WELL SCR	REEN INTERV		DURCIN		5 PURGING ENDED AT:		TOTAL VOL PURGED (g	
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
2950				1	11.20) 22.23	51 8	2.45	-94	33.5	CPUT
00155	D	1			11.16	2244	497	244	-92	27.4	
1000			12221		11.10	22.63	474	R.34	-5-14	29.6	
605					11.04	22.51	MM2.	2.19	-91	22 5	
1010	1				10.98	22.81	428	2.17	-92	28.2	
1015					10.97	22.91	430	2.15	-92	17.4	
1020					10.92	23.01	411	2.10	-91	16.1	1
1025					10.82	23.22	398	2.03	- 89	149)
1030			-		10.82	23.25	395	2.00	-27	15.7	-
TUBING IN PURGING	PACITY (Gallon: NSIDE DIA. CAP EQUIPMENT C	PACITY (Gal./I ODES: B	Ft.): 1/8" = 0.	1" = 0.04; 0006; 3/16' BP = Bladder I SAMPLER(S)	Pump; SAM	1/4" = 0.002 ESP = Electric PLING D/	26: 5/16" = 0 Submersible Pr	0.004: 3/8* = (eristaltic Pur	6" = 1.47; 2" = 0.010; mp; O = O SAMPLIN ENDED A	
PUMP OR	TUBING			TUBING				D-FILTERED: Y	N		IZE:μm
DEPTH IN	WELL (feet):			MATERIAL C				tion Equipment Ty		N	
						Y N (r	eplaced)			SAMPLING	SAMPLE PUMP
SAMPLE ID CODE	PLE CONTAINE # CONTAINERS	MATERIAL CODE	VOLUME	PRESERVAT	IVE	TOTAL VOL	Final pH		AND/OR	EQUIPMENT CODE	FLOW RATE (mL per minute
ID CODE							-	-			
REMARKS	s: PH e	AG = Amber		- (0 (Cr = Clear Glass;	-	コートレンチー = High Density		LDPE = Low D			= Polypropylene

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

NAME:	(Bluf	Т			SITE LOCATION					
WELL NO: 00	-5			SAMPLE	ID:				DATE 5	- 21-2	4
					PUF	RGING DAT	A				
WELL DIAMETER (inches):		TUBING DIAMET	ER (inches):	TOTAL V DEPTH	(feet):		STATIC D TO WATE	it (loot). I i	TÅ OR	RGE PUMP TY BAILER:	PE
well volume pure (only fill out if applicab	e)		= 1		feet -		feet) X	IBING LENGTH	gallons/for		gallons
EQUIPMENT VOLUM (only fill out if applicab		E: 1 EQUI	PMENT VOL		_UME + (T allons + (Y X TL	feet		gallons =	gallons
PUMP OR TUBING D	EPTH		WELL SCF	REEN INTERV			COLUMN TO THE REAL OF	PURGING ENDED AT:		TOTAL VOLU PURGED (ga	
IN WELL (feet): TIME VOLUM PURGE (gallon:		CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standar units)	TEMP	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) (mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
0835				111	3.94	22.70	,650	0.28	376	.03	CEar
0840					3.94	22.55	1,660	0.22	371	120	
0845					3.96	23.06	1,660	0.17	367	0.98	}
			2		-						
			-						-		
		_									
TUBING INSIDE DIA.	CAPAC	ITY (Gal./F	t.): 1/8" = 0.	1" = 0.04; 0006; 3/16' BP = Bladder	" = 0.0014; Pump;	0.06; 2" = 0.16 1/4" = 0.0026 ESP = Electric s IPLING DA	5; 5/16" = 0. Submersible Pur	1 10 10 10 10	5" = 1.02; 5.006: 1/2 reristaltic Purr	" = 0.010;	12" = 5.88 5/8" = 0.016 her (Specify)
TUBING INSIDE DIA. PURGING EQUIPME	CAPAC	ES: B	t.): 1/8" = 0.	0006; 3/16	" = 0.0014; Pump; SAM	1/4" = 0.0020 ESP = Electric S	5; 5/16" = 0. Submersible Pur	004: 3/8" = 1 np: PP = F	0.006: 1/2 reristattic Purr	* = 0.010; p; 0 = 00 SAMPLING	5/8" = 0.016 her (Specify) G
TUBING INSIDE DIA. PURGING EQUIPME SAMPLED BY (PRINT PUMP OR TUBING	CAPAC NT CODI	ES: B	t.): 1/8" = 0.	0006; 3/16 BP = Bladder SAMPLER(S TUBING	" = 0.0014; Pump; SAM) SIGNATU	1/4" = 0.0020 ESP = Electric S	5; 5/16" = 0. Submersible Pur TA FIELD	004: 3/8" = 1 np: PP = F	0.006: 1/2 Veristaltic Purr NT: 084	* = 0.010; p; 0 = 0t SAMPLING ENDED A	5/8" = 0.016 her (Specify) G
WELL CAPACITY (G TUBING INSIDE DIA. PURGING EQUIPME SAMPLED BY (PRINT PUMP OR TUBING DEPTH IN WELL (fee FIELD DECONTAMIN	CAPAC NT CODI	ES: B	t.): 1/8" = 0. = Bailer;	0006; 3/16 BP = Bladder SAMPLER(S TUBING MATERIAL C	" = 0.0014; Pump; SAM) SIGNATU	1/4" = 0.0020 ESP = Electric s IPLING DA JRE(S):	5; 5/16" = 0. Submersible Pur TA FIELD	SAMPLING INITIATED A FILTERED: Y	0.006; 1/2 Veristaltic Purr NT: 084 N Nype:	* = 0.010; p; 0 = 0t SAMPLING ENDED A	5/8" = 0.016 her (Specify) G T:
TUBING INSIDE DIA. PURGING EQUIPMEN SAMPLED BY (PRINT PUMP OR TUBING DEPTH IN WELL (fee FIELD DECONTAMIN SAMPLE CONT SAMPLE #	CAPAC NT CODI)/ AFFIL): ATION: AINER S	ES: B LIATION: PUMP SPECIFICA ATERIAL	rt.): 1/8" = 0. = Bailer; P Y N TION	0006: 3/16' BP = Bladder SAMPLER(S TUBING MATERIAL C SAMPLI PRESERVAT	* = 0.0014; Pump; SAM) SIGNATU) SIGNATU CODE: TUBING E PRESER	1/4" = 0.0020 ESP = Electric 1 IPLING DA JRE(S): G Y N (re RVATION (includie) TOTAL VOL	5: 5/16" = 0. Submersible Pur TA FIELD Filtratic placed) ng wet ice) Final pH/	004: 3/8" = 1 mp: PP = P SAMPLING INITIATED A INITIATED A FILTERED: Yon Equipment T	0.006: 1/2 teristaltic Purr NT: 084 ype: : Y DED AND/OR E	* = 0.010; p; 0 = 0t SAMPLING ENDED A FILTER SI	5/8" = 0.016 her (Specify) G T:
SAMPLED BY (PRINT PUMP OR TUBING DEPTH IN WELL (fee FIELD DECONTAMIN SAMPLE CONT	CAPAC NT CODI)/ AFFIL): ATION: AINER S	ES: B LIATION: PUMP	r.): 1/8" = 0. = Bailer; P Y N	0006; 3/16 BP = Bladder SAMPLER(S TUBING MATERIAL C	* = 0.0014; Pump; SAM) SIGNATU) SIGNATU CODE: TUBING E PRESER	1/4" = 0.0020 ESP = Electric 1 IPLING DA JRE(S): 3 Y N (re RVATION (includie)	5: 5/16" = 0. Submersible Pur TA FIELD Filtratic placed) ng wet ice) Final pH/	004: 3/8" = 1 mp: PP = P SAMPLING INITIATED A FILTERED: Y FILTERED: Y Duplicate DUPLICATE ANALYSIS	0.006: 1/2 teristaltic Purr NT: 084 ype: : Y DED AND/OR E	FILTER SI N SAMPLING O = Ot FILTER SI	5/8" = 0.016 her (Specify) G T: ZE:μm SAMPLE PUMP FLOW RATE
TUBING INSIDE DIA. PURGING EQUIPMEN SAMPLED BY (PRINT PUMP OR TUBING DEPTH IN WELL (fee FIELD DECONTAMIN SAMPLE CONT SAMPLE #	CAPAC NT CODI)/ AFFIL): ATION: AINER S	ES: B LIATION: PUMP SPECIFICA ATERIAL	rt.): 1/8" = 0. = Bailer; P Y N TION	0006: 3/16' BP = Bladder SAMPLER(S TUBING MATERIAL C SAMPLI PRESERVAT	* = 0.0014; Pump; SAM) SIGNATU) SIGNATU CODE: TUBING E PRESER	1/4" = 0.0020 ESP = Electric 1 IPLING DA JRE(S): G Y N (re RVATION (includie) TOTAL VOL	5: 5/16" = 0. Submersible Pur TA FIELD Filtratic placed) ng wet ice) Final pH/	004: 3/8" = 1 mp: PP = P SAMPLING INITIATED A FILTERED: Y FILTERED: Y Duplicate DUPLICATE ANALYSIS	0.006: 1/2 teristaltic Purr NT: 084 ype: : Y DED AND/OR E	FILTER SI N SAMPLING O = Ot FILTER SI	5/8" = 0.016 her (Specify) G T: ZE:μm SAMPLE PUMP FLOW RATE
TUBING INSIDE DIA. PURGING EQUIPMEN SAMPLED BY (PRINT PUMP OR TUBING DEPTH IN WELL (fee FIELD DECONTAMIN SAMPLE CONT SAMPLE #	CAPAC NT CODI)/ AFFIL): ATION: AINER S RS M/	ES: B LIATION: PUMP SPECIFICA ATERIAL	t.): 1/8" = 0. = Bailer; P Y N TION VOLUME	0006: 3/16' BP = Bladder SAMPLER(S TUBING MATERIAL C SAMPLI PRESERVAT USED	TUBING PUMP: SAM SIGNATI SODE: TUBING E PRESER TIVE AD AD CODE: TUVE AD CODE: COD	I/4" = 0.0020 ESP = Electric 5 PLING DA JRE(S): 3 Y N (re RVATION (includie TOTAL VOL DED IN FIELD (n	FIELD FIELD Filtratic placed) ng wet ice) Final pH/ Temp	004: 3/8" = 1 mp: PP = P SAMPLING INITIATED A -FILTERED: Y on Equipment T DUPLICATE INTEND ANALYSIS A METH	0.006: 1/2 teristallic Purr xT: 084: ype: : Y DED AND/OR E DED C C C C	* = 0.010; p; 0 = Ot SAMPLING FILTER SI N SAMPLING QUIPMENT CODE	5/8" = 0.016 her (Specify) G T: ZE:μm SAMPLE PUMP FLOW RATE

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

SITE NAME:	white	马儿	A GE			ITE OCATION:					
WELL NO:	107 0			SAMPLE	ID:				DATE: 5	- 22 - 2	ЦИ
	1010				PUR	GING DA	TA				
WELL DIAMETER	(inches):	TUBING DIAME	TER (inches):	TOTAL V DEPTH	(feet):		TO WA	TER (feet): 20	90 OR	RGE PUMP TY BAILER:	/PE
(only fill out	if applicable)		= (feet -		O WATER) (feet)	X WELL CAPA	gallons/fo		gallons
	if applicable)	IRGE: 1 EQU	IPMENT VOL		UME + (TUI allons + (TY X	TUBING LENGT	'H) + FLOW CE et) +	ELL VOLUME	= gallons
PUMP OR	TUBING DEPTH	4	WELL SCR	REEN INTERV feet to		DURCIN				TOTAL VOL PURGED (g	
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (^o C)	COND. (circle units) μmhos/cm <u>or</u> μS/cm	DISSOLVEI OXYGEN (circle units mg/L or % saturation) Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
405					7.65	2576	60 5	3.05	31	2.05	CIGAT
410					7.93	25.31	57d	4.63	75	2.20	
MIS	1			1	7,86	25.61	595	5.50	89	1.68	
1420					7.52	25.A1	601	1.58	-109	4.79	
1425	2				7.51	25.08	717	0.72	-124	3.17	
1430					7.45	24.64	730	0.39	-139	2.86	
1435		1			7.46	24.60	730	0,29	-146	1.58	
1440					7.50	24.70	728	0.30	-149	3.02	
TUBING IN PURGING	ACITY (Galion SIDE DIA. CAF EQUIPMENT C	ODES: B	$Ft_{.}$: $1/8'' = 0.$	1" = 0.04; 0006; 3/16' BP = Bladder 1	Pump; I SAMF	1/4" = 0.002 ESP = Electric PLING DA	6; 5/16" = Submersible	0.004: 3/8"	Peristaltic Pun		12" = 5.88 5/8" = 0.016 ther (Specify)
SAMPLED		THERMON			/			INITIATED	AT: 1440	ENDED A	Л:
PUMP OR	TUBING WELL (feet):			TUBING MATERIAL C	ODE:			LD-FILTERED: ation Equipment		FILTERS	IZE: μm
	ONTAMINATIO	DN: PUM	IP Y N		TUBING	Y N (r	eplaced)	DUPLICAT	E: Y	N	
SAMP	LE CONTAINE	R SPECIFICA		SAMPLE	E PRESERV	ATION (includ				SAMPLING	SAMPLE PUMP
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVAT USED		TOTAL VOL ED IN FIELD (mL) Final p			CODE	(mL per minute)
								_			
							-	-			
REMARKS	5										
MATERIAL		AG = Amber S = Silicone;	T = Teflon;	= Clear Glass; 0 = Other (Specify)	High Density			Density Polyet		= Polypropylene;
	EQUIPMENT	F	RFPP = Rever	hrough) Perist se Flow Perista the information	altic Pump;			adder Pump; ing Gravity Drain		c Submersible I er (Specify)	-unp;

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

SITE NAME: \ 6	8D -	White.	BINE	F								
	10527			SAMPLE						DATE: 5	-22-21	4
	10 11				PUR	GING DA	ТА					1
WELL DIAMETER	R (inches):		ER (inches):	TOTAL V DEPTH (feet):				R (feet): 45		RGE PUMP T BAILER:	YPE
(only fill out	UME PURGE: t if applicable)		= (feet -		fee	t) X	BING LENGTH	gallons/fo		gallons
(only till ou	t if applicable)		G	= ga	illons + (gallo	ns/foot X		feet)	+	galions	= gallons
PUMP OR IN WELL (f	TUBING DEPTH eet):	4	WELL SCR DEPTH:	EEN INTERVA	AL feet	PURGIN	G DAT: C	32	PURGING ENDED AT:	-	TOTAL VO PURGED (
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (^o C)	CONE (circle ur µmhos/ or µStr	nits) cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	(describe)
100					742	24.44	690	_	0.09	-135	4.35	
1105	0				7.42		693		0.05	-139	3.54	1 1
1110			-		7.42	24.30	699		0,04	-140	2.48	1
								_				
-												
								-				
		_					-	-				
TUBING IN PURGING	PACITY (Gallon: ISIDE DIA. CAP EQUIPMENT C BY (PRINT) / A	ODES: B	= Baller; E	1" = 0.04; 0006; 3/16" 3P = Bladder P SAMPLER(S)	= 0.0014; ump; SAMI	1/4" = 0.002 ESP = Electric PLING DA	6; 5/16 Submersit	0.37; 6" = 0.0 ble Purr	04; 3/8" = 0	eristaltic Pun	6" = 1.47; " = 0.010; np; O = C SAMPLIN ENDED /	
PUMP OR DEPTH IN	TUBING WELL (feet):			TUBING MATERIAL CO	DDE:				FILTERED: Y	N pe:	FILTER S	ilZE:μm
	CONTAMINATIO	DN: PUM	P Y N	T	TUBING	Y N (re	eplaced)		DUPLICATE:	Y	N	
SAMPLE	PLE CONTAINE #	R SPECIFICA		SAMPLE		ATION (include TOTAL VOL) al pH/	INTEND ANALYSIS A	ND/OR E	SAMPLING QUIPMENT	SAMPLE PUMP FLOW RATE
ID CODE	CONTAINERS	CODE	VOLUME	USED		ED IN FIELD (I	nL) Te	qme	METHO		CODE	(mL per minute
				1				-				
REMARKS												
				Clear Class		High Donoity	Polyothylor	10 ⁻	LDPE = Low De	onsity Polyot	vlene: PP	= Polypropylene
		AG = Amber (S = Silicone;	T = Teflon;	Clear Glass; 0 = Other (S prough) Perista	pecify)	High Density F					Submersible	
		R	FPP = Revers	e Flow Peristal	tic Pump;	SM = Straw			Gravity Drain);		r (Specify)	

TES: 1. The above do not constitute all of the information required by 2. <u>STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS</u>

SITE NAME:	White	bluts	l.			ITE OCATION:					
WELL NO:				SAMPLE I	D:				DATE: 5	-22-2	4
-					PUR	GING DA	TA				
WELL DIAMETER	(inches):	TUBING	TER (inches):	TOTAL W. DEPTH (fe	eet):		STATIC TO WAT	DEPTH TER (feet): 78	83 OR	RGE PUMP T BAILER:	YPE
(only fill out	UME PURGE: if applicable)		= (1	eet -		feet))		gallons/for		gallons
	if applicable)				lons + (ons/foot X	feet		gallons	= gallons
PUMP OR	TUBING DEPTHeet):	1	WELL SCRE	EEN INTERVAI		PURGIN		PURGING		TOTAL VOI PURGED ((LUME
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (^o C)	COND. (circle units) μmhos/cm <u>or</u> μS/om	DISSOLVED OXYGEN (circle units) rog/_ or % saturation	Redox (mV)	Turbidity (NTU)	/ COLOR / ODOR (describe)
1205					7.40	22.03	519	0.49	- 111	3.67	Clear
1210					7.39	22 28	\$26	0.67	-94	2.55	
1215					7.46	22.16	526	0.73	-115	2.07	
1220					7.39	22.56	521	0.09	-127	1.47	
1225	1				7.39	21.57	521	0.00	-133	1.19	\rightarrow
1230					1.93	21.77	520	0.03	-133	1.19	
TUBING IN	PACITY (Gallons ISIDE DIA. CAP EQUIPMENT C	ACITY (Gal./	-t.): 1/8" = 0.0	1" = 0.04; 006: 3/16" = P = Bladder Pu	ump; E	1/4" = 0.002	6; 5/16" = 0 Submersible P	0.004; 3/8" = 0	5" = 1.02; 0.006: 1/2 eristaltic Pum		12" = 5.88 5/8" = 0.016 ther (Specify)
SAMPLED	BY (PRINT) / A	FILIATION:		SAMPLER(S) S				SAMPLING INITIATED A	т: 1230	SAMPLIN ENDED A	
PUMP OR DEPTH IN	TUBING WELL (feet):			TUBING MATERIAL CO	DE:			D-FILTERED: Y		FILTER S	IZE:μm
FIELD DEC	CONTAMINATIC	N: PUM	PY N		TUBING	Y N (re	eplaced)	DUPLICATE	: Y	N	
SAMF	PLE CONTAINE	R SPECIFICA	TION	SAMPLE I		ATION (includ				SAMPLING QUIPMENT	SAMPLE PUMI FLOW RATE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIN USED		TOTAL VOL ED IN FIELD (I	Final pH mL) Temp	METHO		CODE	(mL per minute
					_						
								1			
REMARKS											
MATERIAL		AG = Amber S = Silicone;	T = Teflon;	Clear Glass; 0 = Other (Sp	becify)	High Density F		LDPE = Low De			- Polypropylene
	G EQUIPMENT	R	APP = After (Th FPP = Reverse	e Flow Peristalti	ic Pump;			lder Pump; E g Gravity Drain);		Submersible I r (Specify)	Pump,

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

SITE NAME:						SITE OCATION:					
WELL NO:	llOD			SAMPLE	ID:				DATE:	5-22-2	4
	1.				PUR	GING DA	TA				
WELL DIAMETER	(inches):	TUBING	TER (inches):	TOTAL V DEPTH	(feet):		STATIC TO WA	DEPTH TER (feet): 33	25 PL	JRGE PUMP T R BAILER:	YPE
	UME PURGE: if applicable)	1 WELL VO	LUME = (TOT = (AL WELL DEF	PTH – ST	ATIC DEPTH 1	fo WATER)	VVELL CAPA	CITY gallons/f	ioot =	gallons
	IT VOLUME PU	RGE: 1 EQU	JIPMENT VOL		UME + (TU		тү х	TUBING LENGT	H) + FLOW C	ELL VOLUME	
				= gi REEN INTERV	allons + (ons/foot X		et) +	gallons TOTAL VO	
PUMP OR IN WELL (fe	TUBING DEPTH eet):	1	DEPTH:	feet to	feet	INITIATI	IG AT: 1509			PURGED (
ТІМЕ	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 µŚ/cm	OXYGEN (circle units) (circle units) (mg/L or % saturation	Redox (mV)	Turbidity (NTU)	(describe)
1535	1	1			7.57	24.02	490	2.60	44	0.54	Clear
1540	1				7.5.8	27.80	489	2.55	52	0.73	1
1545	1				7.60	23.75	489	2.62	60	1,90	
1550	1				7.61	23.68	490	2.67	45	0.77	
1155					7.63	23.58	490	2.76	70	0.22	
TUBING IN	ACITY (Gallon SIDE DIA. CAF	PACITY (Gal./	Ft.): 1/8" = 0.	1" = 0.04; 0006; 3/16' BP = Bladder I	* = 0.0014;	.06; 2" = 0.1 1/4" = 0.002 ESP = Electric	26; 5/16" =	0.004; 3/8" =	5" = 1.02; 0.006: 1/ Peristaltic Pu	6" = 1.47; /2" = 0.010; mp; O = C	12" = 5.88 5/8" = 0.016 ther (Specify)
					SAM	PLING D	ATA				
SAMPLED	BY (PRINT) / A	FFILIATION:		SAMPLER(S) SIGNATU	RE(S):		SAMPLING	AT: 155	5 SAMPLIN	
PUMP OR				TUBING MATERIAL C				D-FILTERED: ation Equipment		FILTER S	SIZE:μm
	WELL (feet):	DN: PUN	AP Y N			Y N (r	eplaced)	DUPLICAT		N	
			-			ATION (includ		INTEN	DED	SAMPLING	SAMPLE PUMP
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVAT	IVE	TOTAL VOL DED IN FIELD (Final pH			EQUIPMENT CODE	FLOW RATE (mL per minute)
								-			
						_		-			
REMARKS							_		_		
IL MARINO											
MATERIAL	CODES:	CODES:	Glass; CG = T = Teflon; APP = After (T RFPP = Revers		Specify) altic Pump;	= High Density B = Bailer SM = Straw	; BP = Bla	LDPE = Low dder Pump; ng Gravity Drain)	ESP = Electr	ethylene; PF ic Submersible ner (Specify)	• = Polypropylene; Pump;

TES: 1. The above do not constitute all of the information required by 2. <u>STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS</u>

SITE NAME	uhite	Bluf.	r.			SITE LOCATION:					
WELL NO:				SAMPLE	ID:				DATE	5-22.	24
	110.5				PUR	GING DA	TA				
WELL DIAMETER	(inches):		ER (inches):	TOTAL N DEPTH	(feet):	and the strength of the strength		ER (feet):	0 OR	RGE PUMP T BAILER:	/PE
(only fill out	if applicable)		= (feet -	JBING CAPACI	feet) X	WELL CAPAC	gallons/fo		gallons
	if applicable)	IRGE: 1 EQU	IPMENT VOL.		allons + (ns/foot X	feet		gallons	= gallons
PUMP OR		4	WELL SCR	EEN INTERV		PURGIN		PURGING ENDED AT:		TOTAL VOI PURGED (g	
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP	COND. (circle units) µmhos/cm or µ\$700	DISSOLVED OXYGEN (circle units) (rig/) or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
630			1		4.58	24,11	523	0.04	224	2,54	
1635					4.60	241,70	525	0.02	216	176	
1/240					4.58		529	0.01	211	1.74	-
16HS					4.55	24.17	513	0.00	212	1.52	-
WELL CAP	PACITY (Gallon:	s Per Foot): 0	0.75" = 0.02; Ft.): 1/8" = 0.0	1" = 0.04; 006; 3/16	1.25 " = 0 " = 0.0014;	.06; 2 " = 0.1 1/4" = 0.002			5" = 1.02; 0.006; 1/2	6" = 1.47; " = 0.010;	12" = 5.88 5/8" = 0.016
	EQUIPMENT C			P = Bladder			Submersible P	ump; PP = P	Peristaltic Pun	np; O = C	ther (Specify)
SAMPLED	BY (PRINT) / A	FFILIATION:		SAMPLER(S		PLING DA		SAMPLING INITIATED A	T: 1645	SAMPLIN ENDED	
PUMP OR				TUBING MATERIAL C	ODE			D-FILTERED: Y	' N	FILTER S	IZE:μm
	WELL (feet): CONTAMINATIO	DN: PUM			TUBING	Y N (r	aplaced)	DUPLICATE		N	
	PLE CONTAINE		1	SAMPL	E PRESER	VATION (includ				SAMPLING	SAMPLE PUMP
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVA USED		TOTAL VOL DED IN FIELD (Final pH mL) Temp	METH		CODE	(mL per minute)
										5	
				_				-			
REMARKS	S:							× 3			
MATERIA	_	AG = Amber S = Silicone;	T = Teflon;	Clear Glass; O = Other	(Specify)	= High Density B = Bailer		LDPE = Low D dder Pump; E		hylene; PF	= Polypropylene; Pump;
SAMPLIN	G EQUIPMENT		APP = After (Th RFPP = Reverse titute all of t	e Flow Perist	altic Pump;	SM = Straw		ig Gravity Drain);		er (Specify)	

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

SITE NAME:	NhitzB	lhff				SITE LOCATION:					
WELL NO:	1115			SAMPLE	ID:				DATE: 5	-20-	24
	11.9				PUR	GING DA	TA				
WELL DIAMETER	(inches):	TUBING	ER (inches):	TOTAL V DEPTH	(feet):		TOWA	C DEPTH ATER (feet): 13	77 OF	RGE PUMP TY BAILER:	/PE
(only fill out	if applicable)		= (feet-		feet)	X WELL CAPA	gallons/fo	ot =	gallons
	IT VOLUME PU	IRGE: 1 EQU	IPMENT VOL.		UME + (T) allons + (UBING CAPACI	TY X ons/foot X	TUBING LENG	"H) + FLOW Cl	gallons	= gallons
PUMP OR IN WELL (fe		ł	WELL SCR	EEN INTERV		PURGIN				TOTAL VOL PURGED (g	
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standar units)	d TEMP (°C)	COND. (circle units μmhos/cm <u>or</u> μS/cp) Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1700					4.14	35.15	1,380	130	385	6.75	Clear
1705	1				4.13	34.96	1,370	1.32	391	3.44	
1710				1	4.14	34.79	1,370	1.35	396	2,40	1
1715	· · · · · · · · · · · · · · · · · · ·		S		4.10	34.61	1,370	1.33	400	1.94	
	()	6		-						1	1
								-		1	
	V						1.		1.000)	-
		1									
	1	1.0									
										-	
WELL CAP	ACITY (Gallon	s Per Foot):	0.75" = 0.02; E(): 1/8" = 0.0	1" = 0.04;	1.25" = 0 " = 0.0014;				5" = 1.02; = 0.006; 1/2	6" = 1.47; 2" = 0.010;	12" = 5.88 5/8" = 0.016
	EQUIPMENT C			BP = Bladder	A 1997 1997	ESP = Electric	Submersible	Pump; PP =	Peristaltic Pu	mp; O = C	ther (Specify)
						PLING D	ATA				
SAMPLED	BY (PRINT) / A	FFILIATION:		SAMPLER(S) SIGNATU	JRE(S):		SAMPLIN	G DAT: 1715	SAMPLIN ENDED /	
PUMP OR				TUBING				LD-FILTERED: ration Equipment		FILTER S	IZE:μm
	WELL (feet):	ON: PUM		MATERIAL C	TUBING	G Y N (r	eplaced)	DUPLICA		N	
	CONTAMINATIO		T	CAMPLE		VATION (includ			NDED	SAMPLING	SAMPLE PUMP
SAMPLE ID CODE	PLE CONTAINE # CONTAINERS	MATERIAL CODE	VOLUME	PRESERVA	TIVE	TOTAL VOL	Final	H/ ANALYSI		EQUIPMENT CODE	FLOW RATE (mL per minute)
- D CODE	Service in the 19							1			
		1.									
	2		-				_				
							- ()			_	
	51 a	11 - 1									
REMARKS	Du	P									
MATERIA		AG = Amber		Clear Glass;		= High Density	Polyethylene	LDPE = Low	Density Polye	thylene; Pf	= Polypropylene;
SAMPLIN	G EQUIPMENT	S = Silicone; CODES:	APP = After (Th	0 = Other (nrough) Perist	taltic Pump	; B = Baile		ladder Pump;		c Submersible er (Specify)	Pump;
OTES: 4	The above		RFPP = Revers				v ivietnoa (1 ul	oing Gravity Drair	9, 0 – Ou	or (opcony)	

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

SITE NAME:	A -color	1.St				SITE LOCATION:					
WELL NO:	11217			SAMPLE	ID.				DATE:	-23-2	14
	1100				PUR	GING DA	TA				
WELL DIAMETER	(inches):		TER (inches):	TOTAL V DEPTH	(feet):		STATIC TO WAT	ER (feet): 21	.49 OR	RGE PUMP T BAILER:	YPE
(only fill out	if applicable)		= 1		feet -		feet) X		gallons/fo		gallons
	if applicable)	RGE: 1 EQU	IPMENT VOL		UME + (TU allons + (JBING CAPACI	TY X T ons/foot X	UBING LENGTH	1) + FLOW CE	gallons	= gallons
PUMP OR		4	WELL SCF	EEN INTERV		PURGIN		PURGING ENDED AT		TOTAL VOI PURGED (§	UME
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP	COND. (circle units) μmhos/cm or αS/em	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1435		F			7.46	20.67	457	0.05	-143	.50	Clear
1500					THE	20.71	458	0.01	-145	0.92	(
1505					7,49	20,72	457	0.00	-150	0.66	1
TUBING IN PURGING	EQUIPMENT C	PACITY (Gal./ ODES: B	Ft.): 1/8" = 0.	1" = 0.04; 0006; 3/16' BP = Bladder SAMPLER(S	Pump: SAM	1/4" = 0.002 ESP = Electric PLING D	26; 5/16" = 0 Submersible Pi	<u>3/8" =</u> ump: PP = I SAMPLING	Peristaltic Pun AT: (505	SAMPLIN ENDED	
	WELL (feet):			MATERIAL C				tion Equipment T		N	
FIELD DEC	CONTAMINATIO	DN: PUN	IP Y N		TUBING		eplaced)	DUPLICATE		N	
SAMPLE ID CODE	PLE CONTAINE # CONTAINERS	R SPECIFICA MATERIAL CODE	VOLUME	SAMPLI PRESERVAT USED	TIVE	VATION (includ TOTAL VOL DED IN FIELD (Final pH	INTEN ANALYSIS METH	AND/OR	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
									1		
							-				
REMARKS	:							1			
MATERIAL	CODES	AG = Amber S = Silicone;	•	= Clear Glass; 0 = Other (= High Density	Polyethylene;	LDPE = Low [Density Polyet	hylene; P I	Polypropylene;
SAMPLING	G EQUIPMENT	CODES:	APP = After (T RFPP = Rever	hrough) Perist	altic Pump;	SM = Straw		dder Pump; Ig Gravity Drain);		c Submersible er (Specify)	Pump;

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

SITE NAME:	white,	3144									
WELL NO:	1137			SAMPLE	E ID:					-22-2	4
-	11.9.4				PUR	GING DA	TA	-			
WELL DIAMETER	R (inches):	TUBIN	TER (inches):	TOTAL DEPTH	(feet):		TO WA	TER (feet):	63 0	URGE PUMP T R BAILER:	YPE
(only fill out	t if applicable) NT VOLUME PU		= (feet -		feet)	X WELL CAPAC X TUBING LENGTH	gallons/		gallons
(only fill out	t if applicable)			= q	allons + (gall	ons/foot X	fee	et) +	gallons	= gallons
PUMP OR IN WELL (fr	TUBING DEPTH	4	WELL SCP DEPTH:	REEN INTERV feet to		PURGIN	IG ED AT: 115	PURGING ENDED AT	:	TOTAL VO PURGED (
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)	t Turbidit (NTU)	y ODOR (describe)
1215					1.05	21.26	1,460	2.21	133	(). 7	Clear
1220			1		7.04	21.51	1,450	2.19	135	0.49	
1225	25				7.05	23.38	1,460	2.24	136	0.43	1
TUBING IN PURGING SAMPLED	PACITY (Gallons ISIDE DIA. CAP EQUIPMENT C BY (PRINT) / A	ODES: E	Ft.): 1/8" = 0.	0006; 3/16 BP = Bladder SAMPLER(S	Pump: SAMI	1/4" = 0.003 ESP = Electric PLING D/	Submersible F	0.004; 3/8" =	Peristaltic Pu AT: 1225	SAMPLII ENDED	
PUMP OR DEPTH IN	WELL (feet):			TUBING MATERIAL C	ODE:			ation Equipment T			μπ
FIELD DEC	CONTAMINATIC	N: PUN	1PYN		TUBING	Y N (r	eplaced)	DUPLICATE	E: Y	N	
SAMP	PLE CONTAINE	R SPECIFIC		SAMPL		ATION (includ	ing wet ice) Final pl	INTEN ANALYSIS	AND/OR	SAMPLING EQUIPMENT	SAMPLE PUMP FLOW RATE
ID CODE	CONTAINERS	CODE	VOLUME	USED		ed in Field (mL) Temp	, METH		CODE	(mL per minute)
REMARKS	:										1
-			T = Teflon; APP = After (T RFPP = Revers	se Flow Perista	Specify) altic Pump; altic Pump;		; BP = Bla	LDPE = Low D adder Pump; fing Gravity Drain);	ESP = Electr	ethylene; PF ic Submersible ner (Specify)	● = Polypropylene; Pump;

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

AAPPERT INC	0:141	-	.FF			LOCATION:	B RO	eddie!	2	AR	
	. 1140	/		SAN	IPLE ID:				DATE:	5.23	-24
WELL	_	THE	BING	107	PU	RGING D					
	ER (inches):		METER (incl		AL WATER TH (feet):			TER (feet): GO	68	PURGE PUMI OR BAILER:	P TYPE
(only fill o	ut if applicable	E: TWELL)	VOLUME =	(TOTAL WELL	DEPTH - S	TATIC DEPTH	TO WATER)	TER (feet): 60 X WELL CAPAC	TITY	OR BAILER:	
EQUIPME (only fill o	ENT VOLUME ut if applicable	PURGE: 1 E	QUIPMENT	VOL. = PUMP	feet /OLUME + (7	UBING CAPA	feet) CITY X	X TUBING LENGTH	gallon:	s/foot =	gal
				-	gallons + (ga	llons/foot X	feel			
PUMP OR IN WELL (R TUBING DEF (feet);	РΤΗ	WELL DEPT	SCREEN INTE	RVAL feet	PURG		PURGING		gallor TOTAL V	OLUME
TIME	VOLUME PURGED		IE PUR	1 10	рн (standar	TEMP	COND. (circle units)	DISSOLVED OXYGEN (circle units)	Redo		gallons): COLO dity ODO
1.0.0	(gallons)	(gallons	s) (gpr		` units)	(-0)	µmhos/cm or uS/cm	mg/L or % saturation	(mV)		
030		-		-	7.36		475	0.18	-119	0.5	7 Cle
075		1			7.40	19.14	474	0.10	-118		
95		-			7.43	19.15	474	0.08	-119		
				-		1				-	
	1									-	
		-		-		_			-		-
		-									
		-		and the second second				the second se	-		
			-		-						44.000
		1									
ELL CAP	ACITY (Gallon SIDE DIA, CAI	ns Per Foot):	0.75" = 0.02 /EL): 1/8" =	2; 1" = 0.04;	1.25" = 0.0	16; 2 " = 0.10		4 " = 0.65; 5	" = 1.02:	6 ^{<i>n</i>} = 1.47·	12" - 5 99
UBING INS	ACITY (Gallon SIDE DIA. CAI	PACITY (Gal.	0.75" = 0.02 /Ft.): 1/8" = B = Bailer;	0.0006; 3/1	5" = 0.0014;	1/4" = 0.002	6: 5/16" = 0.0	004: 3/8" = 0.0		2" = 0.010;	12 " = 5.88 5/8 " = 0.016
URGING IN	SIDE DIA. CAI	PACITY (Gal. CODES:	/Ft.): 1/8" = B = Bailer;	BP = Bladder	Pump; E	1/4" = 0.002	6: 5/16" = 0.0 Submersible Pun	004: 3/8" = 0.0		2" = 0.010;	
URGING IN:	SIDE DIA. CA	PACITY (Gal. CODES:	/Ft.): 1/8" = B = Bailer;	BP = Bladder	" = 0.0014; Pump;	1/4" = 0.002	6: 5/16" = 0.0 Submersible Pun	004. 3/8" = 0.0	006; 1/. istaltic Pur	2" = 0.010; mp: O = C	5/8" = 0.016 Other (Specify)
URGING E	SIDE DIA. CAI	PACITY (Gal. CODES:	/Ft.): 1/8" = B = Bailer;	SAMPLER(S	5" = 0.0014; Pump; I SAMP) SIGNATUR	1/4" = 0.002	6: 5/16" = 0.0 Submersible Pun	3/8" = 0.0 pp; PP = Per SAMPLING INITIATED AT:	206; 1/ istaltic Pur 1035	2" = 0.010; mp: 0 = 0 SAMPLIN ENDED A	5/8" = 0.016 Dther (Specify)
URGING IN AMPLED E JMP OR TE EPTH IN W	SIDE DIA. CAI EQUIPMENT C BY (PRINT) / A UBING VELL (feet):	PACITY (Gai.	/Ft.): 1/8" = B = Bailer;	BP = Bladder SAMPLER(S TUBING MATERIAL (5" = 0.0014; Pump; E SAMF SIGNATUR CODE:	1/4" = 0.002 SP = Electric LING DA E(S):	6: 5/16" = 0.0 Submersible Pun	004. 3/8" = 0.0	1035 N	2" = 0.010; mp: 0 = 0 SAMPLIN ENDED A	5/8" = 0.016 Other (Specify)
URGING IN AMPLED E JMP OR T EPTH IN W ELD DECC	SIDE DIA. CAI EQUIPMENT C BY (PRINT) / A UBING VELL (feet): DNTAMINATIC	PACITY (Gai. CODES: I NFFILIATION: DN: PUM	/Ft.): 1/8" = B = Bailer; /P Y	BP = Bladder BP = Bladder SAMPLER(S TUBING MATERIAL (N	I" = 0.0014; Pump; I SAMF SIGNATUR SIGNATUR CODE: TUBING	1/4" = 0.002 SP = Electric : LING DA E(S): Y N (reg	6: 5/16" = 0.0 Submersible Pun TA FIELD-I Filtration placed)	3/8" = 0.0 pp; PP = Per SAMPLING INITIATED AT:	1035 N	2" = 0.010; mp: 0 = 0 SAMPLIN ENDED A	5/8" = 0.016 Dther (Specify)
AMPLED E JMP OR T EPTH IN W ELD DECC SAMPL	SIDE DIA. CAI EQUIPMENT C 3Y (PRINT) / A UBING VELL (feet): DNTAMINATIC E CONTAINE #	PACITY (Gai. CODES: I SFFILIATION: DN: PUN R SPECIFIC/ MATERIAL	/Ft.): 1/8" = B = Bailer; //P Y ATION	BP = Bladder SAMPLER(S TUBING MATERIAL (N SAMPL	SODE: TUBING	1/4" = 0.002 SP = Electric : LING DA E(S): Y N (rep TION (including	6: 5/16" = 0.0 Submersible Pun TA FIELD-1 Filtration placed) g wet ice)	3/8" = 0.(p; PP = Per SAMPLING INITIATED AT: ILTERED: Y Equipment Type DUPLICATE: INTENDEC	006; 1// istaltic Pur ///35 N 2: Y	2" = 0.010; mp; O = C SAMPLIN ENDED / FILTER S N SAMPLING	5/8" = 0.016 Other (Specify) NG AT: IZE:μm SAMPLE PUM
JMP OR T EPTH IN W ELD DECC SAMPLE	SIDE DIA. CAI EQUIPMENT C BY (PRINT) / A UBING VELL (feet): DNTAMINATIC E CONTAINE	PACITY (Gai. CODES: I FFILIATION: DN: PUN R SPECIFIC/	/Ft.): 1/8" = B = Bailer; /P Y	BP = Bladder BP = Bladder SAMPLER(S TUBING MATERIAL (N	SAMF Pump: 1 SAMF SAMF SODE: TUBING PRESERVA TVE	1/4" = 0.002 SP = Electric : LING DA E(S): Y N (reg	6: 5/16" = 0.0 Submersible Pun TA FIELD-1 Filtration placed) 19 wet ice) Final pH/	3/8" = 0.(np: PP = Per SAMPLING INITIATED AT: ILTERED: Y Equipment Type DUPLICATE:	206; 1// istaltic Pur ////////////////////////////////////	2" = 0.010; mp: O = C SAMPLIN ENDED A FILTER S N	5/8" = 0.016 Dther (Specify) IG IT: IZE:μm SAMPLE PUM FLOW RATE
JMP OR T EPTH IN W ELD DECC SAMPLE	SIDE DIA. CAI EQUIPMENT C 3Y (PRINT) / A UBING VELL (feet): DNTAMINATIC E CONTAINE #	PACITY (Gai. CODES: I SFFILIATION: DN: PUN R SPECIFIC/ MATERIAL	/Ft.): 1/8" = B = Bailer; //P Y ATION	BP = Bladder SAMPLER(S TUBING MATERIAL (N SAMPL PRESERVA	SAMF Pump: 1 SAMF SAMF SODE: TUBING PRESERVA TVE	1/4" = 0.002 SP = Electric : LING DA E(S): Y N (reg TION (includin OTAL VOL	6: 5/16" = 0.0 Submersible Pun TA FIELD-1 Filtration placed) g wet ice) Final pH/	3/8" = 0.(np; PP = Per SAMPLING INITIATED AT: ILTERED: Y Equipment Type DUPLICATE: INTENDEE ANALYSIS AND	206; 1// istaltic Pur ////////////////////////////////////	2" = 0.010; mp; O = C SAMPLIN ENDED A FILTER S N SAMPLING EQUIPMENT	5/8" = 0.016 Dther (Specify) IG IT: IZE:μm SAMPLE PUM FLOW RATE
AMPLED E JMP OR T EPTH IN W ELD DECC SAMPL	SIDE DIA. CAI EQUIPMENT C 3Y (PRINT) / A UBING VELL (feet): DNTAMINATIC E CONTAINE #	PACITY (Gai. CODES: I SFFILIATION: DN: PUN R SPECIFIC/ MATERIAL	/Ft.): 1/8" = B = Bailer; //P Y ATION	BP = Bladder SAMPLER(S TUBING MATERIAL (N SAMPL PRESERVA	SAMF Pump: 1 SAMF SAMF SODE: TUBING PRESERVA TVE	1/4" = 0.002 SP = Electric : LING DA E(S): Y N (reg TION (includin OTAL VOL	6: 5/16" = 0.0 Submersible Pun TA FIELD-1 Filtration placed) g wet ice) Final pH/	3/8" = 0.(np; PP = Per SAMPLING INITIATED AT: ILTERED: Y Equipment Type DUPLICATE: INTENDEE ANALYSIS AND	206; 1// istaltic Pur ////////////////////////////////////	2" = 0.010; mp; O = C SAMPLIN ENDED A FILTER S N SAMPLING EQUIPMENT	5/8" = 0.016 Dther (Specify) IG IT: IZE:μm SAMPLE PUM FLOW RATE
AMPLED E JMP OR T EPTH IN W ELD DECC SAMPL	SIDE DIA. CAI EQUIPMENT C 3Y (PRINT) / A UBING VELL (feet): DNTAMINATIC E CONTAINE #	PACITY (Gai. CODES: I SFFILIATION: DN: PUN R SPECIFIC/ MATERIAL	/Ft.): 1/8" = B = Bailer; //P Y ATION	BP = Bladder SAMPLER(S TUBING MATERIAL (N SAMPL PRESERVA	SAMF Pump: 1 SAMF SAMF SODE: TUBING PRESERVA TVE	1/4" = 0.002 SP = Electric : LING DA E(S): Y N (reg TION (includin OTAL VOL	6: 5/16" = 0.0 Submersible Pun TA FIELD-1 Filtration placed) g wet ice) Final pH/	3/8" = 0.(np; PP = Per SAMPLING INITIATED AT: ILTERED: Y Equipment Type DUPLICATE: INTENDEE ANALYSIS AND	206; 1// istaltic Pur ////////////////////////////////////	2" = 0.010; mp; O = C SAMPLIN ENDED A FILTER S N SAMPLING EQUIPMENT	5/8" = 0.016 Dther (Specify) IG IT: IZE:μm SAMPLE PUM FLOW RATE
AMPLED E JMP OR T EPTH IN W ELD DECC SAMPL	SIDE DIA. CAI EQUIPMENT C 3Y (PRINT) / A UBING VELL (feet): DNTAMINATIC E CONTAINE #	PACITY (Gai. CODES: I SFFILIATION: DN: PUN R SPECIFIC/ MATERIAL	/Ft.): 1/8" = B = Bailer; //P Y ATION	BP = Bladder SAMPLER(S TUBING MATERIAL (N SAMPL PRESERVA	SAMF Pump: 1 SAMF SAMF SODE: TUBING PRESERVA TVE	1/4" = 0.002 SP = Electric : LING DA E(S): Y N (reg TION (includin OTAL VOL	6: 5/16" = 0.0 Submersible Pun TA FIELD-1 Filtration placed) g wet ice) Final pH/	3/8" = 0.(np; PP = Per SAMPLING INITIATED AT: ILTERED: Y Equipment Type DUPLICATE: INTENDEE ANALYSIS AND	206; 1// istaltic Pur ////////////////////////////////////	2" = 0.010; mp; O = C SAMPLIN ENDED A FILTER S N SAMPLING EQUIPMENT	5/8" = 0.016 Other (Specify) NG AT:
AMPLED E AMPLED E EPTH IN W ELD DECC SAMPLE CODE (SIDE DIA. CA EQUIPMENT C 3Y (PRINT) / A UBING VELL (feet): DNTAMINATIC E CONTAINE #	PACITY (Gai. CODES: I SFFILIATION: DN: PUN R SPECIFIC/ MATERIAL	/Ft.): 1/8" = B = Bailer; //P Y ATION	BP = Bladder SAMPLER(S TUBING MATERIAL (N SAMPL PRESERVA	SAMF Pump: 1 SAMF SIGNATUR SIGNA	1/4" = 0.002 SP = Electric : LING DA E(S): Y N (reg TION (includin OTAL VOL	6: 5/16" = 0.0 Submersible Pun TA FIELD-1 Filtration placed) g wet ice) Final pH/	3/8" = 0.(np; PP = Per SAMPLING INITIATED AT: ILTERED: Y Equipment Type DUPLICATE: INTENDEE ANALYSIS AND	206; 1// istaltic Pur ////////////////////////////////////	2" = 0.010; mp; O = C SAMPLIN ENDED A FILTER S N SAMPLING EQUIPMENT	5/8" = 0.016 Dther (Specify) IG IT: IZE:μm SAMPLE PUM FLOW RATE
AMPLED E JMP OR T EPTH IN W ELD DECC SAMPL	SIDE DIA. CAI EQUIPMENT O BY (PRINT) / A UBING VELL (feet): DNTAMINATIO E CONTAINERS	PACITY (Gai. CODES: 1 FFILIATION: DN: PUN R SPECIFIC/ MATERIAL CODE	/Ft.): 1/8" = B = Bailer; //P Y ATION	O.0006; 3/11 BP = Bladdee SAMPLER(S TUBING MATERIAL (N SAMPL PRESERVA USED O	SODE: TUBING PRESERVA	1/4" = 0.002 SP = Electric : LING DA E(S): Y N (rey TION (includin OTAL VOL D IN FIELD (m	6: 5/16" = 0.1 Submersible Pun TA FIELD-I Filtration placed) g wet ice) L) Final pH/ L) Temp	004: 3/8" = 0.(pp: PP = Per SAMPLING INITIATED AT: ILTERED: Y Equipment Type DUPLICATE: INTENDEL ANALYSIS ANI METHOD	206; 1// istaltic Pur ////////////////////////////////////	2" = 0.010; mp; O = C SAMPLIN ENDED A FILTER S N SAMPLING EQUIPMENT	5/8" = 0.016 Dther (Specify) IG IT: IZE:μm SAMPLE PUM FLOW RATE
AMPLED E AMPLED E EPTH IN W ELD DECC SAMPLE CODE (UBING VELL (feet): DNTAMINATIO E CONTAINERS	PACITY (Gai. CODES: 1 FFILIATION: DN: PUN R SPECIFIC/ MATERIAL CODE	/FL): 1/8" = B = Bailer; //P Y ATION VOLUME	BP = Bladder BP = Bladder SAMPLER(S TUBING MATERIAL (N SAMPL PRESERVA USED	i" = 0.0014; Pump; I SAMF SIGNATUR ODE: TUBING E PRESERVA IVE ADDE	1/4" = 0.002 SP = Electric : LING DA E(S): Y N (reg TION (includin OTAL VOL D IN FIELD (m	6: 5/16" = 0.1 Submersible Pun TA FIELD-I Filtration placed) ig wet ice) Final pH/ Temp State State	2 Jo. C.	206; 1/, istaltic Pur ////////////////////////////////////	2" = 0.010; mp; O = C SAMPLIN ENDED A FILTER S N SAMPLING CODE	5/8" = 0.016 Dther (Specify) IG IT: IZE:μm SAMPLE PUM FLOW RATE
AMPLED E JMP OR TE EPTH IN W ELD DECC SAMPL CODE (MARKS:	UBING VELL (feet): DNTAMINATIO E CONTAINERS	PACITY (Gal. CODES: 1 FFILIATION: DN: PUN R SPECIFIC/ MATERIAL CODE	/FL): 1/8" = B = Bailer; //P Y ATION VOLUME	O.0006; 3/11 BP = Bladdee SAMPLER(S TUBING MATERIAL (N SAMPL PRESERVA USED O		1/4" = 0.002 SP = Electric : LING DA E(S): Y N (rey TION (includin OTAL VOL D IN FIELD (m	6: 5/16" = 0.1 Submersible Pun TA FIELD-I Filtration placed) ig wet ice) Final pH/ Temp State State	004: 3/8" = 0.(pp: PP = Per SAMPLING INITIATED AT: ILTERED: Y Equipment Type DUPLICATE: INTENDEE ANALYSI ANI METHOD	206; 1/, istaltic Pur ////////////////////////////////////	2" = 0.010: mp: O = C SAMPLIN ENDED A FILTER S N SAMPLING CODE CODE	5/8" = 0.016 Dther (Specify) IG IT: IZE:μm SAMPLE PUM FLOW RATE

RITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

SITE NAME:	hite	Bluck				SITE LOCATION:						
WELL NO:	-			SAMPLE	E ID:					DATE: 5	- 23-2	24
	/				PUF	RGING DA	TA					
WELL DIAMETER	(inches):	TUBING	ER (inches):	TOTAL DEPTH	(feet):		Т	TATIC D O WATE	R (feet): 14.	26 o	JRGE PUMP T R BAILER:	YPE
(only fill out	if applicable)		= 1		feet -	TATIC DEPTH T	fe	eet) X		gallons/	001 =	gallons
	IT VOLUME PU if applicable)	RGE: 1 EQU	IPMENT VOL.		LUME + (T allons + (UBING CAPACI	TY 2		IBING LENGTH		gallons	= gallons
PUMP OR IN WELL (f		1	WELL SCR	EEN INTERV		PURGIN	G		PURGING ENDED AT:		TOTAL VO	LUME
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standar units)	rd TEMP	COI (circle µmho <u>or</u> µ	ND. units) s/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	/ COLOR / / ODOR (describe)
1340					7.54	21.07	50	3	0.02	-127	$(1)_{i}$	clear
1345					7.53	21.21	50		0.02	-122	6.00	5
1350		1		2-2-1	7.56	1	Su.	2	0.00	-121	4.31	1
1355					7.57	21.10	50	0	0.00	-120		
400			1-2		7.57	1 20.90	50	1	0.00	- 122	12.95	
						-		_				
TUBING IN	ACITY (Gallons ISIDE DIA. CAP	ACITY (Gal./F	FL.): 1/8" = 0.0	1" = 0.04; 0006: 3/16' 3P = Bladder I	" = 0.0014	0.06; 2" = 0.1 ; 1/4" = 0.002 ESP = Electric	6; 5/	= 0.37; /16" = 0.(sible Pur	004: 3/8" = (5" = 1.02; 0.006: 1 Peristaltic Pu	6" = 1.47; /2" = 0.010; imp; O = C	12" = 5.88 5/8" = 0.016 Other (Specify)
FUNCING		0020. 0	ounor, .	Diama di A		PLING DA						
SAMPLED	BY (PRINT) / A	FFILIATION		SAMPLER(S) SIGNATI	URE(S):			SAMPLING INITIATED A	T:1400	SAMPLIN ENDED /	
PUMP OR DEPTH IN	TUBING WELL (feet):			TUBING MATERIAL C	ODE:				FILTERED: Y		FILTER S	BIZE:μm
FIELD DEC	CONTAMINATIC	N: PUM	PY N		TUBIN	GYN (re	eplaced)	_	DUPLICATE	: Y	N	
SAM	PLE CONTAINE	R SPECIFICA	TION	SAMPLE	E PRESER	RVATION (includ	-				SAMPLING	SAMPLE PUMP FLOW RATE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVAT		TOTAL VOL DED IN FIELD (inal pH/ Temp	METH		CODE	(mL per minute)
		-										
							_					
1 1	1			_				_				
REMARKS	8											
MATERIAL		AG = Amber S = Silicone;	T = Teflon;	Clear Glass; 0 = Other (Specify)	: = High Density í			LDPE = Low D			Polypropylene;
	EQUIPMENT	R	APP = After (TI RFPP = Revers	e Flow Perista	altic Pump	; SM = Straw			ler Pump; E Gravity Drain);		ic Submersible ter (Specify)	Pump;

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

SITE NAME:	shite	BILLE				SITE _OCATION:					
WELL NO:	11517			SAMPLE	E ID:				DATE: 5	- 23-20	-1
	0.0				PUR	GING DA	TA				
WELL DIAMETER	(inches):	TUBING	TER (inches):	TOTAL DEPTH	(feet):		STATIC TO WAT	TER (feet): 40. (SR OF	JRGE PUMP T' R BAILER:	YPE
WELL VOL (only fill out	UME PURGE: if applicable)	1 WELL VO	LUME = (TOT = (AL WELL DEP	PTH – ST	ATIC DEPTH T	O WATER)	K WELL CAPAC	gallons/fc	= tor	gallons
	IT VOLUME PU	RGE: 1 EQU	JIPMENT VOL		LUME + (TU		TY X 1	TUBING LENGTH) + FLOW C	ELL VOLUME	
			1		allons + (ns/foot X	feet) +	gallons	
PUMP OR T	TUBING DEPTHeet):	1	DEPTH:	REEN INTERV	AL feet	PURGIN	g d at: 00	PURGING ENDED AT:		TOTAL VOI PURGED (§	
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)
1120					6.95	20.49	702	0.75	101	036	Open
1125					6.95	20.58	702	0.69	104	(). 25	
1130					6.95	20,64	704	0.69	104	6.4<)
TUBING IN PURGING I	ACITY (Gallons SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A	ODES: B	Ft.): 1/8" = 0.	1" = 0.04; 0006; 3/16 BP = Bladder SAMPLER(S	Pump: SAM	1/4" = 0.002 ESP = Electric PLING DA	6; 5/16" = 0 Submersible P	0.004; 3/8" = 0	eristaltic Pur	6" = 1.47; 2" = 0.010; mp; 0 = 0 SAMPLIN ENDED A	
PUMP OR				TUBING	ODE			D-FILTERED: Y	N	FILTER S	1ZE:μm
	WELL (feet):	N: PUM			TUBING	Y N (re	eplaced)	DUPLICATE:		N	
			1			ATION (includi		INTEND	1	SAMPLING	SAMPLE PUMP
SAMPLE ID CODE	LE CONTAINE # CONTAINERS	MATERIAL CODE	VOLUME	PRESERVAT		TOTAL VOL	Final pH		ND/OR I	EQUIPMENT CODE	FLOW RATE (mL per minute
REMARKS:											
MATERIAL			Glass; CG = T = Teflon; APP = After (T RFPP = Revers		Specify) altic Pump;	= High Density F B = Bailer; SM = Straw	BP = Blac	LDPE = Low De dder Pump; Es ig Gravity Drain);	SP = Electric	hylene; PP c Submersible I er (Specify)	= Polypropylene; Pump;

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

SITE NAME:	White	11.15				TE DCATION:	Red	100	ela,A	n		7 2 4
WELL NO:	NL-10	15		SAMPLE	ID: ML	1-101	5	_		DATE	1-20-3	24
					PURC	SING DA	TA					
VELL DIAMETER	(inches):		TER (inches);	H TOTAL W DEPTH (feet):		TON		(feet): 39.		RGE PUMP T BAILER:	PE
only fill out	if applicable)		LUME = (TOT) = (feet -		feet	t) X	ING LENGTH)	gallons/fc		JA gallons
ONLY fill out	if applicable)	JRGE: 1 EQU	IPMENT VOL.		UME + (TUE		ons/foot X	TUB	feet)		gallons	= M/A gallons
PUMP OR N WELL (f	TUBING DEPT eet): 47		WELL SCR DEPTH:	EEN INTERVA		PURGIN	IG ED AT: 15		PURGING ENDED AT:	1625	TOTAL VOI PURGED (g	
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP_ (^o C)	COND (circle un µmhos/c <u>or</u> µS 6). hits) cm ≸m	DISSOLVED OXYGEN (circle units) @/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
00	0.4	0.4	1	39.35	5.75	15.09	235		0.77	60	1.2	Cleat
605		1		39.75	5.81	15.06	234		0.66	70	0.0	
610		1		39.42	5.78	14.74	233		0.60	71	0.0	
615				39.45	5,77	14.69	234		0.50	74	0.0	
(2 0		1		39.46	577	14.60	274	1	0.52	78	0.0	1
625		0.8		34.48	5.76	1951	234		0.47	76	0.0	1
UBING IN	PACITY (Gallon ISIDE DIA. CAI EQUIPMENT C	PACITY (Gal./	Ft.): 1/8" = 0.0	1" = 0.04; 0006; 3/16" 3P = Bladder P	ump; E	6; 2" = 0.1 1/4" = 0.002 SP = Electric	6: 5/16 Submersib	5" = 0.00	04: 3/8" = 0	5" = 1,02; .006; 1/2 eristaltic Pur	6° = 1.47; 2° = 0.010; mp; O = O	12" = 5.88 5/8" = 0.016 ther (Specify)
SAMPLED	BY (PRINT) / A			SAMPLER(S)		E(S):			SAMPLING	-1615	SAMPLIN ENDED A	
PUMP OR	TUBING WELL (feet):	47		TUBING MATERIAL CO					ILTERED: Y Equipment Ty	pe:	FILTER S	ilZE: μm
IELD DEC	CONTAMINATI	ON: PUM	AP 🕑 N		TUBING	(y N (r	eplaced)		DUPLICATE:	Y	(N)	
SAMPLE	PLE CONTAINE #			SAMPLE		ATION (includ	Fina	al pH/	INTENDI ANALYSIS A METHO	ND/OR I	SAMPLING EQUIPMENT CODE	SAMPLE PUM FLOW RATE (mL per minute
ID CODE	CONTAINERS	CODE	VOLUMIL	USED	ADDE	D IN FIELD (mL) Te	emp				
						_	_					
							-					
REMARKS		1 2.	noth :	39.4	42 (*							
REMARKS	Fina	AG = Amber	Glass; CG =	<u>За.</u> Clear Glass; о = Other (S	HDPE =	High Density	Polyethyler	ne; L	_ DPE = Low De	ensity Polyet	thylene; PF	9 = Polypropylene
IATERIAL	Fina	AG = Amber S = Silicone; CODES:		Clear Glass; O = Other (S prough) Perista	HDPE = Specify) altic Pump;	High Density B = Bailer	; BP =	Bladde		SP = Electric	thylene; PF c Submersible er (Specify)	

SITE NAME:	White	BINK	1210			ITE OCATION:	Red fie	IL, AR			
WELL NO:	101D			SAMPLE	ID: M	W- 1011	1		DATE	1-23-22	1
					PUR	GING DA	TA				
WELL DIAMETER	(inches): 2	TUBING	ER (inches):	TOTAL V DEPTH (feet):		TO WA	TER (feet):	. 40 OF	RGE PUMP TY RBAILER:	lip Lip
(only fill out	if applicable)		= (feet -		feet)	X WELL CAPAC	gallons/fc	ot = 1/	gallons
	T VOLUME P	URGE: 1 EQU	IPMENT VOL.		UME + (TU allons + (TY X	TUBING LENGTH		ELL VOLUME gallons	= NIA gallons
PUMP OR N WELL (f	TUBING DEPT	н	WELL SCRE	EEN INTERVA	Concernance -	PURGIN		DURGING ENDED AT	1315		
TIME	VOLUME PURGED (gallons)	CUMUL, VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (^o C)	COND (circle units) μmhos/cm or cs/cm	DISSOLVED OXYGEN (circle units) n@L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR /
1230	0.9	0.9	1.2	97.24	6.82	17.90	577	8.76	-37	19.7	Clear
1235	1			0134	10017		580	7.88	-54	14.7	(
1240		11.		97.32	6.46	18.03	580	7.28	-76	14.3	11
1245				97.34	6.93	19.00	5.21	7.61	-78	11.9	1
1260		1		47.34	6.85	17.84	5 82	6.37	- 92	11.3	
17.55				97.39	6.9	17,000	582	6.06	-97	8.7	
1700				97.39	6.90	17.87	582	5.70	-101	8.5	11-
1305			1	97.39	6.84	17.97	583	5.36	-105	6.8	1
310			1	97.39	6.29	17.96	583	5.03	-108	7.2	-
1315		2.4	1	97.39	6.88	18.03	59.4	H.92	- 11}	6.6	-
TUBING IN PURGING		CODES: B	-t.): 1/8" = 0.0 = Bailer; B	P = Bladder F	SAM	1/4" = 0.002 ESP = Electric PLING DA RE(S):	6; 5/16" = Submersible F	0.004; 3/8" = Pump; PP = F SAMPLING INITIATED /	Peristaltic Pur	SAMPLIN ENDED A	T: 1335
PUMP OR	TUBING WELL (feet):	1)a		TUBING MATERIAL C	ODE			D-FILTERED: Nation Equipment T		FILTER S	IZE:μm
	CONTAMINATI		F		TUBING	() N (r	eplaced)	DUPLICATE		(N)	
		ER SPECIFICA	V	SAMPLE	PRESERV	ATION (includ	ing wet ice)	INTEN		SAMPLING	SAMPLE PUM
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE		PRESERVAT USED		TOTAL VOL ED IN FIELD (mL) Final pl			EQUIPMENT CODE	FLOW RATE (mL per minute
							-				
REMARKS		nul de	attai	d7.3	10						
MATERIAI		AG = Amber S = Silicone;	Glass: CG = T = Teflon;	Clear Glass; O = Other (S		High Density		LDPE = Low D			e = Polypropylene
SAMPLING	G EQUIPMENT		APP = After (Th RFPP = Reverse			B = Bailer		adder Pump; I ing Gravity Drain);		c Submersible er (Specify)	Pump;

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

	White	- Blu	FF			SITE OCATION:	Redfi	eld A	KR		
WELL NO:	nu-	1025		SAMPLE	-	v-102	5		DATE	1-20-2	14
					PUR	GING DA	TA				
WELL DIAMETER	(inches):	DIAME	TER (inches):	14 TOTAL V DEPTH ((feet):		STATIC D TO WATE	R (feet): 34	76 0	URGE PUMP TYP R BAILER:	[»] Вр
	UME PURGE: if applicable)	1 WELL VO	LUME = (TOT = (AL WELL DEP	TH – ST feet –	ATIC DEPTH T	OWATER) X feet) X		ITY gallons/f	inot = VII	gallons
	IT VOLUME P if applicable)	URGE: 1 EQU	JIPMENT VOL		UME + (TU	BING CAPACI	τγ χ τυ	BING LENGTH) + FLOW C	ELL VOLUME	
			WELL SCE	= ga EEN INTERV	ailons + (PURGIN	ns/foot X	feet)+	gallons =	ME gallons
IN WELL (fe	TUBING DEPT eet): 4	8.00	DEPTH:	feet to	feet		D AT: 0940	ENDED AT:	1040	PURGED (ga	llons): 1.65
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (^o C)	COND. (circle units) µmhos/cm or	DISSOLVED OXYGEN (circle units) 00/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
010	0.80	0.20		35.96	5,90	23.08	208	1.04	83	83.0	Slightly
1015	S	0	1 6	36.15	5.89	23,46	204	0.89	72	65.9	5 1
1020	7			36.15	5,91	23.64	203	0.96	18	53.0	
1025	1			36,16	5,92		302	0. 21	82	38.4	1
1030	2			36.19	5.90	23.46	200	0.80	84	32.7	12
035	1			26.30	5.92	23.07	198	0,78	84	32.7	1
1040		1.65		3633	5.87	23.76	198	0.79	85	32.3	
											11
					1						
	1	1									1
	A OLTAY IO-II										
WELL CAP	ACITY (Gallon	s Per Foot):	0.75" = 0.02;	1" = 0.04;	1.25 " = 0.	06; 2" = 0.1			5" = 1.02;		2" = 5.88
TUBING INS	SIDE DIA. CA	PACITY (Gal./	Ft.): 1/8" = 0.0	0006; 3/16"	= 0.0014;	1/4" = 0.002	6; 5/16" = 0.0	004; 3/8" = 0	.006; 1	2" = 0.010; 5	2" = 5.88 /6" = 0.016 er (Specify)
TUBING INS	SIDE DIA. CAN	PACITY (Gal./	Ft.): 1/8" = 0.0	1" = 0.04; 0006; 3/16" 3P = Bladder P	= 0.0014; ² ump;	1/4" = 0.002	6; 5/16" = 0.0 Submersible Pur	004; 3/8" = 0		2" = 0.010; 5	8'' = 0.016
TUBING INS PURGING E	SIDE DIA. CA	PACITY (Gal./ CODES: B	Ft.): 1/8" = 0.0	0006; 3/16 "	= 0.0014; ² ump; SAMI	1/4" = 0.002 ESP = Electric PLING DA	6; 5/16" = 0.0 Submersible Pur	004; 3/8" = 0	0.006; 1/ eristaltic Pu	2" = 0.010; 5, mp; 0 = Oth SAMPLING	'6'' = 0.016 er (Specify)
	SIDE DIA. CAI	PACITY (Gal./ CODES: B	Ft.): 1/8" = 0.0	0006: 3/16" 3P = Bladder P SAMPLER(S)	= 0.0014; ² ump; SAMI	1/4" = 0.002 ESP = Electric PLING DA RE(S):	6; 5/16" = 0.0 Submersible Pur	004; 3/8" = 0 np; PP = Pe SAMPLING INITIATED A	1.006; 1/ eristaltic Pu T:	2" = 0.010; 5 mp; 0 = 0th SAMPLING ENDED AT	18" = 0.016 er (Specify) : 1100
		PACITY (Gal./ CODES: B	Ft.): 1/8" = 0.1	0006; 3/16" 3P = Bladder P SAMPLER(S)	= 0.0014; Pump; SAMI SIGNATUR 2.202 (1/4" = 0.002 ESP = Electric PLING DA RE(S):	6; 5/16" = 0.0 Submersible Pur TA FIELD-	004; 3/8" = 0 np; PP = Pe SAMPLING INITIATED A FILTERED: Y	1.006; 1/ eristaltic Pu T: 04	2" = 0.010; 5 mp; 0 = 0th SAMPLING ENDED AT	'6'' = 0.016 er (Specify)
SAMPLED E		FFILIATION:	Ft.): 1/8" = 0.1	30006: 3/16" 3P = Bladder P SAMPLER(S) TUBING	= 0.0014; Pump; SAMI SIGNATUR 2.202 (1/4" = 0.002 ESP = Electric PLING DA RE(S):	6; 5/16" = 0.0 Submersible Pur TA FIELD-	004; 3/8" = 0 np; PP = Pe SAMPLING INITIATED A	0.006; 1/ eristaltic Pu T: 04	2" = 0.010; 5 mp; 0 = 0th SAMPLING ENDED AT	18" = 0.016 er (Specify) : 1100
TUBING INS PURGING E SAMPLED E SUPUMP OR T DEPTH IN V FIELD DECO	SIDE DIA. CAN EQUIPMENT C BY (PRINT) / A C / K R TUBING WELL (feet):	$\frac{\text{PACITY (Gal.}}{\text{CODES: B}}$	Ft.): 1/8" = 0.1	3006: 3/16" 3P = Bladder P SAMPLER(S) TUBING MATERIAL CO	= 0.0014; Pump; SIGNATUF SIGNATUF 2	1/4" = 0.002 ESP = Electric PLING DA RE(S):	6; 5/16" = 0.0 Submersible Pur TA FIELD- Filtratic	004; 3/8 ⁱⁱ = 0 np; PP = Pe SAMPLING INITIATED A FILTERED: Y n Equipment Ty	0.006; 1/ eristaltic Pu T: 0 4 pe: 0 4 y ED	2" = 0.010; 5, mp; 0 = 0th SAMPLING FILTER SIZ	18" = 0.016 er (Specify) : 1100
TUBING INS PURGING E SAMPLED E SU PUMP OR T DEPTH IN V FIELD DECO SAMPLE	SIDE DIA. CAN EQUIPMENT C BY (PRINT) / A C / K VELL (feet): ONTAMINATION LE CONTAINE #	Filiation: S Image: S <td< td=""><td>Ft.): 1/8" = 0.(</td><td>3006: 3/16" 3P = Bladder P SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVAT</td><td>= 0.0014; Pump; SIGNATUF SIGNATUF SIGNATUF CODE: TUBING PRESERV VE</td><td>1/4" = 0.002 ESP = Electric PLING DA RE(S): N (re ATION (includi TOTAL VOL</td><td>6; 5/16" = 0.(Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/</td><td>3/8" = 0 np; PP = Pe SAMPLING INITIATED A' FILTERED: Y DUPLICATE: INTENDI ANALYSIS A</td><td>D.006; 1/ eristaltic Pu T: 0 4 pe: 0 y ED ND/OR</td><td>2" = 0.010; 5, mp; 0 = Oth SAMPLING EQUIPMENT</td><td>18" = 0.016 er (Specify) : // () () E:μm E:μm SAMPLE PUMP FLOW RATE</td></td<>	Ft.): 1/8" = 0.(3006: 3/16" 3P = Bladder P SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVAT	= 0.0014; Pump; SIGNATUF SIGNATUF SIGNATUF CODE: TUBING PRESERV VE	1/4" = 0.002 ESP = Electric PLING DA RE(S): N (re ATION (includi TOTAL VOL	6; 5/16" = 0.(Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/	3/8" = 0 np; PP = Pe SAMPLING INITIATED A' FILTERED: Y DUPLICATE: INTENDI ANALYSIS A	D.006; 1/ eristaltic Pu T: 0 4 pe: 0 y ED ND/OR	2" = 0.010; 5, mp; 0 = Oth SAMPLING EQUIPMENT	18" = 0.016 er (Specify) : // () () E:μm E:μm SAMPLE PUMP FLOW RATE
TUBING INS PURGING E SAMPLED E SU PUMP OR T DEPTH IN V FIELD DECO SAMPLE	SIDE DIA. CAN EQUIPMENT O BY (PRINT) / A C / K TUBING WELL (feet): 1 ONTAMINATIO	$\frac{\text{PACITY (Gal.}}{\text{CODES: B}}$ $\frac{1}{5}$	Ft.): 1/8" = 0.1	3006: 3/16" 3P = Bladder P SAMPLER(S) TUBING MATERIAL CO SAMPLE	= 0.0014; Pump; SIGNATUF SIGNATUF SIGNATUF CODE: TUBING PRESERV VE	1/4" = 0.002 ESP = Electric PLING DA RE(S): N (re	6; 5/16" = 0.(Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/	3/8" = 0 np; PP = Pe SAMPLING INITIATED A' FILTERED: Y DUPLICATE: INTENDI	D.006; 1/ eristaltic Pu T: 0 4 pe: 0 y ED ND/OR	2" = 0.010; 5, mp; 0 = Oth SAMPLING EQUIPMENT	18" = 0.016 er (Specify) : 1100 E:μm SAMPLE PUMP
TUBING INS PURGING E SAMPLED E SU PUMP OR T DEPTH IN V FIELD DECO SAMPLE	SIDE DIA. CAN EQUIPMENT C BY (PRINT) / A C / K VELL (feet): ONTAMINATION LE CONTAINE #	Filiation: S Image: S <td< td=""><td>Ft.): 1/8" = 0.(</td><td>3006: 3/16" 3P = Bladder P SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVAT</td><td>= 0.0014; Pump; SIGNATUF SIGNATUF SIGNATUF CODE: TUBING PRESERV VE</td><td>1/4" = 0.002 ESP = Electric PLING DA RE(S): N (re ATION (includi TOTAL VOL</td><td>6; 5/16" = 0.(Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/</td><td>3/8" = 0 np; PP = Pe SAMPLING INITIATED A' FILTERED: Y DUPLICATE: INTENDI ANALYSIS A</td><td>D.006; 1/ eristaltic Pu T: 0 4 pe: 0 y ED ND/OR</td><td>2" = 0.010; 5, mp; 0 = Oth SAMPLING EQUIPMENT</td><td>18" = 0.016 er (Specify) : // () () E:μm E:μm SAMPLE PUMP FLOW RATE</td></td<>	Ft.): 1/8" = 0.(3006: 3/16" 3P = Bladder P SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVAT	= 0.0014; Pump; SIGNATUF SIGNATUF SIGNATUF CODE: TUBING PRESERV VE	1/4" = 0.002 ESP = Electric PLING DA RE(S): N (re ATION (includi TOTAL VOL	6; 5/16" = 0.(Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/	3/8" = 0 np; PP = Pe SAMPLING INITIATED A' FILTERED: Y DUPLICATE: INTENDI ANALYSIS A	D.006; 1/ eristaltic Pu T: 0 4 pe: 0 y ED ND/OR	2" = 0.010; 5, mp; 0 = Oth SAMPLING EQUIPMENT	18" = 0.016 er (Specify) : // () () E:μm E:μm SAMPLE PUMP FLOW RATE
TUBING INS PURGING E SAMPLED E SU PUMP OR T DEPTH IN V FIELD DECO SAMPLE	SIDE DIA. CAN EQUIPMENT C BY (PRINT) / A C / K VELL (feet): ONTAMINATION LE CONTAINE #	Filiation: S Image: S <td< td=""><td>Ft.): 1/8" = 0.(</td><td>3006: 3/16" 3P = Bladder P SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVAT</td><td>= 0.0014; Pump; SIGNATUF SIGNATUF SIGNATUF CODE: TUBING PRESERV VE</td><td>1/4" = 0.002 ESP = Electric PLING DA RE(S): N (re ATION (includi TOTAL VOL</td><td>6; 5/16" = 0.(Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/</td><td>3/8" = 0 np; PP = Pe SAMPLING INITIATED A' FILTERED: Y DUPLICATE: INTENDI ANALYSIS A</td><td>D.006; 1/ eristaltic Pu T: 0 4 pe: 0 y ED ND/OR</td><td>2" = 0.010; 5, mp; 0 = Oth SAMPLING EQUIPMENT</td><td>18" = 0.016 er (Specify) : // () () E:μm E:μm SAMPLE PUMP FLOW RATE</td></td<>	Ft.): 1/8" = 0.(3006: 3/16" 3P = Bladder P SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVAT	= 0.0014; Pump; SIGNATUF SIGNATUF SIGNATUF CODE: TUBING PRESERV VE	1/4" = 0.002 ESP = Electric PLING DA RE(S): N (re ATION (includi TOTAL VOL	6; 5/16" = 0.(Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/	3/8" = 0 np; PP = Pe SAMPLING INITIATED A' FILTERED: Y DUPLICATE: INTENDI ANALYSIS A	D.006; 1/ eristaltic Pu T: 0 4 pe: 0 y ED ND/OR	2" = 0.010; 5, mp; 0 = Oth SAMPLING EQUIPMENT	18" = 0.016 er (Specify) : // () () E:μm E:μm SAMPLE PUMP FLOW RATE
TUBING INS PURGING E SAMPLED E SU PUMP OR T DEPTH IN V FIELD DECO SAMPLE	SIDE DIA. CAN EQUIPMENT C BY (PRINT) / A C / K VELL (feet): ONTAMINATION LE CONTAINE #	Filiation: S Image: S <td< td=""><td>Ft.): 1/8" = 0.(</td><td>3006: 3/16" 3P = Bladder P SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVAT</td><td>= 0.0014; Pump; SIGNATUF SIGNATUF SIGNATUF CODE: TUBING PRESERV VE</td><td>1/4" = 0.002 ESP = Electric PLING DA RE(S): N (re ATION (includi TOTAL VOL</td><td>6; 5/16" = 0.(Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/</td><td>3/8" = 0 np; PP = Pe SAMPLING INITIATED A' FILTERED: Y DUPLICATE: INTENDI ANALYSIS A</td><td>D.006; 1/ eristaltic Pu T: 0 4 pe: 0 y ED ND/OR</td><td>2" = 0.010; 5, mp; 0 = Oth SAMPLING EQUIPMENT</td><td>18" = 0.016 er (Specify) : // () () E:μm E:μm SAMPLE PUMP FLOW RATE</td></td<>	Ft.): 1/8" = 0.(3006: 3/16" 3P = Bladder P SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVAT	= 0.0014; Pump; SIGNATUF SIGNATUF SIGNATUF CODE: TUBING PRESERV VE	1/4" = 0.002 ESP = Electric PLING DA RE(S): N (re ATION (includi TOTAL VOL	6; 5/16" = 0.(Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/	3/8" = 0 np; PP = Pe SAMPLING INITIATED A' FILTERED: Y DUPLICATE: INTENDI ANALYSIS A	D.006; 1/ eristaltic Pu T: 0 4 pe: 0 y ED ND/OR	2" = 0.010; 5, mp; 0 = Oth SAMPLING EQUIPMENT	18" = 0.016 er (Specify) : // () () E:μm E:μm SAMPLE PUMP FLOW RATE
SAMPLED E SAMPLED E SUPUMP OR T DEPTH IN V FIELD DECO SAMPLE	SIDE DIA. CAN EQUIPMENT C BY (PRINT) / A C / K VELL (feet): ONTAMINATION LE CONTAINE #	Filiation: S Image: S <td< td=""><td>Ft.): 1/8" = 0.(</td><td>3006: 3/16" 3P = Bladder P SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVAT</td><td>= 0.0014; Pump; SIGNATUF SIGNATUF SIGNATUF CODE: TUBING PRESERV VE</td><td>1/4" = 0.002 ESP = Electric PLING DA RE(S): N (re ATION (includi TOTAL VOL</td><td>6; 5/16" = 0.(Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/</td><td>3/8" = 0 np; PP = Pe SAMPLING INITIATED A' FILTERED: Y DUPLICATE: UPLICATE: INTEND ANALYSIS A</td><td>D.006; 1/ eristaltic Pu T: 0 4 pe: 0 y ED ND/OR</td><td>2" = 0.010; 5, mp; 0 = Oth SAMPLING EQUIPMENT</td><td>18" = 0.016 er (Specify) : // () () E:μm E:μm SAMPLE PUMP FLOW RATE</td></td<>	Ft.): 1/8" = 0.(3006: 3/16" 3P = Bladder P SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVAT	= 0.0014; Pump; SIGNATUF SIGNATUF SIGNATUF CODE: TUBING PRESERV VE	1/4" = 0.002 ESP = Electric PLING DA RE(S): N (re ATION (includi TOTAL VOL	6; 5/16" = 0.(Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/	3/8" = 0 np; PP = Pe SAMPLING INITIATED A' FILTERED: Y DUPLICATE: UPLICATE: INTEND ANALYSIS A	D.006; 1/ eristaltic Pu T: 0 4 pe: 0 y ED ND/OR	2" = 0.010; 5, mp; 0 = Oth SAMPLING EQUIPMENT	18" = 0.016 er (Specify) : // () () E:μm E:μm SAMPLE PUMP FLOW RATE
TUBING INS PURGING E SAMPLED E SU PUMP OR T DEPTH IN V FIELD DECO SAMPLE	SIDE DIA. CAN EQUIPMENT C BY (PRINT) / A C / K VELL (feet): ONTAMINATION LE CONTAINE #	Filiation: S Image: S <td< td=""><td>Ft.): 1/8" = 0.(</td><td>3006: 3/16" 3P = Bladder P SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVAT</td><td>= 0.0014; Pump; SIGNATUF SIGNATUF SIGNATUF CODE: TUBING PRESERV VE</td><td>1/4" = 0.002 ESP = Electric PLING DA RE(S): N (re ATION (includi TOTAL VOL</td><td>6; 5/16" = 0.(Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/</td><td>3/8" = 0 np; PP = Pe SAMPLING INITIATED A' FILTERED: Y DUPLICATE: UPLICATE: INTEND ANALYSIS A</td><td>D.006; 1/ eristaltic Pu T: 0 4 pe: 0 y ED ND/OR</td><td>2" = 0.010; 5, mp; 0 = Oth SAMPLING EQUIPMENT</td><td>18" = 0.016 er (Specify) : // () () E:μm E:μm SAMPLE PUMP FLOW RATE</td></td<>	Ft.): 1/8" = 0.(3006: 3/16" 3P = Bladder P SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVAT	= 0.0014; Pump; SIGNATUF SIGNATUF SIGNATUF CODE: TUBING PRESERV VE	1/4" = 0.002 ESP = Electric PLING DA RE(S): N (re ATION (includi TOTAL VOL	6; 5/16" = 0.(Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/	3/8" = 0 np; PP = Pe SAMPLING INITIATED A' FILTERED: Y DUPLICATE: UPLICATE: INTEND ANALYSIS A	D.006; 1/ eristaltic Pu T: 0 4 pe: 0 y ED ND/OR	2" = 0.010; 5, mp; 0 = Oth SAMPLING EQUIPMENT	18" = 0.016 er (Specify) : // () () E:μm E:μm SAMPLE PUMP FLOW RATE
TUBING INS PURGING E SAMPLED E DUMP OR T DEPTH IN V FIELD DECC SAMPLE ID CODE	SIDE DIA. CAN EQUIPMENT O BY (PRINT) / A C / K TUBING NELL (feet): I ONTAMINATIO LE CONTAINERS	Filiation: S Image: S <td< td=""><td>Ft.): 1/8" = 0.(</td><td>3006: 3/16" 3P = Bladder P SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVAT</td><td>= 0.0014; Pump; SIGNATUF SIGNATUF SIGNATUF C DDE: TUBING PRESERV VE</td><td>1/4" = 0.002 ESP = Electric PLING DA RE(S): N (re ATION (includi TOTAL VOL</td><td>6; 5/16" = 0.(Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/</td><td>3/8" = 0 np; PP = Pe SAMPLING INITIATED A' FILTERED: Y DUPLICATE: UPLICATE: INTEND ANALYSIS A</td><td>D.006; 1/ eristaltic Pu T: 0 4 pe: 0 y ED ND/OR</td><td>2" = 0.010; 5, mp; 0 = Oth SAMPLING EQUIPMENT</td><td>18" = 0.016 er (Specify) : // () () E:μm E:μm SAMPLE PUMP FLOW RATE</td></td<>	Ft.): 1/8" = 0.(3006: 3/16" 3P = Bladder P SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVAT	= 0.0014; Pump; SIGNATUF SIGNATUF SIGNATUF C DDE: TUBING PRESERV VE	1/4" = 0.002 ESP = Electric PLING DA RE(S): N (re ATION (includi TOTAL VOL	6; 5/16" = 0.(Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/	3/8" = 0 np; PP = Pe SAMPLING INITIATED A' FILTERED: Y DUPLICATE: UPLICATE: INTEND ANALYSIS A	D.006; 1/ eristaltic Pu T: 0 4 pe: 0 y ED ND/OR	2" = 0.010; 5, mp; 0 = Oth SAMPLING EQUIPMENT	18" = 0.016 er (Specify) : // () () E:μm E:μm SAMPLE PUMP FLOW RATE
TUBING INS PURGING E SAMPLED E DUMP OR T DEPTH IN V FIELD DECC SAMPLE ID CODE	SIDE DIA. CAN EQUIPMENT O BY (PRINT) / A C / K TUBING WELL (feet): ONTAMINATIO LE CONTAINERS	PACITY (Gal./ CODES: B S (G, U O DN: PUM ER SPECIFICA MATERIAL CODE	Ft.): 1/8" = 0.1	0006: 3/16" 3P = Bladder P SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVATI USED	= 0.0014; Pump; SAMI SIGNATUF SIGNATUF DDE: TUBING PRESERV VE ADD	1/4" = 0.002 ESP = Electric PLING DA RE(S): (ATION (includi TOTAL VOL ED IN FIELD (r	6; 5/16" = 0.0 Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/ Temp	004; 3/8" = 0 np; PP = Pe SAMPLING INITIATED A FILTERED: Y IN Equipment Ty DUPLICATE: INTENDI ANALYSIS A METHO	0.006; 1/ eristaltic Pu T: 0 4 pe: 9 Y ED ND/OR DD	2" = 0.010; 5, mp; 0 = Oth SAMPLING EQUIPMENT CODE	8" = 0.016 er (Specify) : // Δ Δ E:μm SAMPLE PUMP FLOW RATE (mL per minute)
TUBING INS PURGING E SAMPLED E SU PUMP OR T DEPTH IN V FIELD DECO SAMPLE	SIDE DIA. CAN EQUIPMENT O BY (PRINT) / A C / K TUBING WELL (feet): ONTAMINATIO LE CONTAINERS	ACITY (Gal./ CODES: B FFILIATION: S (G, U O DN: PUN R SPECIFICA MATERIAL CODE	Ft.): 1/8" = 0.(JOOG: 3/16" SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVATI USED	= 0.0014; Pump; SAMI SIGNATUF 2.22 C DDE: TUBING PRESERV VE ADD	1/4" = 0.002 ESP = Electric PLING DA RE(S): N (reconstruction of the second	6; 5/16" = 0.(Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/	3/8" = 0 np; PP = Pe SAMPLING INITIATED A FILTERED: Y IN Equipment Ty DUPLICATE: INTENDI ANALYSIS A METHO	1.006; 1/ eristaltic Pu T: 04 pe: 7 FED ND/OR D	2" = 0.010; 5 mp; O = Oth O ENDED AT FILTER SIZ SAMPLING EQUIPMENT CODE	8" = 0.016 er (Specify) : // Δ Δ E:μm SAMPLE PUMP FLOW RATE (mL per minute)
TUBING INS PURGING E SAMPLE E SUMP OR T DEPTH IN V FIELD DECO SAMPLE ID CODE	SIDE DIA. CAN EQUIPMENT O BY (PRINT) / A C / K TUBING WELL (feet): ONTAMINATIO LE CONTAINERS	ACITY (Gal./ CODES: B FFILIATION: S (G, U O ON: PUM R SPECIFICA MATERIAL CODE MATERIAL CODE	Ft.): 1/8" = 0.1 I = Bailer; II IP N IP N NOLUME IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	DODG: 3/16" 3P = Bladder F SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVATI USED A 2 2 Clear Glass;	= 0.0014; Pump; SAMI SIGNATUP 2.20 C DDE: TUBING PRESERV VE ADD VE ADD PRESERV VE ADD HDPE =	1/4" = 0.002 ESP = Electric PLING DA RE(S): N (reconstruction of the second	5; 5/16" = 0.0 Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/ Temp	2004; 3/8" = 0 np; PP = Pe SAMPLING INITIATED A FILTERED: Y DUPLICATE: INTENDI ANALYSIS A METHO ANALYSIS A METHO	D.006; 1/ eristaltic Pu T: 04 pe: 7 FD ND/OR DD	2" = 0.010; 5, mp; 0 = 0th () SAMPLING ENDED AT FILTER SIZ SAMPLING EQUIPMENT CODE O () SAMPLING EQUIPMENT CODE ()	8" = 0.016 er (Specify) er (Specify) E:µm SAMPLE PUMP FLOW RATE (mL per minute)
TUBING INS PURGING E SAMPLE E SUMP OR T DEPTH IN V FIELD DECO SAMPLE ID CODE REMARKS:	SIDE DIA. CAN EQUIPMENT O BY (PRINT) / A C / K TUBING WELL (feet): ONTAMINATIO LE CONTAINERS	ACITY (Gal./ CODES: B FFILIATION: S (G, U O DN: PUM R SPECIFICA MATERIAL CODE AG = Amber S = Silicone; CODES: A	Ft.): 1/8" = 0.1	D006: 3/16" 3P = Bladder F SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVATI USED ↓ _ ↓ Clear Glass; O = Other (S rough) Perista	= 0.0014; Pump; SAMI SIGNATUF SIGNATUF CODE: TUBING PRESERV VE ADD VE ADD HDPE = specify) Itic Pump;	1/4" = 0.002 ESP = Electric PLING DA RE(S): ATION (includi TOTAL VOL ED IN FIELD (r High Density F B = Bailer;	5; 5/16" = 0.0 Submersible Pur TA FIELD- Filtratic placed) ng wet ice) Final pH/ Temp	3/8" = 0 np; PP = Perform SAMPLING INITIATED A FILTERED: Yn Equipment Ty DUPLICATE: INTENDI ANALYSIS A METHO ANALYSIS A METHO DIPE = Low De er Pump; ES	0.006; 1/ eristaltic Pu T: 0 4 pe: 0 4	2" = 0.010; 5 mp; O = Oth O ENDED AT FILTER SIZ SAMPLING EQUIPMENT CODE	8" = 0.016 er (Specify) er (Specify) E:µm SAMPLE PUMP FLOW RATE (mL per minute)

2. <u>STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS</u> **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

NAME	White	Blue.	ę			TE CATION:	Redf :	eld			
WELL NO:	MW-10	120		SAMPLE	ID: ML	1-1021	2		DATE:]	1-19.8	4
-	1					SING DA					
WELL DIAMETER	R (inches):		TER (inches):	4 DEPTH (feet):			R (feet): 91	() OR	RGE PUMP TY BAILER:	Bp
(only fill out	t if applicable)		= (feet -		feet) X	WELL CAPACI	gallons/foo	t = N/0	gallons
	NT VOLUME PU t if applicable)	JRGE: 1 EQU	JIPMENT VOL.		UME + (TUE Ilons + (TY X TO ons/foot X	JBING LENGTH) feet)			= N/A gallons
PUMP OR	TUBING DEPTH	н	WELL SCRI	EEN INTERVA	NL feet	PURGIN INITIATE	g ed at: 1445	PURGING ENDED AT:	1605	TOTAL VOL PURGED (9	ume allons): 2.6
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 <u>or</u> µத ி ரூ	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
520	1.00	1.00		94.87	7.33	22.52	581	1.44	-123	395	Turbid
1525	1		-	95.46	7.32	22.43	591	0.88	-123	354	(
1530	1	12		95.79	7,29	22.20	585	0.93	-117	312	1
1535				96.34	7.32	22.08	581	0.94	-119	922	1
1540		S		96.87	7.32	21.81	584	0,92	-115	555	
SHS		1		97,42	7.27	21,47	583	1.39	-119	445	
1550	1	1	1.1.1	97,76	7.32	21.64	590	1.63	-119	409	
555		1		78.23	7.31	21.56	582	2.05	-117	425	
1600				98.75	7.31	21.10	581	1.74	-113	734	(
1665	1	2.6		99.30	7.33	21.06	580	1.57	-111	71000	1
TUBING IN	PACITY (Gallon SIDE DIA. CAP	a rei rouij.	0.75 - 0.02,	1" = 0.04; 006: 3/16"	1.25" = 0.0 = 0.0014;	6; 2" = 0.1 1/4" = 0.002	6; 3" = 0.37; 6; 5/16" = 0	a state of the second sec	5" = 1.02; .006; 1/2	= 0.010;	5/8" = 0.016
PURGING	EQUIPMENT C	ODES: E	s = Bailer; E	SAMPLER(S)	SAMP	SP = Electric PLING DA E(S):	Submersible Pu	SAMPLING	eristaltic Pum	samplin	iher (Specify)
SAMPLED	BY (PRINT) / A	FFILIATION:	s = Bailer; B	SAMPLER(S)	SAMP SIGNATUR	SP = Electric	Submersible Pu	SAMPLING INITIATED A P-FILTERED: Y	т: <i>IG05</i> (N	ip: O = OI	G T: 1625
SAMPLED SL(PUMP OR DEPTH IN	EQUIPMENT C BY (PRINT) / A C / K R TUBING WELL (feet):	FFILIATION:	B = Bailer; E	SAMPLER(S)	SAMP SIGNATUR 6 DDE:	ESP = Electric PLING DA E(S):	Submersible Pu ATA FIELD Filtrati	SAMPLING INITIATED A D-FILTERED: Y on Equipment Ty	т: <i>1605</i> гре:	SAMPLIN ENDED A FILTER SI	G T: 1625
PURGING SAMPLED DUMP OR DEPTH IN FIELD DEC	EQUIPMENT C BY (PRINT) / A TUBING WELL (feet): CONTAMINATIC	In the second se	Bailer; E	SAMPLER(S)	Yump; E SAMP SIGNATUR 6 C DDE: TUBING	E(S):	Submersible Pu TA FIELD Filtrati eplaced)	SAMPLING INITIATED A D-FILTERED: Y on Equipment Ty DUPLICATE:	т: <i>1605</i> pe: О	SAMPLIN ENDED A FILTER S	iher (Specify) G T: ΙСДΣ IZE:μm
PURGING SAMPLED DUMP OR DEPTH IN FIELD DEC	EQUIPMENT C BY (PRINT) / A C / K R TUBING WELL (feet):	In the second se	B = Bailer; E	SAMPLER(S)	Aump; E SAMP SIGNATUR 6 C DDE: TUBING PRESERV.	ESP = Electric PLING DA E(S):	Submersible Pu TA FIELD Filtrati eplaced) ing wet ice) Final pH/	MP; PP = P SAMPLING INITIATED A D-FILTERED: Y on Equipment Ty DUPLICATE: INTERNAL DUPLICATE:	T: 1605 pe: Y ED ND/OR E	SAMPLIN ENDED A FILTER SI	G T: / C L J IZE:μm SAMPLE PUMF FLOW RATE
PURGING SAMPLED PUMP OR DEPTH IN FIELD DEC SAMI SAMPLE	EQUIPMENT C BY (PRINT) / A TUBING WELL (feet): CONTAMINATIC PLE CONTAINE #	FFILIATION:	B = Bailer; E	P = Bladder F SAMPLER(S) UBING MATERIAL CO SAMPLE PRESERVAT	Aump; E SAMP SIGNATUR 6 C DDE: TUBING PRESERV.	ESP = Electric E(S): Martion (includ TOTAL VOL	Submersible Pu TA FIELD Filtrati eplaced) ing wet ice) Final pH/	mp; PP = P SAMPLING INITIATED A D-FILTERED: Y on Equipment Ty DUPLICATE: INTEND ANALYSIS A	T: 1605 pe: Y ED ND/OR E	sampling SAMPLIN ENDED A FILTER SI	G T: ΙCLT IZE:μm SAMPLE PUMF FLOW RATE
PURGING SAMPLED PUMP OR DEPTH IN FIELD DEC SAMPLE	EQUIPMENT C BY (PRINT) / A TUBING WELL (feet): CONTAMINATIC PLE CONTAINE #	FFILIATION:	B = Bailer; E	P = Bladder F SAMPLER(S) UBING MATERIAL CO SAMPLE PRESERVAT	Aump; E SAMP SIGNATUR 6 DDE: TUBING PRESERV.	ESP = Electric E(S): Martion (includ TOTAL VOL	Submersible Pu TA FIELD Filtrati eplaced) ing wet ice) Final pH/	mp; PP = P SAMPLING INITIATED A D-FILTERED: Y on Equipment Ty DUPLICATE: INTEND ANALYSIS A	T: 1605 pe: Y ED ND/OR E	sampling SAMPLIN ENDED A FILTER SI	G T: / C L J IZE:μm SAMPLE PUMF FLOW RATE
PURGING SAMPLED PUMP OR DEPTH IN FIELD DEC SAMPLE ID CODE	EQUIPMENT C BY (PRINT) / A TUBING WELL (feet): CONTAMINATIC PLE CONTAINERS	In the second se	B = Bailer; E	SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVAT USED	Aump; E SAMP SIGNATUR 56 DDE: TUBING PRESERV. VE ADDE	ESP = Electric PLING DA E(S): ATION (includ TOTAL VOL ED IN FIELD (Submersible Pu	mp; PP = P SAMPLING INITIATED A D-FILTERED: Y on Equipment Ty DUPLICATE: INTEND ANALYSIS A METHO	T: 1605 PPE: Y ED ND/OR ED	sampling SAMPLING FILTER SI N SAMPLING CODE	iher (Specify) G T: / C 2 5 IZE:μm SAMPLE PUMP FLOW RATE (mL per minute)
PURGING SAMPLED PUMP OR DEPTH IN FIELD DEC SAMI SAMPLE	EQUIPMENT C BY (PRINT) / A TUBING WELL (feet): CONTAMINATIC PLE CONTAINERS CONTAINERS	In the second se	B = Bailer; E	SAMPLER(S) TUBING MATERIAL CO SAMPLE PRESERVAT USED	Pump; E SAMP SIGNATUR 6 DDE: TUBING PRESERV VE ADDE ADDE	ESP = Electric PLING DA E(S): ATION (includ TOTAL VOL ED IN FIELD (Submersible Pu	mp; PP = P SAMPLING INITIATED A D-FILTERED: Y on Equipment Ty DUPLICATE: INTEND ANALYSIS A	T: 1605 (Pe: Pe: PD PD PD PD PD PD PD PD PD PD	sampling Guipment Code	iher (Specify) G T: Ι <i>C </i>

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

FEinal depth : 100, 86 - in the past.

SITE NAME:	white	BLUER			8		Redeie	IL AF	2		
	SI - 21M	130		SAMPLE		MLS -11		1	DATE:	- 18-2	4
	Mu ic		-			GING DA					
WELL DIAMETEI	R (inches): 2	TUBIN	TER (inches):	H TOTAL	(feet):		STATIC I TO WAT	DEPTH ER (feet): スリ WELL CAPAC	18 OR	RGE PUMP TY BAILER: 6	PE PP
(only fill ou	LUME PURGE: it if applicable) NT VOLUME PU it if applicable)		= (= PUMP VOI	feet -	JBING CAPACI	feet) X		gallons/fo) + FLOW CE	ot = \mathcal{N}/Λ ELL VOLUME gallons =	gallons
	TUBING DEPT	H	WELL SCP	REEN INTERV		PURGIN		PURGING		TOTAL VOL PURGED (g	UME
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP	COND. (circle units) µmhos/cm or wStcm	DISSOLVED OXYGEN (circle units) rook or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
110					HE18	22,23	257	3.74	320	174	Turbid
nis					H.97	and in contra	257	3.49	323	157	5
120					41.97	22.29	256	3,16	326	155	
1125		1			497	22.31	257	2.34	327	153	11
1130					4.96		257	2.80	328	151	1
1135		1	1		4.96	22.36	257	2.73	329	146	1
TUBING II PURGING SAMPLED	PACITY (Gailon NSIDE DIA. CAI EQUIPMENT C DBY (PRINT) / A C) KRS	FFILIATION:	(Ft.): 1/8" = 0.	0006; 3/16 BP = Bladder SAMPLER(S	" = 0.0014; Pump; SAM	ESP = Electric PLING D/ RE(S):	26; 5/16" = 0 Submersible Pu ATA	SAMPLING	Peristaltic Pur NT: 1335	" = 0.010; np; 0 = 0 SAMPLIN ENDED A	T:
	TUBING	12.5	- 2.5	TUBING MATERIAL C	ODE:			D-FILTERED: Y		FILTER S	IZE:μm
	CONTAMINATIO			1	TUBING	Y NI	eplaced)	DUPLICATE	: Y	N	
SAM	PLE CONTAINE	R SPECIFIC	ATION	SAMPL	E PRESER	VATION (includ	ling wet ice)	INTEN		SAMPLING	SAMPLE PUMP
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVA USED		TOTAL VOL DED IN FIELD ((mL) Final pH/ (mL) Temp	ANALYSIS / METH			FLOW RATE (mL per minute)
								-			
1.1								-			
DEMADIN											-
REMARK		· · · · · ·	beal	10-11	2 2	o phra					
	110000			= Clear Glass;		= High Density		LDPE = Low D	ensity Polyet	hylene; PP	= Polypropylene;
MATERIA	L CODES:	AG = Amber S = Silicone;	T = Teflon;	O = Other (

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
Allowed well to record in order to F:ll sample bottles
Run out of woter order order Allowing to recharge overnight

SITE NAME:	Jh:te MLC-	Bluff		SAMPLE			Redfie		DATE: /	1-27-3	4
ELL NU:	MLL-	10:32	-	GAWIT LL	1-10	ING DA		-	1	1.94.2	1
ELL		TUBING	. /	H TOTAL	A MARTIN D		OTATIC F	DEPTH		PURGE PUMP T	YPE
AMETER	(inches):	DIAME	TER (inches)	: ' DEPTH	(feet):	3.10	TO WATE	R (feet): 20	82 0	OR BAILER:	ΰβ
	UME PURGE: if applicable)	1 WELL VOL	UME = (TO	TAL WELL DEP	PTH - STAT	IC DEPTH	TO WATER) X	WELL CAPAC			X
		DOT: 1 FOU		L. = PUMP VOI	feet -	NG CAPAC	feet) X	JBING LENGTH	gallons + FLOW	CELL VOLUME	gallons
	if applicable)	RGE: TEQU	IPMENT VO					feet			= M/b gallons
IMP OP			WELL SC	= g REEN INTERV	allons + (AL	PURGI	NG	PURGING		TOTAL VO	
WELL (fe		5	DEPTH:	feet to	feet	INITIAT	ED AT: 525	ENDED AT:	1530	PURGED (gallons):
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (galions)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (circle units) μmhos/cm <u>or</u> μS/cm	DISSOLVED OXYGEN (circle units) mg/L <u>or</u> % saturation	Redo (mV)		/ COLOR / ODOR (describe)
		FFILIATION:	0.75" = 0.02; FL): 1/8" = (= Bailer;	0.0006: 3/16 BP = Bladder SAMPLER(S	Pump; E	1/4" = 0.00 SP = Electric LING D	i26; 5/16" = 0. c Submersible Pu ATA	.004: 3/8" = 0	eristaltic F	1/2" = 0.010; Pump; 0 = 0 SAMPLII ENDED	12" = 5.88 5/8" = 0.016 Dther (Specify) NG AT: JSHO SIZE:µm
JMP OR EPTH IN	WELL (feet):	22.5		MATERIAL	ODE:	A		on Equipment Ty			
ELD DEC	CONTAMINATIO	ON: PU₩	IP (Y)	N	TUBING	V N(replaced)	DUPLICATE	: Y	N	
SAMF	PLE CONTAINE	R SPECIFICA	ATION		E PRESERVA			INTEND ANALYSIS A		SAMPLING EQUIPMENT	SAMPLE PUMP FLOW RATE
AMPLE CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVA USED		OTAL VOL D IN FIELD	(mL) Final pH/ (mL) Temp	METHO		CODE	(mL per minute)
	1							-			
EMADIC	FINN	1212.14	dante	CH & ST-	Sampi	0 1 0	1 44		-		
-manno	er, not	2 dealers	A. 4 W.	an A w w	3 construction	- 2	1021				
ATERIAL	L CODES:	AG = Amber	Glass; CG	= Clear Glass;	HDPE = H	ligh Density	Polyethylene;	LOPE = Low D	ensity Pol	yethylene; PI	= Polypropylene;
		S = Silicone;	T = Teflon								
AMPLING	G EQUIPMENT			Through) Peristerse Flow Perist		B = Baile SM = Strat	er; BP = Blade w Method (Tubing			stric Submersible other (Specify)	Pump;
2. pł	H: + 0.1 units	Temperatu	re: ± 3% S	pecific Cond	OF LAST THRI luctance: ±	3% Disse	CUTIVE READING olved Oxygen: Irbidity: (10% f on Potential: <u>+</u>	(10% for value	es greate ter than t	er than 0.5 mg/l 5 NTU; if three	-, if three dissolv Turbidity values
	1 - 1	1 L 14.5	< 000	6.			TLING	1	- 1 -	as Juces	to a const

	1.000			SAMDI E				12, AR	DATE: 1)	15 34	
VELL NO:	1031			SAMPLE			TA		BAIL.]]	-18-24	
WELL		TUBING	- 1	TOTAL		SING DA	STATICE	EPTH .	P	JRGE PUMP TY	/PE
	(inches):	DIAME	IER (Inches):	H DEPTH	(feet):	Contraction of the local division of the loc	TO WATE	ER (feet): 42.	23 0	R BAILER:	BP
	UME PURGE: if applicable)	1 WELL VO	LUME = (TOT	TAL WELL DEP	PTH – STA	TIC DEPTH T	OWATER) X	WELL CAPACI	ITY	.[7.5
			= (feet -		feet) X	UBING LENGTH	gallons/		7A gallons
	IT VOLUME PU	JRGE: 1 EQU	JIPMENT VOL	= PUMP VOL	LUME + (TUE						MIN
				= g REEN INTERV	allons + (ons/foot X	feet))+	gallons	
PUMP OR 1 IN WELL (fe	TUBING DEPTI eet): 45.0		DEPTH:	feet to	feet	PURGIN	DAT: 1210	ENDED AT:	1305	PURGED (g	
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 <u>or</u> µது/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
240					7.66	22.32	675	6.12	241	60.6	Turbia
1415		1			7.66	22.53	677	6.06	DAM	29.1	Blightly
250			1		7,67	22.73	676	5.84	297	38.1	1
255			1		7.67	22.21	67.7	5.92	299	7.0	Cleck
300					7.68	23.76	684	6.01	2454	8.6	Clear
1305					7.69	23.74	683	6.24	279	8.3)
		1	_	0							1
TUBING IN	PACITY (Gallons SIDE DIA. CAP EQUIPMENT C	PACITY (Gal./	0.75" = 0.02; Ft.): 1/8" = 0 B = Bailer;	1" = 0.04; .0006; 3/16 BP = Bladder		1/4" = 0.002 SP = Electric	26: 5/16" = 0. Submersible Pu	.004; 3/8" = 0	5" = 1.02; 0.006: 1 eristaltic Pu		12" = 5.88 5/8" = 0.016 ther (Specify)
TUBING IN PURGING I	SIDE DIA. CAP EQUIPMENT C	PACITY (Gal./ ODES: E	Ft.): 1/8" = 0	0006; 3/16 BP = Bladder	" = 0.0014; Pump; E SAMP	1/4" = 0.002 SP = Electric	26: 5/16" = 0. Submersible Pu	.004; 3/8" = 0	0.006: 1	/2" = 0.010; imp; O = O	5/8" = 0.016 ther (Specify)
TUBING IN PURGING	SIDE DIA. CAP EQUIPMENT C	PACITY (Gal./ ODES: E	Ft.): 1/8" = 0	0006; 3/16 BP = Bladder SAMPLER(S	" = 0.0014; Pump; E SAMP) SIGNATUR	1/4" = 0.002 SP = Electric LING D	26: 5/16" = 0. Submersible Pu	.004; 3/8" = 0 mp; PP = Po SAMPLING	0.006: 1 eristaltic Pu	/2" = 0.010; imp; O = O SAMPLIN	5/8" = 0.016 ther (Specify)
	SIDE DIA. CAP	PACITY (Gal./ ODES: E	Ft.): 1/8" = 0	0006; 3/16 BP = Bladder	" = 0.0014; Pump; E SAMP) SIGNATUR	1/4" = 0.002 SP = Electric LING D	26: 5/16" = 0. Submersible Pu \TA	.004; 3/8" = 0 imp; PP = P SAMPLING INITIATED A	0.006: 1 eristaltic Pu T: /305	/2" = 0.010; imp; O = O SAMPLIN	5/8" = 0.016 ther (Specify) IG IT: 1328
TUBING IN PURGING I SAMPLED K 25 PUMP OR DEPTH IN	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A TUBING WELL (feet):	PACITY (Gal./ DODES: E FFILIATION: 75.00	(1/8" = 0 = Bailer;	0006; 3/16 BP = Bladder SAMPLER(S Saudy L TUBING MATERIAL C	" = 0.0014; Pump; E SAMP) SIGNATUR J b LSI CODE:	1/4" = 0.002 SP = Electric LING DA E(S):	5/16" = 0. Submersible Pu ATA FIELD Filtrati	.004; 3/8" = C imp; PP = Pr SAMPLING INITIATED A D-FILTERED: Y ion Equipment Ty	0.006: 1 eristaltic Pu T: /305	/2" = 0.010; imp; O = O SAMPLIN ENDED A FILTER S	5/8" = 0.016 ther (Specify) IG IT: 1328
TUBING IN PURGING SAMPLED K 25 PUMP OR DEPTH IN FIELD DEC	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A / Sintheric C TUBING WELL (feet): CONTAMINATIO	FFILIATION: 75.00	Ft.): 1/8" = 0) = Bailer; /P & N	0006; 3/16 BP = Bladder SAMPLER(S Saudy L TUBING MATERIAL C	TUBING	1/4" = 0.002 SP = Electric LING DA E(S): N (r	Submersible Pu Submersible Pu ATA FiltLD Filtrati	.004; 3/8" = C imp; PP = P4 SAMPLING INITIATED A D-FILTERED: Y ion Equipment Ty DUPLICATE:	0.006: 1 eristaltic Pu T: /305 /pe/	/2" = 0.010; imp; O = O SAMPLIN ENDED A FILTER S	5/8" = 0.016 ther (Specify) IG IT: 1325 IZE:μm
TUBING IN PURGING SAMPLED K 25 PUMP OR DEPTH IN FIELD DEC SAMF	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A UBING WELL (feet): CONTAMINATION PLE CONTAINE	PACITY (Gal./ ODES: E FFILIATION: 15.00 DN: PUN R SPECIFIC/	Ft.): 1/8" = 0 1 = Bailer; AP Ø N ATION	0006; 3/16 BP = Bladder SAMPLER(S کی منطب ل TUBING MATERIAL C N SAMPLI	TUBING	1/4" = 0.002 SP = Electric LING DA E(S): (Y) N (m ATION (includ	5/16" = 0. Submersible Pu ATA FIELD Filtrati eplaced) ing wet ice)	.004; 3/8" = C Imp; PP = Pr SAMPLING INITIATED A D-FILTERED: Y ION Equipment Ty DUPLICATE: INTEND ANALYSIS A	D.006: 1 eristaltic Pu T: /305 /pe / /pe / ED AND/OR	12" = 0.010; 10" = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) IG IZE:μm IZE:μm SAMPLE PUMP FLOW RATE
TUBING IN PURGING SAMPLED K 25 PUMP OR DEPTH IN FIELD DEC	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A / Sintheric C TUBING WELL (feet): CONTAMINATIO	FFILIATION: 75.00	Ft.): 1/8" = 0) = Bailer; /P & N	0006; 3/16 BP = Bladder SAMPLER(S Saudy L TUBING MATERIAL C	r = 0.0014; Pump; E SAMP) SIGNATUR) SIGNATUR) SIGNATUR) SIGNATUR CODE: TUBING E PRESERV/ TIVE	1/4" = 0.002 SP = Electric LING DA E(S): N (r	5/16" = 0. Submersible Pu ATA FIELD Filtrati eplaced) ing wet ice) Final pH/	.004; 3/8" = C Imp; PP = P4 SAMPLING INITIATED A D-FILTERED: Y ion Equipment Ty DUPLICATE: INTEND	D.006: 1 eristaltic Pu T: /305 /pe / /pe / ED AND/OR	/2" = 0.010; imp; O = O SAMPLIN FILTER S N SAMPLING	5/8" = 0.016 ther (Specify) IG IZE:μm IZE:μm
TUBING IN PURGING SAMPLED K 25 PUMP OR DEPTH IN FIELD DEC SAMPLE	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A C UBING WELL (feet): CONTAMINATION PLE CONTAINE #	PACITY (Gal./ ODES: E FFILIATION: E 15.00 E DN: PUN ER SPECIFIC/ MATERIAL E	Ft.): 1/8" = 0 1 = Bailer; AP Ø N ATION	0006; 3/16 BP = Bladder SAMPLER(S SALE) TUBING MATERIAL C N SAMPLI PRESERVAT	r = 0.0014; Pump; E SAMP) SIGNATUR) SIGNATUR) SIGNATUR) SIGNATUR CODE: TUBING E PRESERV/ TIVE	1/4" = 0.002 SP = Electric LING DA E(S): (Y) N (rr ATION (includ TOTAL VOL	5/16" = 0. Submersible Pu ATA FIELD Filtrati eplaced) ing wet ice) Final pH/	.004; 3/8" = C Imp; PP = Pr SAMPLING INITIATED A D-FILTERED: Y ION Equipment Ty DUPLICATE: INTEND ANALYSIS A	D.006: 1 eristaltic Pu T: /305 /pe / /pe / ED AND/OR	12" = 0.010; 10" = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) IG IZE:μm IZE:μm SAMPLE PUMP FLOW RATE
TUBING IN PURGING SAMPLED K 25 PUMP OR DEPTH IN FIELD DEC SAMPLE	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A C UBING WELL (feet): CONTAMINATION PLE CONTAINE #	PACITY (Gal./ ODES: E FFILIATION: E 15.00 E DN: PUN ER SPECIFIC/ MATERIAL E	Ft.): 1/8" = 0 1 = Bailer; AP Ø N ATION	0006; 3/16 BP = Bladder SAMPLER(S SALE) TUBING MATERIAL C N SAMPLI PRESERVAT	r = 0.0014; Pump; E SAMP) SIGNATUR) SIGNATUR) SIGNATUR) SIGNATUR CODE: TUBING E PRESERV/ TIVE	1/4" = 0.002 SP = Electric LING DA E(S): (Y) N (rr ATION (includ TOTAL VOL	5/16" = 0. Submersible Pu ATA FIELD Filtrati eplaced) ing wet ice) Final pH/	.004; 3/8" = C Imp; PP = Pr SAMPLING INITIATED A D-FILTERED: Y ION Equipment Ty DUPLICATE: INTEND ANALYSIS A	D.006: 1 eristaltic Pu T: /305 /pe / /pe / ED AND/OR	12" = 0.010; 10" = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) IG IZE:μm IZE:μm SAMPLE PUMP FLOW RATE
	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A C UBING WELL (feet): CONTAMINATION PLE CONTAINE #	PACITY (Gal./ ODES: E FFILIATION: E 15.00 E DN: PUN ER SPECIFIC/ MATERIAL E	Ft.): 1/8" = 0 1 = Bailer; AP Ø N ATION	0006; 3/16 BP = Bladder SAMPLER(S SALE) TUBING MATERIAL C N SAMPLI PRESERVAT	r = 0.0014; Pump; E SAMP) SIGNATUR) SIGNATUR) SIGNATUR) SIGNATUR CODE: TUBING E PRESERV/ TIVE	1/4" = 0.002 SP = Electric LING DA E(S): (Y) N (rr ATION (includ TOTAL VOL	5/16" = 0. Submersible Pu ATA FIELD Filtrati eplaced) ing wet ice) Final pH/	.004; 3/8" = C Imp; PP = Pr SAMPLING INITIATED A D-FILTERED: Y ION Equipment Ty DUPLICATE: INTEND ANALYSIS A	D.006: 1 eristaltic Pu T: /305 /pe / /pe / ED AND/OR	12" = 0.010; 10" = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) IG IZE:μm IZE:μm SAMPLE PUMP FLOW RATE
	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A C UBING WELL (feet): CONTAMINATION PLE CONTAINE #	PACITY (Gal./ ODES: E FFILIATION: E 15.00 E DN: PUN ER SPECIFIC/ MATERIAL E	Ft.): 1/8" = 0 1 = Bailer; AP Ø N ATION	0006; 3/16 BP = Bladder SAMPLER(S SALE) TUBING MATERIAL C N SAMPLI PRESERVAT	r = 0.0014; Pump; E SAMP) SIGNATUR) SIGNATUR) SIGNATUR) SIGNATUR CODE: TUBING E PRESERV/ TIVE	1/4" = 0.002 SP = Electric LING DA E(S): (Y) N (rr ATION (includ TOTAL VOL	5/16" = 0. Submersible Pu ATA FIELD Filtrati eplaced) ing wet ice) Final pH/	.004; 3/8" = C Imp; PP = Pr SAMPLING INITIATED A D-FILTERED: Y ION Equipment Ty DUPLICATE: INTEND ANALYSIS A	D.006: 1 eristaltic Pu T: /305 /pe / /pe / ED AND/OR	12" = 0.010; 10" = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) IG IZE:μm IZE:μm SAMPLE PUMP FLOW RATE
TUBING IN PURGING SAMPLED K 25 PUMP OR DEPTH IN FIELD DEC SAMPLE	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A C UBING WELL (feet): CONTAMINATION PLE CONTAINE #	PACITY (Gal./ ODES: E FFILIATION: E 15.00 E DN: PUN ER SPECIFIC/ MATERIAL E	Ft.): 1/8" = 0 1 = Bailer; AP Ø N ATION	0006; 3/16 BP = Bladder SAMPLER(S SALE) TUBING MATERIAL C N SAMPLI PRESERVAT	r = 0.0014; Pump; E SAMP) SIGNATUR) SIGNATUR) SIGNATUR) SIGNATUR CODE: TUBING E PRESERV/ TIVE	1/4" = 0.002 SP = Electric LING DA E(S): (Y) N (rr ATION (includ TOTAL VOL	5/16" = 0. Submersible Pu ATA FIELD Filtrati eplaced) ing wet ice) Final pH/	.004; 3/8" = C Imp; PP = Pr SAMPLING INITIATED A D-FILTERED: Y ION Equipment Ty DUPLICATE: INTEND ANALYSIS A	D.006: 1 eristaltic Pu T: /305 /pe / /pe / ED AND/OR	12" = 0.010; 10" = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) IG IZE:μm IZE:μm SAMPLE PUMP FLOW RATE
TUBING IN PURGING IN SAMPLED K 25 PUMP OR DEPTH IN FIELD DEC SAMPLE ID CODE	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A TUBING WELL (feet): / CONTAMINATION PLE CONTAINERS	PACITY (Gal./ ODES: E FFILIATION: E 15.00 E DN: PUN ER SPECIFIC/ MATERIAL E	Ft.): 1/8" = 0 1 = Bailer; AP Ø N ATION	0006; 3/16 BP = Bladder SAMPLER(S SALE) TUBING MATERIAL C N SAMPLI PRESERVAT	r = 0.0014; Pump; E SAMP) SIGNATUR) SIGNATUR) SIGNATUR) SIGNATUR CODE: TUBING E PRESERV/ TIVE	1/4" = 0.002 SP = Electric LING DA E(S): (Y) N (rr ATION (includ TOTAL VOL	5/16" = 0. Submersible Pu ATA FIELD Filtrati eplaced) ing wet ice) Final pH/	.004; 3/8" = C Imp; PP = Pr SAMPLING INITIATED A D-FILTERED: Y ION Equipment Ty DUPLICATE: INTEND ANALYSIS A	D.006: 1 eristaltic Pu T: /305 /pe / /pe / ED AND/OR	12" = 0.010; 10" = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) IG IZE:μm IZE:μm SAMPLE PUMP FLOW RATE
TUBING IN PURGING SAMPLED K 25 PUMP OR DEPTH IN FIELD DEC SAMPLE	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A TUBING WELL (feet): / CONTAMINATION PLE CONTAINERS	PACITY (Gal./ ODES: E FFILIATION: E 15.00 E DN: PUN ER SPECIFIC/ MATERIAL E	Ft.): 1/8" = 0 1 = Bailer; AP Ø N ATION	0006; 3/16 BP = Bladder SAMPLER(S SALE) TUBING MATERIAL C N SAMPLI PRESERVAT	r = 0.0014; Pump; E SAMP) SIGNATUR) SIGNATUR) SIGNATUR) SIGNATUR CODE: TUBING E PRESERV/ TIVE	1/4" = 0.002 SP = Electric LING DA E(S): (Y) N (rr ATION (includ TOTAL VOL	5/16" = 0. Submersible Pu ATA FIELD Filtrati eplaced) ing wet ice) Final pH/	.004; 3/8" = C Imp; PP = Pr SAMPLING INITIATED A D-FILTERED: Y ION Equipment Ty DUPLICATE: INTEND ANALYSIS A	D.006: 1 eristaltic Pu T: /305 /pe / /pe / ED AND/OR	12" = 0.010; 10" = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) IG IZE:μm IZE:μm SAMPLE PUMP FLOW RATE
TUBING IN PURGING IN SAMPLED DEPTH IN FIELD DEC SAMPLE ID CODE	SIDE DIA. CAP EQUIPMENT C BY (PRINT) / A TUBING / WELL (feet): CONTAMINATION PLE CONTAINERS	ACITY (Gal./ ODES: E FFILIATION: -15.00 DN: PUN R SPECIFIC/ MATERIAL CODE 	Ft.): 1/8" = 0 B = Bailer; AP ATION VOLUME Glass; CG T = Teflon;	0006; 3/16 BP = Bladder SAMPLER(S Saude L TUBING MATERIAL C N SAMPLI PRESERVAT USED	TUBING E PRESERV	1/4" = 0.002 SP = Electric LING DA E(S): (Y) N (rr ATION (includ TOTAL VOL	26; 5/16" = 0. Submersible Pu ATA FIELD Filtrati eplaced) ing wet ice) Final pH/ Temp Polyethylene;	LDPE = Low Do	ensity Polye	/2" = 0.010; imp; O = O SAMPLIN FILTER S SAMPLING EQUIPMENT CODE	5/8" = 0.016 ther (Specify) IG IT: J325 IZE:μm SAMPLE PUMP FLOW RATE (mL per minute) = Polypropylene;

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

SITE NAME:	Lihite	15/10/01	F	-	S	ITE OCATION:	Redfie	IN AR			
	MW-10			SAMPLE		-104		1		-19-2	14
					PUR	GING DA	TA				
WELL DIAMETER	R (inches): 👌	DIAMET	TER (inches):	H DEPTH	(feet):			ER (feet): Jd	60 OR	RGE PUMP T BAILER:	YPE bp
(only fill ou	t if applicable)		= (feet -		feet) X		gallons/fo		A gallons
	NT VOLUME PU t if applicable)	JRGE: 1 EQU			LUME + (TU allons + (TY X T ons/foot X	UBING LENGTH			= VA gallons
PUMP OR	TUBING DEPT	H 7.00	and the second se	EEN INTERV feet to		PURGIN		PURGING ENDED AT:		TOTAL VOI PURGED (g	LUME LLL
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (^o C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) rtotL or % saturation	Redox (mV)	Turbidity (NTU)	/ COLOR / ODOR (describe)
235	0.83	0.83		33.03	5.06	24.17	226	0.99	160	22.0	clear
1240	0,125		1	33.06	5.11	24.04	226	0.92	154	20.1	1
1245	0.125			33.09	5.17	23.49	229	0.89	149	14.9	2
Dro	0.125			33.14	5.20	23.41	232	0,85	144	10.5	1
1255	0.125			33,15	5.21	23.39	232	0.85	141	10.1	
1300	0.125	1.46		33,22	5,20	23,12	234	0.85	134	4.6	
SAMPLED SAMPLED SUMP OR DEPTH IN	1 - 1 /	FFILIATION:	Ft.): 1/8" = 0.0 = Bailer; B	P = Bladder	Pump; SAMF SIGNATUR Lindo (Lol	1/4" = 0.002 ESP = Electric PLING DA EE(S):	6: 5/16" = 0 Submersible Pu	1.004: 3/8" = 0	r: 1300 T: 1300	SAMPLIN ENDED A	
	PLE CONTAINE			SAMPLE	PRESERV	ATION (includ	ing wet ice)	INTEND	ED	SAMPLING	SAMPLE PUM
SAMPLE ID CODE	# CONTAINERS	MATERIAL		PRESERVAT	IVE	TOTAL VOL ED IN FIELD (Final pH	ANALYSIS A METHO		CODE	FLOW RATE (mL per minute
REMARKS	Fin	AG = Amber		Clear Glass;	HDPE =	High Density !	Polyethylene;	LDPE = Low De	ensity Polyet	hylene; PP	• = Polypropylene
2	G EQUIPMENT	CODES: A	T = Teflon; APP = After (Th RFPP = Reverse titute all of th	e Flow Perista	altic Pump; altic Pump;			lder Pump; E g Gravity Drain);		: Submersible er (Specify)	Pump;

2. <u>STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS</u> **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

WELL NO: Л. – 10 A (L) DATE: 1 - 1 - 2 - 2A WELL NO: Л. – 10 A (L) DATE: 1 - 1 - 2 - 2A WELL DIMMETER (inches): TUBING TOTAL WATER DIAMETER (inches): TOTAL WATER DIAMETER (inches): Static DEPTH DIAMETER (inches): URCE PUMP Type OR BAILER: URCE PUMP Type OR BAILER: DR BAILER: M - 10 - 10 - 20 WELL VOLUME PURGE: 1 audimeter (inches): TOTAL WELL DEPTH - Static DEPTH TO WATER (inch): Static DEPTH OR BAILER: M - 10 - 20 edupMetert volume PURGE: 1 audimeter volume + (TOTAL WELL DEPTH - Static DEPTH TO WATER): WELL CAPACITY gallonsfoot : M - 10 - 20 PUMP OR TUBING DEPTH WELL SCREEN INTERVAL purceine purceine PURGED (INTERVAL (intradiadr PURGED (INTERVAL (intradiadr PURGED (INTERVAL (intradiadr PURGED (INTERVAL (intradiadr PURGED (INTERVAL (INTTATE DAT: J - 0 - 17 - 17 - 17 - 17 - 17 - 17 - 17	SITE NAME:	White					SITE LOCATION:	Redf	.erp	L AR			
PURGING DATA WELL DUMETER (inches): A DUMETER (inches): A UBING TUBING (inf) fill out if applicable) TOTAL WATER TOTAL WATER DUMETER (inches): A DEPTH (ifed): STATIC DEPTH TO WATER (ifed): FOURGE PUMP TYPE OR BAILER: B PUMP OR TUBING CELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) Tell Tell Tell (only fill out if applicable) Tell Tell (only fill out if applicable) Tell (only fill out if applicable) TEL OUTME FURGE (only fill out if applicable) TEL OUTME FURGE (only fill out if applicable) TEL OUTME FURGE (only fill out if applicable) TOTAL VOLUME (only fill out if applicable)<	Car divises		242		SAMPLE						DATE:	-1-2-24	1
WELL COLONAL Construction Construction<					1								
Well Solution Constraint Constantis is in thight in thight in this in the staint <td>DIAMETER</td> <td>R (inches): 2</td> <td>TUBING</td> <td>FER (inches):</td> <td></td> <td>(feet):</td> <td></td> <td>ТОУ</td> <td>NATER</td> <td>(feet): 86.</td> <td>5 OR</td> <td></td> <td></td>	DIAMETER	R (inches): 2	TUBING	FER (inches):		(feet):		ТОУ	NATER	(feet): 86.	5 OR		
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gailons + gailons + (gailons/for X feet) + gailons = */2 PUMP OR TUBING DEPTH INVELL (feet): VOLUME (gailons) WELL SCREEN INTERVAL DEPTH: feet to feet PURGING (INITIATED AT:]236 PURGING TURING ENDED AT:]4(0.5 TURING EDEPTH PURGED (gailons): (ard units) TURING (ard units) TURING (ard units) TURING (ard units) Redox (mV) TURING (INITIATED AT:]236 Turbidity (ard units) TURING (ard units) Redox (mV) Turbidity (INITIATED AT:]236 Turbidity (ard units) TUBING (ard units) Redox (mV) Turbidity (INITIATED AT:]236 Turbidity (ard units)	(only fill ou	t if applicable)	I WELL VOL	= (feet -		feet	X		gallons/fc	ot = M) gallons
PUMP OR TUBING DEPTH IN WELL (feet): WELL SCREEN INTERVAL DEPTH: PURGING feet PURGING Feet PURGING INITIATED AT: PURGING INITIATED AT: PURGING INITIATED AT: I/I OS TOTAL VOLUME PURGED (galons): TIME VOLUME PURGED CUMUL. PURGED VOLUME PURGED PURGE PURGED DEPTH PURGED PH PH PH PH PH PH PH PURGED DISSOLVED OXIGEN Redox Turbidity (INTU) I/I oS 7.5.5 Q.G.S Q.G.S S.9.83 7.3.4 24.9.7 J.0.0 0.7.7 -1.31 S.7.C Turbidity (INTU) I/I oS 1/1 oS Q.135 Q.G.S S.9.8 S.9.7 2.4.12 S.2.0 0.7.7 -1.35 S.2.4 -1.1			URGE: 1 EQU	IPMENT VOL.		LUME + (T			TUB		+ FLOW CI	ELL VOLUME	= MA gallons
TIME VOLUME PURGED CUMUL VOLUME (galons) PURGE (galons) DEPTH (galons) pH (standard (ret) TEMP. (standard (ret) CUMUL (rec) OXYGEN (rmV) Redox (mV) Turbidity (rmV) Cumulation (rmV) 13 55 0.6.2.8 0.6.2.8 \$4.9.83 7.3.4 24.9.7 3.0.0 0.7.7 -17.1 \$7.2.4 7.3.4 14 CC 0.1735 0.9.9.2 10.4.1 7.3.7 24.9.2 5.0.0 0.7.7 -17.1 \$7.2.4 7.3.4 14 CC 0.1735 0.9.9.2 10.4.1 7.3.7 24.1.5 \$2.0 0.7.7 -17.1 \$7.2.4 7.1 14 CC 0.135 0.9.9.5 11.14 7.3.7 24.1.5 \$2.0 0.7.7 -17.5 \$7.2.4 14 CC 0.135 0.9.9.5 11.14 7.3.7 24.1.5 \$2.0 0.7.7 -17.5 \$7.2.7 -1.1.5 51.6 -1.3.5 \$7.3.7 -1.1.5 51.6 -1.3.5 \$7.4 -1.3.5 \$7.4 -1.3.5 53.7 -1.3.5 <td< td=""><td></td><td></td><td></td><td></td><td>EN INTERV</td><td>AL</td><td>PURGIN</td><td>G</td><td></td><td>ENDED AT:</td><td>1405</td><td>TOTAL VOL PURGED (g</td><td>ume allons): 0,95</td></td<>					EN INTERV	AL	PURGIN	G		ENDED AT:	1405	TOTAL VOL PURGED (g	ume allons): 0,95
11100 0.135 0.92 10.01 7.37 24.32 52.0 0.77 -135 52.4 1400 0.135 0.95 11.14 7.37 24.15 52.0 0.86 -135 52.7 1400 0.135 0.95 11.14 7.37 24.15 52.0 0.86 -135 52.7 1400 0.135 0.95 11.14 7.37 24.15 52.0 0.86 -135 52.7 1400 0.135 0.95 11.14 7.37 24.15 52.0 0.86 -135 53.7 1400 0.135 0.95 11.14 7.001 52.0 0.86 -135 53.7 1410 0.015 114* 0.006 316** 0.0014 114* 0.0026 516** 0.006 112** 0.001 114** 0.0026 316*** 0.0014 114** 0.0026 316*** 0.0014 112** 0.0014 112** 0.0016 112*** 0.001 112*** 0.0016 112*** 0.0016 112*** 0.0016 112***	TIME	PURGED	VOLUME PURGED	RATE	TO WATER	(standar		(circle un µmhos/c	nits) cm cm	OXYGEN (circle units) mg/L or % saturation			(describe)
Image: Setting	355	0.68	0.62		\$9.83	7.34					-		Turbid
1405 0.135 0.95 91.14 7.37 24.15 520 0.86 -138 53.7 1405 0.135 0.95 91.14 7.37 24.15 520 0.86 -138 53.7 1405 0.135 0.95 91.14 7.37 24.15 520 0.86 -138 53.7 140	400	0.135	0			-		-					
WELL CAPACITY (Gal/BS PEP POID): 0.175 = 0.02; 11 = 0.00; 112 = 0.004; 114" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Sp SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): FILED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLER(S) SIGNATURE(S): FILED FILTERED: Y FILED FILTERED: Y PUMP OR TUBING DEPTH IN WELL (feet): O MATERIAL CODE: FILED FILTERED: Y SAMPLE ON TUBING SAMPLE PRESERVATION (including wet ice) INTENDED SAMPLE # MATERIAL VOL FINE # MATERIAL VOL					91.14	7.37	24.15	520	(0.80	-138	52.7	(
WELL CAPACITY (Gal./BS /PE/POID): 0.1/5 = 0.02; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 5/8 = 0 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Sp SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLER(S) SIGNATURE(S): SAMPLER(S) SIGNATURE(S): PUMP OR TUBING PUMP OR TUBING DEPTH IN WELL (feet): O TUBING FIELD DECONTAMINATION: PUMP N TUBING SAMPLE CONTAMINATION: PUMP N TUBING // N (replaced) DUPLICATE: SAMPLE # MATERIAL VOL Final PH// N TUBING // N (replaced) DUPLICATE: SAMPLE PRESERVATION SAMPLE PRESERVATION (including wet ice) <td< td=""><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>				-									
WELL CAPACITY (Gal./BS /PE/POID): 0.1/5 = 0.02; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 5/8 = 0 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Sp SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLER(S) SIGNATURE(S): SAMPLER(S) SIGNATURE(S): PUMP OR TUBING PUMP OR TUBING DEPTH IN WELL (feet): O TUBING FIELD DECONTAMINATION: PUMP N TUBING SAMPLE CONTAMINATION: PUMP N TUBING // N (replaced) DUPLICATE: SAMPLE # MATERIAL VOL Final PH// N TUBING // N (replaced) DUPLICATE: SAMPLE PRESERVATION SAMPLE PRESERVATION (including wet ice) <td< td=""><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td></td<>						-						1	
WELL CAPACITY (Gal./BS /PE/POID): 0.1/5 = 0.02; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 5/8 = 0 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Sp SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLER(S) SIGNATURE(S): SAMPLER(S) SIGNATURE(S): PUMP OR TUBING PUMP OR TUBING DEPTH IN WELL (feet): O TUBING FIELD DECONTAMINATION: PUMP N TUBING SAMPLE CONTAMINATION: PUMP N TUBING // N (replaced) DUPLICATE: SAMPLE # MATERIAL VOL Final PH// N TUBING // N (replaced) DUPLICATE: SAMPLE PRESERVATION SAMPLE PRESERVATION (including wet ice) <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>													
WELL CAPACITY (Gal./BS /PE/POID): 0.1/5 = 0.02; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 5/8 = 0 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Sp SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLER(S) SIGNATURE(S): SAMPLER(S) SIGNATURE(S): PUMP OR TUBING PUMP OR TUBING DEPTH IN WELL (feet): O TUBING FIELD DECONTAMINATION: PUMP N TUBING SAMPLE CONTAMINATION: PUMP N TUBING // N (replaced) DUPLICATE: SAMPLE # MATERIAL VOL Final PH// N TUBING // N (replaced) DUPLICATE: SAMPLE PRESERVATION SAMPLE PRESERVATION (including wet ice) <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>													
WELL CAPACITY (Gal./BS /PE/POID): 0.1/5 = 0.02; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 1/2 = 0.00; 5/8 = 0 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Sp SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLER(S) SIGNATURE(S): SAMPLER(S) SIGNATURE(S): PUMP OR TUBING PUMP OR TUBING DEPTH IN WELL (feet): O TUBING FIELD DECONTAMINATION: PUMP N TUBING SAMPLE CONTAMINATION: PUMP N TUBING // N (replaced) DUPLICATE: SAMPLE # MATERIAL VOL Final PH// N TUBING // N (replaced) DUPLICATE: SAMPLE PRESERVATION SAMPLE PRESERVATION (including wet ice) <td< td=""><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	_												
SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLER(S): SAMPLING INITIATED AT: SAMPLING ENDED AT: 14 PUMP OR TUBING DEPTH IN WELL (feet): 00 TUBING MATERIAL CODE: FIELD-FILTERED: Y Y FILTER SIZE: SAMPLING ENDED AT: 14 FIELD DECONTAMINATION: PUMP N TUBING Y N (replaced) DUPLICATE: Y Y SAMPLE # MATERIAL VOL Y N (replaced) INTENDED SAMPLING EQUIPMENT FIC SAMPLE # MATERIAL VOL Y N (replaced) INTENDED SAMPLING EQUIPMENT SAMPLING EQUIPMENT SAMPLING EQUIPMENT SAMPLE # MATERIAL VOL WE PRESERVATIVE TOTAL VOL Final PH/ MATHOD CODE (mL p	WELL CAN	PACITY (Gallor NSIDE DIA. CA	ns Per Foot): 0 PACITY (Gal./F	Ft.): 1/8" = 0.0	006; 3/16	" = 0.0014	1/4" = 0.002	6; 5/16	s" = 0.00	04; 3/8" = 0	.006; 1/.	2" = 0.010;	12" = 5.88 5/8" = 0.016
SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLING INITIATED AT: 1405 SAMPLING ENDED AT: 1405 PUMP OR TUBING DEPTH IN WELL (feet): 00 TUBING MATERIAL CODE: FIELD-FILTERED: Y Filtration Equipment Type: FILTER SIZE: FIELD DECONTAMINATION: PUMP N TUBING DUPLICATE: Y SAMPLE CONTAMINATION: PUMP N TUBING N (replaced) DUPLICATE: Y SAMPLE # MATERIAL VOLUME PRESERVATIVE TOTAL VOL Final PH/ METHOD SAMPLING EQUIPMENT SAMPLING FLO (mL p	PURGING	EQUIPMENT	CODES: B	= Bailer; B	P = Bladder				ble Pum	p; 	enstaltic Pul	mp; 0-0	(apecity)
PUMP OR TUBING DEPTH IN WELL (feet): TUBING MATERIAL CODE: FILLO-FILTERED: Y FILTER SIZE: FIELD DECONTAMINATION: PUMP N TUBING Y N (replaced) DUPLICATE: Y SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION (including wet ice) INTENDED ANALYSIS AND/OR SAMPLING EQUIPMENT SAMPLING FLO (mL p				5) SIGNAT	JRE(S):			SAMPLING	T: 1405	SAMPLIN ENDED #	NG AT: 1425
SAMPLE # MATERIAL VOLUME PRESErvative TOTAL VOL Final pH/ FIDE (c) DUPLICATE: Y	PUMP OR	TUBING	1		TUBING		- C (P 1000 -			ILTERED: Y	(N)	2	
SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION (including wet ice) INTENDED SAMPLING SAMPLING SAMPLING SAMPLING SAMPLING CODE (including wet ice) SAMPLE # MATERIAL VOLUME PRESERVATIVE TOTAL VOL Final pH/ ANALYSIS AND/OR SAMPLING SAMPLING CODE (mL p	-		14 -	A	WATER ALC		G Y N (r					6)	2
SAMPLE # MATERIAL VOLUME PRESERVATIVE TOTAL VOL Final PH/ METHOD CODE (mL p					SAMPL	E PRESER	RVATION (includ	ing wet ice))				SAMPLE PUMP
	SAMPLE	#	MATERIAL										FLOW RATE (mL per minute
	_											_	
	_												
	1 I	1											
REMARKS: Firel devolu 1 93.67	REMARKS			le al	1 93	17							
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polyethylene;	MATERIA		AG = Amber	Glass; CG =	Clear Glass;	HDPE	= High Density	Polyethylen	ne; L	LDPE = Low De	ensity Polye	thylene; PF	e = Polypropylene
S = Silicone; T = Teflon; O = Other (Specify) SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)	SAMPLIN	G EQUIPMENT	CODES: A	APP = After (Th	rough) Perist	taltic Pump							Pump;

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THRE

NAME	Linie	Blue	+		LC	CATION	Re. d. &	ield,	AR		
VELL NO:	MW-	105 S		SAMPLE	ID: MI	1-105	8		DATE:	1-19-2	4
	1.4					SING DA					
WELL DIAMETER	R (inches):	TUBING	ER (inches):	1 TOTAL V DEPTH (feet):		STATIC D TO WATE	R (feet): 28,9	6 0	JRGE PUMP TY R BAILER:	PE BP
(only fill out	t if applicable)		= 1		feet -		feet) X	WELL CAPACI	gallons/f	oot = 1/1	A gallons
EQUIPMEN (only fill out	NT VOLUME PU t if applicable)	IRGE: 1 EQUI	PMENT VOL.		UME + (TUE		TY X TU	JBING LENGTH) feet)			= N/A gallons
PUMP OR IN WELL (f		13,5		EEN INTERV		PURGIN		PURGING ENDED AT:	1130	TOTAL VOI	
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	0.69	0.69		29.92	5.83	28.01	222	4.84	104	3.8	Clear
126	0.14	24		29.13	5.82	28.29	220	4.41	1001	3.1	
121	0.14	+	1	29.96	5.82	23.49	219	4,30	109	4.9	2
136	0.14	1:11		29.97	3.81	28.83	218	4.07	110	4.8	
							-			-	
	1	1.0		1		1		1			
						-			1		1
TUBING IN PURGING	PACITY (Gallon NSIDE DIA. CAP EQUIPMENT C	CODES: B	<u>t.): 1/8" = 0.0</u> = Bailer; E	1" = 0.04; 0006: 3/16' 3P = Bladder I SAMPLER(S)	SAMP	1/4" = 0.002 SP = Electric	6; 5/16" = 0 Submersible Pu	.004; 3/8" = 0	5" = 1.02; 1.006; 1 eristaltic Pu	6" = 1.47; /2" = 0.010; imp; O = C	
	EQUIPMENT C	CODES: B	t.): 1/8" = 0.0 = Bailer; E	SAMPLER(S)	= 0.0014; Pump; E SAMP SIGNATUR	1/4" = 0.002 SP = Electric	6; 5/16" = 0 Submersible Pu	.004; 3/8" = 0 mp; PP = Pe SAMPLING INITIATED A	1.006; 1 eristaltic Pu T: 1137	/2" = 0.010; imp; 0 = 0 SAMPLIN ENDED 4	5/8" = 0.016 other (Specify) AG AT:) 4(9
	EQUIPMENT C	CODES: B	t.): 1/8" = 0.0 = Bailer; E	SAMPLER(S)	SAMP	1/4" = 0.002 SP = Electric LING DA E(S):	6; 5/16" = 0 Submersible Pu ATA FIELD	.004; 3/8" = 0 mp; PP = Pe SAMPLING	1.006; 1 eristaltic Pu T: 1137 (N)	/2" = 0.010; imp; O = C SAMPLIN ENDED A FILTER S	5/8" = 0.016 other (Specify) IG AT:) L(9
SAMPLED SURGING SAMPLED SLC PUMP OR DEPTH IN	EQUIPMENT C BY (PRINT)/A UBING	PACITY (Gal./F CODES: B FFILIATION:	t.): 1/8" = 0.0 = Bailer; E	SAMPLER(S)	SAMP	1/4" = 0.002 SP = Electric LING DA E(S):	6; 5/16" = 0 Submersible Pu ATA FIELD	.004; 3/8" = 0 mp; PP = Pe SAMPLING INITIATED A D-FILTERED: Y	1.006; 1 eristaltic Pu T: 1137 pe: N	/2" = 0.010; imp; 0 = 0 SAMPLIN ENDED 4	5/8" = 0.016 other (Specify) IG AT:) L(9
TUBING IN PURGING SAMPLED JLC PUMP OR DEPTH IN FIELD DEC	BY (PRINT) / A TUBING WELL (feet):	ACITY (Gal./F CODES: B SEFILIATION: 43.5 DN: PUMI	L): 1/8" = 0.0 = Bailer; E	SAMPLER(S) STUBING MATERIAL C	e 0.0014; Pump; E SAMP SIGNATUR b (b) ODE: TUBING	1/4" = 0.002 SP = Electric LING DA E(S):	6; 5/16" = 0 Submersible Pu TA FIELD Filtrat eplaced) ing wet ice)	004; 3/8" = 0 mp; PP = Pe SAMPLING INITIATED A D-FILTERED: Y on Equipment Ty DUPLICATE: INTEND	1.006; 1 eristaltic Pu T: 1137 pe: Y ED	12" = 0.010; 10" = 0 = 0 SAMPLIN FILTER S SAMPLING	5/8" = 0.016 ther (Specify) NG AT:) Д(9 SIZE:µm SAMPLE PUMF
TUBING IN PURGING SAMPLED JLC PUMP OR DEPTH IN FIELD DEC	IBY (PRINT) / A TUBING WELL (feet):	ACITY (Gal./F CODES: B SEFILIATION: 43.5 DN: PUMI	E.): 1/8" = 0.0 = Bailer; E P Ø N TION	SAMPLER(S) STUBING MATERIAL C	e 0.0014; Pump; E SAMP SIGNATUR SIGNATUR D ODE: TUBING E PRESERV. TVE	1/4" = 0.002 SP = Electric LING DA E(S):	6; 5/16" = 0 Submersible Pu TA FIELD Filtrat eplaced) ing wet ice) Final pH/	004; 3/8" = 0 mp; PP = Pe SAMPLING INITIATED A D-FILTERED: Y on Equipment Ty DUPLICATE: INTEND	T: 113 pe: N Y ED ND/OR	/2" = 0.010; ump; O = C SAMPLIN ENDED A FILTER S	5/8" = 0.016 other (Specify) IG AT:) L(9
SAMPLED SAMPLED SUC PUMP OR DEPTH IN FIELD DEC SAMPLE	INSIDE DIA. CAP EQUIPMENT C DBY (PRINT) / A TUBING WELL (feet): CONTAMINATION PLE CONTAINE #	ACITY (Gal./F CODES: B FFILIATION: H3.5 DN: PUMI ER SPECIFICA MATERIAL	L): 1/8" = 0.0 = Bailer; E P Ø N TION	1006; 3/16 3P = Bladder SAMPLER(S) AM TUBING MATERIAL C SAMPLE PRESERVAT	e 0.0014; Pump; E SAMP SIGNATUR SIGNATUR D ODE: TUBING E PRESERV. TVE	1/4" = 0.002 SP = Electric E(S): N (re ATION (includ TOTAL VOL	6; 5/16" = 0 Submersible Pu TA FIELD Filtrat eplaced) ing wet ice) Final pH/	.004; 3/8" = 0 mp; PP = Pe SAMPLING INITIATED A SFILTERED: Y DOFLICATE: INTEND ANALYSIS A	T: 113 pe: N Y ED ND/OR	12" = 0.010; Imp; O = C SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 Other (Specify) NG AT:) μ(9 SIZE:μm SAMPLE PUMI FLOW RATE
SAMPLED SAMPLED SUC PUMP OR DEPTH IN FIELD DEC SAMPLE	INSIDE DIA. CAP EQUIPMENT C DBY (PRINT) / A TUBING WELL (feet): CONTAMINATION PLE CONTAINE #	ACITY (Gal./F CODES: B FFILIATION: H3.5 DN: PUMI ER SPECIFICA MATERIAL	L): 1/8" = 0.0 = Bailer; E P Ø N TION	1006; 3/16 3P = Bladder SAMPLER(S) AM TUBING MATERIAL C SAMPLE PRESERVAT	e 0.0014; Pump; E SAMP SIGNATUR SIGNATUR D ODE: TUBING E PRESERV. TVE	1/4" = 0.002 SP = Electric E(S): N (re ATION (includ TOTAL VOL	6; 5/16" = 0 Submersible Pu TA FIELD Filtrat eplaced) ing wet ice) Final pH/	.004; 3/8" = 0 mp; PP = Pe SAMPLING INITIATED A SFILTERED: Y DOFLICATE: INTEND ANALYSIS A	T: 113 pe: N Y ED ND/OR	12" = 0.010; Imp; O = C SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 Other (Specify) NG AT:) μ(9 SIZE:μm SAMPLE PUMI FLOW RATE
SAMPLED SAMPLED SUC PUMP OR DEPTH IN FIELD DEC SAMPLE	INSIDE DIA. CAP EQUIPMENT C DBY (PRINT) / A TUBING WELL (feet): CONTAMINATION PLE CONTAINE #	ACITY (Gal./F CODES: B FFILIATION: H3.5 DN: PUMI ER SPECIFICA MATERIAL	L): 1/8" = 0.0 = Bailer; E P Ø N TION	1006; 3/16 3P = Bladder SAMPLER(S) AM TUBING MATERIAL C SAMPLE PRESERVAT	e 0.0014; Pump; E SAMP SIGNATUR SIGNATUR D ODE: TUBING E PRESERV. TVE	1/4" = 0.002 SP = Electric E(S): N (re ATION (includ TOTAL VOL	6; 5/16" = 0 Submersible Pu TA FIELD Filtrat eplaced) ing wet ice) Final pH/	.004; 3/8" = 0 mp; PP = Pe SAMPLING INITIATED A SFILTERED: Y DOFLICATE: INTEND ANALYSIS A	T: 113 pe: N Y ED ND/OR	12" = 0.010; Imp; O = C SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 Other (Specify) NG AT:) μ(9 SIZE:μm SAMPLE PUMI FLOW RATE
SAMPLED SAMPLED SUC PUMP OR DEPTH IN FIELD DEC SAMPLE	INSIDE DIA. CAP EQUIPMENT C IBY (PRINT) / A TUBING WELL (feet): CONTAMINATIC PLE CONTAINERS	ACITY (Gal./F CODES: B FFILIATION: H3.5 DN: PUMI ER SPECIFICA MATERIAL	L): 1/8" = 0.0 = Bailer; E P O N TION VOLUME	1006; 3/16 SAMPLER(S) TUBING MATERIAL C SAMPLE PRESERVAT USED		1/4" = 0.002 SP = Electric LING DA E(S): N (red ATION (includ TOTAL VOL ED IN FIELD (6; 5/16" = 0 Submersible Pu TA FIELC Filtrat eplaced) ing wet ice) Final pH/ Temp	004; 3/8" = 0 mp; PP = Pe SAMPLING INITIATED A D-FILTERED: Y on Equipment Ty DUPLICATE: INTEND ANALYSIS A METHO	T: 113 pe: N Y ED ND/OR	12" = 0.010; Imp; O = C SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) NG AT:) μ(9 SIZE:μm SAMPLE PUMF FLOW RATE
TUBING IN PURGING SAMPLED JLC PUMP OR DEPTH IN FIELD DEG SAMPLE ID CODE	INSIDE DIA. CAP EQUIPMENT C IBY (PRINT) / A TUBING WELL (feet): CONTAMINATIC PLE CONTAINERS	ACITY (Gal./F CODES: B FFILIATION: H3.5 DN: PUMI ER SPECIFICA MATERIAL	L): 1/8" = 0.0 = Bailer; E P O N TION VOLUME	1006; 3/16 3P = Bladder SAMPLER(S) AM TUBING MATERIAL C SAMPLE PRESERVAT		1/4" = 0.002 SP = Electric LING DA E(S): N (red ATION (includ TOTAL VOL ED IN FIELD (6; 5/16" = 0 Submersible Pu ATA FIELD Filtrat eplaced) ing wet ice) Final pH/ Temp Imp Imp Imp Imp Imp Imp Imp Imp	004; 3/8" = 0 mp; PP = Pe SAMPLING INITIATED A D-FILTERED: Y on Equipment Ty DUPLICATE: INTEND ANALYSIS A METHO	T: 1137 pe: Y ED ND/OR	12" = 0.010; Imp; O = O SAMPLING EQUIPMENT CODE	5/8" = 0.016 Other (Specify) NG AT:) μ(9 SIZE:μm SAMPLE PUMI FLOW RATE

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

IAME: V	Jh. Yo	Gluff			SI	CATION:	2 edfiel	AR, AR			
VELL NO:	-105 D	- 18:00		SAMPLE		N V			DATE: ()	-19.24	1
NW	-1021			-		SING DA	TA				
VELL	(inches): 2	TUBING DIAMETI	ار ER (inches):	H TOTAL W DEPTH (feet):		STATIC DI TO WATE	EPTH 79	86 OR	BAILER:	PE P
VELL VOL	UME PURGE: if applicable)		= (feet -		OWATER) X feet) X TY X TU	BING LENGTH)	gallons/fo		A gallons
OUIPMEN	t if applicable)	RGE: 1 EQUI	PMENT VOL.		illons + (ns/foot X	feet)		gallons	= MA gallons
PUMP OR		7.00	WELL SCRE	EEN INTERVA					1020	TOTAL VOL PURGED (g	UME 1,25
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP, (^o C)	COND. (circle units) μmhos/cm <u>or</u> μ\$ <u>/</u> cm	DISSOLVED OXYGEN (circle units) MOU- or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
610	0.90	0.90		\$3.65	7.40	20.02	547	8.01	-111	9.8	Clear
015	0,175	1.075		84.10	7.49	20,47	550	7.60	-105	10.0	
020	0.175	1.25	1	84.71	7.50	20.31	556	7.30	-109	9.6	,
	PACITY (Gallon NSIDE DIA. CAF EQUIPMENT C BY (PRINT) / A C / KP	STACITY (Gal./F	(t.): 1/8" = 0.0	1" = 0.04; 1006; 3/16 BP = Bladder I SAMPLER(S) TUBING	SAMF	1/4" = 0.002 SP = Electric PLING D/ E(S):	26; 5/16" = 0. Submersible Pu ATA FIELD	004: 3/8" = 0 mp; PP = P SAMPLING INITIATED A -FILTERED: Y	T: 108	SAMPLIN	AT: 1040
	BY (PRINT) / A C / KP TUBING WELL (feet):	SODES: B	0	SAMPLER(S)	= 0.0014; Pump; I SAMF SIGNATUR Colles	1/4" = 0.002 ESP = Electric PLING DA E(S):	5/16" = 0. Submersible Pur ATA FIELD Filtrati	004; 3/8" = 0 mp; PP = P SAMPLING INITIATED A -FILTERED: Y on Equipment Ty	0.006: 1/ eristaltic Pu T: 108 ype:	2" = 0.010; mp; 0 = 0 SAMPLIN ENDED A FILTER S	5/8" = 0.016 ther (Specify) IG AT: 1040
SAMPLED SAMPLED SL PUMP OR DEPTH IN FIELD DE	BY (PRINT) / A C / K / C TUBING WELL (feet): CONTAMINATIO	ACITY (Gal./F CODES: B AFFILIATION: S S OD: PUM	0 P () N	SAMPLER(S)	2 = 0.0014; Pump; I SAMF SIGNATUR SIGNATUR CODE: TUBING	1/4" = 0.002 SP = Electric PLING DA E(S): 2 ^N P (N (r	5/16" = 0. Submersible Pur ATA FIELD Filtrati eplaced)	004; 3/8" = 0 mp; PP = P SAMPLING INITIATED A -FILTERED: Y on Equipment Ty DUPLICATE	0.006; 1/ eristaltic Pu T: 1000 T: 1000 Vpe: Y	2" = 0.010; mp; O = O SAMPLIN ENDED A FILTER S	5/8" = 0.016 ther (Specify)
SAMPLED SAMPLED SUMP OR DEPTH IN FIELD DE	BY (PRINT) / A C / KP TUBING WELL (feet):	ACITY (Gal./F CODES: B AFFILIATION: S S OD: PUM	0 P () N	SAMPLER(S)	2 = 0.0014; 2 = 0.0014; 2 = 0.0014; 3 = 0	1/4" = 0.002 ESP = Electric PLING DA E(S):	5/16" = 0. Submersible Pur ATA FIELD Filtrati eplaced) ling wet ice) Final pH/	004; 3/8" = 0 mp; PP = P SAMPLING INITIATED A -FILTERED: Y on Equipment Ty	AT: 102 ype: Y DED AND/OR	2" = 0.010; mp; 0 = 0 SAMPLIN ENDED A FILTER S	5/8" = 0.016 ther (Specify) NG AT: 0 4 0 SIZE:µm SAMPLE PUN FLOW RATE
SAMPLED SAMPLED SUMP OR DEPTH IN FIELD DEC SAM	BY (PRINT) / A C / K / C TUBING WELL (feet): CONTAMINATION PLE CONTAINE #	ACITY (Gal./F CODES: B SEFILIATION: S S ON: PUM ER SPECIFICA MATERIAL	it.): 1/8" = 0.0 = Bailer: E O Image: second	1006; 3/16 SAMPLER(S) TUBING MATERIAL C SAMPLE PRESERVAT	2 = 0.0014; 2 = 0.0014; 2 = 0.0014; 3 = 0	1/4" = 0.002 SP = Electric PLING DA E(S): 2 () N (r ATION (includ TOTAL VOL	5/16" = 0. Submersible Pur ATA FIELD Filtrati eplaced) ling wet ice) Final pH/	004; 3/8" = 0 mp; PP = P SAMPLING INITIATED A -FILTERED: Y on Equipment Ty DUPLICATE INTEND ANALYSIS /	AT: 102 ype: Y DED AND/OR	2" = 0.010; mp; 0 = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) NG AT: 0 4 0 SIZE:µm SAMPLE PUN FLOW RATE
SAMPLED SAMPLED SUMP OR DEPTH IN FIELD DEC SAM	BY (PRINT) / A C / K / C TUBING WELL (feet): CONTAMINATION PLE CONTAINE #	ACITY (Gal./F CODES: B SEFILIATION: S S ON: PUM ER SPECIFICA MATERIAL	it.): 1/8" = 0.0 = Bailer: E O Image: second	1006; 3/16 SAMPLER(S) TUBING MATERIAL C SAMPLE PRESERVAT	2 = 0.0014; 2 = 0.0014; 2 = 0.0014; 3 = 0	1/4" = 0.002 SP = Electric PLING DA E(S): 2 () N (r ATION (includ TOTAL VOL	5/16" = 0. Submersible Pur ATA FIELD Filtrati eplaced) ling wet ice) Final pH/	004; 3/8" = 0 mp; PP = P SAMPLING INITIATED A -FILTERED: Y on Equipment Ty DUPLICATE INTEND ANALYSIS /	AT: 102 ype: Y DED AND/OR	2" = 0.010; mp; 0 = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) NG AT: 0 M 0 SIZE:µm SAMPLE PUN FLOW RATE
SAMPLED SAMPLED SUMP OR DEPTH IN FIELD DEC SAMPLE	BY (PRINT) / A C / K / C TUBING WELL (feet): CONTAMINATION PLE CONTAINE #	ACITY (Gal./F CODES: B SEFILIATION: S S ON: PUM ER SPECIFICA MATERIAL	it.): 1/8" = 0.0 = Bailer: E O Image: second	1006; 3/16 SAMPLER(S) TUBING MATERIAL C SAMPLE PRESERVAT	2 = 0.0014; 2 = 0.0014; 2 = 0.0014; 3 = 0	1/4" = 0.002 SP = Electric PLING DA E(S): 2 () N (r ATION (includ TOTAL VOL	5/16" = 0. Submersible Pur ATA FIELD Filtrati eplaced) ling wet ice) Final pH/	004; 3/8" = 0 mp; PP = P SAMPLING INITIATED A -FILTERED: Y on Equipment Ty DUPLICATE INTEND ANALYSIS /	AT: 102 ype: Y DED AND/OR	2" = 0.010; mp; 0 = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) NG AT: 0 4 0 SIZE:µm SAMPLE PUN FLOW RATE
SAMPLED SAMPLED SUMP OR DEPTH IN FIELD DEC SAMPLE	BY (PRINT) / A C / K / C TUBING WELL (feet): CONTAMINATION PLE CONTAINE #	ACITY (Gal./F CODES: B SEFILIATION: S S ON: PUM ER SPECIFICA MATERIAL	it.): 1/8" = 0.0 = Bailer: E O Image: second	1006; 3/16 SAMPLER(S) TUBING MATERIAL C SAMPLE PRESERVAT	2 = 0.0014; 2 = 0.0014; 2 = 0.0014; 3 = 0	1/4" = 0.002 SP = Electric PLING DA E(S): 2 () N (r ATION (includ TOTAL VOL	5/16" = 0. Submersible Pur ATA FIELD Filtrati eplaced) ling wet ice) Final pH/	004; 3/8" = 0 mp; PP = P SAMPLING INITIATED A -FILTERED: Y on Equipment Ty DUPLICATE INTEND ANALYSIS /	AT: 102 ype: Y DED AND/OR	2" = 0.010; mp; 0 = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) NG AT: 0 M 0 SIZE:µm SAMPLE PUN FLOW RATE
SAMPLED SAMPLED SUMP OR DEPTH IN FIELD DEC SAM SAMPLE ID CODE	EQUIPMENT OF CONTAINERS	ACITY (Gal./F CODES: B SEFILIATION: S S ON: PUM ER SPECIFICA MATERIAL	it.): 1/8" = 0.0 = Bailer: E O Image: second	1006; 3/16 SAMPLER(S) TUBING MATERIAL C SAMPLE PRESERVAT USED	e 0.0014: Pump; I SAMF SIGNATUR SIGNATUR ODE: TUBING PRESERV TVE ADD	1/4" = 0.002 SP = Electric PLING DA E(S): 2 () N (r ATION (includ TOTAL VOL	5/16" = 0. Submersible Pur ATA FIELD Filtrati eplaced) (mL) Final pH/ Temp	004: 3/8" = 0 mp: PP = P SAMPLING INITIATED A -FILTERED: Y on Equipment Ty DUPLICATE INTEND ANALYSIS / METHO	AT: 100 YPE: Y DED AND/OR	2" = 0.010; mp; 0 = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) NG AT: 0 4 0 SIZE:µm SAMPLE PUN FLOW RATE
TUBING IN PURGING SAMPLED JL PUMP OR DEPTH IN FIELD DEC SAM SAMPLE ID CODE	BY (PRINT) / A C / / / / / / / / / / / / / / / / / / /	ACITY (Gal./F CODES: B SEFILIATION: S S ON: PUM ER SPECIFICA MATERIAL	a);b(a);	1006; 3/16 SAMPLER(S) TUBING MATERIAL C SAMPLE PRESERVAT USED	e 0.0014: Pump: II SAMF SIGNATUR SIGNATUR CODE: TUBING PRESERV TVE ADD ADD ADD ADD ADD ADD ADD ADD	1/4" = 0.002 ESP = Electric PLING DA E(S): (V) N (r ATION (includ TOTAL VOL ED IN FIELD (5/16" = 0. Submersible Pur ATA FIELD Filtrati eplaced) ling wet ice) Final pH/	004: 3/8" = 0 mp: PP = P SAMPLING INITIATED A -FILTERED: Y on Equipment Ty DUPLICATE INTEND ANALYSIS / METHO	D.006: 1/ eristaltic Pu T: 104 ype: Y DED AND/OR DD	2" = 0.010; mp; O = O SAMPLIN FILTER S N SAMPLING EQUIPMENT CODE	5/8" = 0.016 ther (Specify) IG AT: 1040

Final depth: 86.43 ft

SITE NAME:	Wh'y	× 131	1.56		8		Redi	ield.	AR		
	MLS-	106 5	-	SAMPLE		14-106				1-20 -	24
					PUR	GING DA	TA				
WELL DIAMETER	R (inches): ð		TER (inches):	14 TOTAL	(feet):		STATIC TO WAT	ER (feet): 17,		RGE PUMP T 8 BAILER:	BP
(only fill ou	t if applicable)		= (feet -		feet) X		gallons/fo	ELL VOLUME	A gallons
	t if applicable)				allons + (ons/foot X	feet) +	gallons	= MA gallons
PUMP OR IN WELL (f	TUBING DEPT	H GO	WELL SCR DEPTH:	REEN INTERV feet to		PURGIN		PURGING ENDED AT:		TOTAL VOI PURGED (g	LUME 1.3
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 <u>or</u> μS/cm	DISSOLVED OXYGEN (circle units) mg/L <u>or</u> % saturation	Redox (mV)	Turbidity (NTU)	COLOR /
1150	1.0	1.0		13.76	4.12	26.21	1,700	0. 92	332	4.3	Clear
1135		L		13.81	4.12	26.26	1,700	0,81	336	2.0	1
200	ą	1.3		13,94	4.12	26.15	1,670	0.81	342	0,0	,
								1.200			
						-					1
TUBING IN	PACITY (Gallon SIDE DIA. CAI	PACITY (Gal./	Ft.): 1/8" = 0.	.0006; 3/16		1/4" = 0.002	26: 5/16" = 0	.004: 3/8" = 0		6" = 1.47; 2" = 0.010;	12" = 5.88 5/8" = 0.016
PURGING	EQUIPMENT C	ODES: B	= Bailer;	BP = Bladder		PLING D		imp; PP = P	eristaltic Pun	np; 0-0	ther (Specify)
SAMPLED	BY (PRINT) / A	FFILIATION:		SAMPLER(S) SIGNATU			SAMPLING INITIATED A	T:]] 00	SAMPLIN ENDED A	1G AT: 1237
PUMP OR DEPTH IN		18.00		TUBING MATERIAL C	C	819070		D-FILTERED: Y	N	FILTER S	
FIELD DEC	CONTAMINATIO	ON: PUM	IP 🕼 N	1	TUBING	9 N (r	eplaced)	DUPLICATE:	(\mathbf{y})	(N	
SAM	PLE CONTAINE	R SPECIFICA	TION	SAMPLI	E PRESER	ATION (includ				SAMPLING EQUIPMENT	SAMPLE PUMP
SAMPLE	#	MATERIAL	VOLUME	PRESERVAT USED		TOTAL VOL DED IN FIELD (Final pH mL) Temp	METHO		CODE	(mL per minute)
ID CODE	CONTAINERS	CODE									
	CONTAINERS	CODE									
	CONTAINERS	CODE									
	CONTAINERS	CODE									
		CODE	take	3~				Final	dep	ith : 1	4.08
ID CODE	s: Vup	AG = Amber		2 = Clear Glass; O = Other (= High Density	Polyethylene;	Final LDPE = Low De	dep ensity Polyet	th ! hylene; PP	4.08 = Polypropylene;

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

SITE NAME: Mithe SITE Location: Redicting and anti- reduction: Mithe Stresses WELL NO: Mither and big and
PURCING DATA WELL DIAMETER (inches): TUBING DIAMETER (inches): TOTAL WATER DEPTH (feet): STATIC DEPTH TO WATER (feet): PURGE PUMP TYPE TO WATER (feet): PURGE PUMP TYPE OR BAILER: WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY PURGE PUMP TYPE OR BAILER: OR BAILER: OR WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY gallons/foot = //// /// gallons/foot = //// /// gallons/foot = /// /// gallons = /// // gallons = /// /// gallons = /// // gallons = /// /// gallons = /// // gallons = /// // // // // // // // // // // //
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 = /// EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME COMP OR TUBING DEPTH IN WELL (feet): WELL SCREEN INTERVAL PURGING PURGING TOTAL VOLUME N WELL (feet): CUMUL. DEPTH: feet to feet INITIATED AT: JSSOLVED OXYGEN Turbidity COULUME TIME VOLUME CUMUL. PURGE DEPTH pH TEMP. COND. DISSOLVED OXYGEN COULUNE COULUME COULUME </th
(only fill out if applicable) = (feet - feet) X gallons/foot = //A 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 = //A PUMP OR TUBING DEPTH IN WELL (feet): WELL SCREEN INTERVAL DEPTH: PURGING feet to feet PURGING INITIATED AT: 125 C PURGING ENDED AT: TOTAL VOLUME PURGED (gallons): TIME VOLUME PURGED CUMUL. VOLUME PURGED PURGE RATE DEPTH TO WATER pH (standard (standard) (ord) TEMP. (°C) COND. (circle units) µmhos/cm DISSOLVED OXYGEN (circle units) Redox (mV) Turbidity (NTU) COU (des
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = M Go TOTAL VOLUME PURGED DEPTH: feet to feet PURGING INITIATED AT: JSSO PURGED OXYGEN PURGED (gallons): I TIME VOLUME PURGED PURGE DEPTH pH TEMP. COND. OXYGEN Redox Turbidity OE TIME PURGED PURGED RATE WATER units) (°C) µmhos/cm foot(or foot(or foot(or foot(or foot(or foot(or foot(or foot(or foot(or
PUMP OR TUBING DEPTH IN WELL (feet): WELL SCREEN INTERVAL DEPTH: PURGING feet to PURGING INITIATED AT: PURGING ENDED AT: TOTAL VOLUME PURGED (gallons): TIME VOLUME PURGED CUMUL. VOLUME PURGED PURGE RATE DEPTH TO WATER DEPTH (standard water PUR PUR (circle units) (°C) DISSOLVED (circle units) DISSOLVED OXYGEN (circle units) Turbidity (mV) COL (mV) COL (mV) COL (mV)
TIME VOLUME VOLUME PURGED PURGED RATE WATER WATER (°C) white (°C) where (°C)
(gallons) (gpm) (feet) <u>or</u> we saturation
1720 1.45 1.45 49.85 10.57 24.54 HII 6.62 -49 4.9 Up
1325 49.73 10.63 24.77 409 6.31 -48 5.1 5
1730 1.66 50.35 10.59 24.95 409 6.01 -49 4.6 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" = 5.86 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" = 0.01 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Content of the content of th
SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLING INITIATED AT: 30 SAMPLING ENDED AT: 35
PUMP OR TUBING DEPTH IN WELL (feet): TUBING MATERIAL CODE: FIELD-FILTERED: Y N FILTER SIZE:
FIELD DECONTAMINATION: PUMP CY N TUBING N (replaced) DUPLICATE: Y
SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION (including wet ice) INTENDED SAMPLING SAMPLE SAMPLE # MATERIAL VOLUME PRESERVATIVE TOTAL VOL Final pH/ ANALYSIS AND/OR EQUIPMENT FLOW I SAMPLE # MATERIAL VOLUME PRESERVATIVE TOTAL VOL Final pH/ METHOD CODE (mL per reline)
ID CODE CONTAINERS CODE VOLOME USED ADDED IN FIELD (mL) Temp METHOD CODE (mE per
Final depth: 53.42
MATERIAL CODES AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polyprop S = Silicone; T = Teflon; O = Other (Specify)

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

WELL NO: AVAIL 10 7 (1) SAMPLE ID: PURCING DATA PURCING DATA WELL DAMETER (Inclust): TUBING DAMETER (Inclust): TUBING DAMETER (Inclust): TOTAL WATER TOWARD (Inclust): TOTAL WATER TOWARD (Inclust): TOWARD (Inclust): PURCE PURCING PURCE INCLUSTON: PURCE PURCING PURCE INCLUSTON: PURCE PURCING: PURCE PURCE PURCING: PURCE PURCE PURCING: PURCE PURC	SITE NAME:	Wh?	ine Blu	64			ITE OCATION:	Redf	ield A	R		
PURGING DATA STATE GENERAL DATA TOTAL WATER (GeNE) STATE GENERAL DURCE PURGE FUEL VOLUME - (TOTAL WELL DEPTH - STATE CEPTH TO WATER (GeNE): A), SS DURCE PURGE: VELL VOLUME - (TOTAL WELL DEPTH - STATE CEPTH TO WATER (GeNE): A), SS DURCE PURGE: VELL VOLUME - (TOTAL WELL DEPTH - STATE CEPTH TO WATER (GeNE): A), SS DURCE PURGE: VELL VOLUME - (TOTAL WELL DEPTH - STATE CEPTH TO WATER (GeNE): A), SS DURCE PURGE: VELL VOLUME - (TUENC CAPACITY X TUBING LENGTH) - ROW CELL VOLUME (GENE): A), AND CERT (GENE) WELL VOLUME FORCE: VELL SCREEN INTERVAL gatomatox gatomatox gatomatox gatomatox gatomatox COND. VOLUME VOLUME VOLUME FURGE DEPTH: method to for the PURGED on TOTAL VOLUME (GENE) TOTAL VOLUME FURGED ON TOTAL VOLUME (GENE) VOLUME VOLUME VOLUME (GENE INTERVAL DEPTH: method to for a visb (GENE) TOTAL VOLUME (GENE INTERVAL PURGED DIPTAL VOLE PURGED ON TOTAL VOLE (GENE INTERVAL VOLUME VOLUME VOLUME (GENE INTERVAL PURGED DIPTAL VOLE (GENE INTERVAL OTAL VOLUME (GENE INTERVAL OTAL VOLUME (GENE INTERVAL VOLUME (GENE INTERVAL VOLUME (GENE INTERVAL VOLUME (GEN					SAMPLE	ID: MA	W-107		P	DATE:	33.34	
Diskattere (nohes) Diskattere (nohes) Diskattere (nohes) To WATER (noi: 12) Diskattere (nohes) All Depth (not) (mult volume (not) (mult applicable) ************************************			• • • •					TA				
(and if applicable)	DIAMETEI	R (inches):	DIAMET	ER (inches):	The DEPTH	(feet):		TO WAT	ER (feet): 21.	25 OR		
	(only fill ou	nt if applicable)		= (feet-		feet)	<	gallons/fo		A gallons
PINE OR TUBING DEPTH WELL SCREEN INTERVAL DEPTH: PURGING feet PURGING INTERTEXAL DEPTH: PURGING feet PURGING INTERTEXAL PURGING ENDED AT: PURGING FURD (and and gradients) TOTAL VOLUME PURGE (and and gradients) PURGE (and and gradients) PURGE (and and gradients) Total VOLUME PURGE (and and gradients) PURGE (and and gradients) PURGE (and and gradients) Total VOLUME PURGE (and and gradients) PURGE (and and gradients) PURGE (and and gradients) Total VOLUME (and and gradients) PURGE (and and gradients) PURGE (and and gradients) Total VOLUME (and and gradients) PURCE (and and gradients) PURCE (and and gradients) Total VOLUME (and and gradients) PURCE (and and gradien	(only fill ou	it if applicable)							feet) +	gallons	= #//×gallons
TIME VOLUME (galons) CUMUL (galons) PURGE (galons) PURGE (galons) </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>ENDED AT:</td> <td></td> <td></td> <td></td>									ENDED AT:			
NGO 010 0.10 <	TIME	PURGED	VOLUME PURGED	RATE	TO WATER	(standard		(circle units) µmhos/cm	OXYGEN (circle units)			COLOR / ODOR (describe)
IDDS Image: State in the image: State in	1055	0.6	0.6		2572	7.39	21.58	\$37		-161	0.0	Clear
INDS INT 7, 41 P. 75 INT 8, 22 INT 1, 12	1100				26.62	740	21.70	842		-154	2.2	(
1110 94.0 7.45 91.8 93.2 1,12 -164 0.0 1113 97.5 7.45 7.47 91.84 93.2 1,01 -166 0.0 1130 97.5 7.47 91.84 93.2 1,01 -163 0.0 1 1130 94.5 7.40 92.24 93.1 0.91 -163 0.0 1 1132 1.4 30.06 7.52 92.45 7.17 0.91 -163 0.0 1 1132 1.4 30.06 7.50 92.95 91.65 51.7 0.91 -163 0.0 1 1132 1.4 30.06 1.25 91.65 51.61 0.00 127.5 58.8 1133 1.4 30.06 1.25 51.61 0.00 127.5 58.8 1143 1.4 1.45 1.45 1.45 1.45 1.47 127.5 58.8 1143 1.4 1.4 1.4 1.4 1.4 1.4 0.00 0.010 0.010 0.010	1105				27.17	7.42		838	1.32	-161	0.0	1
III 5 97.4% 7.40					2.5 , 621	7,519	21.59	\$ 36	1,12	-164	6.0	ł
Image: Solution and the second sec	1115	1			29 46	7.647	22,204	833				1
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.85; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal.FL): 1/8" = 0.006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016; 1/2" = 0.016; 5/8" = 0.026; 1/2" = 0.016; 5/8" = 0.026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.016; 5/8" = 0.016;	1120				29,59	7.50	22.21	831	0.96	-163	0.0	12
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 = Peristatic Pump; O = Other (Specify) SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLING SAMPLING SAMPLING ENDED AT: 1/2/5 SAMPLING PUMP OR TUBING TUBING TUBING (MATERIAL CODE: FILED-FILTERED: Y FILTER SIZE: µm FIELD DECONTAMINATION: PUMP N TUBING Y N (replaced) DUPLICATE: Y N SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION (including wet ice) INTENDED SAMPLING EQUIPMENT CODE SAMPLE PRESERVATIVE TOTAL VOL Final PH/ MALYSIS AND/OR SAMPLE ONE SAMPLE ONTAINER SPECIFICATION SAMPL	1125		1.4		30.06	7.52	22.45	827	0,91	-163	0.0	}
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 = Peristatic Pump; O = Other (Specify) SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLING SAMPLING SAMPLING ENDED AT: 1/2/5 SAMPLING PUMP OR TUBING TUBING TUBING (MATERIAL CODE: FILED-FILTERED: Y FILTER SIZE: µm FIELD DECONTAMINATION: PUMP N TUBING Y N (replaced) DUPLICATE: Y N SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION (including wet ice) INTENDED SAMPLING EQUIPMENT CODE SAMPLE PRESERVATIVE TOTAL VOL Final PH/ MALYSIS AND/OR SAMPLE ONE SAMPLE ONTAINER SPECIFICATION SAMPL												
SUL / K.S. INITIATED AT: 1/2.5 ENDED AT: 1/2.5 PUMP OR TUBING DEPTH IN WELL (feet): % TUBING MATERIAL CODE: FILED-FILTERED: Y Filtration Equipment Type: FILTER SIZE:um SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION (including wet ice) DUPLICATE: Y % SAMPLE # MATERIAL VOLUME PRESERVATIVE USED TOTAL VOL ADDED IN FIELD (mL) Final pH/ Temp INTENDED ANALYSIS AND/OR METHOD SAMPLE PUMP FLOW RATE (mL per minute REMARKS: Fill A ADDED IN FIELD (mL) Final pH/ Temp INTENDED ANALYSIS AND/OR METHOD SAMPLE PUMP FLOW RATE (mL per minute REMARKS: Fill A ADDED IN FIELD (mL) Final pH/ Temp INTENDED ANALYSIS AND/OR METHOD SAMPLE PUMP FLOW RATE (mL per minute REMARKS: Fill A ADDED IN FIELD (mL) Final pH/ Temp INTENDED ANALYSIS AND/OR METHOD SAMPLE PUMP FLOW RATE (mL per minute REMARKS: Fill A ADDED ADDED ADDED ADDED IN FIELD (mL) Fill PE = Low Density Polyethylene; PP = Polypropylene S = Silicone; THE FILL ADDED A	TUBING II PURGING	EQUIPMENT	PACITY (Gal./F CODES: B	t.): 1/8" = 0.0	0006: 3/16" 3P = Bladder F	= 0.0014; Pump; I SAMF	1/4" = 0.002 ESP = Electric PLING DA	6; 5/16" = 0 Submersible P	0.004; 3/8" = 0	.006; 1/2	" = 0.010	5/8" = 0.016
DEPTH IN WELL (teet): X MATERIAL CODE: Filtration Equipment Type: FIELD DECONTAMINATION: PUMP N TUBING Y N (replaced) DUPLICATE: Y N SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION (including wet ice) INTENDED SAMPLING SAMPLE QUIPMENT PP = Polypropylene REMARKS: Sampling Equipment Gass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylen	-	KRS	AFFILIATION:		SAMPLER(S)	1.1				T: 1125	ENDED A	T:] H
SAMPLE ONTAINER SPECIFICATION SAMPLE PRESERVATION (including wet ice) INTENDED SAMPLING EQUIPMENT CODE SAMPLE PUM SAMPLE # MATERIAL VOLUME PRESERVATIVE TOTAL VOL Final pH/ ANALYSIS AND/OR SAMPLING EQUIPMENT CODE SAMPLE PUM SAMPLE # MATERIAL VOLUME PRESERVATIVE TOTAL VOL Final pH/ INTENDED SAMPLING EQUIPMENT CODE CODE CODE CODE COTAINERS SAMPLE PUM FLOW RATE ID CODE CONTAINERS MATERIAL VOLUME PRESERVATIVE TOTAL VOL Final pH/ INTENDED ANALYSIS AND/OR SAMPLE PUM FLOW RATE ID CODE CONTAINERS VOLUME PRESERVATIVE TOTAL VOL Final pH/ INTENDED NALYSIS AND/OR SAMPLE PUM FLOW RATE ID CODE CONTAINERS VOLUME PRESERVATIVE TOTAL VOL Final pH/ INTENDED NALYSIS AND/OR SAMPLING EQUIPMENT CODE Intended			36			ODE:	~				,	IZE: μm
SAMPLE # MATERIAL VOLUME PRESERVATIVE TOTAL VOL ADDED IN FIELD (mL) Final pH/ Temp ANALYSIS AND/OR METHOD EQUIPMENT CODE EQUIPMENT (mL per minute mode SAMPLE # MATERIAL CODE VOLUME PRESERVATIVE USED TOTAL VOL ADDED IN FIELD (mL) Final pH/ Temp ANALYSIS AND/OR METHOD EQUIPMENT CODE FLOW RATE (mL per minute mode Image: Contrainers Image	FIELD DE	CONTAMINATI	ON: PUM	PYN	_	TUBING	Y N (re	eplaced)	DUPLICATE	Y	(\mathbb{N})	
REMARKS: Find definition REMARKS: Find definition Find definition Find definition Balance Balance SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;	SAMPLE	#	MATERIAL		PRESERVAT	IVE	TOTAL VOL	Final pH	ANALYSIS A	ND/OR E	QUIPMENT	SAMPLE PUMP FLOW RATE (mL per minute)
Final double is a state 33,37 MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;		Committend										
Final double is a state 33,37 MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;												
Final double is a state 33,37 MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;												
Final double is a state 33,37 MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;												
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;	REMARKS	5:	and de	ath:	33.3	7						
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;	MATERIA		AG = Amber (Glass; CG =	Clear Glass;	HDPE =	High Density I	Polyethylene;	LDPE = Low D	ensity Polyet	nylene; PP	= Polypropylene;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)	SAMPLIN	G EQUIPMENT	CODES: A	PP = After (Th	nrough) Perista	altic Pump;						Pump;

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

SITE NAME:	hhit.	e Blu	22			TE DCATION:	Redu	rield,	AR		1
	MU-10	1812		SAMPLE	ID: M	5-108	U		DATE: 11-	90-9H	
	110.10					SING DA			1	_	
WELL DIAMETER	(inches): 2	TUBING	TER (inches):	TOTAL V DEPTH	(feet):		TO WA	TER (feet): 45	86 OR	RGE PUMP TY BAILER:	BP
(only fill out	if applicable)	1 WELL VOL	= (IPMENT VOL.	L WELL DEP	feet -		feet)	X WELL CAPACI X TUBING LENGTH	gallons/foo		ノム gallons
	if applicable)	JRGE: 1 EQU			allons + (ons/foot X	feet		gallons	= MA gallons
PUMP OR	TUBING DEPT		1	EEN INTERV		PURGIN				TOTAL VOL PURGED (g	
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (^o C)	COND. (circle units) µmhos/cm <u>or</u> µ ⊙ /cm	(circle units) ng/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1440	0.8	0.8		51.41	7.36	16.08	721	1.22	-159	0.3	Clear
1445				51.81	7.34	15.87	720	1,27	-160	0.8	
1450		1.1	1	12,79	7.36		724	1.07	-160	0.0	
1435		1		53.95	7.34	13.79	721	1.02	-163	4.6	
1500		1.5		55.09	7.35	15.87	726	1.01	-159	0.0	/
				1					-		
			-		1	1					
			1			1					
	-										
1		1		11.		1	1				
WELL CAP	ACITY (Gallor	is Per Foot):	0.75" = 0.02; Ft.): 1/8" = 0.0	1" = 0.04;	1.25" = 0.0	6; 2" = 0.1 1/4" = 0.00	6; 3 " = 0.37 26: 5/16 " =		5" = 1.02; 0.006: 1/2	6" = 1.47; " = 0.010;	12" = 5.88 5/8" = 0.016
Contraction of the state of the	EQUIPMENT (P = Bladder I			Submersible F		eristaltic Purr	ip; 0 = 0	ther (Specify)
	-					LING D	ATA			1	
	BY (PRINT) / /	AFFILIATION:		SAMPLER(S				SAMPLING INITIATED A	TIKON	SAMPLIN ENDED A	IG AT: 1521
PUMPOR	1KRS	4-1-		TUBING	6 Calle	*	FIEL	D-FILTERED: Y			IZE:μm
	WELL (feet):	62		MATERIAL C		h	Filtra	ation Equipment Ty	/pe:	2.1	
	CONTAMINATI		-11		TUBING	V	eplaced)	DUPLICATE		(N)	
SAMF	PLE CONTAINI	ER SPECIFIC				ATION (includ					SAMPLE PUMP FLOW RATE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	USED		TOTAL VOL	mL) Final pl	METHO		CODE	(mL per minute)
					-						
					-						
-											
1							-				
REMARKS	5 1 .				<u> </u>			1. 1.	10		
	July	ihur-s	men	to wa	ter	F	inal	deth:	58.6	1-11	
MATERIAL	CODES:		Glass; CG = T = Teflon;			High Density	Polyethylene;	LDPE = Low D	ensity Polyet	nylene; PF	Polypropylene;
SAMPLING	G EQUIPMENT		APP = After (Th RFPP = Reverse			B = Baile SM = Strav		adder Pump; E ng Gravity Drain);		Submersible r (Specify)	Pump;
OTER: 4	The above	do not cons	stitute all of t	ne informat	tion requir	ed by					

The above do not constitute all of the information required by
 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

SITE NAME:	1ch ??	e Blu	wf.sp			TE DCATION:	Redfie	-W, AR			
WELL NO:		Л		SAMPLE		5-109			DATE 1	- 21 - 3	14
	*			1		SING DA					
WELL DIAMETER	R (inches):	TUBING	ER (inches):	DEPTH ((feet):			ER (feet): 74	38 OR	RGE PUMP TY BAILER:	spe
(only fill our	t if applicable)		= 1		feet -		feet) >	WELL CAPACI	gallons/for	ot = N	A gallons
	NT VOLUME PU t if applicable)	JRGE: 1 EQU	IPMENT VOL.		UME + (TUE allons + (TY X 1 ons/foot X	TUBING LENGTH		LL VOLUME	N/ gallons
PUMP OR	TUBING DEPT	н Л 5	WELL SCR	EEN INTERV		PURGIN	and the second s	PURGING		TOTAL VOL	
TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	темр. (°С)	COND. (circle units) µmhos/cm or µது/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1545	0.6	0.6		\$3.15	7.30	16.47	558	0.53	-142	0.5	Clear
1550	1		1	XH.10	7.31	16.37	559	0.47	-146	0.4	1
55%				14.94	7.36	16.34	562	0.43	-150	0.3	1
1600	-	0.9		15.71	7.37	16.31	562	0.40	-153	0.0	1
							1000	1			
100			-						-		-
-						-			1		1
		-	1	1				1			
	-										J. L
WELL CAI	PACITY (Gallor	ns Per Foot): 0 PACITY (Gal./F).75" = 0.02; -1.). 1/8" = 0.	1" = 0.04; 0006; 3/16*	1.25 " = 0.0 ' = 0.0014;	16; 2 " = 0.1 1/ 4 " = 0.002		0.004; 3/B" = 0		" = 0.010;	12" = 5.88 5/8" = 0.016
PURGING	EQUIPMENT	CODES: B	= Bailer;	BP = Bladder F		A S Martin and American American	Submersible P	ump; PP = P	eristaltic Pur	np: O = O	Iher (Specify)
				SAMPLER(S)		LING DA		1		1	
	BY (PRINT) / A	AFFILIATION:		~	1 0	lues l		SAMPLING INITIATED A	T: 1600	SAMPLIN ENDED A	
PUMP OR		45		TUBING MATERIAL C	~ ~	108-1		D-FILTERED: Y tion Equipment Ty	N	FILTER S	IZE: μm
	WELL (feet): CONTAMINATI				TUBING	(Y) N (P	eplaced)	DUPLICATE		(N)	
	PLE CONTAIN		V			ATION (includ		INTEND	ED	SAMPLING	SAMPLE PUMP
SAMPLE	CONTAINERS	MATERIAL	VOLUME	PRESERVAT	IVE	TOTAL VOL	Final pH	ANALYSIS A METHO		CODE	FLOW RATE (mL per minute
								-			
										100	
								-			
REMARKS	5	phene	Sone	n to.	webke	P		100 - C	6 lar	· th	84.26
MATERIA			Glass; CG =		HDPE =	High Density	Polyethylene;	LDPE = Low D			= Polypropylene
SAMPLIN		CODES: A	APP = After (T	nrough) Perista	altic Pump;	B = Bailer SM ≍ Straw		dder Pump; E 1g Gravity Drain);		: Submersible l er (Specify)	² ump;
DTES: 1	. The above										

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

NAME:	While	BLUEF			S L	ITE OCATION:	Redfie	eld, AR	~		
WELL NO:	MW-11	0.5		SAMPLE		14-110		1	DATE:)).	-15.2	6-1
				1		GING DA					
WELL DIAMETER	R (inches): 2	TUBING	TER (inches):	TOTAL V	(feet):		STATIC I TO WAT	ER (feet): 15.4	OR	RGE PUMP TY BAILER:	PE BP
(only fill out	t if applicable)		= (feet -		feet) X	WELL CAPACI	gallons/foo	$p_1 = N_1$	1A gallons
	NT VOLUME PL t if applicable)	IRGE: 1 EQU	IPMENT VOL.		.UME + (TU allons + (TY X T	UBING LENGTH)			= N/Agallons
PUMP OR	TUBING DEPTI	H .00	WELL SCRE	EN INTERV		PURGIN		PURGING ENDED AT:		TOTAL VOL PURGED (g	
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) @g/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
15415					4.62	22.47	394	5.90	312	5.0	Clear
1550					4.62	12.25	381	5.54	312	3.6	
1555					4.71	22.26	1372	5.21	301	4.3	1
1600					4.77	22.22	362	4.82	294	4.3	
1605					4.79	22,30	363	H.GI	292	4.2	
1610			-		4,75	12,21	363	4,63	201	3.5	(
											_
TUBING IN	PACITY (Gallon NSIDE DIA. CAP EQUIPMENT C	PACITY (Gal./	Ft.): 1/8" = 0.0	1" = 0.04; 006; 3/16" P = Bladder F	Pump;	1/4" = 0.002	6: 5/16" = 0 Submersible Pu	.004; 3/8" = 0	5" = 1.02; .006; 1/2 eristaltic Pum		12" = 5.88 5/8" = 0.016 ther (Specify)
SAMPLED	BY (PRINT) / A		1.0	SAMPLER(S)							
		FFILIATION:				RE(S):		SAMPLING	1.2.1	SAMPLIN	Glac
1	324	FFILIATION:		30		RE(S):		INITIATED A	121	ENDED A	IT: 1625
PUMP OR		1825		TUBING	act L	12		INITIATED A	N		IT: 1625
DEPTH IN	TUBING WELL (feet): CONTAMINATIO	18.00	-	30	act L	Freits		INITIATED A	N	ENDED A	IT: 1625
DEPTH IN	WELL (feet):	18.00 DN: PUM	1P (Y N	TUBING MATERIAL C	ODE: TUBING	Freits	Filtrati placed)	INITIATED A D-FILTERED: Y ion Equipment Typ DUPLICATE: INTEND	Pe: V Y ED	ENDED A FILTER S	т:) (, 2, 5 IZE: μm SAMPLE PUMI
DEPTH IN	WELL (feet): CONTAMINATIO	18.00 DN: PUM		TUBING MATERIAL C	ODE: TUBING PRESERV	M N (re	Filtration placed) ng wet ice) Final pH/	INITIATED A D-FILTERED: Y ion Equipment Ty DUPLICATE: INTENDI	Per Y ED ND/OR E	FILTER S	IZE: μm SAMPLE PUME FLOW RATE
DEPTH IN FIELD DEC SAMPLE	WELL (feet): CONTAMINATION PLE CONTAINE #	NRRS NS.00 DN: PUM ER SPECIFICA MATERIAL	IP (Y N ATION	TUBING MATERIAL C SAMPLE PRESERVAT	ODE: TUBING PRESERV	V N (re VATION (includi TOTAL VOL	Filtration placed) ng wet ice) Final pH/	INITIATED A D-FILTERED: Y ion Equipment Ty DUPLICATE: INTENDI ANALYSIS A	Per Y ED ND/OR E	ENDED A FILTER S	T: ၂၄၃ ၄ IZE: µm SAMPLE PUMF FLOW RATE
DEPTH IN FIELD DEC SAMPLE	WELL (feet): CONTAMINATION PLE CONTAINE #	NRRS NS.00 DN: PUM ER SPECIFICA MATERIAL	IP (Y N ATION	TUBING MATERIAL C SAMPLE PRESERVAT	ODE: TUBING PRESERV	V N (re VATION (includi TOTAL VOL	Filtration placed) ng wet ice) Final pH/	INITIATED A D-FILTERED: Y ion Equipment Ty DUPLICATE: INTENDI ANALYSIS A	Per Y ED ND/OR E	ENDED A FILTER S	IZE: μm SAMPLE PUME FLOW RATE
DEPTH IN FIELD DEC SAMPLE	WELL (feet): CONTAMINATION PLE CONTAINE #	NRRS NS.00 DN: PUM ER SPECIFICA MATERIAL	IP (Y N ATION	TUBING MATERIAL C SAMPLE PRESERVAT	ODE: TUBING PRESERV	V N (re VATION (includi TOTAL VOL	Filtration placed) ng wet ice) Final pH/	INITIATED A D-FILTERED: Y ion Equipment Ty DUPLICATE: INTENDI ANALYSIS A	Per Y ED ND/OR E	ENDED A FILTER S	IZE: μm SAMPLE PUME FLOW RATE
DEPTH IN FIELD DEC SAMPLE	WELL (feet): CONTAMINATION PLE CONTAINE #	NRRS NS.00 DN: PUM ER SPECIFICA MATERIAL	IP (Y N ATION	TUBING MATERIAL C SAMPLE PRESERVAT	ODE: TUBING PRESERV	V N (re VATION (includi TOTAL VOL	Filtration placed) ng wet ice) Final pH/	INITIATED A D-FILTERED: Y ion Equipment Ty DUPLICATE: INTENDI ANALYSIS A	Per Y ED ND/OR E	ENDED A FILTER S	T:) (
DEPTH IN FIELD DEC SAMI SAMPLE	WELL (feet): CONTAMINATIO PLE CONTAINE # CONTAINERS	NRRS NS.00 DN: PUM ER SPECIFICA MATERIAL	IP (Y N ATION	TUBING MATERIAL C SAMPLE PRESERVAT	ODE: TUBING PRESERV	V N (re VATION (includi TOTAL VOL	Filtration placed) ng wet ice) Final pH/	INITIATED A D-FILTERED: Y ion Equipment Ty DUPLICATE: INTENDI ANALYSIS A	Per Y ED ND/OR E	ENDED A FILTER S	T:) (ک ک IZE: µm SAMPLE PUMI FLOW RATE
DEPTH IN FIELD DEC SAMI SAMPLE ID CODE	WELL (feet): CONTAMINATION PLE CONTAINE # CONTAINERS	AG = Amber	IP N ATION F VOLUME F	TUBING MATERIAL C SAMPLE PRESERVAT USED	DDE: TUBING PRESERV IVE ADD	V N (re VATION (includi TOTAL VOL	Polyethylene,	LDPE = Low De	Y ED ND/OR D	ENDED A FILTER S	T: /(, 2, S IZE: μm SAMPLE PUMI FLOW RATE (mL per minute (mL per minute

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

SITE NAME:	Mite	Blur	6				eed f	iel.	J. AR			
	MW-1	1017		SAMPLE		1-1100				DATE: 11-	18-24	
			1		PUR	GING DA	TA					
WELL DIAMETER	R (inches): 2	TUBING	ER (inches):	' DEPTH ((feet):		TO	TIC DE	R (feet): 34	. 59 OR	RGE PUMP TY BAILER:	PE
(only fill ou	t if applicable)		UME = (TOTAL = (feet -		feet	t) X		gallons/fo		gallons
	NT VOLUME PU t if applicable)	RGE: 1 EQU	IPMENT VOL. =		UME + (Tu allons + (TY X ns/foot X	TU	BING LENGTH) feet)		gallons :	gallons
PUMP OR IN WELL (f		1	WELL SCRE		100 + 080 - 10	PURGIN		155	PURGING ENDED AT:	11.10	TOTAL VOL PURGED (g	
тіме	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	d TEMP. (°C)	COND (circle un µmhos/c <u>or</u> µS/c	nits) cm	DISSOLVED OXYGEN (circle units) mg/L. or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
425	1				7.42	23.75	544		0.98	-118	70.7	Inchio
1430					7.4)		5412		0.14	-121	70.7)
1435		1			7.43		543		0.92	וכנ -	25.9	Cieon
1440	1				7.44	23.20	542	2	0,95	- 116	18.5	t
14245	S				7.418		542		1.11	- 98	18.3	
1450				L	7,52		540	-	1.10	-93	17.8	1
1455					7.53	22.84	541		1.18	- 89	17,4	
TUBING IN	PACITY (Gallon NSIDE DIA. CAP	ACITY (Gal./	Ft.): 1/8" = 0.00	1" = 0.04; 06; 3/16' 9 = Bladder F		0.06; 2 " = 0.1 1/4" = 0.002 ESP = Electric	6; 5/16	0.37; 5" = 0.0 ble Purr	004: 3/8" = 0	5" = 1.02; 0.006; 1/2 eristaltic Pun	2" = 0.010;	12" = 5.88 5/8" = 0.016 ther (Specify)
FURGING	EQUIPMENTO	0010. 0	Duilon, Di		the second of the second secon	PLING DA					_	
SAMPLED	BY (PRINT) / A		S	AMPLER(S)	SIGNATU				SAMPLING INITIATED A		SAMPLIN ENDED A	G T: 1510
PUMP OR	TUBING WELL (feet):	40		UBING ATERIAL C	ODE:				FILTERED: Y		FILTER S	IZE:μm
	CONTAMINATIO	DN: PUM	PGN		TUBING	G 🕢 N (re	eplaced)		DUPLICATE:	Y	(N	
SAM	PLE CONTAINE	R SPECIFICA	TION	SAMPLE	E PRESER	VATION (includ	ing wet ice)	INTEND		SAMPLING	SAMPLE PUMP
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME P	RESERVAT USED		TOTAL VOL DED IN FIELD (al pH/ emp	ANALYSIS A METHO		EQUIPMENT	(mL per minute
-												
			I									
					_			-				
REMARKS	S:			-			1		1			
							_					
MATERIA	L CODES:	AG = Amber S = Silicone;		Clear Glass; 0 = Other (= High Density I	Polyethyler	ne;	LDPE = Low De		thylene; PP	= Polypropylene

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

R

	shite 1	Sluff				OCATION:	Rela	181	d AR			
WELL NO:	MK-111			SAMPLE	ID: ML	1-1115			I		-22-2	H
		-				GING DA	TA					
WELL DIAMETER	R (inches): 2	TUBING DIAMET	ER (inches):	TOTAL V DEPTH (feet):		TOW	IC DE	(feet): HC		IRGE PUMP TY R BAILER:	BP
(only fill out	UME PURGE: t if applicable)		= (feet -		feet)	x	ING LENGTH)	gallons/fc		gallons
	NT VOLUME PU t if applicable)	JRGE: 1 EQU	IPMENT VOL.		allons + (ons/foot X	100	feet)		gallons	= M/A gallons
	TUBING DEPT	н	WELL SCR	EEN INTERVA		PURGIN	IG .		PURGING		TOTAL VOL	UME 1 -
IN WELL (f		0	DEPTH:	feet to	feet	INITIATE	ED AT: 08		ENDED AT:	0955	PURGED (g	
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standar units)	temp. (°C)	COND. (circle unit: µmhos/cm <u>or</u> so/cm	s) n	OXYGEN (circle units) 지엔스 <u>아</u> % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
6600	0.80	0.80		15.19	3.91	K.73	1,730	2 1	.88	361	9.5	Clear
0925				15.24	3.19	15.60	1,710		. 85	364	C.7	
09 30		1		15.25	3.91	16.05	1,694		. 82	369	4.9	
0035	1			15.25	3.90	16.43	1,690	1	.71	374	2.7	1
0940				15.3	3.9	-	1,710	1	,10	377	1.3	
09-15				15.25	3.91	17.36	1,600	-	1.10	387	0.1	
1930		12		15.26	7.90		1,670		1.67	395	0.	11-
0455		1.7		15.26	7,9	17.84	1,690	5	1.70	389	0.0)
	1		-	-		-		-	-			
	1		-					-			-	-
TUBING IN	PACITY (Gallon NSIDE DIA. CAI EQUIPMENT C	PACITY (Gal./I	Ft.): 1/8" = 0.	1" = 0.04; 0006; 3/16" BP = Bladder F	oump;	0.06; 2" = 0.1 1/4" = 0.002 ESP = Electric PLING DA	26: 5/16" Submersible	= 0.00	04: 3/8" = 0.	5" = 1.02; 006: 1/ ristaltic Pu		12" = 5.88 5/8" = 0.016 ther (Specify)
TUBING IN PURGING	EQUIPMENT C	PACITY (Gal./I CODES: B	Ft.): 1/8" = 0.	0006; 3/16" BP = Bladder F SAMPLER(S)	= 0.0014; Pump; SAM SIGNATU	1/4" = 0.002 ESP = Electric PLING D/ IRE(S):	Submersible	= 0.00	04: 3/8" = 0. p: PP = Pe SAMPLING	006: 1/ eristaltic Pu	2" = 0.010; mp; 0 = 0	5/8" = 0.016 ther (Specify)
	EQUIPMENT C	PACITY (Gal./I	Ft.): 1/8" = 0.	0006; 3/16" BP = Bladder F SAMPLER(S)	= 0.0014; Pump; SAM SIGNATU	1/4" = 0.002 ESP = Electric PLING D/	26; 5/16" Submersible	= 0.00	04: 3/8" = 0. p; PP = Pe	006: 1/ eristaltic Pu	2" = 0.010; mp; 0 = 0 SAMPLIN ENDED A	5/8" = 0.016 ther (Specify)
	EQUIPMENT C	AFFILIATION:	Ft.): 1/8" = 0. = Bailer; I	0006; 3/16" BP = Bladder F SAMPLER(S) TUBING MATERIAL C	SIGNATU	1/4" = 0.002 ESP = Electric PLING DA RE(S):	26; 5/16" Submersible ATA FII FII	= 0.00 = Pump ELD-F	04: 3/8" = 0. p: PP = Pe SAMPLING INITIATED A1 ILTERED: Y Equipment Typ	006: 1/ ristaltic Pu	2" = 0.010; mp; 0 = 0 SAMPLIN ENDED A FILTER S	5/8" = 0.016 ther (Specify) IG .T: / 012
PURGING SAMPLED SUPPOR DEPTH IN	EQUIPMENT C BY (PRINT) / A - U / M TUBING	PACITY (Gal./I CODES: B NFFILIATION:	Ft.): 1/8" = 0. = Bailer; I	0006; 3/16" BP = Bladder F SAMPLER(S) TUBING MATERIAL C	e 0.0014; Pump; SAM SIGNATU SIGNATU ODE: TUBINO	1/4" = 0.002 ESP = Electric PLING DA RE(S): (26; 5/16" Submersible ATA Fill eplaced)	= 0.00 = Pump ELD-F	04: 3/8" = 0. p: PP = Pe SAMPLING INITIATED AT ILTERED: Y Equipment Ty DUPLICATE:	006: 1/ pristaltic Pu C: 0,9159 pe V Y	2" = 0.010: mp; 0 = 0 SAMPLIN ENDED A FILTER S	5/8" = 0.016 ther (Specify) IG .T: / 0/2 IZE:μm
TUBING IN PURGING SAMPLED JL PUMP OR DEPTH IN FIELD DEC SAM	IBY (PRINT) / A EQUIPMENT O IBY (PRINT) / A - U / L (F TUBING WELL (feet): CONTAMINATION PLE CONTAINE	AFFILIATION:	Ft.): 1/8" = 0. = Bailer; 1 IP // N ATION	0006; 3/16" BP = Bladder F SAMPLER(S) TUBING MATERIAL C SAMPLE	e 0.0014; 2ump; SAM SIGNATU CODE: TUBINC PRESER	1/4" = 0.002 ESP = Electric PLING DA RE(S): (26; 5/16" Submersible ATA Fill eplaced)	= 0.00	04: 3/8" = 0. p: PP = Pe NITIATED AT ILTERED: Y Equipment Typ DUPLICATE: INTENDI ANALYSIS A	ristaltic Pu F: 09155 pe V Y ED ND/OR	2" = 0.010; mp; 0 = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) G IZE: μm IZE: μm SAMPLE PUMF FLOW RATE
PURGING SAMPLED SUMP OR DEPTH IN FIELD DEC	IBY (PRINT) / A EQUIPMENT O BY (PRINT) / A - C / L A TUBING WELL (feet): CONTAMINATIO	PACITY (Gal./I CODES: B AFFILIATION: ころ のい: PUM	Ft.): 1/8" = 0. = Bailer; I	0006; 3/16" BP = Bladder F SAMPLER(S) TUBING MATERIAL C	e 0.0014; Sump; SIGNATU SIGNATU ODE: TUBINO PRESER IVE	1/4" = 0.002 ESP = Electric PLING DA RE(S): (Submersible ATA Fil eplaced) ling wet ice) Final	ELD-F	04: 3/8" = 0. p: PP = Pe SAMPLING INITIATED AT ILTERED: Y Equipment Typ DUPLICATE: INTENDI	ristaltic Pu F: 09155 pe V Y ED ND/OR	2" = 0.010; mp; 0 = 0 SAMPLIN FILTER S SAMPLING	5/8" = 0.016 ther (Specify) G IZE: μm IZE: μm SAMPLE PUMF FLOW RATE
TUBING IN PURGING SAMPLED JUMP OR DEPTH IN FIELD DEC SAMPLE	INSIDE DIA. CAI EQUIPMENT OF BY (PRINT) / A - U / U / TUBING WELL (feet): CONTAMINATION PLE CONTAINE #	PACITY (Gal./I CODES: B A C ON: PUM ER SPECIFICA MATERIAL	Ft.): 1/8" = 0. = Bailer; 1 IP // N ATION	0006; 3/16" BP = Bladder F SAMPLER(S) TUBING MATERIAL C SAMPLE PRESERVAT	e 0.0014; Sump; SIGNATU SIGNATU ODE: TUBINO PRESER IVE	1/4" = 0.002 ESP = Electric PLING DA RE(S): () bort S Y () VATION (includ TOTAL VOL	Submersible ATA Fil eplaced) ling wet ice) Final	ELD-F	04: 3/8" = 0. p: PP = Pe NITIATED AT ILTERED: Y Equipment Typ DUPLICATE: INTENDI ANALYSIS A	ristaltic Pu F: 09155 pe V Y ED ND/OR	2" = 0.010; mp; 0 = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) IG IZE:μm SAMPLE PUMF
TUBING IN PURGING SAMPLED JUMP OR DEPTH IN FIELD DEC SAMPLE	INSIDE DIA. CAI EQUIPMENT OF BY (PRINT) / A - U / U / TUBING WELL (feet): CONTAMINATION PLE CONTAINE #	PACITY (Gal./I CODES: B A C ON: PUM ER SPECIFICA MATERIAL	Ft.): 1/8" = 0. = Bailer; 1 IP // N ATION	0006; 3/16" BP = Bladder F SAMPLER(S) TUBING MATERIAL C SAMPLE PRESERVAT	e 0.0014; Sump; SIGNATU SIGNATU ODE: TUBINO PRESER IVE	1/4" = 0.002 ESP = Electric PLING DA RE(S): () bort S Y () VATION (includ TOTAL VOL	Submersible ATA Fil eplaced) ling wet ice) Final	ELD-F	04: 3/8" = 0. p: PP = Pe NITIATED AT ILTERED: Y Equipment Typ DUPLICATE: INTENDI ANALYSIS A	ristaltic Pu F: 09155 pe V Y ED ND/OR	2" = 0.010; mp; 0 = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) G IZE: μμm IZE: μμm SAMPLE PUMI FLOW RATE
TUBING IN PURGING SAMPLED JUMP OR DEPTH IN FIELD DEC SAMPLE	INSIDE DIA. CAI EQUIPMENT OF BY (PRINT) / A - U / U / TUBING WELL (feet): CONTAMINATION PLE CONTAINE #	PACITY (Gal./I CODES: B A C ON: PUM ER SPECIFICA MATERIAL	Ft.): 1/8" = 0. = Bailer; 1 IP // N ATION	0006; 3/16" BP = Bladder F SAMPLER(S) TUBING MATERIAL C SAMPLE PRESERVAT	e 0.0014; Sump; SIGNATU SIGNATU ODE: TUBINO PRESER IVE	1/4" = 0.002 ESP = Electric PLING DA RE(S): (1 bort) (1 bort) (1 bort) VATION (includ TOTAL VOL	Submersible ATA Fil eplaced) ling wet ice) Final	ELD-F	04: 3/8" = 0. p: PP = Pe NITIATED AT ILTERED: Y Equipment Typ DUPLICATE: INTENDI ANALYSIS A	ristaltic Pu F: 09155 pe V Y ED ND/OR	2" = 0.010; mp; 0 = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) G IZE: μm IZE: μm SAMPLE PUMF FLOW RATE
TUBING IN PURGING SAMPLED JUMP OR DEPTH IN FIELD DEC SAMPLE	INSIDE DIA. CAI EQUIPMENT OF BY (PRINT) / A - U / M TUBING WELL (feet): CONTAMINATION PLE CONTAINERS	PACITY (Gal./I CODES: B AFFILIATION: CODE ON: PUM ER SPECIFICA MATERIAL CODE	Ft.): 1/8" = 0. = Bailer; 1 IP N NTION VOLUME	0006; 3/16" BP = Bladder F SAMPLER(S) TUBING MATERIAL C SAMPLE PRESERVAT USED	e 0.0014; Pump; SAM SIGNATU ODE: TUBINC PRESER IVE AD	1/4" = 0.002 ESP = Electric PLING DA RE(S): (A borth VATION (includ TOTAL VOL DED IN FIELD (26; 5/16" Submersible ATA Fill eplaced) ling wet ice) mL) Ten	ELD-F	04: 3/8" = 0. p: PP = Pe NITIATED AT ILTERED: Y Equipment Typ DUPLICATE: INTENDI ANALYSIS A	Y D ND/OR D	2" = 0.010: mp; 0 = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT CODE	5/8" = 0.016 ther (Specify) G IZE: μm IZE: μm SAMPLE PUMF FLOW RATE
TUBING IN PURGING SAMPLED DEPTH IN FIELD DEC SAMM SAMPLE ID CODE	INSIDE DIA. CAI EQUIPMENT OF BY (PRINT) / A - U / M TUBING WELL (feet): CONTAMINATION PLE CONTAINERS	PACITY (Gal./I CODES: B A C ON: PUM ER SPECIFICA MATERIAL	Ft.): 1/8" = 0. = Bailer; 1 IP N NATION VOLUME Glass; CG =	0006; 3/16" BP = Bladder F SAMPLER(S) TUBING MATERIAL C SAMPLE PRESERVAT USED	E PORTE AD HDPE	1/4" = 0.002 ESP = Electric PLING DA RE(S): (A borth VATION (includ TOTAL VOL DED IN FIELD (Submersible ATA Fill eplaced) ling wet ice) Final Ten	= 0.000 Pump ELD-F Itration pH/ np	04: 3/8" = 0. p: PP = Pe NITIATED AT ILTERED: Y Equipment Typ DUPLICATE: INTENDI ANALYSIS A	1006: 1/ pristaltic Pu C: OSISS Pe V ED ND/OR D	2" = 0.010: mp; O = O SAMPLING ENDED A FILTER S SAMPLING EQUIPMENT CODE	5/8" = 0.016 ther (Specify) G IZE: μμm IZE: μμm SAMPLE PUMI FLOW RATE

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

SITE	white	131456			SI		redfiel	J, AR			
	Mar			SAMPLE		-112 V			DATE:	- 22-2	24
						SING DA					
WELL	R (inches): 4	TUBING	ER (inches):	TOTAL V	(feet):			ER (feet):	.61 OR	RGE PUMP T' BAILER:	PPE BP
(only fill ou	t if applicable)		= (feet -		feet) X	WELL CAPACI	TY gallons/foo	pt = N/	4 gallons
EQUIPMEN (only fill out	NT VOLUME P t if applicable)	URGE: 1 EQU	PMENT VOL. =		UME + (TUB allons + (TY X T ons/foot X	UBING LENGTH)			= MIA gallons
PUMP OR IN WELL (f	TUBING DEPT	-	WELL SCRE			DURCIN		PURGING ENDED AT:	1430	TOTAL VOI PURGED (g	UME) 7
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 <u>or</u> μ δ/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1420	0.9	0.9		88.77	7.44	16,29	509	1.66	-156	0.6	Class
1225		1		91.04	7.46	16.37	507	1.74	-165	0.0	
1430		1.2		89.71	7 516	16.27	509	1.61	-165	0.0	1
										·	
											-
		-		_							
TUBING IN PURGING	PACITY (Gallor ISIDE DIA. CA EQUIPMENT (BY (PRINT) / A	CODES: B	t.): 1/8" = 0.00 = Baller: BP	e = Bladder F	SAMP	1/4" = 0.002 SP = Electric LING DA E(S):	6: 5/16" = 0 Submersible Pu	0.004; 3/8" = 0 ump; PP = Pe SAMPLING	eristaltic Pum	SAMPLIN	12" = 5.88 5/8" = 0.016 ther (Specify)
	ULER	5		Qui	ed le	loors		INITIATED A	1		IZE:μm
PUMP OR DEPTH IN	TUBING WELL (feet):	103		UBING IATERIAL C	ODE:			tion Equipment Ty	pe:	TIETERO	μ
FIELD DEC	CONTAMINATI	ON: PUM	P (Y N		TUBING	() N (r	eplaced)	DUPLICATE:	Ø	N	
SAMPLE	#	ATERIAL		RESERVAT	IVE	TION (includ	Final pH/	INTEND ANALYSIS A METHO	ND/OR E	SAMPLING QUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
ID CODE	CONTAINERS	CODE		USED	ADDE	D IN FIELD (mL) remp		-		
											(
				_	-						
REMARKS	Fì	al d	epth ."	915							
MATERIAL		AG = Amber (Glass; CG = C		HDPE =	High Density I	Polyethylene;	LDPE = Low De			= Polypropylene;
	G EQUIPMENT	R	PP = After (Thro FPP = Reverse	Flow Perista	Itic Pump;			lder Pump; Es g Gravity Drain);		Submersible r (Specify)	Pump;

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

NAME:)	white B	1454			SI		red (:e)	J, AR			
WELL NO:				SAMPLE		1-11312			DATE:	-21-24	1
-	MILL I	170				SING DA					
WELL	R (inches):	TUBING DIAMET	ER (inches):	4 DEPTH	WATER (feet):		STATIC I TO WAT	ER (feet):	25 OF	RGE PUMP TY BAILER:	BP
(only fill out	t if applicable)		= (feet -		feet) X	WELL CAPACI	gallons/fc	not = M	A gallons
	NT VOLUME PU t if applicable)	IRGE: 1 EQUI	IPMENT VOL.		UME + (TUE allons + (TY X T	UBING LENGTH) feet)		ELL VOLUME gallons :	= N/A gallons
PUMP OR IN WELL (f	TUBING DEPTH	н	WELL SCR	EEN INTERV feet to		PURGIN		PURGING		TOTAL VOL PURGED (g	
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 <u>or</u> μ S/μ εm	DISSOLVED OXYGEN (circle units) mg/0_or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1305	0.8	0.9.		10.55	G.75	26.24	1 29.52 54	0.48	-6	3.7	clear
1315				11.72	6.73	26.21	1,490	0,45	-4	2.8	5
313		1,2		11.94	6.75	26.21	1,490	0.44	-1	2.5	/
											1
_											
_											
TUBING IN	PACITY (Gallon: SIDE DIA. CAP EQUIPMENT C	PACITY (Gal./F	Ft.): 1/8" = 0.	1" = 0.04; 0006: 3/16 3P = Bladder	Pump; E	1/4" = 0.002 SP = Electric	6: 5/16" = 0 Submersible Pu	.004; 3/8" = 0	 5" = 1.02; 0.006; 1/ eristaltic Pu	2" = 0.010;	12" = 5.88 5/8" = 0.016 ther (Specify)
	DV (DDINT) / A					LING DA	AIA		1		
		CON INTIONS				E(S)				O A MOLINI	0
		FFILIATION:		SAMPLER(S	. 1			SAMPLING INITIATED A	1315	SAMPLIN ENDED A	G T: 1333
JLL PUMP OR	TUBING	S			Colons		FIELD		64	ENDED A	G T: 1333 IZE:μm
JLL PUMP OR DEPTH IN	The	5	P (Y) N		Colons		FIELD	INITIATED A	Ø pe:	ENDED A	T: 1333
JLL PUMP OR DEPTH IN FIELD DEC	TUBING WELL (feet): CONTAMINATIO	5 37 DN: PUM	6		Color CODE: TUBING		FIELD Filtrat eplaced)	INITIATED A D-FILTERED: Y ion Equipment Ty DUPLICATE: INTEND	PPE: Y	ENDED A FILTER S	Τ: 1 333 IZE:μm SAMPLE PUMF
JLL PUMP OR DEPTH IN FIELD DEC	TUBING WELL (feet):	5 37 DN: PUM	6		CODE: TUBING E PRESERVA	/y N (r	FIELD Filtrat eplaced) ing wet ice) Final pH/	INITIATED A D-FILTERED: Y ion Equipment Ty DUPLICATE: INTEND	ED ND/OR	ENDED A	T: 1333 IZE:μm SAMPLE PUMF FLOW RATE
JLL PUMP OR DEPTH IN FIELD DEC SAMI	TUBING WELL (feet): CONTAMINATION PLE CONTAINE #	S DN: PUMI ER SPECIFICA	TION	TUBING MATERIAL C SAMPLI PRESERVAT	CODE: TUBING E PRESERVA	N (re ATION (includ TOTAL VOL	FIELD Filtrat eplaced) ing wet ice) Final pH/	INITIATED A D-FILTERED: Y ion Equipment Ty DUPLICATE: INTEND ANALYSIS A	ED ND/OR	ENDED A FILTER S N SAMPLING EQUIPMENT	T: 1333 IZE:μm SAMPLE PUMF FLOW RATE
JLL PUMP OR DEPTH IN FIELD DEC SAMI	TUBING WELL (feet): CONTAMINATION PLE CONTAINE #	S DN: PUMI ER SPECIFICA	TION	TUBING MATERIAL C SAMPLI PRESERVAT	CODE: TUBING E PRESERVA	N (re ATION (includ TOTAL VOL	FIELD Filtrat eplaced) ing wet ice) Final pH/	INITIATED A D-FILTERED: Y ion Equipment Ty DUPLICATE: INTEND ANALYSIS A	ED ND/OR	ENDED A FILTER S N SAMPLING EQUIPMENT	T: 1333 IZE:μm SAMPLE PUMF FLOW RATE
JLL PUMP OR DEPTH IN FIELD DEC SAMI	TUBING WELL (feet): CONTAMINATION PLE CONTAINE #	S DN: PUMI ER SPECIFICA	TION	TUBING MATERIAL C SAMPLI PRESERVAT	CODE: TUBING E PRESERVA	N (re ATION (includ TOTAL VOL	FIELD Filtrat eplaced) ing wet ice) Final pH/	INITIATED A D-FILTERED: Y ion Equipment Ty DUPLICATE: INTEND ANALYSIS A	ED ND/OR	ENDED A FILTER S N SAMPLING EQUIPMENT	T: 1333 IZE:μm SAMPLE PUMF
JLL PUMP OR DEPTH IN FIELD DEC SAMI	TUBING WELL (feet): CONTAMINATION PLE CONTAINERS	S DN: PUM ER SPECIFICA MATERIAL CODE	VOLUME	SAMPLI PRESERVATUSED		N (re ATION (includ TOTAL VOL	FIELD Filtrat eplaced) ing wet ice) Final pH/	INITIATED A D-FILTERED: Y ion Equipment Ty DUPLICATE: INTEND ANALYSIS A	ED ND/OR	ENDED A FILTER S N SAMPLING EQUIPMENT	T: 1333 IZE:μm SAMPLE PUMF FLOW RATE
JLL PUMP OR DEPTH IN FIELD DEC SAMPLE ID CODE	TUBING WELL (feet): CONTAMINATIO PLE CONTAINERS	S DN: PUM ER SPECIFICA MATERIAL CODE		SAMPLI PRESERVAT USED	CODE: TUBING E PRESERV TIVE ADDE	N (re ATION (includ TOTAL VOL	FIELD Filtrat eplaced) ing wet ice) Final pH/ Temp	INITIATED A D-FILTERED: Y ion Equipment Ty DUPLICATE: INTEND ANALYSIS A	Ppe: Y ED ND/OR DD		T: 1333 IZE:μm SAMPLE PUMF FLOW RATE

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

	VI	BINF		SAMPLE		CATION:	Rede		DATE: 1).	-21-24	
VELL NO:	MW-1	190		Or divin EE		ING DA			1.	G. 0.1	
VELL	R (inches): 2	TUBING	ER (inches):		WATER			R (feet): 60.	4 PU OR	RGE PUMP TY BAILER:	
WELL VOI	UME PURGE: t if applicable)	1 WELL VOL	UME = (TOT/	AL WELL DEP	TH - STA	TIC DEPTH T	OWATER) X	WELL CAPACI	TY gallons/fo	at = A	1 gallons
EQUIPME only fill ou	NT VOLUME PU t if applicable)	JRGE: 1 EQU	= { IPMENT VOL.					BING LENGTH) feet)	+ FLOW CE	ELL VOLUME	ich
	TUBING DEPT	H	WELL SCR	EEN INTERV	allons + (AL feet	PURGIN		PURGING		TOTAL VOL	
IN WELL († 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)
015	0.6	0.6	1	61.08	7.34	13.<1	517	0.45	-142	0,5	Gene
020	4.4			61.16	7.32	13.96	516	0,44	-145	0.3	2
1025			1	61,34	7.37	14.04	516	0.41	-147	0.1	1
1030	1	1.0		61.41	7.38	14.22	513	0,40	-149	6.1	1
		PACITY (Gal./I CODES: B AFFILIATION:	Ft.): 1/8" = 0.	SAMPLER(S	Pump; E SAMP SIGNATUR	1/4" = 0.002 SP = Electric PLING DA E(S):	Submersible Pu		eristaltic Pur T: /030	2" = 0.010; mp; 0 = 01 SAMPLIN	T: 049
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2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

SITE NAME:	white.	Flicts	R			TE DCATION:	Redf	.ed Mr	e e e e e e e e e e e e e e e e e e e	-	
WELL NO:				SAMPLE	ID:	14-115	12	7	DATE:	1-21-2	4
-	1	111				SING DA					
	R (inches): 2	TUBING	FR (inches):	TOTAL V DEPTH (feet):		STATIC I TO WAT	ER (feet): 15	28 OR	RGE PUMP TY BAILER:	PE 17P
(only fill out	t if applicable)		= (feet -		feet) X	WELL CAPACI	gallons/fo	ot = N/1	A gallons
	NT VOLUME PU t if applicable)	IRGE: 1 EQU	IPMENT VOL. =		UME + (TUE		TY X T ns/foot X	UBING LENGTH) feet)			Nallons
PUMP OR IN WELL (f		t U	WELL SCRE			DURCIN		PURGING		TOTAL VOL PURGED (g	UME allons): /. 3
TIME	VOLUME PURGED (galions)	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)
1425	0.8	0.8		76.36	7:45	1745	522	0.44	-71	5.4	01205
1430		1		76.59	7.44	17,39	523	6.42	-68	4.8	Ueu
135	1	1.0.11		76.20	7.46	17.37	524	0.44	-71	4.5	Lleon
14490		1.3		77.01	7.45	17.13	SAH	0.41	- 68	H. 5	
										-	
							_			-	
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The	IKRS				to hall	has		INITIATED A			T: 500
PUMP OR	TUBING WELL (feet):	au		TUBING MATERIAL C	ODE:	~		D-FILTERED: Y tion Equipment Ty		FILTERS	IZE:μm
	CONTAMINATIO		11		TUBING	(Y) N(n	eplaced)	DUPLICATE		/N)	
	PLE CONTAINE		ATION	SAMPLE	PRESERV	ATION (includ				SAMPLING	SAMPLE PUMP
SAMPLE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVAT USED		TOTAL VOL ED IN FIELD (mL) Final pH mL) Temp	METHO		CODE	(mL per minute
ID CODE	CONTRINCIO	/									
ID CODE	CONTRINERO										
REMARKS	5:		d de the 1	77.0	15						
REMARKS	5:	AG = Amber S = Silicone;	Glass; CG = T = Teilon; APP = After (Th	Clear Glass; O = Other (HDPE = Specify)	High Density B = Bailer		LDPE = Low D		thylene; PP	= Polypropylene

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

	MW-1	\$0		SAMPLE	ID: MU	-118			DATE:	-21-24	
	IIW I	DU			PURC	SING DA	TA				
WELL DIAMETER	(inches): J	TUBING	ER (inches):	H TOTAL V DEPTH ((feet):		STATIC I TO WATI	ER (feet): 40.0	NS OF	IRGE PUMP TY R BAILER:	/PE)
	UME PURGE: if applicable)	1 WELL VOL	UME = (TOTA = (NL WELL DEP	TH - STA	TIC DEPTH T	OWATER) X feet) X	WELL CAPACI	gallons/fo	ot = 1/)	gallons
	IT VOLUME PU	JRGE: 1 EQU	IPMENT VOL.		UME + (TUE		TY X T	UBING LENGTH)	+ FLOW C		= N/A gallons
PUMP OR T		Н		EEN INTERV	allons + (AL feet	PURGIN		PURGING ENDED AT:	1 .	TOTAL VOL PURGED (g	UME 14
TIME	VOLUME PURGED (gailons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm <u>or</u> μŜ/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)
1135	9	1.51		41.36	7.21	20.20	764	0.65	27	5.8	Clear
140		a. t	1	H. 71	7.20.	20.68	755	0.60	25	4.0	15
145		1.1.1.1		41.410	7.14	20.85	753	0.57	20	4.1	12
130		1.4		41.43	7,16	20.96	747	0.54	15	M.7)
					1						
SAMPLED	BY (PRINT) / A	S	Ft.): 1/8" = 0.0	1" = 0.04; 1006; 3/16' 3P = Bladder I SAMPLER(S) AMPLER(S) AMPLER(S) AMPLER(S) AMPLER(S) AMPLER(S)	Pump; E SAMP SIGNATUR	1/4" = 0.002 SP = Electric PLING DA E(S):	6; 5/16" = 0 Submersible Pu ATA FIELD	.004: 3/8" = 0 amp; PP = P SAMPLING INITIATED A D-FILTERED: Y ion Equipment Ty DUPLICATE	eristaltic Pu T: 1) 5 0 (y) /pe: Y	SAMPLIN ENDED A FILTER S	λΤ: <u>)</u> ΖΕ: μm
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SAMPLED DEPTH IN FIELD DEC SAMPLE	SIDE DIA. CAN EQUIPMENT O BY (PRINT) / A UBING WELL (feet): (CONTAMINATION PLE CONTAINE #	ACITY (Gal./F CODES: B SEFILIATION: S ON: PUM ER SPECIFICA MATERIAL	IP & N	3006; 3/16' 3P = Bladder I SAMPLER(S) a.40' TUBING MATERIAL C SAMPLE PRESERVAT		1/4" = 0.002 SP = Electric E(S): M M (re ATION (includ TOTAL VOL	6; 5/16" = 0 Submersible Pu ATA FIELD Filtrat eplaced) ing wet ice) Final pH/	1.004: 3/8" = 0 Imp; PP = P SAMPLING INITIATED A D-FILTERED: Y Ion Equipment Ty DUPLICATE INTEND ANALYSIS A	0.006; 1/ eristaltic Pu T: 1150 ype: : Y DED AND/OR	2" = 0.010; mp; 0 = 0 SAMPLIN FILTER S SAMPLING EQUIPMENT	5/8" = 0.016 ther (Specify) IG IT: 2 1 IZE:µm SAMPLE PUM

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



APPENDIX E ALTERNATE SOURCE DEMONSTRATIONS



Alternate Source Demonstration

2nd Half 2023 Sampling Event

Entergy White Bluff Plant Coal Ash Disposal Landfill Redfield, Jefferson County, Arkansas

January 2025

Prepared For

Entergy Arkansas, LLC White Bluff Plant 1100 White Bluff Road Redfield, Arkansas 72132

Submitted By

TRC Environmental Corporation 4545 Sherwood Common Blvd. Building 3, Suite A Baton Rouge, LA 70816

Jason S. House Senior Project Manager

Nakia W. Addison, P.E. Operations Manager

TRC Environmental Corporation | Entergy Arkansas, LLC Alternate Source Demonstration – Entergy White Bluff Plant Coal Ash Disposal Landfill © 2025 TRC All Rights Reserved

Final January 2025

Executive Summary

Entergy Arkansas, LLC (EAL) performed the most recent semiannual detection monitoring sampling (2nd Half 2023) in November 2023 for Cells 1 through 4 of 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). Cells 1 through 4 of the CADL constitute 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 16 statistically significant increases (SSI) above background concentrations were identified in three monitoring wells in Stratum I and three monitoring wells in Stratum III, based on either increasing trends at 98% confidence levels using Sen's Slope test and/or intrawell prediction limits statistical analyses:

- Fluoride (MW-102S);
- Calcium, fluoride, sulfate and TDS (MW-106S);
- Boron and fluoride (MW-110S);
- Boron, calcium, fluoride, sulfate, and TDS (MW-111S);
- Fluoride (MW-105D);
- Boron, calcium, and TDS (MW-112D).

The information provided in this report serves as EAL'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), oxidationreduction potential (ORP) and the naturally occurrence of sulfide minerals;

- Natural variation in groundwater quality;
- Releases from historic fill or portions of the CADL closed before the effective date of the CCR Rule (October 19, 2015); and/or
- Surface water that has come into contact with on-site CCR and has migrated into the subsurface.

Therefore, based on the information provided in this ASD report, EAL will continue to conduct semiannual 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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TRC Environmental Corporation | Entergy Arkansas, LLC

Alternate Source Demonstration – Entergy White Bluff Plant Coal Ash Disposal Landfill

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1.1 Background

Entergy Arkansas, LLC (EAL) operates the Entergy White Bluff Plant (Plant), a coal-fired power plant, to generate electricity. The Plant is located at 1100 White Bluff Road in Redfield, Jefferson County, Arkansas as shown on (**Figure 1**). Coal combustion residuals (CCR) are produced as part of the electrical generation operations. The Plant has been generating and disposing of CCR in a portion of the on-site coal ash disposal landfill (CADL) since it began operations in 1981. The CADL is a Class 3N non-commercial industrial landfill and operates under Arkansas Division of Environmental Quality (ADEQ) Solid Waste Permit No. 0199-S3N-R3.

The ADEQ-permitted CADL consists of approximately 153-acres at the Plant and encompasses the following three areas:

- Approximately 50-acre portion of the CADL historically used for CCR disposal from 1981 until prior to the effective date of the CCR Rule (October 19, 2015). CCR was placed into ravines. This area was closed in accordance with the Plant's original solid waste permit (TRC, 2018a);
- Cells 1 through 4, which are the current cells used for CCR disposal and were constructed on top of, and adjacent to, the above-noted closed CCR disposal areas prior to the effective date of the CCR Rule. Cells 1 through 4 encompass approximately 30 acres and were constructed as follows:
 - Cells 1, 2, and 3 were constructed with an 18-inch thick compacted clay bottom liner;
 - Cell 4 was constructed with a two-foot thick compacted clay bottom liner and a leachate collection system; and
- Approximately 100-acre portion of the CADL that is currently undeveloped and may be used for CCR and/or non-CCR disposal.

In addition to the current 153-acre permitted landfill, there is an approximately 25 acre area to the immediate west of Cells 1 through 4 where during the initial period of operation of the Plant, ash was placed pursuant to the permits issued at that time. This historic fill area is covered with soil and vegetated.

Cells 1 through 4 accept CCR for disposal in accordance with the federal *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule* (CCR Rule), effective October 19, 2015, and subsequent Final Rules promulgated by the United States Environmental Protection Agency (USEPA). Cells 1 through 4 comprise the CCR management unit (CCR Unit) per the CCR Rule and are the focus of this ASD. The approximate limits of Cells 1 through 4, the closed disposal areas, and the undeveloped, future disposal areas within the ADEQ-permitted footprint of the CADL are shown in (**Figure 2**).

Historical CCR management by EAL has consisted of the following activities:

- Beneficial use in local construction projects;
- Beneficial use as roadbed material at the CADL; and
- Placement into the CADL.

1.1.1 Groundwater Monitoring and Statistical Analysis

In accordance with 40 CFR 257.90 through 257.94, EAL installed a groundwater monitoring system for Cells 1 through 4, collected samples from the Certified Monitoring Well Network for laboratory analysis for CCR constituents and performed statistical analysis of the collected samples. EAL 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 23 wells installed into two stratigraphic units as follows:

- Eight wells are installed into an upper silty and clayey sand unit (Stratum I), which are designated as "S" monitoring wells; and
- Fifteen wells are installed into a lower silty and clayey sand and clay unit (Stratum III), which are designated as "D" monitoring wells.

Pursuant to 40 CFR 257.91(f), EAL obtained certification by a qualified Arkansas-registered professional engineer (P.E.) stating that the Certified Monitoring Well Network has been designed and constructed to meet the requirements of 40 CFR 257.91 (see Groundwater Monitoring System Certification, TRC, February 26, 2018) of the CCR Rule (TRC 2018b).

As discussed above, Stratum I and Stratum III are currently being monitored pursuant to the CCR Rule. A groundwater sampling and analysis program including selection of statistical procedures to evaluate groundwater data was prepared per the CCR Rule (see Groundwater Sampling and Analysis Plan (FTN, 2017b)). Eight quarterly background CCR detection monitoring events were performed from October 2015 through June 2017 in accordance with 40 CFR 257.93(d) and 257.94(b). The eight quarterly detection monitoring background samples were analyzed for Appendix III to Part 257 – Constituents for Detection Monitoring and for Appendix IV to Part 257 – Constituents for Assessment Monitoring.

Following completion of quarterly background detection monitoring in June 2017, EAL implemented semiannual detection monitoring per 40 CFR 257.94(b) for the CCR Unit. The first semiannual detection monitoring event was performed in August 2017 (2nd Half 2017). Subsequent detection monitoring events, with associated verification sampling when appropriate, have been performed on a semiannual basis since August 2017. EAL performed the most recent semiannual detection monitoring event (2nd Half 2023) in November 2023. Per the CCR Rule, the semiannual detection monitoring event samples were analyzed for Appendix III constituents.

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), EAL 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 and re-analysis of the laboratory analytical data were performed to identify potential SSIs for the 2nd Half 2023 semiannual detection monitoring event. A total of 16 SSIs were identified for five Appendix III constituents: boron, calcium, fluoride, sulfate, and TDS. SSIs were identified in four Stratum I and two Stratum III monitoring wells.

1.2 Purpose

Pursuant to 40 CFR 257.94(e)(2), EAL may demonstrate that a source other than the CCR Unit caused the SSIs identified or that the SSIs resulted from error 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 SSIs identified for the 2nd Half 2023 semiannual detection monitoring event, pursuant to 40 CFR 257.94(e)(2) of the CCR Rule.

2.1 Site Hydrogeology

Historical subsurface investigations have identified the following four stratigraphic horizons of the Jackson Group (Kresse, et. al., 2014) and their associated hydrogeology for the CCR Unit and the CADL:

- Stratum I. Interbedded Clay, Silt, and Sand Stratum I ranges from approximately 10 to 54feet thick and consists of interbedded silty sand (SM), clayey sand (SC), silts (ML and MH), and clay (CL and CH). Occasional deposits of carbonaceous material are present throughout Stratum I. Based on the results of in-situ slug tests, hydraulic conductivity values range from 4.0 x 10⁻⁵ to 4.0 x 10⁻⁴ cm/sec;
- Stratum II. Clay Stratum II ranges from approximately 14 to 49-feet thick and consists of a very stiff clay (CH) with occasional silt and/or very fine-grained sand laminations. Occasional deposits of carbonaceous mater are present throughout Stratum II. Based on the results of in-situ slug tests, hydraulic conductivity values range from 4.7 x 10⁻⁶ to 1.4 x 10⁻⁸ cm/sec;
- Stratum III. Clayey and Silty Sand Stratum III ranges from approximately 5 to 19-feet thick and consists primarily of clayey sand (SC) and/or silty sand (SM). A poorly graded, fine-grained sand (SM) was identified in one piezometer. The upper limits of Stratum III were encountered at elevations of 263 to 289-feet NGVD (depths ranging from 19 to 97-feet bgs). Based on results of in-situ slug tests, hydraulic conductivity was determined to be spatially variable and ranged from 4.2 x 10⁻⁷ to 2.5 x 10⁻⁴ cm/sec; and
- Lower Confining Unit below Stratum III. is a very dark grey, fat clay that is highly laminated with light grey silt and very fine-grained sand. In-situ permeability testing of this unit determined a vertical hydraulic conductivity of 3.7 x 10⁻⁸ cm/s. This Lower Confining Unit was encountered during aquifer characterization efforts around the recycle ponds conducted in 2018.

It was concluded that Stratum I was not laterally continuous across the approximately 153-acre landfill. The estimated calculated seepage velocities in Stratums I and III were as follows:

- Stratum I: 2 to 20 feet/year; and
- Stratum III: <1 to 10 feet/year.

While Stratum I and Stratum III have been monitored per the CCR Rule since October 2015, it is unclear whether Stratum I and Stratum III are aquifers that are capable of providing sustainable well yields consistent with USEPA aquifer use criteria (*e.g.*, 0.1 gallons per minute). This uncertainty is based on the following evidence:

- Stratum I is present to the west of the CADL and only present within the western portion of the ADEQ-permitted boundaries of the CADL, approximately corresponding to the boundaries of the closed portions of the CADL. The CCR Unit and Stratum I are not continuous to the east across the entire footprint of the CADL;
- In-situ hydraulic conductivities are low to very low for both Stratum I and Stratum III, indicating that sustainable well yields may not be obtainable from Stratum I and Stratum III at volumes that meet the minimum USEPA well use criteria (*e.g.*, 0.1 gallons per minute); and
- During the quarterly and semiannual detection monitoring events performed from October 2015 through November 2023, which have been performed using the low-flow purge and sample methodology, the sampling teams have consistently documented that turbidity values are often greater than 10 Nephelometric Turbidity Units (NTU). Furthermore, wells have been pumped dry during sampling for both Stratum I and Stratum III, indicating that neither sustainable well yields nor useable drinking water are associated with Stratum I and Stratum III.

To evaluate this uncertainty, EAL began performing hydrogeologic investigations during 2019 and 2020, continuing through 2024 to evaluate both the stratigraphy and hydrogeology beneath the CCR Unit and to identify the aquifer(s) making up the uppermost aquifer system at the CCR Unit and CADL and the appropriateness of the current Certified Monitoring Well Network.

2-2

2.2 General Groundwater Quality

Regionally, groundwater quality in the Jackson Group consists of a sodium- and calcium-sulfate water type, with generally poor water quality (FTN 2014, Kresse et. al 2014). Reported water quality concentrations for select secondary drinking water contaminants compared to USEPA secondary maximum contaminant levels (MCLs) are provided in the table below.

Jackson Group Groundwater Water Quality							
	Concentrat	tion Range	USEPA				
Constituent	Low	High	Secondary MCL				
Iron (mg/L)	0.05	19	0.3				
pH (s.u.)	2.9	8.0	6.5 - 8.5				
Sulfate (mg/L)	0.6	3,080	250				
TDS (mg/L)	11	5,330	500				

As noted in the table above, the natural range of groundwater quality within the Jackson Group, which includes both Stratum I and Stratum III, exceeds the secondary drinking water MCLs established by the USEPA for drinking water or, in the case of pH, is less than its secondary MCL. Finally, the results of historical groundwater monitoring at the Plant conducted from 1991 through 1996 showed that normal indicator parameters were masked by naturally elevated concentrations of the monitored constituents (FTN 2014, TRC 2018a).

2.3 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 the site geological conditions, several groundwater parameters are discussed as follows, including boron, fluoride, sulfate, calcium, TDS and pH.

2.3.1 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 the World Health Organization (WHO) and 0.9 mg/L by 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 the 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 in groundwater and the results indicated that the main process caused high boron enrichment in groundwater was the flushing by fresh groundwater rather than geological setting, climate or age. The desorption of Boron from mineral surfaces could be affected by pH, ionic strength, salinity and HCO₃/CO₃. 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 SO₄²⁻/Cl⁻ ratio. Rodriguez-Espinosa et al. (2020) found that the Boron concentration in groundwater was related to the SO₄²⁻ and age affect.

Regarding the Boron concentration level on the sites, the main source of Boron is more natural than anthropogenic. Therefore, the detected increasing of Boron concentration is likely due to the geochemistry condition changes, such as pH, ion exchanges, EC and salinity.

2.3.2 Fluoride in Groundwater

The common natural source of fluoride in groundwater is the dissolution of natural fluoridebearing mineral, such as fluorspar, fluorapatite, amphiboles, hornblende, tremolite and biotite (Luo et al., 2018). The natural concentration of fluoride in groundwater depends on the geological, chemical and physical characteristics of the aquifer, the porosity and acidity of the soil and rocks, the surrounding temperature, the action of other chemical elements, depth of the aquifer and intensity of weathering (Brindha & Elango, 2011). Due to the concentration range of this site, geochemical process is the main factor controlling fluoride in groundwater. Ion exchange, evaporation, adsorption-desorption, ion competition, mixing, salinization and anthropogenic pollution are geochemical processes that can take place and cause the occurrence of fluoride in groundwater (Luo et al., 2018). Main factors that might cause the increase of fluoride concentration in groundwater include alkaline pH, high concentration of sodium and bicarbonate, and low concentration of calcium.

Alkaline pH can increase the fluoride dissolution from mineral surfaces into groundwater. Saxena & Ahmed (2001) observed that alkaline conditions with pH ranging between 7.6 and 8.6 are favorable for dissolution of fluorite mineral from the host rocks.

Sodium bicarbonate type waters are typical of high fluoride waters. Many research studies have demonstrated positive correlations between fluoride and both bicarbonate and sodium as well as an inverse relation between fluoride and calcium (Mondal et al., 2014; Guo et al., 2012; Chen et al., 2020). The chemical reactions for the dissolution of fluoride in the presence of high bicarbonate and sodium, and low calcium content is described as follows (Kimambo et al., 2019):

 $Na^+ + +HCO_3^- \rightarrow NaHCO_3$

$$CaF_2 + +2NaHCO_3 \rightarrow CaCO_3 + 2Na^+ + 2F^- + H_2O + CO_2$$

Luo et al. (2018) reported that cation exchange can increase the fluoride concentration when increasing the Na/Ca molar ratio via ion complexation, and salt effect can further increase the fluoride dissolution from mineral surfaces.

In addition, evaporation is another potential reason for increases in the fluoride concentration in shallow groundwater. Evaporation could directly remove water from shallow aquifers and elevate the fluoride concentration. Evaporation could increase ion concentrations, leading to the precipitation of some major minerals, reducing the calcium concentration, and favoring the dissolution of fluoride. Anthropogenic sources may also increase the fluoride in groundwater, such as pesticide and fertilizer use, and industrial waste discharge.

2.3.3 Sulfate in Groundwater

Sulfate is ubiquitous in groundwater, with both natural and anthropogenic sources. There are many potential sources of sulfate including mineral dissolution, atmospheric deposition, and other anthropogenic sources (mining, fertilizer, synthetic detergents, industrial wastewater etc.) (Miao et al., 2012). As water moves through soil and rock formations that contain sulfate

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minerals, some of the sulfate dissolves into the groundwater. Minerals that contain sulfate include magnesium sulfate (Epsom salt), sodium sulfate (Glauber's salt), and calcium sulfate (gypsum). Gypsum is an important contributor to the high levels of sulfate in many aquifers around the world. Higher levels of sulfate in groundwater are common in the western part of the United States (MDH, 2008).

Sulfate is mobile in soil and inputs to soil will impact groundwater eventually. Many research studies indicated that atmospheric deposition, dissolution of gypsum, oxidation of sulfide mineral and anthropogenic inputs will contribute to sulfate. Based on the geological condition of the site, atmospheric deposition and anthropogenic activities could be the main factors (Einsiedl & Mayer, 2005; Pu et al., 2012).

2.3.4 Calcium in Groundwater

Calcium is one of the most important ionic constituents in groundwater (Razowska-jaworek, 2014). Water-rock interaction occurs when water meets rocks or minerals, such as limestone, marble, calcite, dolomite, gypsum, fluorite and apatite. Natural dissolution of carbonate rocks and minerals is the primary source of calcium in groundwater (Jiang et al., 2009). Calcium is an important determinant of water hardness (Ca²⁺), while magnesium is the other hardness determinant. The most common shallow groundwater type is Ca-HCO₃ dominated and Ca(Mg)-HCO₃ dominated.

A literature review indicates the major factors that may influence the calcium concentration in groundwater include rock weathering, pH, electrical conductivity and anthropogenic activities (mining, concrete material dissolution, fertilizer etc.) (Hájek et al., 2021; Schot & Wassen, 1993; Shi et al., 2018). Based on the geological condition of the site, pH, electrical conductivity and anthropogenic activities could be the potential reasons for the calcium concentrations.

2.3.5 TDS in Groundwater

Total dissolved solids represent the combined total of inorganic and organic substances contained in the groundwater, and it can be a general indicator of water quality. These solids are primarily minerals, salts, and organic matters, which may originate from sources such as the weathering of minerals, urban runoff, sewage, effluent discharges, agriculture, decaying organisms, and other human activities (de-icing roads, water softer use). Common salts that contribute to TDS are sodium, chloride, calcium, magnesium, potassium, sulfates, and bicarbonates (Olumuyiwa I. Ojo, 2012).

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TDS levels in groundwater is usually higher than surface water due to the longer contact time with the underlying rocks and sediments. Since many minerals are water soluble, high concentrations can accumulate over time, through the constantly reoccurring process of precipitation and evaporation.

TDS is related to other water quality parameters like hardness, which may occur if the high TDS content is due to the presence of carbonates. A few research studies simulated the relationship between TDS and other groundwater parameters such as EC and salinity, using different models. Due to the complicated geological conditions, the observation was not consistent at different study sites (Atekwana et al., 2004; Banadkooki et al., 2020; Poursaeid et al., 2020).

2.3.6 pH in Groundwater

Groundwater pH is an important aspect to consider in the monitoring and management of CCR landfill sites, as changes in pH can affect the quality of groundwater and the potential for release of contaminants. The potential reasons for pH changes in groundwater are as following:

- Changes in water flow patterns. Changes in the flow patterns of groundwater can cause the mixing of different water sources with varying pH levels, resulting in an overall increase in the pH of the groundwater at the site.
- Drainage from adjacent areas. Groundwater from adjacent areas with higher pH levels may be flowing into the landfill site and raising the overall pH of the groundwater at the site.
- Changes in geochemistry conditions. Geochemistry can play a role in affecting the pH of groundwater at a landfill site, such as mineral dissolution, pH buffering capacity, redox reactions, and groundwater-rock interactions (Edmunds & Smedley, 1996; Wilkin & DiGiulio, 2010).
 - Mineral dissolution. Minerals present in the surrounding soil can dissolve and release basic or acidic compounds into the groundwater, affecting the pH, e.g., the dissolution of calcium carbonate can increase the pH of the groundwater by releasing carbonate ions, the dissolution and oxidation of pyrite can decrease the pH of groundwater by releasing hydrogen ions.
 - pH buffering capacity. The presence of minerals with a high buffering capacity in the surrounding soil can help to regulate the pH of the groundwater, preventing drastic

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changes in response to other factors. For example, the presence of minerals like calcite and dolomite can buffer the groundwater pH, helping to maintain a relatively stable pH even in the presence of acidic compounds.

- Redox reactions. The oxidation-reduction reactions that occur in the surrounding soil can impact the pH of the groundwater. The oxidation of iron-sulfide minerals can result in the release of sulfuric acid, which can lower the pH of groundwater. The oxidation of reduced sulfur species to sulfate, which can increase the pH of groundwater (Jacks, 2017).
- Groundwater-rock interactions. The interaction between groundwater and the rocks and minerals in the surrounding soil can affect the pH of the groundwater. For example, groundwater can dissolve or release basic or acidic compounds from the minerals in the rock, affecting the pH.

Section 3 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 2023 semiannual detection monitoring event was performed in November 2023. Statistical analysis of the 2nd Half 2023 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 either increasing trends at 98% confidence levels using Sen's Slope test and/or intrawell prediction limits statistical analyses, the following 16 SSIs were identified and summarized in Table 1:

- Fluoride (MW-102S);
- Calcium, fluoride, sulfate and TDS (MW-106S);
- Boron and fluoride (MW-110S);
- Boron, calcium, fluoride, sulfate, and TDS (MW-111S);
- Fluoride (MW-105D);
- Boron, calcium, and TDS (MW-112D).

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.

A discussion for each of the individual SSIs identified for the Stratum I and III wells and associated evidence demonstrating that the 16 SSIs were not caused by a release from the CCR Unit is provided in the subsections below.

Stratum	Well	Analyte	Value (mg/L)	Intrawell Prediction Limit (mg/L)	SI by Sen's Slope test
Ι	MW-102S	Fluoride	0.663	0.195	Ν
	MW-106S	Calcium	40.5	23.8	Y
	MW-106S	Fluoride	0.695	0.625	Y
	MW-106S	Sulfate	698	604	Y
	MW-106S	TDS	1040	827	Y
	MW-110S	Boron	1.69	1.586	Y
	MW-110S	Fluoride	0.444	0.373	Y
	MW-111S	Boron	6.67	4.495	Y
	MW-111S	Calcium	117	36.8	Y
	MW-111S	Fluoride	0.869	0.283	Y
	MW-111S	Sulfate	827	398	Y
	MW-111S	TDS	1370	541	Y
III	MW-105D	Fluoride	0.31	0.200	Ν
	MW-112D	Boron	0.286	0.252	Ν
	MW-112D	Calcium	41.1	21.3	Y
	MW-112D	TDS	295	205	Y

Table 1 SSIs – November 2023 Semiannual Detection Monitoring Event

3.1 pH Values Across the Site

During the June 2023 sampling event, notably low pH values were recorded across the site, especially in the Stratum III monitoring wells. Ten pH values of the monitoring wells were detected below the intrawell prediction limit ranges. The pH values of the monitoring wells detected during the November 2023 sampling event returned to normal ranges aligning with historical data, which suggests that the anomalous low pH values observed during the June 2023 sampling event may be attributed to potential field detection instruments inaccuracies or sampling errors rather than indicating the presence of contamination sources.

3.2 Fluoride at MW-102S

The fluoride SSI identified at MW-102S is a result of potential laboratory inaccuracies or sampling errors, groundwater geochemistry conditions, and potential infiltration of surface water not related to CCR Unit. The following evidence supports this determination:

- Fluoride was detected in MW-102S at a concentration of 0.663 mg/L in the November 2023 sample. Compared to the historical data which is below detection limit of 0.15 mg/L, the fluoride concentration increased approximately 4 times. This concentration exceeded the intrawell prediction limit of 0.195 mg/L. No significant trend was detected by the Mann-Kendal statistical analysis. MW-102S is one of the three Stratum I background monitoring wells (MW-101S, MW-102S, and MW-104S) which have the fluoride concentrations below 0.15 mg/L in the past. However, it should be noted that the measured fluoride concentrations are less than the federal primary drinking water maximum contaminant level (MCL) standard of 4.0 mg/L.
- The fluoride exceedance may be attributed to potential laboratory inaccuracies or sampling errors.
- As discussed in Section 2.3, pH of the groundwater is not an impact of the exceedance since fluoride dissolution favors alkaline pH. Fluoride has positive correlation with both bicarbonate and sodium, and an inverse relation with calcium. Ion exchange process with the presence of high sodium and bicarbonate could result in the increasing of fluoride in groundwater.
- Surface water infiltration may have impacts to the groundwater quality, however, the impacts are not related to the CCR Unit since MW-102S located upgradient to the CCR Unit.

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3.3 Calcium at MW-106S

The calcium SSI identified at MW-106S is a result of the acidic geochemistry condition in groundwater, potential impact of CCR disposed at the CADL prior to October 19, 2015, and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-106S. The following evidence supports this determination:

- Calcium was detected in MW-106S at a concentration of 40.5 mg/L in the November 2023 sample. Compared to the value of 46.8 mg/L in the June 2023 sample, the calcium concentration decreased approximately 13%. The Mann-Kendal statistic of 171 exceeded the critical value of 78 indicating a significant increasing trend at the 98% confidence level. As discussed in Section 2.3, pH and EC could affect calcium concentrations in groundwater. Low pH values of 3.8-4.0 were detected in the past few years, which indicates the groundwater in this area is acidic and it was related to pre-CCR Rule disposal source or natural geochemistry conditions. The acidic groundwater condition favors the dissolution of calcium from soil and mineral surfaces to water phase. The significant increasing trend of calcium from 16 mg/L in 2015 to 46.8 mg/L in 2023 could be a result of the acidic geochemistry condition. The increasing cation and anion concentrations will also lead to the increasing EC, which will affect other metals dissolution.
- The concentrations of calcium in MW-101S, which is a background well, have varied from 14 to 98.5 mg/L during the overall time period of CCR detection monitoring. The calcium concentration of 98.5 mg/L for MW-101S is greater than the calcium concentration of 40.5 mg/L measured at MW-106S during the 2nd Half 2023 semiannual detection monitoring event. Therefore, the calcium concentration measured at MW-106S is within the range of natural variation in background groundwater quality.
- Based on review of potentiometric surface mapping, locations of closed portions of the CADL underlying the CCR Unit, and the CCR Unit relative to MW-106S, it appears that MW-106S likely monitors groundwater associated with the underlying pre-CCR Rule closed portions of the CADL rather than the CCR Unit; therefore, concentrations measured in MW-106S are likely more reflective of pre-CCR Rule disposal rather than of the CCR Unit.
- Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-106S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR

Unit. This surface water ultimately migrates from the MW-106S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water to MW-106S, it appears likely that surface water infiltration has impacted the MW-106S monitoring results.

3.4 Fluoride at MW-106S

The fluoride SSI identified at MW-106S is a result of groundwater geochemistry conditions, potential impact of CCR disposed at the CADL prior to October 19, 2015, and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-106S. The following evidence supports this determination:

- Fluoride was detected in MW-106S at a concentration of 0.695 mg/L in the November 2023 sample. Compared to the value of 0.728 mg/L in the June 2023 sample, the fluoride concentration decreased by 5%. The Mann-Kendal statistic of 143 exceeded the critical value of 78 indicating a significant increasing trend at the 98% confidence level. This concentration exceeded the intrawell prediction limit of 0.625 mg/L and the maximum fluoride concentrations of 0.1 to 0.135 mg/L measured in the three Stratum I background monitoring wells (MW-101S, MW-102S, and MW-104S). However, it should be noted that the measured fluoride concentrations are less than the federal primary drinking water maximum contaminant level (MCL) standard of 4.0 mg/L.
- The fluoride concentration in MW-106S stayed in a narrow range of 0.6-0.68 mg/L in the past two years. pH of the groundwater is not an impact of the exceedance since fluoride dissolution favors alkaline pH. As discussed in Section 2.3, fluoride has positive correlation with both bicarbonate and sodium, and an inverse relation with calcium. With the increasing trend of calcium in the groundwater, ion exchange process with high sodium and bicarbonate can result in the increasing of fluoride in groundwater.
- Based on review of potentiometric surface mapping, locations of closed portions of the CADL underlying the CCR Unit, and the CCR Unit relative to MW-106S, it appears that MW-106S likely monitors groundwater associated with the underlying pre-CCR Rule closed portions of the CADL rather than the CCR Unit; therefore, concentrations measured in MW-106S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.
- Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within

the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-106S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR Unit. This surface water ultimately migrates from the MW-106S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water to MW-106S, it appears likely that surface water infiltration has impacted the MW-106S monitoring results.

3.5 Sulfate at MW-106S

The sulfate SSI identified at MW-106S is a result of natural geochemistry condition in soil and groundwater, potential impact of CCR disposed at the CADL prior to October 19, 2015, and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-106S. The following evidence supports this determination:

- Sulfate was detected in MW-106S at a concentration of 698 mg/L in the November 2023 sample, which exceeded the intrawell prediction limit of 604 mg/L. Compared to the value of 808 mg/L in the June 2023 sample, the sulfate concentration decreased by 14%. The Mann-Kendal statistic of 158 exceeded the critical value of 78 indicating a significant increasing trend at the 98% confidence level. The increasing trend of sulfate was consistent with TDS. The elevated sulfate concentration in the past three years could be caused by the acidic geochemistry condition discussed above or an anthropogenic source since sulfate is mobile in soils and can get into groundwater via surface water infiltration. Another potential reason is the natural occurrence of sulfide minerals in the soil, such as pyrite. The oxidation of sulfide minerals will slowly release sulfate and hydrogen ion into groundwater, which will lead to the increasing of sulfate and decreasing of pH.
- Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-106S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR Unit. This surface water ultimately migrates from the MW-106S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water to MW-106S, it appears likely that surface water infiltration has impacted the MW-106S monitoring results.

Based on review of potentiometric surface mapping and locations of closed portions of the CADL, and the CCR Unit relative to MW-106S, MW-106S likely monitors groundwater associated with the pre-CCR Rule closed portions of the CADL rather than the CCR Unit; therefore, concentrations measured in MW-106S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.

3.6 TDS at MW-106S

The TDS SSI identified at MW-106S is a result of the acidic groundwater geochemistry condition, sodium sulfate source, potential impact of CCR disposed at the CADL prior to October 19, 2015, and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-106S. The following evidence supports this determination:

- TDS was detected in MW-106S at a concentration of 1,040 mg/L in the November 2023 sample, which exceeded the intrawell prediction limit of 827 mg/L. The Mann-Kendal statistic of 152 exceeded the critical value of 78 indicating a significant increasing trend at the 98% confidence level. Compared to the TDS value of 1,200 mg/L in the June 2023 sample, 979 mg/L in the December 2022 sample, 920 mg/L in the June 2022 sample and 1090 mg/L in the November 2021 sample, the TDS was stable. As discussed in Section 2.2, the Jackson Group groundwater is sodium- and calcium-sulfate water type. Sodium could be another main contribution to the TDS exceedance with calcium and sulfate. High sodium concentration can also cause the fluoride exceedance. The acidic groundwater could be one of the potential reasons. An alternate source containing sodium sulfate should also be considered, which can be mineral dissolution, surface water flux or atmospheric deposition.
- Based on review of potentiometric surface mapping, locations of closed portions of the CADL, and the CCR Unit relative to MW-106S, MW-106S likely monitors groundwater associated with the pre-CCR Rule closed portions of the CADL rather than the CCR Unit. Therefore, concentrations measured in MW-106S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.
- Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-106S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR Unit. This surface water ultimately migrates from the MW-106S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site

surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water to MW-106S, it appears likely that surface water infiltration has impacted the MW-106S monitoring results.

3.7 Boron at MW-110S

The Boron SSI identified at MW-110S is a result of the acidic groundwater geochemistry condition and potential impact of CCR disposed at the CADL prior to October 19, 2015. The following evidence supports this determination:

- Boron was detected in MW-110S at a concentration of 1.69 mg/L in the November 2023 sample, which exceeded the intrawell prediction limit of 1.586 mg/L. Compared to the value of 2.24 mg/L in the June 2023 sample, the boron concentration decreased by 25%. The Mann-Kendal statistic of 165 exceeded the critical value of 78 indicating a significant increasing trend at the 98% confidence level. As discussed in Section 2.3, the main factors that may influence boron concentration in groundwater are pH and EC. Decreasing of 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 relatively low salts concentrations in MW-110S area, which indicates EC is not the factor causing the boron increasing trend. Low pH values of 4.80 and 4.16 were detected in the November 2023 and June 2023 samples, respectively. The acidic groundwater condition favors the boron dissolution from soil and mineral surface. Based on the consistent boron levels in groundwater, the significant increasing trend of boron is more likely relative to the acidic geochemistry condition other than a contamination source.
- Based on review of potentiometric surface mapping, locations of historic fill, locations of closed portions of the CADL underlying the CCR Unit, and the CCR Unit relative to MW-110S, it appears that MW-110S likely monitors groundwater associated with the underlying pre-CCR Rule closed portions of the CADL rather than the CCR Unit; therefore, concentrations measured in MW-110S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.

3.8 Fluoride at MW-110S

The fluoride SSI identified at MW-110S is a result of natural groundwater geochemistry conditions, potential impact of CCR disposed at the CADL prior to October 19, 2015, and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-110S. The following evidence supports this determination:

- Fluoride was detected in MW-110S at a concentration of 0.444 mg/L in the November 2023 sample, which exceeded the intrawell prediction limit of 0.373 mg/L and the maximum fluoride concentrations of 0.1 to 0.135 mg/L measured in the three Stratum I background monitoring wells (MW-101S, MW-102S, and MW-104S). Compared to the value of 0.228 mg/L in the June 2023 sample, the fluoride concentration increased by 95%. The Mann-Kendal statistic of 80 exceeded the critical value of 78 indicating a significant increasing trend at the 98% confidence level. However, it should be noted that the measured fluoride concentrations are less than the federal primary drinking water MCL of 4.0 mg/L. pH of the groundwater is not an impact of the exceedance since fluoride dissolution favors alkaline pH. As discussed in Section 2.3.2, fluoride has positive correlation with both bicarbonate and sodium, and an inverse relation with calcium. The relative low concentration of calcium and high concentration of sodium in the groundwater could result in the increasing of fluoride in groundwater.
- Based on review of potentiometric surface mapping, locations of closed portions of the CADL, and the CCR Unit relative to MW-110S, MW-110S likely monitors groundwater associated with the pre-CCR Rule closed portions of the CADL rather than the CCR Unit. Therefore, concentrations measured in MW-110S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.
- Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-110S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR Unit. This surface water ultimately migrates from the MW-110S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water to MW-110S, it appears likely that surface water infiltration has impacted the MW-110S monitoring results.

3.9 Boron at MW-111S

The boron SSI identified at MW-111S is a result of natural groundwater geochemistry conditions with low pH and high EC, potential impact of CCR disposed at the CADL prior to October 19, 2015, and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-111S. The following evidence supports this determination:

- Boron was detected in MW-111S at a concentration of 6.67 mg/L in the November 2023 sample, which exceeded the intrawell prediction limit of 4.495 mg/L. Compared to the value of 5.98 mg/L in the June 2023 sample, the boron concentration increased by 12%. The Mann-Kendal statistic of 165 exceeded the critical value of 78 indicating a significant increasing trend at the 98% confidence level. As discussed in Section 2.3, the main factors that may influence boron concentration in groundwater are pH and EC. Decreasing of pH will increase the dissolution of boron from the mineral surfaces. Boron in groundwater will increase with the increasing of EC. A low pH value of 3.86 was detected in the November 2023 sample and the pH of groundwater in the area of MW-111S stayed in a steady range of 3.6 to 4.5 in the past five years. The acidic groundwater condition favors the boron dissolution from soil and mineral surface. The increasing TDS and sulfate in MW-111S demonstrates that the groundwater in this area has relatively high EC, which will cause the increasing of boron concentration in groundwater. Based on the consistent boron levels, the significant increasing trend of boron is more likely relative to the geochemistry conditions with low pH and high EC other than a contamination source.
- Based on review of potentiometric surface mapping and locations of closed portions of the CADL, and the CCR Unit relative to MW-111S, MW-111S likely monitors groundwater associated with the pre-CCR Rule closed portions of the CADL rather than the CCR Unit. Therefore, concentrations measured in MW-111S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.
- Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-111S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR Unit. This surface water ultimately migrates from the MW-111S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water to MW-111S, it appears likely that surface water infiltration has impacted the MW-111S monitoring results.

3.10 Calcium at MW-111S

The calcium SSI identified at MW-111S is a result of natural groundwater geochemistry conditions with low pH and high EC, potential impact of CCR disposed at the CADL prior to

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October 19, 2015, and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-111S. The following evidence supports this determination:

- Calcium was detected in MW-111S at a concentration of 117 mg/L in the November 2023 sample, which exceeded the intrawell prediction limit of 36.8 mg/L. Compared to the value of 118 mg/L in the June 2023 sample, the calcium concentration was consistent. Normality analysis of the calcium data set at MW-111S was non-normal requiring trend analysis of the data set to determine a potential significance increase. The Mann-Kendal statistic of 186 exceeded the critical value of 78 indicating a significant increasing trend at the 98% confidence level. As discussed in Section 2.3, pH and EC could affect calcium concentrations in groundwater. A low pH value of 3.86 was detected in the November 2023 sample and the pH of groundwater in the area of MW-111S stayed in a steady range of 3.6 to 4.5 in the past five years. The acidic condition favors the dissolution of calcium from soil and mineral surfaces to water phase. The relatively high EC in groundwater discussed above can also increase the calcium concentration. The significant increasing trend of calcium could be a result of the natural geochemistry conditions with low pH and high EC.
- Background concentrations of calcium have varied from 14 to 98.5 mg/L at upgradient monitoring well MW-101S. The calcium concentration of 117 mg/L at MW-111S during the 2nd Half 2023 semiannual detection monitoring event is beyond but close to the top background concentration. Therefore, the calcium exceedance is still in the range of natural variation in background groundwater quality.
- Based on review of potentiometric surface mapping, locations of closed portions of the CADL, and the CCR Unit relative to MW-111S, MW-111S likely monitors groundwater associated with the underlying pre-CCR Rule closed portions of the CADL rather than the CCR Unit. Therefore, concentrations measured in MW-111S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.
- Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-111S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR Unit. This surface water ultimately migrates from the MW-111S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water

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to MW-111S, it appears likely that surface water infiltration has impacted the MW-111S monitoring results.

3.11 Fluoride at MW-111S

The fluoride SSI identified at MW-111S is a result of natural groundwater geochemistry conditions, potential impact of CCR disposed at the CADL prior to October 19, 2015, and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-111S. The following evidence supports this determination:

- Fluoride was detected in MW-111S at a concentration of 0.869 mg/L in the November 2023 sample, which exceeded the intrawell prediction limit of 0.283 mg/L and the maximum fluoride concentrations of 0.1 to 0.135 mg/L measured in the three Stratum I background monitoring wells (MW-101S, MW-102S, and MW-104S). Compared to the value of 0.85 mg/L in the June 2023 sample, the fluoride concentration was consistent. The Mann-Kendal statistic of 180 exceeded the critical value of 78 indicating a significant increasing trend at the 98% confidence level. However, it should be noted that the measured fluoride concentrations are less than the federal primary drinking water MCL of 4.0 mg/L. pH of the groundwater is not an impact of the exceedance since fluoride dissolution favors alkaline pH. As discussed in Section 2.3, fluoride has positive correlation with both bicarbonate and sodium, and an inverse relation with calcium. With the increasing trend of calcium in the groundwater, ion exchange process with high sodium and bicarbonate can result in the increasing of fluoride in groundwater. The fluoride increasing trend could also be a result of continuous dissolution of salts from the soils and minerals associated with the increased TDS.
- Based on review of potentiometric surface mapping, locations of closed portions of the CADL, and the CCR Unit relative to MW-111S, MW-111S likely monitors groundwater associated with the pre-CCR Rule closed portions of the CADL rather than the CCR Unit. Therefore, concentrations measured in MW-111S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.
- Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-111S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR Unit. This surface water ultimately migrates from the MW-111S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site

surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water to MW-111S, it appears likely that surface water infiltration has impacted the MW-111S monitoring results.

3.12 Sulfate at MW-111S

The sulfate SSI identified at MW-111S is a result of natural groundwater geochemistry condition of low pH and potential oxidation of sulfide minerals, potential impact of CCR disposed at the CADL prior to October 19, 2015, and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-111S. The following evidence supports this determination:

- Sulfate was detected in MW-111S at a concentration of 827 mg/L in the November 2023 sample, which exceeded the intrawell prediction limit of 398 mg/L. Compared to the value of 854 mg/L in the June 2023 sample, the sulfate concentration was consistent. The Mann-Kendal statistic of 168 exceeded the critical value of 78 indicating a significant increasing trend at the 98% confidence level. The sulfate increasing was consistent with the TDS increasing, which indicated that more salts were dissolved into groundwater. It could be caused by the acidic geochemistry condition discussed above or an anthropogenic source since sulfate is soluble in soils and can get into groundwater via surface water infiltration. Another potential reason is the naturally occurrence of sulfide minerals in the soil, such as pyrite. The oxidation of sulfide minerals will slowly release sulfate and hydrogen ion into groundwater, which will lead to the increasing of sulfate and decreasing of pH.
- Based on review of potentiometric surface mapping and locations of closed portions of the CADL, and the CCR Unit relative to MW-111S, MW-111S likely monitors groundwater associated with the pre-CCR Rule closed portions of the CADL rather than the CCR Unit; therefore, concentrations measured in MW-111S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.
- Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-111S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR Unit. This surface water ultimately migrates from the MW-111S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water

to MW-111S, it appears likely that surface water infiltration has impacted the MW-111S monitoring results.

3.13 TDS at MW-111S

The TDS SSI identified at MW-111S is a result of the acidic groundwater geochemistry conditions with natural occurrence of sulfide minerals, sodium sulfate source, the potential impact of CCR disposed at the CADL prior to October 19, 2015 and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-111S. The following evidence supports this determination:

- TDS was detected in MW-111S at a concentration of 1,370 mg/L in the November 2023 sample, which exceeded the intrawell prediction limit of 541 mg/L. Compared to the value of 1,270 mg/L in the June 2023 sample, the TDS concentration was consistent. The Mann-Kendal statistic of 188 exceeded the critical value of 78 indicating a significant increasing trend at the 98% confidence level. As discussed in Section 2.2, the Jackson Group groundwater is sodium- and calcium-sulfate water type. Sodium could be another main contribution to the TDS exceedance with the increasing of calcium and sulfate. High sodium concentration can also cause the fluoride exceedance. The acidic groundwater could be one of the potential reasons. An alternate source containing sodium sulfate should also be considered, which can be mineral dissolution, surface water flux or atmospheric deposition.
- Based on review of potentiometric surface mapping, locations of closed portions of the CADL, and the CCR Unit relative to MW-111S, MW-111S likely monitors groundwater associated with the pre-CCR Rule closed portions of the CADL rather than the CCR Unit. Therefore, concentrations measured in MW-111S may be more reflective of pre-CCR Rule disposal rather than of the Unit.
- Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-111S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR Unit. This surface water ultimately migrates from the MW-111S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water to MW-111S, it appears likely that surface water infiltration has impacted the MW-111S monitoring results.

3.14 Fluoride at MW-105D

The fluoride SSI identified at MW-105D is a result of potential laboratory inaccuracies or sampling errors, groundwater geochemistry conditions, and potential infiltration of surface water not related to CCR Unit. The following evidence supports this determination:

- Fluoride was detected in MW-105D at a concentration of 0.31 mg/L in the November 2023 sample. Compared to the historical data which is below detection limit of 0.15 mg/L, the fluoride concentration increased approximately 2 times. This concentration exceeded the intrawell prediction limit of 0.20 mg/L. No significant trend was detected by the Mann-Kendal statistical analysis. However, it should be noted that the measured fluoride concentrations are less than the federal primary drinking water maximum contaminant level (MCL) standard of 4.0 mg/L.
- The fluoride exceedance may be attributed to potential laboratory inaccuracies or sampling errors.
- As discussed in Section 2.3, pH of the groundwater is not an impact of the exceedance since fluoride dissolution favors alkaline pH. Fluoride has positive correlation with both bicarbonate and sodium, and an inverse relation with calcium. Ion exchange process with the presence of high sodium and bicarbonate could result in the increasing of fluoride in groundwater.
- Surface water infiltration may have impacts to the groundwater quality; however, the surface
 water impacts are not related to the CCR Unit since MW-105D located upgradient to the CCR
 Unit.

3.15 Boron at MW-112D

The boron SSI identified at MW-112D is a result of natural variation in groundwater quality and potential impact of CCR disposed at the CADL prior to October 19, 2015. The following evidence supports this determination:

Boron was detected in MW-112D at a concentration of 0.286 mg/L in the November 2023 sample, which was consistent with 0.287 mg/L in the June 2023 sample. This concentration exceeds the intrawell prediction limit of 0.252 mg/L. Boron concentrations measured at MW-118D (background well for Stratum III) have ranged from 0.274 to 0.355 mg/L. Therefore, the

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boron exceedance at MW-112D is within the range of variation in background groundwater quality and is not a potential environmental concern.

- Based on review of potentiometric surface mapping, locations of closed portions of the CADL, and the CCR Unit relative to MW-112D, MW-112D is located immediately adjacent (approximately 25 feet) to historic fill, but approximately 950 feet from the CCR Unit. Therefore, the concentrations of boron measured in MW-112D may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.
- Groundwater flow velocities are estimated to be approximately <1 ft/year to 10 ft/year (TRC 2018a). Since, MW-112D is located approximately 950 feet from the CCR unit, any release from the CCR Unit would be detected in Stratum III at MW-112D within approximately 95 years, which is significantly longer than the CCR Unit has been in operation. Therefore, the concentration of boron at MW-112D likely represents either potential pre-CCR Rule migration from historic fill or background groundwater quality for Stratum III.</p>

3.16 Calcium at MW-112D

The calcium SSI identified at MW-112D is a result of natural variation in groundwater quality and potential impact of CCR disposed at the CADL prior to October 19, 2015. The following evidence supports this determination:

- Calcium was detected in MW-112D at a concentration of 41.1 mg/L in the November 2023 sample, which was consistent with 39.5 mg/L in the June 2023 sample. This concentration exceeds the intrawell prediction limit of 21.3 mg/L. The Mann-Kendal statistic of 224 exceeded the critical value of 84 indicating a significant increasing trend at the 98% confidence level. The pH of 7.57 detected in November 2023 sample and the historical data review shows MW-112D area has a neutral pH condition in groundwater, therefore, the pH of 5.65 detected in June 2023 sample could be caused by potential field instrument inaccuracies or sampling errors. The relatively low TDS indicated that EC in groundwater is not a factor to the calcium exceedance. Calcium concentrations measured at MW-118D (background well for Stratum III) have ranged from 68.4 to 83.2 mg/L. Therefore, the calcium exceedance at MW-112D is within the range of variation in background groundwater quality and is not a potential environmental concern.
- Based on review of potentiometric surface mapping, locations of historic fill, locations of closed portions of the CADL, and the CCR Unit relative to MW-112D, MW-112D is located immediately adjacent (approximately 25 feet) to historic fill, but approximately 950 feet from

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the CCR Unit. Therefore, the concentrations of calcium measured in MW-112D may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.

As discussed previously, groundwater flow velocities are estimated to be approximately <1 ft/year to 10 ft/year (TRC 2018a). Since, MW-112D is located approximately 950 feet from the CCR Unit, any release from the CCR Unit would be detected in Stratum III at MW-112D within approximately 95 years, which is significantly longer than the CCR Unit has been in operation. Therefore, the concentration of calcium at MW-112D likely represents either potential pre-CCR Rule migration from historic fill or background groundwater quality for Stratum III.</p>

3.17 TDS at MW-112D

The TDS SSI identified at MW-112D is a result of natural variation in groundwater quality and potential impact of CCR disposed at the CADL prior to October 19, 2015. The following evidence supports this determination:

- TDS was detected in MW-112D at a concentration of 295 mg/L in the November 2023 sample, which exceeded the intrawell prediction limit of 205 mg/L. Compared to the value of 308 mg/L in the June 2023 sample, the TDS concentration was consistent. The Mann-Kendal statistic of 205 exceeded the critical value of 84 indicating a significant increasing trend at the 98% confidence level. TDS concentrations measured at MW-118D (background well for Stratum III) have ranged from 415 to 484 mg/L. A review of groundwater parameters in Stratum III indicates that sulfate is a great contributor to TDS, but the sulfate concentration at MW-112D is not detectable (less than 5 mg/L). Therefore, the TDS exceedance at MW-112D is within the range of variation in background groundwater quality and is not a potential environmental concern.
- Based on review of potentiometric surface mapping, locations of historic fill, locations of closed portions of the CADL, and the CCR Unit relative to MW-112D, MW-112D is located immediately adjacent (approximately 25 feet) to historic fill, but approximately 950 feet from the CCR Unit. Therefore, the concentrations of TDS measured in MW-112D may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.
- As discussed previously, groundwater flow velocities are estimated to be approximately <1 ft/year to 10 ft/year (TRC 2018a). Since, MW-112D is located approximately 950 feet from the CCR Unit, any release from the CCR Unit would be detected in Stratum III at MW-112D within approximately 95 years, which is significantly longer than the CCR Unit has been in</p>

operation. Therefore, the concentration of TDS at MW-112D likely represents either potential pre-CCR Rule migration from the historic fill or background groundwater quality for Stratum III.

Section 4 Conclusions

The information provided in this report serves as the ASD prepared in accordance with 40 CFR 257.94(e)(2) of the CCR Rule. Statistical evaluation identified 16 potential SSIs in four monitoring wells in Stratums I and two monitoring wells in Stratum III. This ASD has demonstrated the following lines of reasoning that support alternative sources for the identified SSIs:

- The monitoring data in the November 2023 sampling event indicated that the low pH values detected sitewide especially in Stratum III in the June 2023 sampling event could be possibly due to field detection instrument inaccuracies or potential sampling errors rather than indicative of contamination sources.
- The SSIs identified in MW-106S, MW-110S, and MW-111S are likely releases from historic fill or portions of the CADL closed before the effective date of the CCR Rule (October 19, 2015); and
- Historical data indicated acidic groundwater geochemistry conditions in MW-106S, MW-110S and MW-111S. The SSIs identified in these wells are related to the natural groundwater geochemistry conditions, such as low pH, high electrical conductivity, potential presence of sulfide minerals in soils and relatively high oxidation-reduction potential; and
- Surface water that has come into contact with on-site CCR and has migrated into the subsurface.
- The fluoride SSIs identified in MW-102S and MW-105D could be a result of potential laboratory inaccuracies or sampling errors, or natural groundwater geochemistry conditions (relative low concentration of calcium and high concentration of sodium).
- The 3 SSIs identified in Stratum III well MW-112D are mostly within the natural variation in groundwater quality compared to MW-118D, which likely represents background natural groundwater quality of Stratum III due to its location to CCR Unit and groundwater flow velocities.

Therefore, the SSIs determined based on statistical analysis of the 2nd Half 2023 semiannual detection monitoring event performed in November 2023 are not due to a release from the CCR

Unit to Stratums I and III of the Jackson Group. Based on the information provided in this ASD report, 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 5 Certification

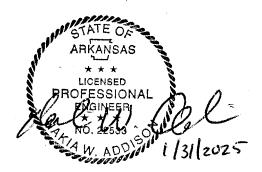
I hereby certify that the alternative source demonstration presented within this document for the Entergy White Bluff Plant Coal Ash Disposal Landfill CCR Unit has been prepared to meet the requirements of Title 40 CFR §257.94(e) 2 of the Federal CCR Rule. This document is accurate and has been prepared 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: <u>TRC Environmental Corporation</u>

Date: 1/31/2025



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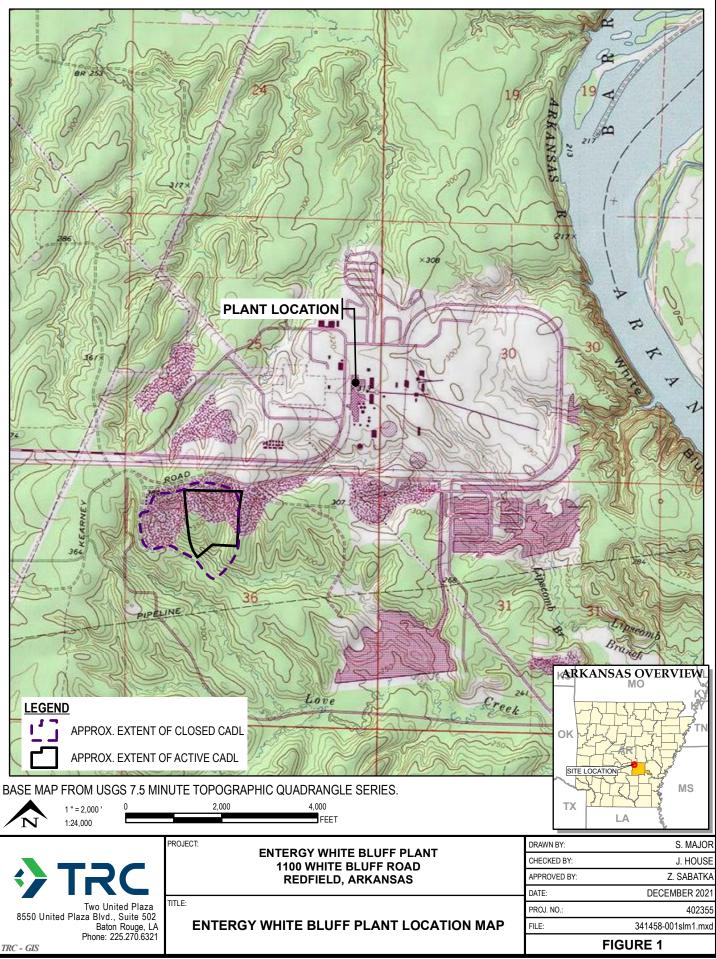
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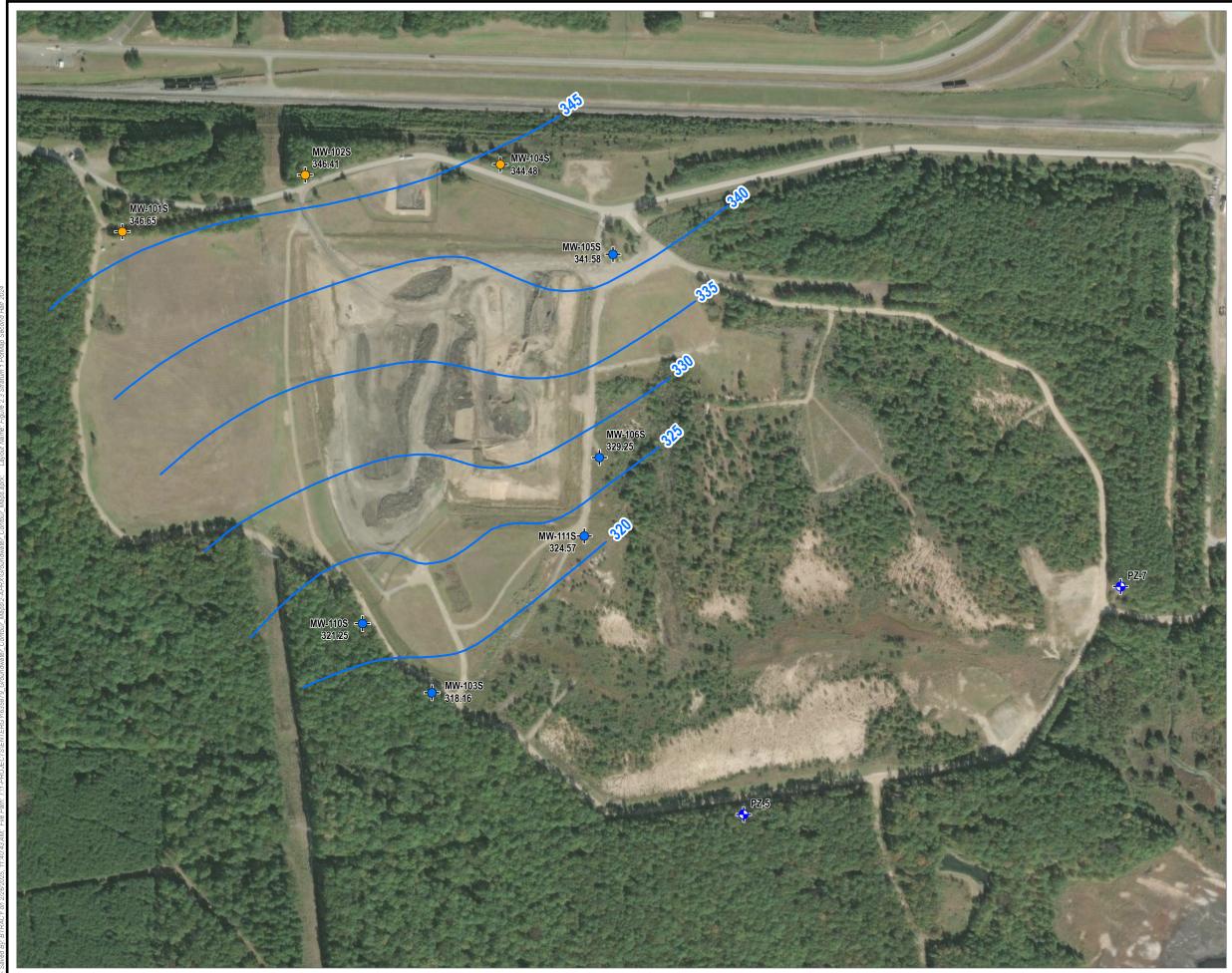


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CHECKED BY:	S. SELLWOOD		
APPROVED BY:	J. HOUSE	FIGURE 2	
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Two United Plaza 8550 United Plaza Blvd., Suite 502 Baton Rouge, LA Phone: 225.216.7483

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STRATUM I BACKROUND WELL
 STRATUM I MW
 STRATUM III BACKROUND WELL
 STRATUM III MW
 STRATUM III PIEZOMETER
 GROUNDWATER CONTOUR

BASE MAP: ESRI "WORLD IMAGERY" ONLINE SERVICE LAYER. DATA SOURCES: TRC



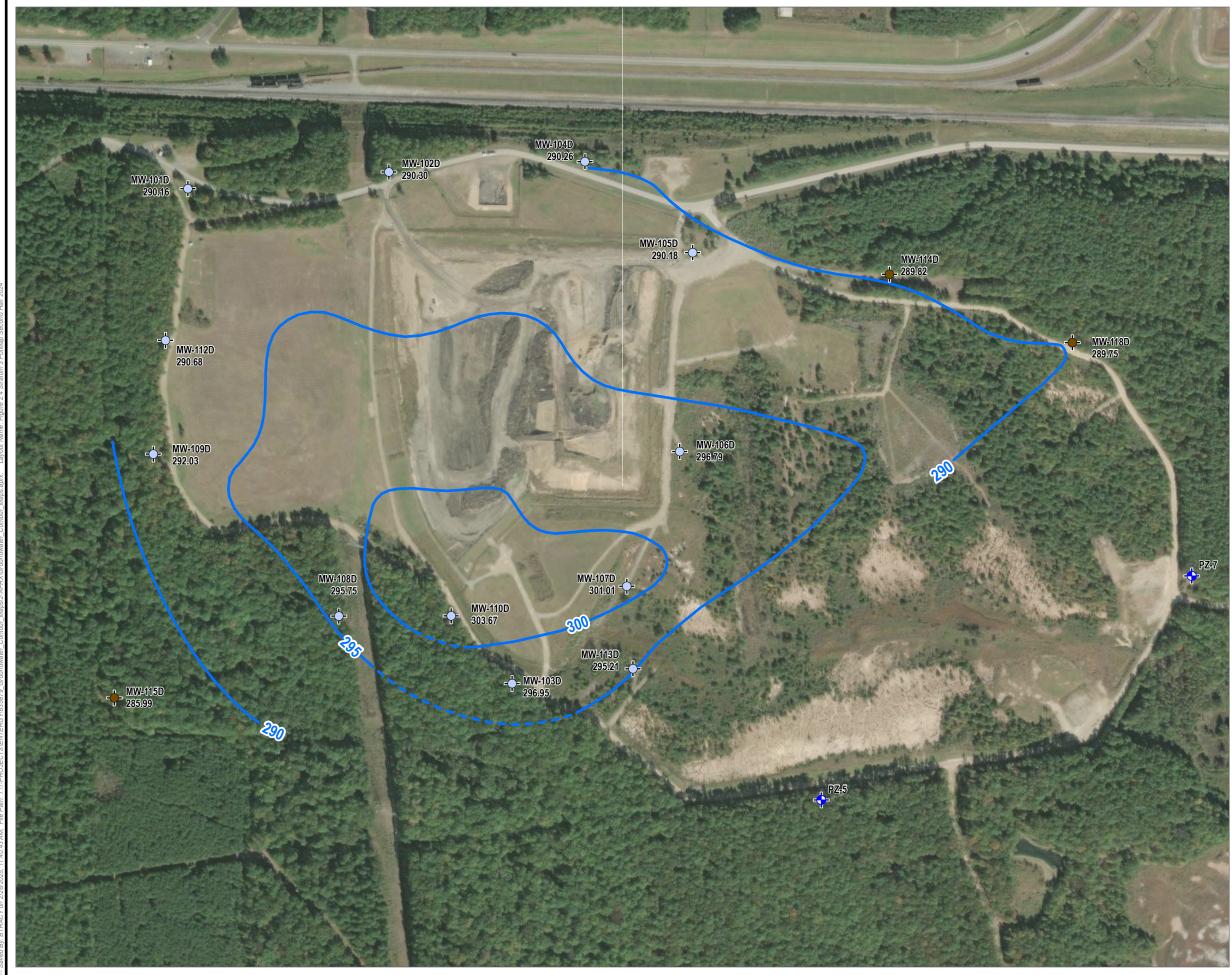
1:4,800 1" = 400'

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PROJECT: ENTERGY WHITE BLUFF PLANT 1100 WHITE BLUFF ROAD REDFIELD, ARKANSAS TITLE: STRATUM 1 POTENTIOMETRIC MAP, SECOND HALF 2024 DRAWN BY: B. TRACY PROJ. NO.: 635879 CHECKED BY: D. STITCHER FIGURE 2.1

APPROVED BY: E. GAINES DATE: FEBRUARY 2025 4545 SHERWOOD COMMON BLVD. BUILDING 3 - SUITE A BATON ROUGE, LA 70816 PHONE: 225.216.7483 FILE: Groundwater Contour Maps.aprx



♦ STRATUM I BACKROUND WELL

- ◆ STRATUM I MW
- ✦ STRATUM III BACKROUND WELL
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- STRATUM III PIEZOMETER
- GROUNDWATER CONTOUR
- --- GROUNWATER CONTOUR INFERRED

BASE MAP: ESRI "WORLD IMAGERY" ONLINE SERVICE LAYER. DATA SOURCES: TRC



1:4,900 1" = 408'

400

800 FEET

PROJECT: ENTERGY WHITE BLUFF PLANT 1100 WHITE BLUFF ROAD REDFIELD, ARKANSAS

STRATUM 3 POTENTIOMETRIC MAP, SECOND HALF 2024

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Alternate Source Demonstration

1st Half 2024 Sampling Event

Entergy White Bluff Plant Coal Ash Disposal Landfill Redfield, Jefferson County, Arkansas

January 2025

Prepared For

Entergy Arkansas, LLC White Bluff Plant 1100 White Bluff Road Redfield, Arkansas 72132

Submitted By

TRC Environmental Corporation 4545 Sherwood Common Blvd. Building 3, Suite A Baton Rouge, LA 70816

Nakia W. Addison, P.E. Operations Manager

Jason S. House Senior Project Manager

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Executive Summary

Entergy Arkansas, LLC (EAL) performed the most recent semiannual detection monitoring sampling (1st Half 2024) in May 2024 for Cells 1 through 4 of 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). Cells 1 through 4 of the CADL constitute 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 16 statistically significant increases (SSI) above background concentrations were identified in three monitoring wells in Stratum I and two monitoring wells in Stratum III, based on either increasing trends at 98% confidence levels using Sen's Slope test and/or intrawell prediction limits statistical analyses:

- Calcium, fluoride, sulfate and TDS (MW-106S);
- Boron, calcium and TDS (MW-110S);
- Boron, calcium, fluoride, sulfate, and TDS (MW-111S);
- Boron, calcium, and TDS (MW-112D);
- TDS (MW-114D).

The information provided in this report serves as EAL'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), oxidationreduction potential (ORP) and the naturally occurrence of sulfide minerals;
- Natural variation in groundwater quality;
- Releases from historic fill or portions of the CADL closed before the effective date of the CCR Rule (October 19, 2015); and/or

TRC-Environmental Corporation | Entergy Arkansas, LLC Alternate Source Demonstration – Entergy White Bluff Plant Coal Ash Disposal Landfill • Surface water that has come into contact with on-site CCR and has migrated into the subsurface.

Therefore, based on the information provided in this ASD report, EAL will continue to conduct semiannual 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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1.1 Background

Entergy Arkansas, LLC (EAL) operates the Entergy White Bluff Plant (Plant), a coal-fired power plant, to generate electricity. The Plant is located at 1100 White Bluff Road in Redfield, Jefferson County, Arkansas as shown on Figure 1. Coal combustion residuals (CCR) are produced as part of the electrical generation operations. The Plant has been generating and disposing of CCR in a portion of the on-site coal ash disposal landfill (CADL) since it began operations in 1981. The CADL is a Class 3N non-commercial industrial landfill and operates under Arkansas Division of Environmental Quality (ADEQ) Solid Waste Permit No. 0199-S3N-R3.

The ADEQ-permitted CADL consists of approximately 153-acres at the Plant and encompasses the following three areas:

- Approximately 50-acre portion of the CADL historically used for CCR disposal from 1981 until prior to the effective date of the CCR Rule (October 19, 2015). CCR was placed into ravines. This area was closed in accordance with the Plant's original solid waste permit (TRC, 2018a);
- Cells 1 through 4, which are the current cells used for CCR disposal and were constructed on top of, and adjacent to, the above-noted closed CCR disposal areas prior to the effective date of the CCR Rule. Cells 1 through 4 encompass approximately 30 acres and were constructed as follows:
 - Cells 1, 2, and 3 were constructed with an 18-inch thick compacted clay bottom liner;
 - Cell 4 was constructed with a two-foot thick compacted clay bottom liner and a leachate collection system; and
- Approximately 100-acre portion of the CADL that is currently undeveloped and may be used for CCR and/or non-CCR disposal.

In addition to the current 153-acre permitted landfill, there is an approximately 25 acre area to the immediate west of Cells 1 through 4 where during the initial period of operation of the Plant, ash was placed pursuant to the permits issued at that time. This historic fill area is covered with soil and vegetated.

Cells 1 through 4 accept CCR for disposal in accordance with the federal *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule* (CCR Rule), effective October 19, 2015, and subsequent Final Rules promulgated by the United States Environmental Protection Agency (USEPA). Cells 1 through 4 comprise the CCR management unit (CCR Unit) per the CCR Rule and are the focus of this ASD. The approximate limits of Cells 1 through 4, the closed disposal areas, and the undeveloped, future disposal areas within the ADEQ-permitted footprint of the CADL are shown in Figure 2.

Historical CCR management by EAL has consisted of the following activities:

- Beneficial use in local construction projects;
- Beneficial use as roadbed material at the CADL; and
- Placement into the CADL.

1.1.1 Groundwater Monitoring and Statistical Analysis

In accordance with 40 CFR 257.90 through 257.94, EAL installed a groundwater monitoring system for Cells 1 through 4, collected samples from the Certified Monitoring Well Network for laboratory analysis for CCR constituents and performed statistical analysis of the collected samples. EAL 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 23 wells installed into two stratigraphic units as follows:

- Eight wells are installed into an upper silty and clayey sand unit (Stratum I), which are designated as "S" monitoring wells; and
- Fifteen wells are installed into a lower silty and clayey sand and clay unit (Stratum III), which are designated as "D" monitoring wells.

Pursuant to 40 CFR 257.91(f), EAL obtained certification by a qualified Arkansas-registered professional engineer (P.E.) stating that the Certified Monitoring Well Network has been

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designed and constructed to meet the requirements of 40 CFR 257.91 (see Groundwater Monitoring System Certification, TRC, February 26, 2018) of the CCR Rule (TRC 2018b).

As discussed above, Stratum I and Stratum III are currently being monitored pursuant to the CCR Rule. A groundwater sampling and analysis program including selection of statistical procedures to evaluate groundwater data was prepared per the CCR Rule (see Groundwater Sampling and Analysis Plan (FTN, 2017b)). Eight quarterly background CCR detection monitoring events were performed from October 2015 through June 2017 in accordance with 40 CFR 257.93(d) and 257.94(b). The eight quarterly detection monitoring background samples were analyzed for Appendix III to Part 257 – Constituents for Detection Monitoring and for Appendix IV to Part 257 – Constituents for Assessment Monitoring.

Following completion of quarterly background detection monitoring in June 2017, EAL implemented semiannual detection monitoring per 40 CFR 257.94(b) for the CCR Unit. The first semiannual detection monitoring event was performed in August 2017 (2nd Half 2017). Subsequent detection monitoring events, with associated verification sampling when appropriate, have been performed on a semiannual basis since August 2017. EAL performed the most recent semiannual detection monitoring event (1st Half 2024) in November 2024. Per the CCR Rule, the semiannual detection monitoring event samples were analyzed for Appendix III constituents.

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), EAL 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 and re-analysis of the laboratory analytical data were performed to identify potential SSIs for the 1st Half 2024 semiannual detection monitoring event. A total of 16 SSIs were identified for five Appendix III constituents: boron, calcium, fluoride, sulfate, and TDS. SSIs were identified in three Stratum I and two Stratum III monitoring wells.

1.2 Purpose

Pursuant to 40 CFR 257.94(e)(2), EAL may demonstrate that a source other than the CCR Unit caused the SSIs identified or that the SSIs resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. The purpose of this report is to provide

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written documentation of the successful ASD for the SSIs identified for the 1st Half 2024 semiannual detection monitoring event, pursuant to 40 CFR 257.94(e)(2) of the CCR Rule.

2.1 Site Hydrogeology

Historical subsurface investigations have identified the following four stratigraphic horizons of the Jackson Group (Kresse, et. al., 2014) and their associated hydrogeology for the CCR Unit and the CADL:

- Stratum I. Interbedded Clay, Silt, and Sand. Stratum I ranges from approximately 10 to 54-feet thick and consists of interbedded silty sand (SM), clayey sand (SC), silts (ML and MH), and clay (CL and CH). Occasional deposits of carbonaceous material are present throughout Stratum I. Based on the results of in-situ slug tests, hydraulic conductivity values range from 4.0 x 10⁻⁵ to 4.0 x 10⁻⁴ cm/sec;
- Stratum II. Clay. Stratum II ranges from approximately 14 to 49-feet thick and consists of a very stiff clay (CH) with occasional silt and/or very fine-grained sand laminations. Occasional deposits of carbonaceous mater are present throughout Stratum II. Based on the results of insitu slug tests, hydraulic conductivity values range from 4.7 x 10⁻⁶ to 1.4 x 10⁻⁸ cm/sec;
- Stratum III. Clayey and Silty Sand. Stratum III ranges from approximately 5 to 19-feet thick and consists primarily of clayey sand (SC) and/or silty sand (SM). A poorly graded, fine-grained sand (SM) was identified in one piezometer. The upper limits of Stratum III were encountered at elevations of 263 to 289-feet NGVD (depths ranging from 19 to 97-feet bgs). Based on results of in-situ slug tests, hydraulic conductivity was determined to be spatially variable and ranged from 4.2 x 10⁻⁷ to 2.5 x 10⁻⁴ cm/sec; and

Lower Confining Unit below Stratum III. is a very dark grey, fat clay that is highly laminated with light grey silt and very fine-grained sand. In-situ permeability testing of this unit determined a vertical hydraulic conductivity of 3.7×10^{-8} cm/s. This Lower Confining Unit was encountered during aquifer characterization efforts around the recycle ponds conducted in 2018.

It was concluded that Stratum I was not laterally continuous across the approximately 153-acre landfill. The estimated calculated seepage velocities in Stratums I and III were as follows:

- Stratum I: 2 to 20 feet/year; and
- Stratum III: <1 to 10 feet/year.

While Stratum I and Stratum III have been monitored per the CCR Rule since October 2015, it is unclear whether Stratum I and Stratum III are aquifers that are capable of providing sustainable well yields consistent with USEPA aquifer use criteria (*e.g.*, 0.1 gallons per minute). This uncertainty is based on the following evidence:

- Stratum I is present to the west of the CADL and only present within the western portion of the ADEQ-permitted boundaries of the CADL, approximately corresponding to the boundaries of the closed portions of the CADL. The CCR Unit and Stratum I are not continuous to the east across the entire footprint of the CADL;
- In-situ hydraulic conductivities are low to very low for both Stratum I and Stratum III, indicating that sustainable well yields may not be obtainable from Stratum I and Stratum III at volumes that meet the minimum USEPA well use criteria (*e.g.*, 0.1 gallons per minute); and
- During the quarterly and semiannual detection monitoring events performed from October 2015 through May 2024, which have been performed using the low-flow purge and sample methodology, the sampling teams have consistently documented that turbidity values are often greater than 10 Nephelometric Turbidity Units (NTU). Furthermore, wells have been pumped dry during sampling for both Stratum I and Stratum III, indicating that neither sustainable well yields nor useable drinking water are associated with Stratum I and Stratum III.

To evaluate this uncertainty, EAL began performing hydrogeologic investigations during 2019 and 2020, continuing through 2024 to evaluate both the stratigraphy and hydrogeology beneath the CCR Unit and to identify the aquifer(s) making up the uppermost aquifer system at the CCR Unit and CADL and the appropriateness of the current Certified Monitoring Well Network.

2.2 General Groundwater Quality

Regionally, groundwater quality in the Jackson Group consists of a sodium- and calcium-sulfate water type, with generally poor water quality (FTN 2014, Kresse et. al 2014). Reported water quality concentrations for select secondary drinking water contaminants compared to USEPA secondary maximum contaminant levels (MCLs) are provided in the table below.

Jackson Group Groundwater Water Quanty					
	Concentration Range		USEPA		
Constituent	Low	High	Secondary MCL		
Iron (mg/L)	0.05	19	0.3		
pH (s.u.)	2.9	8.0	6.5 - 8.5		
Sulfate (mg/L)	0.6	3,080	250		
TDS (mg/L)	11	5,330	500		

Jackson Group Groundwater Water Quality

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As noted in the table above, the natural range of groundwater quality within the Jackson Group, which includes both Stratum I and Stratum III, exceeds the secondary drinking water MCLs established by the USEPA for drinking water or, in the case of pH, is less than its secondary MCL. Finally, the results of historical groundwater monitoring at the Plant conducted from 1991 through 1996 showed that normal indicator parameters were masked by naturally elevated concentrations of the monitored constituents (FTN 2014, TRC 2018a).

2.3 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 the site geological conditions, several groundwater parameters are discussed as follows, including boron, fluoride, sulfate, calcium, TDS and pH.

2.3.1 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 the World Health Organization (WHO) and 0.9 mg/L by 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 H₃BO₃ 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 the 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 in groundwater and the results indicated that the main process that caused high boron enrichment in groundwater was the flushing by fresh groundwater rather than geological setting, climate or age. The desorption of Boron from mineral surfaces could be affected by pH, ionic strength, salinity and HCO₃/CO₃. 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).

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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 SO₄²⁻/Cl⁻ ratio. Rodriguez-Espinosa et al. (2020) found that the Boron concentration in groundwater was related to the SO₄²⁻ and age affect.

Regarding the Boron concentration level on the sites, the main source of Boron is more natural than anthropogenic. Therefore, the detected increasing of Boron concentration is likely due to the geochemistry condition changes, such as pH, ion exchanges, EC and salinity.

2.3.2 Fluoride in Groundwater

The common natural source of fluoride in groundwater is the dissolution of natural fluoridebearing mineral, such as fluorspar, fluorapatite, amphiboles, hornblende, tremolite and biotite (Luo et al., 2018). The natural concentration of fluoride in groundwater depends on the geological, chemical and physical characteristics of the aquifer, the porosity and acidity of the soil and rocks, the surrounding temperature, the action of other chemical elements, depth of the aquifer and intensity of weathering (Brindha & Elango, 2011). Due to the concentration range of this site, geochemical process is the main factor controlling fluoride in groundwater.

Ion exchange, evaporation, adsorption-desorption, ion competition, mixing, and salinization are geochemical processes that can take place and cause the occurrence of fluoride in groundwater (Luo et al., 2018). Main factors that might cause the increase of fluoride concentration in groundwater include alkaline pH, high concentration of sodium and bicarbonate, and low concentration of calcium.

Alkaline pH can increase the fluoride dissolution from mineral surfaces into groundwater. Saxena & Ahmed (2001) observed that alkaline conditions with pH ranging between 7.6 and 8.6 are favorable for dissolution of fluorite mineral from the host rocks.

Sodium bicarbonate type waters are typical of high fluoride waters. Many research studies have demonstrated positive correlations between fluoride and both bicarbonate and sodium as well as an inverse relation between fluoride and calcium. (Mondal et al., 2014; Guo et al., 2012; Chen et

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al., 2020). The chemical reactions for the dissolution of fluoride in the presence of high bicarbonate and sodium, and low calcium content is described as follows (Kimambo et al., 2019):

$$Na^+ + +HCO_3^- \rightarrow NaHCO_3$$

$$CaF_2 + +2NaHCO_3 \rightarrow CaCO_3 + 2Na^+ + 2F^- + H_2O + CO_2$$

Luo et al. (2018) reported that cation exchange can increase the fluoride concentration when increasing the Na/Ca molar ratio via ion complexation, and salt effect can further increase the fluoride dissolution from mineral surfaces.

In addition, evaporation is another potential reason for increases in the fluoride concentration in shallow groundwater. Evaporation could directly remove water from shallow aquifers and elevate the fluoride concentration. Evaporation could increase ion concentrations, leading to the precipitation of some major minerals, reducing the calcium concentration, and favoring the dissolution of fluoride. Anthropogenic sources may also increase the fluoride in groundwater, such as pesticide and fertilizer use, and industrial waste discharge.

2.3.3 Sulfate in Groundwater

Sulfate is ubiquitous in groundwater, with both natural and anthropogenic sources. There are many potential sources of sulfate including mineral dissolution, atmospheric deposition, and other anthropogenic sources (mining, fertilizer, synthetic detergents, industrial wastewater etc.) (Miao et al., 2012). As water moves through soil and rock formations that contain sulfate minerals, some of the sulfate dissolves into the groundwater. Minerals that contain sulfate include magnesium sulfate (Epsom salt), sodium sulfate (Glauber's salt), and calcium sulfate (gypsum). Gypsum is an important contributor to the high levels of sulfate in many aquifers around the world. Higher levels of sulfate in groundwater are common in the western part of the United States (MDH, 2008).

Sulfate is mobile in soil and inputs to soil will impact groundwater eventually. Many research studies indicated that atmospheric deposition, dissolution of gypsum, oxidation of sulfide mineral and anthropogenic inputs will contribute to sulfate. Based on the geological condition of the site, atmospheric deposition and anthropogenic activities could be the main factors (Einsiedl & Mayer, 2005; Pu et al., 2012).

2.3.4 Calcium in Groundwater

Calcium is one of the most important ionic constituents in groundwater (Razowska-jaworek, 2014). Water-rock interaction occurs when water meets rocks or minerals, such as limestone, marble, calcite, dolomite, gypsum, fluorite and apatite. Natural dissolution of carbonate rocks and minerals is the primary source of calcium in groundwater (Jiang et al., 2009). Calcium is an important determinant of water hardness (Ca²⁺), while magnesium is the other hardness determinant. The most common shallow groundwater type is Ca-HCO₃ dominated and Ca(Mg)-HCO₃ dominated.

A literature review indicates the major factors that may influence the calcium concentration in groundwater include rock weathering, pH, electrical conductivity and anthropogenic activities (mining, concrete material dissolution, fertilizer etc.) (Hájek et al., 2021; Schot & Wassen, 1993; Shi et al., 2018). Based on the geological condition of the site, pH, electrical conductivity and anthropogenic activities could be the potential reasons for the calcium concentrations.

2.3.5 TDS in Groundwater

Total dissolved solids represent the combined total of inorganic and organic substances contained in the groundwater, and it can be a general indicator of water quality. These solids are primarily minerals, salts, and organic matters, which may originate from sources such as the weathering of minerals, urban runoff, sewage, effluent discharges, agriculture, decaying organisms, and other human activities (de-icing roads, water softer use). Common salts that contribute to TDS are sodium, chloride, calcium, magnesium, potassium, sulfates, and bicarbonates (Olumuyiwa I. Ojo, 2012).

TDS levels in groundwater is usually higher than surface water due to the longer contact time with the underlying rocks and sediments. Since many minerals are water soluble, high concentrations can accumulate over time through the constantly reoccurring process of precipitation and evaporation.

TDS is related to other water quality parameters like hardness, which may occur if the high TDS content is due to the presence of carbonates. A few research studies simulated the relationship between TDS and other groundwater parameters such as EC and salinity, using different models. Due to the complicated geological conditions, the observation was not consistent at different study sites (Atekwana et al., 2004; Banadkooki et al., 2020; Poursaeid et al., 2020).

2.3.6 pH in Groundwater

Groundwater pH is an important aspect to consider in the monitoring and management of CCR landfill sites, as changes in pH can affect the quality of groundwater and the potential for release of contaminants. The potential reasons for pH changes in groundwater are as following:

- Changes in water flow patterns. Changes in the flow patterns of groundwater can cause the mixing of different water sources with varying pH levels, resulting in an overall increase in the pH of the groundwater at the site.
- Drainage from adjacent areas. Groundwater from adjacent areas with higher pH levels may be flowing into the landfill site and raising the overall pH of the groundwater at the site.
- Changes in geochemistry condition. Geochemistry can play a role in affecting the pH of groundwater at a landfill site, such as mineral dissolution, pH buffering capacity, redox reactions, and groundwater-rock interactions (Edmunds & Smedley, 1996; Wilkin & DiGiulio, 2010).
 - Mineral dissolution. Minerals present in the surrounding soil can dissolve and release basic or acidic compounds into the groundwater, affecting the pH, e.g., the dissolution of calcium carbonate can increase the pH of the groundwater by releasing carbonate ions, the dissolution and oxidation of pyrite can decrease the pH of groundwater by releasing hydrogen ions.
 - pH buffering capacity. The presence of minerals with a high buffering capacity in the surrounding soil can help to regulate the pH of the groundwater, preventing drastic changes in response to other factors. For example, the presence of minerals like calcite and dolomite can buffer the groundwater pH, helping to maintain a relatively stable pH even in the presence of acidic compounds.
 - Redox reactions. The oxidation-reduction reactions that occur in the surrounding soil can impact the pH of the groundwater. The oxidation of iron-sulfide minerals can result in the release of sulfuric acid, which can lower the pH of groundwater. The oxidation of reduced sulfur species to sulfate, which can increase the pH of groundwater (Jacks, 2017).
 - Groundwater-rock interactions. The interaction between groundwater and the rocks and minerals in the surrounding soil can affect the pH of the groundwater. For example,

groundwater can dissolve or release basic or acidic compounds from the minerals in the rock, affecting the pH.

Section 3 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 1st Half 2024 semiannual detection monitoring event was performed in May 2024. Statistical analysis of the 1st 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 either increasing trends at 98% confidence levels using Sen's Slope test and/or intrawell prediction limits statistical analyses, the following 16 SSIs were identified and summarized in Table 1:

- Calcium, fluoride, sulfate and TDS (MW-106S);
- Boron, calcium and TDS (MW-110S);
- Boron, calcium, fluoride, sulfate, and TDS (MW-111S);
- Boron, calcium, and TDS (MW-112D);
- TDS (MW-114D).

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.

A discussion for each of the individual SSIs identified for the Stratum I and III wells and associated evidence demonstrating that the 16 SSIs were not caused by a release from the CCR Unit is provided in the subsections below.

Stratum	Well	Analyte	Value (mg/L)	Intrawell Prediction Limit (mg/L)	SI by Sen's Slope test
	MW-106S	Calcium	38	23.81	Y
	MW-106S	Fluoride	0.901	0.625	Y
	MW-106S	Sulfate	752	603.5	Y
	MW-106S	TDS	1120	827.1	Y
	MW-110S	Boron	2.41	1.586	Y
Ι	MW-110S	Calcium	8.88	6.762	Ν
	MW-110S	TDS	475	465.2	Y
	MW-111S	Boron	6.45	4.495	Y
	MW-111S	Calcium	108	36.78	Y
	MW-111S	Fluoride	0.957	0.283	Y
	MW-111S	Sulfate	756	397.5	Y
	MW-111S	TDS	1270	540.7	Y
III	MW-112D	Boron	0.288	0.252	Y
	MW-112D	Calcium	42.4	21.28	Y
	MW-112D	TDS	327	204.9	Y
	MW-114D	TDS	332	322	Y

Table 1 SSIs – May 2024 Semiannual Detection Monitoring Event

3.1 Calcium at MW-106S

The calcium SSI identified at MW-106S is a result of the acidic geochemistry condition in groundwater, potential impact of CCR disposed at the CADL prior to October 19, 2015, and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-106S. The following evidence supports this determination:

- Calcium was detected in MW-106S at a concentration of 38 mg/L in the May 2024 sample. Compared to the value of 40.5 mg/L in the November 2023 sample, the calcium concentration decreased approximately 6%. The Mann-Kendal statistic of 186 exceeded the critical value of 84 indicating a significant increasing trend at the 98% confidence level. As discussed in Section 2.3.6, pH and EC could affect calcium concentrations in groundwater. Low pH values of 3.8-4.0 were detected in the past few years, which indicates the groundwater in this area is acidic and it was related to pre-CCR Rule disposal source or natural geochemistry conditions. The acidic groundwater condition favors the dissolution of calcium from soil and mineral surfaces to water phase. The significant increasing trend of calcium from 16 mg/L in 2015 to 38 mg/L in 2024 could be a result of the acidic geochemistry condition. The increasing cation and anion concentrations will also lead to the increasing EC, which will affect other metals dissolution.
- The concentrations of calcium in MW-101S, which is a background well, have varied from 14 to 98.5 mg/L during the overall time period of CCR detection monitoring. The calcium concentration of 98.5 mg/L for MW-101S is greater than the calcium concentration of 38 mg/L measured at MW-106S during the 1st Half 2024 semiannual detection monitoring event. Therefore, the calcium concentration measured at MW-106S is within the range of natural variation in background groundwater quality.
- Based on review of potentiometric surface mapping, locations of closed portions of the CADL underlying the CCR Unit, and the CCR Unit relative to MW-106S, it appears that MW-106S likely monitors groundwater associated with the underlying pre-CCR Rule closed portions of the CADL rather than the CCR Unit; therefore, concentrations measured in MW-106S are likely more reflective of pre-CCR Rule disposal rather than of the CCR Unit.
- Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-106S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR

Unit. This surface water ultimately migrates from the MW-106S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water to MW-106S, it appears likely that surface water infiltration has impacted the MW-106S monitoring results.

3.2 Fluoride at MW-106S

The fluoride SSI identified at MW-106S is a result of groundwater geochemistry conditions, potential impact of CCR disposed at the CADL prior to October 19, 2015, and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-106S. The following evidence supports this determination:

- Fluoride was detected in MW-106S at a concentration of 0.901 mg/L in the May 2024 sample. Compared to the value of 0.695 mg/L in the November 2023 sample, the fluoride concentration increased by 29%. The Mann-Kendal statistic of 164 exceeded the critical value of 84 indicating a significant increasing trend at the 98% confidence level. This concentration exceeded the intrawell prediction limit of 0.625 mg/L and the maximum fluoride concentrations of 0.1 to 0.135 mg/L measured in the three Stratum I background monitoring wells (MW-101S, MW-102S, and MW-104S). However, it should be noted that the measured fluoride concentrations are less than the federal primary drinking water maximum contaminant level (MCL) standard of 4.0 mg/L.
- The fluoride concentration in MW-106S stayed in a narrow range of 0.6-0.7 mg/L in the past two years. pH of the groundwater is not an impact of the exceedance since fluoride dissolution favors alkaline pH. As discussed in Section 2.3, fluoride has positive correlation with both bicarbonate and sodium, and an inverse relation with calcium. With the increasing trend of calcium in the groundwater, ion exchange process with high sodium and bicarbonate can result in the increasing of fluoride in groundwater.
- Based on review of potentiometric surface mapping, locations of closed portions of the CADL underlying the CCR Unit, and the CCR Unit relative to MW-106S, it appears that MW-106S likely monitors groundwater associated with the underlying pre-CCR Rule closed portions of the CADL rather than the CCR Unit; therefore, concentrations measured in MW-106S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.
- Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within

the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-106S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR Unit. This surface water ultimately migrates from the MW-106S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water to MW-106S, it appears likely that surface water infiltration has impacted the MW-106S monitoring results.

3.3 Sulfate at MW-106S

The sulfate SSI identified at MW-106S is a result of natural geochemistry condition in soil and groundwater, potential impact of CCR disposed at the CADL prior to October 19, 2015, and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-106S. The following evidence supports this determination:

- Sulfate was detected in MW-106S at a concentration of 752 mg/L in the May 2024 sample, which exceeded the intrawell prediction limit of 604 mg/L. Compared to the value of 698 mg/L in the November 2023 sample, the sulfate concentration increased by 8%. The Mann-Kendal statistic of 177 exceeded the critical value of 84 indicating a significant increasing trend at the 98% confidence level. The increasing trend of sulfate was consistent with TDS. The elevated sulfate concentration in the past three years could be caused by the acidic geochemistry condition discussed above or an anthropogenic source since sulfate is mobile in soils and can get into groundwater via surface water infiltration. Another potential reason is the natural occurrence of sulfide minerals in the soil, such as pyrite. The oxidation of sulfide minerals will slowly release sulfate and hydrogen ion into groundwater, which will lead to the increasing of sulfate and decreasing of pH.
- Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-106S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR Unit. This surface water ultimately migrates from the MW-106S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water to MW-106S, it appears likely that surface water infiltration has impacted the MW-106S monitoring results.

Based on review of potentiometric surface mapping and locations of closed portions of the CADL, and the CCR Unit relative to MW-106S, MW-106S likely monitors groundwater associated with the pre-CCR Rule closed portions of the CADL rather than the CCR unit; therefore, concentrations measured in MW-106S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.

3.4 TDS at MW-106S

The TDS SSI identified at MW-106S is a result of the acidic groundwater geochemistry condition, sodium sulfate source, potential impact of CCR disposed at the CADL prior to October 19, 2015, and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-106S. The following evidence supports this determination:

- TDS was detected in MW-106S at a concentration of 1,120 mg/L in the May 2024 sample, which exceeded the intrawell prediction limit of 827 mg/L. The Mann-Kendal statistic of 171 exceeded the critical value of 84 indicating a significant increasing trend at the 98% confidence level. Compared to the TDS value of 1,040 mg/L in the November 2023, 1,200 mg/L in the June 2023 sample, 979 mg/L in the December 2022 sample, 920 mg/L in the June 2022 sample and 1090 mg/L in the November 2021 sample, the TDS was stable. As discussed in Section 2.2, the Jackson Group groundwater is sodium- and calcium-sulfate water type. Sodium could be another main contribution to the TDS exceedance with calcium and sulfate. High sodium concentration can also cause the fluoride exceedance. The acidic groundwater could be one of the potential reasons. An alternate source containing sodium sulfate should also be considered, which can be mineral dissolution, surface water flux or atmospheric deposition.
- Based on review of potentiometric surface mapping, locations of closed portions of the CADL, and the CCR Unit relative to MW-106S, MW-106S likely monitors groundwater associated with the pre-CCR Rule closed portions of the CADL rather than the CCR Unit. Therefore, concentrations measured in MW-106S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.
- Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-106S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR Unit. This surface water ultimately migrates from the MW-106S area via surface water

swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water to MW-106S, it appears likely that surface water infiltration has impacted the MW-106S monitoring results.

3.5 Boron at MW-110S

The Boron SSI identified at MW-110S is a result of the acidic groundwater geochemistry condition and potential impact of CCR disposed at the CADL prior to October 19, 2015. The following evidence supports this determination:

- Boron was detected in MW-110S at a concentration of 2.41 mg/L in the May 2024 sample, which exceeded the intrawell prediction limit of 1.586 mg/L. Compared to the value of 1.69 mg/L in the November 2023 sample, the boron concentration increased by 43%. The Mann-Kendal statistic of 186 exceeded the critical value of 84 indicating a significant increasing trend at the 98% confidence level. As discussed in Section 2.3, the main factors that may influence boron concentration in groundwater are pH and EC. Decreasing of 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 relatively low salts concentrations in MW-110S area, which indicates EC is not the factor causing the boron increasing trend. Low pH values of 4.55 and 4.80 were detected in the May 2024 and November 2023, respectively. The acidic groundwater condition favors the boron dissolution from soil and mineral surface. Based on the consistent boron levels in groundwater, the significant increasing trend of boron is more likely relative to the acidic geochemistry condition other than a contamination source.
- Based on review of potentiometric surface mapping, locations of historic fill, locations of closed portions of the CADL underlying the CCR Unit, and the CCR Unit relative to MW-110S, it appears that MW-110S likely monitors groundwater associated with the underlying pre-CCR Rule closed portions of the CADL rather than the CCR Unit; therefore, concentrations measured in MW-110S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.

3.6 Calcium at MW-110S

The calcium SSI identified at MW-110S is a result of the acidic geochemistry condition in groundwater, potential impact of CCR disposed at the CADL prior to October 19, 2015. The following evidence supports this determination:

- Calcium was detected in MW-110S at a concentration of 8.88 mg/L in the May 2024 sample, compared to the value of 6.03 mg/L in the November 2023 sample. No significant trend was detected by the Mann-Kendal statistical analysis. As discussed in Section 2.3.4 and, pH and EC could affect calcium concentrations in groundwater. Low pH values of 3.8-4.0 were detected in the past few years, which indicates the groundwater in this area is acidic and it was related to pre-CCR Rule disposal source or natural geochemistry conditions. The acidic groundwater condition favors the dissolution of calcium from soil and mineral surfaces to water phase.
- The concentrations of calcium in MW-101S, which is a background well, have varied from 14 to 98.5 mg/L during the overall time period of CCR detection monitoring. The calcium concentration of 8.88 mg/L measured at MW-110S during the 1st Half 2024 semiannual detection monitoring event is lower than the background well. Therefore, the calcium concentration measured at MW-110S is within the range of natural variation in background groundwater quality.
- Based on review of potentiometric surface mapping, locations of closed portions of the CADL underlying the CCR Unit, and the CCR Unit relative to MW-110S, it appears that MW-110S likely monitors groundwater associated with the underlying pre-CCR Rule closed portions of the CADL rather than the CCR Unit; therefore, concentrations measured in MW-110S are likely more reflective of pre-CCR Rule disposal rather than of the CCR Unit.

3.7 TDS at MW-110S

The TDS SSI identified at MW-110S is a result of the acidic groundwater geochemistry condition, and potential impact of CCR disposed at the CADL prior to October 19, 2015. The following evidence supports this determination:

TDS was detected in MW-110S at a concentration of 475 mg/L in the May 2024 sample, which exceeded the intrawell prediction limit of 465.2 mg/L. The Mann-Kendal statistic of 101 exceeded the critical value of 84 indicating a significant increasing trend at the 98% confidence level. Compared to the TDS value of 355 mg/L in the November 2023, the TDS concentration increased by 34%. As discussed in Section 2.2, the Jackson Group groundwater is sodium- and calcium-sulfate water type. Sodium could be another main contribution to the TDS exceedance with calcium and sulfate. High sodium concentration can also cause the fluoride exceedance. The acidic groundwater could be one of the potential reasons. An alternate source containing sodium sulfate should also be considered, which can be mineral dissolution, surface water flux or atmospheric deposition.

Based on review of potentiometric surface mapping, locations of closed portions of the CADL, and the CCR Unit relative to MW-110S, MW-110S likely monitors groundwater associated with the pre-CCR Rule closed portions of the CADL rather than the CCR Unit. Therefore, concentrations measured in MW-110S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.

3.8 Boron at MW-111S

The boron SSI identified at MW-111S is a result of natural groundwater geochemistry conditions with low pH and high EC, potential impact of CCR disposed at the CADL prior to October 19, 2015, and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-111S. The following evidence supports this determination:

- Boron was detected in MW-111S at a concentration of 6.45 mg/L in the May 2024 sample, which exceeded the intrawell prediction limit of 4.495 mg/L. Compared to the value of 6.67 mg/L in the November 2023 sample, the boron concentration decreased by 3%. The Mann-Kendal statistic of 184 exceeded the critical value of 84 indicating a significant increasing trend at the 98% confidence level. As discussed in Section 2.3.1, the main factors that may influence boron concentration in groundwater are pH and EC. Decreasing of pH will increase the dissolution of boron from the mineral surfaces. Boron in groundwater will increase with the increasing of EC. A low pH value of 4.10 was detected in the May 2024 sample and the pH of groundwater in the area of MW-111S stayed in a steady range of 3.6 to 4.5 in the past five years. The acidic groundwater condition favors the boron dissolution from soil and mineral surface. The increasing TDS and sulfate in MW-111S demonstrates that the groundwater in this area has relatively high EC, which will cause the increasing of boron concentration in groundwater. Based on the consistent boron levels, the significant increasing trend of boron is more likely relative to the geochemistry conditions with low pH and high EC other than a contamination source.
- Based on review of potentiometric surface mapping and locations of closed portions of the CADL, and the CCR Unit relative to MW-111S, MW-111S likely monitors groundwater associated with the pre-CCR Rule closed portions of the CADL rather than the CCR Unit. Therefore, concentrations measured in MW-111S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.
- Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within the perimeter surface water swale. When this build-up occurs, surface water flows out of the

swale and over the adjoining access road and then to the area of MW-111S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR Unit. This surface water ultimately migrates from the MW-111S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water to MW-111S, it appears likely that surface water infiltration has impacted the MW-111S monitoring results.

3.9 Calcium at MW-111S

The calcium SSI identified at MW-111S is a result of natural groundwater geochemistry conditions with low pH and high EC, potential impact of CCR disposed at the CADL prior to October 19, 2015, and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-111S. The following evidence supports this determination:

- Calcium was detected in MW-111S at a concentration of 108 mg/L in the May 2024 sample, which exceeded the intrawell prediction limit of 36.8 mg/L. Compared to the value of 117 mg/L in the November 2023 sample, the calcium concentration decreased by 8%. Normality analysis of the calcium data set at MW-111S was non-normal requiring trend analysis of the data set to determine a potential significance increase. The Mann-Kendal statistic of 197 exceeded the critical value of 84 indicating a significant increasing trend at the 98% confidence level. As discussed in Section 2.3, pH and EC could affect calcium concentrations in groundwater. A low pH value of 4.1 was detected in the May 2024 sample and the pH of groundwater in the area of MW-111S stayed in a steady range of 3.6 to 4.5 in the past five years. The acidic condition favors the dissolution of calcium from soil and mineral surfaces to water phase. The relatively high EC in groundwater discussed above can also increase the calcium concentration. The significant increasing trend of calcium could be a result of the natural geochemistry conditions with low pH and high EC.
- Background concentrations of calcium have varied from 14 to 98.5 mg/L at upgradient monitoring well MW-101S. The calcium concentration of 108 mg/L at MW-111S during the 1st Half 2024 semiannual detection monitoring event is beyond but close to the top background concentration. Therefore, the calcium exceedance is still in the range of natural variation in background groundwater quality.
- Based on review of potentiometric surface mapping, locations of closed portions of the CADL, and the CCR Unit relative to MW-111S, MW-111S likely monitors groundwater associated with the underlying pre-CCR Rule closed portions of the CADL rather than the

CCR Unit. Therefore, concentrations measured in MW-111S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.

Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-111S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR Unit. This surface water ultimately migrates from the MW-111S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water to MW-111S, it appears likely that surface water infiltration has impacted the MW-111S monitoring results.

3.10 Fluoride at MW-111S

The fluoride SSI identified at MW-111S is a result of natural groundwater geochemistry conditions, potential impact of CCR disposed at the CADL prior to October 19, 2015, and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-111S. The following evidence supports this determination:

- Fluoride was detected in MW-111S at a concentration of 0.957 mg/L in the May 2024 sample, which exceeded the intrawell prediction limit of 0.283 mg/L and the maximum fluoride concentrations of 0.1 to 0.135 mg/L measured in the three Stratum I background monitoring wells (MW-101S, MW-102S, and MW-104S). Compared to the value of 0.869 mg/L in the November 2023 sample, the fluoride concentration was consistent. The Mann-Kendal statistic of 199 exceeded the critical value of 84 indicating a significant increasing trend at the 98% confidence level. However, it should be noted that the measured fluoride concentrations are less than the federal primary drinking water MCL of 4.0 mg/L. pH of the groundwater is not an impact of the exceedance since fluoride dissolution favors alkaline pH. As discussed in Section 2.3.2, fluoride has positive correlation with both bicarbonate and sodium, and an inverse relation with calcium. With the increasing trend of calcium in the groundwater, ion exchange process with high sodium and bicarbonate can result in the increasing of fluoride in groundwater. The fluoride increasing trend could also be a result of continuous dissolution of salts from the soils and minerals associated with the increased TDS.
- Based on review of potentiometric surface mapping, locations of closed portions of the CADL, and the CCR Unit relative to MW-111S, MW-111S likely monitors groundwater

associated with the pre-CCR Rule closed portions of the CADL rather than the CCR Unit. Therefore, concentrations measured in MW-111S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.

Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-111S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR Unit. This surface water ultimately migrates from the MW-111S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water to MW-111S, it appears likely that surface water infiltration has impacted the MW-111S monitoring results.

3.11 Sulfate at MW-111S

The sulfate SSI identified at MW-111S is a result of natural groundwater geochemistry condition of low pH and potential oxidation of sulfide minerals, potential impact of CCR disposed at the CADL prior to October 19, 2015, and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-111S. The following evidence supports this determination:

- Sulfate was detected in MW-111S at a concentration of 756 mg/L in the May 2024 sample, which exceeded the intrawell prediction limit of 398 mg/L. Compared to the value of 827 mg/L in the November 2023 sample, the sulfate concentration decreased by 8%. The Mann-Kendal statistic of 179 exceeded the critical value of 84 indicating a significant increasing trend at the 98% confidence level. The sulfate increasing was consistent with the TDS increasing, which indicated that more salts were dissolved into groundwater. It could be caused by the acidic geochemistry condition discussed above or an anthropogenic source since sulfate is soluble in soils and can get into groundwater via surface water infiltration. Another potential reason is the naturally occurrence of sulfide minerals in the soil, such as pyrite. The oxidation of sulfide minerals will slowly release sulfate and hydrogen ion into groundwater, which will lead to the increasing of sulfate and decreasing of pH.
- Based on review of potentiometric surface mapping and locations of closed portions of the CADL, and the CCR Unit relative to MW-111S, MW-111S likely monitors groundwater associated with the pre-CCR Rule closed portions of the CADL rather than the CCR Unit;

therefore, concentrations measured in MW-111S may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.

Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-111S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR Unit. This surface water ultimately migrates from the MW-111S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water to MW-111S, it appears likely that surface water infiltration has impacted the MW-111S monitoring results.

3.12 TDS at MW-111S

The TDS SSI identified at MW-111S is a result of the acidic groundwater geochemistry conditions with natural occurrence of sulfide minerals, sodium sulfate source, the potential impact of CCR disposed at the CADL prior to October 19, 2015 and potential infiltration of surface water impacted by on-site CCR into the subsurface in the area of MW-111S. The following evidence supports this determination:

- TDS was detected in MW-111S at a concentration of 1,270 mg/L in the May 2024 sample, which exceeded the intrawell prediction limit of 541 mg/L. Compared to the value of 1,370 mg/L in the November 2023 sample, the TDS concentration was consistent. The Mann-Kendal statistic of 205 exceeded the critical value of 84 indicating a significant increasing trend at the 98% confidence level. As discussed in Section 2.2.5, the Jackson Group groundwater is sodium- and calcium-sulfate water type. Sodium could be another main contribution to the TDS exceedance with the increasing of calcium and sulfate. High sodium concentration can also cause the fluoride exceedance. The acidic groundwater could be one of the potential reasons. An alternate source containing sodium sulfate should also be considered, which can be mineral dissolution, surface water flux or atmospheric deposition.
- Based on review of potentiometric surface mapping, locations of closed portions of the CADL, and the CCR Unit relative to MW-111S, MW-111S likely monitors groundwater associated with the pre-CCR Rule closed portions of the CADL rather than the CCR Unit. Therefore, concentrations measured in MW-111S may be more reflective of pre-CCR Rule disposal rather than of the Unit.

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Surface water that has come into contact with on-site CCR at the CCR Unit has migrated from the perimeter drainage swale for the CCR Unit due to periodic build-up of sediment within the perimeter surface water swale. When this build-up occurs, surface water flows out of the swale and over the adjoining access road and then to the area of MW-111S. This drainage swale carries surface water runoff from closed portions of the CADL as well as from the CCR Unit. This surface water ultimately migrates from the MW-111S area via surface water swales within the ADEQ-permitted CADL footprint, with ultimate discharge into the site surge pond as per EAL's NPDES permit. Based on the close proximity of this surface water to MW-111S, it appears likely that surface water infiltration has impacted the MW-111S monitoring results.

3.13 Boron at MW-112D

The boron SSI identified at MW-112D is a result of natural variation in groundwater quality and potential impact of CCR disposed at the CADL prior to October 19, 2015. The following evidence supports this determination:

- Boron was detected in MW-112D at a concentration of 0.288 mg/L in the May 2024 sample, which was consistent with 0.286 mg/L in the November 2023 sample. This concentration exceeds the intrawell prediction limit of 0.252 mg/L. Boron concentrations measured at MW-118D (background well for Stratum III) have ranged from 0.274 to 0.355 mg/L. Therefore, the boron exceedance at MW-112D is within the range of variation in background groundwater quality and is not a potential environmental concern.
- Based on review of potentiometric surface mapping, locations of closed portions of the CADL, and the CCR Unit relative to MW-112D, MW-112D is located immediately adjacent (approximately 25 feet) to historic fill, but approximately 950 feet from the CCR Unit. Therefore, the concentrations of boron measured in MW-112D may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.
- Groundwater flow velocities are estimated to be approximately <1 ft/year to 10 ft/year (TRC 2018a). Since, MW-112D is located approximately 950 feet from the CCR unit, any release from the CCR Unit would be detected in Stratum III at MW-112D within approximately 95 years, which is significantly longer than the CCR Unit has been in operation. Therefore, the concentration of boron at MW-112D likely represents either potential pre-CCR Rule migration from historic fill or background groundwater quality for Stratum III.</p>

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3.14 Calcium at MW-112D

The calcium SSI identified at MW-112D is a result of natural variation in groundwater quality and potential impact of CCR disposed at the CADL prior to October 19, 2015. The following evidence supports this determination:

- Calcium was detected in MW-112D at a concentration of 42.4 mg/L in the November 2023 sample, which was consistent with 41.1 mg/L in the November 2023 sample. This concentration exceeds the intrawell prediction limit of 21.3 mg/L. The Mann-Kendal statistic of 246 exceeded the critical value of 89 indicating a significant increasing trend at the 98% confidence level. The relatively low TDS indicated that EC in groundwater is not a factor to the calcium exceedance. Calcium concentrations measured at MW-118D (background well for Stratum III) have ranged from 68.4 to 83.2 mg/L. Therefore, the calcium exceedance at MW-112D is within the range of variation in background groundwater quality and is not a potential environmental concern.
- Based on review of potentiometric surface mapping, locations of historic fill, locations of closed portions of the CADL, and the CCR Unit relative to MW-112D, MW-112D is located immediately adjacent (approximately 25 feet) to historic fill, but approximately 950 feet from the CCR Unit. Therefore, the concentrations of calcium measured in MW-112D may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.
- As discussed previously, groundwater flow velocities are estimated to be approximately <1 ft/year to 10 ft/year (TRC 2018a). Since, MW-112D is located approximately 950 feet from the CCR Unit, any release from the CCR Unit would be detected in Stratum III at MW-112D within approximately 95 years, which is significantly longer than the CCR Unit has been in operation. Therefore, the concentration of calcium at MW-112D likely represents either potential pre-CCR Rule migration from historic fill or background groundwater quality for Stratum III.</p>

3.15 TDS at MW-112D

The TDS SSI identified at MW-112D is a result of natural variation in groundwater quality and potential impact of CCR disposed at the CADL prior to October 19, 2015. The following evidence supports this determination:

TDS was detected in MW-112D at a concentration of 327 mg/L in the May 2024 sample, which exceeded the intrawell prediction limit of 205 mg/L. Compared to the value of 295 mg/L in

the November 2023 sample, the TDS concentration was consistent. The Mann-Kendal statistic of 227 exceeded the critical value of 89 indicating a significant increasing trend at the 98% confidence level. TDS concentrations measured at MW-118D (background well for Stratum III) have ranged from 415 to 484 mg/L. A review of groundwater parameters in Stratum III indicates that sulfate is a great contributor to TDS, but the sulfate concentration at MW-112D is not detectable (less than 5 mg/L). Therefore, the TDS exceedance at MW-112D is within the range of variation in background groundwater quality and is not a potential environmental concern.

- Based on review of potentiometric surface mapping, locations of historic fill, locations of closed portions of the CADL, and the CCR Unit relative to MW-112D, MW-112D is located immediately adjacent (approximately 25 feet) to historic fill, but approximately 950 feet from the CCR Unit. Therefore, the concentrations of TDS measured in MW-112D may be more reflective of pre-CCR Rule disposal rather than of the CCR Unit.
- As discussed previously, groundwater flow velocities are estimated to be approximately <1 ft/year to 10 ft/year (TRC 2018a). Since, MW-112D is located approximately 950 feet from the CCR unit, any release from the CCR Unit would be detected in Stratum III at MW-112D within approximately 95 years, which is significantly longer than the CCR Unit has been in operation. Therefore, the concentration of TDS at MW-112D likely represents either potential pre-CCR Rule migration from the historic fill or background groundwater quality for Stratum III.</p>

3.16 TDS at MW-114D

The TDS SSI identified at MW-114D is a result of natural variation in groundwater quality. The following evidence supports this determination:

- TDS was detected in MW-114D at a concentration of 332 mg/L in the May 2024 sample, which exceeded the intrawell prediction limit of 322 mg/L. Compared to the value of 315 mg/L in the November 2023 sample and 326 mg/L in the June 2023 sample, the TDS concentration was consistent. TDS concentrations measured at MW-118D (background well for Stratum III) have ranged from 415 to 642 mg/L. Therefore, the TDS exceedance at MW-114D is within the range of variation in background groundwater quality and is not a potential environmental concern.
- Based on review of potentiometric surface mapping, locations of closed portions of the CADL, and the CCR Unit relative to MW-114D, MW-114D is located 950 feet from the CCR

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Unit. Therefore, the concentrations of TDS measured in MW-114D may be more reflective of background natural water quality rather than of the CCR Unit.

As discussed previously, groundwater flow velocities in Stratum III are estimated to be approximately <1 ft/year to 10 ft/year (TRC 2018a). Since, MW-114D is located approximately 950 feet from the CCR Unit, any release from the pre-CCR Rule closed portions of the CADL or the CCR Unit would be detected in Stratum III at MW-114D within approximately 95 years, which is significantly longer than either the CADL or the CCR Unit has been in operation. Therefore, the concentration of calcium at MW-114D likely represents background natural groundwater quality for Stratum III.</p>

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Section 4 Conclusions

The information provided in this report serves as the ASD prepared in accordance with 40 CFR 257.94(e)(2) of the CCR Rule. Statistical evaluation identified 16 potential SSIs in three monitoring wells in Stratums I and two monitoring wells in Stratum III. This ASD has demonstrated the following lines of reasoning that support alternative sources for the identified SSIs:

- The SSIs identified in MW-106S, MW-110S, and MW-111S are likely releases from historic fill or portions of the CADL closed before the effective date of the CCR Rule (October 19, 2015); and
- Historical data indicated acidic groundwater geochemistry conditions in MW-106S, MW-110S and MW-111S. The 12 SSIs identified in these wells are related to the natural groundwater geochemistry conditions, such as low pH, high electrical conductivity, potential presence of sulfide minerals in soils and relatively high oxidation-reduction potential; and
- Surface water that has come into contact with on-site CCR and has migrated into the subsurface.
- The 2 fluoride SSIs identified in MW-106S and MW-111S could be a result of natural groundwater geochemistry conditions (relative low concentration of calcium and high concentration of sodium).
- The 4 SSIs identified in Stratum III wells MW-112D and MW-114D are mostly within the natural variation in groundwater quality compared to MW-118D, which likely represents background natural groundwater quality of Stratum III due to its location to CCR Unit and groundwater flow velocities.

Therefore, the SSIs determined based on statistical analysis of the 1st Half 2024 semiannual detection monitoring event performed in May 2024 are not due to a release from the CCR Unit to Stratums I and III of the Jackson Group. Based on the information provided in this ASD report, 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 5 Certification

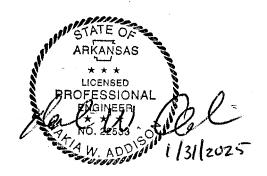
I hereby certify that the alternative source demonstration presented within this document for the Entergy White Bluff Plant Coal Ash Disposal Landfill CCR Unit has been prepared to meet the requirements of Title 40 CFR §257.94(e) 2 of the Federal CCR Rule. This document is accurate and has been prepared 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: 1/31/2025



(SEAL)

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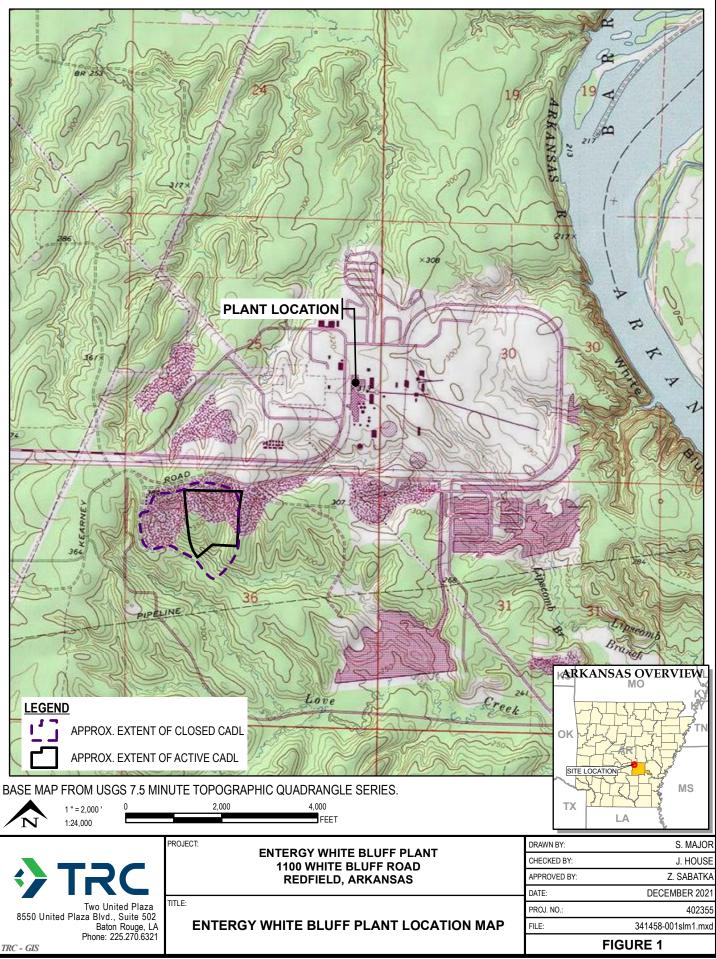
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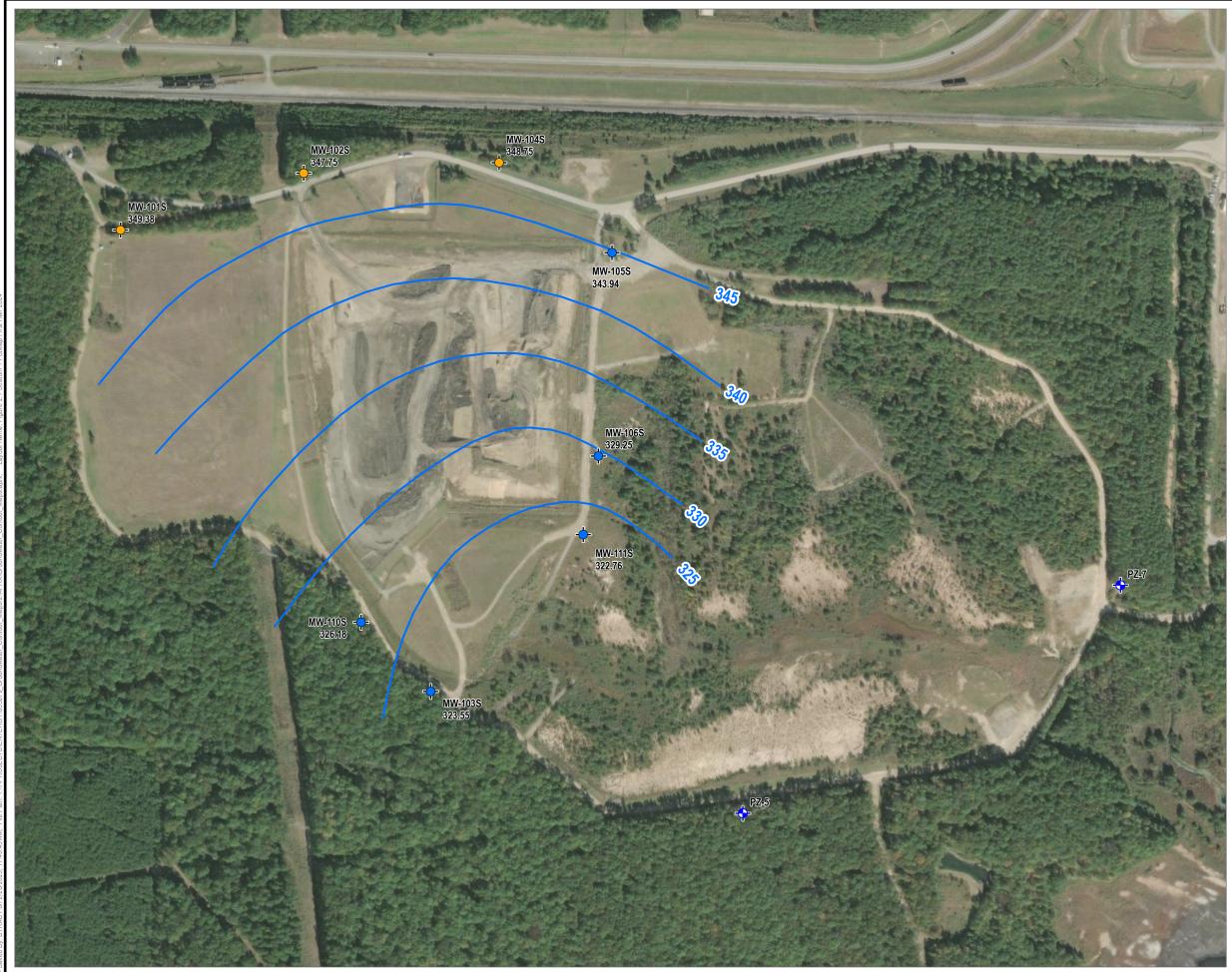


DRAWN BY:	S. MAJOR	PROJ. NO.:	341458
CHECKED BY:	S. SELLWOOD		
APPROVED BY:	J. HOUSE	FIGURE 2	
DATE:	OCTOBER 2020]	
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Two United Plaza 8550 United Plaza Blvd., Suite 502 Baton Rouge, LA Phone: 225.216.7483

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÷	STRATUM I BACKROUND WELL
\	STRATUM I MW
•	STRATUM III BACKROUND WELL
\	STRATUM III MW
\	STRATUM III PIEZOMETER
	GROUNDWATER CONTOUR

BASE MAP: ESRI "WORLD IMAGERY" ONLINE SERVICE LAYER. DATA SOURCES: TRC



1:4,800 1" = 400'

400

800 FEET

PROJECT: ENTERGY WHITE BLUFF PLANT 1100 WHITE BLUFF ROAD REDFIELD, ARKANSAS TITLE: STRATUM 1 POTENTIOMETRIC MAP, FIRST HALF 2024 DRAWN BY: B. TRACY PROJ. NO.: 635879

CHECKED BY:	D. STITCHER	
APPROVED BY:	E. GAINES	FIGURE 2.1
DATE:	FEBRUARY 2025	
> T		545 SHERWOOD COMMON BLVD. BUILDING 3 - SUITE A BATON ROUGE, LA 70816 PHONE: 225.216.7483
FILE:		Groundwater_Contour_Maps.aprx



- ✦ STRATUM I BACKROUND WELL
- ♦ STRATUM I MW
- ✦ STRATUM III BACKROUND WELL

- ↔ STRATUM III MW
- ♦ STRATUM III PIEZOMETER
- GROUNDWATER CONTOUR
- --- GROUNDWATER CONTOUR INFERRED

BASE MAP: ESRI "WORLD IMAGERY" ONLINE SERVICE LAYER. DATA SOURCES: TRC



1:4,900 1" = 408'

400

800 FEET

ENTERGY WHITE BLUFF PLANT 1100 WHITE BLUFF ROAD REDFIELD, ARKANSAS PROJECT:

TITLE: STRATUM 3 POTENTIOMETRIC MAP, FIRST HALF 2024

DRAWN BY:	B. TRACY	PROJ. NO.:	635879	
CHECKED BY:	D. STITCHER			
APPROVED BY:	E. GAINES	FIGURE 2.2		
DATE:	FEBRUARY 2025			
4545 SHERWOOD COMMON BLVD. BUILDING 3 - SUITE A BATON ROUGE, LA 70816 PHONE: 225.216.7483				
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