

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

2021 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:



Prepared by:



January 31, 2022



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EXECUTIVE SUMMARY

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

The Plant conducted two semi-annual detection monitoring events in 2021 for the Landfill CCR Unit monitoring well network per 40 CFR § 257.94. The statistical analyses completed for the second semi-annual 2020 identified potential statistically significant increases (SSIs); therefore, an alternate source demonstration (ASD) was performed for the second half 2020 detection monitoring event and is attached to this report. The ASD was successful which resulted in the landfill continuing to operate under the detection monitoring program. The first semi-annual 2021 sampling event analytical data did not identify SSIs. The Landfill CCR unit operated under the detection monitoring program (40 CFR § 257.94) during the duration of 2021.



1. INTRODUCTION

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



2. GROUNDWATER MONITORING SYSTEM

The Landfill's groundwater monitoring system consists of 11 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 2021

Entergy did not install any new wells or decommission any existing wells in the certified groundwater monitoring system during 2021.



4. GROUNDWATER MONITORING DATA

In accordance with §257.90(e)(3), all monitoring data obtained under §§257.90 through 257.98 during 2021 are provided in Appendix B. Data include:

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



5. STATUS SUMMARY OF THE 2021 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 2021 is provided in the list below:

- In accordance with §257.94(b), semiannual detection monitoring was performed during the first half (June) and second half (November) of 2021 for analysis of Appendix III parameters (boron, calcium, chloride, fluoride, pH, sulfate and total dissolved solids (TDS)).
- Statistical evaluation of the semiannual detection monitoring data was performed in accordance with the statistical method certified by a qualified Arkansas-registered professional engineer. The certified statistical method has been posted to Entergy's CCR Rule Compliance Data and Information website.
- In 2021, Entergy 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 2020 semi-annual detection monitoring event. The ASD was certified by an Arkansas-registered professional engineer. As required by §257.94(e)(2), a copy of the ASD is included in Appendix C. Based on the successful evaluation conducted and results presented in the ASD, Entergy continued with detection monitoring in accordance with §257.94.
- The first half 2021 semi-annual detection monitoring sampling was performed during June 2021. Based on statistical evaluation of the data; resampling was performed during August 2021 to verify potential statistical exceedances. Resample results did not confirm potential SSIs for calcium, chloride, sulfate, and total dissolved solids (TDS).
- No SSIs were identified in the first half of 2021 semi-annual detection monitoring event; therefore, Entergy did not prepare alternative source demonstrations (ASDs) per §257.94(e)(2) for either of the detection monitoring events for the CADL CCR Unit.
- The second half 2021 detection monitoring sampling was performed during November 2021. Statistical evaluation of the data will be performed during 2022 to determine if any SSIs are identified in accordance with §257.93(h).



- No problems were encountered during 2021 regarding the detection monitoring and corrective action system. Therefore, no actions were required to modify the system.
- The Landfill CCR unit remained in detection monitoring during the duration of 2021.



6. PROJECTED ACTIVITIES FOR 2022

Planned activities for the program during 2022 are listed below:

- Statistical evaluation of the second half 2021 and first-half 2022 detection monitoring sampling data will be performed during 2022 to determine if any SSIs are identified.
- Semiannual detection monitoring is planned for June and November 2022.



APPENDIX A SITE MAP



APPENDIX B GROUNDWATER MONITORING DATA



	Canadina Cabadula Entara	. In donous donous CADL Nativos	ul.
		y Independence CADL Netwo	r K
	_	ampling Dates and Wells	
	Sam	pled .	
	21	11/15-11/17/2021	
	,20	7/2	
	6/17-6/23/2021	./1]	
	/9-	-11	Number of
	/17	/15	Samples
Well ID	9	11,	Collected
MW-1R	Χ	X	2
MW-3	X	Х	2
MW-6	Х	Х	2
MW-7	Х	Х	2
MW-8	X	Х	2
MW-9	X	Х	2
MW-10	Χ	Х	2
MW-11	X	Х	2
MW-13	X	Х	2
MW-17	X	X	2
MW-18	-	X	1

Notes:

All samples collected in 2021 were part of the detection monitoring program. No samples collected in 2021 were part of an assessment monitoring program.

¹ MW-18 (a background well) was inaccessible during 1st Half sampling (6/17-6/18/2021) due to site construction activities.



Field pH o	data collected during 2021, Ente	rgy Independence CADL network
Well ID	Date Collected	pH (su)
MW-1R	6/18/2021	6.74
IVIVV-IK	11/16/2021	7.06
MW-3	6/18/2021	6.69
10100-5	11/15/2021	7.26
MW-6	6/18/2021	6.57
IVIVV-0	11/16/2021	6.62
MW-7	6/18/2021	7.55
10100-7	11/15/2021	7.48
MW-8	6/17/2021	6.20
10100-0	11/16/2021	6.96
MW-9	6/17/2021	6.24
10100-9	11/16/2021	7.02
MW-10	6/18/2021	7.10
10100-10	11/15/2021	7.24
MW-11	6/23/2021	6.47
10100-11	11/15/2021	6.42
MW-13	6/18/2021	7.14
14144-12	11/15/2021	6.52
NAVA/ 17	6/18/2021	5.89
MW-17	11/17/2021	6.81
MW-18	6/18/2021	1
10100-10	11/16/2021	6.94

MW-18 (a background well) was inaccessible during 1st Half sampling (6/17-6/18/2021) due to site construction activities.



Pace Analytical® ANALYTICAL REPORT

TRC Solutions - Dallas, TX

Sample Delivery Group: L1369462 Samples Received: 06/22/2021

Project Number:

Description: **Entergy Independence**

Report To: Zak Sabatka

700 Highlander Blvd, Ste 210

Arlington, TX 76015

















Entire Report Reviewed By:

Jason Romer 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 www.pacenational.com

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SAMPLE SUMMARY

FB-01 L1369462-01 GW			Collected by Z. Sabatka	Collected date/time 06/18/21 10:40	Received dat 06/22/21 09:	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Gravimetric Analysis by Method 2540 C-2011	WG1694171	1	06/23/21 21:55	06/24/21 03:19	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG1696532	1	06/28/21 16:09	06/28/21 16:09	BMD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1701003	1	07/07/21 16:32	07/07/21 16:32	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1701049	1	07/09/2110:20	07/09/21 15:53	KMG	Mt. Juliet, TN



















CASE NARRATIVE

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

¹Cp

















Jason Romer Project Manager

SAMPLE RESULTS - 01

Collected date/time: 06/18/21 10:40

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Dissolved Solids	ND		10000	1	06/24/2021 03:19	WG1694171

Wet Chemistry by Method 9040C

	Result	Qualifier	Dilution	Analysis	<u>Batch</u>
Analyte	Su			date / time	
рН	5.79	<u>T8</u>	1	06/28/2021 16:09	WG1696532



Sample Narrative:

L1369462-01 WG1696532: 5.79 at 22.4C



Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	907	<u>J</u>	379	1000	1	07/07/2021 16:32	WG1701003
Fluoride	U		64.0	150	1	07/07/2021 16:32	WG1701003
Sulfate	U		594	5000	1	07/07/2021 16:32	WG1701003



GI

Metals (ICP) by Method 6010B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	ug/l		ug/l	ug/l		date / time	
Boron	U		20.0	200	1	07/09/2021 15:53	WG1701049
Calcium	U		79.3	1000	1	07/09/2021 15:53	WG1701049





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QUALITY CONTROL SUMMARY

Gravimetric Analysis by Method 2540 C-2011

L1369462-01

Method Blank (MB)

(MB) R3672881-1 0	(MB) R3672881-1 06/24/21 03:19						
	MB Result	MB Qualifier	MB MDL	MB RDL			
Analyte	ug/l		ug/l	ug/l			
Dissolved Solids	U		10000	10000			



3 Ss

L1369424-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1369424-01 06/24/21 03:19 • (DUP) R3672881-3 06/24/21 03:19

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Dissolved Solids	1470000	1470000	1	0.136		5





L1369484-18 Original Sample (OS) • Duplicate (DUP)

(OS) L1369484-18 06/24/21 03:19 • (DUP) R3672881-4 06/24/21 03:19

(03) [1303404-10 00/24/2	Original Result			DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Dissolved Solids	358000	367000	1	2.48		5





Laboratory Control Sample (LCS)

(LCS) R3672881-2 06/24/21 03:19

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits
Analyte	ug/l	ug/l	%	%
Dissolved Solids	8800000	8900000	101	77.4-123

QUALITY CONTROL SUMMARY

L1369462-01

Wet Chemistry by Method 9040C

L1369263-18 Original Sample (OS) • Duplicate (DUP)

(OS) L1369263-18 06/28/21 16:09 • (DUP) R3673068-2 06/28/21 16:09

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	Su	SU		%		%
рН	11.9	11.9	1	0.000		1



Sample Narrative:

OS: 11.93 at 19.1C DUP: 11.93 at 19.1C



Ss

L1369484-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1369484-09 06/28/21 16:09 • (DUP) R3673068-3 06/28/21 16:09

(03) 11303404-03 00/20/2	Original Result	,		DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
рН	7.70	7.71	1	0.130		1



⁹Sc

Sample Narrative:

OS: 7.7 at 22.1C DUP: 7.71 at 24.1C

Laboratory Control Sample (LCS)

(LCS) R3673068-1 06/28/2116:09

(,	Spike Amount	LCS Result	LCS Rec.	Rec. Limits
Analyte	su	su	%	%
На	10.0	10.0	100	99.0-101

Sample Narrative:

LCS: 10.02 at 26C

QUALITY CONTROL SUMMARY

L1369462-01

Wet Chemistry by Method 9056A

	M	let	hod	ΙВ	lan	k (M	IB)	
--	---	-----	-----	----	-----	-----	---	-----	--

(MB) R3677130-1	07/07/21 13:12

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l
Chloride	U		379	1000
Fluoride	U		64.0	150
Sulfate	H		594	5000







L1369467-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1369467-09 07/07/21 19:51 • (DUP) R3677130-3 07/07/21 20:30

(,	Original Result			DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Chloride	11500	11600	1	0.935		15
Fluorida	253	2/17	1	2.36		15







L1369293-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1369293-01 07/07/21 14:59 • (DUP) R3677130-6 07/07/21 21:23

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Chloride	6540	6350	1	2.99		15
Fluoride	106	115	1	8.44	<u>J</u>	15
Sulfate	U	U	1	0.000		15

9
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) C

Laboratory Control Sample (LCS)

(LCS) R3677130-2 07/07/21 13:25

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits
Analyte	ug/l	ug/l	%	%
Chloride	40000	39100	97.8	80.0-120
Fluoride	8000	8120	101	80.0-120
Sulfate	40000	39700	99.1	80.0-120

L1369467-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1369467-10 07/07/21 20:44 • (MS) R3677130-4 07/07/21 20:57 • (MSD) R3677130-5 07/07/21 21:10

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	50000	17400	66200	66100	97.6	97.5	1	80.0-120			0.122	15
Fluoride	5000	196	4880	4900	93.6	94.1	1	80.0-120			0.503	15

LCS Qualifier

QUALITY CONTROL SUMMARY

Wet Chemistry by Method 9056A

L1369462-01

L1369467-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1369467-10 07/07/21 20:44 • (MS) R3677130-4 07/07/21 20:57 • (MSD) R3677130-5 07/07/21 21:10

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Sulfate	50000	303000	324000	323000	42.8	41.5	1	80.0-120	ΕV	EV	0.210	15

Ср





L1369263-21 Original Sample (OS) • Matrix Spike (MS)

(OS) L1369263-21 07/08/21 10:31 • (MS) R3677130-7 07/07/21 21:38

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	ug/l	ug/l	ug/l	%		%	
Chloride	50000	17800	66500	97.5	1	80.0-120	
Fluoride	5000	273	4960	93.8	1	80.0-120	
Sulfate	50000	310000	325000	29.0	1	80.0-120	EV



[†]Cn











QUALITY CONTROL SUMMARY

L1369462-01

Metals (ICP) by Method 6010B Method Blank (MB)

(MB) R3677764-1 07/09/21 14:50 MB Result MB MDL MB RDL MB Qualifier Analyte ug/l ug/l ug/l Boron U 20.0 200 U 79.3 1000 Calcium





Laboratory Control Sample (LCS)

(LCS) R3677764-2 07/09	LCS) R3677764-2 07/09/2114:52									
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier					
Analyte	ug/l	ug/l	%	%						
Boron	1000	997	99.7	80.0-120						
Calcium	10000	10000	100	80 0-120						



[†]Cn



⁷Gl

L1369263-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)







	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Boron	1000	58.3	1090	1070	104	101	1	75.0-125			1.94	20
Calcium	10000	145000	154000	153000	94.4	77.9	1	75.0-125			1.07	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

Apple viations and	a 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
Е	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.



















ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
lowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky 16	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	Al30792	Tennessee 1 4	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234



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

TN00003

EPA-Crypto



















 $^{^* \, \}text{Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.} \\$

Company Name/Address:			Billing Info	rmation:					F	nalvsis /	Contain	er / Pre	servative				Chain of Custody	Page or
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Armigion, 1x 70013							955										1	
Report to:	11			Sabatka@trccom														ount Juliet, TN 37122 ia this chain of custody igment and acceptance of the
Zak Sabatka	House	City/State		etrecomp	Please Ci	rcle:											Pace Terms and Condi https://info.pacelabs.	
Project Description: Entergy Independence		Collected:	edfiel	Id, AR	Please Ci	TET	125mlHDPE-NoPres										terms.pdf	19162
Phone: 817-522-1026	Client Project			Lab Project #	FROUNDY		Pol		HNO3								SDG# LI	369462
THORE. OZ. DZZ ZOZ				TRCDTX-ENT	EKGYINDY		PE-1	10	Z								Table f	G157
Collected by (print):	Site/Facility I	D#		P.O. #			무	Pres	250mlHDPE-								Acctnum: TR	CDTY
Z Sabatka							Sml	No	모								Template:T1	
Collected by (signature):	Rush? (Lab MUST Be	Notified)	Quote #			125	PE-	Om O								Prelogin: P85	
The	Same D	ay Five	Day y (Rad Only)	Date Resul	ts Needed	1	04	H								B 100 100 100 100 100 100 100 100 100 10	PM: 134 - Ma	
Immediately	Two Da	10 D	ay (Rad Only)	7/10	121	No.	pH, SO4	250mIHDPE-NoPr	, Ca								PB: () & 1	16/11/21
Packed on Ice N Y	Three I			110	1	of	F, pl		al B,			7.					Shipped Via: F	edEX Ground
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Circis	C, F	TDS	Total								Remarks	Sample # (lab only)
FB-01	Grah	GW	1	6/18/2	1 1040	13	×	×	1000									-01
FD-01	9 20	GW	-	1010	1 10 (0	-		1										
						3								er de				
		GW																
		GW				2.41												
		GW																
								1										
		12						120										
4.26										2.5				e estar		1	See Section 1	
						-								<i>(</i> 2-1)	7		- Harry	
						- At									AL THE	=		
	bananta			4.	(2)	-	1									Samp!	Le Receipt C	hecklist
* Matrix: SS - Soil AIR - Air F - Filter	Remarks: 2	non	seg.	200	COC	2 5	=2			рН		_ Temp		-		eal Pre	esent/Intact Accurate:	: NP Y N
GW - Groundwater B - Bioassay WW - WasteWater	stand									Flow		_ Othe	r	_	Bottle	es arr	ive intact: tles used:	- X - N
DW - Drinking Water	Samples returned						7	0-		- 1	.1			A.			volume sent	
OT - Other	_ UPS _ FedE			Track	king# 511	03	1	69	7 5	DO	24		0				adspace: n Correct/Cl	Y_N
Relinquished by : (Signature)		ate:	/_ Tim		ived by: (Signa	ture)	<u> </u>			Trip Blan	nk Recei		es/No)	u			<0.5 mR/hr:	lecked: ZI _N
July 1		6(21)	121 1	530		1	220						TBR					
Relinquished by: (Signature)	D	ate:	Tim	e: Rece	ived by: (Signa	iture)				Temp#			les Receive	ed:	If prese	rvation	required by Lo	ogin: Date/Time
								Λ		-	.051-	-	0					I con list
Relinquished by : (Signature)	C	ate:	Tim	e: Rece	ived for lab by	: (Signat	ture)	VIN	2	Date:	110	Tim		(17)	Hold:			NCF 7 OK
			41-11 - 7	10	Mill	JK	10	001)	6/2	HI	, \	091	10				



Pace Analytical® ANALYTICAL REPORT

TRC Solutions - Dallas, TX

L1369522 Sample Delivery Group:

Samples Received: 06/22/2021

Project Number: 419735

Description: **Entergy Independence**

Report To: Zak Sabatka

700 Highlander Blvd, Ste 210

Arlington, TX 76015

















Entire Report Reviewed By:

Jason Romer

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 www.pacenational.com

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28

SAMPLE SUMMARY

MW-1R L1369522-01 GW			Collected by Z. Sabatka	Collected date/time 06/18/21 10:51	Received da 06/22/21 09	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1694174	1	06/23/21 21:51	06/24/21 06:44	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG1696929	1	06/29/2112:00	06/29/2112:00	SAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1701516	1	07/10/21 23:31	07/10/21 23:31	MCG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1703802	5	07/13/21 01:20	07/13/21 01:20	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1701050	1	07/09/21 13:01	07/09/21 18:37	KMG	Mt. Juliet, TN
MW 2 14200522 02 CW			Collected by Z. Sabatka	Collected date/time 06/17/21 15:02	Received da 06/22/21 09	
MW-2 L1369522-02 GW	D	D.1				
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1694174	1	06/23/21 21:51	06/24/21 06:44	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG1696929	1	06/29/21 12:00	06/29/21 12:00	SAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1701516	1	07/10/21 23:43	07/10/21 23:43	MCG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1703802	5	07/13/21 01:33	07/13/21 01:33	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1701050	1	07/09/21 13:01	07/09/21 18:40	KMG	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
MW-3 L1369522-03 GW			Z. Sabatka	06/18/21 14:36	06/22/21 09	:00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Gravimetric Analysis by Method 2540 C-2011	WG1694183	1	06/23/21 22:12	06/24/21 08:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG1696929	1	06/29/2112:00	06/29/2112:00	SAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1701516	1	07/10/21 23:54	07/10/21 23:54	MCG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1701050	1	07/09/21 13:01	07/09/21 18:43	KMG	Mt. Juliet, TN
			Collected by	Collected date/time		
MW-6 L1369522-04 GW			Z. Sabatka	06/18/21 13:57	06/22/21 09	:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1694183	1	06/23/21 22:12	06/24/21 08:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG1696929	1	06/29/2112:00	06/29/21 12:00	SAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1701516	1	07/11/21 00:06	07/11/21 00:06	MCG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1701050	1	07/09/21 13:01	07/09/21 18:46	KMG	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
MW-7 L1369522-05 GW			Z. Sabatka	06/18/21 16:56	06/22/21 09	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
Cravimatrie Analysis by Mathad 2540 C 2011	WC4C0 4402	1	date/time	date/time	VADD	M+ lulina TA
Gravimetric Analysis by Method 2540 C-2011	WG1694183	1	06/23/21 22:12	06/24/21 08:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG1696929	1	06/29/21 12:00	06/29/21 12:00	SAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1701516	1	07/11/21 00:17	07/11/21 00:17	MCG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1701050	1	07/09/21 13:01	07/09/21 18:49	KMG	Mt. Juliet, TN
MW 0 14200522 00 0W			Collected by Z. Sabatka	Collected date/time 06/17/21 10:57	Received da 06/22/21 09	
MW-8 L1369522-06 GW						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1694183	1	06/23/21 22:12	06/24/21 08:02	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG1696929	1	06/29/2112:00	06/29/21 12:00	SAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1701516	1	07/11/21 00:29	07/11/21 00:29	MCG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1703802	5	07/13/21 02:12	07/13/21 02:12	ELN	Mt. Juliet, TN
ACCOUNT:	PROJECT:		SDG:	DAT	E/TIME:	

















SAMPLE SUMMARY

			Collected by	Collected date/time	Received da	te/time
MW-8 L1369522-06 GW			Z. Sabatka	06/17/21 10:57	06/22/21 09	:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1701050	1	07/09/2113:01	07/09/2118:52	KMG	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
MW-9 L1369522-07 GW			Z. Sabatka	06/17/21 10:05	06/22/21 09	:00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1694183	1	date/time 06/23/21 22:12	date/time 06/24/21 08:02	VRP	Mt. Juliet, TN
Vet Chemistry by Method 9040C	WG1694183	1	06/29/2112:00	06/29/2112:00	SAC	Mt. Juliet, TN
Vet Chemistry by Method 9056A	WG1701516	1	07/11/21 00:52	07/11/21 00:52	MCG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1703802	5	07/13/21 02:25	07/13/21 02:25	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1701050	1	07/09/21 13:01	07/09/21 18:55	KMG	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
MW-10 L1369522-08 GW			Z. Sabatka	06/18/21 15:23	06/22/21 09	:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1694183	1	06/23/21 22:12	06/24/21 08:02	VRP	Mt. Juliet, TN
Net Chemistry by Method 9040C	WG1696929	1	06/29/2112:00	06/29/2112:00	SAC	Mt. Juliet, TN
Net Chemistry by Method 9056A	WG1701516	1	07/11/21 01:15	07/11/21 01:15	MCG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1703802	5	07/13/21 02:38	07/13/21 02:38	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1701050	1	07/09/2113:01	07/09/21 18:57	KMG	Mt. Juliet, TN
			Collected by	Collected date/time		
MW-13 L1369522-09 GW			Z. Sabatka	06/18/21 09:55	06/22/21 09:	:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1694183	1	06/23/21 22:12	06/24/21 08:02	VRP	Mt. Juliet, TN
Vet Chemistry by Method 9040C	WG1696929	1	06/29/21 12:00	06/29/2112:00	SAC	Mt. Juliet, TN
Net Chemistry by Method 9056A	WG1701516	1	07/11/21 01:49	07/11/21 01:49	MCG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1701050	1	07/09/21 13:01	07/09/21 19:00	KMG	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
DUP-01 L1369522-10 GW			Z. Sabatka	06/17/21 08:00	06/22/21 09	:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1694183	1	06/23/21 22:12	06/24/21 08:02	VRP	Mt. Juliet, TN
Vet Chemistry by Method 9040C	WG1696929	1	06/29/2112:00	06/29/2112:00	SAC	Mt. Juliet, TN
Net Chemistry by Method 9056A	WG1701516	1	07/11/21 02:01	07/11/21 02:01	MCG	Mt. Juliet, TN
Net Chemistry by Method 9056A	WG1703802	5	07/13/21 02:51	07/13/21 02:51	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1701050	1	07/09/21 13:01	07/09/21 19:03	KMG	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
MW-17 L1369522-11 GW			Z. Sabatka	06/17/21 08:00	06/22/21 09	:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
	WG1695130	1	06/25/2112:39	06/25/21 14:47	MMF	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WGICEGIOW					,
, ,	WG1696929	1	06/29/2112:00	06/29/2112:00	SAC	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011 Wet Chemistry by Method 9040C Wet Chemistry by Method 9056A				06/29/21 12:00 07/11/21 02:12	SAC MCG	Mt. Juliet, TN Mt. Juliet, TN



















CASE NARRATIVE

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

¹Cp

















Jason Romer Project Manager

SAMPLE RESULTS - 01

Collected date/time: 06/18/21 10:51

1369522

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Dissolved Solids	825000	<u>J3</u>	10000	1	06/24/2021 06:44	WG1694174



Wet Chemistry by Method 9040C

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	su			date / time	
рН	8.28	<u>T8</u>	1	06/29/2021 12:00	WG1696929



Sample Narrative:

L1369522-01 WG1696929: 8.28 at 23C



Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	183000		1900	5000	5	07/13/2021 01:20	WG1703802
Fluoride	173		64.0	150	1	07/10/2021 23:31	WG1701516
Sulfate	272000		2970	25000	5	07/13/2021 01:20	WG1703802



Metals (ICP) by Method 6010B

. , , ,							
	Result	Qualifier	MDL	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	ug/l		ug/l	ug/l		date / time	
Boron	84.6	J	20.0	200	1	07/09/2021 18:37	WG1701050
Calcium	134000		79.3	1000	1	07/09/2021 18:37	WG1701050





Sc

MW-2

SAMPLE RESULTS - 02

L13695

Gravimetric Analysis by Method 2540 C-2011

Collected date/time: 06/17/21 15:02

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Dissolved Solids	656000		10000	1	06/24/2021 06:44	WG1694174



Wet Chemistry by Method 9040C

	Result	Qualifier	Dilution	Analysis	<u>Batch</u>
Analyte	su			date / time	
рН	7.88	<u>T8</u>	1	06/29/2021 12:00	WG1696929



Sample Narrative:

L1369522-02 WG1696929: 7.88 at 22.8C



Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	19000		379	1000	1	07/10/2021 23:43	WG1701516
Fluoride	217		64.0	150	1	07/10/2021 23:43	WG1701516
Sulfate	298000		2970	25000	5	07/13/2021 01:33	WG1703802



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PAGE:

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Metals (ICP) by Method 6010B

, , ,							
	Result	Qualifier	MDL	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	ug/l		ug/l	ug/l		date / time	
Boron	52.2	<u>J</u>	20.0	200	1	07/09/2021 18:40	WG1701050
Calcium	1///00		70.2	1000	1	07/00/2021 19:40	WC1701050

MW-3

SAMPLE RESULTS - 03

Collected date/time: 06/18/21 14:36 L13

Consideration American Invitation

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	ug/l		ug/l		date / time	
Dissolved Solids	621000		10000	1	06/24/2021 08:02	WG1694183

²Tc

Wet Chemistry by Method 9040C

	Result	Qualifier	Dilution	Analysis	<u>Batch</u>
Analyte	su			date / time	
рН	7.24	T8	1	06/29/2021 12:00	WG1696929



Sample Narrative:

L1369522-03 WG1696929: 7.24 at 22.5C



Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	21200		379	1000	1	07/10/2021 23:54	WG1701516
Fluoride	365		64.0	150	1	07/10/2021 23:54	WG1701516
Sulfate	97100		594	5000	1	07/10/2021 23:54	WG1701516



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PAGE:

8 of 29

Metals (ICP) by Method 6010B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Boron	400		20.0	200	1	07/09/2021 18:43	WG1701050
Calcium	66900		79.3	1000	1	07/09/2021 18:43	WG1701050

MW-6

SAMPLE RESULTS - 04

Collected date/time: 06/18/21 13:57

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Dissolved Solids	398000		10000	1	06/24/2021 08:02	WG1694183



Wet Chemistry by Method 9040C

	Result	Qualifier	Dilution	Analysis	<u>Batch</u>
Analyte	Su			date / time	
рН	7.81	<u>T8</u>	1	06/29/2021 12:00	WG1696929



Sample Narrative:

L1369522-04 WG1696929: 7.81 at 22.6C



Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	30200		379	1000	1	07/11/2021 00:06	WG1701516
Fluoride	131	J	64.0	150	1	07/11/2021 00:06	WG1701516
Sulfate	88000		594	5000	1	07/11/2021 00:06	WG1701516



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	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Boron	80.2	<u>J</u>	20.0	200	1	07/09/2021 18:46	WG1701050
Calcium	62500		79 3	1000	1	07/09/2021 18:46	WG1701050

MW-7

SAMPLE RESULTS - 05

L1369522

Collected date/time: 06/18/21 16:56

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Dissolved Solids	495000		10000	1	06/24/2021 08:02	WG1694183



Wet Chemistry by Method 9040C

	Result	Qualifier	Dilution	Analysis	<u>Batch</u>
Analyte	su			date / time	
рН	7.97	T8	1	06/29/2021 12:00	WG1696929



Sample Narrative:

L1369522-05 WG1696929: 7.97 at 22.4C



Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	10600		379	1000	1	07/11/2021 00:17	WG1701516
Fluoride	710		64.0	150	1	07/11/2021 00:17	WG1701516
Sulfate	46800		594	5000	1	07/11/2021 00:17	WG1701516



Gl

⁹Sc

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Boron	60.6	<u>J</u>	20.0	200	1	07/09/2021 18:49	WG1701050
Calcium	45500		79.3	1000	1	07/09/2021 18:49	WG1701050

MW-8

SAMPLE RESULTS - 06

Gravimetric Analysis by Method 2540 C-2011

Collected date/time: 06/17/21 10:57

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Dissolved Solids	1020000		10000	1	06/24/2021 08:02	WG1694183



Wet Chemistry by Method 9040C

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	su			date / time	
рН	7.45	<u>T8</u>	1	06/29/2021 12:00	WG1696929



Sample Narrative:

L1369522-06 WG1696929: 7.45 at 23.1C



Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	181000		1900	5000	5	07/13/2021 02:12	WG1703802
Fluoride	199		64.0	150	1	07/11/2021 00:29	WG1701516
Sulfate	308000		2970	25000	5	07/13/2021 02:12	WG1703802



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Metals (ICP) by Method 6010B

(/)							
	Result	Qualifier	MDL	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	ug/l		ug/l	ug/l		date / time	
Boron	178	<u>J</u>	20.0	200	1	07/09/2021 18:52	WG1701050
Calcium	136000		70.2	1000	1	07/00/2021 19:52	WC1701050

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Collected date/time: 06/17/21 10:05

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Dissolved Solids	909000		10000	1	06/24/2021 08:02	WG1694183



Wet Chemistry by Method 9040C

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	SU			date / time	
pH	5.96	<u>T8</u>	1	06/29/2021 12:00	WG1696929



Sample Narrative:

L1369522-07 WG1696929: 5.96 at 23.6C



Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	50700		379	1000	1	07/11/2021 00:52	WG1701516
Fluoride	183		64.0	150	1	07/11/2021 00:52	WG1701516
Sulfate	391000		2970	25000	5	07/13/2021 02:25	WG1703802



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	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l	<u> </u>	ug/l	ug/l	Dilation	date / time	Baten
Boron	635		20.0	200	1	07/09/2021 18:55	WG1701050
Calcium	115000		79 3	1000	1	07/09/2021 18:55	WG1701050

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Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	ug/l		ug/l		date / time	
Dissolved Solids	1030000		10000	1	06/24/2021 08:02	WG1694183





Collected date/time: 06/18/21 15:23

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	su			date / time	
рН	5.57	<u>T8</u>	1	06/29/2021 12:00	WG1696929



Sample Narrative:

L1369522-08 WG1696929: 5.57 at 23.2C



Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	20400		379	1000	1	07/11/2021 01:15	WG1701516
Fluoride	388		64.0	150	1	07/11/2021 01:15	WG1701516
Sulfate	419000		2970	25000	5	07/13/2021 02:38	WG1703802



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	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
Analyte	ug/l		ug/l	ug/l		date / time		
Boron	3920		20.0	200	1	07/09/2021 18:57	WG1701050	
Calcium	1/2000		70.3	1000	1	07/09/2021 19:57	WC1701050	

Collected date/time: 06/18/21 09:55

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Dissolved Solids	485000		10000	1	06/24/2021 08:02	WG1694183



Wet Chemistry by Method 9040C

	Result	Qualifier	Dilution	Analysis	<u>Batch</u>
Analyte	su			date / time	
рН	5.76	<u>T8</u>	1	06/29/2021 12:00	WG1696929



Sample Narrative:

L1369522-09 WG1696929: 5.76 at 23.5C



Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	11700		379	1000	1	07/11/2021 01:49	WG1701516
Fluoride	297		64.0	150	1	07/11/2021 01:49	WG1701516
Sulfate	98400		594	5000	1	07/11/2021 01:49	WG1701516



	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Boron	364		20.0	200	1	07/09/2021 19:00	WG1701050
Calcium	81000		79.3	1000	1	07/09/2021 19:00	WG1701050





Collected date/time: 06/17/21 08:00

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Dissolved Solids	851000		10000	1	06/24/2021 08:02	WG1694183



Wet Chemistry by Method 9040C

	Result	Qualifier	Dilution	Analysis	<u>Batch</u>
Analyte	Su			date / time	
рН	8.27	<u>T8</u>	1	06/29/2021 12:00	WG1696929



Sample Narrative:

L1369522-10 WG1696929: 8.27 at 23.8C



Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	19100		379	1000	1	07/11/2021 02:01	WG1701516
Fluoride	217		64.0	150	1	07/11/2021 02:01	WG1701516
Sulfate	298000		2970	25000	5	07/13/2021 02:51	WG1703802



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	Result	Qualifier	MDL	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	ug/l		ug/l	ug/l		date / time	
Boron	56.6	J	20.0	200	1	07/09/2021 19:03	WG1701050
Calcium	144000		79.3	1000	1	07/09/2021 19:03	WG1701050



Collected date/time: 06/17/21 08:00

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Dissolved Solids	187000	T8	10000	1	06/25/2021 14:47	WG1695130



Wet Chemistry by Method 9040C

	Result	Qualifier	Dilution	Analysis	<u>Batch</u>
Analyte	Su			date / time	
pH	6.80	<u>T8</u>	1	06/29/2021 12:00	WG1696929



Sample Narrative:

L1369522-11 WG1696929: 6.8 at 23.8C



Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	2530		379	1000	1	07/11/2021 02:12	WG1701516
Fluoride	102	J	64.0	150	1	07/11/2021 02:12	WG1701516
Sulfate	20600		594	5000	1	07/11/2021 02:12	WG1701516



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	Result	Qualifier	MDL	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	ug/l		ug/l	ug/l		date / time	
Boron	69.3	<u>J</u>	20.0	200	1	07/09/2021 19:12	WG1701050
Calcium	35500		70.2	1000	1	07/09/2021 19:12	WC1701050

QUALITY CONTROL SUMMARY

Gravimetric Analysis by Method 2540 C-2011

L1369522-01,02

Method Blank (MB)

(MB) R3672882-1 06/24/21 06:44									
	MB Result	MB Qualifier	MB MDL	MB RDL					
Analyte	ug/l		ug/l	ug/l					
Dissolved Solids	U		10000	10000					



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L1369484-27 Original Sample (OS) • Duplicate (DUP)

(OS) L1369484-27 06/24/21 06:44 • (DUP) R3672882-3 06/24/21 06:44

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Dissolved Solids	374000	369000	1	1.35		5



L1369522-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1369522-01 06/24/21 06:44 • (DUP) R3672882-4 06/24/21 06:44

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Dissolved Solids	825000	1020000	1	20.9	<u>J3</u>	5



Laboratory Control Sample (LCS)

(LCS) R3672882-2 06/24/21 06:44

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	ug/l	ug/l	%	%	
Dissolved Solids	8800000	8790000	99.9	77.4-123	

QUALITY CONTROL SUMMARY

Gravimetric Analysis by Method 2540 C-2011

L1369522-03,04,05,06,07,08,09,10

Method Blank (MB)

(MB) R3672889-1 06/	24/21 08:02			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l
Dissolved Solids	П		10000	10000





L1368707-22 Original Sample (OS) • Duplicate (DUP)

(OS) L1368707-22 06/24/21 08:02 • (DUP) R3672889-3 06/24/21 08:02

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Dissolved Solids	5850000	5920000	1	1.19		5





L1369522-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1369522-06 06/24/21 08:02 • (DUP) R3672889-4 06/24/21 08:02

, ,	Original Resul	It DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Dissolved Solids	1020000	1020000	1	0.686		5





Laboratory Control Sample (LCS)

(LCS) R3672889-2 06/24/21 08:02

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	ug/l	ug/l	%	%	
Dissolved Solids	8800000	8860000	101	77 4-123	

QUALITY CONTROL SUMMARY

Gravimetric Analysis by Method 2540 C-2011

L1369522-11

Method Blank (MB)

(MB) R3673121-1 06/25/21	14:47			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ua/l		ua/l	ua/l



Analyte	ug/i	ug/i	ug/i
Dissolved Solids	U	10000	10000



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L1369293-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1369293-01 06/25/2114:47 • (DUP) R3673121-3 06/25/2114:47

	Original Resu	lt DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Dissolved Solids	624000	625000	1	0.213		5



L1369478-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1369478-01 06/25/2114:47 • (DUP) R3673121-4 06/25/2114:47

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Dissolved Solids	1260000	1270000	1	0.158		5



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Laboratory Control Sample (LCS)

(LCS) R3673121-2 06/25/21 14:47

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	ug/l	ug/l	%	%	
Dissolved Solids	8800000	8710000	99.0	77.4-123	

QUALITY CONTROL SUMMARY

L1369522-01,02,03,04,05,06,07,08,09,10,11

Wet Chemistry by Method 9040C

L1369498-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1369498-01 06/29/21 12:00 • (DUP) R3673433-2 06/29/21 12:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	SU	SU		%		%
рН	7.76	7.79	1	0.386		1



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Sample Narrative:

OS: 7.76 at 21.7C DUP: 7.79 at 22C



L1369522-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1369522-10 06/29/21 12:00 • (DUP) R3673433-3 06/29/21 12:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	SU		%		%
рН	8.27	8.28	1	0.121		1



Sample Narrative:

OS: 8.27 at 23.8C DUP: 8.28 at 23C



Laboratory Control Sample (LCS)

(LCS) R3673433-1 06/29/2112:00

(,	Spike Amount	LCS Result	LCS Rec.	Rec. Limits
Analyte	Su	SU	%	%
На	10.0	10.1	101	99.0-101

Sample Narrative:

LCS: 10.06 at 24.9C

QUALITY CONTROL SUMMARY

L1369522-01,02,03,04,05,06,07,08,09,10,11

Wet Chemistry by Method 9056A Method Blank (MB)

(MB) R3678142-1 07/10/21 21:14

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l
Chloride	U		379	1000
Fluoride	U		64.0	150
Sulfato	H		504	5000

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(OS) L1369510-01 07/10/21 21:48 • (DUP) R3678142-3 07/10/21 22:00

(,	(= 0.7					
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Chloride	15600	15700	1	0.987		15
Fluoride	113	112	1	0.534	<u>J</u>	15
Sulfate	70900	71000	1	0.124		15

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L1369522-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1369522-06 07/11/21 00:29 • (DUP) R3678142-6 07/11/21 00:40

(03) [1303322-00 07/11/21	100.23 (001)	113070172-0	7//11/2100	7.40		
		Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
А	Analyte	ug/l	ug/l		%		%
F	·luoride	199	197	1	0.858		15



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Laboratory Control Sample (LCS)

(LCS) R3678142-2 07/10/21 21:25

(200) 1100701122 077107	2.220				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	ug/l	ug/l	%	%	
Chloride	40000	39000	97.5	80.0-120	
Fluoride	8000	7720	96.5	80.0-120	
Sulfate	40000	41700	104	80.0-120	

L1369510-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1369510-02 07/10/21 22:11 • (MS) R3678142-4 07/10/21 22:23 • (MSD) R3678142-5 07/10/21 22:34

(O3) LI369510-02 07/10/2	21 22.11 • (IVIS) K	30/0142-4 0//	10/21 22.23 • (1VI3D) K307014.	2-3 0//10/212	2.54						
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	50000	7000	55100	55100	96.1	96.3	1	80.0-120			0.136	15
Fluoride	5000	83.7	4900	4890	96.3	96.2	1	80.0-120			0.141	15
Sulfate	50000	50900	98000	97700	94.2	93.5	1	80.0-120			0.312	15

QUALITY CONTROL SUMMARY

Wet Chemistry by Method 9056A

L1369522-01,02,03,04,05,06,07,08,09,10,11

L1369522-07 Original Sample (OS) • Matrix Spike (MS)

100	111111111111111111111111111111111111111	07/11/21 00.52	(NAC) DOCTO140 7	07/11/21 01:02
(U)	5) LI369522-U/	07/11/21 00:52 •	(MS) R3678142-7	07/11/21 01:03

• •	, ,						
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	ug/l	ug/l	ug/l	%		%	
Chloride	50000	50700	101000	99.7	1	80.0-120	<u>E</u>
Fluoride	5000	183	4780	92.0	1	80.0-120	



















QUALITY CONTROL SUMMARY

L1369522-01,02,06,07,08,10

Wet Chemistry by Method 9056A Method Blank (MB)

(MB) R3678627-1 07/12/21 22:46

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l
Chloride	U		379	1000
Sulfate	U		594	5000







L1372166-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1372166-01 07/13/21 00:03 • (DUP) R3678627-3 07/13/21 00:16

'	, ,					
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Chloride	2450	2310	1	5.83		15
Sulfate	92100	86500	1	6.26		15







L1371467-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1371467-01 07/13/21 04:08 • (DUP) R3678627-5 07/13/21 04:47

(,	Original Result			DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Chloride	40500	39000	1	3.64		15
Sulfate	15600	15200	1	2.82		15

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Laboratory Control Sample (LCS)

(I CS) P3678627-2 07/12/21 22:59

(LC3) K3078027-2 07/12/		1000	1 00 D	B 1: "	1.00.0 1:0
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	ug/l	ug/l	%	%	
Chloride	40000	40400	101	80.0-120	
Sulfate	40000	41000	102	80.0-120	

L1372166-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1372166-01_07/13/21_00:03 • (MS) R3678627-4_07/13/21_00:29

(03) [1372100-01 07/13/2	100.05 (1015) 10	.5070027-4 07	/13/21 00.23				
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	ug/l	ug/l	ug/l	%		%	
Chloride	50000	2450	53500	102	1	80.0-120	
Sulfate	50000	92100	135000	85.6	1	80.0-120	<u>E</u>

QUALITY CONTROL SUMMARY

Wet Chemistry by Method 9056A

L1369522-01,02,06,07,08,10

L1371467-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1371467-01 07/13/21 04:08 • (MS) R3678627-6 07/13/21 05:00 • (MSD) R3678627-7 07/13/21 05:13

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	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	50000	40500	90700	87000	100	93.1	1	80.0-120			4.11	15
Sulfate	50000	15600	67900	65000	105	98.8	1	80.0-120			4.36	15



















QUALITY CONTROL SUMMARY

L1369522-01,02,03,04,05,06,07,08,09,10,11

Method Blank (MB)

Metals (ICP) by Method 6010B

(MB) R3677766-1 07/09/2118:02

MB Result MB Qualifier MB MDL MB RDL



Analyte	ug/l	ug/l	ug/l
Boron	U	20.0	200
Calcium	U	79.3	1000



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Laboratory Control Sample (LCS)

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(LCS) R3677766-2 07/09/	′21 18:05				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	ug/l	ug/l	%	%	
Boron	1000	954	95.4	80.0-120	
Calcium	10000	9670	96.7	80.0-120	









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

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

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
T8	Sample(s) received past/too close to holding time expiration.





















ACCREDITATIONS & LOCATIONS

Pace Analy	tical National	12065 Lebanon	Rd Mount 1	uliet TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
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Kentucky ²	16	South Dakota	n/a
Louisiana	Al30792	Tennessee 1 4	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
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Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
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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



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

EPA-Crypto

TN00003



















PAGE:

27 of 29

 $^{^* \, \}text{Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.} \\$

mpany Name/Address:		В	illing Infor	mation:						A	nalvsis / C	ontaine	r / Prese	rvative		Chain of Custody	Page + OI -
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Relinquished by : (Signature)		Pate:	Tim	e:	Recei	ved by: (Sign	ature)				Temp: 1. 24.			s Received:	if preservat	tion required by Log	gin: Date/Time
Relinquished by : (Signature)		Date:	Tim	e:	Recei	ved for lab by	y: (Signa	ture)	1,00		Date:	2/1	Time	0900	Hold:		Condition NCP / O

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formed by call formed by Email formed by Voicemail ne:6/24/21	If no COC: Tracking #:		
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Beasley COC and run Watkins	Received MW-17 not on	2000	
o COC and run ny Watkins	Mark Beasley	24 June 20	21 11:23 AM
ıy Watkins	Add to COC and run		
Done	Jeremy Watkins	24 June 20)21 5:42 PM
	Done		



Pace Analytical® ANALYTICAL REPORT

TRC Solutions - Dallas, TX

Sample Delivery Group: L1372320

Samples Received: 06/29/2021

Project Number: 419735

Description: **Entergy Independence**

Report To: Zak Sabatka

700 Highlander Blvd, Ste 210

Arlington, TX 76015

















Entire Report Reviewed By:

Jason Romer

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 www.pacenational.com

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SAMPLE SUMMARY

Collected by

Collected date/time Received date/time

MW-11 L1372320-01 GW			Z. Sabatka	06/23/21 11:02	06/29/21 14:	00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Gravimetric Analysis by Method 2540 C-2011	WG1697728	1	06/30/21 14:49	06/30/21 15:32	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG1700129	1	07/04/21 15:00	07/04/21 15:00	BMD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1704443	1	07/14/21 14:44	07/14/21 14:44	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1704443	1	07/14/21 21:19	07/14/21 21:19	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1705205	1	07/15/21 17:15	07/16/21 01:16	CCE	Mt. Juliet, TN



















CASE NARRATIVE

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

¹Cp

















Jason Romer Project Manager

L1372320

Collected date/time: 06/23/21 11:02

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Dissolved Solids	372000		10000	1	06/30/2021 15:32	WG1697728



Wet Chemistry by Method 9040C

	Result	Qualifier	Dilution	Analysis	<u>Batch</u>
Analyte	Su			date / time	
рН	7.28	<u>T8</u>	1	07/04/2021 15:00	WG1700129



Sample Narrative:

L1372320-01 WG1700129: 7.28 at 19.5C



Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	48500		379	1000	1	07/14/2021 14:44	WG1704443
Fluoride	179		64.0	150	1	07/14/2021 21:19	WG1704443
Sulfate	35200		594	5000	1	07/14/2021 14:44	WG1704443



Gl

Metals (ICP) by Method 6010B

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Boron	48.6	<u>J</u>	20.0	200	1	07/16/2021 01:16	WG1705205
Calcium	66800		79.3	1000	1	07/16/2021 01:16	WG1705205



Sc

QUALITY CONTROL SUMMARY

Gravimetric Analysis by Method 2540 C-2011

L1372320-01

Method Blank (MB)

(MB) R3677720-1 06/30/21 15:32

,	MB Result	MB Qualifier	MB MDL	MB RDL	
Analyte	ug/l		ug/l	ug/l	
Dissolved Solids	П		10000	10000	



L1369926-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1369926-04 06/30/2115:32 • (DUP) R3677720-3 06/30/2115:32

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Dissolved Solids	1870000	1850000	1	1.48		5



Ss

L1370209-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1370209-03 06/30/21 15:32 • (DUP) R3677720-4 06/30/21 15:32

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Dissolved Solids	830000	830000	1	0.000		5



Sc

Laboratory Control Sample (LCS)

(LCS) R3677720-2 06/30/2115:32

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	ug/l	ug/l	%	%	
Dissolved Solids	8800000	8770000	99 7	77 4-123	

QUALITY CONTROL SUMMARY

Wet Chemistry by Method 9040C

L1372320-01

L1372881-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1372881-01 07/04/21 15:00 • (DUP) R3675459-3 07/04/21 15:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	SU	SU		%		%
рН	8.48	8.47	1	0.118		1



Sample Narrative:

OS: 8.48 at 21.3C DUP: 8.47 at 21.9C



Ss

Laboratory Control Sample (LCS)

(LCS) R3675459-1 07/04/2115:00

(LCS) K3073439-1 077047	Spike Amount	LCS Result	LCS Rec.	Rec. Limits
Analyte	Su	Su	%	%
рН	10.0	10.1	101	99 0-101



Sample Narrative:

LCS: 10.08 at 21.5C



⁹Sc

QUALITY CONTROL SUMMARY

L1372320-01

Wet Chemistry by Method 9056A

Method Blank (MB)

(MB) R3679465-1 0	07/14/21 10:38			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l
Chloride	U		379	1000
Fluoride	U		64.0	150
Sulfate	U		594	5000







L1372318-01 Original Sample (OS) • Duplicate (DUP)

(OS) | 1372318-01 | 07/14/21 12:35 | (DI IP) | D3679465-3 | 07/14/21 12:48

(O3) £1372316-01 07/14/21 12.33 • (DOF) R3073403-3 07/14/21 12.46						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Chloride	10100	9320	1	7.51		15
Fluoride	156	144	1	8.08	<u>J</u>	15







L1372318-01 Original Sample (OS) • Duplicate (DUP)

(OS) | 1372318-01 | 07/14/21 22:11 • (DLIP) P3679465-8 | 07/14/21 22:24

(US) LIS/2316-UT U//14	+/21 22.11 • (DUP) R	30/9403-0	1//14/21/22	.24		
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Sulfate	104000	107000	5	2.38		15



L1372363-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1372363-05 07/14/21 23:16 • (DUP) R3679465-9 07/14/21 23:29

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l		%		%
Chloride	8710	9110	1	4.49		15
Fluoride	119	92.1	1	25.3	<u>J P1</u>	15
Sulfate	63600	66400	1	4.20		15

Laboratory Control Sample (LCS)

(LCS) R3679465-2 07/14/21 12:15

(200) 11007 3 100 2 07/1	1/21 12.10				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	ug/l	ug/l	%	%	
Chloride	40000	44800	112	80.0-120	
Fluoride	8000	9190	115	80.0-120	
Sulfate	40000	45900	115	80.0-120	

QUALITY CONTROL SUMMARY

Wet Chemistry by Method 9056A

L1372318-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1372318-02 07/14/21 13:01 • (MS) R3679465-4 07/14/21 13:14 • (MSD) R3679465-5 07/14/21 13:27

(/				,								
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	50000	2660	58500	58800	112	112	1	80.0-120			0.483	15
Fluoride	5000	243	5950	5970	114	114	1	80.0-120			0.342	15
Sulfate	50000	51600	106000	106000	109	109	1	80.0-120	<u>E</u>	<u>E</u>	0.0880	15









(OS) L1372363-06_07/14/21 18:06 • (MS) R3679465-7_07/14/21 18:19

(OS) E1372303-00 07/1 4 /2	(03) £1372303-00 07/14/21 10:00 4 (113) 1(3073403-7 07/14/21 10:13								
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier		
Analyte	ug/l	ug/l	ug/l	%		%			
Chloride	50000	9850	64600	109	1	80.0-120			
Fluoride	5000	83.8	5530	109	1	80.0-120			
Sulfate	50000	63000	114000	103	1	80.0-120	Е		













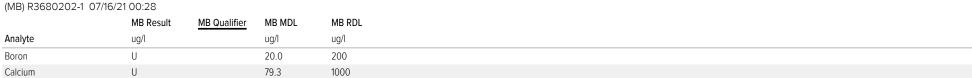
QUALITY CONTROL SUMMARY

L1372320-01

Method Blank (MR)

Metals (ICP) by Method 6010B

IVIC	tillou	Diani	n ((טוייו
(MB)) R3680	0202-1	07	7/16/21







Laboratory Control Sample (LCS)

Laboratory Control Sample (LCS)
(LCS) R3680202-2 07/16/21 00:30

(LC3) K3000202-2 07/10/	/2100.30				(LC3) R3080202-2 07/10/21 00:30						
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier						
Analyte	ug/l	ug/l	%	%							
Boron	1000	976	97.6	80.0-120							
Calcium	10000	9920	99.2	80 0-120							



[†]Cn



L1370026-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1370026-01	07/16/21 00:33	· (MS) R3680202-4	07/16/21 00:38 •	(MSD) R3680202-5	07/16/21 00:41

(O3) L	(03) £1370020-01 07/10/21 00:33 - (1113) 1/3000202-4 07/10/21 00:30 - (1113) 1/3000202-3 07/10/21 00:41												
		Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	9	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Boron		1000	36.8	1010	1000	97.7	96.5	1	75.0-125			1.21	20
Calcium	1	10000	45600	54900	54700	93.7	91.4	1	75 0-125			0 412	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.



















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
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Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
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Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky 16	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	Al30792	Tennessee 1 4	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234



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

TN00003

EPA-Crypto



















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 $^{^* \, \}text{Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.} \\$

			Billing Infor	rmation:						A	nalvsis /	Contain	er / Prese	rvative			Ch	nain of Custody	Page oi
TRC Solutions - Dallas, TX		Accounts Payable 21 Griffin Rd. N.				Pres Chk		N	77								Pac	e Analytical	
700 Highlander Blvd, Ste 210 Arlington, TX 76015			Windsor	, CT 06095		2 2							-			16	1:	2065 Lebanon Rd M	ount Juliet, TN 37122
Report to: Zak Sabatka / Jason Hous	26		Email To: 2	Sabatka@tr	ccompa	nies.com . co	· ·										p.	onstitutes acknowled	ia this chain of custody Igment and acceptance of t Itions found at: com/hubfs/pas-standard-
Project Description: Entergy Independence	3.	City/State Collected:	Neward	c, DR		PT MT	ET ET	Pres											
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WATER SAMPLE LOG

PROJECT NAME: 155		PREP	ARED		CHEC	KED	
PROJECT NUMBER: 419735	BY:	·	DATE:	BY:		DATE:	
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VELL MATERIAL: PVC SS IRON		NIZED STE	Control to the factor of the second control	U OTH	THE THE PERSON NAMED OF THE PERSON NAMED IN		
AMPLE TYPE: GW WW SW	☐ DI	LE/	ACHATE	ОТН	HER		
PURGING TIME: 103 \ DATE:	18/21	SAN	IPLE T	IME: O	5 \ DA	TE:6/18/21	
PURGE		PH: ORP:	SU mV	***************************************	CTIVITY: mg/		
DEPTH TO WATER: <u>でん</u> す/ PVC FLOW-T	THRU CELL	TURBIDIT	AND THE RESIDENCE OF THE PROPERTY OF THE PROPE	NTU	THE MATERIAL PROPERTY OF THE P	un territoria de estados estad em locare versidos exemisios em proprior para en exemplar.	
DEPTH TO BOTTOM: T/ PVC VO	LUME	NONE	SLIGH	т 🗌	MODERATE	☐ VERY	
PUMP INTAKE DEPTH: T/ PVC	LITERS	TEMPERA	TURE:	°C	OTHER:	ANCH MIZET BED I SEPERIEM WOM Anch BENERAL AUGUSTUS. MODIEN STEED AUGUSTUS AUGUS AUGUSTUS AUGUSTUS AUG	
WELL VOLUME: LITERS G	ALLONS	COLOR:			ODOR:		
/OLUME REMOVED: LITERS G	ALLONS	FILTRATE	(0.45 um)	YES	□ NO		
COLOR: ODOR:		FILTRATE (THE STATE OF THE S	FILTRATE ODO	R:	
TURBIDITY			LE: MS/MS	SD	DUP-	· · · · · · · · · · · · · · · · · · ·	
NONE SLIGHT MODERATE	VERY		TS: FO-				
DISPOSAL METHOD GROUND DRUM O	THER				(0,0)		
RAIE MS		D.O. TI mg/L)	URBIDITY T (NTU)	EMPERATU	RE WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)	
1031 Dert purp	and veneral real					INITIAL	
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BOTTLES FILLED PRESERVATIVE CODES A - NO	ONE B-	HNO3	C - H2SO4	D - NaOH	E - HCL	. F	
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HIPPING METHOD: DATE SH	IPPED:						
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WATER SAMPLE LOG

PROJECT NAME:		PREPARED		CHECKED
PROJECT NUMBER:	BY:	DATE:	BY:	DATE:
SAMPLE ID: 702 S WELL MATERIAL: PVC SS SAMPLE TYPE: GW WW PURGING TIME: 1450 D PURGE PUMP METHOD: BAILER		NIZED STEEL LEACHATE	THE STATE OF THE S	ER
DEPTH TO WATER: 23. ST/ PVC DEPTH TO BOTTOM: T/ PVC PUMP INTAKE DEPTH: T/ PVC WELL VOLUME: LITERS VOLUME REMOVED: LITERS	GALLONS GALLONS DOR:	TURBIDITY: NONE SLIGHTEMPERATURE: COLOR: FILTRATE (0.45 um) FILTRATE COLOR: QC SAMPLE: MS/M COMMENTS:	NTU HT	mg/L MODERATE VERY DTHER: DDOR: NO FILTRATE ODOR: DUP-
TIME PURGE PH CONDUCTIVITY (ML/MIN) (SU) (umhos/cm) 450 Start Sam 453 6.75 1.12 1489 6.55 1.13 1502 6.55 1.13	(mv) (1 pering 130 0 137 0	D.O. TURBIDITY (NTU)	TEMPERATUR (°C) 19143 18.81 16.61	E WATER LEVEL PURGE VOLUME (GAL OR L) INITIAL 23.53 23.54 23.54
NOTE: STABILIZATION TEST IS COMPLETE WATER PH: +/- 10 % COND.: +/- 10 % ORP BOTTLES FILLED PRESERVATIVE CODES NUMBER SIZE TYPE PRESERVAT	: +/- 10 % D.O.:	+/- 10 % TURB: +/- 10	0% or <	
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PROJECT NAME: \SES		PR	EPARED		CHEC	CKED
PROJECT NUMBER: 4(9735	BY:		DATE:	BY:		DATE:
SAMPLE ID: 7035	ELL DIAMET	ER:	2"	6" OT	HER	
WELL MATERIAL: PVC SS IRON	GALVA	NIZED S	STEEL	□ от	HER	AND IN MALE ALLEGAR SHEEM OF CONTRIBUTION OF THE PROPERTY OF CONTRIBUTION ASSESSMENT OF THE PROPERTY OF THE PR
SAMPLE TYPE:	□DI		LEACHATE	по [HER	
PURGING TIME: U(16 DATE:	18/21	S	AMPLE	TIME: 14	136 0	ATE: 6 (8) 21
PURGE PUMP METHOD: BAILER		1	SI		JCTIVITY: mg	umhos/cm
DEPTH TO WATER: 25.63 T/ PVC FLOW-1	THRU CELL	TURBI	DITY:	NTU	ora nera Arabanin menuari pramujum Ancio propanjanjanjang sobre sobrozova	
DEPTH TO BOTTOM: T/ PVC VC	LUME	☐ NOI	NE SLIC	GHT	MODERATE	☐ VERY
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	ALLONS	COLOF			ODOR:	
VOLUME REMOVED: LITERS G	ALLONS	FILTRA	TE (0.45 um)	YES	□ NO	
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TURBIDITY		 	MPLE: MS/	MSD	DUP-	
□ NONE □ SLIGHT □ MODERATE □ VERY COMMENTS: DISPOSAL METHOD □ GROUND □ DRUM □ OTHER						
DISPOSAL METHOD: GROUND DRUM CO	THER		1,4	W - 3		
RAIE		D.O. mg/L)	TURBIDITY (NTU)	TEMPERAT	LEVEL	CUMULATIVE PURGE VOLUME
	(IIIV)	mg/L)	(IVIO)	(0)	(FEET)	(GAL OR L)
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NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 pH: +/- 10 % COND.: +/- 10 % ORP: +/- 10			INGS ARE WIT 6 TURB: +/-			TS: TEMP.: +/- 0.5°C
BOTTLES FILLED PRESERVATIVE CODES A - NO	ONE B-	HNO3	C - H2SO4	D - NaO	H E-HC	CL F
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PROJECT NAME: 15ES		PRE	PARED		CHEC	KED
PROJECT NUMBER: 419735	BY:	· · · · · · · · · · · · · · · · · · ·	DATE:	BY:	6	DATE:
SAMPLE ID: 7065 W	ELL DIAMET	ER: 2'	'	OTHE	:R	
WELL MATERIAL: PVC SS IRON	GALVA	NIZED STI	EEL	OTHE	R	and the second s
SAMPLE TYPE:	☐ DI		ACHATE	OTHE	:R	
PURGING TIME: 13/2 DATE:	letel	SAI	MPLE TI	IME: 135	7 DA	ATE: 6 18 21
PURGE PUMP METHOD: BAILER	<u>v</u> '		SU mV	-	ΓΙVITY:mg	umhos/cm
DEPTH TO WATER: 23-の T/ PVC FLOW-T	HRU CELL	TURBIDI	CONTRACTOR OF THE PARTY OF THE	NTU		A THE RESERVE OF THE PARTY OF T
	LUME				MODERATE	☐ VERY
PUMP INTAKE DEPTH: T/ PVC	LITERS	TEMPER/	ATURE:	°c	OTHER:	and the state of the second control of the second of the s
WELL VOLUME: LITERS GA	ALLONS	COLOR:			DDOR:	
VOLUME REMOVED: LITERS GA	ALLONS	FILTRATE	(0.45 um)	YES [] NO	
COLOR: ODOR:		FILTRATE	COLOR:		FILTRATE ODO	R:
TURBIDITY		QC SAME	PLE: MS/MS	SD [DUP-	
	VERY THER	COMMEN	ITS: MW	-6		
		D.O. T	TURBIDITY T	EMPERATUR (°C)	E WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
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NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 9 pH: +/- 10 % COND.: +/- 10 % ORP: +/- 10			GS ARE WITHII TURB: +/- 10			'S: TEMP.: +/- 0.5°C
BOTTLES FILLED PRESERVATIVE CODES A - NO	NE B-	HNO3	C - H2SO4	D - NaOH	E - HCL	F
NUMBER SIZE TYPE PRESERVATIVE F	FILTERED	NUMBER	SIZE	TYPE I	PRESERVATIV	/E FILTERED
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PROJECT NAME: \SES		PREPARED		CHECKED
PROJECT NUMBER: 419735	BY:	DATE:	BY:	DATE:
SAMPLE ID: 307	S WELL DIAMET	ΓER:	6" \ OTHER	
WELL MATERIAL: PVC SS [IRON GALVA	NIZED STEEL	OTHER	
SAMPLE TYPE:	□ sw □ di	LEACHATE	OTHER	
PURGING TIME: 1641	DATE: 6/18/21	SAMPLE	TIME: 1654	DATE: 6 (8/2)
PURGE PUMP		PH:SU		
METHOD: BAILER		ORP:mV	~~	mg/L
DEPTH TO WATER: 22.79 T/ PVC	FLOW-THRU CELL	TURBIDITY:	NTU	AND THE RESERVE OF THE PROPERTY OF THE PROPERT
DEPTH TO BOTTOM: T/ PVC	VOLUME	NONE SLIG	- НТ 🗌 МОІ	DERATE VERY
PUMP INTAKE DEPTH: T/ PVC _	LITERS	TEMPERATURE:	°C OTH	TER:
WELL VOLUME: LITERS	GALLONS	COLOR:	ODC	
VOLUME REMOVED: LITERS	GALLONS	FILTRATE (0.45 um)		NO
COLOR: C	DDOR:	FILTRATE COLOR:	FILT	FRATE ODOR:
TURBIDITY		QC SAMPLE: MS/M		DUP-
□ NONE □ SLIGHT □ MODERATE	☐ VERY	COMMENTS:	۸	
DISPOSAL METHOD: GROUND DRUM	M [] OTHER		Mw-7	
TIME PURGE PH CONDUCTIVIT	Y ORP	D.O. TURBIDITY	TEMPERATURE	WATER CUMULATIVE LEVEL PURGE VOLUME
(ML/MIN) (SU) (umhos/cm)	(mV) (mg/L) (NTU)	(°C)	(FEET) (GAL OR L)
leff				INITIAL
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NOTE: STABILIZATION TEST IS COMPLETE W				VING LIMITS:
pH: +/- 10 % COND.: +/- 10 % ORP	: +/- 10 % D.O.:	+/- 10 % TURB: +/- 10	% or = !</td <td>TEMP.: +/- 0.5°C</td>	TEMP.: +/- 0.5°C
BOTTLES FILLED PRESERVATIVE CODES	A - NONE B -	HNO3 C - H2SO4	D - NaOH	E - HCL F
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COC NUMBER: SI	GNATURE:		DATE SIGNED:	

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WELL MATERIAL:	DATE: BY: DATE:
WELL MATERIAL: PVC SS IRON GALVANIZ SAMPLE TYPE: GW WW SW DI PURGING TIME: 1037 DATE: 617 21 PURGE PUMP DIOCUL P METHOD: BAILER 3 CPM DEPTH TO WATER: 77 PVC FLOW-THRU CELL T VOLUME T/ PVC PUMP INTAKE DEPTH: T/ PVC LITERS TE WELL VOLUME: GALLONS CO VOLUME REMOVED: GALLONS FI	ZED STEEL
PURGE PUMP 3 CPM COMMETHOD: BAILER 3 CPM COMMETHOD: BAILER 3 CPM COMMETHOD: BAILER 7 PVC FLOW-THRU CELL TOP COMMET TO BOTTOM: T/ PVC VOLUME COMMETTERS TO COMMETTERS TO COMMETTERS TO COMMETTERS TO COMMETTERS TO COMMETTERS	PH:SU CONDUCTIVITY: umhos/cm DRP:mV DO:mg/L FURBIDITY:NTU NONE
PURGE PUMP 3 CPM 3 CPM CD	PH:SU CONDUCTIVITY: umhos/cm DRP:mV DO:mg/L FURBIDITY:NTU NONE
PUMP INTAKE DEPTH: T/ PVC LITERS TE WELL VOLUME: LITERS GALLONS COLUME REMOVED: LITERS GALLONS FI	EMPERATURE:°C OTHER: COLOR: ODOR: ILTRATE (0.45 um)
VOLUME REMOVED: LITERS GALLONS FI	ILTRATE (0.45 um) YES NO ILTRATE COLOR: FILTRATE ODOR: DUP- COMMENTS:
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097 6.22/.53 223 3.3 092 6.19 1.33 226 3.2 1057 6.20 1.52 226 3.2	g/L) (NTU) (°C) (FEET) (GAL OR L) INITIAL (88 0. 0 21.63 22.98 31 0. 0 18.70 22.99 27 0. 0 18.88 23.00 20 0. 0 18.91 23.00
NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE F pH: +/- 10 % COND.: +/- 10 % ORP: +/- 10 % D.O.: +/-	READINGS ARE WITHIN THE FOLLOWING LIMITS: 1- 10 % TURB: +/- 10 % or = 5 TEMP.: +/- 0.5°C</td
BOTTLES FILLED PRESERVATIVE CODES A - NONE B - HI	NO3 C - H2SO4 D - NaOH E - HCL F
NUMBER SIZE TYPE PRESERVATIVE FILTERED NI Y N Y N Y N Y N Y N Y N DY N DATE SHIPPED:	IUMBER SIZE TYPE PRESERVATIVE FILTERED Y N Y N Y N Y N Y N Y N
COC NUMBER: SIGNATURE:	AIRBILL NUMBER: DATE SIGNED:

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PROJECT NAME: \SE3		PREPARED	CHECKED
PROJECT NUMBER: 4(975)	BY:	DATE 6	DATE:
SAMPLEID: YWW-709 S	WELL DIAMET	ER: 2" 4" 6	S" OTHER
The state of the s	ON GALVAI	NIZED STEEL	OTHER
SAMPLE TYPE:	W DI	LEACHATE	OTHER
	617/21	SAMPLE 1	TIME: 1005 DATE: 6/11/12/
PURGE DEPUMP Bladde METHOD: BAILER 3 CPM)	PH: SU ORP: mV	THE RESIDENCE OF THE PROPERTY
DEPTH TO WATER: 2.25 T/ PVC FLOW DEPTH TO BOTTOM: T/ PVC	W-THRU CELL VOLUME	TURBIDITY:	_ NTU HT MODERATE VERY
PUMP INTAKE DEPTH: T/ PVC	LITERS	TEMPERATURE:	*C OTHER:
WELL VOLUME: LITERS	GALLONS	COLOR:	ODOR:
VOLUME REMOVED: LITERS	GALLONS	FILTRATE (0.45 um)	YES NO
COLOR: ODOR	₹:	FILTRATE COLOR:	FILTRATE ODOR:
TURBIDITY		QC SAMPLE: MS/M	
NONE SLIGHT MODERATE DISPOSAL METHOD: GROUND DRUM □	UERY OTHER	COMMENTS: ALSO	MW-9
1000 600 6,23 1.18 5 1005 6,24 1.19 5	(my) (1) 234 2. 233 (1) 237 1.	mg/L) (NTU) .36 0.0 23 64 0.0 3	TEMPERATURE LEVEL (°C) (FEET) CUMULATIVE PURGE VOLUME (GAL OR L) 22.43 21.85 1NITIAL
NOTE: STABILIZATION TEST IS COMPLETE WHEI ph: +/- 10 % COND.: +/- 10 % ORP: +/-			
BOTTLES FILLED PRESERVATIVE CODES A	NONE B-	HNO3 C - H2SO4	D - NaOH E - HCL F
NUMBER SIZE TYPE PRESERVATIVE	FILTERED Y N Y N Y N N Y N	NUMBER SIZE	TYPE PRESERVATIVE FILTERED Y N Y N Y N Y N
SHIPPING METHOD: DATE	SHIPPED:		AIRBILL NUMBER:
90 (MELD) 2010 99 24 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	ATURE:	Ward favor shows on the transport of the transport of the state of the	DATE SIGNED:

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PROJECT NAME: Litersy hegender	.Q	PRE	PARED		CHEC	KED
PROJECT NUMBER: 419735	BY:		DATE:	BY:		DATE:
SAMPLE ID: MW -(1 W	ELL DIAMET	ER: 2	"	" OTHER		· · · · · · · · · · · · · · · · · · ·
and the second s	GALVA	NIZED ST	EEL	OTHER	en de la company	
SAMPLE TYPE:	□ DI	Пп	EACHATE	OTHER	and the state of t	a ann mhaill she lite mar an t-an t-an t-an an
PURGING TIME: /642 DATE	123/21	SA	MPLE T	IME: 1102	DA	ATE:6/23/21
PURGE PUMP bladden		PH:	SU	CONDUCTI	VITY:	umhos/cm
METHOD: BAILER BAILER		ORP: _	mV	DO:	mg	/L
DEPTH TO WATER: 27.17 T/ PVC FLOW-T	HRU CELL	TURBIDI	CONTRACTOR SERVICE CONTRACTOR CON	NTU	and the first term of the original of the original and the first term of the original of the	NL DYNAMEN PRIMETY OCHROLI BERKOLIBINI (PORINY I VERSIA – A I NAME
DEPTH TO BOTTOM:T/ PVC VOLUME NONE SLIGHT MODERATE VERY					☐ VERY	
PUMP INTAKE DEPTH: T/ PVC	LITERS	TEMPER	ATURE:	°C OT	HER:	BB-TOP ENGAPETHE EPHETET THAT MICHAELS PENAPTHE FRIENDS FALLENGES (AND AND AND AND AND AND AND AND AND AND
WELL VOLUME: LITERS GA	ALLONS	COLOR:		_ OE	OOR:	
VOLUME REMOVED: LITERS GA	ALLONS	FILTRATI	E (0.45 um)	YES [NO	
COLOR: ODOR:		POSSO TO CHESTON AND A COMMENT OF	COLOR:		TRATE ODO)R:
TURBIDITY QC SAMPLE: MS/MSD DUP-						
□ NONE □ SLIGHT □ MODERATE □ VERY COMMENTS:						
DISPOSAL METHOD: GROUND DRUM OTHER						
TIME PURGE DI COMPUSER DE					WATER	CUMULATIVE
[발표] : [18] [18] [14] [5] [2] [4] [4] [4] [4] [4] [4] [4] [4] [4] [4				TEMPERATURE	LEVEL	PURGE VOLUME
	mV) (1	mg/L)	(NTU)	(°C)	(FEET)	(GAL OR L)
1042 start Purp	- Charles and Char				THE RESERVE COLUMN THE REAL PROPERTY OF THE PR	INITIAL
	Amende Transmission of Marie Con-		234	CONTRACTOR OF THE PROPERTY OF	ON THE PROPERTY OF THE PARTY OF	
1050 400 6.51 0-562	and the second second second second second	number under entretecture (1. trescut)	CT PROTECTOR AND AND AND AND ASSESSMENT AND ASSESSMENT	18.27	and and the second	THE EXCENTION WHEN THE PROPERTY OF THE CONTROL OF THE PROPERTY
1053 400 Co.46 0.560 x	58 0	0.28	33.5	18.17	29.41	
1056 400 6.46 0.559	53 0	.28	19.3 1	7.98	29.46	
1059 400 6.47 6.562 4	19 1	.47	19.6			
1102 400 6.470.563	49 1.	NOTORIFED WINDOWS AND THE MANUAL PROPERTY.		17.99	29.59	reteren eta eta esta esta esta esta esta esta e
	and the second s	one of the second	ente entre entre en remembre de la constant de la c	CONTRACTOR IN COLUMN CONTRACTOR AND	on the second contract of the second contract	KOMBANI BERBERANDA BERBERA COM BERBERANDA LANG AN ANG PENDANDAN BERBERANDA AN ANG PENDANDAN
			THE REST OF THE PROPERTY OF TH	l Moure, feriens malerina analisment no account management aggregation	TO THE RESERVE AND ADDRESS OF THE AD	CHARLES, PRELIMINERS (ALLEH HELLER PRIMER PRIMER AND
	Married and a second section of the property of the second section of the section of the second section of the second section of the second section of the section of the second section of the	NAME AND ADDRESS OF THE PARTY O	C (PER DECIPE O MOTOR PARA EX PARA DE	enhante authoristic constitues nonestatus si totalis estatus si sistema.		in the Mills of the color than a state of the street description of th
		and the second			***************************************	
NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 : pH: +/- 10 % COND.: +/- 10 % ORP: +/- 10			IGS ARE WITH TURB: +/- 10			rs: remp.: +/- 0.5°C
BOTTLES FILLED PRESERVATIVE CODES A - NO	ONE B-	HNO3	C - H2SO4	D - NaOH	E - HCI	L F
NUMBER SIZE TYPE PRESERVATIVE F	FILTERED	NUMBER	SIZE	TYPE P	RESERVATIV	/E FILTERED
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	Y 🔲 N			The desired community of the state of the st	indicate de la material de la proposition de la material de la mat	□Y □N
	Y 🔲 N	Balanda Siri Perikla Manuser or Penikanya ego e	THE COMMENT OF THE RESIDENCE OF THE COMMENT OF THE		rgener men ere en en en en en en en elektrock en en en en en	DY DN
	Y N	en en accessor und includence une discussivo competito della sistema della sistema discussiva di constituto di		**************************************	COST-Male PAPE (ACTION AS EXPENSE MARKET MARKET PAPARATE	OY ON
SHIPPING METHOD: DATE SH	IPPED:			AIRBILL NUN	MBER:	
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PROJECT NAME: (SES		PR	EPARED		CHE	CKED
PROJECT NUMBER: 4	(19735	BY:		DATE:	BY:		DATE:
SAMPLE ID: 7(0	S	WELL DIAI	METER:	2"		IER	
WELL MATERIAL: P	vc	☐ IRON ☐ GA	LVANIZED	STEEL	□ отн	IER	TETRICA ROSCHIPPINOCUCINICONA REPUBLICATION DE ROSCHIPPINOCUCINICONAL PROPURSION DE ROSCHIPPINOCUCINICONAL PROPUNSION DE R
SAMPLE TYPE:	w 🗆 ww	SW DI		LEACHATE	□ отн	IER	
PURGING TIME	1505	DATE: 6/16/2	_(AMPLE	TIME: 15	23 1	DATE: 156 181
PURGE PUMF METHOD: BAILE				n	······································	CTIVITY:	umhos/cm
DEPTH TO WATER: 25		FLOW-THRU CE	CONT. Design Production Company	IDITY:	reason was taken to communicate our in consideration of	THE PROPERTY OF THE PROPERTY O	
DEPTH TO BOTTOM:	T/ PVC	VOLUME		NE SL		MODERATE	☐ VERY
PUMP INTAKE DEPTH:	T/ PVC	LITEF	RS TEMPE	RATURE:	°C	OTHER:	PROCESSES SAN AND ELECTRICAL STATE S
WELL VOLUME:	LITERS	GALLONS	COLO			ODOR:	
VOLUME REMOVED:	LITERS	GALLONS	FILTRA	TE (0.45 um)	YES	NO	
COLOR:		ODOR:	-/NORTH-NORTH ENGA-	TE COLOR:	TO THE PROPERTY OF THE PROPERT	FILTRATE OF	OOR:
	TURBIDITY			MPLE: MS	S/MSD	DUP-	
	MODERATI	E UERY	COMM	IENTS:			
DISPOSAL METHOD: G	ROUND DR	UM OTHER		M	w - (C)	
TIME PURGE PH			D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATU	RE WATER LEVEL (FEET)	PURGE VOLUME
1505							INITIAL
1508 7	19 1.48	7 _	S 11	3.80	1940	752	
×11 7-	Company of the contract of the			2.22	CONTRACTOR	managara Canananan	The second secon
Annual control control and the forest control	CONTRACTOR OF THE PROPERTY OF	TO THE RESIDENCE OF THE		1-46		THE PERSON SECTION ASSESSMENT ASSESSMENT	
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(820) 7	10 1.47		6-19		19.13	10370	
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IOTE: STABILIZATION TES pH: +/- 10 % COND.		WHEN 3 SUCCES					
BOTTLES FILLED PRES	ERVATIVE COD	ES A - NONE	B - HNO3	C - H2SO4	D - NaOH	E-H	CL F
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HIPPING METHOD:		DATE SHIPPED:	\$		AIRBILL N	NUMBER:	
COC NUMBER:	SO PRESIDENTE CONTROL CONTROL PROCESSOR SAMPLES CONTROL AND	SIGNATURE:	ACCOMMENSATION OF A COMMENSATION OF THE PROPERTY OF THE PROPER	CAMPINED AND PRODUCTION OF THE PARTY OF THE PARTY AND	DATE SIG	SNED:	
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SHIPPING METHOD: DATE SHIP	PEU:	AIRBILL NUMBER:	

	THE THE PROPERTY OF THE PROPER		
NOMBER SIZE TIPE PRESERVATIVE FILE		TYPE PRESERVATIVE FILTERED	
	E B - HNO3 C - H2SO4 TERED NUMBER SIZE	D - NaOH E - HCL F	
BOTTLES FILLED PRESERVATIVE CODES A - NON			
NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SU pH: +/- 10 % COND.: +/- 10 % ORP: +/- 10 %			
	CONTRACTOR AND		
	THACH SOME THE STATE OF THE STA	,	
1612 6.940.581 -	- 14.22 19.3	17.86 75.50	
1609 6.940,581 -	- 14.17 17.9	17.87 25.48	
(60b 694 0.578 ·	- 14.41 16.6	17.89 75.47	
1603 6.97 0.576 .	- 15.00 75.8	17.96 85.47	
1600 6.98 0.582	- ITOS 58.9	18.09 25.47	
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1554		INITIAL	
(ML/MIN) (SU) (umhos/cm) (m\) (mg/L) (NTU)	(°C) (FEET) (GAL OR L)	
TIME PURGE PH CONDUCTIVITY OR	P D.O. TURBIDITY	TEMPERATURE WATER CUMULATIVE	
DISPOSAL METHOD: GROUND DRUM OTH	ER COMMENTS:	asur wa	01
□ NONE □ SLIGHT □ MODERATE □ V	ERY COMMENTS:	uty spilced and ma	w-(1
TURBIDITY	QC SAMPLE: MS/N		
COLOR: ODOR:	FILTRATE COLOR:	FILTRATE ODOR:	
	LONS FILTRATE (0.45 um)	YES NO	
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PUMP INTAKE DEPTH: T/ PVC	LITERS TEMPERATURE:	°C OTHER:	
DEPTH TO WATER T/ PVC FLOW-THE VOLUME		_ NTU SHT	
BAILER	ORP:m\	THE RESIDENCE OF THE PROPERTY	
PURGE PUMP	PH: SU	J CONDUCTIVITY: umhos/cm	
PURGING TIME: 155 DATE:	16/21 SAMPLE	TIME: 1612 DATE:6/18/21	
SAMPLE TYPE:	DI LEACHATE	OTHER	
WELL MATERIAL: PVC SS IRON [GALVANIZED STEEL	OTHER	
SAMPLE ID: 71/5 WEL	L DIAMETER: 2" 4" 0	6" OTHER	
PROJECT NUMBER:49735	BY: DATE:	BY: DATE:	
PROJECT NAME: \SES	PREPARED	CHECKED	
l		가장 가장 보면 하다 하는데, 나는 이 사람들이 가장 하다면 하는데 되었다. 그리고 하는데 하다 하다 하다 보다.	

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PROJECT NAME: (SES		PREPARED		CHECKED
PROJECT NUMBER: \$ (973)	BY:	DATE:	BY:	DATE:
SAMPLE ID: 7135	WELL DIAMET	ΓER:	6" OTHE	R
WELL MATERIAL: PVC SS	☐ IRON ☐ GALVA	NIZED STEEL	OTHE	R
SAMPLE TYPE:	SW DI	LEACHATE	□ office	R
PURGING TIME: 1543	DATE: 6 1821	SAMPLE	TIME:	HOTZ DATE: GHEYZT
PURGE PUMP METHOD: BAILER		PH: St		IVITY: umhos/cm
DEPTH TO WATER: 21.60 T/ PVC	FLOW-THRU CELL	TURBIDITY:	NTU	international and artifaction of the Control of Control
DEPTH TO BOTTOM: T/ PVC	VOLUME	NONE SLIC	SHT M	ODERATE VERY
PUMP INTAKE DEPTH: T/ PVC	LITERS	TEMPERATURE:	°C O	THER:
WELL VOLUME: LITERS	GALLONS	COLOR:	o	DOR:
VOLUME REMOVED:		FILTRATE (0.45 um)	YES [NO :
COLOR: <u>VECLOWISM</u> FUN	ODOR:	FILTRATE COLOR:	F	ILTRATE ODOR:
TURBIDITY	14.	QC SAMPLE: MS/	MSD [DUP-
☐ NONE ☐ SLIGHT ☐ MODERAT	E VERY	COMMENTS:	. 1	
DISPOSAL METHOD: GROUND DR	UM 🗌 OTHER	MW	-11	
TIME PURGE PH CONDUCTIVE (ML/MIN) (SU) (umhos/ci		D.O. TURBIDITY mg/L) (NTU)	TEMPERATURE	WATER CUMULATIVE LEVEL PURGE VOLUME (FEET) (GAL OR L)
1542 Stars pur	ying.		\\	INITIAL
1546 642 15	N 245 0	.00 416	19 20	2460
15/10 6 27 0 53	Q OI E	0 912	18.72	
1552 (2005)	00 -10	200 40.8	10,1	700
1502 (800.50	1 - 9 6	7 700	20.90	124.61
1558 6.8 0.52		10.2	21.97	24.9
1558 6.340.53	1 10 0	·00 25.3	18-63	24.61
The second secon	8 17 0	00 39.	18.33	24.62
1604 6.320,60	2 23 0	00 45.9	18:17	2462
1607 6.350.62	5 26 8	0.00 461	18:35	24.62
1610 6.38 0.63	4 36 0	0.00	18,33	24.63
NOTE: STABILIZATION TEST IS COMPLETI pH: +/- 10 % COND.: +/- 10 % O		'E READINGS ARE WITH +/- 10 % TURB: +/- 1		
BOTTLES FILLED PRESERVATIVE COD	ES A - NONE B -	HNO3 C - H2SO4	D - NaOH	E- HCL F
NUMBER SIZE TYPE PRESERV		NUMBER SIZE		RESERVATIVE FILTERED
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AND THE OWNER AND ADDRESS OF THE OWNER AND ADD			THE RESIDENCE OF THE PARTY OF T	
			WOODS A CHEST CHARLES THE SENSE THE SENSE SENSE FOR THE SENSE SENS	
			20 M 1977 1000 19 1000 1000 1000 1000 1000 1	
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COC NUMBER:	PROPERTY OF THE PERTY OF THE PE	TO THE STREET STREET STREET AND A SECURITION OF STREET STREET STREET, STREET STREET STREET STREET STREET STREET	**************************************	MARKET MARKET STORE OF COLUMN TO THE SECTION OF THE
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WATER SAMPLE LOG

PROJEC	T NAME:	(SES	Ś			PR	EPARED			CHEC	KED
PROJEC	T NUMBER	7: 419	135		BY:		DATE:	BY:			DATE:
SAMPLE	ID: M	12-18	>	WELL I	DIAMET	ΓER:	2"] 6"	HER		
WELL MA	entidente	PVC	ss	☐ IRON ☐	GALVA	NIZED S	STEEL	ОТ	HER	PRINTER TO THE PRINTER OF THE PRINTE	elmanada madelem kein av ALD ell traken av ATD ellem av ATD
SAMPLE T	TYPE:	☑ GW	□ww	□ sw □	DI		LEACHATE	П от	HER	THE CONTRACT	
PUR	GING	TIME: 6	140	DATE: 6 (8	121	s	SAMPLE	TIME: 0	155	5 04	ATE: 6/18/21
PURGE METHOI		PUMP BAILER				PH: ORP:	PRODUCE OF THE PRODUC	SU CONDU	JCTI\	/ITY:mg	umhos/cm
DEPTH TO	O WATER:	20.IA	T/ PVC	FLOW-THRU	CELL	TURBI		NTU		PO PRINCIPO DE PORTO POR PORTO DE PORTO	
DEPTH TO	о воттом	:	T/ PVC	VOLUME		□ №		IGHT	MO	DERATE	□ VERY
PUMP INT	TAKE DEPT	H:	T/ PVC	Li	TERS	TEMPE	RATURE:	°C	ОТ	HER:	COLUMNIA DE VECUME ENCLIPION AUTH GENERAL MUTTET MET STERNOOL MONTH
WELL VO	LUME:		LITERS	GALLO	NS	COLO	R:		OD	OR:	
VOLUME	REMOVED:		LITERS	GALLO	NS	FILTRA	TE (0.45 um)	YES		NO	
COLOR:				ODOR:		***************************************	TE COLOR:	S-AZ-LLAN HICKORY SHEEK SA-SHEEK SA-SHEEK	FIL	TRATE ODC)R:
	-	TUR	BIDITY					MSD		DUP-	
NONE	SLI	GHT [MODERATE	E UEF	RY	COMM	IENTS:				
DISPOSA	L METHOD	GROU	ND DRI	JM 🗌 OTHER	2	1					
TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIV			D.O.	TURBIDITY	TEMPERAT	URE	WATER LEVEL	CUMULATIVE PURGE VOLUME
0 940	(IVILDIVINY)	(30)	(uninos/Gii	1) (mV)		mg/L)	(NTU)	(°C)	•	(FEET)	(GAL OR L) INITIAL
0943	500	7.01	0-74	9 745	- 11/	0.52	9-51	18 04	valleridensk dreme	20.74	1.FL
OCH6	5200	7.06	0-77	17 —		047	8.99	17.20		20.74	
0949	500	7.14	0.79	4 -	nemerous veromen	0.42	9.17	17.13	- Commence of the Party of the	20,76	4.56
0952	500	714	0.78	DE TENEDO DE CONTROL D	encontrol control control	6.15	9.53	17.10		20.75	6.0L
0855	500	7.4	0.70	- marine for an annual marine marine morner	and the same of th	6.10		17.0		20.74	7.5L
INTERNOCATION Edition Francescond	CARRIED AND PARTY AND COLUMN ASSESSMENT OF THE	STATISTER PROFESSIONAL SOCIETA GRADULOS AND	CEA COMO PERONA PARA PARA PARA PARA PARA PARA PARA PA		***************************************		PCNOCCHTAIP BANKAYT GALL GOAD LARE LA CHANNAG AND CHAN		NACO NACO NACO NACO NACO NACO NACO NACO		na Saliku, kep sasaran kilabakan makan ki kuminyi 31 (dinensi arang makan ara
Manual and substant one or and a tree-thinky in the circles of the	ns. (ii), the manufaction for the land of	ericka Militari eta araba a	Wernershild & Klain-Lewischildscoon his water List	The hand of the second	CETA FOR CLAM SAME SHALL SECTION			TO PROPERTY OF THE PROPERTY OF			in de la grande de l La grande de la grande
NOTE: ST/ pH: +/-				WHEN 3 SUCC							TS: TEMP.: +/- 0.5°C
BOTTLES	SFILLED	PRESERV	ATIVE CODE	S A - NONE	В-	HNO3	C - H2SO4	D - NaO	Н	E - HC	L F
NUMBER	SIZE	TYPE	PRESERV	ATIVE FILTE	RED	NUMBE	ER SIZE	TYPE	PR	RESERVATIV	VE FILTERED
The state of the s	ALPA I LUT A LUT			□ Y [N	No. of Control					□ Y □ N
ACTION OF PROPERTY AND ADDRESS OF THE PERSON		* HERE TROOMS I CAMERINO CONSUMATIVA CANADOMS	SLANDELINENCEACHAGASE PRO-ESSANIZACION-PROPRINC	□ Y [N		AND AND THE PROPERTY OF THE PR	and the state of t	1	AND THE RESERVE AND THE PROPERTY OF THE PROPER	
1.542/of #1.0377 .000 (1000-1000 1000 1000 1000 1000 1000	CHARLES COMPANY OF THE STREET, NAME OF THE STREET, NAME OF THE STREET, NAME OF THE STREET, NAME OF THE STREET,	ANESPALONOMAADAL SPINSSAAAA					MII (TVI) isaa saara jaga ji maanga gaga ahaa ki isah isah ahaabaya.	Salto manghangganantanintanintahin terdangga	· emanurers a	BAL BB BB BB ANN A LANGE AND THE THE THE STREET OF THE STR	
# EESTAND FORMACT AND AN ARMADO STOCKED AND ARMADO STOCKED AND ARMADO STOCKED AND ARMADO STOCKED AND ARMADO ST	**************************************	THE ANGEL STREET SECTION OF THE WITH TREASURE SECTION.	T THE ROY SOMES WAS ALCOHOLOGIC HEAD THE PROPERTY OF A	□ Y [-		PRIES NOTICE DE LIBERTO COPPOR ESCHIOLÒSICO SUSSIANI ANNA	-	AND THE PROPERTY OF THE PROPER	
SHIPPING	METHOD:		· · · · · · · · · · · · · · · · · · ·	DATE SHIPPE	D:	§		AIRBILL	NUM	BER:	
COC NUME	*OMESS CHISCOS COLL SERVING COLUMN		OF THE PARTY OF TH	SIGNATURE:	NAMES AND ASSOCIATION OF THE PARTY OF THE PA	TOTAL PARTICIPATION AND ADDRESS OF THE PARTICIPATION AND ADDRESS O	TO COMPANY OF THE PARTY OF THE	DATE SI			AND CONTRACTOR LINE AND CONTRACTOR WHEN PROPERTY AND CONTRACTOR CO

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Pace Analytical® ANALYTICAL REPORT

December 24, 2021

GBMc & Associates - Bryant, AR

Sample Delivery Group: L1433506 Samples Received: 11/19/2021 Project Number: 1145-21-081

Description: Entergy - Independence

Site: LANDFILL - CCR

Report To: Jonathan Brown

219 Brown Lane

Bryant, AR 72022



















Entire Report Reviewed By:

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SAMPLE SUMMARY

MW-1 (701S-R) L1433506-01 GW			Collected by Danielle Braund	Collected date/time 11/16/21 13:15	Received data	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1779132	1	11/23/21 12:58	11/23/21 17:00	VRP	Mt. Juliet, Ti
Wet Chemistry by Method 9056A	WG1786886	1	12/12/21 04:01	12/12/21 04:01	ELN	Mt. Juliet, Th
Wet Chemistry by Method 9056A	WG1786886	5	12/12/21 05:00	12/12/21 05:00	ELN	Mt. Juliet, Ti
Metals (ICP) by Method 6010B	WG1792036	1	12/21/21 07:16	12/23/21 04:37	CCE	Mt. Juliet, T
Metals (ICPMS) by Method 6020	WG1790950	1	12/20/21 04:29	12/20/21 11:45	LAT	Mt. Juliet, Ti
MIN 2 (702C) 1422E06 02 CIN			Collected by Danielle Braund	Collected date/time 11/16/21 10:45	Received data	
MW-2 (702S) L1433506-02 GW	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Gravimetric Analysis by Method 2540 C-2011	WG1779132	1	11/23/21 12:58	11/23/21 17:00	VRP	Mt. Juliet, T
Vet Chemistry by Method 9056A	WG1786886	1	12/12/21 05:19	12/12/21 05:19	ELN	Mt. Juliet, T
Vet Chemistry by Method 9056A	WG1786886	5	12/13/21 16:27	12/13/21 16:27	ELN	Mt. Juliet, T
Metals (ICP) by Method 6010B	WG1792036	1	12/21/21 07:16	12/23/21 04:04	CCE	Mt. Juliet, T
Metals (ICPMS) by Method 6020	WG1790950	1	12/20/21 04:29	12/20/21 11:48	LAT	Mt. Juliet, T
			Collected by	Collected date/time	Received da	te/time
MW-3 (703S) L1433506-03 GW			Danielle Braund	11/15/21 16:45	11/19/21 09:0	0
lethod	Batch	Dilution	Preparation	Analysis	Analyst	Location
A M . II . 12540 C 2044	W04770700		date/time	date/time	VDD	NA: 1 1: 1 T
ravimetric Analysis by Method 2540 C-2011	WG1778738	1	11/22/21 17:16	11/22/21 18:06	VRP	Mt. Juliet, T
/et Chemistry by Method 9056A	WG1786873	1	12/10/21 03:10	12/10/21 03:10	ELN	Mt. Juliet, T
Metals (ICP) by Method 6010B	WG1792036	1	12/21/21 07:16	12/23/21 04:39	CCE	Mt. Juliet, T
Metals (ICPMS) by Method 6020	WG1790950	1	12/20/21 04:29	12/20/21 11:52	LAT	Mt. Juliet, T
			Collected by	Collected date/time		
MW-6 (706S) L1433506-04 GW			Danielle Braund	11/16/21 08:23	11/19/21 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1779132	1	11/23/21 12:58	11/23/21 17:00	VRP	Mt. Juliet, T
Vet Chemistry by Method 9056A	WG1786886	1	12/12/21 05:39	12/12/21 05:39	ELN	Mt. Juliet, T
/et Chemistry by Method 9056A	WG1786886	5	12/13/21 16:38	12/13/21 16:38	ELN	Mt. Juliet, T
letals (ICP) by Method 6010B	WG1792036	1	12/21/21 07:16	12/23/21 04:42	CCE	Mt. Juliet, T
Metals (ICPMS) by Method 6020	WG1790950	1	12/20/21 04:29	12/20/21 11:55	LAT	Mt. Juliet, T
			Collected by	Collected date/time	Received da	te/time
MW-7 (707S) L1433506-05 GW			Danielle Braund	11/15/21 14:46	11/19/21 09:0	0
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1778738	1	11/22/21 17:16	11/22/21 18:06	VRP	Mt. Juliet, T
Vet Chemistry by Method 9056A	WG1786873	1	12/10/21 03:58	12/10/21 03:58	ELN	Mt. Juliet, T
Metals (ICP) by Method 6010B	WG1792036	1	12/21/21 07:16	12/23/21 04:45	CCE	Mt. Juliet, T
Metals (ICPMS) by Method 6020	WG1790950	1	12/20/21 04:29	12/20/21 11:58	LAT	Mt. Juliet, T
MW-8 (708S) L1433506-06 GW			Collected by Danielle Braund	Collected date/time 11/16/21 14:28	Received da: 11/19/21 09:0	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1779132	1	date/time 11/23/21 12:58	date/time 11/23/21 17:00	VRP	Mt. Juliet, T
Vet Chemistry by Method 9056A	WG1786886	1	12/12/21 05:59	12/12/21 05:59	ELN	Mt. Juliet, T
Wet Chemistry by Method 9056A	WG1786886	5	12/12/21 05:39	12/12/21 05:59	ELN	Mt. Juliet, T
		J		.2, .2, 21 00.10	ELI!	Juliet, II
ACCOUNT:	PROJECT:		SDG:	DAT	E/TIME:	

Ср

















SAMPLE SUMMARY

MW-8 (708S) L1433506-06 GW			Collected by Danielle Braund	Collected date/time 11/16/21 14:28	Received da: 11/19/21 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1792036	1	12/21/21 07:16	12/23/21 04:47	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1790950	1	12/20/21 04:29	12/20/21 12:02	LAT	Mt. Juliet, TN
MW-9 (709S) L1433506-07 GW			Collected by Danielle Braund	Collected date/time 11/16/21 13:50	Received da: 11/19/21 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1779132	1	11/23/21 12:58	11/23/21 17:00	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1786886	1	12/12/21 06:38	12/12/21 06:38	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1786886	5	12/13/21 16:50	12/13/21 16:50	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1792036	1	12/21/21 07:16	12/23/21 04:50	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1790950	1	12/20/21 04:29	12/20/21 12:05	LAT	Mt. Juliet, TN
MW-10 (710S) L1433506-08 GW			Collected by Danielle Braund	Collected date/time 11/15/21 17:05	Received da: 11/19/21 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1778738	1	11/22/21 17:16	11/22/21 18:06	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1776736 WG1786873	1	12/10/21 04:14	12/10/21 04:14	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1792036	1	12/21/21 07:16	12/23/21 04:53	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1790950	1	12/20/21 04:29	12/20/21 12:22	LAT	Mt. Juliet, TN
MW-11 (711S) L1433506-09 GW			Collected by Danielle Braund	Collected date/time 11/15/21 14:00	Received da: 11/19/21 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1778738	1	11/22/21 17:16	11/22/21 18:06	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1786873	1	12/10/21 04:30	12/10/21 04:30	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1792036	1	12/21/21 07:16	12/23/21 04:55	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1790950	1	12/20/21 04:29	12/20/21 12:25	LAT	Mt. Juliet, TN
MW-13 (NOT 713S) L1433506-10 GW			Collected by Danielle Braund	Collected date/time 11/15/21 13:00	Received da: 11/19/21 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1778738	1	11/22/21 17:16	11/22/21 18:06	VRP	Mt. Juliet, TN
Vet Chemistry by Method 9056A	WG1786873	1	12/10/21 04:46	12/10/21 04:46	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1792036	1	12/21/21 07:16	12/23/21 05:03	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1790950	1	12/20/21 04:29	12/20/21 12:29	LAT	Mt. Juliet, TN
MW-17 L1433506-11 GW			Collected by Danielle Braund	Collected date/time 11/17/21 08:50	Received da: 11/19/21 09:0	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1779725	1	11/24/21 11:14	11/24/21 16:11	BRG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1786873	1	12/10/21 05:01	12/10/21 05:01	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1792036	1	12/21/21 07:16	12/23/21 05:06	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1790950	1	12/20/21 04:29	12/20/21 12:32	LAT	Mt. Juliet, TN



















SAMPLE SUMMARY

			Collected by	Collected date/time	Received da	to/timo
MANA 10 11422500 12 CM			Danielle Braund	11/16/21 16:05	11/19/21 09:0	
MW-18 L1433506-12 GW			Barrierie Braaria	11/10/21 10:03	11/10/21 00.0	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Gravimetric Analysis by Method 2540 C-2011	WG1779132	1	11/23/21 12:58	11/23/21 17:00	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1786886	1	12/12/21 06:58	12/12/21 06:58	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1792036	1	12/21/21 07:16	12/23/21 05:09	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1790950	1	12/20/21 04:29	12/20/21 12:35	LAT	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
FIELD BLANK 1 CCR L1433506-13 GW			Danielle Braund	11/17/21 12:00	11/19/21 09:0	0
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Gravimetric Analysis by Method 2540 C-2011	WG1779723	1	11/24/21 11:12	11/24/21 15:02	BRG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1788341	1	12/14/21 02:35	12/14/21 02:35	LBR	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1792036	1	12/21/21 07:16	12/23/21 05:11	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1790950	1	12/20/21 04:29	12/20/21 12:39	LAT	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
DUPLICATE 1 MW-1R L1433506-14 GW			Danielle Braund	11/16/21 13:15	11/19/21 09:0	0
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Gravimetric Analysis by Method 2540 C-2011	WG1779132	1	11/23/21 12:58	11/23/21 17:00	VRP	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1786886	1	12/12/21 07:18	12/12/21 07:18	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1786886	5	12/12/21 07:37	12/12/21 07:37	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1792036	1	12/21/21 07:16	12/23/21 05:14	CCE	Mt. Juliet, TN

WG1790956





















Metals (ICPMS) by Method 6020

12/21/21 04:23

12/23/21 14:02

LD

Mt. Juliet, TN

CASE NARRATIVE

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

¹Cp

















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Mark W. Beasley Project Manager

SAMPLE RESULTS - 01

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

	Result	Units
Analyte		
pH (On Site)	7.06	SU



Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	924		13.3	1	11/23/2021 17:00	WG1779132



Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Chloride	146		5.00	5	12/12/2021 05:00	WG1786886
Fluoride	ND		0.150	1	12/12/2021 04:01	WG1786886
Sulfate	ND		5.00	1	12/12/2021 04:01	WG1786886



Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Roron	ND		0.200	1	12/23/2021 04:37	WG1792036



Sc

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Calcium	119		1.00	1	12/20/2021 11:45	WG1790950

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MW-2 (702S)

SAMPLE RESULTS - 02

Collected date/time: 11/16/21 10:45

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

	Result	Units
Analyte		
pH (On Site)	8.04	SU





Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	750		10.0	1	11/23/2021 17:00	WG1779132



Ss

Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Chloride	10.4		1.00	1	12/12/2021 05:19	WG1786886
Fluoride	0.202		0.150	1	12/12/2021 05:19	WG1786886
Sulfate	271		25.0	5	12/13/2021 16:27	WG1786886





Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>	
Analyte	mg/l		mg/l		date / time		
Boron	ND		0.200	1	12/23/2021 04:04	WG1792036	



Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Calcium	114		1.00	1	12/20/2021 11:48	WG1790950

GBMc & Associates - Bryant, AR 1145-21-081

MW-3 (703S)

SAMPLE RESULTS - 03

Collected date/time: 11/15/21 16:45

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

		noise analyses are not assistance to look noise
	Result	Units
Analyte		
pH (On Site)	7.26	SU





Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	510		10.0	1	11/22/2021 18:06	WG1778738



Ss

Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Chloride	55.6		1.00	1	12/10/2021 03:10	WG1786873
Fluoride	0.168		0.150	1	12/10/2021 03:10	WG1786873
Sulfate	98.9		5.00	1	12/10/2021 03:10	WG1786873



[°]Qc

⁷Gl

Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Boron	ND		0.200	1	12/23/2021 04:39	WG1792036



	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Calcium	70.1		1.00	1	12/20/2021 11:52	WG1790950

MW-6 (706S)

SAMPLE RESULTS - 04

Collected date/time: 11/16/21 08:23

L1433506

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

	Result	Units
Analyte		
pH (On Site)	6.62	SU





	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	422		10.0	1	11/23/2021 17:00	WG1779132



Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Chloride	30.5		1.00	1	12/12/2021 05:39	WG1786886
Fluoride	ND		0.150	1	12/12/2021 05:39	WG1786886
Sulfate	103		25.0	5	12/13/2021 16:38	<u>WG1786886</u>



GI

Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>	
Analyte	mg/l		mg/l		date / time		
Boron	ND		0.200	1	12/23/2021 04:42	WG1792036	



Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Calcium	63.7		1.00	1	12/20/2021 11:55	WG1790950

GBMc & Associates - Bryant, AR

MW-7 (707S)

SAMPLE RESULTS - 05

Collected date/time: 11/15/21 14:46

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

	Result	Units
Analyte		
pH (On Site)	7.48	SU



Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	627		10.0	1	11/22/2021 18:06	WG1778738



Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Chloride	94.3		1.00	1	12/10/2021 03:58	WG1786873
Fluoride	0.522		0.150	1	12/10/2021 03:58	WG1786873
Sulfate	76.4		5.00	1	12/10/2021 03:58	WG1786873



Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Roron	ND		0.200	1	12/23/2021 04:45	WG1792036



Sc

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Calcium	67.0		1.00	1	12/20/2021 11:58	WG1790950	

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MW-8 (708S)

SAMPLE RESULTS - 06

Collected date/time: 11/16/21 14:28

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

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	Result	Units
Analyte		
pH (On Site)	6.96	SU





Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	900		13.3	1	11/23/2021 17:00	WG1779132



Ss



	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Chloride	141		5.00	5	12/12/2021 06:19	WG1786886
Fluoride	0.168		0.150	1	12/12/2021 05:59	WG1786886
Sulfate	246		25.0	5	12/12/2021 06:19	WG1786886





Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>	
Analyte	mg/l		mg/l		date / time		
Boron	0.201		0.200	1	12/23/2021 04:47	WG1792036	



	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Calcium	123		1.00	1	12/20/2021 12:02	WG1790950

MW-9 (709S)

SAMPLE RESULTS - 07

Collected date/time: 11/16/21 13:50

L1433506

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

	Result	Units
Analyte		
pH (On Site)	7.02	SU



Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	839		13.3	1	11/23/2021 17:00	WG1779132



Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Chloride	46.0		1.00	1	12/12/2021 06:38	WG1786886
Fluoride	0.159		0.150	1	12/12/2021 06:38	WG1786886
Sulfate	328		25.0	5	12/13/2021 16:50	WG1786886



[°]Qc

Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Boron	0.771		0.200	1	12/23/2021 04:50	WG1792036



Sc

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Calcium	107		1.00	1	12/20/2021 12:05	WG1790950

MW-10 (710S)

SAMPLE RESULTS - 08

Collected date/time: 11/15/21 17:05

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

	Result	Units
Analyte		
pH (On Site)	7.24	SU

2___

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	481		10.0	1	11/22/2021 18:06	WG1778738



Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Chloride	59.1		1.00	1	12/10/2021 04:14	WG1786873
Fluoride	0.152		0.150	1	12/10/2021 04:14	WG1786873
Sulfate	79.4		5.00	1	12/10/2021 04:14	WG1786873



Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>	
Analyte	mg/l		mg/l		date / time		
Boron	ND		0.200	1	12/23/2021 04:53	WG1792036	



Sc

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	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Calcium	66.0		1.00	1	12/20/2021 12:22	WG1790950

MW-11 (711S)

SAMPLE RESULTS - 09

Collected date/time: 11/15/21 14:00

L1433506

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

		,
	Result	Units
Analyte		
pH (On Site)	6.42	SU



Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	476		10.0	1	11/22/2021 18:06	WG1778738



Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Chloride	58.7		1.00	1	12/10/2021 04:30	WG1786873
Fluoride	0.187		0.150	1	12/10/2021 04:30	WG1786873
Sulfate	75.2		5.00	1	12/10/2021 04:30	<u>WG1786873</u>



Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Roron	ND		0.200	1	12/23/2021 04:55	WG1792036



Sc

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GI

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Calcium	78.2		1.00	1	12/20/2021 12:25	WG1790950

MW-13 (NOT 713S) Collected date/time: 11/15/21 13:00

SAMPLE RESULTS - 10

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

	Result	Units
Analyte		
pH (On Site)	6.52	SU





	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	427		10.0	1	11/22/2021 18:06	WG1778738



Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Chloride	9.97		1.00	1	12/10/2021 04:46	WG1786873
Fluoride	0.276		0.150	1	12/10/2021 04:46	WG1786873
Sulfate	96.2		5.00	1	12/10/2021 04:46	WG1786873



Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Boron	0.346		0.200	1	12/23/2021 05:03	WG1792036



Sc

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Calcium	74.5		1.00	1	12/20/2021 12:29	WG1790950

DATE/TIME:

12/24/21 15:06

SAMPLE RESULTS - 11

Collected date/time: 11/17/21 08:50

L1433506

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

	Result	Units
Analyte		
pH (On Site)	6.81	Su



Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	214		10.0	1	11/24/2021 16:11	WG1779725



Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Chloride	5.52		1.00	1	12/10/2021 05:01	WG1786873
Fluoride	ND		0.150	1	12/10/2021 05:01	WG1786873
Sulfate	18.6		5.00	1	12/10/2021 05:01	WG1786873



Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Roron	ND		0.200	1	12/23/2021 05:06	WG1792036



Sc

Gl

Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Calcium	47.4		1.00	1	12/20/2021 12:32	WG1790950

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SAMPLE RESULTS - 12

Collected date/time: 11/16/21 16:05

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

		*
	Result	Units
Analyte		
pH (On Site)	6.94	SU





Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	334		10.0	1	11/23/2021 17:00	WG1779132



Ss

Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Chloride	5.76		1.00	1	12/12/2021 06:58	WG1786886
Fluoride	ND		0.150	1	12/12/2021 06:58	WG1786886
Sulfate	45.9		5.00	1	12/12/2021 06:58	WG1786886



Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Boron	ND		0.200	1	12/23/2021 05:09	WG1792036



Sc

Metals (ICPMS) by Method 6020

. , , ,						
	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Calcium	74.0		1.00	1	12/20/2021 12:35	WG1790950

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FIELD BLANK 1 CCR

Collected date/time: 11/17/21 12:00

SAMPLE RESULTS - 13

1433506

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	ND		10.0	1	11/24/2021 15:02	WG1779723

²Tc

Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Chloride	ND		1.00	1	12/14/2021 02:35	WG1788341
Fluoride	ND		0.150	1	12/14/2021 02:35	WG1788341
Sulfate	ND		5.00	1	12/14/2021 02:35	WG1788341



Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Boron	ND		0.200	1	12/23/2021 05:11	WG1792036



Gl

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Calcium	ND		1.00	1	12/20/2021 12:39	WG1790950





DUPLICATE 1 MW-1R Collected date/time: 11/16/21 13:15

SAMPLE RESULTS - 14

1433506

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

		,
	Result	Units
Analyte		
pH (On Site)	7.06	SU



Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Dissolved Solids	931		13.3	1	11/23/2021 17:00	WG1779132



Wet Chemistry by Method 9056A

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Chloride	144		5.00	5	12/12/2021 07:37	WG1786886
Fluoride	0.157		0.150	1	12/12/2021 07:18	WG1786886
Sulfate	242		25.0	5	12/12/2021 07:37	<u>WG1786886</u>



GI

Metals (ICP) by Method 6010B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Boron	ND		0.200	1	12/23/2021 05:14	WG1792036	



Metals (ICPMS) by Method 6020

	Result	Qualifier	RDL	Dilution	Analysis	<u>Batch</u>
Analyte	mg/l		mg/l		date / time	
Calcium	122		1.00	1	12/23/2021 14:02	WG1790956

GBMc & Associates - Bryant, AR

QUALITY CONTROL SUMMARY

Gravimetric Analysis by Method 2540 C-2011

L1433506-03,05,08,09,10

Method Blank (MB)

(MB) R3733768-1 11/22/21 18:06

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





³Ss

L1433215-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1433215-11 11/22/21 18:06 • (DUP) R3733768-3 11/22/21 18:06

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	190	198	1	4.12		5



[†]Cn



⁶Qc

L1433215-74 Original Sample (OS) • Duplicate (DUP)

(OS) L1433215-74 11/22/21 18:06 • (DUP) R3733768-4 11/22/21 18:06

(00) 1.1001.0 7.1 11/12/12	Original Result			DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	39.0	ND	1	200	<u>P1</u>	5



⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3733768-2 11/22/21 18:06

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	7970	90.6	77.4-123	

QUALITY CONTROL SUMMARY

Gravimetric Analysis by Method 2540 C-2011

L1433506-01,02,04,06,07,12,14

Method Blank (MB)

(MB) R3734200-1	11/23/21 17:00
	MP Docult

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





³Ss

[†]Cn

L1433506-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1433506-01 11/23/21 17:00 • (DUP) R3734200-3 11/23/21 17:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	924	943	1	2.00		5





⁶Qc

L1433506-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1433506-06 11/23/21 17:00 • (DUP) R3734200-4 11/23/21 17:00

(03) [1433300-00 11/23/21	Original Result				DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	900	915	1	1.62		5





Laboratory Control Sample (LCS)

(LCS) R3734200-2 11/23/21 17:00

(200) 1(0704200 2 1	11/23/21 17.00				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8570	97.4	77 4-123	

QUALITY CONTROL SUMMARY

Gravimetric Analysis by Method 2540 C-2011

L1433506-13

Method Blank (MB)

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





³Ss

L1432218-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1432218-03 11/24/21 15:02 • (DUP) R3734302-3 11/24/21 15:02

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/I	mg/l		%		%
Dissolved Solids	812	805	1	0.825		5





⁶Qc

L1432740-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1432740-01 11/24/21 15:02 • (DUP) R3734302-4 11/24/21 15:02

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	1940	1930	1	0.258		5





Laboratory Control Sample (LCS)

(LCS) R3734302-2 11/24/21 15:02

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8620	98.0	77 4-123	

QUALITY CONTROL SUMMARY

Gravimetric Analysis by Method 2540 C-2011

L1433506-11

Method Blank (MB)

(MB) R3734296-1 11/24/21 16:11

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







(OS) L1432898-05 11/24/21 16:11 • (DUP) R3734296-3 11/24/21 16:11

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	1460	1480	1	153		5



[†]Cn



L1432898-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1432898-06 11/24/21 16:11 • (DUP) R3734296-4 11/24/21 16:11

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	1650	1650	1	0.152		5





Laboratory Control Sample (LCS)

(LCS) R3734296-2 11/24/21 16:11

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8570	97.4	77.4-123	

QUALITY CONTROL SUMMARY

Wet Chemistry by Method 9056A

L1433506-03,05,08,09,10,11

Method Blank (MB)

(MB) R3/39426-1	12/09/21 14:28
	MR Do

	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







L1433215-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1433215-07 12/09/21 22:40 • (DUP) R3739426-3 12/09/21 22:56

,	, ,					
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	4.06	4.07	1	0.157		15
Fluoride	ND	ND	1	0.000		15
Sulfate	31.4	31.4	1	0.0515		15









L1433506-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1433506-11 12/10/21 05:01 • (DUP) R3739426-6 12/10/21 05:17

(00) E1400000 11 12/10/21 00.01 - (D01) N0/00420 0 12/10/21 00.17						
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	5.52	5.56	1	0.599		15
Fluoride	ND	ND	1	0.824		15
Sulfate	18.6	18.7	1	0.233		15

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Laboratory Control Sample (LCS)

(I CS) P3739426-2 12/09/2114:44

(LC3) R3/39420-2 12/03	0/21 14.44				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Chloride	40.0	39.1	97.8	80.0-120	
Fluoride	8.00	8.00	100	80.0-120	
Sulfate	40.0	39.5	98.7	80.0-120	

QUALITY CONTROL SUMMARY

Wet Chemistry by Method 9056A

L1433506-03,05,08,09,10,11

L1433215-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1433215-07 12/09/21 22:40 • (MS) R3739426-4 12/09/21 23:11 • (MSD) R3739426-5 12/09/21 23:27

` '	, ,		,	,								
	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	50.0	4.06	50.0	49.8	92.0	91.6	1	80.0-120			0.399	15
Fluoride	5.00	ND	4.64	4.64	92.9	92.9	1	80.0-120			0.0237	15
Sulfato	50.0	31./	76.2	76.2	80 5	80.6	1	90 0 120			0.0794	15









(OS) L1433506-11 12/10/21 05:01 • (MS) R3739426-7 12/10/21 05:33

(03) 11-33300 11 12/10/21	05.01 - (1415) 135	7755420 7 12/1	0/2103.33			
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits
Analyte	mg/l	mg/l	mg/l	%		%
Chloride	50.0	5.52	54.0	97.0	1	80.0-120
Fluoride	5.00	ND	4.93	96.8	1	80.0-120
Sulfate	50.0	18.6	66.8	96.3	1	80.0-120













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QUALITY CONTROL SUMMARY

L1433506-01,02,04,06,07,12,14

Wet Chemistry by Method 9056A Method Blank (MB)

	\ /
(MB) R3740138-1	12/11/21 15:08

	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









(OS) L1433215-98 12/11/21 22:45 • (DUP) R3740138-3 12/11/21 23:05

,	,					
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	18.2	18.0	1	1.06		15
Fluoride	ND	ND	1	3.55		15
Sulfate	ND	ND	1	9.21		15









L1433510-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1433510-01 12/12/21 07:57 • (DUP) R3740138-6 12/12/21 08:56

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	9.27	9.29	1	0.197		15
Fluoride	0.224	0.224	1	0.0446		15



L1433510-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1433510-01 12/13/21 17:02 • (DUP) R3740197-1 12/13/21 17:13

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	171	170	5	0.804		15

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Laboratory Control Sample (LCS)

(LCS)	R3740138-2	12/11/21	15:28
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	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	
Analyte	mg/l	mg/l	%	%	
Chloride	40.0	38.2	95.5	80.0-120	
Fluoride	8.00	7.08	88.5	80.0-120	
Sulfate	40.0	38.0	95.0	80.0-120	

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LCS Qualifier

QUALITY CONTROL SUMMARY

Wet Chemistry by Method 9056A

L1433506-01,02,04,06,07,12,14

L1433215-98 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1433215-98 12/11/21 22:45 • (MS) R3740138-4 12/11/21 23:24 • (MSD) R3740138-5 12/11/21 23:44

,	, ,		,	,								
	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	50.0	18.2	67.3	69.1	98.2	102	1	80.0-120			2.67	15
Fluoride	5.00	ND	4.66	4.86	91.1	95.0	1	80.0-120			4.09	15
Sulfate	50.0	ND	50.4	52.3	97.8	102	1	80 0-120			3 77	15







L1433510-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1433510-01 12/12/21 07:57 • (MS) R3740138-7 12/12/21 09:16

(,	(
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier			
Analyte	mg/l	mg/l	mg/l	%		%				
Chloride	50.0	9.27	58.8	99.1	1	80.0-120				
Fluoride	5.00	0.224	4.95	94.4	1	80.0-120				
Sulfate	50.0	174	233	119	1	80.0-120	Е			













QUALITY CONTROL SUMMARY

L1433506-13

Wet Chemistry by Method 9056A

Method Blank (MB)

	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







L1433498-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1433498-11 12/14/21 00:27 • (DUP) R3740658-3 12/14/21 00:38

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







L1434071-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1434071-03 12/14/21 06:18 • (DUP) R3740658-6 12/14/21 06:29

(00) 2110 1071 00 1271 172	Original Result				DUP Qualifier	DUP RPD Limits	
Analyte	mg/l	mg/l		%		%	
Chloride	15.4	15.5	1	0.0492		15	
Fluoride	0.523	0.517	1	1.04		15	

Sc

Laboratory Control Sample (LCS)

/I CS) D27/106E9 2 12/12/21 10:0E

(LCS) R3/40658-2	25) R3/40038-2 12/13/21 19:03								
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier				
Analyte	mg/l	mg/l	%	%					
Chloride	40.0	39.9	99.7	80.0-120					
Fluoride	8.00	7.99	99.9	80.0-120					
Sulfate	40.0	39.8	99.4	80.0-120					

L1433498-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) I 1433498-11 12/14/21 00:27 • (MS) R3740658-4 12/14/21 00:50 • (MSD) R3740658-5 12/14/21 01:25

(03) [1433430=11 12/14/21]	03) E1733436-11 12/14/21 00.2/7 • (MIS) N3/40036-4 12/14/21 00.30 • (MIS) N3/40036-3 12/14/21 01.23											
	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	50.0	ND	52.1	52.0	104	104	1	80.0-120			0.0991	15
Fluoride	5.00	ND	5.30	5.31	106	106	1	80.0-120			0.247	15

QUALITY CONTROL SUMMARY

Wet Chemistry by Method 9056A

L1433506-13

L1433498-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1433498-11 12/14/21 00:27 • (MS) R3740658-4 12/14/21 00:50 • (MSD) R3740658-5 12/14/21 01:25

	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	%	%		%			%	%
Sulfate	50.0	ND	51.5	51.5	103	103	1	80.0-120			0.0144	15

Ср





L1434071-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1434071-03 12/14/21 06:18 • (MS) R3740658-7 12/14/21 06:41

· /	٠, ,					
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits
Analyte	mg/l	mg/l	mg/l	%		%
Chloride	50.0	15.4	64.9	98.9	1	80.0-120
Fluoride	5.00	0.523	5.21	93.7	1	80.0-120













DATE/TIME:

12/24/21 15:06

QUALITY CONTROL SUMMARY

L1433506-01,02,03,04,05,06,07,08,09,10,11,12,13,14

Method Blank (MB)

Metals (ICP) by Method 6010B

(MB) R3744230-1 12/23/21 03:59

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









	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Boron	1.00	0.970	97.0	80.0-120	



[†]Cn







(OS) L1433506-02 12/23/21 04:04 • (MS) R3744230-4 12/23/21 04:10 • (MSD) R3744230-5 12/23/21 04:12

,	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	
Analyte	mg/I	mg/l	mg/l	mg/l	%	%		%			%	%	
Roron	100	ND	1.09	1 10	98.8	99.7	1	75 0-125			0.819	20	







QUALITY CONTROL SUMMARY

L1433506-01,02,03,04,05,06,07,08,09,10,11,12,13

Method Blank (MB)

(MB) R3742679-1 12/20/21 10:54

Metals (ICPMS) by Method 6020

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

Ср





Laboratory Control Sample (LCS)

(LCS) R3742679-2 12/20/21 10:58

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Calcium	5.00	4 82	96.3	80 O-120	









(OS) L1433502-08 12/20/21 11:01 • (MS) R3742679-4 12/20/21 11:08 • (MSD) R3742679-5 12/20/21 11:11

, ,	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	65.0	69.4	69.4	89.4	89.4	1	75 0-125			0.00249	20







Calcium

QUALITY CONTROL SUMMARY

L1433506-14

Method Blank (MB)

Metals (ICPMS) by Method 6020

(MB) R3744521-1 12/23/21 13:41

MB Result MB Qualifier MB MDL MB RDL

Analyte mg/l mg/l mg/l





U

(LCS) R3744521-2 12/23/21 13:44

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Calcium	5.00	4.88	97.7	80.0-120	

0.0936

1.00



Ss

L1433526-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1433526-01 12/23/21 13:48 • (MS) R3744521-4 12/23/21 13:55

(03) 11433320-01 12/23/2	3) E1433320-01 12/23/21 13.40 · (M3) 13/44321-4 12/23/21 13.33												
	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier						
Analyte	mg/l	mg/l	mg/l	%		%							
Calcium	5.00	82.3	84.9	52.5	1	75.0-125	V						



GI



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

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

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.



















ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
lowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky 16	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	Al30792	Tennessee 1 4	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234



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

TN00003

EPA-Crypto



















 $^{^* \, \}text{Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.} \\$

Company Name/Address:	The Contract of the Contract o		Billing Infor	rmation:	7 - 5 - 7				Analysis / Cor	ntainer / Preserva	tive		Chain of Custody	Page of
GBMc & Associates - Br 219 Brown Lane Bryant, AR 72022	yant, AR			s Payable vn Ln.		Pres Chk							- Pac	e Analytical [®]
Report to:			Email To:					S					12065 Lebanon Rd Mou Submitting a sample via	this chain of custody
Jonathan Brown	100		jbrown@g	bmcassoc.com;	16	^		Pres				1	Pace Terms and Conditi	ment and acceptance of the ons found at: om/hubfs/pas-standard-
Project Description: Entergy - Independence		City/State Collected:	Newar	k, AR		CT ET		E-NoP					terms.pdf	1-2-0
Phone: 501-847-7077	Client Project	-21-08	31	Lab Project # GBMCBAR	INDY		50mIHDPE					SDG # _ K12	35506	
Collected by (print): Danielle Braund	Site/Facility I			P.O.#			-HNO3	52					Acctnum: GBI	WILDA
Collected by (signature): Rush? (Lab MUST Same Day F Next Day S			Day	Quote #	e Results Needed		250mIHDPE-HNO3	pH, SO4, TD					Prelogin: P88 PM: 134 - Mari PB: Shipped Via:	5927
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	B, Ca	Cl, F,					Remarks	Sample # (lab only)
MW-1 (7015-R)	Grab	GW	39.9	111/16/2	1 1315	2	X	X		4.66			7.06	-01
MW-2 (702S)	Grab	GW	31.7	11/16/2	1045	2	X	X	to to				8.04	-02
MW-3 (703S)	Grab	GW	32.9	11/15/2	164	5 2	X	X					7.26	-03
MW-6 (706S)	Grab	GW	30.3	11/16/2	1 823	3 2	X	X					6.62	-04
MW-7 (707S)	Grab	GW	30,0	11/15/21	1441	0 2	X	X					7.48	-05
MW-8 (7085)	Grab	GW	31.2	11/16/2	1 1428	8 2	X	X			# / ·		6.96	-do
MW-9 (709S)	Grab	GW	30.1	11/16/	21 1350	5 2	X	X					7.02	-07
MW-10 (710S)	Grab	GW	33.0	11/15/2	170	5 2	X	X					7.24	-08
MW-11 (7115)	Grab	GW	33.5	11/15/2	1140	0 2	X	X			4	7-4-	6.42	-09
MW-13 (NOT 713S)	Grab	GW	27.7	11/15	130	0 2	X	X					6.52	1-10
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater	AIR-Air F-Filter roundwater B-Bioassay				iks .				pH	TempOther		COC Seal COC Signer Bottles a Correct be	pple Receipt Ch Present/Intact d/Accurate: rrive intact: ottles used: t volume sent:	: NP Y N
DW - Drinking Water OT - Other UPSFedEx Cour					acking#	seed	itto	sched	Trip Blank F	Received: Yes N		VOA Zero Preservat	If Applicab Headspace: ion Correct/Ch	le Y N
Relinquished by: (Signature)	The second secon	Date: 1 18 2	2(Fim	500	eceived by: (Si	e e de la companya de La companya de la co			Прынк	HCL 7 TBR	МеоН		n <0.5 mR/hr:	YN
Relinquished by : (Signature)	40	Date:	Tim	4	eceived by: (Si		3		Temp: Seatto	°C Bottles Re	8		on required by LO	
Relinquished by : (Signature)		Date:	Tim	ne: Re	eceived for lat	by: (Signa	ature)	1	Date:	71 OO		Hold:		Condition: NCF / OK

Company Name/Address:			Billing Infor	mation:					Analysis / Co	ntainer / Preservativ	9		Chain of Custody	Page	_of
GBMc & Associates - Bry 219 Brown Lane Bryant, AR 72022	ant, AR		Accounts 219 Brow Bryant, A	vn Ln.		Pres Chk							Pac	e Analyti	ical*
Report to: Jonathan Brown			Email To: jbrown@gl	omcassoc.com;dl	oraund@gbm	cassoc.	. 201	res					12065 Lebanon Rd Mos Submitting a sample via constitutes acknowledg	this chain of custo ment and acceptar	ody
Project Description: Entergy - Independence		CALL CONTRACTOR OF THE PARTY OF	News	urk, AR			E-NoP						Pace Terms and Conditi https://info.pacelabs.co terms.pdf		dard-
Phone: 501-847-7077	Client Project # 1145 - 21 - 081			Lab Project # GBMCBAR-E	BMCBAR-ENTERGYINDY			250mIHDPE-NoPres					SDG # 11335010		20
Collected by (print): Danielle Braund	Site/Facility ID # LANDFILL - CCR			P.O. #		HNO						Acctnum: GBN	ICBAR		
Collected by (signature): Convelled Pool of the Collected by (signature): Immediately Packed on Ice N Y X			Quote # Date Resul	e# Date Results Needed No. of		250mHDPE-HNO3	pH, SO4, TDS					PR: Template: T196 Prelogin: P88! PM: 134 - Mark	385927		
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	B, Ca ;	Cl, F, F					Shipped Via:	Sample # (lab only	
MW-17	Grab	GW	27.75	11/17/21	850	2	X	X					10.81	1-11	
MW-18	Grab	GW	793	11/16/21	1605	7	X	X					694	-17	
FIELD BLANK 1 CCR	Grab	GW	-	11 17 121	1200	7	X	X						-12)
DUPLICATE 1 MW-IR.	Giab	GW	32.9	11/16/21	1315	2	X	X					7.06	-14	
	entra de la companya	GW-						A contract	ا في دست بي ع ا						
													92.		
		Winds											2		
940		48.4													
Matrix: G-Soil AIR-Air F-Filter W-Groundwater B-Bioassay W-WasteWater W-Drinking Water Remarks: Final pH in ren				emouks		1			pH	TempOther	COC Bott Corr	Seal Pro Signed/A les arra ect bota	e Receipt Chesent/Intact: Accurate: ive intact: tles used: volume sent:	NP Y	NA ANA
Samples returned via: OT - Other Samples returned via: UPSFedExCourier Relinquished by: (Signature) Date:		_ Courier		Track		ture)			Trip Plant 9	veniund: Vas (1)	VOA	Zero Hea	If Applicabladspace: Correct/Che	Y	-N
		t IS	00	ved by: (Signa				Trip Blank Re	eceived: Yes / No) HCL / Meo TBR	H RAD	Screen .	<0.5 mR/hr:	7	_N	
Relinquished by : (Signature) Date: Time:				ved by: (Signa	٨			Temp:	°C Bottles Receive	d: If pre	servation	required by Log	in: Date/Tin	ne	
Relinquished by : (Signature) Date:			Time	Recei	Signat	ure	1	Date:	Time:	Hold:			Condition NCF /		

L1433500

	5300 4300 5652	5300 4300 57W	6300 4797 7031	058h 00ch 00E9	Tracking Numbers
	22+1=23 PKA3	1.9+.1=2.0DKA3	1.7+1=1.8 DK #3	1.0±0=1.0NSAZ	Temperature

SITE NAME:	ISES					OCATION:	555 P	Point Fo	erru	Rd			
WELL NO): M(1)-	IR/7	OIS-R	SAMPLE	1	W-IRI	7015-1		DATE:	111017			
	11100	d),			PUR	GING DA	TA			1012			
WELL	R (inches):	2 TUBI	NG ETER (inches):	TOTAL DEPTH		STATIC DEPTH PURGE PUMP TYPE TO WATER (feet): OR BAILER:							
WELL VO	LUME PURGE					ATIC DEPTH 1		WELL CAPACI		JAILLIN.			
	ut if applicable)		= (feet -		feet) X		gallons/foo		gallons		
	NT VOLUME P ut if applicable)	URGE: 1 E	NOIPMENT VOI		`			UBING LENGTH)					
PUMP OF	R TUBING DEPT	H /	WELL SC	= g REEN INTERV	allons + (AL	PURGIN	ons/foot X	feet)	1220	gallons TOTAL VOL			
IN WELL	(feet): didi (area	DEPTH:	feet to	feet	INITIATE	ED AT:	ENDED AT:	1912	PURGED (g	allons):		
TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGEI (gallons)	PURGE RATE	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND (circle units) µmhos/cm or µS/cm	OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)		
1307					706	1847	1.33	2.89	182	0	none		
1310				-	+.07	1843	1.51	2.74	183	0			
120	-				706	10.41	1.50	6.10	100				
						-							
	PACITY (Gallon			1" = 0.04;		06; 2 " = 0.1				6" = 1.47;	12" = 5.88		
	NSIDE DIA. CAI EQUIPMENT C			BP ≃ Bladder F		1/4" = 0,002 ESP = Electric	6; 5/16" = 0 Submersible Pu		nistaltic Pump		5/8" = 0.016 ther (Specify)		
						LING DA	ATA						
DI	MB/W	H6	1	SAMPLER(S)	SIGNATUR	E(S):		SAMPLING INITIATED AT	1315	SAMPLIN ENDED A			
PUMP OR	TUBING WELL (feet):	edica	ted	TUBING MATERIAL C	ODF.			-FILTERED: Y on Equipment Type	ne N	FILTER SI	ZE: μm		
	CONTAMINATION		MP Y		TUBING	Y (N (re	placed)	DUPLICATE:	(Y)	N			
	PLE CONTAINE	R SPECIFIC	CATION			ATION (includi		INTENDE		AMPLING	SAMPLE PUMP		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVAT USED		TOTAL VOL ED IN FIELD (1	mL) Final pH/	ANALYSIS A METHO	D	CODE	FLOW RATE (mL per minute)		
	2	ADP		250	H	N03	7.06	COC		SP .			
	Ч			11.5	_#	NO3		COCE	3	1			
	7			150				COCI					
DUP	+			150				1000	DITIE				
DUP	DUP 2 250 COC2 DUP												
REMARKS: Sampled CCR COCT/COCZ, CCR Duplicate, & Rule 22 COCT/COC3													
MATERIAI	L CODES:		r Glass; CG =			High Density P	Polyethylene;	LDPE = Low De	nsity Polyethy	rlene; PP	= Polypropylene;		
SAMPLING	S = Silicone; T = Teflon; O = Other (Specify) SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;												
			RFPP = Revers	e Flow Peristal	tic Pump;	SM = Straw	Method (Tubing		O = Other				

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

							1						
SITE NAME:													
WELL NO	mw-	2/70	2.5	SAMPLE	-	. 01	7025		DATE:	111017			
		-			PURG	ING DA	TA			1			
WELL	0	TUBING		1 TOTAL	NATER 🔼		STATIC	DEPTH 🥎 i	-7 PU	RGE PUMP T	YPE		
	R (inches):		ER (inches):					ER (feet):		BAILER:	3P		
	ut if applicable)	1 WELL VOL	.UME = (101	AL WELL DEF	'IH - SIA	TIC DEPTH I	OWATER) X	WELL CAPAC	II Y				
FOLIDME	ENT VOLUME P	URGE: 1 FOU	= (= PLIMP VOL	feet -	INC CADACI	feet) X	UBING LENGTH	gallons/fo		galions		
	ut if applicable)	ONOL, ILQU	II IIILINI VOL		,						_		
DI IMP OF	R TUBING DEPT	"LI ^	TWELL SCI	= g: REEN INTERV	allons + (ons/foot X	feet		gallons TOTAL VO			
IN WELL	(feet): dedi	ated	DEPTH:	feet to	feet	INITIATE	IG AT:1015	PURGING ENDED AT:	1055	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	OISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)		
1025		3CPY	'n	31.7	9.20	1771	1.07	6	135	0	none		
1028	30	0 m/n	nin	31.7	8.76	1772	1.03	Ŏ	140	0			
1034				31.7	8.35	17.75	1.03	0	148	0	1		
1038				31.7	8.17	1778	1.03	0	149	6			
1041				31.7	8.08	17.78	1.03	0	149	0			
1044				31.7	8.04	17.78	1.03	0	150	0	Ø.		
TUBING I	PACITY (Gallon	PACITY (Gal./F	t.): 1/8" = 0	0006; 3/16"	= 0.0014	5; 2 " = 0.1 1/4" = 0.002	26; 5/16" = 0	.004; 3/8" = 0		6" = 1.47; " = 0.010;	12" = 5.88 5/8" = 0.016		
PURGING	EQUIPMENT C	ODES: B	= Bailer;	BP = Bladder F			Submersible Pu	imp; PP = P	eristaltic Pun	np; O = C	ther (Specify)		
SAMPLE	D BY (PRINT) / A	FEILIATION:		SAMPLER(S)		LING DA	AIA .	1.		. T			
Dm	0 /			SKIWIF LEN(S)	SIGNATURE	_(3).		SAMPLING INITIATED A	T: 1045	SAMPLIN ENDED A			
PUMP OR	R TUBÎNG WELL (feet):	ledicat	ed	TUBING MATERIAL CO	ODE:			on Equipment Ty	N	FILTER S	IZE: μm		
	CONTAMINATIO		-	310	TUBING	Y N (re	eplaced)	DUPLICATE:	-	N			
	IPLE CONTAINE			1		TION (includi	40.14.204040	INTEND		SAMPLING	SAMPLE PUMP		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVAT	IVE T	OTAL VOL D IN FIELD (1	Final pH/	ANIAL VOIC A	ND/OR E	CODE	FLOW RATE (mL per minute)		
	2	HDPE '	250		70		8.04	COCI		BP			
	1		250			50		COCZ					
	2		250	HNO3	7:	50		COC2		1			
	4			HN02				COC	3	V			
	1												
REMARKS	REMARKS: Sampled CCR COCI/COCZ 9 Rule 22 COCZ/COC3												
MATERIA	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	G EQUIPMENT	CODES: A	PP = After (TI	nrough) Perista e Flow Peristal	Itic Pump;	B = Bailer;				Submersible I	Pump;		
		KI	rr - Revers	e riow renstal	uc rump;	Om - Otraw	Method (Tubing	Gravity Drain);	U = Otne	r (Specify)			

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

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

SITE NAME:	150	55			1000	TE (555 F	=obcy F	20			
WELL NO	mw-	3/703	35	SAMPLE		0-31	7035		DATE:	11517	1	
		1			PURC	ING DA	TA		- 1.1	1010		
	R (inches): 2		ER (inches):		feet):	38.1	TO WATE	ER (feet): 32	ORE	GE PUMP TY BAILER:	PEBP	
	LUME PURGE: ut if applicable)	1 WELL VOL	UME = (TOT	TAL WELL DEP	TH – STA	TIC DEPTH T	OWATER) X	WELL CAPACI	TY		(And a	
EQUIPME	NT VOLUME P	URGE: 1 EQUI	= (PMENT VOL	. = PUMP VOL	feet – UME + (TUB	ING CAPACI	feet) X	JBING LENGTH)	gallons/foo + FLOW CEI		gallons	
	ut if applicable)				illons + (ons/foot X	feet)		gallons =	= gallons	
PUMP OR	TUBING DEPT	licuted	WELL SCI	REEN INTERVA		PURGIN		PURGING ENDED AT:		TOTAL VOL	UME	
II VVLLE (icci).	CUMUL.		DEPTH		INITIATE	COND	DISSOLVED	100	FORGED (g.	COLOR /	
TIME	VOLUME PURGED (gallons)	VOLUME PURGED (gallons)	PURGE RATE (gpm)	TO WATER (feet)	pH (standard units)	TEMP (°C)	(circle units) μmhos/cm or μS/cm	OXYGEN (circle units) (mg/L) or % saturation	Redox (mV)	Turbidity (NTU)		
1(038	3	PM		33	7.75	1681	0807	3.84	180	0	none	
1(041	75/			33	777	16.81	0.805	3.85	181	0		
1044	300	MIM	in	133	726	16.85	0.802	3.80	182	0		
											- V	
											_	
				1							_	
WELL CA	PACITY (Galion	s Pas Facth: 0	751 - 0.00	1" = 0.04;	4 2511 - 0 00	. 611 → 0.4	6; 3" = 0.37;	4" = 0.65;	- 1 00·	6 " = 1.47:	100 500	
TUBING I	NSIDE DIA. CAI	PACITY (Gal./F	.): 1/8" = 0.	0006; 3/16"	= 0.0014;	1/4"= 0.002	6; 5/16" = 0.0	004; 3/8" = 0			12" = 5.88 5/8" = 0.016	
PURGING	EQUIPMENT C	ODES: B	Bailer;	BP = Bladder P	111111111111111111111111111111111111111	SP = Electric	Submersible Pur	np; PP = Pe	eristaltic Pump	O = Ot	her (Specify)	
SAMPLED	BY (PRINT) / A	FFILIATION:		SAMPLER(S)			NIA.	SAMPLING	11 110	SAMPLING	- i 60	
Dr	nB/u	1HO	æ					INITIATED AT	1645	ENDED A		
PUMP OR DEPTH IN	TUBING WELL (feet): /	dedica	ca	TUBING _MATERIAL CO	DDE:			FILTERED: Y on Equipment Typ	pe (N)	FILTER SIZ	ZE: μm	
FIELD DE	CONTAMINATIO	ON: PUMF	Y (N		TUBING	Y N (re	placed)	DUPLICATE:	Y	(N)		
	PLE CONTAINE		ION			TION (includi		INTENDE		AMPLING	SAMPLE PUMP	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATI USED		OTAL VOL D IN FIELD (r	nL) Final pH/	ANALYSIS AI METHO		CODE	FLOW RATE (mL per minute)	
	2	HOPE	250		B V	250	7.26	COC	- 2	BP		
	2		250			250	, , ,	COCI	!			
	1		250	HN03		250		COC	2			
	4	V		HN03			_	COCS	3	V		
REMARKS	Sampled CCR COCI/COCZ & Rule 22 COCZ/COC3											
MATERIAL	CODES	AG = Amber G				igh Density P		LDPE = Low De		1	= Polypropylene;	
	S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING	EQUIPMENT			nrough) Peristal e Flow Peristalt		B = Bailer; SM = Straw	BP = Bladde Method (Tubing		P = Electric S O = Other	Submersible Po (Specify)	ump;	

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:	ISES				-	SITE LOCATION: 555 POINT FEM Rd							
WELL NO	: MW-(1701	25	SAMPLE		111=60	170605		DATE:	116/21			
					PURC	ING DA	TA						
WELL	ER (inches):	TUBING DIAMET	ER (inches):	TOTAL V		38.6	STATIC TO WAT	DEPTH 30.	4	RGE PUMP TY BAILER:	PEBP		
WELL VO	OLUME PURGE:				TH - STA	TIC DEPTH		WELL CAPAC					
	ENT VOLUME P	URGE: 1 FOU	= (= DI IMP VAI	feet -	ING CARAC	feet) X	UBING LENGTH	gallons/foo		gallons		
(only fill o	ut if applicable)	J., J			allons + (ons/foot X	feet)		gallons :	= gallons		
PUMP OF	R TUBING DEPT	Hariad	1	EEN INTERV	100000000000000000000000000000000000000	PURGII	NG /AA	PURGING ENDED AT:		TOTAL VOL			
IN WELL	(feet): Ald		DEPTH:	feet to DEPTH	feet	INITIAT	COND.	ENDED AT:		PURGED (g			
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	TO WATER (feet)	pH (standard units)	TEMP (°C)	(circle units) μmhos/cm <u>or</u> -μS/cm	OXYGEN (circle units) (mg/L) or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)		
813		3Um		30.3	U.58	16.14	0.1070	2.97	253	0	none		
010	3	00 m	min	30.3	658	10.27	0.6+3	2.95	240	0			
272				30.3	10/02	110.32	0674	287	235	0			
					40.0		0.611	7.01					
										11			
-													
										-	-		
	WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016												
PURGING	EQUIPMENT C	ODES: B=	Bailer; B	IP = Bladder F		SP = Electric	Submersible Pu	mp; PP = Pe	eristaltic Pum	p; O = Ot	her (Specify)		
SAMPLE	BY (PRINT) / A	FFILIATION:		SAMPLER(S)			AIA	SAMPLING	000	SAMPLING	3026		
U	NB/ WH	16						INITIATED AT	1.873	ENDED A	T: 000		
PUMP OR DEPTH IN	WELL (feet):	ldilater		TUBING MATERIAL CO	DDE:		FIELD Filtrati	-FILTERED: Y on Equipment Typ	pe: N	FILTER SI	ZE: μm		
	CONTAMINATIO)	TUBING		eplaced)	DUPLICATE:	Y	N			
SAM SAMPLE	IPLE CONTAINE	MATERIAL		SAMPLE PRESERVATI	PRESERVA	TION (includ	ing wet ice)	INTENDE ANALYSIS A		AMPLING QUIPMENT	SAMPLE PUMP FLOW RATE		
ID CODE	CONTAINERS	CODE	VOLUME	USED		D IN FIELD (mL) Temp	METHO		CODE	(mL per minute)		
	5	HOPE	250			150	Le.62	COCT					
	1			1N02		150	+	COC 2					
	u	4		+N02				COC3					
				D 30									
REMARKS	2.			0.5	410								
IVE INIVINA		Sampl	ed CU	R COC	TICO	C2	g Rul	le 22 (10C2	C0C3)		
MATERIA		AG = Amber Gl S = Silicone:	ass; CG = 0	Clear Glass; O = Other (S		ligh Density F	Polyethylene;	LDPE ≈ Low De	nsity Polyethy	/lene; PP :	= Polypropylene;		
SAMPLIN	G EQUIPMENT	CODES: AP	P = After (Thr	rough) Peristal	tic Pump;	B = Bailer SM = Straw	BP = Bladd		iP = Electric S O = Other	Submersible P	ump;		
					unipi	Jiii Gildw		Siderity Dianity,	O - Other	(opecity)			

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 15ES SITE LOCATION: 555 FEVLY Rd													
WELL NO	: mw	-7-17	075	SAMPLE	La a	N-7	1707	S	DATE:	115/2	4		
		1			PURC	SING DA	TA			1			
WELL DIAMETE	R (inches): 2	TUBING	ER (inches):	TOTAL \ DEPTH		5.9	STATIC TO WAT	DEPTH 30	/ /	RGE PUMP T BAILER:	YPE BP		
	DLUME PURGE: ut if applicable)	1 WELL VOL	UME = (TOTA	AL WELL DEP	TH - STA	TIC DEPTH	TO WATER) X	WELL CAPAC	ITY				
FOUIPME	NT VOLUME P	URGE: 1 FOU	= (= DI IMP VOI	feet -	RING CARAC	feet) X	('UBING LENGTH)	gallons/foc		gallons		
	ut if applicable)	0.1.02, 7.220			allons + (ons/foot X	feet)		gallons	= gallons		
PUMP OF	R TUBING DEPT	Н		EEN INTERV	AL	PURGIN	IG 1/10	PURGING	11160	TOTAL VOI			
IN WELL	(feet): Cleo	licated	DEPTH:	feet to	feet	INITIATI	IG AT: 1422	ENDED AT:	1452	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	OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)		
1435	3(pm r	nL/min	30.0	7.43	17.68	LO	2640	119	20			
1440		2001	pm	30.0	7.44	17.60le	1.0	2.37	123	0			
1443		6		30.1	7.47	17/06	1.0	247	125	0			
1446				30.1	7.48	17.64	10	2.35	127	0			
							11						
	WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gall./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" > 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016												
PURGING	EQUIPMENT C	ODES: B	Bailer; B	P Bladder P			Submersible Pu	ump; PP = Pe	eristaltic Pum	O = O	ther (Specify)		
21115175	att manter 1 t					LING DA	ATA						
Dn	OBY (PRINT) /A	HG		SAMPLER(S)	SIGNATURE	SAMPLING SAMPLING INITIATED AT: 1446 SAMPLING ENDED AT:							
PUMP OR DEPTH IN	TUBING WELL (feet):	ledica	Lucy D CV	TUBING MATERIAL CO	DDE:	FIELD-FILTERED: Y N FILTER SIZE: Filtration Equipment Type:							
FIELD DE	CONTAMINATIO	ON: PUMF	YN	1	TUBING	Y (N)(n	eplaced)	DUPLICATE:	Y	(N)			
SAM	PLE CONTAINE	R SPECIFICAT	TION	SAMPLE	PRESERVA	TION (includ	ing wet ice)	INTENDI	ED S	AMPLING	SAMPLE PUMP		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME F	PRESERVATI USED		OTAL VOL D IN FIELD (I	Final pH/ mL) Temp	ANALYSIS A METHO		CODE	FLOW RATE (mL per minute)		
	2	HDPE					7.48	COCI		3P			
	2	1						COC 2	a.	1			
	2			HN03				COC.2		W.			
	Ч	W		HN03				COC2		V			
	-		1	1000						-M			
REMARKS	S: -	Sample	d CCR	coc	LICUC	2 8	Rule 27	COCZ	/ COC	3			
MATERIAL	L CODES:	AG = Amber G	lass; CG = 0	Clear Glass;	HDPE =	ligh Density F		LDPE = Low De	1		= Polypropylene;		
SAMPLING	3 EQUIPMENT		PP = After (Thr		tic Pump;	B = Bailer;		der Pump; ES	P = Electric S	Submersible F	oump;		
OTES: 4			PP = Reverse		tic Pump:	SM = Straw	Method (Tubing	Gravity Drain);	O = Other				

The above do not constitute all of the information required by
 Stabilization Criteria for range of variation of last three consecutive readings

SITE NAME:	ISES					SITE LOCATION: 555 Point Ferry Rd						
	mw-8	3/ 7089	>	SAMPLE			7085		DATE: (16/21		
		1		*	PURG	ING DA	TA		18			
WELL	(inches):	TUBING DIAME	G TER (inches):	TOTAL V		(0.0)	STATIC D	DEPTH 31.	2 PUR	RGE PUMP TY	Ëρ	
	.UME PURGE: if applicable)	1 WELL VO	LUME = (TOT	AL WELL DEP	TH - STA	TIC DEPTH T		WELL CAPACI				
FOLIONE	IT VALUE D	URGE: 1 EQL	= (- DUMB VOL	feet -	INC CARACI	feet) X	JBING LENGTH)	gallons/foo		gallons	
	if applicable)	ORGE: TEQU	IIFMENT VOL		allons + (ins/foot X	feet)		gallons :	= gallons	
PUMP OR	TUBING DEPT	Ή .	WELL SCR	REEN INTERVA		PURGIN	0	T BUIDOING		TOTAL VOL		
IN WELL (fo	eet): dedi	cated	DEPTH:	feet to	feet	INITIATE	D AT: 400	ENDED AT:	1438	PURGED (g	allons):	
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	OXYGEN (circle units) mg/L_or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)	
1418	30	PM		31.3	7-11	18.16	1.43	4.04	188	0	none	
1421	m	min		31.3	7.02	1805	1.44	3.96	192	0		
1424		•		31.3	10.97	1796	1.44	3.89	196	0		
1427				31.3	696	17.95	1.44	3.80	197	0	N/	
1												
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016												
Part Commission	EQUIPMENT O	Grants Private " " " "		BP = Bladder P			Submersible Pu		eristaltic Pum		5/8" = 0.016 ther (Specify)	
						LING DA					(0,500.)/	
SAMPLED	BY (PRINT) / A	FFILIATION:		SAMPLER(S)				SAMPLING INITIATED AT	1428	SAMPLIN ENDED A		
PUMP OR	TUBING	ladico	Lad	TUBING		FIELD-FILTERED: Y N FILTER SIZE:						
	NELL (feet):	ledico		MATERIAL CO				on Equipment Ty				
FIELD DEC	ONTAMINATIO	ON: PUM	PYN		TUBING		placed)	DUPLICATE:	Y	(N)		
		R SPECIFICA	TION			TION (includi		INTENDE ANALYSIS A		AMPLING QUIPMENT	SAMPLE PUMP FLOW RATE	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATI USED		'OTAL VOL D IN FIELD (r	nL) Final pH/ nL) Temp	METHO		CODE	(mL per minute)	
	2	HDPE	250	4	7	50	1096	COCI	_ (3P		
	2	1	150			250		(000)				
	7.		750	HN 03		250		COC 2		1		
	И		V 9 0	HN0-2				COC 2		4		
		A		1111/3				1000				
REMARKS:	(Sampl	ock (CP C	001/0	002	& RU	le 22 (002/	(002		
MATERIAL	CODES	AG = Amber (S = Silicone;	Glass; CG = T = Teflon;	O = Other (S	A CONTRACT OF THE PARTY OF THE	ligh Density F	olyethylene;	LDPE = Low De	nsity Polyethy	ylene; PP	= Polypropylene;	
SAMPLING	EQUIPMENT			rough) Peristal		B = Bailer; SM = Straw	BP = Bladd Method (Tubing		iP = Electric S O = Other	Submersible F (Specify)	oump;	
		- '			ارها		1.00.18	- · - · · · · · · · · · · · · · · · · ·		·/		

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

Reductive Control Co	SITE NAME:	ISES				SI ⁻	CATION:	555 P	oint F	OVY	Rd	
DEPTH (mothes)	WELL NO:	mw-	7/70	95	SAMPLE	1110	1-9			DATE:	11612	-(
Total			id.			PURG	ING DA	TA	30.	1	1	
Time	DIAMETER		DIAME	TER (inches)): 🛂 DEPTH	(feet):		STATIC E TO WATE	ER (feet):	PUI OR		BP
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH)+ FLOW CELL VOLUME rect of control with of a pump volume rect of control with volume rec			1 WELL VO		TAL WELL DEF		TIC DEPTH T	OWATER) A	WELL CAPACI	11	ot =	gallor
PURGING PURG			URGE: 1 EQI	JIPMENT VO		•		TY X TI	JBING LENGTH)	+ FLOW CE	LL VOLUME	
COLUME PURGED Gallons PURGED Gallons PURGED Gallons Gallons PURGED Gallons	PUMP OR	TUBING DEPT	icatea	WELL SO	CREEN INTERV	AL	PURGIN	IG 1221	PURGING	1400)	TOTAL VO	LUME
SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATIVE DIDCODE CONTAINERS SOCIETY CONTAINERS SAMPLE		VOLUME PURGED	CUMUL. VOLUME PURGED	PURGE RATE	DEPTH TO WATER	pH (standard	TEMP.	COND. (circle units) µmhos/cm	DISSOLVED OXYGEN (circle units) mg/L or		Turbidity	COLOR
WELL CAPACITY (Gallons Per Foot): 0.78" = 0.02; 1" = 0.04; 1.28" = 0.05(; 2" = 0.15; 3" = 0.37; 4" = 0.65; 8" = 1.02; 8" = 1.47; 12" = 5.88	MAN		3CPr			7.08	1828			184	0	none
NELL CAPACITY (Gallons Per Foot): 0.75" = 0.02,	PK	3	00 my	min	35 10	7.03	18,21	1.26	336		0	1
TUBING SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLING SAMPLED BY (PRINT) / AFFILIATION: SAMPLE SAMPLE CODE SAMPLE CODE CODE CONTAINERS SAMPLING CODE CODE CONTAINERS CODE CODE CODE CONTAINERS CODE	1348				202	7.02	18.18	1.26	3.30	191	0	
TUBING SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLING SAMPLE SAMPLE CODE SAMPLE CODE SAMPLE CODE CODE CONTAINERS CODE CODE CODE CONTAINERS CODE					JU. 6							
TUBING SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLING SAMPLE SAMPLE CODE SAMPLE CODE SAMPLE CODE CODE CONTAINERS CODE CODE CODE CONTAINERS CODE												
TUBING SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLING SAMPLED BY (PRINT) / AFFILIATION: SAMPLE SAMPLE CODE SAMPLE CODE CODE CONTAINERS SAMPLING CODE CODE CONTAINERS CODE CODE CODE CONTAINERS CODE												
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailer, BP = Blaider Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify SAMPLED BY (PRINT) / AFFILIATION: SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLING INITIATED AT: 13 50 SAMPLING SAMPLING SAMPLED BY (PRINT) / AFFILIATION: DEPTH IN WELL (feet): CLOCATE OF TUBING TU				1								
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailer, BP = Blaider Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify SAMPLED BY (PRINT) / AFFILIATION: SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLING INITIATED AT: 13 50 SAMPLING SAMPLING SAMPLED BY (PRINT) / AFFILIATION: DEPTH IN WELL (feet): CLOCATE OF TUBING TU												
TUBING SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLING SAMPLED BY (PRINT) / AFFILIATION: SAMPLE SAMPLE CODE SAMPLE CODE CODE CONTAINERS SAMPLING CODE CODE CONTAINERS CODE CODE CODE CONTAINERS CODE												
SAMPLING DATA SAMPLED BY (PRINT) / AFFILIATION: DYNO WHY G SAMPLER(S) SIGNATURE(S): SAMPLING INITIATED AT: N N SAMPLING INITIATED AT: N SAMPLING INITIATED AT: N SAMPLING INITIATED AT: N SAMPLING INITIATED AT: N INITIATED AT: N N SAMPLING INITIATED AT: N N N SAMPLING INITIATED AT: N N N SAMPLING INITIATED AT: N N N N N SAMPLING INITIATED AT: N N N N N SAMPLING INITIATED AT: N N N N N N N N N N N N N												
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PUMP OR TUBING DEPTH IN WELL (feet): CLOCATE OF TUBING DEPTH IN WELL (feet): CLOCATE O	SAMPLED	BY (PRINT) / A	FFILIATION:		SAMPLER(S)			AIA	CAMPLING	1250	CAMPLIA	10 144
DEPTH IN WELL (feet): CLAR COMMATERIAL CODE: Filtration Equipment Type: FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced) DUPLICATE: Y N SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION (including wet ice) ANALYSIS AND/OR EQUIPMENT CODE CONTAINERS CODE USED ADDED IN FIELD (mL) Temp ANALYSIS AND/OR METHOD CODE (mL) PRESERVATIVE USED ADDED IN FIELD (mL) Temp ANALYSIS AND/OR METHOD CODE (mL) PRESERVATIVE USED ADDED IN FIELD (mL) Temp ANALYSIS AND/OR METHOD CODE (mL) PRESERVATIVE USED ADDED IN FIELD (mL) Temp ANALYSIS AND/OR METHOD CODE (mL) PRESERVATIVE USED ADDED IN FIELD (mL) Temp ANALYSIS AND/OR METHOD CODE (mL) PRESERVATIVE USED ADDED IN FIELD (mL) Temp ANALYSIS AND/OR METHOD CODE (mL) PRESERVATIVE USED ADDED IN FIELD (mL) Temp ANALYSIS AND/OR METHOD CODE (mL) PRESERVATIVE USED ANALYSIS AND/OR METHOD C	DM	3/WH	6				,					
SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION (including wet ice) SAMPLE BREAKERIAL CODE SAMPLE PRESERVATION (including wet ice) ANALYSIS AND/OR EQUIPMENT CODE TOTAL VOL ADDED IN FIELD (mL) Temp ANALYSIS AND/OR METHOD SAMPLING EQUIPMENT CODE FLOW R. (mL per m.) TOTAL VOL Temp ADDED IN FIELD (mL) TOTAL VOL Temp ANALYSIS AND/OR METHOD CODE TOTAL VOL TEMP ANALYSIS AND/OR METHOD CODE TOTAL VOL TEMP ANALYSIS AND/OR METHOD CODE TOTAL VOL TEMP ANALYSIS AND/OR METHOD CODE TOTAL VOL TEMP ANALYSIS AND/OR METHOD CODE TOTAL VOL TEMP ANALYSIS AND/OR METHOD CODE TOTAL VOL TEMP ANALYSIS AND/OR METHOD CODE TOTAL VOL TEMP ANALYSIS AND/OR METHOD CODE TOTAL VOL TEMP ANALYSIS AND/OR METHOD CODE TOTAL VOL TEMP ANALYSIS AND/OR METHOD CODE TOTAL VOL TEMP ANALYSIS AND/OR METHOD CODE TOTAL VOL TEMP ANALYSIS AND/OR METHOD ANALYSIS AND/OR METHOD CODE TOTAL VOL TEMP ANALYSIS AND/OR METHOD CODE TOTAL VOL TEMP ANALYSIS AND/OR METHOD A			ledica	ted		ODE:						
SAMPLE # MATERIAL VOLUME PRESERVATIVE USED TOTAL VOL ADDED IN FIELD (mL) Final RH/ Temp ANALYSIS AND/OR METHOD CODE (mL per m) 2 HDPE 250 250 250 250 250 250 250 250 250 250	FIELD DEC	ONTAMINATIO	ON: PUM	PY	N)	TUBING	Y N (re	placed)	DUPLICATE:	Y	(N)	r
10 10 10 10 10 10 10 10	SAMPLE	#	MATERIAL		PRESERVAT	IVE T	OTAL VOL	Final pH/	ANALYSIS A	ND/OR E	QUIPMENT	SAMPLE PUN FLOW RATE
2 2 250 250 COC2 2 2 250 HN03 250 COC2 4 HN03 COC3 5 HN04 COC2 & Rule 11 COC2 COC3 6 RATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropy	ID CODE				USED							(III.E per IIIIII.
REMARKS: Sampled CCR COC1/COC2 & Rule 12 COC2/COC3 MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropy		2					250		COCZ			
REMARKS: Sampled CCR COC1/COC2 & Rule 12 COC2/COC3 WATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropy		1		250	HNO3		250		COC2	-		
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropy		4			HN03				COC3			
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropy											¥	
	REMARKS:		Sar	npled	CCR	COC 1/	COCZ	& Rule	12 Coc	2/COC	3	×
S = Silicone; T = Teflon; O = Other (Specify)	MATERIAL				•		igh Density P	Polyethylene;	LDPE = Low De	nsity Polyeth	nylene; PP	= Polypropylen
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)	SAMPLING		CODES: A	PP = After (Through) Perista	Itic Pump;						oump;

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

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



SITE NAME:	ISES					TE DCATION:	555	Februs	2a			
WELL NO	: MW-	10/7-10)5	SAMPLE		W-101	7105		DATE:	115/21		
		11			PURC	SING DA	TA			11-1-01		
	R (inches):		TER (inches):		(feet):	41.3 STATIC DEPTH TO WATER (feet): 33.0 PURGE PUMP TYPE OR BAILER:					PERP	
(only fill o	DLUME PURGE ut if applicable)	1 WELL VO	LUME = (TO	TAL WELL DEF	PTH - STA	TIC DEPTH T	O WATER) X	WELL CAPACI	TY			
EQUIPME	NT VOLUME P	URGE: 1 EQ	= (L. = PUMP VOI	feet - UMF + (TUF	BING CAPACI	feet) X	UBING LENGTH)	gallons/foo	t =	gallons	
	ut if applicable)				allons + (ons/foot X	feet)		gallons =	gallons	
PUMP OF	R TUBING DEPT	Holes	J.	REEN INTERV					774	TOTAL VOLU		
IN WELL	(feet): Ald		DEPTH:	feet to	feet	INITIATE		DISSOLVED	170	PURGED (ga	T	
TIME	VOLUME PURGED (gallons)	VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (circle units) µmhos/cm or µS/cm	OXYGEN	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)	
1556		30	n	33.0	7.31	17.55	1.48	0.765	165	0	none	
1559		200		33	7.27	1750	1.42	0.765	169	0		
1602		300	milmu	133	7.74	17.46	1.38	0.766	170	0	-	
	+								_			
			-									
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88												
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016												
	SAMPLING DATA 17051105 +172011070											
SAMPLEC	BY (PRINT) / A	HG	-	SAMPLER(S)	SIGNATURE	JRE(S): SAMPLING SAMPLING INITIATED AT 105 E						
PUMP OR	TUBING WELL (feet):	tedico	uted	TUBING MATERIAL CO	DDE:			P-FILTERED: Y	N	FILTER SIZ	Е: μm	
	CONTAMINATION	ON: PUM	PY	1)	TUBING	Y N (re	placed)	DUPLICATE:	Y	N		
SAM	PLE CONTAINE	R SPECIFICA	TION	SAMPLE	PRESERVA	TION (includi	ng wet ice)	INTENDE			SAMPLE PUMP	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATI USED		OTAL VOL D IN FIELD (r	nL) Final pH/	METHO	D	CODE	FLOW RATE (mL per minute)	
	2	HDPE	250			150	7.24	COCI	_	3P		
	1		250	. 75		150		COCZ				
	1	1	150	HN03		150		COC2				
	Ч			HNO3				COC3		V		
					-							
REMARKS	i	CAN	ooled	CCR	0001	Trac	7 8 0	ile 22	CNCI	1/coc	3	
SAA TERIC	00050									/15/		
MATERIAI		AG = Amber (S = Silicone;	Glass; CG = T = Teflon;	Clear Glass; O = Other (S		ligh Density P	olyethylene;	LDPE = Low Der	nsity Polyethy	lene; PP =	Polypropylene;	
SAMPLING	GEQUIPMENT			hrough) Peristal se Flow Peristal		B = Bailer; SM = Straw	BP = Blado Method (Tubing		P = Electric S O = Other	Submersible Pu (Specify)	mp;	

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:	ISES					TE (555 F	evy R	d				
WELL NO:	mw	-11/7	115	SAMPLE	10-2	1	7115		DATE:	11512	1		
	PURGING DATA												
WELL DIAMETER	(inches):	TUBING DIAMET	ER (inches):	TOTAL \	VATER (feet):	0.1	STATIC I		5 PUR	GE PUMP TY	(PE PIP		
WELL VOL	WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)												
		URGE: 1 EQU	= (IPMENT VOL	. = PUMP VOI	feet – UMF + (TUR	ING CAPACI	feet) X	JBING LENGTH)	gailons/foo		gallons		
	if applicable)				allons + (ons/foot X	,		gallons :	= gallons		
PUMP OR IN WELL (fe	TUBING DEPT	Hated	WELL SCR DEPTH:	REEN INTERV		PURGIN	IG 🙀	PURGING ENDED AT:	1415	TOTAL VOL PURGED (g	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/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	Redox (mV)	Turbidity (NTU)	COLOR / ODOR (describe)		
1350	30	PM		32.5	lo.le2	17.62	0.738	_0	39	0	none		
1353		2000	រា	32.5	6.48	17.58	0.735	0	40	6			
1356		mym	in .	32.5	10.42	17.58	0.133	0	41	0	+		
1001				36.3	10.42	14:30	0.732		12	0			
				1									
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016													
	QUIPMENT C			3P = Bladder P	ump; E	SP = Electric	Submersible Pur		eristaltic Pump		her (Specify)		
SAMPLED	BY (PRINT) / A	EEII IATION		SAMPLER(S)		LING DA	ATA		111 0				
Acres.	18/W+	16		OAMIFEER(O)	SIGNATORE	.(3).		SAMPLING INITIATED AT	1400	SAMPLING ENDED A			
PUMP OR T		tedico		TUBING MATERIAL CO	DDE:			FILTERED: Y	N	FILTER SI	ZE: μm		
	ONTAMINATIO	0.00		1	TUBING	Y N (re	eplaced)	DUPLICATE:	Y	N			
		R SPECIFICA	TION			TION (includi		INTENDE ANALYSIS AI		AMPLING QUIPMENT	SAMPLE PUMP		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATI USED		OTAL VOL D IN FIELD (r	Final pH/ nL) Temp	METHO		CODE	FLOW RATE (mL per minute)		
	2	HDPE					6.42 176	1 COC 1	P	of			
	2						11	COC 2	1				
	2	1		HN03				COC2					
	4	4		HN03				CUUS	-	J.			
REMARKS:	5	ample	d CC	R CO	C1/C	SCZ (& Rul	e 22 C	001/0	003			
MATERIAL		AG = Amber G		Clear Glass;	1	igh Density P	olyethylene;	LDPE = Low De	nsity Polyethy	lene; PP	= Polypropylene;		
SAMPLING	EQUIPMENT (CODES: AI		O = Other (S rough) Peristal Flow Peristal	tic Pump;	B = Bailer;			P = Electric S		ump;		
IOTES: 4	T	IN			ic rump;	JINI - STERW	Method (Tubing	Gravity Drain);	O = Other	(opecity)			

The above do not constitute all of the information required by
 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

	SITE NAME:	ISES					CATION:	555 Fe	my Rd			
	WELL NO:	mw	-13		SAMPLE	ID: MI	N-13			DATE:	15/2	021
-						PURG	ING DA	TA				
	WELL VOL			ER (inches)		(feet): 🧢 💆	36.4	STATIC D TO WATE TO WATER) X	:R (feet): - 7 .	7 PUF OR	RGE PUMP T BAILER:	PPE BP
	(only fill out	if applicable)		= (feet –		feet) X	WELL CAPACI	gallons/foo	ot =	gallons
Ī		NT VOLUME PU if applicable)	JRGE: 1 EQUI	PMENT VO	L. = PUMP VOL	UME + (TUB	ING CAPACI	ITY X TU	IBING LENGTH)			
ŀ	DI IMP OP	TUBING DEPT		WELL SC	= g	allons + (ons/foot X	feet)		gallons TOTAL VO	
	IN WELL (fe		signata	DEPTH:	feet to	feet	INITIATE	IG AT: 1237	ENDED AT:	1305	PURGED (gallons)
	TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (circle units) μπhos/cm or με/cm	OXYGEN (circle units) (mg/L) or % saturation	Redox (mV)	Turbidity (NTU)	COLOR /
	HANAN	30	PM		27.7	6.27	17.75	0.694	0	-28	0	none
	TANKY		200 gar		27.7	6.36	17.74	0.698	- 0	-16	18	
2	259	i.	Paga	N	27.7	6.50	1727	0.701	0	0	0	1
	1302	41.5			27.7	6.52	17.24	0.701	0	6	0	- *
L							41					
ŀ												
-						-						
H								-				
				17								
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; (1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016												
L	PURGING E	EQUIPMENT C	ODES: B=	Bailer; (BP = Bladder F			Submersible Pur	np; PP = Pe	eristaltic Pum	p; O = O	ther (Specify)
Г	SAMPLED E	BY (PRINT) / AI	FFILIATION:	-	SAMPLER(S)		LING DA	ATA	EAMPLING.	10.6	CAMPLIA	10 10 10
L		B/WH	6		7				SAMPLING INITIATED AT		SAMPLIN ENDED A	
	PUMP OR T DEPTH IN V	TUBÍNG NELL (feet):	edicat	ed	TUBING MATERIAL CO	ODE:		FIELD- Filtratio	FILTERED: Y	De:	FILTER S	IZE: μm
		ONTAMINATIO		100	y	TUBING	YN	eplaced)	DUPLICATE:	Υ	(N)	
			R SPECIFICAT	ON		PRESERVA			INTENDE ANALYSIS A		AMPLING QUIPMENT	SAMPLE PUMI FLOW RATE
		# CONTAINERS	CODE	/OLUME	PRESERVAT USED	ADDE	OTAL VOL D IN FIELD (r		METHO	D	CODE	(mL per minute
L		2 Cor		25.250			50	1.52,17	24		3P	
H		2 CO	7 +	45 W	none	2	50					
H		-				-						
H	-	8					×					
F	REMARKS:	C	Sample	d (CR C	001,	COC2	-				
!	MATERIAL		AG = Amber Gl S = Silicone;		= Clear Glass; O = Other (S		igh Density F	Polyethylene;	LDPE = Low De	nsity Polyethy	ylene; PP	= Polypropylene
	SAMPLING	EQUIPMENT (hrough) Perista se Flow Peristal		B = Bailer; SM = Straw	BP Bladde	er Pump; ES		Submersible F	Pump;
	OTEO. 4	Th	RFI o not constit					Method (Tubing (Gravity Drain);	O = Other	(Specify)	

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

WELL NO: MU										
WELL DIAMETER (inches): TUBING DEPTH (feet): DEPTH TO WATER (feet): QR BAILER: BP										
DIAMETER (inches): DEPTH (feet): TO WATER (feet): OR BAILER: OR BAILER: WELL VOLUME PURGE: 1 WELL VOLUME (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) (feet - feet - feet - feet) TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) (feet - feet - feet) TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) (feet - feet) TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) (feet) TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) (feet) Feet to feet										
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) feet feet feet X gallons/foot = gallons/foot gallons/foot gallons/foot gallons/foot gallons/foot gallons/foot gallons/foot TUBING LENGTH) + FLOW CELL VOLUME George Georg										
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME										
Convoice										
PUMP OR TUBING DEPTH 39.0 WELL SCREEN INTERVAL DEPTH: feet to feet DEPTH: PURGED (gallons) DEPTH: PURGED (gallons) DEPTH: PURGED (gallons) PURGED (GICLe units) PURGED (GICLE uni										
TIME VOLUME PURGED (gallons) PURGE (gallons) PURGED PURGED (gallons) PURGED (gallons) PURGED PURGED (gallons) PURGED PUR										
TIME VOLUME PURGED (gallons) VOLUME PURGED (gallons) (ga										
SST 30PM 29.3 6.97 (6.97 0.580 1.94 187 3.4 1857 7.50 1.94 1.94 1.579 1.30 189 2.7 180 3 189 1.24 189 3.4 189 18										
WELL CAPACITY (Galions Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)										
WELL CAPACITY (Galions Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)										
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SAMPLING DATA										
SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMPLED BY (PRINT) / AFFILIATION: SAMPLING INITIATED AT: 1605 SAMPLING INITIATED AT: 1605										
PUMP OR TUBING 10 FIELD-FILTERED: Y (N) FILTER SIZE:										
DEPTH IN WELL (feet): MATERIAL CODE: Filtration Equipment Type:										
FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced) DUPLICATE: Y N										
SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION (including wet ice) INTENDED SAMPLING SAMPLE PUI										
SAMPLE # MATERIAL VOLUME PRESERVATIVE TOTAL VOL Final PH/ METHOD CODE (ML per minu)										
2 HDPE 250 250 6.94 COCI BP										
2 1 250 250 COC2 I										
REMARKS: ho dedicated pump, used rental bladder pump to Sample										
Sampled CCR COCT/COCZ										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene;										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropyler S = Silicone; T = Teflon; O = Other (Specify)										

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



APPENDIX C ALTERNATE SOURCE DEMONSTRATION



Alternate Source Demonstration

2nd Half 2020 Sampling Event

Entergy Independence Plant
Coal Ash Disposal Landfill
Newark, Independence County, Arkansas

July 2021

Prepared For Entergy Arkansas, LLC Independence Plant 555 Point Ferry Road Newark, Arkansas 72562

Michael Amstadt, P.E.

Senior Engineer

Jason S. House Project Manager

Executive Summary

Entergy Arkansas, LLC (Entergy) performed the most recent semiannual detection monitoring sampling (2nd Half 2020) in December 2020 for Cells 12 through 15 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 12 through 15 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, verification samples were collected during March 2021, and the statistical analysis was then re-evaluated for the resampled parameters.

Based on the statistical analyses, the following statistically significant increase (SSI) above background concentrations was identified in one well monitoring the shallow sub horizon of the alluvial aquifer based on intrawell prediction limits:

■ Chloride, sulfate and total dissolved solids (TDS) (MW-8).

The information provided in this report serves as Entergy's alternate source demonstration (ASD) prepared in accordance with 40 CFR 257.94(e)(2) and successfully demonstrates that the SSIs are not due to a release from the CCR Unit to groundwater, but is due to the following:

- Changes in redox conditions inhibiting the reduction of sulfate in the groundwater;
 and/or
- Natural variation in groundwater quality.

Therefore, based on the information provided in this ASD report, Entergy 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.

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Section 1 Introduction

1.1 Background

Entergy Arkansas, LLC (Entergy) operates the Entergy Independence Plant (Plant), a coal-fired power plant, to generate electricity. The Plant is located at 555 Point Ferry Road in Newark, Independence 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 1983. The CADL is a Class 3N non-commercial industrial landfill and operates under Arkansas Department of Energy and Environment, Division of Environmental Quality (ADEQ) Solid Waste Permit No. 0200-S3N-R2.

The CADL consists of a total of 15 disposal cells. There are currently four active CCR disposal cells (Cells 12 through 15) at the CADL 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 17, 2015, and subsequent Final Rules promulgated by the United States Environmental Protection Agency (USEPA). Cells 12 through 15 comprise the CCR management unit (Unit) per the CCR Rule and are the focus of this ASD. The closed and active cells are shown on Figure 2. Cells 1 through 11 were closed under Entergy's ADEQ solid waste management permit prior to the effective date of the CCR Rule. CCR has not been placed in those cells after October 15, 2015.

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

- Beneficial use in local construction projects;
- Beneficial use as road bed 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, Entergy installed a groundwater monitoring system for the CCR Unit and has collected samples from the Certified Monitoring Well Network for CCR constituents and performed statistical analysis of the collected samples. The Certified Monitoring Well Network consists of 11 wells installed into the shallow sub horizon of the alluvial aquifer, which is the uppermost aquifer system underlying the CCR Unit.

Pursuant to 40 CFR 257.91(f) of the CCR Rule, Entergy 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 of the CCR Rule (see Groundwater Monitoring System Certification, TRC, February 26, 2018).

As discussed above, groundwater quality in the shallow sub horizon of the alluvial aquifer is currently being monitored pursuant to the following:

- ADEQ Solid Waste Permit No. 0200-S3N-R2, 11 closed and four active cells of the CADL; and
- CCR Rule, four active CCR disposal cells.

Groundwater monitoring in accordance with the ADEQ solid waste management permit began in 2002. After installation of the CCR groundwater monitoring Certified Monitoring Well Network prior to October 15, 2017 and development of a groundwater sampling and analysis program including selection of statistical procedures to evaluate groundwater data (see Groundwater Sampling and Analysis Plan (FTN, 2017a)), 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 background monitoring samples were analyzed for the Appendix III and the Appendix IV to Part 257 – Constituents for Assessment Monitoring (Appendix IV) per 40 CFR 257.94(b).

Following completion of quarterly background monitoring in June 2017, Entergy 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. Entergy performed the most recent semiannual detection monitoring event (2nd Half 2020) in December 2020 (additional verification sampling was performed in March 2021). 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. In accordance with 40 CFR 257.93(f)(6), Entergy obtained certification by a qualified Arkansas-registered professional engineer 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 2020 semiannual detection monitoring

event. A total of 3 SSIs were identified for three Appendix III constituents: chloride, sulfate and total dissolved solids (TDS). SSIs were identified in MW-8.

1.2 Purpose

Pursuant to 40 CFR 257.94(e)(2), Entergy 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 2020 semiannual detection monitoring event, pursuant to 40 CFR 257.94(e)(2) of the CCR Rule.

1.3 Site Hydrogeology

Historical subsurface investigations at the CADL have identified the following three stratigraphic horizons and hydrogeology:

- **Upper Confining Unit**. A 23 to 35 feet thick upper confining unit consisting of clays and silts is present at the ground surface down to 23 to 35 feet below ground surface (bgs). Vertical hydraulic conductivity of the upper confining unit is estimated to range from 4.0 x 10⁻⁹ to 7.8 x 10⁻⁷ centimeters per second (cm/s) based on flexible wall permeability tests (FTN 2001, FTN and Golder Associates Inc. 2017).
- Alluvial Aquifer. An alluvial aquifer consisting of fine to medium grained sandy sub rounded to sub angular chert gravel with varying amounts of silt and clay is present beneath the upper confining unit. The alluvial aquifer is the uppermost laterally continuous water bearing zone beneath the CADL and the unit and is the uppermost aquifer pursuant to the CCR Rule. The alluvial aquifer extends to depths of 85 to 120 feet bgs. Hydraulic conductivity of the alluvial aquifer is estimated to range from 2.1 x 10-2 to 6 x 10-2 cm/s (FTN 2015).

Historically, groundwater monitoring investigations were performed to evaluate three potential stratigraphic zones of the alluvial aquifer designated as upper, middle, and deep. Based on geochemical fingerprinting investigations, groundwater quality indicated that the alluvial aquifer consists of two distinct sub horizons: shallow (combination of upper and middle stratigraphic zones) and deep. Based on geochemical fingerprinting, the uppermost aquifer for the CCR groundwater monitoring system is the shallow sub horizon. Therefore, the 11 monitoring wells making up the Certified Monitoring Well Network for the CCR Unit are screened within the shallow sub horizon of the alluvial aquifer.

Groundwater in the alluvial aquifer is present under confined conditions (i.e., the hydraulic head in the aquifer is present above the base of the upper confining clays and silts) except during periods of significant fluctuations of water elevation where levels can drop below the lower limits of the confining unit. During the 2nd Half 2020 semiannual detection monitoring event, groundwater flow was to the southeast. However, based on historical groundwater

- monitoring at the CADL, seasonal variations in groundwater flow direction have been documented with flow to the southeast, north, east, south and west.
- **Bedrock**. Pennsylvanian aged bedrock consisting of chert, limestone, sandstone, and carbonaceous shale and associated residuum at the bedrock surface are present beneath the alluvial aquifer (Albin, 1967). The top of the bedrock is approximately 85 to 120 feet bgs.

1.4 General Groundwater Quality

Regionally, groundwater in the alluvial aquifer is a calcium-bicarbonate water type with sodium, magnesium, chloride, sulfate, silica, and iron comprising most of the remaining dissolved ions (Kresse et al. 2014). Elevated concentrations of trace metals including iron, manganese, and arsenic are ubiquitous in the alluvial aquifer and thought to be elevated due to the presence of carbonaceous material within the alluvial aquifer that drives redox-sensitive parameters to dissolve in groundwater (Kresse and Fazio 2003, Gonthier 2003, Kresse and Clark 2008, Welch et al. 2009, Kresse et al. 2014). Most parameters show a wide variability in concentration with respect to lateral and vertical position in the aquifer (Albin et al. 1967, Kresse et al. 2014).

Groundwater quality at the base of the alluvial aquifer can be heavily influenced by the underlying bedrock. The lower portion of the alluvial aquifer has high concentrations of chloride. The chloride concentrations in the deep alluvial aquifer sub horizon range from 1,260 to 2,220 milligrams per liter (mg/L). The source of this brackish to salty water in the deep alluvial aquifer sub horizon is likely related to upwelling of high-salinity groundwater from the underlying bedrock. An example of this type of upwelling has been documented in Morris and Bush (1986), where a similar plume of chloride (with concentrations in the 1,000s of mg/L) originated in the underlying bedrock and migrated up into the overlying alluvial aquifer.

Section 2 Alternate Source Demonstration

Pursuant to 40 CFR 257.94(e)(2), Entergy may demonstrate that a source other than the CCR Unit caused an 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 2020 semiannual detection monitoring event was performed in December 2020 and verification sampling was performed in March 2021. Statistical analysis of the 2nd Half 2020 semiannual detection monitoring data and verification sampling data were performed pursuant to 40 CFR 257.93(f) and (g) and in accordance with the Statistical Methods Certification (TRC 2017b) and the Statistical Analysis Plan (FTN 2017a). Based on intrawell prediction limits statistical analyses, the following 3 SSIs were identified:

■ Chloride, sulfate and TDS (MW-8).

All other Appendix III constituent concentrations were within their intrawell prediction limits in all wells within the CCR Rule Certified Monitoring Well Network.

A discussion for each of the individual SSIs identified for the alluvial aquifer wells and associated evidence demonstrating that the 3 SSIs were not caused by a release from the CCR Unit is provided in the subsections below.

2.1 Chloride at MW-8

The chloride SSI identified at MW-8 is a result of natural variation in groundwater quality. The following evidence supports this determination:

- Chloride was detected at a concentration of 163 mg/L in the December 2020 sample. This concentration exceeds the intrawell prediction limit of 140 mg/L. Chloride concentrations measured in leachate at the CADL were 16 mg/L during the same sampling period. It is therefore unlikely that a leak from the CCR Unit could be responsible for the measured chloride concentrations observed at MW-8.
- As noted in Section 1 above, the chloride concentrations in the deep alluvial aquifer sub horizon range from 1,260 to 2,220 mg/L at the CADL and potential upwelling from this deep sub horizon may have impacted the MW-8 monitoring results.

2.2 Sulfate at MW-8

The sulfate SSI identified at MW-8 is a result of a change in redox conditions and natural variation in groundwater quality. The following evidence supports this determination:

- Sulfate was detected at a concentration of 276 mg/L in the December 2020 sample. This concentration exceeds the intrawell prediction limit of 268.4 mg/L. Oxygen reduction potential measured at MW-8 during the 2nd Half of 2020 indicated redox conditions unfavorable for sulfate reducing bacteria (values greater than 200 millivolts(mV)). Prior to March 2020, all ORP measurements collected at MW-8 during the CCR background and detection monitoring period were below 200 mV indicating more favorable sulfate reducing conditions. Based on this factor, it is likely that a change in redox conditions, and not a release from the CCR Unit, has impacted the MW-8 monitoring results.
 - o Reduction of sulfate to sulfide by anaerobic bacteria results in an increase in the ³⁴S isotope of the residual sulfate. When the ³⁴S/³²S isotope ratio measured at MW-8 is compared against a known reference standard (Vienna-Canyon Diablo Troilite (VCDT)) it has a resulting ratio differential of -19.3 parts per thousand (⁰/₀₀). Samples collected from an additional 6 wells at the CADL had ³⁴S/³²S isotope ratios ranging from -11.4 to 4.2 ⁰/₀₀. This indicates a lower amount of sulfate reduction activity is currently occurring in the MW-8 vicinity than around the rest of the CADL.
- Comparisons of CCR parameter ratios between MW-8 and monitoring wells at the CADL located east of MW-8 (604S, 605S and 701S-R) appear to become more similar after November 2019 (Appendix A). Groundwater flow at the site is variable over time and during 2 of 4 gauging events performed during 2020, groundwater flow was in a western/northwestern direction (towards the CCR Unit) at MW-8. This indicates a potential for groundwater movement from these wells to have impacted the MW-8 monitoring results.
 - o An analysis of groundwater age by sulfur hexafluoride (SF₆), indicates an age range of 15 to 26 years at MW-8. Groundwater age at monitoring wells 604S and 701S were measured to be between 6 to 14 years and 9 to 14 years respectively, indicating a more robust recharge mechanism located east of MW-8 that may be contributing to the western component of the variable flow at the site.

2.3 TDS at MW-8

The TDS SSI identified at MW-8 is a result of a change in redox conditions and natural variation in groundwater quality. The following evidence supports this determination:

- TDS was detected at a concentration of 926 mg/L in the December 2020 sample. This concentration exceeds the intrawell prediction limit of 891 mg/L. Two common components of TDS in groundwater are chloride and sulfate. As noted in sections 2.1 and 2.2, increases in these constituents during the December 2020 monitoring results are more likely a release of natural variation in groundwater quality and a change in redox conditions, respectively.
- Comparisons of CCR parameter ratios between MW-8 and monitoring wells at the CADL located east of MW-8 (604S, 605S and 701S-R) appear to become more similar after November 2019 (Appendix A). Groundwater flow at the site is variable over time and during 2 of 4 gauging events performed during 2020, groundwater flow was in a western/northwestern direction (towards the CCR Unit) at MW-8. This indicates a potential for groundwater movement from these wells to have impacted the MW-8 monitoring results. The TDS measurements of 926 mg/L at MW-8 during the December 2020 monitoring event is within the historical ranges of TDS measurements at 604S and 701S-R. TDS measurements at 604S have historically ranged from 390 mg/L to 980 mg/L while measurements at 701SR have ranged from 623 mg/L to 1030 mg/L.

Section 3 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 and demonstrates that the SSIs determined based on statistical analysis of the 2nd Half 2020 semiannual detection monitoring event performed in December 2020 and subsequent verification sampling in March 2021 are not due to a release from the CCR Unit to the uppermost aquifer system.

Based on the information provided in this ASD report, Entergy 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 4 Certification

I hereby certify that the alternative source demonstration presented within this document for the Entergy Independence Plant Coal Ash Disposal Landfill CCR Unit has been prepared to meet the requirements of Title 40 CFR §257.94(e) 2 of the Federal CCR Rule. This document is accurate and has been prepared in accordance with good engineering practices, including the consideration of applicable industry standards, and with the requirements of Title 40 CFR §257.94(e)2.

Name: Michael J. Amstadt Expiration Date: December 31, 2022

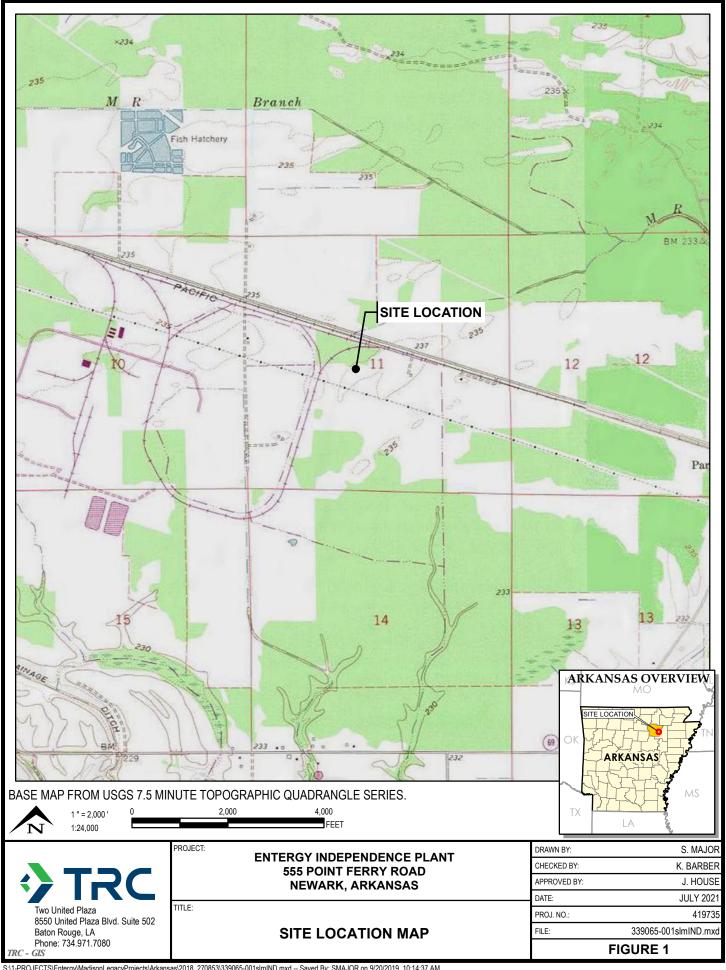
Company: TRC Environmental Corporation Date: July 2, 2021



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APPENDIX A WATER QUALITY PARAMETER COMPARISON CHARTS

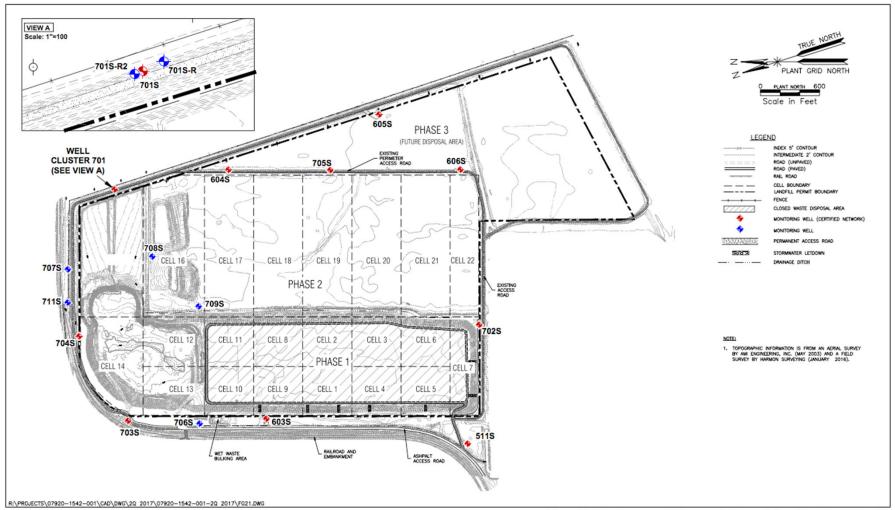
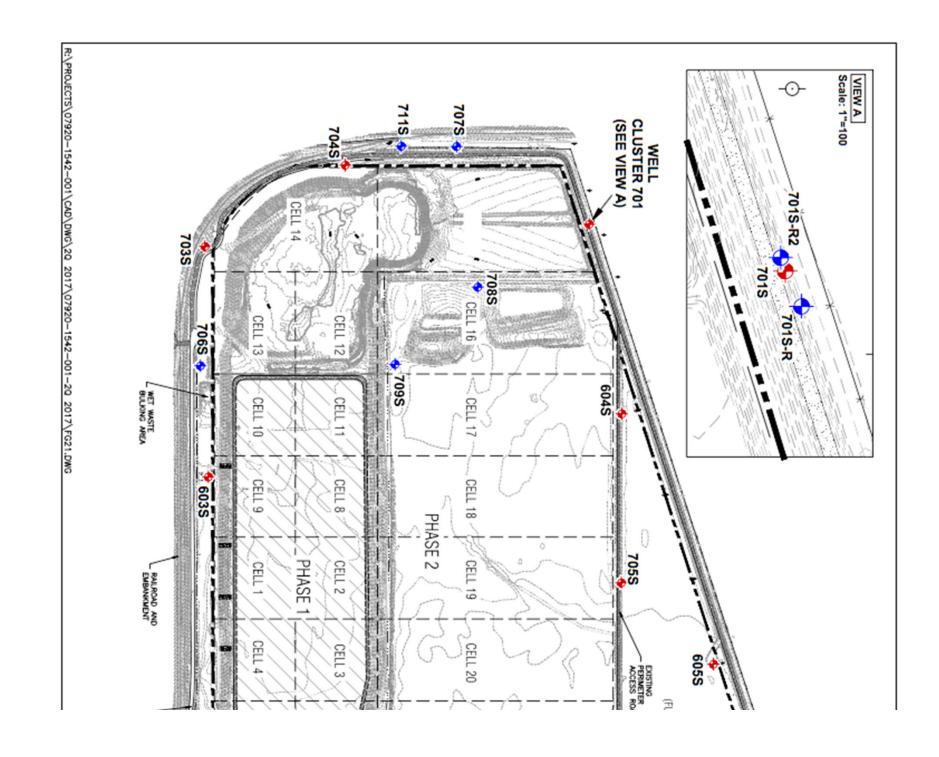


Figure 2.1. Groundwater monitoring network, Entergy Independence Class 3N landfill.





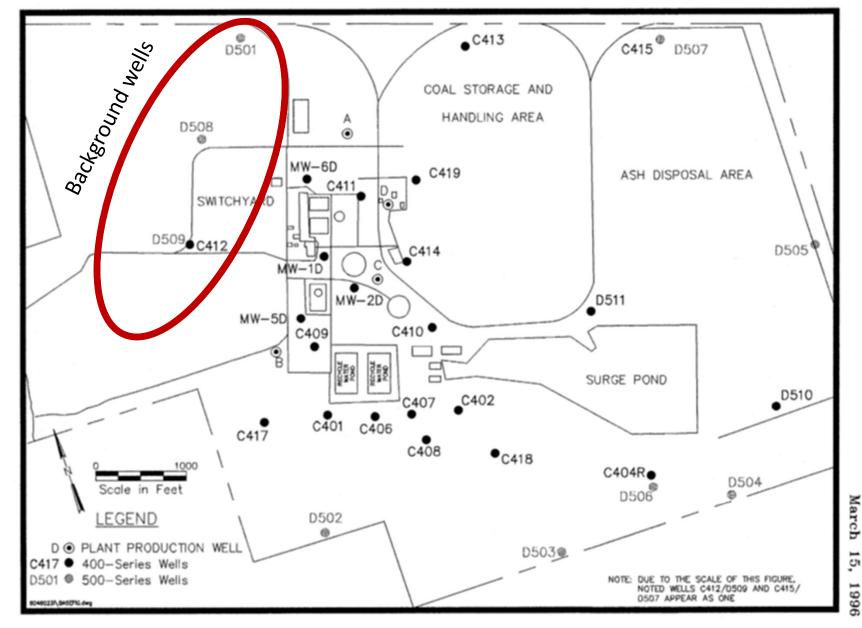


Figure 2.1. Location of Independence Plant groundwater monitoring wells.

