ANALYTICAL REPORT

May 13, 2025

Pace Analytical Services, LLC
2025.05.14 22:00:22 -05'00'
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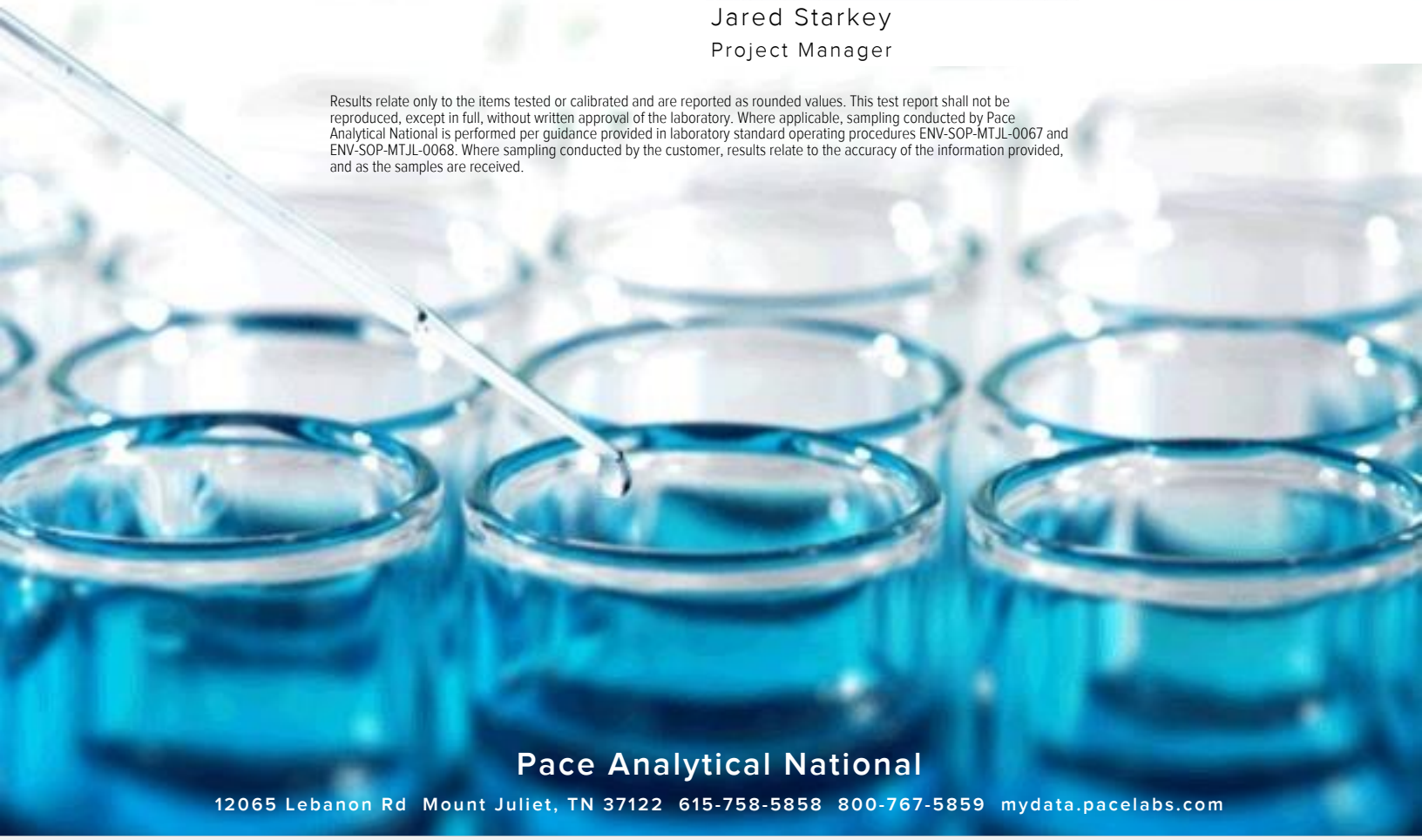
CTEH - ER

Sample Delivery Group:	L1853296
Samples Received:	04/30/2025
Project Number:	PROJ-054017
Description:	Bishop Loss of Containment Incident
Report To:	CTEH
	5120 North Shore Drive
	North Little Rock, AR 72118

Entire Report Reviewed By:

Jared Starkey
Project Manager

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



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

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GACO0429W002.5 L1853296-01

Collected by: Pressley Alaniz
Collected date/time: 04/29/25 08:29
Received date/time: 04/30/25 11:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2512694	1	05/12/25 22:57	05/12/25 22:57	AEC	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2503835	1	04/30/25 15:54	04/30/25 20:42	JAC	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 D-2020	WG2503977	1	04/30/25 17:22	04/30/25 18:27	BDC	Mt. Juliet, TN
Wet Chemistry by Method 130.1	WG2506066	5	05/05/25 11:30	05/06/25 19:33	CAT	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2504762	1	05/01/25 19:14	05/01/25 19:14	KRB	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2505614	5	05/03/25 02:51	05/03/25 02:51	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2505614	50	05/03/25 03:44	05/03/25 03:44	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG2504752	1	05/01/25 19:29	05/01/25 19:29	RTW	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG2512694	1	05/12/25 10:10	05/12/25 22:57	AEC	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG2508424	1	05/06/25 07:51	05/08/25 12:30	AEC	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2503765	1	04/30/25 23:50	04/30/25 23:50	TMH	Mt. Juliet, TN
Wet Chemistry by Method 5540 C-2011	WG2503991	1	04/30/25 17:30	04/30/25 21:04	JEG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2503795	1	05/02/25 11:32	05/02/25 11:32	SET	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2504776	1	05/01/25 19:15	05/01/25 19:15	KRB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2507706	1	05/06/25 10:20	05/06/25 17:14	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2507706	5	05/06/25 10:20	05/06/25 19:05	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2508238	1	05/07/25 22:42	05/08/25 00:46	LD	Mt. Juliet, TN

GACO0429W003 L1853296-02

Collected by: Pressley Alaniz
Collected date/time: 04/29/25 09:16
Received date/time: 04/30/25 11:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2512305	1	05/11/25 18:05	05/11/25 18:05	AEC	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG2503835	1	04/30/25 15:54	04/30/25 20:42	JAC	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 D-2020	WG2503977	1	04/30/25 17:22	04/30/25 18:27	BDC	Mt. Juliet, TN
Wet Chemistry by Method 130.1	WG2506066	5	05/05/25 11:30	05/06/25 19:43	CAT	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2504762	1	05/01/25 19:18	05/01/25 19:18	KRB	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2503726	5	04/30/25 21:27	04/30/25 21:27	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG2503726	50	04/30/25 23:12	04/30/25 23:12	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG2504752	1	05/01/25 19:35	05/01/25 19:35	RTW	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG2512305	1	05/11/25 07:47	05/11/25 18:05	AEC	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG2508424	1	05/06/25 07:51	05/08/25 12:34	AEC	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2014	WG2503765	1	05/01/25 00:38	05/01/25 00:38	TMH	Mt. Juliet, TN
Wet Chemistry by Method 5540 C-2011	WG2503991	1	04/30/25 17:30	04/30/25 21:05	JEG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2503795	1	05/02/25 12:02	05/02/25 12:02	SET	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2504776	1	05/01/25 19:15	05/01/25 19:15	KRB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2507706	1	05/06/25 10:20	05/06/25 18:11	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2508238	1	05/07/25 22:42	05/08/25 01:51	LD	Mt. Juliet, TN

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. 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.

Jared Starkey
Project Manager

Sample Delivery Group (SDG) Narrative

The following samples were prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.

Batch	Method	Lab Sample ID
WG2504776	9040C	L1853296-01, 02
WG2505614	300.0	L1853296-01

Wet Chemistry by Method 130.1

The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).

Batch	Lab Sample ID	Analytes
WG2506066	(MS) R4210725-3	Hardness (colorimetric) as CaCO3
WG2506066	(MSD) R4210725-4	Hardness (colorimetric) as CaCO3

Wet Chemistry by Method 300.0

The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).

Batch	Lab Sample ID	Analytes
WG2505614	(MS) R4209272-4	Sulfate
WG2505614	(MSD) R4209272-5	Sulfate

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

Batch	Lab Sample ID	Analytes
WG2503726	(DUP) R4208827-3	Fluoride

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2503726	(DUP) R4208827-4	Sulfate

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG2503726	(MS) R4208827-5, (MSD) R4208827-6	Bromide, Chloride, Fluoride, Nitrate as (N) and Nitrite as (N)
WG2505614	(MS) R4209272-4, (MSD) R4209272-5, L1853296-01	Chloride and Nitrate as (N)

Wet Chemistry by Method 300.0

The sample concentration is too high to evaluate accurate spike recoveries.

Batch	Lab Sample ID	Analytes
WG2505614	(MS) R4209272-4, (MSD) R4209272-5	Sulfate

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2503726	(MSD) R4208827-6	Bromide

Wet Chemistry by Method 351.2

The sample matrix interfered with the ability to make any accurate determination; spike value is high.

Batch	Lab Sample ID	Analytes
WG2512305	(MS) R4213065-4, (MSD) R4213065-5	Kjeldahl Nitrogen, TKN
WG2512694	(MSD) R4213699-10	Kjeldahl Nitrogen, TKN

The sample concentration is too high to evaluate accurate spike recoveries.

Batch	Lab Sample ID	Analytes
WG2512694	(MS) R4213699-14	Kjeldahl Nitrogen, TKN

Metals (ICPMS) by Method 6020B

The sample concentration is too high to evaluate accurate spike recoveries.

Batch	Lab Sample ID	Analytes
WG2508238	(MS) R4211442-4, (MSD) R4211442-5, L1853296-01	Magnesium

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Total Nitrogen	5450		250	1	05/12/2025 22:57	WG2512694

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	2800000		50000	1	04/30/2025 20:42	WG2503835

Gravimetric Analysis by Method 2540 D-2020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Suspended Solids	7500		2500	1	04/30/2025 18:27	WG2503977

Wet Chemistry by Method 130.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Hardness (colorimetric) as CaCO3	1420000		150000	5	05/06/2025 19:33	WG2506066

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Alkalinity	396000		20000	1	05/01/2025 19:14	WG2504762

Sample Narrative:

L1853296-01 WG2504762: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Bromide	ND		5000	5	05/03/2025 02:51	WG2505614
Chloride	104000	J6	5000	5	05/03/2025 02:51	WG2505614
Fluoride	1190		750	5	05/03/2025 02:51	WG2505614
Nitrate as (N)	5920	J6 T8	500	5	05/03/2025 02:51	WG2505614
Nitrite as (N)	ND	T8	500	5	05/03/2025 02:51	WG2505614
Sulfate	1480000		250000	50	05/03/2025 03:44	WG2505614

Sample Narrative:

L1853296-01 WG2505614: Dilution due to matrix impact on instrumentation at lower dilution

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ammonia Nitrogen	143		100	1	05/01/2025 19:29	WG2504752

Wet Chemistry by Method 351.2

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Kjeldahl Nitrogen, TKN	1870		250	1	05/12/2025 22:57	WG2512694

Wet Chemistry by Method 365.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Phosphorus,Total	126		100	1	05/08/2025 12:30	WG2508424

Wet Chemistry by Method 5310 B-2014

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	14400		1000	1	04/30/2025 23:50	WG2503765

Wet Chemistry by Method 5540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
MBAS	ND		100	1	04/30/2025 21:04	WG2503991

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Hexavalent Chromium	ND		0.500	1	05/02/2025 11:32	WG2503795

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.19	T8	1	05/01/2025 19:15	WG2504776

Sample Narrative:

L1853296-01 WG2504776: 8.19 at 19.4C

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Aluminum,Dissolved	ND		100	1	05/06/2025 17:14	WG2507706
Arsenic,Dissolved	ND		2.00	1	05/06/2025 17:14	WG2507706
Cadmium,Dissolved	ND		1.00	1	05/06/2025 17:14	WG2507706
Calcium	270000		1000	1	05/08/2025 00:46	WG2508238
Chromium,Dissolved	ND		2.00	1	05/06/2025 17:14	WG2507706
Lead,Dissolved	ND		2.00	1	05/06/2025 17:14	WG2507706
Magnesium	172000	V	1000	1	05/08/2025 00:46	WG2508238
Manganese,Dissolved	520		25.0	5	05/06/2025 19:05	WG2507706
Nickel,Dissolved	4.05		2.00	1	05/06/2025 17:14	WG2507706
Selenium,Dissolved	7.76		2.00	1	05/06/2025 17:14	WG2507706
Silver,Dissolved	ND		2.00	1	05/06/2025 17:14	WG2507706
Zinc,Dissolved	ND		25.0	1	05/06/2025 17:14	WG2507706

Calculated Results

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Total Nitrogen	10300		250	1	05/11/2025 18:05	WG2512305

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	3290000		50000	1	04/30/2025 20:42	WG2503835

Gravimetric Analysis by Method 2540 D-2020

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Suspended Solids	6000		2500	1	04/30/2025 18:27	WG2503977

Wet Chemistry by Method 130.1

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Hardness (colorimetric) as CaCO3	1400000		150000	5	05/06/2025 19:43	WG2506066

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	374000		20000	1	05/01/2025 19:18	WG2504762

Sample Narrative:

L1853296-02 WG2504762: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 300.0

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Bromide	ND		5000	5	04/30/2025 21:27	WG2503726
Chloride	132000		5000	5	04/30/2025 21:27	WG2503726
Fluoride	1280		750	5	04/30/2025 21:27	WG2503726
Nitrate as (N)	8920		500	5	04/30/2025 21:27	WG2503726
Nitrite as (N)	ND		500	5	04/30/2025 21:27	WG2503726
Sulfate	1720000		250000	50	04/30/2025 23:12	WG2503726

Wet Chemistry by Method 350.1

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	ND		100	1	05/01/2025 19:35	WG2504752

Wet Chemistry by Method 351.2

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Kjeldahl Nitrogen, TKN	1380		250	1	05/11/2025 18:05	WG2512305

Wet Chemistry by Method 365.4

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Phosphorus,Total	122		100	1	05/08/2025 12:34	WG2508424

Wet Chemistry by Method 5310 B-2014

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	8150		1000	1	05/01/2025 00:38	WG2503765

Wet Chemistry by Method 5540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
MBAS	ND		100	1	04/30/2025 21:05	WG2503991

Wet Chemistry by Method 7199

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.500	1	05/02/2025 12:02	WG2503795

Wet Chemistry by Method 9040C

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.10	T8	1	05/01/2025 19:15	WG2504776

Sample Narrative:

L1853296-02 WG2504776: 8.1 at 19.5C

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	ND		100	1	05/06/2025 18:11	WG2507706
Arsenic,Dissolved	ND		2.00	1	05/06/2025 18:11	WG2507706
Cadmium,Dissolved	ND		1.00	1	05/06/2025 18:11	WG2507706
Calcium	245000		1000	1	05/08/2025 01:51	WG2508238
Chromium,Dissolved	ND		2.00	1	05/06/2025 18:11	WG2507706
Lead,Dissolved	ND		2.00	1	05/06/2025 18:11	WG2507706
Magnesium	185000		1000	1	05/08/2025 01:51	WG2508238
Manganese,Dissolved	231		5.00	1	05/06/2025 18:11	WG2507706
Nickel,Dissolved	2.68		2.00	1	05/06/2025 18:11	WG2507706
Selenium,Dissolved	11.7		2.00	1	05/06/2025 18:11	WG2507706
Silver,Dissolved	ND		2.00	1	05/06/2025 18:11	WG2507706
Zinc,Dissolved	ND		25.0	1	05/06/2025 18:11	WG2507706

Method Blank (MB)

(MB) R4209200-1 04/30/25 20:42

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

L1853119-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1853119-03 04/30/25 20:42 • (DUP) R4209200-3 04/30/25 20:42

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	926000	934000	1	0.860		10

L1853313-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1853313-02 04/30/25 20:42 • (DUP) R4209200-4 04/30/25 20:42

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	3010000	3020000	1	0.498		10

Laboratory Control Sample (LCS)

(LCS) R4209200-2 04/30/25 20:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	8730000	99.2	90.0-110	

Method Blank (MB)

(MB) R4208247-1 04/30/25 18:27

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Suspended Solids	U		283	2500

L1852682-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1852682-01 04/30/25 18:27 • (DUP) R4208247-3 04/30/25 18:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Suspended Solids	1160000	1140000	1	1.39		10

L1853400-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1853400-05 04/30/25 18:27 • (DUP) R4208247-4 05/01/25 08:12

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Suspended Solids	106000	106000	1	0.378		10

Laboratory Control Sample (LCS)

(LCS) R4208247-2 04/30/25 18:27

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Suspended Solids	773000	824000	107	85.0-115	

Method Blank (MB)

(MB) R4210725-1 05/06/25 19:08

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hardness (colorimetric) as CaCO3	U		10600	30000

Laboratory Control Sample (LCS)

(LCS) R4210725-2 05/06/25 19:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hardness (colorimetric) as CaCO3	200000	203000	102	85.0-115	

L1853296-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1853296-01 05/06/25 19:33 • (MS) R4210725-3 05/06/25 19:35 • (MSD) R4210725-4 05/06/25 19:38

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hardness (colorimetric) as CaCO3	1000000	1420000	2330000	2380000	91.0	96.5	5	80.0-120	E	E	2.34	20

Method Blank (MB)

(MB) R4208539-2 05/01/25 16:52

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		4750	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1853287-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1853287-01 05/01/25 17:02 • (DUP) R4208539-3 05/01/25 17:06

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	425000	424000	1	0.111		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5 Headspace

L1853313-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1853313-02 05/01/25 20:08 • (DUP) R4208539-4 05/01/25 20:12

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	391000	391000	1	0.0335		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5 Headspace

Laboratory Control Sample (LCS)

(LCS) R4208539-1 05/01/25 16:46

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	101000	101	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R4208827-1 04/30/25 20:49

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Bromide	U		680	1000
Chloride	U		547	1000
Fluoride	U		76.1	150
Nitrate as (N)	U		88.4	100
Nitrite as (N)	U		79.4	100
Sulfate	U		637	5000

L1853296-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1853296-01 04/30/25 21:14 • (DUP) R4208827-3 04/30/25 23:50

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Bromide	ND	ND	5	0.000		15
Chloride	99700	109000	5	8.78		15
Fluoride	996	1270	5	24.1	P1	15
Nitrate as (N)	3580	3920	5	9.18		15
Nitrite as (N)	ND	ND	5	0.000		15

L1853296-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1853296-01 04/30/25 22:59 • (DUP) R4208827-4 05/01/25 00:03

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	1410000	1800000	50	24.4	J3	15

Laboratory Control Sample (LCS)

(LCS) R4208827-2 04/30/25 21:02

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromide	40000	37400	93.5	90.0-110	
Chloride	40000	36600	91.4	90.0-110	
Fluoride	8000	7690	96.1	90.0-110	
Nitrate as (N)	8000	7690	96.1	90.0-110	
Nitrite as (N)	8000	7740	96.8	90.0-110	
Sulfate	40000	37900	94.7	90.0-110	

L1853296-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1853296-01 04/30/25 21:14 • (MS) R4208827-5 05/01/25 00:16 • (MSD) R4208827-6 05/01/25 00:29

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromide	40000	ND	28100	33000	70.3	82.4	5	90.0-110	J6	J3 J6	15.8	15
Chloride	40000	99700	104000	118000	11.4	44.6	5	90.0-110	J6	J6	12.0	15
Fluoride	8000	996	7640	8610	83.0	95.1	5	90.0-110	J6		11.9	15
Nitrate as (N)	8000	3580	9010	10400	67.9	84.9	5	90.0-110	J6	J6	14.1	15
Nitrite as (N)	8000	ND	6970	8110	87.2	101	5	90.0-110	J6		15.0	15

Method Blank (MB)

(MB) R4209272-1 05/03/25 02:11

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Bromide	U		680	1000
Chloride	U		547	1000
Fluoride	U		76.1	150
Nitrate as (N)	U		88.4	100
Nitrite as (N)	U		79.4	100
Sulfate	U		637	5000

L1853296-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1853296-01 05/03/25 02:51 • (DUP) R4209272-3 05/03/25 03:04

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Bromide	ND	ND	5	0.000		15
Chloride	104000	104000	5	0.595		15
Fluoride	1190	1350	5	12.6		15
Nitrate as (N)	5920	6070	5	2.42		15
Nitrite as (N)	ND	ND	5	0.000		15

Sample Narrative:

OS: Dilution due to matrix impact on instrumentation at lower dilution

L1853296-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1853296-01 05/03/25 03:44 • (DUP) R4209272-6 05/03/25 03:58

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	1480000	1500000	50	1.53		15

Laboratory Control Sample (LCS)

(LCS) R4209272-2 05/03/25 02:24

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromide	40000	41600	104	90.0-110	
Chloride	40000	39100	97.7	90.0-110	
Fluoride	8000	7980	99.7	90.0-110	
Nitrate as (N)	8000	8400	105	90.0-110	

Laboratory Control Sample (LCS)

(LCS) R4209272-2 05/03/25 02:24

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Nitrite as (N)	8000	8130	102	90.0-110	
Sulfate	40000	41500	104	90.0-110	

L1853296-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1853296-01 05/03/25 02:51 • (MS) R4209272-4 05/03/25 03:18 • (MSD) R4209272-5 05/03/25 03:31

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromide	40000	ND	37000	36400	92.5	90.9	5	90.0-110			1.69	15
Chloride	40000	104000	121000	117000	43.7	35.0	5	90.0-110	J6	J6	2.92	15
Fluoride	8000	1190	9160	8940	99.6	96.8	5	90.0-110			2.47	15
Nitrate as (N)	8000	5920	12500	12100	82.9	77.1	5	90.0-110	J6	J6	3.71	15
Nitrite as (N)	8000	ND	8600	8410	108	105	5	90.0-110			2.26	15
Sulfate	40000	1450000	1180000	1150000	0.000	0.000	5	90.0-110	E V	E V	2.99	15

Sample Narrative:

OS: Dilution due to matrix impact on instrumentation at lower dilution

Method Blank (MB)

(MB) R4208517-1 05/01/25 18:26

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ammonia Nitrogen	U		53.9	100

L1852675-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1852675-02 05/01/25 18:29 • (DUP) R4208517-3 05/01/25 18:31

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	ND	ND	1	0.000		10

L1853296-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1853296-01 05/01/25 19:29 • (DUP) R4208517-9 05/01/25 19:31

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	143	142	1	0.702		10

Laboratory Control Sample (LCS)

(LCS) R4208517-2 05/01/25 18:28

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ammonia Nitrogen	7500	7740	103	90.0-110	

L1852675-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1852675-02 05/01/25 18:29 • (MS) R4208517-4 05/01/25 18:32 • (MSD) R4208517-5 05/01/25 18:34

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ammonia Nitrogen	5000	ND	5150	5080	103	102	1	90.0-110			1.33	10

L1853296-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1853296-01 05/01/25 19:29 • (MS) R4208517-10 05/01/25 19:32 • (MSD) R4208517-11 05/01/25 19:34

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ammonia Nitrogen	5000	143	4950	4860	96.1	94.3	1	90.0-110			1.90	10

Method Blank (MB)

(MB) R4213065-1 05/11/25 18:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Kjeldahl Nitrogen, TKN	U		131	250

L1853672-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1853672-01 05/11/25 18:06 • (DUP) R4213065-3 05/11/25 18:07

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Kjeldahl Nitrogen, TKN	7750	8160	1	5.21		20

Laboratory Control Sample (LCS)

(LCS) R4213065-2 05/11/25 18:04

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Kjeldahl Nitrogen, TKN	12000	12200	102	90.0-110	

L1853672-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1853672-01 05/11/25 18:06 • (MS) R4213065-4 05/11/25 18:08 • (MSD) R4213065-5 05/11/25 18:09

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Kjeldahl Nitrogen, TKN	5000	7750	14100	14000	127	125	1	90.0-110	J5	J5	0.792	20

Method Blank (MB)

(MB) R4213699-1 05/12/25 22:32

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Kjeldahl Nitrogen, TKN	168	J	131	250

Laboratory Control Sample (LCS)

(LCS) R4213699-3 05/12/25 22:33

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Kjeldahl Nitrogen, TKN	12000	10900	90.9	90.0-110	

L1853173-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1853173-01 05/12/25 22:41 • (MS) R4213699-8 05/12/25 22:41 • (MSD) R4213699-10 05/12/25 22:43

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Kjeldahl Nitrogen, TKN	5000	7050	12400	13100	106	121	1	90.0-110		J5	5.62	20

L1853159-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1853159-01 05/12/25 23:05 • (MS) R4213699-14 05/12/25 23:07

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Kjeldahl Nitrogen, TKN	5000	23700	31100	147	5	90.0-110	V

Method Blank (MB)

(MB) R4211307-1 05/07/25 17:09

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Phosphorus,Total	U		64.2	100

L1853159-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1853159-01 05/07/25 17:12 • (DUP) R4211307-3 05/07/25 17:14

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Phosphorus,Total	2360	2350	1	0.425		20

L1853167-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1853167-01 05/07/25 17:16 • (DUP) R4211307-4 05/07/25 17:18

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Phosphorus,Total	ND	ND	1	3.51		20

Laboratory Control Sample (LCS)

(LCS) R4211307-2 05/07/25 17:10

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Phosphorus,Total	2540	2470	97.2	85.0-115	

L1853296-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1853296-01 05/08/25 12:30 • (MS) R4211307-7 05/08/25 12:32 • (MSD) R4211307-8 05/08/25 12:33

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Phosphorus,Total	2500	126	2460	2530	93.4	96.2	1	90.0-110			2.81	20

Method Blank (MB)

(MB) R4208015-2 04/30/25 17:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	U		495	1000

L1853097-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1853097-04 04/30/25 18:39 • (DUP) R4208015-6 04/30/25 19:44

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	2030	1660	1	19.9		20

L1853168-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1853168-04 04/30/25 22:10 • (DUP) R4208015-7 04/30/25 22:24

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	1780	1760	1	1.19		20

Laboratory Control Sample (LCS)

(LCS) R4208015-1 04/30/25 16:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	24900	99.4	80.0-120	

L1853097-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1853097-02 04/30/25 17:17 • (MS) R4208015-3 04/30/25 17:33 • (MSD) R4208015-4 04/30/25 17:49

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	2370	27600	27500	101	101	1	75.0-125			0.327	20

L1853296-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1853296-01 04/30/25 23:50 • (MS) R4208015-8 05/01/25 00:07 • (MSD) R4208015-9 05/01/25 00:24

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	14400	39900	39700	102	101	1	75.0-125			0.503	20

Method Blank (MB)

(MB) R4207907-1 04/30/25 20:58

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
MBAS	U		19.0	100

L1853287-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1853287-01 04/30/25 21:02 • (DUP) R4207907-3 04/30/25 21:02

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
MBAS	ND	ND	1	1.87		20

Laboratory Control Sample (LCS)

(LCS) R4207907-2 04/30/25 20:58

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
MBAS	1000	1010	101	85.0-115	

L1853296-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1853296-01 04/30/25 21:04 • (MS) R4207907-4 04/30/25 21:05 • (MSD) R4207907-5 04/30/25 21:05

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
MBAS	1000	ND	914	928	88.4	89.8	1	85.0-115			1.52	20

QUALITY CONTROL SUMMARY

L1853296-01,02

Method Blank (MB)

(MB) R4210700-1 05/02/25 10:22

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexavalent Chromium	U		0.100	0.500

L1853313-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1853313-01 05/02/25 12:31 • (DUP) R4210700-5 05/02/25 12:41

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	ND	ND	1	0.000		20

L1853978-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1853978-01 05/02/25 16:05 • (DUP) R4210700-7 05/02/25 16:14

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4210700-2 05/02/25 10:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	2.00	1.99	99.7	90.0-110	

L1853296-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1853296-01 05/02/25 11:32 • (MS) R4210700-3 05/02/25 11:42 • (MSD) R4210700-4 05/02/25 11:52

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium	50.0	ND	47.8	47.8	95.6	95.7	1	90.0-110			0.0749	20

L1853367-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1853367-02 05/02/25 13:10 • (MS) R4210700-6 05/02/25 13:20

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	50.0	ND	47.6	95.3	1	90.0-110	

L1853287-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1853287-01 05/01/25 19:15 • (DUP) R4208553-2 05/01/25 19:15

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

Sample Narrative:

OS: 8.14 at 18.9C

DUP: 8.14 at 18.9C

L1853701-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1853701-01 05/01/25 19:15 • (DUP) R4208553-3 05/01/25 19:15

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	5.70	5.71	1	0.175		1

Sample Narrative:

OS: 5.7 at 19.8C

DUP: 5.71 at 19.8C

Laboratory Control Sample (LCS)

(LCS) R4208553-1 05/01/25 19:15

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

Sample Narrative:

LCS: 10 at 20.8C

Method Blank (MB)

(MB) R4210649-1 05/06/25 17:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Aluminum,Dissolved	U		16.0	100
Arsenic,Dissolved	U		0.120	2.00
Cadmium,Dissolved	U		0.120	1.00
Chromium,Dissolved	U		0.900	2.00
Lead,Dissolved	U		0.500	2.00
Manganese,Dissolved	U		0.700	5.00
Nickel,Dissolved	U		0.500	2.00
Selenium,Dissolved	U		0.250	2.00
Silver,Dissolved	U		0.110	2.00
Zinc,Dissolved	U		4.00	25.0

Laboratory Control Sample (LCS)

(LCS) R4210649-2 05/06/25 17:06

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum,Dissolved	1000	1010	101	80.0-120	
Arsenic,Dissolved	50.0	49.7	99.4	80.0-120	
Cadmium,Dissolved	50.0	52.8	106	80.0-120	
Chromium,Dissolved	50.0	51.8	104	80.0-120	
Lead,Dissolved	50.0	50.2	100	80.0-120	
Manganese,Dissolved	50.0	51.7	103	80.0-120	
Nickel,Dissolved	50.0	52.8	106	80.0-120	
Selenium,Dissolved	50.0	49.6	99.3	80.0-120	
Silver,Dissolved	50.0	52.0	104	80.0-120	
Zinc,Dissolved	50.0	56.7	113	80.0-120	

L1853296-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1853296-01 05/06/25 17:14 • (MS) R4210649-4 05/06/25 17:17 • (MSD) R4210649-5 05/06/25 17:20

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum,Dissolved	1000	ND	1000	980	100	98.0	1	75.0-125			2.30	20
Arsenic,Dissolved	50.0	ND	52.4	52.4	101	101	1	75.0-125			0.0973	20
Cadmium,Dissolved	50.0	ND	51.9	51.4	104	103	1	75.0-125			0.951	20
Chromium,Dissolved	50.0	ND	50.3	51.5	101	103	1	75.0-125			2.36	20
Lead,Dissolved	50.0	ND	49.7	50.0	99.4	100	1	75.0-125			0.640	20
Manganese,Dissolved	50.0	533	572	577	78.5	88.5	1	75.0-125			0.876	20
Nickel,Dissolved	50.0	4.05	53.7	53.9	99.3	99.6	1	75.0-125			0.342	20

L1853296-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1853296-01 05/06/25 17:14 • (MS) R4210649-4 05/06/25 17:17 • (MSD) R4210649-5 05/06/25 17:20

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Selenium,Dissolved	50.0	7.76	59.2	60.0	103	104	1	75.0-125			1.36	20
Silver,Dissolved	50.0	ND	51.3	51.9	103	104	1	75.0-125			1.07	20
Zinc,Dissolved	50.0	ND	53.0	52.1	97.6	95.8	1	75.0-125			1.67	20

QUALITY CONTROL SUMMARY

L1853296-01,02

Method Blank (MB)

(MB) R4211442-1 05/08/25 00:39

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Calcium	U		92.5	1000
Magnesium	U		82.7	1000

Laboratory Control Sample (LCS)

(LCS) R4211442-2 05/08/25 00:42

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Calcium	5000	4930	98.5	80.0-120	
Magnesium	5000	4740	94.9	80.0-120	

L1853296-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1853296-01 05/08/25 00:46 • (MS) R4211442-4 05/08/25 00:52 • (MSD) R4211442-5 05/08/25 00:55

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Calcium	5000	270000	275000	276000	92.1	114	1	75.0-125			0.402	20
Magnesium	5000	172000	171000	173000	0.000	23.9	1	75.0-125	V	V	0.987	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
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.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

Company Name/Address:
CTEH - ER

5120 North Shore Drive
North Little Rock, AR 72118

Billing Information:
Accounts Payable
10700 Prarie Lakes Drive
Eden Prairie, MN 55344

Report to:
CTEH 501-801-8500

Email To:
labresults@cteh.com; kylelawrence@cteh.com; ecatlin@cteh.com; ahenault@cteh.com; tmcmullin@cteh.com; mklinkerman@cteh.com

Project Description:
Bishop Loss of Containment Incident

City/State Collected: **Galeton, CO**

Please Circle: PT (MT) CT ET

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

Client Project #: **PROJ-054017**

Lab Project #: **CTEHER-054017**

Collected by (print): Presley Alanis

Collected by (signature):

Site/Facility ID #:

P.O. #:

Rush? (Lab MUST Be Notified)
____Same Day ____Five Day
____Next Day ____5 Day (Rad Only)
____Two Day ____10 Day (Rad Only)
____Three Day ____STD TaT

Quote #

Date Results Needed

Immediately Packed on Ice N____ Y **X**

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	*Anions / Alkalinity 250ml HDPE-NoPres	CR6ICFFP 50mlTube/plungerPres	Cations / Hardness 250ml HDPE-HNO3	Diss. Metals 200.8 250ml HDPE-HNO3	MBAS 500ml HDPE-NoPres	PT,TKN 250ml HDPE-H2SO4	RA-226, RA-228, KPA-U 1L-HDPE-Add-HNO3	TDS 1L-HDPE NoPres	TOC 250ml Amb-HCl	TSS 1L-HDPE NoPres	Remarks	Sample # (lab only)
									2	2		2			2			
GACO0429W002.5	G	SW	-	4/29/2025	0829	9	X	X	X	X	X	X	-	X	X	X		-01
GACO0429W002.5MS	G	SW	-	4/29/2025	0829	9	X	X	X	X	X	X	-	X	X	X		-02 -01

JM

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE
MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1853296
H034

Acctnum: **CTEHER**
Template: **T271979**
Prelogin: **P1144451**
PM: **546 - Jared Starkey**
PB:

Shipped Via:

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
UPS ____UPS Courier _____
____FedEx ____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: Y Y __N
Correct bottles used: Y Y __N
Sufficient volume sent: Y Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: Y Y __N
Rad Screen 0.5 mR/hr: Y Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes (No) HCL / MeoH TBR	If preservation required by Login: Date/Time
Presley Alanis	04-29-25	1800	PACE	D	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.3+0.5=2.7 °C Bottles Received: 18	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 04/30/25 Time: 1120	Hold: Condition: NCF / OK

Company Name/Address:
CTEH - ER

5120 North Shore Drive
North Little Rock, AR 72118

Billing Information:
Accounts Payable
10700 Prarie Lakes Drive
Eden Prairie, MN 55344

Report to:
CTEH 501-801-8500

Email To:
labresults@cteh.com; kylelawrence@cteh.com; ecatlin@cteh.com; ahenault@cteh.com; tmcmullin@cteh.com; mklinkerman@cteh.com

Project Description:
Bishop Loss of Containment Incident

City/State Collected: **Galeton, CO**

Please Circle: PT (MT) CT ET

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

Client Project #: **PROJ-054017**

Lab Project #: **CTEHER-054017**

Collected by (print): Presley Alanis

Site/Facility ID #:

P.O. #:

Collected by (signature):

Immediately Packed on Ice N ____ Y X

Rush? (Lab MUST Be Notified)
____Same Day X Five Day
____Next Day ____5 Day (Rad Only)
____Two Day ____10 Day (Rad Only)
____Three Day ____STD TaT

Quote #:

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	*Anions / Alkalinity 250ml HDPE-NoPres	CR6ICFFP 50mlTube/plungerPres	Cations / Hardness 250ml HDPE-HNO3	Diss. Metals 200.8 250ml HDPE-HNO3	MBAS 500ml HDPE-NoPres	PT,TKN 250ml HDPE-H2SO4	RA-226, RA-228, KPA-U 1L-HDPE-Add-HNO3	TDS 1L-HDPE NoPres	TOC 250ml Amb-HCl	TSS 1L-HDPE NoPres	Remarks	Sample # (lab only)
									x2	x2		x2			x1			
GACO0429W002.5MSD	G	SW	-	4/29/2025	0829	9	X	X	X	X	X	X	-	X	X	X		-01
GACO0429W003	G	SW	-	4/29/2025	0916	9	X	X	X	X	X	X	-	X	X	X		-02

JTM

Chain of Custody Page 1 of 1

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PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

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SDG # L1853296

H036

Acctnum: **CTEHER**
Template: **T271979**
Prelogin: **P1144451**
PM: **546 - Jared Starkey**
PB:

Shipped Via:

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
UPS ____UPS Courier _____
____FedEx ____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: X Y __N
Rad Screen 0.5 mR/hr: X Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Presley Alanis	04-29-25	1800	PACE
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes (No)
0 HCL / MeoH
TBR

Temp: 4.9 °C Bottles Received: 20+DM=24 18

Date: 04/30/25 Time: 1120

PH – 10BDH2631
TRC – 4072A72

Hold: Condition: NCF / OK

Rev_01
MAK 04/30/25

Company Name/Address:	Billing Information:	Pres Chk
CTEH - ER 5120 North Shore Drive North Little Rock, AR 72118	Accounts Payable 10700 Prarie Lakes Drive Eden Prairie, MN 55344	
Report to: CTEH 501-801-8500	Email To: labresults@cteh.com; kylelawrence@cteh.com; ecatlin@cteh.com; ahenault@cteh.com; tmcmullin@cteh.com; mklinkerman@cteh.com	
Project Description: Bishop Loss of Containment Incident	City/State Collected: Galeton, CO	Please Circle: PT (MT) CT ET
Regulatory Program (COC,RCRA,DW,etc):	Client Project # PROJ-054017	Lab Project # CTEHER-054017
Collected by (print): Pressley Alaniz	Site/Facility ID #	P.O. #
Collected by (signature): [signature]	***Rush?*** (Lab MUST Be Notified) ___Same Day ___Five Day ___Next Day ___5 Day (Rad Only) ___Two Day ___10 Day (Rad Only) ___Three Day ___STD TaT	Quote # Date Results Needed
Immediately Packed on Ice N ___ Y **X**		No. of Cntrs

Chain of Custody Page 1 of 1

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12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

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SDG # L1853296
H034

Acctnum: **CTEHER**
Template: **T271979**
Prelogin: **P1144451**
PM: **546 - Jared Starkey**
PB:
Shipped Via:

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	*Anions / Alkalinity 250ml HDPE-NoPres/pH	CR6ICFFP 50mlTube/plungerPres (MAK 04/30/25)	~~Cations~~ (MAK 04/30/25) / Hardness 250ml HDPE-HNO3 ✓	Diss. Metals ~~200.8~~ 6020B 250ml HDPE-HNO3 (MAK 04/30/25) ✓	MBAS 500ml HDPE-NoPres	PT,TKN 250ml HDPE-H2SO4 /Ammonia (MAK 04/30/25) ✓	RA-226, RA-228, KPA-U 1L-HDPE-Add-HNO3	TDS 1L-HDPE NoPres	TOC 250ml Amb-HCl ✓	TSS 1L-HDPE NoPres	Remarks	Sample # (lab only)
GACO0429W002.5	G	SW	-	4/29/2025	0829	9	X	X	X	X	X	X	-	X	X	X		-01
GACO0429W002.5MS	G	SW	-	4/29/2025	0829	9	X	X	X	X	X	X	-	X	X	X		~~-02~~ -01

JM

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

Remarks:
Dissolved Metals Al, As, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Zn;
Anions Br, Cl, F, SO4, NO2, NO3

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
UPS ___UPS Courier ______
___FedEx ___

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: X Y __N
Rad Screen 0.5 mR/hr: X Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR	
[signature]	04-29-25	1800	PACE	0	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.3+0.4=2.7 °C Bottles Received: 18	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 04/30/25 Time: 1120	Hold: Condition: NCF / OK

Company Name/Address:
CTEH - ER
5120 North Shore Drive
North Little Rock, AR 72118

Billing Information:
Accounts Payable
10700 Prarie Lakes Drive
Eden Prairie, MN 55344

Pres Chk

Report to: CTEH 501-801-8500

Email To: labresults@cteh.com; kylelawrence@cteh.com; ecatlin@cteh.com; ahenault@cteh.com; tmcmullin@cteh.com; mklinkerman@cteh.com

Project Description: Bishop Loss of Containment Incident

City/State Collected: Galeton, CO

Please Circle: PT (MT) CT ET

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

Client Project # PROJ-054017

Lab Project # CTEHER-054017

Collected by (print): Pressley Alaniz

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y X

Rush? (Lab MUST Be Notified)
____Same Day X Five Day
____Next Day ____5 Day (Rad Only)
____Two Day ____10 Day (Rad Only)
____Three Day ____STD TaT

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace® PEOPLE ADVANCING SCIENCE
MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

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SDG # L1853296

H036

Acctnum: CTEHER
Template: T271979
Prelogin: P1144451
PM: 546 - Jared Starkey
PB:

Shipped Via:

<2 <2 <2 <2

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	*Anions / Alkalinity 250ml HDPE-NoPres MAK 04/30/25 / pH	CR6ICFFP 50mlTube/plungerPres	~~Cations~~ / Hardness 250ml HDPE-HNO3 MAK 04/30/25	Diss. Metals ~~[illegible]~~ 6020B 250ml HDPE-HNO3 MAK 04/30/25	MBAS 500ml HDPE-NoPres	PT,TKN 250ml HDPE-H2SO4 /Ammonia MAK 04/30/25	RA-226, RA-228, KPA-U 1L-HDPE-Add-HNO3	TDS 1L-HDPE NoPres	TOC 250ml Amb-HCl	TSS 1L-HDPE NoPres	Remarks	Sample # (lab only)
GACO0429W002.5MSD	G	SW	-	4/29/2025	0829	9	X	X	X	X	X	X	-	X	X	X		-01
GACO0429W003	G	SW	-	4/29/2025	0916	9	X	X	X	X	X	X	-	X	X	X		-02

JM

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

Remarks:

pH ______ Temp ______

Flow ______ Other ______

Samples returned via:
UPS ____UPS Courier ________
____FedEx ____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: X Y __N
Rad Screen 0.5 mR/hr: X Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR
Pressley Alaniz	04-29-25	1800	PACE	0
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: TL49 2.0+0=2.0 Bottles Received: 18
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 04/30/25 Time: 1120

If pre... e

PH – 10BDH2631
TRC – 4072A72

Hold:

Condition: NCF / (OK)