

CTEH - ER

Sample Delivery Group: L1850463
Samples Received: 04/22/2025
Project Number: PROJ-054017
Description: Bishop Loss of Containment Incident
Site: CHEVRON GALETON, CO
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.

TABLE OF CONTENTS

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	5
Sr: Sample Results	6
GACO0421W001 L1850463-01	6
GACO0421W002 L1850463-02	7
GACO0421W002.5 L1850463-03	8
GACO0421W003 L1850463-04	9
GACO0421W004 L1850463-05	10
GACO0421W004.5 L1850463-06	11
GACO0421W005 L1850463-07	12
GACO0421W006 L1850463-08	13
GACO0421F001 L1850463-09	14
Qc: Quality Control Summary	15
Radiochemistry by Method 904/9320	15
Radiochemistry by Method D5174	16
Radiochemistry by Method SM7500Ra B M	17
Gl: Glossary of Terms	18
Al: Accreditations & Locations	19
Sc: Sample Chain of Custody	20



SAMPLE SUMMARY

GACO0421W001 L1850463-01 Non-Potable Water

Collected by Spencer Beghtol Collected date/time 04/21/25 09:25 Received date/time 04/22/25 11:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2497611	1	04/23/25 07:42	04/26/25 14:32	DDD	Mt. Juliet, TN
Radiochemistry by Method D5174	WG2497694	1	04/23/25 09:02	04/25/25 14:49	CAB	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2496961	1	04/23/25 14:20	04/25/25 01:19	ZRG	Mt. Juliet, TN



GACO0421W002 L1850463-02 Non-Potable Water

Collected by Spencer Beghtol Collected date/time 04/21/25 10:30 Received date/time 04/22/25 11:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2497611	1	04/23/25 07:42	04/26/25 14:32	DDD	Mt. Juliet, TN
Radiochemistry by Method D5174	WG2497694	1	04/23/25 09:02	04/25/25 14:51	CAB	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2496961	1	04/23/25 14:20	04/25/25 01:19	ZRG	Mt. Juliet, TN

GACO0421W002.5 L1850463-03 Non-Potable Water

Collected by Spencer Beghtol Collected date/time 04/21/25 11:16 Received date/time 04/22/25 11:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2497611	1	04/23/25 07:42	04/26/25 14:32	DDD	Mt. Juliet, TN
Radiochemistry by Method D5174	WG2497694	1	04/23/25 09:02	04/25/25 14:52	CAB	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2496961	1	04/23/25 14:20	04/25/25 01:19	ZRG	Mt. Juliet, TN

GACO0421W003 L1850463-04 Non-Potable Water

Collected by Spencer Beghtol Collected date/time 04/21/25 11:55 Received date/time 04/22/25 11:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2497611	1	04/23/25 07:42	04/26/25 14:32	DDD	Mt. Juliet, TN
Radiochemistry by Method D5174	WG2497694	1	04/23/25 09:02	04/25/25 14:54	CAB	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2496961	1	04/23/25 14:20	04/25/25 01:19	ZRG	Mt. Juliet, TN

GACO0421W004 L1850463-05 Non-Potable Water

Collected by Spencer Beghtol Collected date/time 04/21/25 10:22 Received date/time 04/22/25 11:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2497611	1	04/23/25 07:42	04/26/25 14:32	DDD	Mt. Juliet, TN
Radiochemistry by Method D5174	WG2497694	1	04/23/25 09:02	04/25/25 14:55	CAB	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2496961	1	04/23/25 14:20	04/25/25 01:19	ZRG	Mt. Juliet, TN

GACO0421W004.5 L1850463-06 Non-Potable Water

Collected by Spencer Beghtol Collected date/time 04/21/25 11:11 Received date/time 04/22/25 11:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2497611	1	04/23/25 07:42	04/26/25 14:32	DDD	Mt. Juliet, TN
Radiochemistry by Method D5174	WG2497694	1	04/23/25 09:02	04/25/25 14:58	CAB	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2496961	1	04/23/25 14:20	04/25/25 01:19	ZRG	Mt. Juliet, TN

SAMPLE SUMMARY

GACO0421W005 L1850463-07 Non-Potable Water

Collected by: Spencer Beghtol
 Collected date/time: 04/21/25 09:37
 Received date/time: 04/22/25 11:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2497611	1	04/23/25 07:42	04/26/25 14:32	DDD	Mt. Juliet, TN
Radiochemistry by Method D5174	WG2497694	1	04/23/25 09:02	04/25/25 15:05	CAB	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2496961	1	04/23/25 14:20	04/25/25 01:19	ZRG	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

GACO0421W006 L1850463-08 Non-Potable Water

Collected by: Spencer Beghtol
 Collected date/time: 04/21/25 12:04
 Received date/time: 04/22/25 11:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2497611	1	04/23/25 07:42	04/26/25 14:32	DDD	Mt. Juliet, TN
Radiochemistry by Method D5174	WG2497694	1	04/23/25 09:02	04/25/25 15:08	CAB	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2496961	1	04/23/25 14:20	04/25/25 01:19	ZRG	Mt. Juliet, TN

⁵Sr

⁶Qc

⁷Gl

GACO0421F001 L1850463-09 Non-Potable Water

Collected by: Spencer Beghtol
 Collected date/time: 04/21/25 10:16
 Received date/time: 04/22/25 11:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2497611	1	04/23/25 07:42	04/26/25 14:32	DDD	Mt. Juliet, TN
Radiochemistry by Method D5174	WG2497694	1	04/23/25 09:02	04/25/25 15:17	CAB	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2496961	1	04/23/25 14:20	04/25/25 01:19	ZRG	Mt. Juliet, TN

⁸Al

⁹Sc

CASE NARRATIVE

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 radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. 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

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	-0.0956	<u>U</u>	0.552	0.567	0.974	0.328	04/26/2025 14:32	WG2497611
(T) Barium	90.9					30.0-143	04/26/2025 14:32	WG2497611
(T) Yttrium	86.5					30.0-136	04/26/2025 14:32	WG2497611

Radiochemistry by Method D5174

Analyte	Result	Qualifier	Uncertainty	RDL	Analysis Date	Batch
	ug/l		+ / -	ug/l	date / time	
Uranium	89.3		4.45	1.00	04/25/2025 14:49	WG2497694

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.366		0.282	0.363	0.309	0.0910	04/25/2025 01:19	WG2496961
(T) Barium-133	89.4					30.0-143	04/25/2025 01:19	WG2496961

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.298	<u>U</u>	0.428	0.453	0.728	0.242	04/26/2025 14:32	WG2497611
(T) Barium	83.5					30.0-143	04/26/2025 14:32	WG2497611
(T) Yttrium	96.3					30.0-136	04/26/2025 14:32	WG2497611

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

Radiochemistry by Method D5174

Analyte	Result	Qualifier	Uncertainty	RDL	Analysis Date	Batch
	ug/l		+ / -	ug/l	date / time	
Uranium	89.6		4.46	1.00	04/25/2025 14:51	WG2497694

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.0359	<u>U</u>	0.157	0.186	0.291	0.0918	04/25/2025 01:19	WG2496961
(T) Barium-133	92.4					30.0-143	04/25/2025 01:19	WG2496961

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.198	<u>U</u>	0.483	0.504	0.831	0.279	04/26/2025 14:32	WG2497611
(T) Barium	91.9					30.0-143	04/26/2025 14:32	WG2497611
(T) Yttrium	91.5					30.0-136	04/26/2025 14:32	WG2497611

Radiochemistry by Method D5174

Analyte	Result	Qualifier	Uncertainty	RDL	Analysis Date	Batch
	ug/l		+ / -	ug/l	date / time	
Uranium	88.0		4.39	1.00	04/25/2025 14:52	WG2497694

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.0802	<u>U</u>	0.139	0.177	0.227	0.0590	04/25/2025 01:19	WG2496961
(T) Barium-133	87.8					30.0-143	04/25/2025 01:19	WG2496961

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	-0.00262	<u>U</u>	0.474	0.476	0.835	0.279	04/26/2025 14:32	WG2497611
(T) Barium	89.4					30.0-143	04/26/2025 14:32	WG2497611
(T) Yttrium	86.5					30.0-136	04/26/2025 14:32	WG2497611

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

Radiochemistry by Method D5174

Analyte	Result	Qualifier	Uncertainty	RDL	Analysis Date	Batch
	ug/l		+ / -	ug/l	date / time	
Uranium	106		5.27	1.00	04/25/2025 14:54	WG2497694

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.0107	<u>U</u>	0.253	0.270	0.484	0.162	04/25/2025 01:19	WG2496961
(T) Barium-133	72.9					30.0-143	04/25/2025 01:19	WG2496961

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.0397	<u>U</u>	0.357	0.367	0.631	0.209	04/26/2025 14:32	WG2497611
(T) Barium	97.2					30.0-143	04/26/2025 14:32	WG2497611
(T) Yttrium	90.8					30.0-136	04/26/2025 14:32	WG2497611

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

Radiochemistry by Method D5174

Analyte	Result	Qualifier	Uncertainty	RDL	Analysis Date	Batch
	ug/l		+ / -	ug/l	date / time	
Uranium	84.6		4.22	1.00	04/25/2025 14:55	WG2497694

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.0623	<u>U</u>	0.224	0.270	0.392	0.130	04/25/2025 01:19	WG2496961
(T) Barium-133	95.1					30.0-143	04/25/2025 01:19	WG2496961

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.0727	<u>U</u>	0.417	0.429	0.731	0.243	04/26/2025 14:32	WG2497611
(T) Barium	91.3					30.0-143	04/26/2025 14:32	WG2497611
(T) Yttrium	86.3					30.0-136	04/26/2025 14:32	WG2497611

Radiochemistry by Method D5174

Analyte	Result	Qualifier	Uncertainty	RDL	Analysis Date	Batch
	ug/l		+ / -	ug/l	date / time	
Uranium	99.1		4.94	1.00	04/25/2025 14:58	WG2497694

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.334	<u>J</u>	0.348	0.441	0.460	0.152	04/25/2025 01:19	WG2496961
(T) Barium-133	80.5					30.0-143	04/25/2025 01:19	WG2496961

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

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	-0.00455	<u>U</u>	0.349	0.352	0.620	0.206	04/26/2025 14:32	WG2497611
(T) Barium	98.3					30.0-143	04/26/2025 14:32	WG2497611
(T) Yttrium	92.1					30.0-136	04/26/2025 14:32	WG2497611

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

Radiochemistry by Method D5174

Analyte	Result	Qualifier	Uncertainty	RDL	Analysis Date	Batch
	ug/l		+ / -	ug/l	date / time	
Uranium	117		5.83	1.00	04/25/2025 15:05	WG2497694

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	-0.0503	<u>U</u>	0.261	0.295	0.514	0.182	04/25/2025 01:19	WG2496961
(T) Barium-133	78.7					30.0-143	04/25/2025 01:19	WG2496961

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.443	J	0.406	0.437	0.674	0.224	04/26/2025 14:32	WG2497611
(T) Barium	91.9					30.0-143	04/26/2025 14:32	WG2497611
(T) Yttrium	93.8					30.0-136	04/26/2025 14:32	WG2497611

1 Cp

2 Tc

3 Ss

Radiochemistry by Method D5174

Analyte	Result	Qualifier	Uncertainty	RDL	Analysis Date	Batch
	ug/l		+ / -	ug/l	date / time	
Uranium	89.8		4.47	1.00	04/25/2025 15:08	WG2497694

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.0420	U	0.142	0.172	0.277	0.0759	04/25/2025 01:19	WG2496961
(T) Barium-133	92.5					30.0-143	04/25/2025 01:19	WG2496961

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.330	J	0.379	0.406	0.638	0.212	04/26/2025 14:32	WG2497611
(T) Barium	99.4					30.0-143	04/26/2025 14:32	WG2497611
(T) Yttrium	91.0					30.0-136	04/26/2025 14:32	WG2497611

Radiochemistry by Method D5174

Analyte	Result	Qualifier	Uncertainty	RDL	Analysis Date	Batch
	ug/l		+ / -	ug/l	date / time	
Uranium	ND			1.00	04/25/2025 15:17	WG2497694

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	-0.0415	U	0.0813	0.111	0.274	0.0750	04/25/2025 01:19	WG2496961
(T) Barium-133	100					30.0-143	04/25/2025 01:19	WG2496961

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4206578-1 04/26/25 14:32

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.0476	<u>U</u>	0.362	0.635	0.212
(T) Barium	69.6		69.6		
(T) Yttrium	90.7		90.7		

L1850291-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1850291-01 04/26/25 14:32 • (DUP) R4206578-5 04/26/25 14:32

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.531	0.416	0.682	0.227	1.51	0.734	1.17	0.393	96.1	1.16		20	3
(T) Barium	93.6				91.7	91.7							
(T) Yttrium	85.3				89.6	89.6							

Laboratory Control Sample (LCS)

(LCS) R4206578-2 04/26/25 14:32

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.36	87.1	80.0-120	
(T) Barium			102		
(T) Yttrium			81.4		

L1845986-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1845986-01 04/26/25 14:32 • (MS) R4206578-3 04/26/25 14:32 • (MSD) R4206578-4 04/26/25 14:32

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	10.0	0.487	8.06	9.80	75.7	93.1	1	70.0-130			19.5		20
(T) Barium		92.5			101	80.7							
(T) Yttrium		97.5			82.4	82.8							

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4205549-1 04/25/25 14:40

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Uranium	U		1.00	1.00

¹Cp

²Tc

³Ss

L1850463-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1850463-09 04/25/25 15:17 • (DUP) R4205549-4 04/25/25 15:13

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

⁴Cn

⁵Sr

Laboratory Control Sample (LCS)

(LCS) R4205549-2 04/25/25 14:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Uranium	30.0	28.0	93.2	80.0-120	

⁶Qc

⁷Gl

L1850463-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1850463-01 04/25/25 14:49 • (MS) R4205549-3 04/25/25 14:46

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Uranium	20.0	89.3	112	115	1	75.0-125	

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4205067-1 04/25/25 01:19

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.0193	<u>U</u>	0.0480	0.0791	0.0265
(T) Barium-133	99.9		99.9		

L1850288-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1850288-01 04/25/25 01:19 • (DUP) R4205067-5 04/25/25 01:19

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	-0.0872	0.180	0.384	0.138	-0.00669	0.0972	0.232	0.0662	0.000	0.394	<u>U</u>	20	3
(T) Barium-133	98.0				96.5	96.5							

Laboratory Control Sample (LCS)

(LCS) R4205067-2 04/25/25 01:19

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	4.91	98.3	80.0-120	
(T) Barium-133			105		

L1850463-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1850463-02 04/25/25 01:19 • (MS) R4205067-3 04/25/25 01:19 • (MSD) R4205067-4 04/25/25 01:19

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.0359	16.6	17.2	82.7	86.0	1	75.0-125			3.85		20
(T) Barium-133		92.4			80.6	92.3							

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

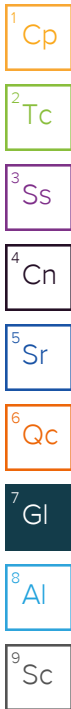
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

Abbreviations and Definitions

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

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.



ACCREDITATIONS & LOCATIONS

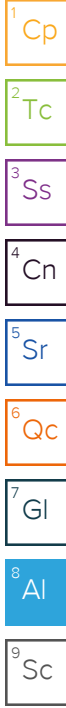
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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


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

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

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



Company Name/Address: CTEH - ER 5120 North Shore Drive North Little Rock, AR 72118		Billing Information: Accounts Payable 10700 Prairie Lakes Drive Eden Prairie, MN 55344		Pres Chk	Analysis / Container / Preservative								Chain of Custody Page <u>1</u> of <u>1</u>
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Report to: CTEH 501-801-8500		Email To: labresults@cteh.com;ahenault@cteh.com;kyle		City/State Collected: Galeton, CO		Please Circle: PT (M) CT ET						 MT JULIET, TN 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf	
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Project Description: Bishop Loss of Containment Incident		Client Project # PROJ-054017		Lab Project # CTEHER-054017		Regulatory Program(DOD,RCRA,DW,etc):						SDG # <u>U850463</u>	
Collected by (print): <i>Spencer Beightel</i>		Site/Facility ID # <i>Cherron Galeton, CO</i>		P.O. #		Collected by (signature): <i>Jim Beightel</i>		Rush? (Lab MUST Be Notified)		Quote #		Table #	
Immediately Packed on Ice N <u> </u> Y <u>X</u>		<input type="checkbox"/> Same Day <input checked="" type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day <input type="checkbox"/> STD TAT		Date Results Needed		No. of Cntrs				Acctnum: CTEHER		Template: T271979	
										Prelogin: P1144451		PM: 546 - Jared Starkey	
										PB:		Shipped Via:	

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	*Anions / Alkalinity 250mlHDPE-NoPres	CR6ICFP 50mlTube/plungerPres	Cations / Hardness 250mlHDPE-HNO3	Diss. Metals 200.8 250mlHDPE HNO3	MBAS 500mlHDPE-NoPres	PT, TKN 250mlHDPE-H2SO4	RA-226,RA-228,KPA-U 1L-HDPE-Add-HNO3	TDS 1L-HDPE NoPres	TOC 250mlAmb-HCl	TSS 1L-HDPE NoPres	Remarks	Sample # (lab only)
GACO0421W001	G	GW SW	—	4/21/25	0925	2							X					-01
GACO0421W002	G	NPW SW	—	4/21/25	1030	2							X					-02
GACO0421W002.5	G	NPW SW	—	4/21/25	1116	2							X					-03
GACO0421W003	G	NPW SW	—	4/21/25	1155	2							X					-04
GACO0421W004	G	NPW SW	—	4/21/25	1022	2							X					-05
GACO0421W004.5	G	NPW SW	—	4/21/25	1111	2							X					-06
GACO0421W005	G	NPW SW	—	4/21/25	0937	2							X					-07
GACO0421W006	G	NPW SW	—	4/21/25	1204	2							X					-08
GACO0421F001	G	NPW SW	—	4/21/25	1016	2							X					-09

* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other <i>SW - Surface Water</i>		Remarks:		pH _____ Temp _____ Flow _____ Other _____		Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N if Applicable VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N									
Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier		Tracking #		Relinquished by: (Signature) <i>Madelyn Nikerson</i>		Date: 04/21/25 Time: 1644		Received by: (Signature) <i>John Bishop</i>		Trip Blank Received: Yes / No HCL / MeOH TBR		Bottles Received:		If preservation required by Login: Date/Time	
Relinquished by: (Signature) <i>John Bishop</i>		Date: 4-21-25 Time: 18:00		Received by: (Signature) <i>SWA</i>		Temp: °C 3.810.4=4.2		Date: 4/21/25 Time: 1130		Hold:		Condition: NCF (OK)			

