

**Caerus Oil and Gas**

Sample Delivery Group: L1782104  
Samples Received: 09/26/2024  
Project Number:  
Description: Corral Creek 4508 Facility Decommissioning  
Site: CORRAL CREEK 4508  
Report To: Jake J. / Brett M. / Blair R. / Andy V.  
143 Diamond Avenue  
Parachute, CO 81635

Entire Report Reviewed By:



Chris Ward  
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

# TABLE OF CONTENTS

<b>Cp: Cover Page</b>	1
<b>Tc: Table of Contents</b>	2
<b>Ss: Sample Summary</b>	3
<b>Cn: Case Narrative</b>	4
<b>Sr: Sample Results</b>	5
20240925-M29 199-(FC-PL01)@5 L1782104-01	5
20240925-M29 199-(FC-PL02)@4 L1782104-02	7
<b>Qc: Quality Control Summary</b>	9
Wet Chemistry by Method 7199	9
Wet Chemistry by Method 9045D	11
Wet Chemistry by Method 9050AMod	13
Metals (ICP) by Method 6010B-NE493 Ch 2	15
Metals (ICPMS) by Method 6020	17
Volatile Organic Compounds (GC) by Method 8015D/GRO	18
Volatile Organic Compounds (GC/MS) by Method 8260B	19
Semi-Volatile Organic Compounds (GC) by Method 8015M	20
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	21
<b>Gl: Glossary of Terms</b>	23
<b>Al: Accreditations &amp; Locations</b>	24
<b>Sc: Sample Chain of Custody</b>	25

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

# SAMPLE SUMMARY

20240925-M29 199-(FC-PL01)@5 L1782104-01 Solid

Collected by Trevor Lakin  
 Collected date/time 09/25/24 09:24  
 Received date/time 09/26/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2373471	1	10/04/24 16:25	10/04/24 16:25	MAP	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2372201	1	10/01/24 04:30	10/01/24 17:35	ANW	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2375697	1	10/04/24 08:34	10/04/24 12:24	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2375699	1	10/04/24 08:35	10/04/24 14:35	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2373505	1	10/03/24 13:37	10/03/24 16:52	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2373319	5	10/03/24 07:37	10/03/24 14:31	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2374608	1	09/30/24 10:42	10/03/24 06:01	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2372919	1	09/30/24 10:42	10/01/24 20:18	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2374729	1	10/03/24 16:01	10/04/24 00:07	KKS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2374741	1	10/03/24 15:28	10/04/24 03:24	JRM	Mt. Juliet, TN



20240925-M29 199-(FC-PL02)@4 L1782104-02 Solid

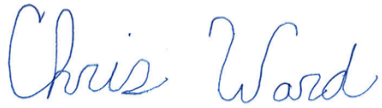
Collected by Trevor Lakin  
 Collected date/time 09/25/24 09:53  
 Received date/time 09/26/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2373470	1	10/02/24 18:43	10/02/24 18:43	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2373606	1	10/01/24 23:34	10/02/24 16:24	ANW	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2374289	1	10/02/24 14:33	10/02/24 22:15	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2374317	1	10/02/24 14:41	10/02/24 21:20	KRB	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2373479	1	10/01/24 21:42	10/02/24 11:31	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2373319	5	10/03/24 07:37	10/03/24 14:48	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2374608	1	09/30/24 10:42	10/03/24 06:20	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2372919	1	09/30/24 10:42	10/01/24 20:37	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2374729	5	10/03/24 16:01	10/04/24 14:46	KKS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2374741	1	10/03/24 15:28	10/04/24 03:42	JRM	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.



Chris Ward  
Project Manager

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.323		1	10/04/2024 16:25	WG2373471

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U	P1	0.255	1.00	1	10/01/2024 17:35	WG2372201

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.70	T8	1	10/04/2024 12:24	WG2375697

Sample Narrative:

L1782104-01 WG2375697: 7.7 at 21.9C

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	280	umhos/cm		10.0	1	10/04/2024 14:35	WG2375699

Sample Narrative:

L1782104-01 WG2375699: at 25C

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.390		0.0167	0.200	1	10/03/2024 16:52	WG2373505

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.60		0.100	1.00	5	10/03/2024 14:31	WG2373319
Barium	249		0.152	2.50	5	10/03/2024 14:31	WG2373319
Cadmium	0.130	J	0.0855	1.00	5	10/03/2024 14:31	WG2373319
Copper	10.5		0.132	5.00	5	10/03/2024 14:31	WG2373319
Lead	14.1		0.0990	2.00	5	10/03/2024 14:31	WG2373319
Nickel	13.7		0.197	2.50	5	10/03/2024 14:31	WG2373319
Selenium	0.753	J	0.180	2.50	5	10/03/2024 14:31	WG2373319
Silver	U		0.0865	0.500	5	10/03/2024 14:31	WG2373319
Zinc	46.5		0.740	25.0	5	10/03/2024 14:31	WG2373319

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0878	B J	0.0217	0.100	1	10/03/2024 06:01	WG2374608
(S) a,a,a-Trifluorotoluene(FID)	91.5			77.0-120		10/03/2024 06:01	WG2374608

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	10/01/2024 20:18	<a href="#">WG2372919</a>
Toluene	U		0.00130	0.00500	1	10/01/2024 20:18	<a href="#">WG2372919</a>
Ethylbenzene	U		0.000737	0.00250	1	10/01/2024 20:18	<a href="#">WG2372919</a>
Xylenes, Total	U		0.000880	0.00650	1	10/01/2024 20:18	<a href="#">WG2372919</a>
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	10/01/2024 20:18	<a href="#">WG2372919</a>
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	10/01/2024 20:18	<a href="#">WG2372919</a>
(S) Toluene-d8	93.9			75.0-131		10/01/2024 20:18	<a href="#">WG2372919</a>
(S) 4-Bromofluorobenzene	99.4			67.0-138		10/01/2024 20:18	<a href="#">WG2372919</a>
(S) 1,2-Dichloroethane-d4	101			70.0-130		10/01/2024 20:18	<a href="#">WG2372919</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

## Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	9.25		1.61	4.00	1	10/04/2024 00:07	<a href="#">WG2374729</a>
C28-C36 Motor Oil Range	30.2		0.274	4.00	1	10/04/2024 00:07	<a href="#">WG2374729</a>
(S) o-Terphenyl	68.5			18.0-148		10/04/2024 00:07	<a href="#">WG2374729</a>

6 Qc

7 Gl

8 Al

## Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	10/04/2024 03:24	<a href="#">WG2374741</a>
Anthracene	U		0.00230	0.00600	1	10/04/2024 03:24	<a href="#">WG2374741</a>
Benzo(a)anthracene	0.00231	U	0.00173	0.00600	1	10/04/2024 03:24	<a href="#">WG2374741</a>
Benzo(b)fluoranthene	0.00202	U	0.00153	0.00600	1	10/04/2024 03:24	<a href="#">WG2374741</a>
Benzo(k)fluoranthene	U		0.00215	0.00600	1	10/04/2024 03:24	<a href="#">WG2374741</a>
Benzo(a)pyrene	U		0.00179	0.00600	1	10/04/2024 03:24	<a href="#">WG2374741</a>
Chrysene	0.00322	U	0.00232	0.00600	1	10/04/2024 03:24	<a href="#">WG2374741</a>
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	10/04/2024 03:24	<a href="#">WG2374741</a>
Fluoranthene	0.00635		0.00227	0.00600	1	10/04/2024 03:24	<a href="#">WG2374741</a>
Fluorene	U		0.00205	0.00600	1	10/04/2024 03:24	<a href="#">WG2374741</a>
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	10/04/2024 03:24	<a href="#">WG2374741</a>
1-Methylnaphthalene	U		0.00449	0.0200	1	10/04/2024 03:24	<a href="#">WG2374741</a>
2-Methylnaphthalene	U		0.00427	0.0200	1	10/04/2024 03:24	<a href="#">WG2374741</a>
Naphthalene	U		0.00408	0.0200	1	10/04/2024 03:24	<a href="#">WG2374741</a>
Pyrene	0.00469	U	0.00200	0.00600	1	10/04/2024 03:24	<a href="#">WG2374741</a>
(S) p-Terphenyl-d14	71.4			23.0-120		10/04/2024 03:24	<a href="#">WG2374741</a>
(S) Nitrobenzene-d5	87.5			14.0-149		10/04/2024 03:24	<a href="#">WG2374741</a>
(S) 2-Fluorobiphenyl	75.8			34.0-125		10/04/2024 03:24	<a href="#">WG2374741</a>

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	1.54		1	10/02/2024 18:43	WG2373470

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	10/02/2024 16:24	<a href="#">WG2373606</a>

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.07	<u>T8</u>	1	10/02/2024 22:15	<a href="#">WG2374289</a>

Sample Narrative:

L1782104-02 WG2374289: 8.07 at 19.7C

Wet Chemistry by Method 9050AMod

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	355	umhos/cm		10.0	1	10/02/2024 21:20	<a href="#">WG2374317</a>

Sample Narrative:

L1782104-02 WG2374317: at 25C

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	1.14		0.0167	0.200	1	10/02/2024 11:31	<a href="#">WG2373479</a>

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	9.66		0.100	1.00	5	10/03/2024 14:48	<a href="#">WG2373319</a>
Barium	519		0.152	2.50	5	10/03/2024 14:48	<a href="#">WG2373319</a>
Cadmium	0.260	<u>J</u>	0.0855	1.00	5	10/03/2024 14:48	<a href="#">WG2373319</a>
Copper	13.6		0.132	5.00	5	10/03/2024 14:48	<a href="#">WG2373319</a>
Lead	9.61		0.0990	2.00	5	10/03/2024 14:48	<a href="#">WG2373319</a>
Nickel	14.0		0.197	2.50	5	10/03/2024 14:48	<a href="#">WG2373319</a>
Selenium	0.513	<u>J</u>	0.180	2.50	5	10/03/2024 14:48	<a href="#">WG2373319</a>
Silver	U		0.0865	0.500	5	10/03/2024 14:48	<a href="#">WG2373319</a>
Zinc	43.3		0.740	25.0	5	10/03/2024 14:48	<a href="#">WG2373319</a>

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0707	<u>B J</u>	0.0217	0.100	1	10/03/2024 06:20	<a href="#">WG2374608</a>
(S) a,a,a-Trifluorotoluene(FID)	89.5			77.0-120		10/03/2024 06:20	<a href="#">WG2374608</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	10/01/2024 20:37	<a href="#">WG2372919</a>
Toluene	U		0.00130	0.00500	1	10/01/2024 20:37	<a href="#">WG2372919</a>
Ethylbenzene	U		0.000737	0.00250	1	10/01/2024 20:37	<a href="#">WG2372919</a>
Xylenes, Total	U		0.000880	0.00650	1	10/01/2024 20:37	<a href="#">WG2372919</a>
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	10/01/2024 20:37	<a href="#">WG2372919</a>
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	10/01/2024 20:37	<a href="#">WG2372919</a>
(S) Toluene-d8	93.6			75.0-131		10/01/2024 20:37	<a href="#">WG2372919</a>
(S) 4-Bromofluorobenzene	98.8			67.0-138		10/01/2024 20:37	<a href="#">WG2372919</a>
(S) 1,2-Dichloroethane-d4	97.8			70.0-130		10/01/2024 20:37	<a href="#">WG2372919</a>

## Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		8.05	20.0	5	10/04/2024 14:46	<a href="#">WG2374729</a>
C28-C36 Motor Oil Range	39.1		1.37	20.0	5	10/04/2024 14:46	<a href="#">WG2374729</a>
(S) o-Terphenyl	53.1			18.0-148		10/04/2024 14:46	<a href="#">WG2374729</a>

## Sample Narrative:

L1782104-02 WG2374729: Cannot run at lower dilution due to viscosity of extract.

## Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	10/04/2024 03:42	<a href="#">WG2374741</a>
Anthracene	U		0.00230	0.00600	1	10/04/2024 03:42	<a href="#">WG2374741</a>
Benzo(a)anthracene	U		0.00173	0.00600	1	10/04/2024 03:42	<a href="#">WG2374741</a>
Benzo(b)fluoranthene	U		0.00153	0.00600	1	10/04/2024 03:42	<a href="#">WG2374741</a>
Benzo(k)fluoranthene	U		0.00215	0.00600	1	10/04/2024 03:42	<a href="#">WG2374741</a>
Benzo(a)pyrene	U		0.00179	0.00600	1	10/04/2024 03:42	<a href="#">WG2374741</a>
Chrysene	U		0.00232	0.00600	1	10/04/2024 03:42	<a href="#">WG2374741</a>
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	10/04/2024 03:42	<a href="#">WG2374741</a>
Fluoranthene	U		0.00227	0.00600	1	10/04/2024 03:42	<a href="#">WG2374741</a>
Fluorene	U		0.00205	0.00600	1	10/04/2024 03:42	<a href="#">WG2374741</a>
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	10/04/2024 03:42	<a href="#">WG2374741</a>
1-Methylnaphthalene	U		0.00449	0.0200	1	10/04/2024 03:42	<a href="#">WG2374741</a>
2-Methylnaphthalene	U		0.00427	0.0200	1	10/04/2024 03:42	<a href="#">WG2374741</a>
Naphthalene	U		0.00408	0.0200	1	10/04/2024 03:42	<a href="#">WG2374741</a>
Pyrene	U		0.00200	0.00600	1	10/04/2024 03:42	<a href="#">WG2374741</a>
(S) p-Terphenyl-d14	60.3			23.0-120		10/04/2024 03:42	<a href="#">WG2374741</a>
(S) Nitrobenzene-d5	62.7			14.0-149		10/04/2024 03:42	<a href="#">WG2374741</a>
(S) 2-Fluorobiphenyl	58.1			34.0-125		10/04/2024 03:42	<a href="#">WG2374741</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4126976-1 10/01/24 20:35

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Hexavalent Chromium	U		0.255	1.00

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1781816-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1781816-09 10/01/24 17:04 • (DUP) R4126976-7 10/01/24 17:10

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Hexavalent Chromium	U	U	1	0.000		20

L1782104-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1782104-01 10/01/24 17:35 • (DUP) R4126976-8 10/01/24 17:41

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Hexavalent Chromium	U	0.293	1	200	J P1	20

Laboratory Control Sample (LCS)

(LCS) R4126976-2 10/01/24 15:35

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Hexavalent Chromium	10.0	9.88	98.8	80.0-120	

L1781816-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1781816-05 10/01/24 16:02 • (MS) R4126976-3 10/01/24 16:08 • (MSD) R4126976-4 10/01/24 16:15

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Hexavalent Chromium	20.0	0.295	19.8	18.9	97.5	92.9	1	75.0-125			4.71	20

L1781816-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1781816-05 10/01/24 16:02 • (MS) R4126976-5 10/01/24 16:21

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Hexavalent Chromium	648	0.295	596	92.0	50	75.0-125	

Method Blank (MB)

(MB) R4127619-1 10/02/24 15:57

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Hexavalent Chromium	U		0.255	1.00

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1782104-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1782104-02 10/02/24 16:24 • (DUP) R4127619-3 10/02/24 16:30

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Hexavalent Chromium	U	U	1	0.000		20

L1782689-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1782689-01 10/02/24 17:32 • (DUP) R4127619-4 10/02/24 17:38

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Hexavalent Chromium	0.674	0.737	1	8.98	↓	20

Laboratory Control Sample (LCS)

(LCS) R4127619-2 10/02/24 16:06

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Hexavalent Chromium	10.0	10.2	102	80.0-120	

L1782689-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1782689-02 10/02/24 17:45 • (MS) R4127619-5 10/02/24 17:51 • (MSD) R4127619-6 10/02/24 17:57

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Hexavalent Chromium	20.0	U	19.5	19.2	97.6	96.2	1	75.0-125			138	20

L1782689-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1782689-02 10/02/24 17:45 • (MS) R4127619-7 10/02/24 18:03

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Hexavalent Chromium	641	U	545	85.0	50	75.0-125	

L1780661-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1780661-02 10/02/24 22:15 • (DUP) R4127662-2 10/02/24 22:15

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
su	su			%		%
pH	8.87	8.83	1	0.452		1

Sample Narrative:

OS: 8.87 at 20.6C  
 DUP: 8.83 at 20.6C

L1782631-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1782631-03 10/02/24 22:15 • (DUP) R4127662-3 10/02/24 22:15

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
su	su			%		%
pH	8.88	8.90	1	0.225		1

Sample Narrative:

OS: 8.88 at 19.1C  
 DUP: 8.9 at 18.9C

Laboratory Control Sample (LCS)

(LCS) R4127662-1 10/02/24 22:15

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
su	su		%	%	
pH	10.0	9.97	99.7	99.0-101	

Sample Narrative:

LCS: 9.97 at 19.1C



L1782049-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1782049-01 10/04/24 12:24 • (DUP) R4128428-2 10/04/24 12:24

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
su	su			%		%
pH	8.39	8.36	1	0.358		1

Sample Narrative:

OS: 8.39 at 21.9C  
 DUP: 8.36 at 22.5C

L1782652-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1782652-04 10/04/24 12:24 • (DUP) R4128428-3 10/04/24 12:24

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
pH	8.22	8.17	1	0.610		1

Sample Narrative:

OS: 8.22 at 21.4C  
 DUP: 8.17 at 21.4C

Laboratory Control Sample (LCS)

(LCS) R4128428-1 10/04/24 12:24

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
su	su	su	%	%	
pH	10.0	9.99	99.9	99.0-101	

Sample Narrative:

LCS: 9.99 at 21.2C



Method Blank (MB)

(MB) R4127633-1 10/02/24 21:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Specific Conductance	U		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1782049-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1782049-05 10/02/24 21:20 • (DUP) R4127633-3 10/02/24 21:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Specific Conductance	73.7	73.3	1	0.544		20

Sample Narrative:

OS: at 25C  
DUP: at 25C

L1782631-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1782631-02 10/02/24 21:20 • (DUP) R4127633-4 10/02/24 21:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Specific Conductance	357	358	1	0.280		20

Sample Narrative:

OS: at 25C  
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4127633-2 10/02/24 21:20

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Specific Conductance	733	699	95.4	85.0-115	

Sample Narrative:

LCS: at 25C



Method Blank (MB)

(MB) R4128491-1 10/04/24 14:35

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Specific Conductance	U		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1782104-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1782104-01 10/04/24 14:35 • (DUP) R4128491-3 10/04/24 14:35

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Specific Conductance	280	279	1	0.357		20

Sample Narrative:

OS: at 25C  
DUP: at 25C

L1782724-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1782724-01 10/04/24 14:35 • (DUP) R4128491-4 10/04/24 14:35

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Specific Conductance	294	296	1	0.644		20

Sample Narrative:

OS: at 25C  
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4128491-2 10/04/24 14:35

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Specific Conductance	733	718	98.0	85.0-115	

Sample Narrative:

LCS: at 25C



Method Blank (MB)

(MB) R4127337-1 10/02/24 10:59

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hot Water Sol. Boron	U		0.0167	0.200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4127337-2 10/02/24 11:01 • (LCSD) R4127337-3 10/02/24 11:03

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.01	1.01	101	101	80.0-120			0.320	20

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

Method Blank (MB)

(MB) R4128135-1 10/03/24 16:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hot Water Sol. Boron	U		0.0167	0.200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4128135-2 10/03/24 16:47 • (LCSD) R4128135-3 10/03/24 16:49

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.09	1.10	109	110	80.0-120			0.853	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R4127977-1 10/03/24 14:25

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.100	1.00
Barium	U		0.152	2.50
Cadmium	U		0.0855	1.00
Copper	U		0.133	5.00
Lead	U		0.0990	2.00
Nickel	U		0.197	2.50
Selenium	U		0.180	2.50
Silver	U		0.0865	0.500
Zinc	U		0.740	25.0

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

Laboratory Control Sample (LCS)

(LCS) R4127977-2 10/03/24 14:28

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	96.4	96.4	80.0-120	
Barium	100	97.0	97.0	80.0-120	
Cadmium	100	99.0	99.0	80.0-120	
Copper	100	98.6	98.6	80.0-120	
Lead	100	96.5	96.5	80.0-120	
Nickel	100	101	101	80.0-120	
Selenium	100	94.3	94.3	80.0-120	
Silver	20.0	19.8	98.8	80.0-120	
Zinc	100	97.6	97.6	80.0-120	

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1782104-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1782104-01 10/03/24 14:31 • (MS) R4127977-5 10/03/24 14:41 • (MSD) R4127977-6 10/03/24 14:44

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	4.60	109	103	104	98.5	5	75.0-125			5.38	20
Barium	100	249	421	401	172	152	5	75.0-125	J5	J5	4.82	20
Cadmium	100	0.130	108	103	108	103	5	75.0-125			4.64	20
Copper	100	10.5	115	108	105	97.4	5	75.0-125			6.40	20
Lead	100	14.1	114	109	99.4	94.5	5	75.0-125			4.41	20
Nickel	100	13.7	121	116	107	103	5	75.0-125			4.08	20
Selenium	100	0.753	106	99.1	105	98.4	5	75.0-125			6.45	20
Silver	20.0	U	21.2	20.1	106	101	5	75.0-125			5.10	20
Zinc	100	46.5	150	149	103	103	5	75.0-125			0.118	20

Method Blank (MB)

(MB) R4127759-2 10/03/24 01:31

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0281	↓	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	94.5			77.0-120

Laboratory Control Sample (LCS)

(LCS) R4127759-1 10/03/24 00:52

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.00	4.76	95.2	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			105	77.0-120	

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

Method Blank (MB)

(MB) R4127797-3 10/01/24 12:39

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000467	0.00100
Toluene	U		0.00130	0.00500
Ethylbenzene	U		0.000737	0.00250
Xylenes, Total	U		0.000880	0.00650
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
(S) Toluene-d8	95.7			75.0-131
(S) 4-Bromofluorobenzene	98.8			67.0-138
(S) 1,2-Dichloroethane-d4	105			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4127797-1 10/01/24 11:04 • (LCSD) R4127797-2 10/01/24 11:23

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.125	0.133	0.150	106	120	70.0-123			12.0	20
Toluene	0.125	0.117	0.142	93.6	114	75.0-121			19.3	20
Ethylbenzene	0.125	0.117	0.137	93.6	110	74.0-126			15.7	20
Xylenes, Total	0.375	0.343	0.396	91.5	106	72.0-127			14.3	20
1,2,4-Trimethylbenzene	0.125	0.102	0.122	81.6	97.6	70.0-126			17.9	20
1,3,5-Trimethylbenzene	0.125	0.108	0.128	86.4	102	73.0-127			16.9	20
(S) Toluene-d8				94.3	97.4	75.0-131				
(S) 4-Bromofluorobenzene				99.6	95.3	67.0-138				
(S) 1,2-Dichloroethane-d4				106	106	70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4128503-1 10/03/24 20:52

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C36 Motor Oil Range	U		0.274	4.00
<i>(S) o-Terphenyl</i>	73.1			18.0-148

Laboratory Control Sample (LCS)

(LCS) R4128503-2 10/03/24 21:05

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C10-C28 Diesel Range	50.0	27.5	55.0	50.0-150	
<i>(S) o-Terphenyl</i>			61.7	18.0-148	

L1782074-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1782074-02 10/03/24 22:49 • (MS) R4128503-3 10/03/24 23:02 • (MSD) R4128503-4 10/03/24 23:15

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	49.5	U	28.3	29.7	57.2	60.1	1	50.0-150			4.83	20
<i>(S) o-Terphenyl</i>					49.7	59.3		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4129002-2 10/04/24 00:09

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00209	0.00600
Anthracene	U		0.00230	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
Naphthalene	U		0.00408	0.0200
Pyrene	U		0.00200	0.00600
(S) p-Terphenyl-d14	97.2			23.0-120
(S) Nitrobenzene-d5	103			14.0-149
(S) 2-Fluorobiphenyl	97.4			34.0-125

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

Laboratory Control Sample (LCS)

(LCS) R4129002-1 10/03/24 23:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0800	0.0673	84.1	50.0-120	
Anthracene	0.0800	0.0636	79.5	50.0-126	
Benzo(a)anthracene	0.0800	0.0680	85.0	45.0-120	
Benzo(b)fluoranthene	0.0800	0.0699	87.4	42.0-121	
Benzo(k)fluoranthene	0.0800	0.0669	83.6	49.0-125	
Benzo(a)pyrene	0.0800	0.0658	82.3	42.0-120	
Chrysene	0.0800	0.0736	92.0	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0761	95.1	47.0-125	
Fluoranthene	0.0800	0.0765	95.6	49.0-129	
Fluorene	0.0800	0.0724	90.5	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0706	88.3	46.0-125	
1-Methylnaphthalene	0.0800	0.0710	88.8	51.0-121	
2-Methylnaphthalene	0.0800	0.0689	86.1	50.0-120	
Naphthalene	0.0800	0.0651	81.4	50.0-120	
Pyrene	0.0800	0.0693	86.6	43.0-123	

Laboratory Control Sample (LCS)

(LCS) R4129002-1 10/03/24 23:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
(S) p-Terphenyl-d14			98.3	23.0-120	
(S) Nitrobenzene-d5			113	14.0-149	
(S) 2-Fluorobiphenyl			106	34.0-125	

L1782074-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1782074-01 10/04/24 00:27 • (MS) R4129002-3 10/04/24 00:45 • (MSD) R4129002-4 10/04/24 01:02

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Acenaphthene	0.0800	U	0.0549	0.0602	68.6	75.3	1	14.0-127			9.21	27
Anthracene	0.0800	U	0.0478	0.0515	59.8	64.4	1	10.0-145			7.45	30
Benzo(a)anthracene	0.0800	U	0.0543	0.0586	67.9	73.3	1	10.0-139			7.62	30
Benzo(b)fluoranthene	0.0800	U	0.0524	0.0566	65.5	70.8	1	10.0-140			7.71	36
Benzo(k)fluoranthene	0.0800	U	0.0516	0.0544	64.5	68.0	1	10.0-137			5.28	31
Benzo(a)pyrene	0.0800	U	0.0525	0.0566	65.6	70.8	1	10.0-141			7.52	31
Chrysene	0.0800	U	0.0587	0.0641	73.4	80.1	1	10.0-145			8.79	30
Dibenz(a,h)anthracene	0.0800	U	0.0595	0.0636	74.4	79.5	1	10.0-132			6.66	31
Fluoranthene	0.0800	U	0.0602	0.0660	75.3	82.5	1	10.0-153			9.19	33
Fluorene	0.0800	U	0.0635	0.0727	79.4	90.9	1	11.0-130			13.5	29
Indeno(1,2,3-cd)pyrene	0.0800	U	0.0539	0.0590	67.4	73.8	1	10.0-137			9.03	32
1-Methylnaphthalene	0.0800	U	0.0612	0.0800	76.5	100	1	10.0-142			26.6	28
2-Methylnaphthalene	0.0800	U	0.0583	0.0756	72.9	94.5	1	10.0-137			25.8	28
Naphthalene	0.0800	U	0.0552	0.0634	69.0	79.3	1	10.0-135			13.8	27
Pyrene	0.0800	0.00219	0.0550	0.0614	66.0	74.0	1	10.0-148			11.0	35
(S) p-Terphenyl-d14					68.8	80.3		23.0-120				
(S) Nitrobenzene-d5					93.8	112		14.0-149				
(S) 2-Fluorobiphenyl					77.0	86.5		34.0-125				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

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

### Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
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

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
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.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 AI

9 Sc

# 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 <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	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 <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	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 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> 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.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Caerus Oil and Gas  
143 Diamond Avenue  
Parachute, CO 81635

Billing Information:  
SAMEASLEFT

Pres Chk

Chain of Custody Page \_\_\_ of \_\_\_



Report to:  
Jake Janicek

Email To:  
jjanicek@caerusoilandgas.com

Project Description:  
Corral Creek 4508 Facility Decommissioning

City/State Collected: Piceance Crk, CO  
Please Circle: PT MI CT ET

Phone: (970) 778-2314

Client Project #

Lab Project #

Collected by (print):  
Trevor Lakin

Site/Facility ID #  
Corral Creek 4508

P.O. #

Collected by (signature):  
*Trevor Lakin*

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

Quote #  
Date Results Needed  
Standard TAT

Immediately Packed on Ice N \_\_\_ Y

No. of Cntrs

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	COGOC Table 915-1	EC, pH, SAR	Arsenic, Boron	COGOC Table 910-1	Remarks	Sample # (lab only)
20240925-M29 199-(FC-PL01)@5	Grab	SS	5ft	9/25/24	9:24	4	X					-01
20240925-M29 199-(FC-PL02)@4	↓	↓	4ft	↓	9:53	4	X					-02
<p><i>Trevor Lakin</i> 9/25/24</p>												

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

Remarks:  
Samples returned via:  
 UPS  FedEx  Courier

Tracking # 410291736789  
pH \_\_\_ Temp \_\_\_  
Flow \_\_\_ Other \_\_\_

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

Relinquished by: (Signature)  
*Trevor Lakin*  
Date: 9/25/24  
Time: 13:00

Received by: (Signature)  
*AS*  
Date: 9/25/24  
Time: 1:50

Received for lab by: (Signature)  
*Demang*  
Date: 9-26-24  
Time: 0930

Trip Blank Received: Yes / No  
HCL / MeOH TBR  
Bottles Received: 8  
Temp: 24.9C  
36103-3.9  
If preservation required by Login: Date/Time  
Hold:  
Condition: NCF / OK