

May 10, 2023

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Caerus Oil and Gas

Sample Delivery Group: L1613445
Samples Received: 05/06/2023
Project Number: 20234315.001A
Description:
Site: LOVE RANCH 8
Report To: Brett M. , Jake J. , Blair R.
143 Diamond Avenue
Parachute, CO 81635

Entire Report Reviewed By:



Chris Ward
Project Manager

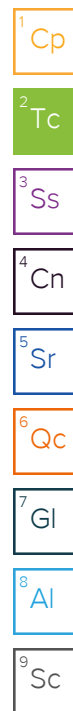
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Pace Analytical National

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

TABLE OF CONTENTS

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Sr: Sample Results	5
20230505-LOVE1RANCH 8-(ST-PC-UG02) L1613445-01	5
20230505-LOVE RANCH 8-(ST-PC-POR) L1613445-02	6
20230505-LOVE RANCH 8-(ST-PC-DG14) L1613445-03	7
20230505-LOVE RANCH 8-(ST-PC-DG13) L1613445-04	8
20230505-LOVE RANCH 8-(ST-PC-DG12) L1613445-05	9
20230505-LOVE RANCH 8-(ST-PC-DG11) L1613445-06	10
Qc: Quality Control Summary	11
Gravimetric Analysis by Method 2540 C-2011	11
Wet Chemistry by Method 9056A	12
Volatile Organic Compounds (GC/MS) by Method 8260B	13
Gl: Glossary of Terms	14
Al: Accreditations & Locations	15
Sc: Sample Chain of Custody	16



SAMPLE SUMMARY

20230505-LOVE1RANCH 8-(ST-PC-UG02) L1613445-01 GW

Collected by
Tristan Schmalz

Collected date/time
05/05/23 10:25

Received date/time
05/06/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2055883	1	05/08/23 09:24	05/08/23 12:31	AS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056748	1	05/09/23 20:02	05/09/23 20:02	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2055733	1	05/08/23 00:31	05/08/23 00:31	DWR	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

20230505-LOVE RANCH 8-(ST-PC-POR) L1613445-02 GW

Collected by
Tristan Schmalz

Collected date/time
05/05/23 10:33

Received date/time
05/06/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2055883	1	05/08/23 09:24	05/08/23 12:31	AS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056748	1	05/09/23 20:29	05/09/23 20:29	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2055733	1	05/08/23 00:52	05/08/23 00:52	DWR	Mt. Juliet, TN

20230505-LOVE RANCH 8-(ST-PC-DG14) L1613445-03 GW

Collected by
Tristan Schmalz

Collected date/time
05/05/23 10:42

Received date/time
05/06/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2055883	1	05/08/23 09:24	05/08/23 12:31	AS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056748	1	05/09/23 21:23	05/09/23 21:23	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2055733	1	05/08/23 01:13	05/08/23 01:13	DWR	Mt. Juliet, TN

20230505-LOVE RANCH 8-(ST-PC-DG13) L1613445-04 GW

Collected by
Tristan Schmalz

Collected date/time
05/05/23 10:48

Received date/time
05/06/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2055883	1	05/08/23 09:24	05/08/23 12:31	AS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056748	1	05/09/23 21:51	05/09/23 21:51	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2055733	1	05/08/23 01:35	05/08/23 01:35	DWR	Mt. Juliet, TN

20230505-LOVE RANCH 8-(ST-PC-DG12) L1613445-05 GW

Collected by
Tristan Schmalz

Collected date/time
05/05/23 10:56

Received date/time
05/06/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2055883	1	05/08/23 09:24	05/08/23 12:31	AS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056748	1	05/09/23 22:17	05/09/23 22:17	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2055733	1	05/08/23 01:57	05/08/23 01:57	DWR	Mt. Juliet, TN

20230505-LOVE RANCH 8-(ST-PC-DG11) L1613445-06 GW

Collected by
Tristan Schmalz

Collected date/time
05/05/23 11:04

Received date/time
05/06/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2055883	1	05/08/23 09:24	05/08/23 12:31	AS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2056748	1	05/09/23 22:45	05/09/23 22:45	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2055733	1	05/08/23 02:18	05/08/23 02:18	DWR	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



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	<u>Qualifier</u>	RDL mg/l	Dilution	Analysis date / time	<u>Batch</u>
Dissolved Solids	545		10.0	1	05/08/2023 12:31	WG2055883

Wet Chemistry by Method 9056A

Analyte	Result mg/l	<u>Qualifier</u>	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	<u>Batch</u>
Chloride	9.09		0.379	1.00	1	05/09/2023 20:02	WG2056748
Sulfate	140		0.594	5.00	1	05/09/2023 20:02	WG2056748

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

Analyte	Result mg/l	<u>Qualifier</u>	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.0000941	0.00100	1	05/08/2023 00:31	WG2055733
Toluene	U		0.000278	0.00100	1	05/08/2023 00:31	WG2055733
Ethylbenzene	U		0.000137	0.00100	1	05/08/2023 00:31	WG2055733
Xylenes, Total	U		0.000174	0.00300	1	05/08/2023 00:31	WG2055733
Naphthalene	U		0.00100	0.00500	1	05/08/2023 00:31	WG2055733
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	05/08/2023 00:31	WG2055733
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	05/08/2023 00:31	WG2055733
(S) Toluene-d8	113			80.0-120		05/08/2023 00:31	WG2055733
(S) 4-Bromofluorobenzene	95.9			77.0-126		05/08/2023 00:31	WG2055733
(S) 1,2-Dichloroethane-d4	109			70.0-130		05/08/2023 00:31	WG2055733

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	542		10.0	1	05/08/2023 12:31	WG2055883

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	8.99		0.379	1.00	1	05/09/2023 20:29	WG2056748
Sulfate	140		0.594	5.00	1	05/09/2023 20:29	WG2056748

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.000955	J	0.0000941	0.00100	1	05/08/2023 00:52	WG2055733
Toluene	0.00588		0.000278	0.00100	1	05/08/2023 00:52	WG2055733
Ethylbenzene	0.000532	J	0.000137	0.00100	1	05/08/2023 00:52	WG2055733
Xylenes, Total	0.00876		0.000174	0.00300	1	05/08/2023 00:52	WG2055733
Naphthalene	0.00105	J	0.00100	0.00500	1	05/08/2023 00:52	WG2055733
1,2,4-Trimethylbenzene	0.00211		0.000322	0.00100	1	05/08/2023 00:52	WG2055733
1,3,5-Trimethylbenzene	0.00171		0.000104	0.00100	1	05/08/2023 00:52	WG2055733
(S) Toluene-d8	112			80.0-120		05/08/2023 00:52	WG2055733
(S) 4-Bromofluorobenzene	98.9			77.0-126		05/08/2023 00:52	WG2055733
(S) 1,2-Dichloroethane-d4	108			70.0-130		05/08/2023 00:52	WG2055733

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	537		10.0	1	05/08/2023 12:31	WG2055883

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	8.96		0.379	1.00	1	05/09/2023 21:23	WG2056748
Sulfate	139		0.594	5.00	1	05/09/2023 21:23	WG2056748

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.0000965	J	0.0000941	0.00100	1	05/08/2023 01:13	WG2055733
Toluene	0.000426	J	0.000278	0.00100	1	05/08/2023 01:13	WG2055733
Ethylbenzene	U		0.000137	0.00100	1	05/08/2023 01:13	WG2055733
Xylenes, Total	0.000416	J	0.000174	0.00300	1	05/08/2023 01:13	WG2055733
Naphthalene	U		0.00100	0.00500	1	05/08/2023 01:13	WG2055733
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	05/08/2023 01:13	WG2055733
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	05/08/2023 01:13	WG2055733
(S) Toluene-d8	111			80.0-120		05/08/2023 01:13	WG2055733
(S) 4-Bromofluorobenzene	95.8			77.0-126		05/08/2023 01:13	WG2055733
(S) 1,2-Dichloroethane-d4	107			70.0-130		05/08/2023 01:13	WG2055733

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	549		10.0	1	05/08/2023 12:31	WG2055883

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	8.95		0.379	1.00	1	05/09/2023 21:51	WG2056748
Sulfate	140		0.594	5.00	1	05/09/2023 21:51	WG2056748

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0000941	0.00100	1	05/08/2023 01:35	WG2055733
Toluene	U		0.000278	0.00100	1	05/08/2023 01:35	WG2055733
Ethylbenzene	U		0.000137	0.00100	1	05/08/2023 01:35	WG2055733
Xylenes, Total	0.000210	J	0.000174	0.00300	1	05/08/2023 01:35	WG2055733
Naphthalene	U		0.00100	0.00500	1	05/08/2023 01:35	WG2055733
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	05/08/2023 01:35	WG2055733
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	05/08/2023 01:35	WG2055733
(S) Toluene-d8	107			80.0-120		05/08/2023 01:35	WG2055733
(S) 4-Bromofluorobenzene	85.8			77.0-126		05/08/2023 01:35	WG2055733
(S) 1,2-Dichloroethane-d4	103			70.0-130		05/08/2023 01:35	WG2055733

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	536		10.0	1	05/08/2023 12:31	WG2055883

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	9.04		0.379	1.00	1	05/09/2023 22:17	WG2056748
Sulfate	140		0.594	5.00	1	05/09/2023 22:17	WG2056748

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0000941	0.00100	1	05/08/2023 01:57	WG2055733
Toluene	U		0.000278	0.00100	1	05/08/2023 01:57	WG2055733
Ethylbenzene	U		0.000137	0.00100	1	05/08/2023 01:57	WG2055733
Xylenes, Total	U		0.000174	0.00300	1	05/08/2023 01:57	WG2055733
Naphthalene	U		0.00100	0.00500	1	05/08/2023 01:57	WG2055733
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	05/08/2023 01:57	WG2055733
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	05/08/2023 01:57	WG2055733
(S) Toluene-d8	110			80.0-120		05/08/2023 01:57	WG2055733
(S) 4-Bromofluorobenzene	96.1			77.0-126		05/08/2023 01:57	WG2055733
(S) 1,2-Dichloroethane-d4	108			70.0-130		05/08/2023 01:57	WG2055733

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	544		10.0	1	05/08/2023 12:31	WG2055883

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	8.97		0.379	1.00	1	05/09/2023 22:45	WG2056748
Sulfate	140		0.594	5.00	1	05/09/2023 22:45	WG2056748

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0000941	0.00100	1	05/08/2023 02:18	WG2055733
Toluene	U		0.000278	0.00100	1	05/08/2023 02:18	WG2055733
Ethylbenzene	U		0.000137	0.00100	1	05/08/2023 02:18	WG2055733
Xylenes, Total	U		0.000174	0.00300	1	05/08/2023 02:18	WG2055733
Naphthalene	U		0.00100	0.00500	1	05/08/2023 02:18	WG2055733
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	05/08/2023 02:18	WG2055733
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	05/08/2023 02:18	WG2055733
(S) Toluene-d8	112			80.0-120		05/08/2023 02:18	WG2055733
(S) 4-Bromofluorobenzene	92.7			77.0-126		05/08/2023 02:18	WG2055733
(S) 1,2-Dichloroethane-d4	108			70.0-130		05/08/2023 02:18	WG2055733

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3922876-1 05/08/23 12:31

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

L1611880-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1611880-03 05/08/23 12:31 • (DUP) R3922876-3 05/08/23 12:31

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	455	483	1	5.97	<div></div>	5

L1613445-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1613445-01 05/08/23 12:31 • (DUP) R3922876-4 05/08/23 12:31

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	545	550	1	0.913		5

Laboratory Control Sample (LCS)

(LCS) R3922876-2 05/08/23 12:31

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8650	98.3	77.3-123	

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3923003-1 05/09/23 11:10

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Chloride	U		0.379	1.00
Sulfate	U		0.594	5.00

L1612034-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1612034-02 05/09/23 15:57 • (DUP) R3923003-3 05/09/23 16:11

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	13.9	14.0	1	0.0903		15
Sulfate	24.5	24.6	1	0.421		15

Laboratory Control Sample (LCS)

(LCS) R3923003-2 05/09/23 11:23

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	mg/l	mg/l	%	%	
Chloride	40.0	37.9	94.7	80.0-120	
Sulfate	40.0	36.5	91.3	80.0-120	

L1612034-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1612034-02 05/09/23 15:57 • (MS) R3923003-4 05/09/23 16:24 • (MSD) R3923003-5 05/09/23 16:38

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Chloride	50.0	13.9	62.8	62.9	97.6	97.9	1	80.0-120			0.253	15
Sulfate	50.0	24.5	71.4	71.4	93.9	93.9	1	80.0-120			0.0282	15

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3922968-2 05/07/23 16:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0000941	0.00100
Toluene	U		0.000278	0.00100
Ethylbenzene	U		0.000137	0.00100
Xylenes, Total	U		0.000174	0.00300
Naphthalene	U		0.00100	0.00500
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
(S) Toluene-d8	107			80.0-120
(S) 4-Bromofluorobenzene	94.3			77.0-126
(S) 1,2-Dichloroethane-d4	105			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3922968-1 05/07/23 15:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00428	85.6	70.0-123	
Toluene	0.00500	0.00442	88.4	79.0-120	
Ethylbenzene	0.00500	0.00451	90.2	79.0-123	
Xylenes, Total	0.0150	0.0127	84.7	79.0-123	
Naphthalene	0.00500	0.00410	82.0	54.0-135	
1,2,4-Trimethylbenzene	0.00500	0.00451	90.2	76.0-121	
1,3,5-Trimethylbenzene	0.00500	0.00466	93.2	76.0-122	
(S) Toluene-d8			112	80.0-120	
(S) 4-Bromofluorobenzene			97.1	77.0-126	
(S) 1,2-Dichloroethane-d4			102	70.0-130	

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

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
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.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

ACCREDITATIONS & LOCATIONS

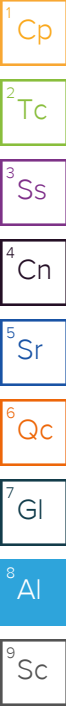
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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 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.



Caerus Oil and Gas
143 Diamond Avenue
Parachute, CO 81635

	Analysis / Container / Preservative							
Pres Chk								

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

Email To: brollins@caerusoilandgas.com	
City/State Collected: Piceance Crk, CO	Please Call PT <u>MT</u> C

Lab Project #
CAERUSPO - KLEIN

	P.O. #
--	--------

Notified) **Quote #**
 Day
 (Rad Only) **Date Results Needed**
 (Rad Only) **Standard TAT**

Acctnum:
Template:
Prelogin:
PM:
PB:

Remarks	Sample # (lab only)
---------	---------------------

* Matrix:	Remarks:	Sample Receipt Checklist
-----------	----------	--------------------------

Remarks:

Samples returned via:
___ UPS ___ FedEx ___ Courier ___

<u>Sample Receipt Checklist</u>			
COC Seal Present/Intact:	<u>NP</u>	<u>Y</u>	<u>N</u>
COC Signed/Accurate:		<u>Y</u>	<u>N</u>
Bottles arrive intact:		<u>Y</u>	<u>N</u>
Correct bottles used:		<u>Y</u>	<u>N</u>
Sufficient volume sent:		<u>Y</u>	<u>N</u>
<u>If Applicable</u>			
VOA Zero Headspace:		<u>Y</u>	<u>N</u>

Date:	5/5/2023
Date:	5/5/23
Date:	

Received by: (Signature)

Received by: (Signature)

Received for lab by: (Signature)

Preservation Correct/Checked: <u>Y</u> N	
RAD Screen <0.5 mR/hr: <u>Y</u> N	
If preservation required by Login: Date/Time	
Hold:	Condition: NCF / OK