


**Phillips 66 - Tasman**

Sample Delivery Group: L1861960  
Samples Received: 05/22/2025  
Project Number:  
Description: CR40 & CR35 (BF-3-2)

Report To: S. Weathers, B. Humphrey, J. Watts  
4725 Independence St  
Wheat Ridge, CO 80033

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.

# 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	
<b>MW01 L1861960-01</b>	5	
<b>MW02 L1861960-02</b>	6	
<b>MW03 L1861960-03</b>	7	
<b>MW04 L1861960-04</b>	8	
<b>MW05 L1861960-05</b>	9	
<b>Qc: Quality Control Summary</b>	10	
<b>Gravimetric Analysis by Method 2540 C-2011</b>	10	
<b>Wet Chemistry by Method 9056A</b>	11	
<b>Volatile Organic Compounds (GC/MS) by Method 8260B</b>	15	
<b>Gl: Glossary of Terms</b>	16	
<b>Al: Accreditations &amp; Locations</b>	17	
<b>Sc: Sample Chain of Custody</b>	18	

# SAMPLE SUMMARY

## MW01 L1861960-01

Collected by: Grayson Turner  
 Collected date/time: 05/20/25 12:13  
 Received date/time: 05/22/25 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2522157	1	05/27/25 08:46	05/27/25 11:13	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2521585	5	05/31/25 06:31	05/31/25 06:31	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2522102	1	05/26/25 02:26	05/26/25 02:26	JBE	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

## MW02 L1861960-02

Collected by: Grayson Turner  
 Collected date/time: 05/20/25 11:47  
 Received date/time: 05/22/25 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2522157	1	05/27/25 08:46	05/27/25 11:13	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2521585	10	05/31/25 06:45	05/31/25 06:45	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2522102	1	05/26/25 02:47	05/26/25 02:47	JBE	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

## MW03 L1861960-03

Collected by: Grayson Turner  
 Collected date/time: 05/20/25 11:25  
 Received date/time: 05/22/25 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2522157	1	05/27/25 08:46	05/27/25 11:13	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2521585	1	05/31/25 08:12	05/31/25 08:12	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2521585	5	05/31/25 09:05	05/31/25 09:05	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2522102	1	05/26/25 03:09	05/26/25 03:09	JBE	Mt. Juliet, TN

7 Gl

8 Al

9 Sc

## MW04 L1861960-04

Collected by: Grayson Turner  
 Collected date/time: 05/20/25 11:31  
 Received date/time: 05/22/25 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2522157	1	05/27/25 08:46	05/27/25 11:13	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2521587	5	05/29/25 12:01	05/29/25 12:01	DLH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2522102	1	05/26/25 03:30	05/26/25 03:30	JBE	Mt. Juliet, TN

## MW05 L1861960-05

Collected by: Grayson Turner  
 Collected date/time: 05/20/25 11:58  
 Received date/time: 05/22/25 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2522157	1	05/27/25 08:46	05/27/25 11:13	MMF	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2521587	5	05/29/25 12:14	05/29/25 12:14	DLH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2522102	1	05/26/25 03:52	05/26/25 03:52	JBE	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

## Report Revision History

---

Level II Report - Version 1: 06/02/25 08:21

## Project Narrative

---

Report has been revised to correct the Client ID. MLE 06/02/2025

<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

Gravimetric Analysis by Method 2540 C-2011

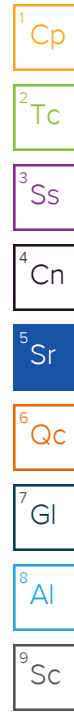
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	1480		25.0	1	05/27/2025 11:13	<a href="#">WG2522157</a>

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	241		2.74	5.00	5	05/31/2025 06:31	<a href="#">WG2521585</a>
Sulfate	395		3.18	25.0	5	05/31/2025 06:31	<a href="#">WG2521585</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Benzene	42.5		0.0941	1.00	1	05/26/2025 02:26	<a href="#">WG2522102</a>
Toluene	U		0.278	1.00	1	05/26/2025 02:26	<a href="#">WG2522102</a>
Ethylbenzene	4.28		0.137	1.00	1	05/26/2025 02:26	<a href="#">WG2522102</a>
Xylenes, Total	26.8		0.174	3.00	1	05/26/2025 02:26	<a href="#">WG2522102</a>
Naphthalene	U		1.00	5.00	1	05/26/2025 02:26	<a href="#">WG2522102</a>
1,2,4-Trimethylbenzene	3.91		0.322	1.00	1	05/26/2025 02:26	<a href="#">WG2522102</a>
1,3,5-Trimethylbenzene	2.43		0.104	1.00	1	05/26/2025 02:26	<a href="#">WG2522102</a>
(S) Toluene-d8	103			80.0-120		05/26/2025 02:26	<a href="#">WG2522102</a>
(S) 4-Bromofluorobenzene	99.3			77.0-126		05/26/2025 02:26	<a href="#">WG2522102</a>
(S) 1,2-Dichloroethane-d4	95.1			70.0-130		05/26/2025 02:26	<a href="#">WG2522102</a>



Gravimetric Analysis by Method 2540 C-2011

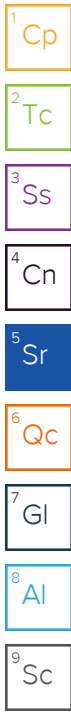
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	2520		50.0	1	05/27/2025 11:13	<a href="#">WG2522157</a>

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	474		5.47	10.0	10	05/31/2025 06:45	<a href="#">WG2521585</a>
Sulfate	745		6.37	50.0	10	05/31/2025 06:45	<a href="#">WG2521585</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	05/26/2025 02:47	<a href="#">WG2522102</a>
Toluene	U		0.278	1.00	1	05/26/2025 02:47	<a href="#">WG2522102</a>
Ethylbenzene	U		0.137	1.00	1	05/26/2025 02:47	<a href="#">WG2522102</a>
Xylenes, Total	U		0.174	3.00	1	05/26/2025 02:47	<a href="#">WG2522102</a>
Naphthalene	U		1.00	5.00	1	05/26/2025 02:47	<a href="#">WG2522102</a>
1,2,4-Trimethylbenzene	U		0.322	1.00	1	05/26/2025 02:47	<a href="#">WG2522102</a>
1,3,5-Trimethylbenzene	U		0.104	1.00	1	05/26/2025 02:47	<a href="#">WG2522102</a>
(S) Toluene-d8	111			80.0-120		05/26/2025 02:47	<a href="#">WG2522102</a>
(S) 4-Bromofluorobenzene	90.1			77.0-126		05/26/2025 02:47	<a href="#">WG2522102</a>
(S) 1,2-Dichloroethane-d4	77.4			70.0-130		05/26/2025 02:47	<a href="#">WG2522102</a>



Gravimetric Analysis by Method 2540 C-2011

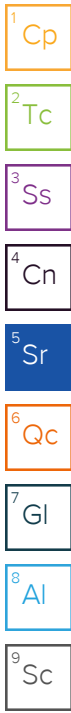
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	515		50.0	1	05/27/2025 11:13	<a href="#">WG2522157</a>

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	79.9	<a href="#">J6</a>	0.547	1.00	1	05/31/2025 08:12	<a href="#">WG2521585</a>
Sulfate	195		3.18	25.0	5	05/31/2025 09:05	<a href="#">WG2521585</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	05/26/2025 03:09	<a href="#">WG2522102</a>
Toluene	U		0.278	1.00	1	05/26/2025 03:09	<a href="#">WG2522102</a>
Ethylbenzene	U		0.137	1.00	1	05/26/2025 03:09	<a href="#">WG2522102</a>
Xylenes, Total	U		0.174	3.00	1	05/26/2025 03:09	<a href="#">WG2522102</a>
Naphthalene	U		1.00	5.00	1	05/26/2025 03:09	<a href="#">WG2522102</a>
1,2,4-Trimethylbenzene	U		0.322	1.00	1	05/26/2025 03:09	<a href="#">WG2522102</a>
1,3,5-Trimethylbenzene	U		0.104	1.00	1	05/26/2025 03:09	<a href="#">WG2522102</a>
(S) Toluene-d8	103			80.0-120		05/26/2025 03:09	<a href="#">WG2522102</a>
(S) 4-Bromofluorobenzene	101			77.0-126		05/26/2025 03:09	<a href="#">WG2522102</a>
(S) 1,2-Dichloroethane-d4	98.3			70.0-130		05/26/2025 03:09	<a href="#">WG2522102</a>



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	1580		200	1	05/27/2025 11:13	<a href="#">WG2522157</a>

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	213		2.74	5.00	5	05/29/2025 12:01	<a href="#">WG2521587</a>
Sulfate	367		3.18	25.0	5	05/29/2025 12:01	<a href="#">WG2521587</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	05/26/2025 03:30	<a href="#">WG2522102</a>
Toluene	U		0.278	1.00	1	05/26/2025 03:30	<a href="#">WG2522102</a>
Ethylbenzene	U		0.137	1.00	1	05/26/2025 03:30	<a href="#">WG2522102</a>
Xylenes, Total	U		0.174	3.00	1	05/26/2025 03:30	<a href="#">WG2522102</a>
Naphthalene	U		1.00	5.00	1	05/26/2025 03:30	<a href="#">WG2522102</a>
1,2,4-Trimethylbenzene	U		0.322	1.00	1	05/26/2025 03:30	<a href="#">WG2522102</a>
1,3,5-Trimethylbenzene	U		0.104	1.00	1	05/26/2025 03:30	<a href="#">WG2522102</a>
(S) Toluene-d8	103			80.0-120		05/26/2025 03:30	<a href="#">WG2522102</a>
(S) 4-Bromofluorobenzene	100			77.0-126		05/26/2025 03:30	<a href="#">WG2522102</a>
(S) 1,2-Dichloroethane-d4	97.0			70.0-130		05/26/2025 03:30	<a href="#">WG2522102</a>

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

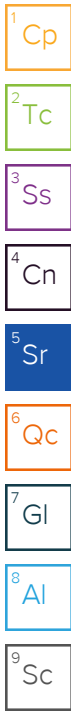
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	1420		20.0	1	05/27/2025 11:13	<a href="#">WG2522157</a>

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	162		2.74	5.00	5	05/29/2025 12:14	<a href="#">WG2521587</a>
Sulfate	299		3.18	25.0	5	05/29/2025 12:14	<a href="#">WG2521587</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	05/26/2025 03:52	<a href="#">WG2522102</a>
Toluene	U		0.278	1.00	1	05/26/2025 03:52	<a href="#">WG2522102</a>
Ethylbenzene	U		0.137	1.00	1	05/26/2025 03:52	<a href="#">WG2522102</a>
Xylenes, Total	U		0.174	3.00	1	05/26/2025 03:52	<a href="#">WG2522102</a>
Naphthalene	U		1.00	5.00	1	05/26/2025 03:52	<a href="#">WG2522102</a>
1,2,4-Trimethylbenzene	U		0.322	1.00	1	05/26/2025 03:52	<a href="#">WG2522102</a>
1,3,5-Trimethylbenzene	U		0.104	1.00	1	05/26/2025 03:52	<a href="#">WG2522102</a>
(S) Toluene-d8	104			80.0-120		05/26/2025 03:52	<a href="#">WG2522102</a>
(S) 4-Bromofluorobenzene	99.9			77.0-126		05/26/2025 03:52	<a href="#">WG2522102</a>
(S) 1,2-Dichloroethane-d4	97.3			70.0-130		05/26/2025 03:52	<a href="#">WG2522102</a>



Method Blank (MB)

(MB) R4222621-1 05/27/25 11:13

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		5.20	10.0

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1861959-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1861959-07 05/27/25 11:13 • (DUP) R4222621-3 05/27/25 11:13

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	2630	2630	1	0.000		10

L1862959-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1862959-06 05/27/25 11:13 • (DUP) R4222621-4 05/27/25 11:13

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	1110	1120	1	0.359		10

Laboratory Control Sample (LCS)

(LCS) R4222621-2 05/27/25 11:13

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800	8740	99.3	90.0-110	

Method Blank (MB)

(MB) R4223425-1 05/31/25 01:09

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	U		0.547	1.00
Sulfate	U		0.637	5.00

<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

L1861927-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1861927-08 05/31/25 01:49 • (DUP) R4223425-4 05/31/25 02:03

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	246	233	5	5.36		15
Sulfate	79.8	79.6	5	0.239		15

L1861960-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1861960-03 05/31/25 08:12 • (DUP) R4223425-5 05/31/25 08:25

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	79.9	76.6	1	4.19		15

L1861960-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1861960-03 05/31/25 09:05 • (DUP) R4223425-8 05/31/25 09:19

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Sulfate	195	195	5	0.0380		15

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

(LCS) R4223425-2 05/31/25 01:23 • (LCSD) R4223425-3 05/31/25 01:36

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Chloride	40.0	42.0	40.2	105	100	80.0-120			4.41	15
Sulfate	40.0	39.2	39.2	98.1	98.0	80.0-120			0.0551	15

L1861960-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1861960-03 05/31/25 08:12 • (MS) R4223425-6 05/31/25 08:39 • (MSD) R4223425-7 05/31/25 08:52

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	79.9	101	100	53.5	50.7	1	80.0-120	<u>EJ6</u>	<u>EJ6</u>	1.13	15
Sulfate	40.0	194	191	185	0.000	0.000	1	80.0-120	<u>EV</u>	<u>EV</u>	2.88	15

<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) R4223086-1 05/29/25 11:07

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Chloride	U		0.547	1.00
Sulfate	U		0.637	5.00

L1861969-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1861969-01 05/29/25 12:28 • (DUP) R4223086-3 05/29/25 12:41

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	94.7	99.6	5	5.02		15
Sulfate	178	188	5	5.42		15

Sample Narrative:

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

L1861969-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1861969-02 05/29/25 13:22 • (DUP) R4223086-6 05/29/25 13:35

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	59.9	57.6	1	3.89		15
Sulfate	75.1	72.4	1	3.66		15

Laboratory Control Sample (LCS)

(LCS) R4223086-2 05/29/25 11:20

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/l	mg/l	%	%	
Chloride	40.0	41.5	104	80.0-120	
Sulfate	40.0	42.5	106	80.0-120	

L1861969-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1861969-01 05/29/25 12:28 • (MS) R4223086-4 05/29/25 12:55 • (MSD) R4223086-5 05/29/25 13:08

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Chloride	40.0	94.7	114	111	47.5	40.3	5	80.0-120	J6	J6	2.58	15
Sulfate	40.0	178	183	178	12.6	0.000	5	80.0-120	V	V	2.82	15

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1861969-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1861969-02 05/29/25 13:22 • (MS) R4223086-7 05/29/25 13:48

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40.0	59.9	83.9	60.0	1	80.0-120	<u>J6</u>
Sulfate	40.0	75.1	96.8	54.4	1	80.0-120	<u>J6</u>

<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) R4220818-2 05/25/25 20:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
Xylenes, Total	U		0.174	3.00
Naphthalene	U		1.00	5.00
1,2,4-Trimethylbenzene	U		0.322	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
(S) Toluene-d8	104			80.0-120
(S) 4-Bromofluorobenzene	98.9			77.0-126
(S) 1,2-Dichloroethane-d4	101			70.0-130

Laboratory Control Sample (LCS)

(LCS) R4220818-1 05/25/25 19:49

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	5.00	4.07	81.4	70.0-123	
Toluene	5.00	4.05	81.0	79.0-120	
Ethylbenzene	5.00	4.28	85.6	79.0-123	
Xylenes, Total	15.0	12.9	86.0	79.0-123	
Naphthalene	5.00	4.33	86.6	54.0-135	J
1,2,4-Trimethylbenzene	5.00	4.51	90.2	76.0-121	
1,3,5-Trimethylbenzene	5.00	4.48	89.6	76.0-122	
(S) Toluene-d8			104	80.0-120	
(S) 4-Bromofluorobenzene			99.7	77.0-126	
(S) 1,2-Dichloroethane-d4			101	70.0-130	

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.

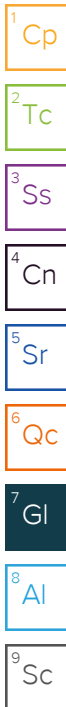
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location.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

E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.



# ACCREDITATIONS & LOCATIONS

## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico <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

Company Name/Address: **Tasman/DCP**  
**4725 Independence St.**  
**Wheat Ridge, CO 80033**

Billing Information: **Tasman**

Chain of Custody Page 1 of 1

Pres Chk



12065 Lebanon Rd Mount Juliet, TN 37122  
 Phone: 615-758-5858 Alt: 800-767-5859  
 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubs/pas-standard-terms.pdf>

Report to: **S. Weathers, B. Humphrey, J. Watts**

Email To: **Stephen.Weathers@pbl.com**  
**bhumphrey@tasman-geo.com**  
**JWatts@tasman-geo.com**

Project Description: **CR 40 & CR 35 (BF3-2)**

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

Please Circle: PT  MT  CT  ET

Phone: **303-487-1228**

Client Project #

Lab Project #

Collected by (print): **Grayson Turner**

Site/Facility ID #

P.O. #

Collected by (signature): *Grayson Turner*

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

Date Results Needed

Quote #

Immediately Packed on Ice N  Y

No. of Cntrs

V8260 (Table 915-10 gm HCl)  
 TDS (IL Poly) / none  
 Chloride & Sulfate (as Sulfate poly)

SDG # **U860960**  
**M228**

Acctnum:

Template:

Prelogin:

PM:

PB:

Shipped Via:

Remarks

Sample # (lab only)

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs												
MW01	Grab	GW		5/20/25	12:13	5												-01
MW02	Grab	GW			11:47	1												-02
MW03	Grab	GW			11:25	1												-03
MW04	Grab	GW			11:31	1												-04
MW05	Grab	GW			11:58	1												-05

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

Remarks:

Samples returned via:  UPS  FedEx  Courier

Tracking # **SWA**

pH \_\_\_\_\_ Temp \_\_\_\_\_  
 Flow \_\_\_\_\_ Other \_\_\_\_\_

Sample Receipt Checklist

COC Seal Present/Intact:  NP  Y  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) *Grayson Turner* Date: **5/20/25** Time: **18:00**

Received by: (Signature) *[Signature]* Trip Blank Received: Yes /  No  
 HCL / MeOH  
 TBR

Relinquished by: (Signature) *[Signature]* Date: **5/21/25** Time: **18:00**

Received by: (Signature) **SWA** Temp: **21.61 °C** Bottles Received: **01 + 0.4 = 0.5 29**

If preservation required by Login: Date/Time

Relinquished by: (Signature) Date: Time: Received for lab by: (Signature) Date: Time: Hold: Condition: **NCF / OK**