

September 03, 2020

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: L1253389  
Samples Received: 08/21/2020  
Project Number: F23  
Description: F23  
Site: F23  
Report To: Blair Rollins  
143 Diamond Avenue  
Parachute, CO 81635

Entire Report Reviewed By:

*Chris Ward*

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.



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# SAMPLE SUMMARY

## 2020082-F23-06D-NWALL L1253389-01 Solid

Collected by  
Chance Holder      Collected date/time  
08/20/20 10:00      Received date/time  
08/21/20 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1531686	1	08/26/20 10:10	08/26/20 10:10	CCE	Mt. Juliet, TN
Calculated Results	WG1532136	1	08/25/20 17:35	08/27/20 11:53	TRB	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1531600	1	08/25/20 18:00	08/26/20 17:02	JIC	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1533896	1	08/28/20 16:00	08/28/20 17:00	JIC	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1530570	1	08/22/20 10:02	08/22/20 14:42	SRG	Mt. Juliet, TN
Mercury by Method 7471A	WG1532263	1	08/25/20 18:37	08/26/20 09:50	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1532136	1	08/25/20 17:35	08/27/20 11:53	TRB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1532132	5	08/25/20 17:26	08/26/20 16:09	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1533805	1	08/25/20 22:27	08/28/20 10:53	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1533076	1	08/25/20 22:27	08/27/20 03:28	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1535246	1	08/31/20 18:01	09/01/20 13:12	JN	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1533587	1	08/28/20 00:46	08/28/20 08:31	AAT	Mt. Juliet, TN

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

## 2020082-F23-06D-EWALL L1253389-02 Solid

Collected by  
Chance Holder      Collected date/time  
08/20/20 10:10      Received date/time  
08/21/20 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1529923	1	08/25/20 17:46	08/25/20 17:46	EL	Mt. Juliet, TN
Calculated Results	WG1532136	1	08/25/20 17:35	08/27/20 11:56	TRB	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1531600	1	08/25/20 18:00	08/26/20 17:02	JIC	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1533896	1	08/28/20 16:00	08/28/20 17:00	JIC	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1530570	1	08/22/20 10:02	08/22/20 14:42	SRG	Mt. Juliet, TN
Mercury by Method 7471A	WG1532263	1	08/25/20 18:37	08/26/20 09:53	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1532136	1	08/25/20 17:35	08/27/20 11:56	TRB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1532132	5	08/25/20 17:26	08/26/20 16:13	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1533806	25	08/25/20 22:27	08/28/20 20:23	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1533076	1	08/25/20 22:27	08/27/20 03:47	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1533269	10	08/25/20 22:27	08/27/20 13:54	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1535246	1	08/31/20 18:01	09/01/20 13:25	JN	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1533587	1	08/28/20 00:46	08/28/20 08:48	AAT	Mt. Juliet, TN

## 2020082-F23-06D-SWALL L1253389-03 Solid

Collected by  
Chance Holder      Collected date/time  
08/20/20 10:20      Received date/time  
08/21/20 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1529923	1	08/25/20 17:49	08/25/20 17:49	EL	Mt. Juliet, TN
Calculated Results	WG1532136	1	08/25/20 17:35	08/27/20 11:59	TRB	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1531600	1	08/25/20 18:00	08/26/20 17:03	JIC	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1533896	1	08/28/20 16:00	08/28/20 17:00	JIC	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1530570	1	08/22/20 10:02	08/22/20 14:42	SRG	Mt. Juliet, TN
Mercury by Method 7471A	WG1532263	1	08/25/20 18:37	08/26/20 09:55	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1532136	1	08/25/20 17:35	08/27/20 11:59	TRB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1532132	5	08/25/20 17:26	08/26/20 16:16	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1533887	500	08/25/20 22:27	08/28/20 23:16	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1533076	40	08/25/20 22:27	08/27/20 04:43	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1533576	20	08/28/20 09:53	08/30/20 16:29	JN	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1533587	1	08/28/20 00:46	08/28/20 09:06	AAT	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1533587	20	08/28/20 00:46	08/28/20 13:07	AAT	Mt. Juliet, TN

# SAMPLE SUMMARY

## 2020082-F23-06D-WWALL L1253389-04 Solid

Collected by  
Chance Holder      Collected date/time  
08/20/20 10:30      Received date/time  
08/21/20 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1529923	1	08/25/20 17:58	08/25/20 17:58	EL	Mt. Juliet, TN
Calculated Results	WG1532136	1	08/25/20 17:35	08/27/20 12:08	TRB	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1531600	1	08/25/20 18:00	08/26/20 17:04	JIC	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1533896	1	08/28/20 16:00	08/28/20 17:00	JIC	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1530570	1	08/22/20 10:02	08/22/20 14:42	SRG	Mt. Juliet, TN
Mercury by Method 7471A	WG1532263	1	08/25/20 18:37	08/26/20 09:58	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1532136	1	08/25/20 17:35	08/27/20 12:08	TRB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1532132	5	08/25/20 17:26	08/26/20 16:19	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1533887	1	08/25/20 22:27	08/28/20 19:28	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1533076	1	08/25/20 22:27	08/27/20 04:06	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1535246	1	08/31/20 18:01	09/02/20 13:51	JN	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1533587	1	08/28/20 00:46	08/28/20 09:23	AAT	Mt. Juliet, TN

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

## 2020082-F23-06D-BOT L1253389-05 Solid

Collected by  
Chance Holder      Collected date/time  
08/20/20 10:40      Received date/time  
08/21/20 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1529923	1	08/25/20 18:00	08/25/20 18:00	EL	Mt. Juliet, TN
Calculated Results	WG1532136	1	08/25/20 17:35	08/27/20 12:11	TRB	Mt. Juliet, TN
Wet Chemistry by Method 3060A/7196A	WG1531600	1	08/25/20 18:00	08/26/20 17:04	JIC	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1533896	1	08/28/20 16:00	08/28/20 17:00	JIC	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1530570	1	08/22/20 10:02	08/22/20 14:42	SRG	Mt. Juliet, TN
Mercury by Method 7471A	WG1532263	1	08/25/20 18:37	08/26/20 10:00	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1532136	1	08/25/20 17:35	08/27/20 12:11	TRB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1532132	5	08/25/20 17:26	08/26/20 16:22	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1533887	1	08/25/20 22:27	08/28/20 19:48	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1533076	1	08/25/20 22:27	08/27/20 04:24	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1533576	1	08/28/20 09:53	08/28/20 19:16	JN	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1533587	1	08/28/20 00:46	08/28/20 09:40	AAT	Mt. Juliet, TN



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	33.8		1	08/26/2020 10:10	WG1531686

<sup>1</sup> Cp

<sup>2</sup> Tc

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chromium, Trivalent	25.2		1.00	1	08/27/2020 11:53	<a href="#">WG1532136</a>

<sup>3</sup> Ss

<sup>4</sup> Cn

Wet Chemistry by Method 3060A/7196A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	08/26/2020 17:02	<a href="#">WG1531600</a>

<sup>5</sup> Sr

<sup>6</sup> Qc

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	9.39	<u>T8</u>	1	08/28/2020 17:00	<a href="#">WG1533896</a>

<sup>7</sup> Gl

<sup>8</sup> Al

Sample Narrative:

L1253389-01 WG1533896: 9.39 at 23.2C

<sup>9</sup> Sc

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	1710	<u>J4</u>	10.0	1	08/22/2020 14:42	<a href="#">WG1530570</a>

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	08/26/2020 09:50	<a href="#">WG1532263</a>

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Barium	616		0.500	1	08/27/2020 11:53	<a href="#">WG1532136</a>
Cadmium	ND		0.500	1	08/27/2020 11:53	<a href="#">WG1532136</a>
Chromium	25.2		1.00	1	08/27/2020 11:53	<a href="#">WG1532136</a>
Copper	24.1		2.00	1	08/27/2020 11:53	<a href="#">WG1532136</a>
Lead	17.0		0.500	1	08/27/2020 11:53	<a href="#">WG1532136</a>
Nickel	21.5		2.00	1	08/27/2020 11:53	<a href="#">WG1532136</a>
Selenium	ND		2.00	1	08/27/2020 11:53	<a href="#">WG1532136</a>
Silver	ND		1.00	1	08/27/2020 11:53	<a href="#">WG1532136</a>
Zinc	61.3		5.00	1	08/27/2020 11:53	<a href="#">WG1532136</a>

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	18.3		1.00	5	08/26/2020 16:09	<a href="#">WG1532132</a>

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	1.84		0.100	1	08/28/2020 10:53	<a href="#">WG1533805</a>



Collected date/time: 08/20/20 10:00

L1253389

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	85.6		77.0-120		08/28/2020 10:53	<a href="#">WG1533805</a>

1 Cp

2 Tc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	0.0230		0.00100	1	08/27/2020 03:28	<a href="#">WG1533076</a>
Toluene	0.246		0.00500	1	08/27/2020 03:28	<a href="#">WG1533076</a>
Ethylbenzene	0.0518		0.00250	1	08/27/2020 03:28	<a href="#">WG1533076</a>
Total Xylenes	3.15		0.00650	1	08/27/2020 03:28	<a href="#">WG1533076</a>
(S) Toluene-d8	103		75.0-131		08/27/2020 03:28	<a href="#">WG1533076</a>
(S) 4-Bromofluorobenzene	99.4		67.0-138		08/27/2020 03:28	<a href="#">WG1533076</a>
(S) 1,2-Dichloroethane-d4	82.9		70.0-130		08/27/2020 03:28	<a href="#">WG1533076</a>

3 Ss

4 Cn

5 Sr

6 Qc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) High Fraction	30.1		4.00	1	09/01/2020 13:12	<a href="#">WG1535246</a>
(S) <i>o</i> -Terphenyl	36.0		18.0-148		09/01/2020 13:12	<a href="#">WG1535246</a>

7 Gl

8 Al

9 Sc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Anthracene	ND		0.00600	1	08/28/2020 08:31	<a href="#">WG1533587</a>
Acenaphthene	ND		0.00600	1	08/28/2020 08:31	<a href="#">WG1533587</a>
Acenaphthylene	ND		0.00600	1	08/28/2020 08:31	<a href="#">WG1533587</a>
Benzo(a)anthracene	ND		0.00600	1	08/28/2020 08:31	<a href="#">WG1533587</a>
Benzo(a)pyrene	ND		0.00600	1	08/28/2020 08:31	<a href="#">WG1533587</a>
Benzo(b)fluoranthene	ND		0.00600	1	08/28/2020 08:31	<a href="#">WG1533587</a>
Benzo(g,h,i)perylene	ND		0.00600	1	08/28/2020 08:31	<a href="#">WG1533587</a>
Benzo(k)fluoranthene	ND		0.00600	1	08/28/2020 08:31	<a href="#">WG1533587</a>
Chrysene	ND		0.00600	1	08/28/2020 08:31	<a href="#">WG1533587</a>
Dibenz(a,h)anthracene	ND		0.00600	1	08/28/2020 08:31	<a href="#">WG1533587</a>
Fluoranthene	ND		0.00600	1	08/28/2020 08:31	<a href="#">WG1533587</a>
Fluorene	ND		0.00600	1	08/28/2020 08:31	<a href="#">WG1533587</a>
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	08/28/2020 08:31	<a href="#">WG1533587</a>
Naphthalene	0.115		0.0200	1	08/28/2020 08:31	<a href="#">WG1533587</a>
Phenanthrene	ND		0.00600	1	08/28/2020 08:31	<a href="#">WG1533587</a>
Pyrene	ND		0.00600	1	08/28/2020 08:31	<a href="#">WG1533587</a>
1-Methylnaphthalene	0.0756		0.0200	1	08/28/2020 08:31	<a href="#">WG1533587</a>
2-Methylnaphthalene	0.226		0.0200	1	08/28/2020 08:31	<a href="#">WG1533587</a>
2-Chloronaphthalene	ND		0.0200	1	08/28/2020 08:31	<a href="#">WG1533587</a>
(S) <i>p</i> -Terphenyl-d14	96.1		23.0-120		08/28/2020 08:31	<a href="#">WG1533587</a>
(S) Nitrobenzene-d5	81.3		14.0-149		08/28/2020 08:31	<a href="#">WG1533587</a>
(S) 2-Fluorobiphenyl	73.3		34.0-125		08/28/2020 08:31	<a href="#">WG1533587</a>



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	23.5		1	08/25/2020 17:46	WG1529923

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

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chromium, Trivalent	24.2		1.00	1	08/27/2020 11:56	<a href="#">WG1532136</a>

Wet Chemistry by Method 3060A/7196A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	08/26/2020 17:02	<a href="#">WG1531600</a>

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	9.32	<u>T8</u>	1	08/28/2020 17:00	<a href="#">WG1533896</a>

Sample Narrative:

L1253389-02 WG1533896: 9.32 at 23.1C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	1590	<u>J4</u>	10.0	1	08/22/2020 14:42	<a href="#">WG1530570</a>

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	08/26/2020 09:53	<a href="#">WG1532263</a>

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Barium	338		0.500	1	08/27/2020 11:56	<a href="#">WG1532136</a>
Cadmium	ND		0.500	1	08/27/2020 11:56	<a href="#">WG1532136</a>
Chromium	24.2		1.00	1	08/27/2020 11:56	<a href="#">WG1532136</a>
Copper	28.0		2.00	1	08/27/2020 11:56	<a href="#">WG1532136</a>
Lead	16.9		0.500	1	08/27/2020 11:56	<a href="#">WG1532136</a>
Nickel	21.0		2.00	1	08/27/2020 11:56	<a href="#">WG1532136</a>
Selenium	ND		2.00	1	08/27/2020 11:56	<a href="#">WG1532136</a>
Silver	ND		1.00	1	08/27/2020 11:56	<a href="#">WG1532136</a>
Zinc	64.0		5.00	1	08/27/2020 11:56	<a href="#">WG1532136</a>

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	18.2		1.00	5	08/26/2020 16:13	<a href="#">WG1532132</a>

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	88.8		2.50	25	08/28/2020 20:23	<a href="#">WG1533806</a>



Collected date/time: 08/20/20 10:10

L1253389

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
(S) a,a,a-Trifluorotoluene(FID)	90.5		77.0-120		08/28/2020 20:23	<a href="#">WG1533806</a>

1 Cp

2 Tc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	0.260		0.00100	1	08/27/2020 03:47	<a href="#">WG1533076</a>
Toluene	7.07		0.0500	10	08/27/2020 13:54	<a href="#">WG1533269</a>
Ethylbenzene	0.358		0.00250	1	08/27/2020 03:47	<a href="#">WG1533076</a>
Total Xylenes	17.7		0.0650	10	08/27/2020 13:54	<a href="#">WG1533269</a>
(S) Toluene-d8	103		75.0-131		08/27/2020 03:47	<a href="#">WG1533076</a>
(S) Toluene-d8	96.1		75.0-131		08/27/2020 13:54	<a href="#">WG1533269</a>
(S) 4-Bromofluorobenzene	96.4		67.0-138		08/27/2020 03:47	<a href="#">WG1533076</a>
(S) 4-Bromofluorobenzene	106		67.0-138		08/27/2020 13:54	<a href="#">WG1533269</a>
(S) 1,2-Dichloroethane-d4	89.4		70.0-130		08/27/2020 03:47	<a href="#">WG1533076</a>
(S) 1,2-Dichloroethane-d4	101		70.0-130		08/27/2020 13:54	<a href="#">WG1533269</a>

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) High Fraction	16.3		4.00	1	09/01/2020 13:25	<a href="#">WG1535246</a>
(S) o-Terphenyl	32.8		18.0-148		09/01/2020 13:25	<a href="#">WG1535246</a>

9 Sc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Anthracene	ND		0.00600	1	08/28/2020 08:48	<a href="#">WG1533587</a>
Acenaphthene	ND		0.00600	1	08/28/2020 08:48	<a href="#">WG1533587</a>
Acenaphthylene	ND		0.00600	1	08/28/2020 08:48	<a href="#">WG1533587</a>
Benzo(a)anthracene	ND		0.00600	1	08/28/2020 08:48	<a href="#">WG1533587</a>
Benzo(a)pyrene	ND		0.00600	1	08/28/2020 08:48	<a href="#">WG1533587</a>
Benzo(b)fluoranthene	ND		0.00600	1	08/28/2020 08:48	<a href="#">WG1533587</a>
Benzo(g,h,i)perylene	ND		0.00600	1	08/28/2020 08:48	<a href="#">WG1533587</a>
Benzo(k)fluoranthene	ND		0.00600	1	08/28/2020 08:48	<a href="#">WG1533587</a>
Chrysene	ND		0.00600	1	08/28/2020 08:48	<a href="#">WG1533587</a>
Dibenz(a,h)anthracene	ND		0.00600	1	08/28/2020 08:48	<a href="#">WG1533587</a>
Fluoranthene	ND		0.00600	1	08/28/2020 08:48	<a href="#">WG1533587</a>
Fluorene	ND		0.00600	1	08/28/2020 08:48	<a href="#">WG1533587</a>
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	08/28/2020 08:48	<a href="#">WG1533587</a>
Naphthalene	0.0860		0.0200	1	08/28/2020 08:48	<a href="#">WG1533587</a>
Phenanthrene	ND		0.00600	1	08/28/2020 08:48	<a href="#">WG1533587</a>
Pyrene	ND		0.00600	1	08/28/2020 08:48	<a href="#">WG1533587</a>
1-Methylnaphthalene	ND		0.0200	1	08/28/2020 08:48	<a href="#">WG1533587</a>
2-Methylnaphthalene	0.0497		0.0200	1	08/28/2020 08:48	<a href="#">WG1533587</a>
2-Chloronaphthalene	ND		0.0200	1	08/28/2020 08:48	<a href="#">WG1533587</a>
(S) p-Terphenyl-d14	84.3		23.0-120		08/28/2020 08:48	<a href="#">WG1533587</a>
(S) Nitrobenzene-d5	73.8		14.0-149		08/28/2020 08:48	<a href="#">WG1533587</a>
(S) 2-Fluorobiphenyl	74.2		34.0-125		08/28/2020 08:48	<a href="#">WG1533587</a>



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	27.4		1	08/25/2020 17:49	WG1529923

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

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	22.4		1.00	1	08/27/2020 11:59	<a href="#">WG1532136</a>

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	08/26/2020 17:03	<a href="#">WG1531600</a>

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	9.12	<u>T8</u>	1	08/28/2020 17:00	<a href="#">WG1533896</a>

Sample Narrative:

L1253389-03 WG1533896: 9.12 at 23.4C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	3450	<u>J4</u>	10.0	1	08/22/2020 14:42	<a href="#">WG1530570</a>

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.127		0.0400	1	08/26/2020 09:55	<a href="#">WG1532263</a>

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	807		0.500	1	08/27/2020 11:59	<a href="#">WG1532136</a>
Cadmium	ND		0.500	1	08/27/2020 11:59	<a href="#">WG1532136</a>
Chromium	22.4		1.00	1	08/27/2020 11:59	<a href="#">WG1532136</a>
Copper	25.5		2.00	1	08/27/2020 11:59	<a href="#">WG1532136</a>
Lead	16.1		0.500	1	08/27/2020 11:59	<a href="#">WG1532136</a>
Nickel	20.5		2.00	1	08/27/2020 11:59	<a href="#">WG1532136</a>
Selenium	ND		2.00	1	08/27/2020 11:59	<a href="#">WG1532136</a>
Silver	ND		1.00	1	08/27/2020 11:59	<a href="#">WG1532136</a>
Zinc	59.8		5.00	1	08/27/2020 11:59	<a href="#">WG1532136</a>

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	26.6		1.00	5	08/26/2020 16:16	<a href="#">WG1532132</a>

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	2780		50.0	500	08/28/2020 23:16	<a href="#">WG1533887</a>



Collected date/time: 08/20/20 10:20

L1253389

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
(S) a,a,a-Trifluorotoluene(FID)	86.0		77.0-120		08/28/2020 23:16	<a href="#">WG1533887</a>

1 Cp

2 Tc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	0.413		0.0400	40	08/27/2020 04:43	<a href="#">WG1533076</a>
Toluene	12.4		0.200	40	08/27/2020 04:43	<a href="#">WG1533076</a>
Ethylbenzene	1.85		0.100	40	08/27/2020 04:43	<a href="#">WG1533076</a>
Total Xylenes	125		0.260	40	08/27/2020 04:43	<a href="#">WG1533076</a>
(S) Toluene-d8	96.2		75.0-131		08/27/2020 04:43	<a href="#">WG1533076</a>
(S) 4-Bromofluorobenzene	120		67.0-138		08/27/2020 04:43	<a href="#">WG1533076</a>
(S) 1,2-Dichloroethane-d4	98.1		70.0-130		08/27/2020 04:43	<a href="#">WG1533076</a>

3 Ss

4 Cn

5 Sr

6 Qc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) High Fraction	3680		80.0	20	08/30/2020 16:29	<a href="#">WG1533576</a>
(S) o-Terphenyl	0.000	J7	18.0-148		08/30/2020 16:29	<a href="#">WG1533576</a>

7 Gl

8 Al

9 Sc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Anthracene	ND		0.00600	1	08/28/2020 09:06	<a href="#">WG1533587</a>
Acenaphthene	ND		0.120	20	08/28/2020 13:07	<a href="#">WG1533587</a>
Acenaphthylene	ND		0.120	20	08/28/2020 13:07	<a href="#">WG1533587</a>
Benzo(a)anthracene	ND		0.00600	1	08/28/2020 09:06	<a href="#">WG1533587</a>
Benzo(a)pyrene	ND		0.00600	1	08/28/2020 09:06	<a href="#">WG1533587</a>
Benzo(b)fluoranthene	ND		0.00600	1	08/28/2020 09:06	<a href="#">WG1533587</a>
Benzo(g,h,i)perylene	ND		0.00600	1	08/28/2020 09:06	<a href="#">WG1533587</a>
Benzo(k)fluoranthene	ND		0.00600	1	08/28/2020 09:06	<a href="#">WG1533587</a>
Chrysene	ND		0.00600	1	08/28/2020 09:06	<a href="#">WG1533587</a>
Dibenz(a,h)anthracene	ND		0.00600	1	08/28/2020 09:06	<a href="#">WG1533587</a>
Fluoranthene	ND		0.00600	1	08/28/2020 09:06	<a href="#">WG1533587</a>
Fluorene	0.391		0.120	20	08/28/2020 13:07	<a href="#">WG1533587</a>
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	08/28/2020 09:06	<a href="#">WG1533587</a>
Naphthalene	5.04		0.400	20	08/28/2020 13:07	<a href="#">WG1533587</a>
Phenanthrene	0.212		0.00600	1	08/28/2020 09:06	<a href="#">WG1533587</a>
Pyrene	0.00605		0.00600	1	08/28/2020 09:06	<a href="#">WG1533587</a>
1-Methylnaphthalene	3.12		0.400	20	08/28/2020 13:07	<a href="#">WG1533587</a>
2-Methylnaphthalene	11.5		0.400	20	08/28/2020 13:07	<a href="#">WG1533587</a>
2-Chloronaphthalene	ND		0.400	20	08/28/2020 13:07	<a href="#">WG1533587</a>
(S) p-Terphenyl-d14	92.6		23.0-120		08/28/2020 09:06	<a href="#">WG1533587</a>
(S) p-Terphenyl-d14	95.9	J7	23.0-120		08/28/2020 13:07	<a href="#">WG1533587</a>
(S) Nitrobenzene-d5	0.000	J2	14.0-149		08/28/2020 09:06	<a href="#">WG1533587</a>
(S) Nitrobenzene-d5	0.000	J7	14.0-149		08/28/2020 13:07	<a href="#">WG1533587</a>
(S) 2-Fluorobiphenyl	0.000	J2	34.0-125		08/28/2020 09:06	<a href="#">WG1533587</a>
(S) 2-Fluorobiphenyl	103	J7	34.0-125		08/28/2020 13:07	<a href="#">WG1533587</a>

## Sample Narrative:

L1253389-03 WG1533587: Surrogate failure due to matrix interference

L1253389-03 WG1533587: IS/SURR failed on lower dilution.



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	14.8		1	08/25/2020 17:58	WG1529923

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

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chromium, Trivalent	23.9		1.00	1	08/27/2020 12:08	<a href="#">WG1532136</a>

Wet Chemistry by Method 3060A/7196A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	08/26/2020 17:04	<a href="#">WG1531600</a>

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	9.68	T8	1	08/28/2020 17:00	<a href="#">WG1533896</a>

Sample Narrative:

L1253389-04 WG1533896: 9.68 at 23.2C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	1110	J4	10.0	1	08/22/2020 14:42	<a href="#">WG1530570</a>

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	ND		0.0400	1	08/26/2020 09:58	<a href="#">WG1532263</a>

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Barium	1710		0.500	1	08/27/2020 12:08	<a href="#">WG1532136</a>
Cadmium	ND		0.500	1	08/27/2020 12:08	<a href="#">WG1532136</a>
Chromium	23.9		1.00	1	08/27/2020 12:08	<a href="#">WG1532136</a>
Copper	24.5		2.00	1	08/27/2020 12:08	<a href="#">WG1532136</a>
Lead	15.2		0.500	1	08/27/2020 12:08	<a href="#">WG1532136</a>
Nickel	23.9		2.00	1	08/27/2020 12:08	<a href="#">WG1532136</a>
Selenium	ND		2.00	1	08/27/2020 12:08	<a href="#">WG1532136</a>
Silver	ND		1.00	1	08/27/2020 12:08	<a href="#">WG1532136</a>
Zinc	63.8		5.00	1	08/27/2020 12:08	<a href="#">WG1532136</a>

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	17.7		1.00	5	08/26/2020 16:19	<a href="#">WG1532132</a>

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	1.96		0.100	1	08/28/2020 19:28	<a href="#">WG1533887</a>



Collected date/time: 08/20/20 10:30

L1253389

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	96.9		77.0-120		08/28/2020 19:28	<a href="#">WG1533887</a>

1 Cp

2 Tc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	0.00490		0.00100	1	08/27/2020 04:06	<a href="#">WG1533076</a>
Toluene	0.0763		0.00500	1	08/27/2020 04:06	<a href="#">WG1533076</a>
Ethylbenzene	0.0248		0.00250	1	08/27/2020 04:06	<a href="#">WG1533076</a>
Total Xylenes	0.722		0.00650	1	08/27/2020 04:06	<a href="#">WG1533076</a>
(S) Toluene-d8	101		75.0-131		08/27/2020 04:06	<a href="#">WG1533076</a>
(S) 4-Bromofluorobenzene	99.3		67.0-138		08/27/2020 04:06	<a href="#">WG1533076</a>
(S) 1,2-Dichloroethane-d4	87.4		70.0-130		08/27/2020 04:06	<a href="#">WG1533076</a>

3 Ss

4 Cn

5 Sr

6 Qc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) High Fraction	44.2		4.00	1	09/02/2020 13:51	<a href="#">WG1535246</a>
(S) <i>o</i> -Terphenyl	36.9		18.0-148		09/02/2020 13:51	<a href="#">WG1535246</a>

7 Gl

8 Al

9 Sc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Anthracene	ND		0.00600	1	08/28/2020 09:23	<a href="#">WG1533587</a>
Acenaphthene	ND		0.00600	1	08/28/2020 09:23	<a href="#">WG1533587</a>
Acenaphthylene	ND		0.00600	1	08/28/2020 09:23	<a href="#">WG1533587</a>
Benzo(a)anthracene	ND		0.00600	1	08/28/2020 09:23	<a href="#">WG1533587</a>
Benzo(a)pyrene	ND		0.00600	1	08/28/2020 09:23	<a href="#">WG1533587</a>
Benzo(b)fluoranthene	ND		0.00600	1	08/28/2020 09:23	<a href="#">WG1533587</a>
Benzo(g,h,i)perylene	ND		0.00600	1	08/28/2020 09:23	<a href="#">WG1533587</a>
Benzo(k)fluoranthene	ND		0.00600	1	08/28/2020 09:23	<a href="#">WG1533587</a>
Chrysene	ND		0.00600	1	08/28/2020 09:23	<a href="#">WG1533587</a>
Dibenz(a,h)anthracene	ND		0.00600	1	08/28/2020 09:23	<a href="#">WG1533587</a>
Fluoranthene	ND		0.00600	1	08/28/2020 09:23	<a href="#">WG1533587</a>
Fluorene	ND		0.00600	1	08/28/2020 09:23	<a href="#">WG1533587</a>
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	08/28/2020 09:23	<a href="#">WG1533587</a>
Naphthalene	0.0202		0.0200	1	08/28/2020 09:23	<a href="#">WG1533587</a>
Phenanthrene	ND		0.00600	1	08/28/2020 09:23	<a href="#">WG1533587</a>
Pyrene	ND		0.00600	1	08/28/2020 09:23	<a href="#">WG1533587</a>
1-Methylnaphthalene	ND		0.0200	1	08/28/2020 09:23	<a href="#">WG1533587</a>
2-Methylnaphthalene	0.0335		0.0200	1	08/28/2020 09:23	<a href="#">WG1533587</a>
2-Chloronaphthalene	ND		0.0200	1	08/28/2020 09:23	<a href="#">WG1533587</a>
(S) <i>p</i> -Terphenyl-d14	74.5		23.0-120		08/28/2020 09:23	<a href="#">WG1533587</a>
(S) Nitrobenzene-d5	64.7		14.0-149		08/28/2020 09:23	<a href="#">WG1533587</a>
(S) 2-Fluorobiphenyl	80.3		34.0-125		08/28/2020 09:23	<a href="#">WG1533587</a>



## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	13.8		1	08/25/2020 18:00	WG1529923

1 Cp

2 Tc

## Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chromium, Trivalent	29.6		1.00	1	08/27/2020 12:11	<a href="#">WG1532136</a>

3 Ss

4 Cn

## Wet Chemistry by Method 3060A/7196A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.00	1	08/26/2020 17:04	<a href="#">WG1531600</a>

5 Sr

6 Qc

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.96	<u>T8</u>	1	08/28/2020 17:00	<a href="#">WG1533896</a>

7 Gl

8 Al

## Sample Narrative:

L1253389-05 WG1533896: 8.96 at 23.1C

9 Sc

## Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	701	<u>J4</u>	10.0	1	08/22/2020 14:42	<a href="#">WG1530570</a>

## Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0514		0.0400	1	08/26/2020 10:00	<a href="#">WG1532263</a>

## Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Barium	783		0.500	1	08/27/2020 12:11	<a href="#">WG1532136</a>
Cadmium	0.628		0.500	1	08/27/2020 12:11	<a href="#">WG1532136</a>
Chromium	29.6		1.00	1	08/27/2020 12:11	<a href="#">WG1532136</a>
Copper	29.3		2.00	1	08/27/2020 12:11	<a href="#">WG1532136</a>
Lead	18.6		0.500	1	08/27/2020 12:11	<a href="#">WG1532136</a>
Nickel	25.9		2.00	1	08/27/2020 12:11	<a href="#">WG1532136</a>
Selenium	ND		2.00	1	08/27/2020 12:11	<a href="#">WG1532136</a>
Silver	ND		1.00	1	08/27/2020 12:11	<a href="#">WG1532136</a>
Zinc	81.9		5.00	1	08/27/2020 12:11	<a href="#">WG1532136</a>

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Arsenic	21.2		1.00	5	08/26/2020 16:22	<a href="#">WG1532132</a>

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	3.28		0.100	1	08/28/2020 19:48	<a href="#">WG1533887</a>



Collected date/time: 08/20/20 10:40

L1253389

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	95.9		77.0-120		08/28/2020 19:48	<a href="#">WG1533887</a>

1 Cp

2 Tc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	0.0273		0.00100	1	08/27/2020 04:24	<a href="#">WG1533076</a>
Toluene	0.165		0.00500	1	08/27/2020 04:24	<a href="#">WG1533076</a>
Ethylbenzene	0.0132		0.00250	1	08/27/2020 04:24	<a href="#">WG1533076</a>
Total Xylenes	0.293		0.00650	1	08/27/2020 04:24	<a href="#">WG1533076</a>
(S) Toluene-d8	103		75.0-131		08/27/2020 04:24	<a href="#">WG1533076</a>
(S) 4-Bromofluorobenzene	94.3		67.0-138		08/27/2020 04:24	<a href="#">WG1533076</a>
(S) 1,2-Dichloroethane-d4	81.6		70.0-130		08/27/2020 04:24	<a href="#">WG1533076</a>

3 Ss

4 Cn

5 Sr

6 Qc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) High Fraction	137		4.00	1	08/28/2020 19:16	<a href="#">WG1533576</a>
(S) <i>o</i> -Terphenyl	112		18.0-148		08/28/2020 19:16	<a href="#">WG1533576</a>

7 Gl

8 Al

9 Sc

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Anthracene	ND		0.00600	1	08/28/2020 09:40	<a href="#">WG1533587</a>
Acenaphthene	0.00792		0.00600	1	08/28/2020 09:40	<a href="#">WG1533587</a>
Acenaphthylene	ND		0.00600	1	08/28/2020 09:40	<a href="#">WG1533587</a>
Benzo(a)anthracene	ND		0.00600	1	08/28/2020 09:40	<a href="#">WG1533587</a>
Benzo(a)pyrene	ND		0.00600	1	08/28/2020 09:40	<a href="#">WG1533587</a>
Benzo(b)fluoranthene	ND		0.00600	1	08/28/2020 09:40	<a href="#">WG1533587</a>
Benzo(g,h,i)perylene	ND		0.00600	1	08/28/2020 09:40	<a href="#">WG1533587</a>
Benzo(k)fluoranthene	ND		0.00600	1	08/28/2020 09:40	<a href="#">WG1533587</a>
Chrysene	ND		0.00600	1	08/28/2020 09:40	<a href="#">WG1533587</a>
Dibenz(a,h)anthracene	ND		0.00600	1	08/28/2020 09:40	<a href="#">WG1533587</a>
Fluoranthene	ND		0.00600	1	08/28/2020 09:40	<a href="#">WG1533587</a>
Fluorene	0.0202		0.00600	1	08/28/2020 09:40	<a href="#">WG1533587</a>
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	08/28/2020 09:40	<a href="#">WG1533587</a>
Naphthalene	0.177		0.0200	1	08/28/2020 09:40	<a href="#">WG1533587</a>
Phenanthrene	0.0172		0.00600	1	08/28/2020 09:40	<a href="#">WG1533587</a>
Pyrene	ND		0.00600	1	08/28/2020 09:40	<a href="#">WG1533587</a>
1-Methylnaphthalene	0.172		0.0200	1	08/28/2020 09:40	<a href="#">WG1533587</a>
2-Methylnaphthalene	0.459		0.0200	1	08/28/2020 09:40	<a href="#">WG1533587</a>
2-Chloronaphthalene	ND		0.0200	1	08/28/2020 09:40	<a href="#">WG1533587</a>
(S) <i>p</i> -Terphenyl-d14	93.3		23.0-120		08/28/2020 09:40	<a href="#">WG1533587</a>
(S) Nitrobenzene-d5	99.0		14.0-149		08/28/2020 09:40	<a href="#">WG1533587</a>
(S) 2-Fluorobiphenyl	72.0		34.0-125		08/28/2020 09:40	<a href="#">WG1533587</a>



Method Blank (MB)

(MB) R3564130-1 08/26/20 16:44

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chromium,Hexavalent	U		0.640	2.00

<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

L1252275-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1252275-06 08/26/20 16:47 • (DUP) R3564130-3 08/26/20 16:47

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

L1253401-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1253401-02 08/26/20 17:08 • (DUP) R3564130-8 08/26/20 17:10

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chromium,Hexavalent	268	268	50	0.0199		20

Laboratory Control Sample (LCS)

(LCS) R3564130-2 08/26/20 16:44

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chromium,Hexavalent	24.0	22.6	94.2	80.0-120	

L1252951-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1252951-04 08/26/20 16:56 • (MS) R3564130-4 08/26/20 16:58 • (MSD) R3564130-5 08/26/20 16:59

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chromium,Hexavalent	20.0	ND	11.5	11.8	57.5	58.9	1	75.0-125	<u>J6</u>	<u>J6</u>	2.38	20

Sample Narrative:

OS: sample is a reducer



L1252951-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1252951-04 08/26/20 16:56 • (MS) R3564130-6 08/26/20 17:00

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Chromium,Hexavalent	680	ND	588	86.5	50	75.0-125	

Sample Narrative:

OS: sample is a reducer

<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



L1253389-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1253389-03 08/28/20 17:00 • (DUP) R3565034-2 08/28/20 17:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
pH	9.12	9.09	1	0.329		1

Sample Narrative:

OS: 9.12 at 23.4C

DUP: 9.09 at 23.3C

Laboratory Control Sample (LCS)

(LCS) R3565034-1 08/28/20 17:00

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

Sample Narrative:

LCS: 10.02 at 22.7C

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3562662-1 08/22/20 14:42

Analyte	MB Result umhos/cm	MB Qualifier	MB MDL umhos/cm	MB RDL umhos/cm
Specific Conductance	U		10.0	10.0

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1252275-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1252275-03 08/22/20 14:42 • (DUP) R3562662-3 08/22/20 14:42

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Specific Conductance	1810	1810	1	0.497		20

L1252317-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1252317-03 08/22/20 14:42 • (DUP) R3562662-4 08/22/20 14:42

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Specific Conductance	119	126	1	5.55		20

Laboratory Control Sample (LCS)

(LCS) R3562662-2 08/22/20 14:42

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	483	759	157	85.0-115	<u>J4</u>



Method Blank (MB)

(MB) R3563997-1 08/26/20 09:27

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Mercury	U		0.0180	0.0400

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

Laboratory Control Sample (LCS)

(LCS) R3563997-2 08/26/20 09:30

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Mercury	0.500	0.509	102	80.0-120	

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

L1253265-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1253265-01 08/26/20 09:32 • (MS) R3563997-3 08/26/20 09:35 • (MSD) R3563997-4 08/26/20 09:38

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Mercury	0.500	ND	0.524	0.486	105	97.2	1	75.0-125			7.56	20

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Method Blank (MB)

(MB) R3564554-7 08/27/20 16:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Barium	U		0.240	0.500
Cadmium	U		0.0810	0.500
Chromium	U		0.250	1.00
Copper	U		0.506	2.00
Lead	U		0.208	0.500
Nickel	U		0.490	2.00
Selenium	0.940	↓	0.617	2.00
Silver	U		0.228	1.00
Zinc	U		0.939	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

Laboratory Control Sample (LCS)

(LCS) R3564554-2 08/27/20 11:34

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Barium	100	102	102	80.0-120	
Cadmium	100	98.3	98.3	80.0-120	
Chromium	100	101	101	80.0-120	
Copper	100	98.1	98.1	80.0-120	
Lead	100	100	100	80.0-120	
Nickel	100	103	103	80.0-120	
Selenium	100	98.9	98.9	80.0-120	
Silver	20.0	18.9	94.7	80.0-120	
Zinc	100	98.7	98.7	80.0-120	

L1253391-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1253391-02 08/27/20 11:37 • (MS) R3564554-5 08/27/20 11:46 • (MSD) R3564554-6 08/27/20 11:49

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	%	%		%			%	%
Barium	100	258	372	369	115	111	1	75.0-125			1.04	20
Cadmium	100	ND	102	99.2	102	98.8	1	75.0-125			3.13	20
Chromium	100	17.5	116	112	98.0	94.5	1	75.0-125			3.09	20
Copper	100	18.3	121	117	102	98.5	1	75.0-125			3.16	20
Lead	100	10.2	115	114	105	104	1	75.0-125			1.30	20
Nickel	100	18.7	129	126	110	107	1	75.0-125			2.44	20
Selenium	100	ND	102	98.5	102	97.7	1	75.0-125			3.84	20
Silver	20.0	ND	19.7	18.9	98.5	94.7	1	75.0-125			3.85	20
Zinc	100	55.3	151	148	95.8	93.0	1	75.0-125			1.90	20



Method Blank (MB)

(MB) R3564109-1 08/26/20 15:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.422	1.00

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

Laboratory Control Sample (LCS)

(LCS) R3564109-2 08/26/20 15:34

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	95.5	95.5	80.0-120	

<sup>4</sup>Cn

<sup>5</sup>Sr

L1253391-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1253391-02 08/26/20 15:37 • (MS) R3564109-5 08/26/20 15:46 • (MSD) R3564109-6 08/26/20 15:50

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	20.0	10.6	107	102	96.6	91.0	5	75.0-125			5.32	20

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



Method Blank (MB)

(MB) R3564858-2 08/28/20 02:51

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
<sup>(S)</sup> a,a,a-Trifluorotoluene(FID)	92.6			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

Laboratory Control Sample (LCS)

(LCS) R3564858-1 08/28/20 01:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.07	92.2	72.0-127	
<sup>(S)</sup> a,a,a-Trifluorotoluene(FID)			106	77.0-120	

5 Sr

6 Qc

7 Gl

L1252874-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1252874-16 08/28/20 04:24 • (MS) R3564858-3 08/28/20 11:14 • (MSD) R3564858-4 08/28/20 11:34

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 %
TPH (GC/FID) Low Fraction	72.5	ND	70.1	67.7	102	98.4	25	10.0-151			3.48	28
<sup>(S)</sup> a,a,a-Trifluorotoluene(FID)					109	109		77.0-120				

8 Al

9 Sc



Method Blank (MB)

(MB) R3565022-2 08/28/20 14:10

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	92.9			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

Laboratory Control Sample (LCS)

(LCS) R3565022-1 08/28/20 13:22

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.76	105	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			102	77.0-120	

5 Sr

6 Qc

7 Gl

L1253460-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1253460-06 08/28/20 22:23 • (MS) R3565022-3 08/29/20 00:07 • (MSD) R3565022-4 08/29/20 00:28

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 %
TPH (GC/FID) Low Fraction	164	ND	152	165	102	111	26.8	10.0-151			8.20	28
(S) a,a,a-Trifluorotoluene(FID)					111	112		77.0-120				

8 Al

9 Sc



Method Blank (MB)

(MB) R3565010-3 08/28/20 15:40

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0453	↓	0.0217	0.100
<sup>(S)</sup> a,a,a-Trifluorotoluene(FID)	104			77.0-120

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

Laboratory Control Sample (LCS)

(LCS) R3565010-2 08/28/20 14:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.52	100	72.0-127	
<sup>(S)</sup> a,a,a-Trifluorotoluene(FID)			102	77.0-120	

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Method Blank (MB)

(MB) R3564263-3 08/26/20 20:56

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	104			75.0-131
(S) 4-Bromofluorobenzene	95.3			67.0-138
(S) 1,2-Dichloroethane-d4	96.9			70.0-130

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

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

(LCS) R3564263-1 08/26/20 19:41 • (LCSD) R3564263-2 08/26/20 20:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.134	0.129	107	103	70.0-123			3.80	20
Ethylbenzene	0.125	0.120	0.122	96.0	97.6	74.0-126			1.65	20
Toluene	0.125	0.122	0.122	97.6	97.6	75.0-121			0.000	20
Xylenes, Total	0.375	0.359	0.371	95.7	98.9	72.0-127			3.29	20
(S) Toluene-d8				101	97.4	75.0-131				
(S) 4-Bromofluorobenzene				97.2	100	67.0-138				
(S) 1,2-Dichloroethane-d4				99.8	100	70.0-130				

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

L1253291-23 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1253291-23 08/27/20 02:50 • (MS) R3564263-4 08/27/20 05:02 • (MSD) R3564263-5 08/27/20 05:21

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 %
Benzene	0.646	ND	0.690	0.686	110	110	1	10.0-149			0.581	37
Ethylbenzene	0.646	ND	0.623	0.631	99.7	101	1	10.0-160			1.28	38
Toluene	0.646	ND	0.633	0.643	101	103	1	10.0-156			1.57	38
Xylenes, Total	1.93	ND	1.80	1.79	96.0	95.5	1	10.0-160			0.557	38
(S) Toluene-d8					96.4	98.7		75.0-131				
(S) 4-Bromofluorobenzene					91.6	91.0		67.0-138				
(S) 1,2-Dichloroethane-d4					92.6	85.9		70.0-130				



Method Blank (MB)

(MB) R3564615-2 08/27/20 10:16

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	100			75.0-131
(S) 4-Bromofluorobenzene	97.6			67.0-138
(S) 1,2-Dichloroethane-d4	96.6			70.0-130

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

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

(LCS) R3564615-1 08/27/20 09:15 • (LCSD) R3564615-3 08/27/20 12:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Toluene	0.125	0.110	0.111	88.0	88.8	75.0-121			0.905	20
Xylenes, Total	0.375	0.346	0.346	92.3	92.3	72.0-127			0.000	20
(S) Toluene-d8				93.9	95.3	75.0-131				
(S) 4-Bromofluorobenzene				101	103	67.0-138				
(S) 1,2-Dichloroethane-d4				105	106	70.0-130				

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Method Blank (MB)

(MB) R3565375-1 08/28/20 16:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	8.28		0.769	4.00
<i>(S) o-Terphenyl</i>	90.2			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3565375-2 08/28/20 17:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	47.1	94.2	50.0-150	
<i>(S) o-Terphenyl</i>			67.7	18.0-148	

<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) R3566179-1 09/01/20 11:05

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
<i>(S) o-Terphenyl</i>	76.7			18.0-148

1 Cp

2 Tc

3 Ss

Laboratory Control Sample (LCS)

(LCS) R3566179-2 09/01/20 11:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) High Fraction	50.0	32.3	64.6	50.0-150	
<i>(S) o-Terphenyl</i>			70.1	18.0-148	

4 Cn

5 Sr

6 Qc

L1253389-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1253389-04 09/02/20 13:51 • (MS) R3566763-1 09/02/20 14:04 • (MSD) R3566763-2 09/02/20 14:17

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 %
TPH (GC/FID) High Fraction	48.9	44.2	78.3	80.5	69.7	75.2	1	50.0-150			2.77	20
<i>(S) o-Terphenyl</i>					37.3	40.1		18.0-148				

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3564792-2 08/28/20 07:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	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
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	67.0			14.0-149
(S) 2-Fluorobiphenyl	66.7			34.0-125
(S) p-Terphenyl-d14	104			23.0-120

<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) R3565182-1 08/29/20 07:07

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600



Method Blank (MB)

(MB) R3565182-1 08/29/20 07:07

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	60.8			14.0-149
(S) 2-Fluorobiphenyl	72.9			34.0-125
(S) p-Terphenyl-d14	83.0			23.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3565188-1 08/29/20 07:10

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	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
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	68.0			14.0-149
(S) 2-Fluorobiphenyl	77.5			34.0-125
(S) p-Terphenyl-d14	84.3			23.0-120



Method Blank (MB)

(MB) R3565192-1 08/29/20 07:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	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
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	64.5			14.0-149
(S) 2-Fluorobiphenyl	76.0			34.0-125
(S) p-Terphenyl-d14	89.6			23.0-120

<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) R3565194-1 08/29/20 07:43

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600



Method Blank (MB)

(MB) R3565194-1 08/29/20 07:43

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	55.3			14.0-149
(S) 2-Fluorobiphenyl	72.7			34.0-125
(S) p-Terphenyl-d14	83.3			23.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3565197-1 08/29/20 08:41

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	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
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	61.5			14.0-149
(S) 2-Fluorobiphenyl	72.9			34.0-125
(S) p-Terphenyl-d14	82.4			23.0-120



Method Blank (MB)

(MB) R3565325-1 08/29/20 07:44

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	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
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	52.5			14.0-149
(S) 2-Fluorobiphenyl	80.0			34.0-125
(S) p-Terphenyl-d14	75.3			23.0-120

<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

Laboratory Control Sample (LCS)

(LCS) R3564792-1 08/28/20 06:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0607	75.9	50.0-126	
Acenaphthene	0.0800	0.0614	76.8	50.0-120	
Acenaphthylene	0.0800	0.0644	80.5	50.0-120	
Benzo(a)anthracene	0.0800	0.0709	88.6	45.0-120	
Benzo(a)pyrene	0.0800	0.0571	71.4	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0659	82.4	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0597	74.6	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0632	79.0	49.0-125	
Chrysene	0.0800	0.0683	85.4	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0543	67.9	47.0-125	
Fluoranthene	0.0800	0.0685	85.6	49.0-129	



Laboratory Control Sample (LCS)

(LCS) R3564792-1 08/28/20 06:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0658	82.3	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0584	73.0	46.0-125	
Naphthalene	0.0800	0.0582	72.8	50.0-120	
Phenanthrene	0.0800	0.0640	80.0	47.0-120	
Pyrene	0.0800	0.0663	82.9	43.0-123	
1-Methylnaphthalene	0.0800	0.0741	92.6	51.0-121	
2-Methylnaphthalene	0.0800	0.0680	85.0	50.0-120	
2-Chloronaphthalene	0.0800	0.0649	81.1	50.0-120	
(S) Nitrobenzene-d5			81.7	14.0-149	
(S) 2-Fluorobiphenyl			97.0	34.0-125	
(S) p-Terphenyl-d14			92.4	23.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1253460-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1253460-04 08/28/20 11:24 • (MS) R3564792-3 08/28/20 11:42 • (MSD) R3564792-4 08/28/20 11:59

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 %
Anthracene	0.0760	ND	0.0600	0.0521	78.9	68.9	1	10.0-145			14.1	30
Acenaphthene	0.0760	ND	0.0581	0.0506	76.4	66.9	1	14.0-127			13.8	27
Acenaphthylene	0.0760	ND	0.0612	0.0521	80.5	68.9	1	21.0-124			16.1	25
Benzo(a)anthracene	0.0760	ND	0.0676	0.0584	86.4	74.7	1	10.0-139			14.6	30
Benzo(a)pyrene	0.0760	ND	0.0597	0.0518	75.3	65.2	1	10.0-141			14.2	31
Benzo(b)fluoranthene	0.0760	ND	0.0603	0.0455	74.3	55.1	1	10.0-140			28.0	36
Benzo(g,h,i)perylene	0.0760	ND	0.0614	0.0473	77.1	58.9	1	10.0-140			25.9	33
Benzo(k)fluoranthene	0.0760	ND	0.0573	0.0445	75.4	58.9	1	10.0-137			25.1	31
Chrysene	0.0760	ND	0.0646	0.0545	81.6	68.7	1	10.0-145			17.0	30
Dibenz(a,h)anthracene	0.0760	ND	0.0591	0.0447	77.8	59.1	1	10.0-132			27.7	31
Fluoranthene	0.0760	ND	0.0595	0.0685	71.8	84.1	1	10.0-153			14.1	33
Fluorene	0.0760	ND	0.0636	0.0545	83.7	72.1	1	11.0-130			15.4	29
Indeno(1,2,3-cd)pyrene	0.0760	ND	0.0621	0.0476	78.1	59.4	1	10.0-137			26.4	32
Naphthalene	0.0760	ND	0.0522	0.0449	68.7	59.4	1	10.0-135			15.0	27
Phenanthrene	0.0760	ND	0.0648	0.0522	85.3	69.0	1	10.0-144			21.5	31
Pyrene	0.0760	ND	0.0647	0.0643	80.0	79.9	1	10.0-148			0.620	35
1-Methylnaphthalene	0.0760	ND	0.0569	0.0479	74.9	63.4	1	10.0-142			17.2	28
2-Methylnaphthalene	0.0760	ND	0.0542	0.0449	71.3	59.4	1	10.0-137			18.8	28
2-Chloronaphthalene	0.0760	ND	0.0678	0.0591	89.2	78.2	1	29.0-120			13.7	24
(S) Nitrobenzene-d5					57.7	50.4		14.0-149				
(S) 2-Fluorobiphenyl					89.0	79.6		34.0-125				
(S) p-Terphenyl-d14					89.6	86.0		23.0-120				



## Guide to Reading and Understanding Your Laboratory Report

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

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

### Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(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.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
T8	Sample(s) received past/too close to holding time expiration.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

\* 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 National.

## State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico <sup>1</sup>	n/a
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>	90010	South Carolina	84004
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana <sup>1</sup>	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

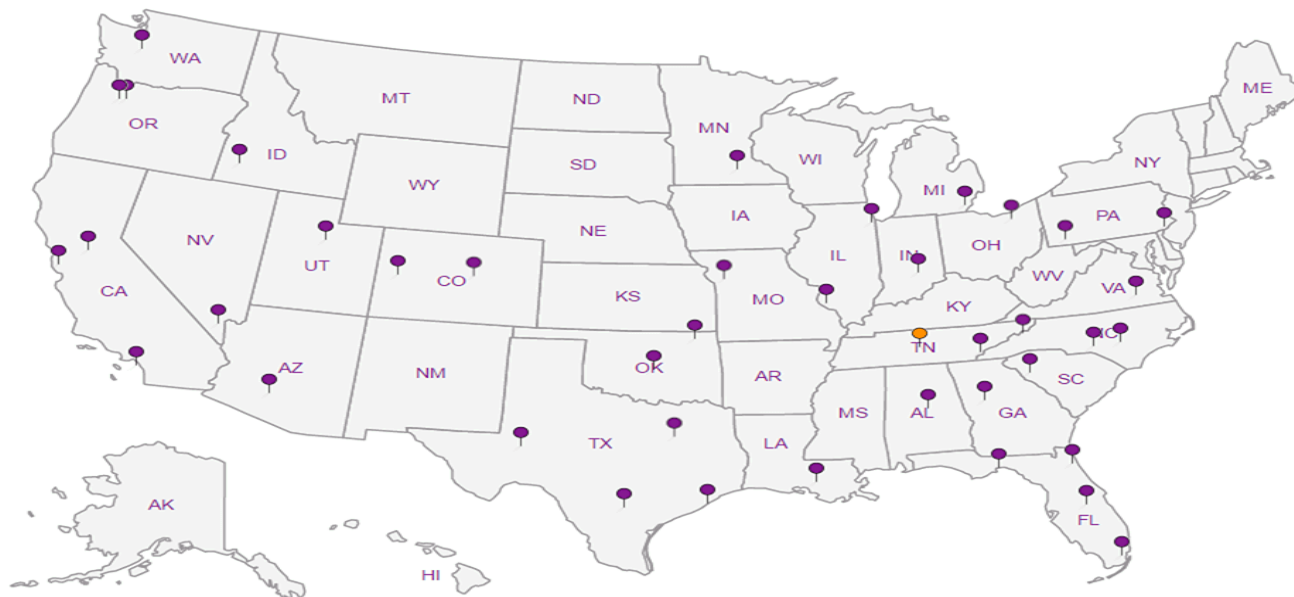
## Third Party Federal Accreditations

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

## Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

**Caerus Oil and Gas**  
**143 Diamond Avenue**  
**Parachute, CO 81635**

Billing Information:  
**Same as left**

Pres Chk

Chain of Custody Page 1 of 1

Report to:  
**Blair Rollins**

Email To:  
**brollins@caerusoilandgas.com**

Project Description:  
**F23**

City/State Collected:  
**CO**

Phone: **(970) 640-6919**  
 Fax:


Client Project #  
**F23**

Lab Project #

Collected by (print):  
**CHANCE HOLDER**

Site/Facility ID #  
**F23**

P.O. #

Collected by (signature):  
  
 Immediately Packed on Ice N    Y    X

**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

Analysis / Container / Preservative		TPH (DRO and GRO)	BTEX	Table 910-1 metals in soil	Table 910-1 PAHs	EC, SAR, pH
		X	X	X	X	X

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



L# **L12 53384**  
**C188**

Acctnum:  
 Template:  
 Prelogin:  
 TSR:  
 PB:

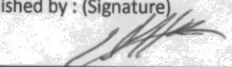
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
20200820-F23-06D-NWALL-	GRAB	SS	7'	8/20/2020	1000	2
20200820-F23-06D-EWALL-			7'		1010	2
20200820-F23-06D-SWALL-			7'		1020	2
20200820-F23-06D-WWALL-			7'		4 @ 1030	3
20200820-F23-06D-BOT			9'		1040	3

Remarks	Sample # (lab only)
	-01
	02
	03
	04
	05

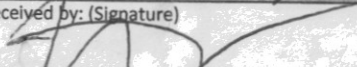
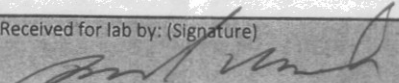
\* Matrix:  
 SS - Soil AIR - Air F - Filter  
 GW - Groundwater B - Bioassay  
 WW - WasteWater  
 DW - Drinking Water  
 OT - Other

Remarks:  
 pH \_\_\_\_\_ Temp \_\_\_\_\_  
 Flow \_\_\_\_\_ Other \_\_\_\_\_  
 Samples returned via:  
 \_\_\_ UPS \_\_\_ FedEx \_\_\_ Courier

Sample Receipt Checklist  
 COC Seal Present/Intact:    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

Relinquished by: (Signature)  
  
 Date: **8/20/2020**  
 Time: **1600**

Date: **8/20/2020**  
 Time: **1700**

Received by: (Signature)  
  
 Received for lab by: (Signature)  


Trip Blank Received: Yes    / No     
 HCL / MeOH  
 TBR  
 Temp: **15.0 = 5** °C  
 Bottles Received: **12**

If preservation required by Login: Date/Time  
 Hold:  
 Condition: **NCF / OK**

Tracking # **1676 27506590**