

**Terra Energy Partners**

Sample Delivery Group: L1437186  
Samples Received: 12/02/2021  
Project Number: TEP-PA 313-33-BKGD  
Description: Terra Energy Partners-WTF PA 313-33  
Site: WTF PA 313-33  
Report To: Mike Gardner  
1058 County Road 215  
Parachute, CO 81635

Entire Report Reviewed By:



Chris Ward  
Project Manager

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# SAMPLE SUMMARY

## SP 1 L1437186-01 Solid

Collected by  
Kris Rowe

Collected date/time  
11/30/21 14:00

Received date/time  
12/02/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1784351	1	12/08/21 20:38	12/08/21 20:38	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1784885	1	12/10/21 03:44	12/13/21 13:20	JER	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1784375	1	12/06/21 14:00	12/06/21 15:17	PSN	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1784547	1	12/06/21 02:16	12/06/21 07:43	ARD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1784894	1	12/06/21 14:02	12/07/21 17:36	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1784346	1	12/07/21 11:42	12/08/21 18:11	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1784892	5	12/06/21 14:00	12/06/21 22:08	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1783552	1	12/02/21 19:18	12/03/21 11:44	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1784206	1	12/02/21 19:18	12/04/21 16:29	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1783877	1	12/03/21 18:23	12/04/21 01:06	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1783711	1	12/04/21 01:55	12/04/21 11:59	LEA	Mt. Juliet, TN

<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

## SP 2 L1437186-02 Solid

Collected by  
Kris Rowe

Collected date/time  
11/30/21 14:15

Received date/time  
12/02/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1784351	1	12/08/21 20:41	12/08/21 20:41	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1784885	1	12/10/21 03:44	12/13/21 13:25	JER	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1784375	1	12/06/21 14:00	12/06/21 15:17	PSN	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1784547	1	12/06/21 02:16	12/06/21 07:43	ARD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1784894	1	12/06/21 14:02	12/07/21 18:29	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1784346	1	12/07/21 11:42	12/08/21 18:14	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1784892	5	12/06/21 14:00	12/06/21 23:13	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1783552	1	12/02/21 19:18	12/03/21 12:08	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1784206	1	12/02/21 19:18	12/04/21 16:48	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1783877	1	12/03/21 18:23	12/04/21 01:19	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1783711	1	12/04/21 01:55	12/04/21 15:10	LEA	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



## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	8.64		1	12/08/2021 20:38	WG1784351

## Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	12/13/2021 13:20	<a href="#">WG1784885</a>

## Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.05	<a href="#">T8</a>	1	12/06/2021 15:17	<a href="#">WG1784375</a>

## Sample Narrative:

L1437186-01 WG1784375: 8.05 at 19C

## Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	2000		10.0	1	12/06/2021 07:43	<a href="#">WG1784547</a>

## Sample Narrative:

L1437186-01 WG1784547: at 25C

## Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	175		0.0852	0.500	1	12/07/2021 17:36	<a href="#">WG1784894</a>
Cadmium	0.592		0.0471	0.500	1	12/07/2021 17:36	<a href="#">WG1784894</a>
Copper	10.0		0.400	2.00	1	12/07/2021 17:36	<a href="#">WG1784894</a>
Lead	9.88		0.208	0.500	1	12/07/2021 17:36	<a href="#">WG1784894</a>
Nickel	8.93		0.132	2.00	1	12/07/2021 17:36	<a href="#">WG1784894</a>
Selenium	U		0.764	2.00	1	12/07/2021 17:36	<a href="#">WG1784894</a>
Silver	U		0.127	1.00	1	12/07/2021 17:36	<a href="#">WG1784894</a>
Zinc	34.1		0.832	5.00	1	12/07/2021 17:36	<a href="#">WG1784894</a>

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.546		0.0167	0.200	1	12/08/2021 18:11	<a href="#">WG1784346</a>

## Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.72		0.100	1.00	5	12/06/2021 22:08	<a href="#">WG1784892</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.208		0.0217	0.100	1	12/03/2021 11:44	<a href="#">WG1783552</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	95.1			77.0-120		12/03/2021 11:44	<a href="#">WG1783552</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	12/04/2021 16:29	<a href="#">WG1784206</a>
Toluene	0.00767	<a href="#">B</a>	0.00130	0.00500	1	12/04/2021 16:29	<a href="#">WG1784206</a>
Ethylbenzene	U		0.000737	0.00250	1	12/04/2021 16:29	<a href="#">WG1784206</a>
Xylenes, Total	0.0117		0.000880	0.00650	1	12/04/2021 16:29	<a href="#">WG1784206</a>
1,2,4-Trimethylbenzene	0.00210	<a href="#">U</a>	0.00158	0.00500	1	12/04/2021 16:29	<a href="#">WG1784206</a>
1,3,5-Trimethylbenzene	0.00361	<a href="#">U</a>	0.00200	0.00500	1	12/04/2021 16:29	<a href="#">WG1784206</a>
(S) Toluene-d8	106			75.0-131		12/04/2021 16:29	<a href="#">WG1784206</a>
(S) 4-Bromofluorobenzene	102			67.0-138		12/04/2021 16:29	<a href="#">WG1784206</a>
(S) 1,2-Dichloroethane-d4	108			70.0-130		12/04/2021 16:29	<a href="#">WG1784206</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.61	4.00	1	12/04/2021 01:06	<a href="#">WG1783877</a>
C28-C36 Motor Oil Range	U		0.274	4.00	1	12/04/2021 01:06	<a href="#">WG1783877</a>
(S) o-Terphenyl	34.8			18.0-148		12/04/2021 01:06	<a href="#">WG1783877</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00230	0.00600	1	12/04/2021 11:59	<a href="#">WG1783711</a>
Acenaphthene	U		0.00209	0.00600	1	12/04/2021 11:59	<a href="#">WG1783711</a>
Acenaphthylene	U		0.00216	0.00600	1	12/04/2021 11:59	<a href="#">WG1783711</a>
Benzo(a)anthracene	U		0.00173	0.00600	1	12/04/2021 11:59	<a href="#">WG1783711</a>
Benzo(a)pyrene	U		0.00179	0.00600	1	12/04/2021 11:59	<a href="#">WG1783711</a>
Benzo(b)fluoranthene	U		0.00153	0.00600	1	12/04/2021 11:59	<a href="#">WG1783711</a>
Benzo(g,h,i)perylene	U		0.00177	0.00600	1	12/04/2021 11:59	<a href="#">WG1783711</a>
Benzo(k)fluoranthene	U		0.00215	0.00600	1	12/04/2021 11:59	<a href="#">WG1783711</a>
Chrysene	U		0.00232	0.00600	1	12/04/2021 11:59	<a href="#">WG1783711</a>
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	12/04/2021 11:59	<a href="#">WG1783711</a>
Fluoranthene	U		0.00227	0.00600	1	12/04/2021 11:59	<a href="#">WG1783711</a>
Fluorene	U		0.00205	0.00600	1	12/04/2021 11:59	<a href="#">WG1783711</a>
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	12/04/2021 11:59	<a href="#">WG1783711</a>
Naphthalene	U		0.00408	0.0200	1	12/04/2021 11:59	<a href="#">WG1783711</a>
Phenanthrene	U		0.00231	0.00600	1	12/04/2021 11:59	<a href="#">WG1783711</a>
Pyrene	U		0.00200	0.00600	1	12/04/2021 11:59	<a href="#">WG1783711</a>
1-Methylnaphthalene	U		0.00449	0.0200	1	12/04/2021 11:59	<a href="#">WG1783711</a>
2-Methylnaphthalene	U		0.00427	0.0200	1	12/04/2021 11:59	<a href="#">WG1783711</a>
2-Chloronaphthalene	U		0.00466	0.0200	1	12/04/2021 11:59	<a href="#">WG1783711</a>
(S) p-Terphenyl-d14	62.8			23.0-120		12/04/2021 11:59	<a href="#">WG1783711</a>
(S) Nitrobenzene-d5	40.0			14.0-149		12/04/2021 11:59	<a href="#">WG1783711</a>
(S) 2-Fluorobiphenyl	53.4			34.0-125		12/04/2021 11:59	<a href="#">WG1783711</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	7.47		1	12/08/2021 20:41	WG1784351

## Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	12/13/2021 13:25	<a href="#">WG1784885</a>

## Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.94	<a href="#">T8</a>	1	12/06/2021 15:17	<a href="#">WG1784375</a>

## Sample Narrative:

L1437186-02 WG1784375: 7.94 at 18.9C

## Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	1860		10.0	1	12/06/2021 07:43	<a href="#">WG1784547</a>

## Sample Narrative:

L1437186-02 WG1784547: at 25C

## Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	261		0.0852	0.500	1	12/07/2021 18:29	<a href="#">WG1784894</a>
Cadmium	0.511		0.0471	0.500	1	12/07/2021 18:29	<a href="#">WG1784894</a>
Copper	12.1		0.400	2.00	1	12/07/2021 18:29	<a href="#">WG1784894</a>
Lead	10.7		0.208	0.500	1	12/07/2021 18:29	<a href="#">WG1784894</a>
Nickel	9.87		0.132	2.00	1	12/07/2021 18:29	<a href="#">WG1784894</a>
Selenium	U		0.764	2.00	1	12/07/2021 18:29	<a href="#">WG1784894</a>
Silver	U		0.127	1.00	1	12/07/2021 18:29	<a href="#">WG1784894</a>
Zinc	42.8		0.832	5.00	1	12/07/2021 18:29	<a href="#">WG1784894</a>

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.280		0.0167	0.200	1	12/08/2021 18:14	<a href="#">WG1784346</a>

## Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.70		0.100	1.00	5	12/06/2021 23:13	<a href="#">WG1784892</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.210		0.0217	0.100	1	12/03/2021 12:08	<a href="#">WG1783552</a>
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	95.3			77.0-120		12/03/2021 12:08	<a href="#">WG1783552</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	12/04/2021 16:48	<a href="#">WG1784206</a>
Toluene	U		0.00130	0.00500	1	12/04/2021 16:48	<a href="#">WG1784206</a>
Ethylbenzene	U		0.000737	0.00250	1	12/04/2021 16:48	<a href="#">WG1784206</a>
Xylenes, Total	U		0.000880	0.00650	1	12/04/2021 16:48	<a href="#">WG1784206</a>
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	12/04/2021 16:48	<a href="#">WG1784206</a>
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	12/04/2021 16:48	<a href="#">WG1784206</a>
(S) Toluene-d8	104			75.0-131		12/04/2021 16:48	<a href="#">WG1784206</a>
(S) 4-Bromofluorobenzene	99.6			67.0-138		12/04/2021 16:48	<a href="#">WG1784206</a>
(S) 1,2-Dichloroethane-d4	110			70.0-130		12/04/2021 16:48	<a href="#">WG1784206</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	12.7		1.61	4.00	1	12/04/2021 01:19	<a href="#">WG1783877</a>
C28-C36 Motor Oil Range	27.4		0.274	4.00	1	12/04/2021 01:19	<a href="#">WG1783877</a>
(S) o-Terphenyl	51.7			18.0-148		12/04/2021 01:19	<a href="#">WG1783877</a>

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00230	0.00600	1	12/04/2021 15:10	<a href="#">WG1783711</a>
Acenaphthene	U		0.00209	0.00600	1	12/04/2021 15:10	<a href="#">WG1783711</a>
Acenaphthylene	U		0.00216	0.00600	1	12/04/2021 15:10	<a href="#">WG1783711</a>
Benzo(a)anthracene	U		0.00173	0.00600	1	12/04/2021 15:10	<a href="#">WG1783711</a>
Benzo(a)pyrene	U		0.00179	0.00600	1	12/04/2021 15:10	<a href="#">WG1783711</a>
Benzo(b)fluoranthene	U		0.00153	0.00600	1	12/04/2021 15:10	<a href="#">WG1783711</a>
Benzo(g,h,i)perylene	U		0.00177	0.00600	1	12/04/2021 15:10	<a href="#">WG1783711</a>
Benzo(k)fluoranthene	U		0.00215	0.00600	1	12/04/2021 15:10	<a href="#">WG1783711</a>
Chrysene	U		0.00232	0.00600	1	12/04/2021 15:10	<a href="#">WG1783711</a>
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	12/04/2021 15:10	<a href="#">WG1783711</a>
Fluoranthene	U		0.00227	0.00600	1	12/04/2021 15:10	<a href="#">WG1783711</a>
Fluorene	U		0.00205	0.00600	1	12/04/2021 15:10	<a href="#">WG1783711</a>
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	12/04/2021 15:10	<a href="#">WG1783711</a>
Naphthalene	U		0.00408	0.0200	1	12/04/2021 15:10	<a href="#">WG1783711</a>
Phenanthrene	U		0.00231	0.00600	1	12/04/2021 15:10	<a href="#">WG1783711</a>
Pyrene	U		0.00200	0.00600	1	12/04/2021 15:10	<a href="#">WG1783711</a>
1-Methylnaphthalene	U		0.00449	0.0200	1	12/04/2021 15:10	<a href="#">WG1783711</a>
2-Methylnaphthalene	U		0.00427	0.0200	1	12/04/2021 15:10	<a href="#">WG1783711</a>
2-Chloronaphthalene	U		0.00466	0.0200	1	12/04/2021 15:10	<a href="#">WG1783711</a>
(S) p-Terphenyl-d14	64.8			23.0-120		12/04/2021 15:10	<a href="#">WG1783711</a>
(S) Nitrobenzene-d5	43.1			14.0-149		12/04/2021 15:10	<a href="#">WG1783711</a>
(S) 2-Fluorobiphenyl	57.6			34.0-125		12/04/2021 15:10	<a href="#">WG1783711</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3740408-1 12/13/21 13:07

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Hexavalent Chromium	U		0.255	1.00

L1437309-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1437309-04 12/13/21 13:36 • (DUP) R3740408-3 12/13/21 13:41

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	1.08	1.32	1	20.0		20

L1437995-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1437995-01 12/13/21 16:55 • (DUP) R3740408-7 12/13/21 15:08

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3740408-2 12/13/21 13:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	10.0	10.8	108	80.0-120	

L1437990-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1437990-02 12/13/21 14:22 • (MS) R3740408-4 12/13/21 14:28 • (MSD) R3740408-5 12/13/21 14:33

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 %
Hexavalent Chromium	20.0	0.316	21.6	19.8	106	97.5	1	75.0-125			8.53	20

L1437990-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1437990-02 12/13/21 14:22 • (MS) R3740408-6 12/13/21 14:38

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	683	0.316	729	107	50	75.0-125	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1437294-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1437294-12 12/06/21 15:17 • (DUP) R3737512-2 12/06/21 15:17

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	pH	su		%		%
pH	8.28	8.30	1	0.241		1

Sample Narrative:

OS: 8.28 at 18.6C

DUP: 8.3 at 18.4C

L1437294-21 Original Sample (OS) • Duplicate (DUP)

(OS) L1437294-21 12/06/21 15:17 • (DUP) R3737512-3 12/06/21 15:17

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	pH	su		%		%
pH	8.43	8.47	1	0.473		1

Sample Narrative:

OS: 8.43 at 18.4C

DUP: 8.47 at 18.7C

Laboratory Control Sample (LCS)

(LCS) R3737512-1 12/06/21 15:17

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	9.98	99.8	99.0-101	

Sample Narrative:

LCS: 9.98 at 18.2C



Method Blank (MB)

(MB) R3737265-1 12/06/21 07:43

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

Sample Narrative:

BLANK: at 25C

L1436781-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1436781-13 12/06/21 07:43 • (DUP) R3737265-3 12/06/21 07:43

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	1390	1340	1	3.58		20

Sample Narrative:

OS: at 25C

DUP: at 25C

L1437178-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1437178-03 12/06/21 07:43 • (DUP) R3737265-4 12/06/21 07:43

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	982	1060	1	7.55		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3737265-2 12/06/21 07:43

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	268	265	99.0	85.0-115	

Sample Narrative:

LCS: at 25C

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

Method Blank (MB)

(MB) R3738225-1 12/07/21 17:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Copper	1.17	U	0.400	2.00
Lead	U		0.208	0.500
Nickel	U		0.132	2.00
Selenium	U		0.764	2.00
Silver	U		0.127	1.00
Zinc	U		0.832	5.00

1Cp

2Tc

3Ss

4Cn

5Sr

Laboratory Control Sample (LCS)

(LCS) R3738225-2 12/07/21 17:33

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium	100	103	103	80.0-120	
Cadmium	100	99.3	99.3	80.0-120	
Copper	100	99.0	99.0	80.0-120	
Lead	100	100	100	80.0-120	
Nickel	100	101	101	80.0-120	
Selenium	100	102	102	80.0-120	
Silver	20.0	17.5	87.4	80.0-120	
Zinc	100	98.7	98.7	80.0-120	

6Qc

7Gl

8Al

9Sc

L1437186-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1437186-01 12/07/21 17:36 • (MS) R3738225-5 12/07/21 17:44 • (MSD) R3738225-6 12/07/21 17:47

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 %
Barium	100	175	260	270	85.2	95.2	1	75.0-125			3.78	20
Cadmium	100	0.592	98.5	100	97.9	99.8	1	75.0-125			1.95	20
Copper	100	10.0	107	109	96.9	98.5	1	75.0-125			1.52	20
Lead	100	9.88	108	112	98.6	102	1	75.0-125			3.01	20
Nickel	100	8.93	109	111	99.9	102	1	75.0-125			1.83	20
Selenium	100	U	86.6	90.2	86.6	90.2	1	75.0-125			4.02	20
Silver	20.0	U	17.7	18.1	88.6	90.6	1	75.0-125			2.22	20
Zinc	100	34.1	121	124	86.5	90.1	1	75.0-125			2.94	20

Method Blank (MB)

(MB) R3739014-1 12/08/21 18:03

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

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

(LCS) R3739014-2 12/08/21 18:06 • (LCSD) R3739014-3 12/08/21 18:08

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	0.992	0.987	99.2	98.7	80.0-120			0.578	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Method Blank (MB)

(MB) R3737645-1 12/06/21 22:01

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Arsenic	U		0.100	1.00

Laboratory Control Sample (LCS)

(LCS) R3737645-2 12/06/21 22:04

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Arsenic	100	90.3	90.3	80.0-120	

L1437186-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1437186-01 12/06/21 22:08 • (MS) R3737645-5 12/06/21 22:18 • (MSD) R3737645-6 12/06/21 22:21

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	100	2.72	84.0	91.1	81.3	88.4	5	75.0-125			8.11	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3738329-2 12/03/21 05:17

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)	98.9			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3738329-1 12/03/21 04:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.65	84.5	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			99.8	77.0-120	

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

Method Blank (MB)

(MB) R3737960-3 12/04/21 09:48

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	0.00170	U	0.00130	0.00500
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	105			75.0-131
(S) 4-Bromofluorobenzene	99.3			67.0-138
(S) 1,2-Dichloroethane-d4	109			70.0-130

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

(LCS) R3737960-1 12/04/21 08:34 • (LCSD) R3737960-2 12/04/21 08:52

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	0.141	0.135	113	108	70.0-123			4.35	20
Ethylbenzene	0.125	0.137	0.137	110	110	74.0-126			0.000	20
Toluene	0.125	0.127	0.125	102	100	75.0-121			1.59	20
1,2,4-Trimethylbenzene	0.125	0.117	0.125	93.6	100	70.0-126			6.61	20
1,3,5-Trimethylbenzene	0.125	0.121	0.123	96.8	98.4	73.0-127			1.64	20
Xylenes, Total	0.375	0.389	0.386	104	103	72.0-127			0.774	20
(S) Toluene-d8				103	103	75.0-131				
(S) 4-Bromofluorobenzene				100	100	67.0-138				
(S) 1,2-Dichloroethane-d4				111	112	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3737060-1 12/03/21 23:31

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	86.9			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3737060-2 12/03/21 23:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	38.5	77.0	50.0-150	
(S) o-Terphenyl			93.1	18.0-148	

L1437444-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1437444-01 12/03/21 23:58 • (MS) R3737060-3 12/04/21 00:12 • (MSD) R3737060-4 12/04/21 00:25

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 %
C10-C28 Diesel Range	49.2	4.24	46.4	45.7	85.7	83.3	1	50.0-150			1.52	20
(S) o-Terphenyl					102	97.6		18.0-148				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3737641-2 12/04/21 10:32

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	58.4			14.0-149
(S) 2-Fluorobiphenyl	80.2			34.0-125
(S) p-Terphenyl-d14	97.6			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

Laboratory Control Sample (LCS)

(LCS) R3737641-1 12/04/21 10:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0637	79.6	50.0-126	
Acenaphthene	0.0800	0.0678	84.8	50.0-120	
Acenaphthylene	0.0800	0.0728	91.0	50.0-120	
Benzo(a)anthracene	0.0800	0.0631	78.9	45.0-120	
Benzo(a)pyrene	0.0800	0.0502	62.8	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0579	72.4	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0539	67.4	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0565	70.6	49.0-125	
Chrysene	0.0800	0.0632	79.0	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0523	65.4	47.0-125	
Fluoranthene	0.0800	0.0625	78.1	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3737641-1 12/04/21 10:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0618	77.3	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0540	67.5	46.0-125	
Naphthalene	0.0800	0.0649	81.1	50.0-120	
Phenanthrene	0.0800	0.0643	80.4	47.0-120	
Pyrene	0.0800	0.0635	79.4	43.0-123	
1-Methylnaphthalene	0.0800	0.0600	75.0	51.0-121	
2-Methylnaphthalene	0.0800	0.0575	71.9	50.0-120	
2-Chloronaphthalene	0.0800	0.0660	82.5	50.0-120	
(S) Nitrobenzene-d5			69.4	14.0-149	
(S) 2-Fluorobiphenyl			86.3	34.0-125	
(S) p-Terphenyl-d14			95.6	23.0-120	

L1437293-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1437293-12 12/04/21 16:19 • (MS) R3737641-3 12/04/21 16:37 • (MSD) R3737641-4 12/04/21 16:54

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	0.0784	U	0.0583	0.0544	74.4	70.5	1	10.0-145			6.92	30
Acenaphthene	0.0784	U	0.0554	0.0541	70.7	70.1	1	14.0-127			2.37	27
Acenaphthylene	0.0784	U	0.0640	0.0615	81.6	79.7	1	21.0-124			3.98	25
Benzo(a)anthracene	0.0784	U	0.0588	0.0547	75.0	70.9	1	10.0-139			7.22	30
Benzo(a)pyrene	0.0784	U	0.0572	0.0481	73.0	62.3	1	10.0-141			17.3	31
Benzo(b)fluoranthene	0.0784	U	0.0555	0.0512	70.8	66.3	1	10.0-140			8.06	36
Benzo(g,h,i)perylene	0.0784	U	0.0515	0.0469	65.7	60.8	1	10.0-140			9.35	33
Benzo(k)fluoranthene	0.0784	U	0.0491	0.0455	62.6	58.9	1	10.0-137			7.61	31
Chrysene	0.0784	U	0.0531	0.0510	67.7	66.1	1	10.0-145			4.03	30
Dibenz(a,h)anthracene	0.0784	U	0.0501	0.0472	63.9	61.1	1	10.0-132			5.96	31
Fluoranthene	0.0784	U	0.0601	0.0551	76.7	71.4	1	10.0-153			8.68	33
Fluorene	0.0784	U	0.0559	0.0525	71.3	68.0	1	11.0-130			6.27	29
Indeno(1,2,3-cd)pyrene	0.0784	U	0.0585	0.0531	74.6	68.8	1	10.0-137			9.68	32
Naphthalene	0.0784	U	0.0564	0.0534	71.9	69.2	1	10.0-135			5.46	27
Phenanthrene	0.0784	U	0.0566	0.0545	72.2	70.6	1	10.0-144			3.78	31
Pyrene	0.0784	U	0.0507	0.0522	64.7	67.6	1	10.0-148			2.92	35
1-Methylnaphthalene	0.0784	U	0.0543	0.0519	69.3	67.2	1	10.0-142			4.52	28
2-Methylnaphthalene	0.0784	U	0.0506	0.0487	64.5	63.1	1	10.0-137			3.83	28
2-Chloronaphthalene	0.0784	U	0.0536	0.0523	68.4	67.7	1	29.0-120			2.46	24
(S) Nitrobenzene-d5					43.7	42.9		14.0-149				
(S) 2-Fluorobiphenyl					68.5	67.7		34.0-125				
(S) p-Terphenyl-d14					84.8	82.7		23.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

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

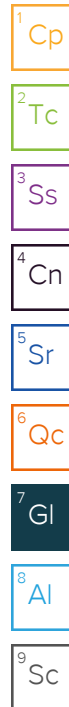
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location.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

### Abbreviations and Definitions

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

### Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
T8	Sample(s) received past/too close to holding time expiration.



# 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.



[illegible]