

July 13, 2020

<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

## Colorado Oil & Gas Conservation

Sample Delivery Group: L1235595

Samples Received: 07/02/2020

Project Number:

Description:

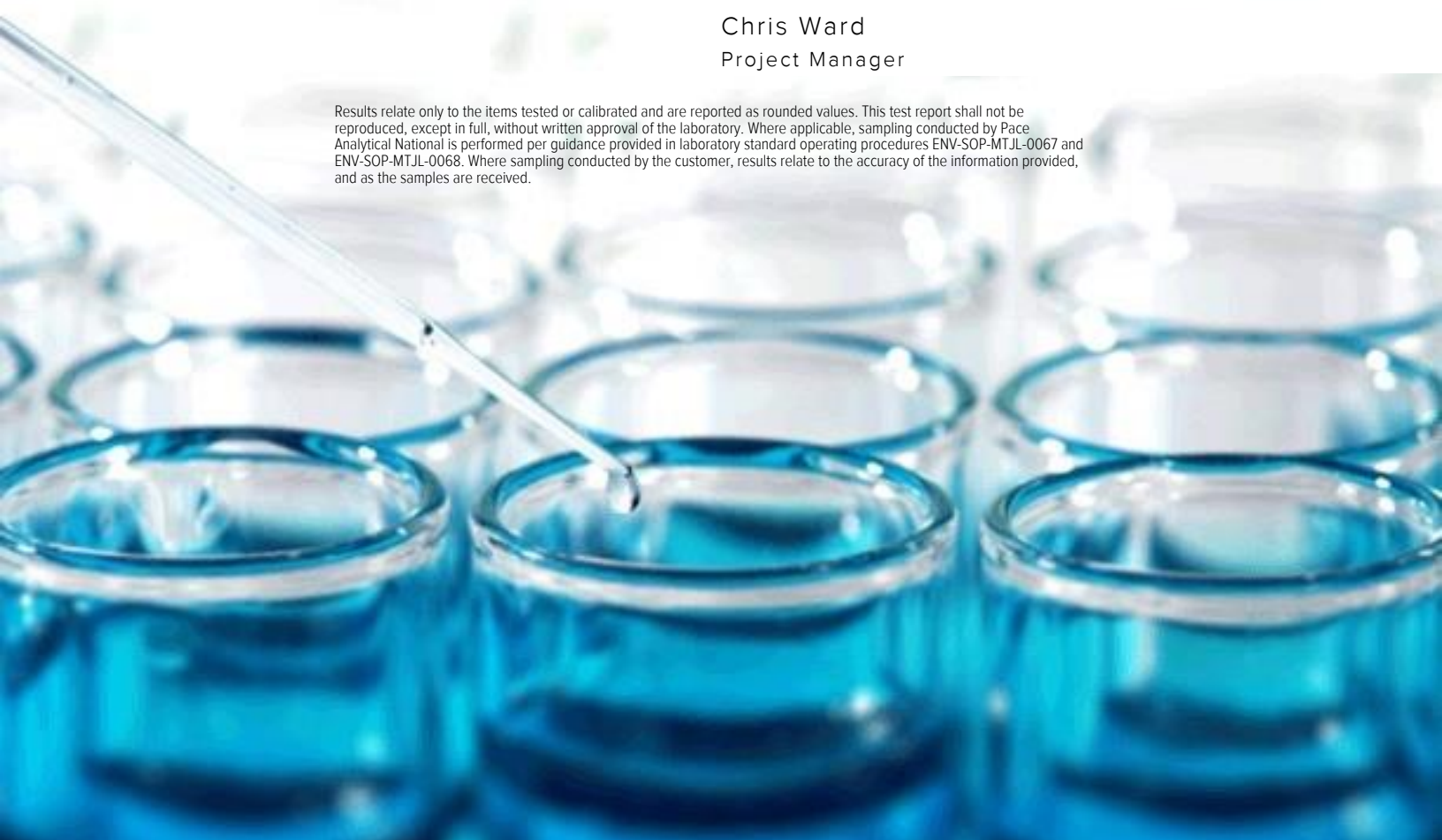
Report To: Jason Kosola  
5405 Sacramento Pl.  
Colorado Springs, CO 80917

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

ONE LAB. NATIONWIDE.



703906 L1235595-01 GW

Collected by  
J KosolaCollected date/time  
07/01/20 10:00Received date/time  
07/02/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Microbiology by Method BART	WG1503347	1	07/13/20 08:10	07/13/20 08:10	RF	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG1504121	1	07/05/20 06:59	07/05/20 14:02	KAB	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1506201	1	07/10/20 15:13	07/10/20 15:13	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG1503021	1	07/02/20 17:34	07/02/20 17:34	JIC	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG1506019	1	07/08/20 23:00	07/08/20 23:00	CAT	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1502952	1	07/02/20 15:34	07/02/20 15:34	MCG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1502952	5	07/02/20 16:06	07/02/20 16:06	MCG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1504471	1	07/06/20 16:12	07/07/20 20:54	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1506200	1	07/09/20 13:14	07/09/20 13:14	JAL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1506537	10	07/09/20 15:34	07/09/20 15:34	JAL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1506286	1	07/09/20 12:32	07/09/20 12:32	JHH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1503589	1	07/03/20 13:31	07/07/20 09:22	SHG	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

ACCOUNT:

Colorado Oil &amp; Gas Conservation

PROJECT:

SDG:

L1235595

DATE/TIME:

07/13/20 17:18

PAGE:

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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

### Project Narrative

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The following reactions were observed on one or more samples within this SDG.

CL Cloudy Growth

FO Foam

BB Blackened Base

<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



## Microbiology by Method BART

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Iron Related Bacteria	Present		1	07/13/2020 08:10	WG1503347
Slime Forming Bacteria	Present		1	07/13/2020 08:10	WG1503347
Sulfate Reducing Bacteria	Present		1	07/13/2020 08:10	WG1503347

## Sample Narrative:

L1235595-01 WG1503347: IRB Approximate Population=&lt;1 CFU/mL. Reactions=FO.

L1235595-01 WG1503347: SLYM Approximate Population=&lt;20 CFU/mL. Reactions=CL.

L1235595-01 WG1503347: SRB Approximate Population=5 CFU/mL. Reactions=BB.

## Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	416	J3	20.0	1	07/05/2020 14:02	WG1504121

## Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Alkalinity	259		20.0	1	07/10/2020 15:13	WG1506201
Alkalinity,Bicarbonate	259		20.0	1	07/10/2020 15:13	WG1506201
Alkalinity,Carbonate	ND		20.0	1	07/10/2020 15:13	WG1506201

## Sample Narrative:

L1235595-01 WG1506201: Endpoint pH 4.5 HEADSPACE

## Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.69	T8	1	07/02/2020 17:34	WG1503021

## Sample Narrative:

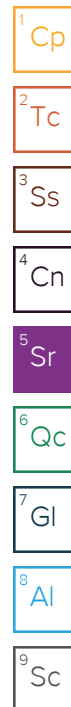
L1235595-01 WG1503021: 7.69 at 21.3C

## Wet Chemistry by Method 9050A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	744		10.0	1	07/08/2020 23:00	WG1506019

## Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Bromide	ND		1.00	1	07/02/2020 15:34	WG1502952
Chloride	48.2		1.00	1	07/02/2020 15:34	WG1502952
Fluoride	0.978		0.150	1	07/02/2020 15:34	WG1502952
Nitrate as (N)	ND		0.100	1	07/02/2020 15:34	WG1502952
Nitrite as (N)	ND		0.100	1	07/02/2020 15:34	WG1502952
Sulfate	75.3		25.0	5	07/02/2020 16:06	WG1502952





## Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Aluminum,Dissolved	ND		0.200	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Antimony,Dissolved	ND		0.0100	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Arsenic,Dissolved	ND		0.0100	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Barium,Dissolved	0.144		0.00500	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Boron,Dissolved	ND		0.200	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Cadmium,Dissolved	ND		0.00200	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Calcium,Dissolved	51.5		1.00	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Chromium,Dissolved	ND		0.0100	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Copper,Dissolved	ND		0.0100	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Iron,Dissolved	ND		0.100	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Lead,Dissolved	ND		0.00600	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Lithium,Dissolved	0.0153		0.0150	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Magnesium,Dissolved	5.51		1.00	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Manganese,Dissolved	0.0331		0.0100	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Molybdenum,Dissolved	ND		0.00500	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Nickel,Dissolved	ND		0.0100	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Potassium,Dissolved	ND		2.00	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Selenium,Dissolved	ND		0.0100	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Silicon,Dissolved	3.94		0.200	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Sodium,Dissolved	110		3.00	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Strontium,Dissolved	0.869		0.0100	1	07/07/2020 20:54	<a href="#">WG1504471</a>
Zinc,Dissolved	ND		0.0500	1	07/07/2020 20:54	<a href="#">WG1504471</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Methane	7.38		0.100	10	07/09/2020 15:34	<a href="#">WG1506537</a>
Ethane	ND		0.0130	1	07/09/2020 13:14	<a href="#">WG1506200</a>
Ethene	ND		0.0130	1	07/09/2020 13:14	<a href="#">WG1506200</a>
Propane	ND		0.0190	1	07/09/2020 13:14	<a href="#">WG1506200</a>

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Acrolein	ND		0.0500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Acrylonitrile	ND		0.0100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Benzene	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Bromodichloromethane	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Bromoform	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Bromomethane	ND	J3	0.00500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Carbon disulfide	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Carbon tetrachloride	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Chlorobenzene	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Chlorodibromomethane	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Chloroethane	ND		0.00500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
2-Chloroethyl vinyl ether	ND		0.0500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Cyclohexane	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Chloroform	ND		0.00500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Chloromethane	ND		0.00250	1	07/09/2020 12:32	<a href="#">WG1506286</a>
1,2-Dibromoethane	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Dibromomethane	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
1,2-Dichlorobenzene	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
1,3-Dichlorobenzene	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
1,4-Dichlorobenzene	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>



Collected date/time: 07/01/20 10:00

L1235595

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dichlorodifluoromethane	ND		0.00500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
1,1-Dichloroethane	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
1,2-Dichloroethane	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
1,1-Dichloroethene	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
cis-1,2-Dichloroethene	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
trans-1,2-Dichloroethene	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
1,2-Dichloropropane	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
cis-1,3-Dichloropropene	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
trans-1,3-Dichloropropene	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Ethylbenzene	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
2-Hexanone	ND		0.0100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Iodomethane	ND		0.0100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
2-Butanone (MEK)	ND		0.0100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Methyl Cyclohexane	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Methylene Chloride	ND		0.00500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Pentachloroethane	ND	J4	0.00500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Styrene	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
1,1,2,2-Tetrachloroethane	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Tetrachloroethene	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Toluene	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
1,1,1-Trichloroethane	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
1,1,2-Trichloroethane	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Trichloroethene	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Trichlorofluoromethane	ND		0.00500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
1,2,3-Trichloropropane	ND		0.00250	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Vinyl acetate	ND		0.0100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Vinyl chloride	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Xylenes, Total	ND		0.00300	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Allyl chloride	ND		0.00500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Chloroprene	ND		0.0500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
trans-1,4-Dichloro-2-butene	ND	J3	0.00250	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Isobutanol	ND		0.100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
1,4-Dioxane	ND		0.100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Ethanol	ND		0.100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
n-Octane	ND		0.00100	1	07/09/2020 12:32	<a href="#">WG1506286</a>
2-Propanol	ND		0.00500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Methacrylonitrile	ND		0.0500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Methyl methacrylate	ND		0.00500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Ethyl methacrylate	ND		0.00500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
Propionitrile	ND		0.0500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
t-Amyl Alcohol	ND		0.0500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
n-Butanol	ND		0.200	1	07/09/2020 12:32	<a href="#">WG1506286</a>
tert-Butyl alcohol	0.0308		0.00500	1	07/09/2020 12:32	<a href="#">WG1506286</a>
(S) Toluene-d8	105		80.0-120		07/09/2020 12:32	<a href="#">WG1506286</a>
(S) 4-Bromofluorobenzene	97.4		77.0-126		07/09/2020 12:32	<a href="#">WG1506286</a>
(S) 1,2-Dichloroethane-d4	95.1		70.0-130		07/09/2020 12:32	<a href="#">WG1506286</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 - TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	CAS #	RT
Unknown-01	0.0168	JN	0.000	1	07/09/2020 12:32	<a href="#">WG1506286</a>	007446-09-5	2.11

Tentatively Identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.



Collected date/time: 07/01/20 10:00

L1235595

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Acenaphthylene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Anthracene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Benzidine	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Benzo(a)anthracene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Benzo(b)fluoranthene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Benzo(k)fluoranthene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Benzo(g,h,i)perylene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Benzo(a)pyrene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Bis(2-chlorethoxy)methane	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Bis(2-chloroethyl)ether	ND	J4	0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
2,2-Oxybis(1-Chloropropane)	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
4-Bromophenyl-phenylether	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
2-Chloronaphthalene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
4-Chlorophenyl-phenylether	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Chrysene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Dibenz(a,h)anthracene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
1,2-Dichlorobenzene	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
1,3-Dichlorobenzene	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
1,4-Dichlorobenzene	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
3,3-Dichlorobenzidine	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
2,4-Dinitrotoluene	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
2,6-Dinitrotoluene	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Fluoranthene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Fluorene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Hexachlorobenzene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Hexachloro-1,3-butadiene	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Hexachlorocyclopentadiene	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Hexachloroethane	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Indeno(1,2,3-cd)pyrene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Isophorone	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Naphthalene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Nitrobenzene	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
n-Nitrosodimethylamine	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
n-Nitrosodiphenylamine	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
n-Nitrosodi-n-propylamine	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Phenanthrene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Benzylbutyl phthalate	ND		0.00300	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Bis(2-ethylhexyl)phthalate	ND		0.00300	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Di-n-butyl phthalate	ND		0.00300	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Diethyl phthalate	ND		0.00300	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Dimethyl phthalate	ND		0.00300	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Di-n-octyl phthalate	ND		0.00300	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Pyrene	ND		0.00100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
1,2,4-Trichlorobenzene	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
4-Chloro-3-methylphenol	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
2-Chlorophenol	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
2,4-Dichlorophenol	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
2,4-Dimethylphenol	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
4,6-Dinitro-2-methylphenol	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
2,4-Dinitrophenol	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
2-Nitrophenol	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
4-Nitrophenol	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Pentachlorophenol	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
Phenol	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>
2,4,6-Trichlorophenol	ND		0.0100	1	07/07/2020 09:22	<a href="#">WG1503589</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc





Collected date/time: 07/01/20 10:00

L1235595

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	20.7		10.0-120		07/07/2020 09:22	<a href="#">WG1503589</a>
(S) Phenol-d5	14.0		10.0-120		07/07/2020 09:22	<a href="#">WG1503589</a>
(S) Nitrobenzene-d5	45.0		10.0-127		07/07/2020 09:22	<a href="#">WG1503589</a>
(S) 2-Fluorobiphenyl	47.7		10.0-130		07/07/2020 09:22	<a href="#">WG1503589</a>
(S) 2,4,6-Tribromophenol	57.6		10.0-155		07/07/2020 09:22	<a href="#">WG1503589</a>
(S) p-Terphenyl-d14	71.2		10.0-128		07/07/2020 09:22	<a href="#">WG1503589</a>

<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) R3547051-1 07/05/20 14:02

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		2.82	10.0

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L1235595-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1235595-01 07/05/20 14:02 • (DUP) R3547051-3 07/05/20 14:02

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	416	480	1	14.3	J3	5

Laboratory Control Sample (LCS)

(LCS) R3547051-2 07/05/20 14:02

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	7630	86.7	85.0-115	

Method Blank (MB)

(MB) R3548453-1 07/10/20 14:37

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Alkalinity	U		8.45	20.0
Alkalinity,Bicarbonate	U		8.45	20.0
Alkalinity,Carbonate	U		8.45	20.0

Sample Narrative:  
BLANK: Endpoint pH 4.5

L1235500-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1235500-01 07/10/20 18:15 • (DUP) R3548453-5 07/10/20 18:23

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	78.0	78.0	1	0.0987		20
Alkalinity,Bicarbonate	78.0	78.0	1	0.0987		20
Alkalinity,Carbonate	ND	ND	1	0.000		20

Sample Narrative:  
OS: Endpoint pH 4.5  
DUP: Endpoint pH 4.5

L1236337-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1236337-01 07/11/20 11:10 • (DUP) R3548453-6 07/11/20 11:17

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	97.2	97.3	1	0.0860		20
Alkalinity,Bicarbonate	92.4	94.5	1	2.33		20
Alkalinity,Carbonate	ND	ND	1	0.000		20

Sample Narrative:  
OS: Endpoint pH 4.5 HEADSPACE  
DUP: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Laboratory Control Sample (LCS)

(LCS) R3548453-3 07/10/20 16:05

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Alkalinity	100	89.1	89.1	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1235389-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1235389-01 07/02/20 17:34 • (DUP) R3545765-2 07/02/20 17:34

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.24	7.26	1	0.276		1

Sample Narrative:  
OS: 7.24 at 20.4C  
DUP: 7.26 at 20.4C

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

L1235623-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1235623-05 07/02/20 17:34 • (DUP) R3545765-3 07/02/20 17:34

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.02	8.03	1	0.125		1

Sample Narrative:  
OS: 8.02 at 21.1C  
DUP: 8.03 at 21.1C

Laboratory Control Sample (LCS)

(LCS) R3545765-1 07/02/20 17:34

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

Sample Narrative:  
LCS: 10.01 at 23.3C

Method Blank (MB)

(MB) R3547576-1 07/08/20 23:00

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

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

L1236348-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1236348-02 07/08/20 23:00 • (DUP) R3547576-3 07/08/20 23:00

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	2640	2620	1	0.494		20

L1237370-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1237370-01 07/08/20 23:00 • (DUP) R3547576-4 07/08/20 23:00

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	52300	51700	1	1.15		20

Laboratory Control Sample (LCS)

(LCS) R3547576-2 07/08/20 23:00

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	445	445	100	85.0-115	



Method Blank (MB)

(MB) R3546171-1 07/02/20 07:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Bromide	U		0.353	1.00
Chloride	U		0.379	1.00
Fluoride	U		0.0640	0.150
Nitrate	U		0.0480	0.100
Nitrite	U		0.0420	0.100
Sulfate	U		0.594	5.00

L1235582-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1235582-01 07/02/20 13:32 • (DUP) R3546171-5 07/02/20 13:43

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP RPD Limits %
Bromide	ND	ND	1	0.000	15
Chloride	25.2	25.0	1	1.06	15
Fluoride	ND	ND	1	0.000	15
Nitrate	0.746	0.725	1	2.92	15
Nitrite	ND	ND	1	0.000	15

Laboratory Control Sample (LCS)

(LCS) R3546171-2 07/02/20 07:56

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromide	40.0	41.6	104	80.0-120	
Chloride	40.0	41.6	104	80.0-120	
Fluoride	8.00	8.35	104	80.0-120	
Nitrate	8.00	7.97	99.6	80.0-120	
Nitrite	8.00	8.47	106	80.0-120	
Sulfate	40.0	42.3	106	80.0-120	

L1235576-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1235576-01 07/02/20 12:27 • (MS) R3546171-3 07/02/20 12:38 • (MSD) R3546171-4 07/02/20 13:11

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromide	50.0	ND	49.0	48.5	97.9	97.0	1	80.0-120			0.924	15
Chloride	50.0	112	160	161	96.7	98.1	1	80.0-120	E	E	0.442	15
Fluoride	5.00	0.234	5.13	5.18	97.9	98.8	1	80.0-120			0.920	15

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



L1235576-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1235576-01 07/02/20 12:27 • (MS) R3546171-3 07/02/20 12:38 • (MSD) R3546171-4 07/02/20 13:11

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate	5.00	24.7	29.0	18.2	87.2	0.000	1	80.0-120	E	E J3 V	45.8	15
Nitrite	5.00	ND	5.13	5.17	103	103	1	80.0-120			0.864	15

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



Method Blank (MB)

(MB) R3547098-1 07/07/20 20:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Aluminum,Dissolved	U		0.0704	0.200
Antimony,Dissolved	U		0.00430	0.0100
Arsenic,Dissolved	U		0.00440	0.0100
Barium,Dissolved	U		0.000895	0.00500
Boron,Dissolved	U		0.0254	0.200
Cadmium,Dissolved	U		0.000563	0.00200
Calcium,Dissolved	U		0.389	1.00
Chromium,Dissolved	U		0.00500	0.0100
Copper,Dissolved	U		0.00469	0.0100
Iron,Dissolved	U		0.0458	0.100
Lead,Dissolved	U		0.00295	0.00600
Lithium,Dissolved	U		0.00574	0.0150
Magnesium,Dissolved	U		0.111	1.00
Manganese,Dissolved	U		0.00327	0.0100
Molybdenum,Dissolved	U		0.00104	0.00500
Nickel,Dissolved	U		0.00298	0.0100
Potassium,Dissolved	U		0.510	2.00
Selenium,Dissolved	U		0.00735	0.0100
Silicon,Dissolved	U		0.0981	0.200
Sodium,Dissolved	U		1.40	3.00
Strontium,Dissolved	U		0.00335	0.0100
Zinc,Dissolved	U		0.00916	0.0500

<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) R3547098-2 07/07/20 20:40

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum,Dissolved	10.0	9.76	97.6	80.0-120	
Antimony,Dissolved	1.00	0.946	94.6	80.0-120	
Arsenic,Dissolved	1.00	0.924	92.4	80.0-120	
Barium,Dissolved	1.00	0.961	96.1	80.0-120	
Boron,Dissolved	1.00	0.955	95.5	80.0-120	
Cadmium,Dissolved	1.00	0.942	94.2	80.0-120	
Calcium,Dissolved	10.0	9.67	96.7	80.0-120	
Chromium,Dissolved	1.00	0.955	95.5	80.0-120	
Copper,Dissolved	1.00	0.947	94.7	80.0-120	
Iron,Dissolved	10.0	9.68	96.8	80.0-120	
Lead,Dissolved	1.00	0.948	94.8	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3547098-2 07/07/20 20:40

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Lithium,Dissolved	1.00	0.941	94.1	80.0-120	
Magnesium,Dissolved	10.0	9.53	95.3	80.0-120	
Manganese,Dissolved	1.00	0.941	94.1	80.0-120	
Molybdenum,Dissolved	1.00	0.973	97.3	80.0-120	
Nickel,Dissolved	1.00	0.962	96.2	80.0-120	
Potassium,Dissolved	10.0	9.26	92.6	80.0-120	
Selenium,Dissolved	1.00	0.972	97.2	80.0-120	
Silicon,Dissolved	1.00	0.857	85.7	80.0-120	
Sodium,Dissolved	10.0	9.64	96.4	80.0-120	
Strontium,Dissolved	1.00	0.959	95.9	80.0-120	
Zinc,Dissolved	1.00	0.942	94.2	80.0-120	

L1236158-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1236158-03 07/07/20 20:43 • (MS) R3547098-4 07/07/20 20:48 • (MSD) R3547098-5 07/07/20 20:51

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Aluminum,Dissolved	10.0	0.786	10.6	10.4	98.0	96.6	1	75.0-125			1.36	20
Antimony,Dissolved	1.00	ND	0.978	0.968	97.8	96.8	1	75.0-125			1.10	20
Arsenic,Dissolved	1.00	ND	0.992	0.982	98.7	97.7	1	75.0-125			1.04	20
Barium,Dissolved	1.00	0.0308	0.978	0.966	94.7	93.6	1	75.0-125			1.21	20
Boron,Dissolved	1.00	ND	0.984	0.979	98.4	97.9	1	75.0-125			0.566	20
Cadmium,Dissolved	1.00	ND	0.988	0.973	98.8	97.3	1	75.0-125			1.51	20
Calcium,Dissolved	10.0	66.3	75.2	75.1	89.2	88.1	1	75.0-125			0.137	20
Chromium,Dissolved	1.00	ND	0.970	0.954	97.0	95.4	1	75.0-125			1.63	20
Copper,Dissolved	1.00	ND	0.981	0.963	98.1	96.3	1	75.0-125			1.91	20
Iron,Dissolved	10.0	ND	9.75	9.62	96.9	95.6	1	75.0-125			1.38	20
Lead,Dissolved	1.00	ND	0.979	0.970	97.9	97.0	1	75.0-125			0.976	20
Lithium,Dissolved	1.00	ND	0.935	0.920	93.5	92.0	1	75.0-125			1.52	20
Magnesium,Dissolved	10.0	3.15	12.4	12.3	92.9	91.9	1	75.0-125			0.760	20
Manganese,Dissolved	1.00	0.130	1.07	1.06	93.8	92.6	1	75.0-125			1.14	20
Molybdenum,Dissolved	1.00	ND	0.979	0.975	97.6	97.1	1	75.0-125			0.428	20
Nickel,Dissolved	1.00	ND	1.02	1.01	101	100	1	75.0-125			1.08	20
Potassium,Dissolved	10.0	9.56	18.8	18.6	92.2	90.1	1	75.0-125			1.14	20
Selenium,Dissolved	1.00	ND	1.05	1.03	105	103	1	75.0-125			2.36	20
Silicon,Dissolved	1.00	3.53	4.42	4.38	88.9	84.6	1	75.0-125			0.982	20
Sodium,Dissolved	10.0	393	397	396	37.0	22.3	1	75.0-125	V	V	0.369	20
Strontium,Dissolved	1.00	0.293	1.25	1.23	95.4	93.9	1	75.0-125			1.21	20
Zinc,Dissolved	1.00	ND	0.977	0.964	97.7	96.4	1	75.0-125			1.33	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3547811-2 07/09/20 12:57

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Ethane	U		0.00407	0.0130
Ethene	U		0.00426	0.0130
Propane	U		0.00548	0.0190

L1236206-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1236206-01 07/09/20 13:00 • (DUP) R3547811-3 07/09/20 13:40

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20
Propane	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3547811-1 07/09/20 12:53

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethane	0.129	0.121	93.8	85.0-115	
Ethene	0.127	0.116	91.3	85.0-115	
Propane	0.186	0.175	94.1	85.0-115	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3547880-2 07/09/20 15:14

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Methane	U		0.00291	0.0100

L1235489-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1235489-01 07/09/20 15:21 • (DUP) R3547880-3 07/09/20 15:44

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Methane	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3547880-1 07/09/20 15:04

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	mg/l	mg/l	%	%	
Methane	0.0678	0.0649	95.7	85.0-115	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3547821-4 07/09/20 08:51

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Acrolein	U		0.00254	0.0500
Acrylonitrile	U		0.000671	0.0100
Benzene	U		0.0000941	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
Carbon disulfide	U		0.0000962	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
2-Chloroethyl vinyl ether	U		0.000575	0.0500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
Cyclohexane	U		0.000188	0.00100
1,2-Dibromoethane	U		0.000126	0.00100
Dibromomethane	U		0.000122	0.00100
1,2-Dichlorobenzene	U		0.000107	0.00100
1,3-Dichlorobenzene	U		0.000110	0.00100
1,4-Dichlorobenzene	U		0.000120	0.00100
trans-1,4-Dichloro-2-butene	U		0.000467	0.00250
Dichlorodifluoromethane	U		0.000374	0.00500
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
1,4-Dioxane	U		0.0360	0.100
Ethylbenzene	U		0.000137	0.00100
Ethanol	U		0.0420	0.100
2-Hexanone	U		0.000787	0.0100
Iodomethane	U		0.00600	0.0100
2-Butanone (MEK)	U		0.00119	0.0100
Methyl Cyclohexane	U		0.000660	0.00100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100

<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) R3547821-4 07/09/20 08:51

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Styrene	U		0.000118	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
Trichlorofluoromethane	U		0.000160	0.00500
1,2,3-Trichloropropane	U		0.000237	0.00250
Vinyl acetate	U		0.000692	0.0100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
tert-Butyl alcohol	U		0.00406	0.00500
Allyl Chloride	U		0.000500	0.00500
Chloroprene	U		0.00145	0.0500
Isobutanol	U		0.0421	0.100
Methacrylonitrile	U		0.0142	0.0500
Methyl methacrylate	U		0.00152	0.00500
Pentachloroethane	U		0.00230	0.00500
Propionitrile	U		0.0162	0.0500
Ethyl Methacrylate	U		0.00148	0.00500
2-Propanol	U		0.00165	0.00500
n-Butanol	U		0.150	0.200
n-Octane	U		0.000566	0.00100
t-Amyl Alcohol	U		0.00490	0.0500
(S) Toluene-d8	105			80.0-120
(S) 4-Bromofluorobenzene	97.9			77.0-126
(S) 1,2-Dichloroethane-d4	91.1			70.0-130

1

Cp

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Tc

3

Ss

4

Cn

5

Sr

6

Qc

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Gl

8

Al

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Sc

Method Blank (MB) - TENTATIVELY IDENTIFIED COMPOUNDS

(MB) R3547821-4 07/09/20 08:51

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l	CAS #
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Number of TICs found: 0

Tentatively identified compounds (TIC) refers to substances not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search routine of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist. Quantitation is accomplished by relative peak area of the TIC compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is 10% or more of that of the nearest internal standard.



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

(LCS) R3547821-1 07/09/20 07:31 • (LCSD) R3547821-2 07/09/20 07:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	0.0205	0.0205	82.0	82.0	19.0-160			0.000	27
Acrolein	0.0250	0.0268	0.0241	107	96.4	10.0-160			10.6	26
t-Amyl Alcohol	0.0250	0.0199	0.0197	79.6	78.8	50.0-160			1.01	25
Acrylonitrile	0.0250	0.0208	0.0211	83.2	84.4	55.0-149			1.43	20
Benzene	0.00500	0.00493	0.00483	98.6	96.6	70.0-123			2.05	20
Bromodichloromethane	0.00500	0.00467	0.00471	93.4	94.2	75.0-120			0.853	20
Bromoform	0.00500	0.00462	0.00449	92.4	89.8	68.0-132			2.85	20
Bromomethane	0.00500	0.00254	0.00362	50.8	72.4	10.0-160		J3	35.1	25
Carbon disulfide	0.00500	0.00480	0.00485	96.0	97.0	61.0-128			1.04	20
Carbon tetrachloride	0.00500	0.00491	0.00482	98.2	96.4	68.0-126			1.85	20
Chlorobenzene	0.00500	0.00516	0.00514	103	103	80.0-121			0.388	20
Chlorodibromomethane	0.00500	0.00490	0.00504	98.0	101	77.0-125			2.82	20
Chloroethane	0.00500	0.00587	0.00594	117	119	47.0-150			1.19	20
2-Chloroethyl vinyl ether	0.0250	0.0223	0.0224	89.2	89.6	51.0-160			0.447	20
Chloroform	0.00500	0.00489	0.00458	97.8	91.6	73.0-120			6.55	20
Chloromethane	0.00500	0.00405	0.00399	81.0	79.8	41.0-142			1.49	20
1,2-Dibromoethane	0.00500	0.00522	0.00490	104	98.0	80.0-122			6.32	20
Dibromomethane	0.00500	0.00500	0.00477	100	95.4	80.0-120			4.71	20
1,2-Dichlorobenzene	0.00500	0.00485	0.00487	97.0	97.4	79.0-121			0.412	20
1,3-Dichlorobenzene	0.00500	0.00516	0.00530	103	106	79.0-120			2.68	20
1,4-Dichlorobenzene	0.00500	0.00442	0.00451	88.4	90.2	79.0-120			2.02	20
trans-1,4-Dichloro-2-butene	0.00500	0.00204	0.00302	40.8	60.4	33.0-144		J3	38.7	20
Dichlorodifluoromethane	0.00500	0.00520	0.00515	104	103	51.0-149			0.966	20
1,1-Dichloroethane	0.00500	0.00502	0.00477	100	95.4	70.0-126			5.11	20
1,2-Dichloroethane	0.00500	0.00497	0.00495	99.4	99.0	70.0-128			0.403	20
1,1-Dichloroethene	0.00500	0.00499	0.00518	99.8	104	71.0-124			3.74	20
cis-1,2-Dichloroethene	0.00500	0.00519	0.00488	104	97.6	73.0-120			6.16	20
trans-1,2-Dichloroethene	0.00500	0.00509	0.00518	102	104	73.0-120			1.75	20
1,2-Dichloropropane	0.00500	0.00515	0.00465	103	93.0	77.0-125			10.2	20
cis-1,3-Dichloropropene	0.00500	0.00459	0.00448	91.8	89.6	80.0-123			2.43	20
trans-1,3-Dichloropropene	0.00500	0.00442	0.00435	88.4	87.0	78.0-124			1.60	20
Cyclohexane	0.00500	0.00483	0.00484	96.6	96.8	71.0-124			0.207	20
Ethylbenzene	0.00500	0.00507	0.00507	101	101	79.0-123			0.000	20
2-Hexanone	0.0250	0.0233	0.0225	93.2	90.0	67.0-149			3.49	20
Iodomethane	0.0250	0.0116	0.0143	46.4	57.2	33.0-147			20.8	26
2-Butanone (MEK)	0.0250	0.0216	0.0218	86.4	87.2	44.0-160			0.922	20
Methylene Chloride	0.00500	0.00512	0.00515	102	103	67.0-120			0.584	20
4-Methyl-2-pentanone (MIBK)	0.0250	0.0232	0.0223	92.8	89.2	68.0-142			3.96	20
Styrene	0.00500	0.00474	0.00466	94.8	93.2	73.0-130			1.70	20
1,1,2,2-Tetrachloroethane	0.00500	0.00426	0.00459	85.2	91.8	65.0-130			7.46	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

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

(LCS) R3547821-1 07/09/20 07:31 • (LCSD) R3547821-2 07/09/20 07:51

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 %
Tetrachloroethene	0.00500	0.00545	0.00525	109	105	72.0-132			3.74	20
Toluene	0.00500	0.00502	0.00488	100	97.6	79.0-120			2.83	20
1,1,1-Trichloroethane	0.00500	0.00507	0.00489	101	97.8	73.0-124			3.61	20
1,1,2-Trichloroethane	0.00500	0.00511	0.00486	102	97.2	80.0-120			5.02	20
Trichloroethene	0.00500	0.00529	0.00506	106	101	78.0-124			4.44	20
Trichlorofluoromethane	0.00500	0.00502	0.00558	100	112	59.0-147			10.6	20
1,2,3-Trichloropropane	0.00500	0.00495	0.00477	99.0	95.4	73.0-130			3.70	20
Methyl Cyclohexane	0.00500	0.00451	0.00474	90.2	94.8	68.0-126			4.97	20
Vinyl acetate	0.0250	0.0135	0.0164	54.0	65.6	11.0-160			19.4	20
Vinyl chloride	0.00500	0.00533	0.00515	107	103	67.0-131			3.44	20
Xylenes, Total	0.0150	0.0147	0.0140	98.0	93.3	79.0-123			4.88	20
tert-Butyl alcohol	0.0250	0.0214	0.0219	85.6	87.6	27.0-160			2.31	30
Allyl Chloride	0.0250	0.0246	0.0248	98.4	99.2	72.0-128			0.810	20
Ethanol	0.250	0.192	0.205	76.8	82.0	10.0-160			6.55	30
(S) Toluene-d8				101	100	80.0-120				
(S) 4-Bromofluorobenzene				91.9	93.7	77.0-126				
(S) 1,2-Dichloroethane-d4				94.7	95.9	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3547821-3 07/09/20 08:11

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Ethyl Methacrylate	0.0500	0.0502	100	72.0-129	
Propionitrile	0.500	0.507	101	49.0-160	
Methyl methacrylate	0.0500	0.0494	98.8	63.0-149	
Isobutanol	1.00	0.990	99.0	40.0-160	
Methacrylonitrile	0.500	0.534	107	61.0-145	
1,4-Dioxane	1.00	1.11	111	13.0-160	
Chloroprene	0.0500	0.0490	98.0	60.0-143	
2-Propanol	0.0500	0.0495	99.0	10.0-160	
n-Butanol	2.00	2.09	104	70.0-130	
n-Octane	0.0100	0.00781	78.1	70.0-130	
Pentachloroethane	0.0500	0.00473	9.46	10.0-160	J4
(S) Toluene-d8			102	80.0-120	
(S) 4-Bromofluorobenzene			97.1	77.0-126	
(S) 1,2-Dichloroethane-d4			93.1	70.0-130	



Method Blank (MB)

(MB) R3546875-2 07/07/20 05:37

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acenaphthene	U		0.0000886	0.00100
Acenaphthylene	U		0.0000921	0.00100
Anthracene	U		0.0000804	0.00100
Benzidine	U		0.00374	0.0100
Benzo(a)anthracene	U		0.000199	0.00100
Benzo(b)fluoranthene	U		0.000130	0.00100
Benzo(k)fluoranthene	U		0.000120	0.00100
Benzo(g,h,i)perylene	U		0.000121	0.00100
Benzo(a)pyrene	U		0.0000381	0.00100
Bis(2-chlorethoxy)methane	U		0.000116	0.0100
Bis(2-chloroethyl)ether	U		0.000137	0.0100
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100
4-Bromophenyl-phenylether	U		0.0000877	0.0100
2-Chloronaphthalene	U		0.0000648	0.00100
4-Chlorophenyl-phenylether	U		0.0000926	0.0100
Chrysene	U		0.000130	0.00100
Dibenz(a,h)anthracene	U		0.0000644	0.00100
1,2-Dichlorobenzene	U		0.0000713	0.0100
1,3-Dichlorobenzene	U		0.000132	0.0100
1,4-Dichlorobenzene	U		0.0000942	0.0100
3,3-Dichlorobenzidine	U		0.000212	0.0100
2,4-Dinitrotoluene	U		0.0000983	0.0100
2,6-Dinitrotoluene	U		0.000250	0.0100
Fluoranthene	U		0.000102	0.00100
Fluorene	U		0.0000844	0.00100
Hexachlorobenzene	U		0.0000755	0.00100
Hexachloro-1,3-butadiene	U		0.0000968	0.0100
Hexachlorocyclopentadiene	U		0.0000598	0.0100
Hexachloroethane	U		0.000127	0.0100
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100
Isophorone	U		0.000143	0.0100
Naphthalene	U		0.000159	0.00100
Nitrobenzene	U		0.000297	0.0100
n-Nitrosodimethylamine	U		0.000998	0.0100
n-Nitrosodiphenylamine	U		0.00237	0.0100
n-Nitrosodi-n-propylamine	U		0.000261	0.0100
Phenanthrene	U		0.000112	0.00100
Benzylbutyl phthalate	U		0.000765	0.00300
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300
Di-n-butyl phthalate	U		0.000453	0.00300

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3546875-2 07/07/20 05:37

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Diethyl phthalate	U		0.000287	0.00300
Dimethyl phthalate	U		0.000260	0.00300
Di-n-octyl phthalate	U		0.000932	0.00300
Pyrene	U		0.000107	0.00100
1,2,4-Trichlorobenzene	U		0.0000698	0.0100
4-Chloro-3-methylphenol	U		0.000131	0.0100
2-Chlorophenol	U		0.000133	0.0100
2,4-Dichlorophenol	U		0.000102	0.0100
2,4-Dimethylphenol	U		0.0000636	0.0100
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100
2,4-Dinitrophenol	U		0.00593	0.0100
2-Nitrophenol	U		0.000117	0.0100
4-Nitrophenol	U		0.000143	0.0100
Pentachlorophenol	U		0.000313	0.0100
Phenol	U		0.00433	0.0100
2,4,6-Trichlorophenol	U		0.000100	0.0100
(S) Nitrobenzene-d5	57.4			10.0-127
(S) 2-Fluorobiphenyl	58.8			10.0-130
(S) p-Terphenyl-d14	72.9			10.0-128
(S) Phenol-d5	16.9			10.0-120
(S) 2-Fluorophenol	27.3			10.0-120
(S) 2,4,6-Tribromophenol	61.5			10.0-155

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3546875-1 07/07/20 05:17

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0500	0.0313	62.6	41.0-120	
Acenaphthylene	0.0500	0.0333	66.6	43.0-120	
Anthracene	0.0500	0.0347	69.4	45.0-120	
Benzidine	0.100	0.0510	51.0	10.0-120	
Benzo(a)anthracene	0.0500	0.0425	85.0	47.0-120	
Benzo(b)fluoranthene	0.0500	0.0395	79.0	46.0-120	
Benzo(k)fluoranthene	0.0500	0.0384	76.8	46.0-120	
Benzo(g,h,i)perylene	0.0500	0.0380	76.0	48.0-121	
Benzo(a)pyrene	0.0500	0.0398	79.6	47.0-120	
Bis(2-chlorethoxy)methane	0.0500	0.0291	58.2	33.0-120	
Bis(2-chloroethyl)ether	0.0500	0.0687	137	23.0-120	J4

Laboratory Control Sample (LCS)

(LCS) R3546875-1 07/07/20 05:17

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
2,2-Oxybis(1-Chloropropane)	0.0500	0.0311	62.2	28.0-120	
4-Bromophenyl-phenylether	0.0500	0.0357	71.4	45.0-120	
2-Chloronaphthalene	0.0500	0.0297	59.4	37.0-120	
4-Chlorophenyl-phenylether	0.0500	0.0349	69.8	44.0-120	
Chrysene	0.0500	0.0377	75.4	48.0-120	
Dibenz(a,h)anthracene	0.0500	0.0379	75.8	47.0-120	
1,2-Dichlorobenzene	0.0500	0.0312	62.4	20.0-120	
1,3-Dichlorobenzene	0.0500	0.0301	60.2	17.0-120	
1,4-Dichlorobenzene	0.0500	0.0306	61.2	18.0-120	
3,3-Dichlorobenzidine	0.100	0.0800	80.0	44.0-120	
2,4-Dinitrotoluene	0.0500	0.0382	76.4	49.0-124	
2,6-Dinitrotoluene	0.0500	0.0346	69.2	46.0-120	
Fluoranthene	0.0500	0.0368	73.6	51.0-120	
Fluorene	0.0500	0.0331	66.2	47.0-120	
Hexachlorobenzene	0.0500	0.0354	70.8	44.0-120	
Hexachloro-1,3-butadiene	0.0500	0.0302	60.4	19.0-120	
Hexachlorocyclopentadiene	0.0500	0.0225	45.0	15.0-120	
Hexachloroethane	0.0500	0.0306	61.2	15.0-120	
Indeno(1,2,3-cd)pyrene	0.0500	0.0409	81.8	49.0-122	
Isophorone	0.0500	0.0294	58.8	36.0-120	
Naphthalene	0.0500	0.0292	58.4	27.0-120	
Nitrobenzene	0.0500	0.0265	53.0	27.0-120	
n-Nitrosodimethylamine	0.0500	0.0158	31.6	10.0-120	
n-Nitrosodiphenylamine	0.0500	0.0333	66.6	47.0-120	
n-Nitrosodi-n-propylamine	0.0500	0.0326	65.2	31.0-120	
Phenanthrene	0.0500	0.0364	72.8	46.0-120	
Benzylbutyl phthalate	0.0500	0.0426	85.2	43.0-121	
Bis(2-ethylhexyl)phthalate	0.0500	0.0454	90.8	43.0-122	
Di-n-butyl phthalate	0.0500	0.0412	82.4	49.0-121	
Diethyl phthalate	0.0500	0.0371	74.2	48.0-122	
Dimethyl phthalate	0.0500	0.0350	70.0	48.0-120	
Di-n-octyl phthalate	0.0500	0.0393	78.6	42.0-125	
Pyrene	0.0500	0.0373	74.6	47.0-120	
1,2,4-Trichlorobenzene	0.0500	0.0281	56.2	24.0-120	
4-Chloro-3-methylphenol	0.0500	0.0274	54.8	40.0-120	
2-Chlorophenol	0.0500	0.0247	49.4	25.0-120	
2,4-Dichlorophenol	0.0500	0.0295	59.0	36.0-120	
2,4-Dimethylphenol	0.0500	0.0215	43.0	33.0-120	
4,6-Dinitro-2-methylphenol	0.0500	0.0348	69.6	38.0-138	
2,4-Dinitrophenol	0.0500	0.0327	65.4	10.0-120	

1

Cp

2

Tc

3

Ss

4

Cn

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Sr

6

Qc

7

Gl

8

Al

9

Sc



Laboratory Control Sample (LCS)

(LCS) R3546875-1 07/07/20 05:17

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
2-Nitrophenol	0.0500	0.0289	57.8	31.0-120	
4-Nitrophenol	0.0500	0.0135	27.0	10.0-120	
Pentachlorophenol	0.0500	0.0321	64.2	23.0-120	
Phenol	0.0500	0.00908	18.2	10.0-120	
2,4,6-Trichlorophenol	0.0500	0.0313	62.6	42.0-120	
(S) Nitrobenzene-d5			52.8	10.0-127	
(S) 2-Fluorobiphenyl			60.4	10.0-130	
(S) p-Terphenyl-d14			75.2	10.0-128	
(S) Phenol-d5			23.9	10.0-120	
(S) 2-Fluorophenol			26.7	10.0-120	
(S) 2,4,6-Tribromophenol			75.0	10.0-155	

<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



## Guide to Reading and Understanding Your Laboratory Report

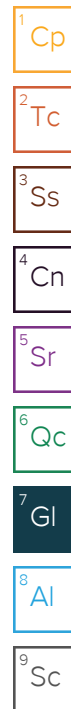
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
N	The analyte is tentatively identified and the associated numerical value may not be consistent with the actual concentration present in the sample.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.





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.



