

Colorado Oil & Gas Conservation

Sample Delivery Group: L961502
Samples Received: 01/06/2018
Project Number: SPILL 453631
Description: Wet Canyon Spill

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

Entire Report Reviewed By:



Daphne Richards
Technical Service Representative

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 ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



C06CC #1 L961502-01 GW

Collected by J. Kosola
Collected date/time 01/05/18 10:15
Received date/time 01/06/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1060637	1	01/08/18 16:52	01/08/18 16:52	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1060904	1	01/09/18 14:28	01/09/18 14:28	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1060904	1	01/11/18 13:16	01/11/18 13:16	RAS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1060385	1	01/06/18 19:30	01/09/18 14:26	TH
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1060375	1.18	01/07/18 22:01	01/10/18 19:08	SR

¹ Cp

² Tc

³ Ss

⁴ Cn

C06CC #4 L961502-02 GW

Collected by J. Kosola
Collected date/time 01/05/18 10:25
Received date/time 01/06/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1060637	1	01/08/18 17:14	01/08/18 17:14	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1060904	1	01/09/18 14:49	01/09/18 14:49	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1060904	1	01/11/18 13:36	01/11/18 13:36	RAS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1060385	1	01/06/18 19:30	01/09/18 14:44	TH
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1060375	1.11	01/07/18 22:01	01/10/18 18:44	SR

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

C06CC #3 L961502-03 GW

Collected by J. Kosola
Collected date/time 01/05/18 11:15
Received date/time 01/06/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1060637	1	01/08/18 17:37	01/08/18 17:37	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1060904	1	01/09/18 15:09	01/09/18 15:09	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1060904	1	01/11/18 13:57	01/11/18 13:57	RAS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1060385	1	01/06/18 19:30	01/09/18 15:02	TH
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1060375	1.05	01/07/18 22:01	01/10/18 18:20	SR

⁹ Sc

ACCOUNT:

Colorado Oil & Gas Conservation

PROJECT:

SPILL 453631

SDG:

L961502

DATE/TIME:

01/12/18 15:14

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 radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. 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.

Daphne Richards
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	01/08/2018 16:52	WG1060637
(S) a,a,a-Trifluorotoluene(FID)	98.9		77.0-122		01/08/2018 16:52	WG1060637

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	01/09/2018 14:28	WG1060904
Acrolein	ND		0.0500	1	01/09/2018 14:28	WG1060904
Acrylonitrile	ND		0.0100	1	01/09/2018 14:28	WG1060904
Benzene	ND		0.00100	1	01/09/2018 14:28	WG1060904
Bromodichloromethane	ND		0.00100	1	01/09/2018 14:28	WG1060904
Bromoform	ND		0.00100	1	01/09/2018 14:28	WG1060904
Bromomethane	ND		0.00500	1	01/09/2018 14:28	WG1060904
Carbon disulfide	ND		0.00100	1	01/09/2018 14:28	WG1060904
Carbon tetrachloride	ND		0.00100	1	01/09/2018 14:28	WG1060904
Chlorobenzene	ND		0.00100	1	01/09/2018 14:28	WG1060904
Chlorodibromomethane	ND		0.00100	1	01/09/2018 14:28	WG1060904
Chloroethane	ND		0.00500	1	01/09/2018 14:28	WG1060904
2-Chloroethyl vinyl ether	ND		0.0500	1	01/09/2018 14:28	WG1060904
Cyclohexane	ND		0.00100	1	01/09/2018 14:28	WG1060904
Chloroform	ND		0.00500	1	01/09/2018 14:28	WG1060904
Chloromethane	ND		0.00250	1	01/09/2018 14:28	WG1060904
1,2-Dibromoethane	ND		0.00100	1	01/09/2018 14:28	WG1060904
Dibromomethane	ND		0.00100	1	01/09/2018 14:28	WG1060904
1,2-Dichlorobenzene	ND		0.00100	1	01/09/2018 14:28	WG1060904
1,3-Dichlorobenzene	ND		0.00100	1	01/09/2018 14:28	WG1060904
1,4-Dichlorobenzene	ND		0.00100	1	01/09/2018 14:28	WG1060904
Dichlorodifluoromethane	ND		0.00500	1	01/09/2018 14:28	WG1060904
1,1-Dichloroethane	ND		0.00100	1	01/09/2018 14:28	WG1060904
1,2-Dichloroethane	ND		0.00100	1	01/09/2018 14:28	WG1060904
1,1-Dichloroethene	ND		0.00100	1	01/09/2018 14:28	WG1060904
cis-1,2-Dichloroethene	ND		0.00100	1	01/09/2018 14:28	WG1060904
trans-1,2-Dichloroethene	ND		0.00100	1	01/09/2018 14:28	WG1060904
1,2-Dichloropropane	ND		0.00100	1	01/09/2018 14:28	WG1060904
cis-1,3-Dichloropropene	ND		0.00100	1	01/09/2018 14:28	WG1060904
trans-1,3-Dichloropropene	ND		0.00100	1	01/09/2018 14:28	WG1060904
Ethylbenzene	ND		0.00100	1	01/09/2018 14:28	WG1060904
2-Hexanone	ND		0.0100	1	01/09/2018 14:28	WG1060904
Iodomethane	ND		0.0100	1	01/09/2018 14:28	WG1060904
2-Butanone (MEK)	ND		0.0100	1	01/09/2018 14:28	WG1060904
Methyl Cyclohexane	ND		0.00100	1	01/09/2018 14:28	WG1060904
Methylene Chloride	ND		0.00500	1	01/09/2018 14:28	WG1060904
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	01/09/2018 14:28	WG1060904
Pentachloroethane	ND	J4	0.0500	1	01/11/2018 13:16	WG1060904
Styrene	ND		0.00100	1	01/09/2018 14:28	WG1060904
1,1,2,2-Tetrachloroethane	ND		0.00100	1	01/09/2018 14:28	WG1060904
Tetrachloroethene	ND		0.00100	1	01/09/2018 14:28	WG1060904
Toluene	ND		0.00100	1	01/09/2018 14:28	WG1060904
1,1,1-Trichloroethane	ND		0.00100	1	01/09/2018 14:28	WG1060904
1,1,2-Trichloroethane	ND		0.00100	1	01/09/2018 14:28	WG1060904
Trichloroethene	ND		0.00100	1	01/09/2018 14:28	WG1060904
Trichlorofluoromethane	ND		0.00500	1	01/09/2018 14:28	WG1060904
1,2,3-Trichloropropane	ND		0.00250	1	01/09/2018 14:28	WG1060904
Vinyl acetate	ND		0.0100	1	01/09/2018 14:28	WG1060904
Vinyl chloride	ND		0.00100	1	01/09/2018 14:28	WG1060904

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/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Xylenes, Total	ND		0.00300	1	01/09/2018 14:28	WG1060904
Allyl chloride	ND		0.00500	1	01/09/2018 14:28	WG1060904
Chloroprene	ND		0.0500	1	01/09/2018 14:28	WG1060904
trans-1,4-Dichloro-2-butene	ND		0.00250	1	01/09/2018 14:28	WG1060904
Isobutanol	ND		0.100	1	01/09/2018 14:28	WG1060904
1,4-Dioxane	ND		0.100	1	01/09/2018 14:28	WG1060904
Ethanol	ND		0.100	1	01/09/2018 14:28	WG1060904
n-Octane	ND		0.0100	1	01/09/2018 14:28	WG1060904
2-Propanol	ND		0.0250	1	01/09/2018 14:28	WG1060904
Methacrylonitrile	ND		0.0500	1	01/09/2018 14:28	WG1060904
Methyl methacrylate	ND		0.0500	1	01/09/2018 14:28	WG1060904
Ethyl methacrylate	ND		0.00500	1	01/09/2018 14:28	WG1060904
Propionitrile	ND		0.0500	1	01/09/2018 14:28	WG1060904
t-Amyl Alcohol	ND		0.0500	1	01/09/2018 14:28	WG1060904
n-Butanol	ND		0.200	1	01/09/2018 14:28	WG1060904
tert-Butyl alcohol	ND		0.00500	1	01/09/2018 14:28	WG1060904
(S) Toluene-d8	101		80.0-120		01/09/2018 14:28	WG1060904
(S) Toluene-d8	107		80.0-120		01/11/2018 13:16	WG1060904
(S) Dibromofluoromethane	102		76.0-123		01/09/2018 14:28	WG1060904
(S) Dibromofluoromethane	99.9		76.0-123		01/11/2018 13:16	WG1060904
(S) a,a,a-Trifluorotoluene	99.8		80.0-120		01/09/2018 14:28	WG1060904
(S) a,a,a-Trifluorotoluene	101		80.0-120		01/11/2018 13:16	WG1060904
(S) 4-Bromofluorobenzene	94.6		80.0-120		01/11/2018 13:16	WG1060904
(S) 4-Bromofluorobenzene	99.7		80.0-120		01/09/2018 14:28	WG1060904

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

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.233		0.100	1	01/09/2018 14:26	WG1060385
(S) o-Terphenyl	110		31.0-160		01/09/2018 14:26	WG1060385

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375
Acenaphthylene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375
Anthracene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375
Benidine	ND	<u>J3</u>	0.0118	1.18	01/10/2018 19:08	WG1060375
Benzo(a)anthracene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375
Benzo(b)fluoranthene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375
Benzo(k)fluoranthene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375
Benzo(g,h,i)perylene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375
Benzo(a)pyrene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375
Bis(2-chlorethoxy)methane	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
Bis(2-chloroethyl)ether	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
Bis(2-chloroisopropyl)ether	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
4-Bromophenyl-phenylether	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
2-Chloronaphthalene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375
4-Chlorophenyl-phenylether	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
Chrysene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375
Dibenz(a,h)anthracene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375
3,3-Dichlorobenzidine	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
2,4-Dinitrotoluene	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
2,6-Dinitrotoluene	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
Fluoranthene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375



Collected date/time: 01/05/18 10:15

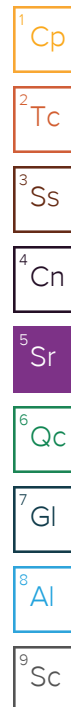
L961502

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Fluorene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375
Hexachlorobenzene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375
Hexachloro-1,3-butadiene	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
Hexachlorocyclopentadiene	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
Hexachloroethane	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
Indeno(1,2,3-cd)pyrene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375
Isophorone	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
Naphthalene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375
Nitrobenzene	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
n-Nitrosodimethylamine	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
n-Nitrosodiphenylamine	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
n-Nitrosodi-n-propylamine	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
Phenanthrene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375
Benzylbutyl phthalate	ND		0.00354	1.18	01/10/2018 19:08	WG1060375
Bis(2-ethylhexyl)phthalate	ND		0.00354	1.18	01/10/2018 19:08	WG1060375
Di-n-butyl phthalate	ND		0.00354	1.18	01/10/2018 19:08	WG1060375
Diethyl phthalate	ND		0.00354	1.18	01/10/2018 19:08	WG1060375
Dimethyl phthalate	ND		0.00354	1.18	01/10/2018 19:08	WG1060375
Di-n-octyl phthalate	ND		0.00354	1.18	01/10/2018 19:08	WG1060375
Pyrene	ND		0.00118	1.18	01/10/2018 19:08	WG1060375
1,2,4-Trichlorobenzene	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
4-Chloro-3-methylphenol	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
2-Chlorophenol	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
2,4-Dichlorophenol	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
2,4-Dimethylphenol	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
4,6-Dinitro-2-methylphenol	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
2,4-Dinitrophenol	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
2-Nitrophenol	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
4-Nitrophenol	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
Pentachlorophenol	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
Phenol	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
2,4,6-Trichlorophenol	ND		0.0118	1.18	01/10/2018 19:08	WG1060375
(S) 2-Fluorophenol	45.3		10.0-120		01/10/2018 19:08	WG1060375
(S) Phenol-d5	39.5		10.0-120		01/10/2018 19:08	WG1060375
(S) Nitrobenzene-d5	57.0		10.0-126		01/10/2018 19:08	WG1060375
(S) 2-Fluorobiphenyl	55.6		22.0-127		01/10/2018 19:08	WG1060375
(S) 2,4,6-Tribromophenol	52.4		10.0-153		01/10/2018 19:08	WG1060375
(S) p-Terphenyl-d14	57.3		29.0-141		01/10/2018 19:08	WG1060375

Sample Narrative:

L961502-01 WG1060375: Dilution due to sample volume





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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	01/08/2018 17:14	WG1060637
(S) a,a,a-Trifluorotoluene(FID)	98.8		77.0-122		01/08/2018 17:14	WG1060637

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	01/09/2018 14:49	WG1060904
Acrolein	ND		0.0500	1	01/09/2018 14:49	WG1060904
Acrylonitrile	ND		0.0100	1	01/09/2018 14:49	WG1060904
Benzene	ND		0.00100	1	01/09/2018 14:49	WG1060904
Bromodichloromethane	ND		0.00100	1	01/09/2018 14:49	WG1060904
Bromoform	ND		0.00100	1	01/09/2018 14:49	WG1060904
Bromomethane	ND		0.00500	1	01/09/2018 14:49	WG1060904
Carbon disulfide	ND		0.00100	1	01/09/2018 14:49	WG1060904
Carbon tetrachloride	ND		0.00100	1	01/09/2018 14:49	WG1060904
Chlorobenzene	ND		0.00100	1	01/09/2018 14:49	WG1060904
Chlorodibromomethane	ND		0.00100	1	01/09/2018 14:49	WG1060904
Chloroethane	ND		0.00500	1	01/09/2018 14:49	WG1060904
2-Chloroethyl vinyl ether	ND		0.0500	1	01/09/2018 14:49	WG1060904
Cyclohexane	ND		0.00100	1	01/09/2018 14:49	WG1060904
Chloroform	ND		0.00500	1	01/09/2018 14:49	WG1060904
Chloromethane	ND		0.00250	1	01/09/2018 14:49	WG1060904
1,2-Dibromoethane	ND		0.00100	1	01/09/2018 14:49	WG1060904
Dibromomethane	ND		0.00100	1	01/09/2018 14:49	WG1060904
1,2-Dichlorobenzene	ND		0.00100	1	01/09/2018 14:49	WG1060904
1,3-Dichlorobenzene	ND		0.00100	1	01/09/2018 14:49	WG1060904
1,4-Dichlorobenzene	ND		0.00100	1	01/09/2018 14:49	WG1060904
Dichlorodifluoromethane	ND		0.00500	1	01/09/2018 14:49	WG1060904
1,1-Dichloroethane	ND		0.00100	1	01/09/2018 14:49	WG1060904
1,2-Dichloroethane	ND		0.00100	1	01/09/2018 14:49	WG1060904
1,1-Dichloroethene	ND		0.00100	1	01/09/2018 14:49	WG1060904
cis-1,2-Dichloroethene	ND		0.00100	1	01/09/2018 14:49	WG1060904
trans-1,2-Dichloroethene	ND		0.00100	1	01/09/2018 14:49	WG1060904
1,2-Dichloropropane	ND		0.00100	1	01/09/2018 14:49	WG1060904
cis-1,3-Dichloropropene	ND		0.00100	1	01/09/2018 14:49	WG1060904
trans-1,3-Dichloropropene	ND		0.00100	1	01/09/2018 14:49	WG1060904
Ethylbenzene	ND		0.00100	1	01/09/2018 14:49	WG1060904
2-Hexanone	ND		0.0100	1	01/09/2018 14:49	WG1060904
Iodomethane	ND		0.0100	1	01/09/2018 14:49	WG1060904
2-Butanone (MEK)	ND		0.0100	1	01/09/2018 14:49	WG1060904
Methyl Cyclohexane	ND		0.00100	1	01/09/2018 14:49	WG1060904
Methylene Chloride	ND		0.00500	1	01/09/2018 14:49	WG1060904
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	01/09/2018 14:49	WG1060904
Pentachloroethane	ND	J4	0.0500	1	01/11/2018 13:36	WG1060904
Styrene	ND		0.00100	1	01/09/2018 14:49	WG1060904
1,1,2,2-Tetrachloroethane	ND		0.00100	1	01/09/2018 14:49	WG1060904
Tetrachloroethene	ND		0.00100	1	01/09/2018 14:49	WG1060904
Toluene	ND		0.00100	1	01/09/2018 14:49	WG1060904
1,1,1-Trichloroethane	ND		0.00100	1	01/09/2018 14:49	WG1060904
1,1,2-Trichloroethane	ND		0.00100	1	01/09/2018 14:49	WG1060904
Trichloroethene	ND		0.00100	1	01/09/2018 14:49	WG1060904
Trichlorofluoromethane	ND		0.00500	1	01/09/2018 14:49	WG1060904
1,2,3-Trichloropropane	ND		0.00250	1	01/09/2018 14:49	WG1060904
Vinyl acetate	ND		0.0100	1	01/09/2018 14:49	WG1060904
Vinyl chloride	ND		0.00100	1	01/09/2018 14:49	WG1060904

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/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Xylenes, Total	ND		0.00300	1	01/09/2018 14:49	WG1060904
Allyl chloride	ND		0.00500	1	01/09/2018 14:49	WG1060904
Chloroprene	ND		0.0500	1	01/09/2018 14:49	WG1060904
trans-1,4-Dichloro-2-butene	ND		0.00250	1	01/09/2018 14:49	WG1060904
Isobutanol	ND		0.100	1	01/09/2018 14:49	WG1060904
1,4-Dioxane	ND		0.100	1	01/09/2018 14:49	WG1060904
Ethanol	ND		0.100	1	01/09/2018 14:49	WG1060904
n-Octane	ND		0.0100	1	01/09/2018 14:49	WG1060904
2-Propanol	ND		0.0250	1	01/09/2018 14:49	WG1060904
Methacrylonitrile	ND		0.0500	1	01/09/2018 14:49	WG1060904
Methyl methacrylate	ND		0.0500	1	01/09/2018 14:49	WG1060904
Ethyl methacrylate	ND		0.00500	1	01/09/2018 14:49	WG1060904
Propionitrile	ND		0.0500	1	01/09/2018 14:49	WG1060904
t-Amyl Alcohol	ND		0.0500	1	01/09/2018 14:49	WG1060904
n-Butanol	ND		0.200	1	01/09/2018 14:49	WG1060904
tert-Butyl alcohol	ND		0.00500	1	01/09/2018 14:49	WG1060904
(S) Toluene-d8	105		80.0-120		01/09/2018 14:49	WG1060904
(S) Toluene-d8	102		80.0-120		01/11/2018 13:36	WG1060904
(S) Dibromofluoromethane	101		76.0-123		01/11/2018 13:36	WG1060904
(S) Dibromofluoromethane	102		76.0-123		01/09/2018 14:49	WG1060904
(S) a,a,a-Trifluorotoluene	99.7		80.0-120		01/11/2018 13:36	WG1060904
(S) a,a,a-Trifluorotoluene	99.7		80.0-120		01/09/2018 14:49	WG1060904
(S) 4-Bromofluorobenzene	94.2		80.0-120		01/11/2018 13:36	WG1060904
(S) 4-Bromofluorobenzene	99.8		80.0-120		01/09/2018 14:49	WG1060904

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		0.100	1	01/09/2018 14:44	WG1060385
(S) o-Terphenyl	119		31.0-160		01/09/2018 14:44	WG1060385

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375
Acenaphthylene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375
Anthracene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375
Benzidine	ND	<u>J3</u>	0.0111	1.11	01/10/2018 18:44	WG1060375
Benzo(a)anthracene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375
Benzo(b)fluoranthene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375
Benzo(k)fluoranthene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375
Benzo(g,h,i)perylene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375
Benzo(a)pyrene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375
Bis(2-chlorethoxy)methane	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
Bis(2-chloroethyl)ether	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
Bis(2-chloroisopropyl)ether	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
4-Bromophenyl-phenylether	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
2-Chloronaphthalene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375
4-Chlorophenyl-phenylether	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
Chrysene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375
Dibenz(a,h)anthracene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375
3,3-Dichlorobenzidine	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
2,4-Dinitrotoluene	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
2,6-Dinitrotoluene	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
Fluoranthene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375

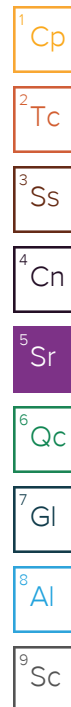


Collected date/time: 01/05/18 10:25

L961502

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Fluorene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375
Hexachlorobenzene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375
Hexachloro-1,3-butadiene	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
Hexachlorocyclopentadiene	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
Hexachloroethane	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
Indeno(1,2,3-cd)pyrene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375
Isophorone	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
Naphthalene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375
Nitrobenzene	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
n-Nitrosodimethylamine	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
n-Nitrosodiphenylamine	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
n-Nitrosodi-n-propylamine	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
Phenanthrene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375
Benzylbutyl phthalate	ND		0.00333	1.11	01/10/2018 18:44	WG1060375
Bis(2-ethylhexyl)phthalate	ND		0.00333	1.11	01/10/2018 18:44	WG1060375
Di-n-butyl phthalate	ND		0.00333	1.11	01/10/2018 18:44	WG1060375
Diethyl phthalate	ND		0.00333	1.11	01/10/2018 18:44	WG1060375
Dimethyl phthalate	ND		0.00333	1.11	01/10/2018 18:44	WG1060375
Di-n-octyl phthalate	ND		0.00333	1.11	01/10/2018 18:44	WG1060375
Pyrene	ND		0.00111	1.11	01/10/2018 18:44	WG1060375
1,2,4-Trichlorobenzene	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
4-Chloro-3-methylphenol	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
2-Chlorophenol	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
2,4-Dichlorophenol	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
2,4-Dimethylphenol	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
4,6-Dinitro-2-methylphenol	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
2,4-Dinitrophenol	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
2-Nitrophenol	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
4-Nitrophenol	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
Pentachlorophenol	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
Phenol	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
2,4,6-Trichlorophenol	ND		0.0111	1.11	01/10/2018 18:44	WG1060375
(S) 2-Fluorophenol	47.1		10.0-120		01/10/2018 18:44	WG1060375
(S) Phenol-d5	38.2		10.0-120		01/10/2018 18:44	WG1060375
(S) Nitrobenzene-d5	53.8		10.0-126		01/10/2018 18:44	WG1060375
(S) 2-Fluorobiphenyl	61.9		22.0-127		01/10/2018 18:44	WG1060375
(S) 2,4,6-Tribromophenol	57.6		10.0-153		01/10/2018 18:44	WG1060375
(S) p-Terphenyl-d14	65.4		29.0-141		01/10/2018 18:44	WG1060375



Sample Narrative:

L961502-02 WG1060375: Dilution due to sample volume



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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	01/08/2018 17:37	WG1060637
(S) a,a,a-Trifluorotoluene(FID)	98.9		77.0-122		01/08/2018 17:37	WG1060637

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	01/09/2018 15:09	WG1060904
Acrolein	ND		0.0500	1	01/09/2018 15:09	WG1060904
Acrylonitrile	ND		0.0100	1	01/09/2018 15:09	WG1060904
Benzene	ND		0.00100	1	01/09/2018 15:09	WG1060904
Bromodichloromethane	ND		0.00100	1	01/09/2018 15:09	WG1060904
Bromoform	ND		0.00100	1	01/09/2018 15:09	WG1060904
Bromomethane	ND		0.00500	1	01/09/2018 15:09	WG1060904
Carbon disulfide	ND		0.00100	1	01/09/2018 15:09	WG1060904
Carbon tetrachloride	ND		0.00100	1	01/09/2018 15:09	WG1060904
Chlorobenzene	ND		0.00100	1	01/09/2018 15:09	WG1060904
Chlorodibromomethane	ND		0.00100	1	01/09/2018 15:09	WG1060904
Chloroethane	ND		0.00500	1	01/09/2018 15:09	WG1060904
2-Chloroethyl vinyl ether	ND		0.0500	1	01/09/2018 15:09	WG1060904
Cyclohexane	ND		0.00100	1	01/09/2018 15:09	WG1060904
Chloroform	ND		0.00500	1	01/09/2018 15:09	WG1060904
Chloromethane	ND		0.00250	1	01/09/2018 15:09	WG1060904
1,2-Dibromoethane	ND		0.00100	1	01/09/2018 15:09	WG1060904
Dibromomethane	ND		0.00100	1	01/09/2018 15:09	WG1060904
1,2-Dichlorobenzene	ND		0.00100	1	01/09/2018 15:09	WG1060904
1,3-Dichlorobenzene	ND		0.00100	1	01/09/2018 15:09	WG1060904
1,4-Dichlorobenzene	ND		0.00100	1	01/09/2018 15:09	WG1060904
Dichlorodifluoromethane	ND		0.00500	1	01/09/2018 15:09	WG1060904
1,1-Dichloroethane	ND		0.00100	1	01/09/2018 15:09	WG1060904
1,2-Dichloroethane	ND		0.00100	1	01/09/2018 15:09	WG1060904
1,1-Dichloroethene	ND		0.00100	1	01/09/2018 15:09	WG1060904
cis-1,2-Dichloroethene	ND		0.00100	1	01/09/2018 15:09	WG1060904
trans-1,2-Dichloroethene	ND		0.00100	1	01/09/2018 15:09	WG1060904
1,2-Dichloropropane	ND		0.00100	1	01/09/2018 15:09	WG1060904
cis-1,3-Dichloropropene	ND		0.00100	1	01/09/2018 15:09	WG1060904
trans-1,3-Dichloropropene	ND		0.00100	1	01/09/2018 15:09	WG1060904
Ethylbenzene	ND		0.00100	1	01/09/2018 15:09	WG1060904
2-Hexanone	ND		0.0100	1	01/09/2018 15:09	WG1060904
Iodomethane	ND		0.0100	1	01/09/2018 15:09	WG1060904
2-Butanone (MEK)	ND		0.0100	1	01/09/2018 15:09	WG1060904
Methyl Cyclohexane	ND		0.00100	1	01/09/2018 15:09	WG1060904
Methylene Chloride	ND		0.00500	1	01/09/2018 15:09	WG1060904
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	01/09/2018 15:09	WG1060904
Pentachloroethane	ND	J4	0.0500	1	01/11/2018 13:57	WG1060904
Styrene	ND		0.00100	1	01/09/2018 15:09	WG1060904
1,1,2,2-Tetrachloroethane	ND		0.00100	1	01/09/2018 15:09	WG1060904
Tetrachloroethene	ND		0.00100	1	01/09/2018 15:09	WG1060904
Toluene	ND		0.00100	1	01/09/2018 15:09	WG1060904
1,1,1-Trichloroethane	ND		0.00100	1	01/09/2018 15:09	WG1060904
1,1,2-Trichloroethane	ND		0.00100	1	01/09/2018 15:09	WG1060904
Trichloroethene	ND		0.00100	1	01/09/2018 15:09	WG1060904
Trichlorofluoromethane	ND		0.00500	1	01/09/2018 15:09	WG1060904
1,2,3-Trichloropropane	ND		0.00250	1	01/09/2018 15:09	WG1060904
Vinyl acetate	ND		0.0100	1	01/09/2018 15:09	WG1060904
Vinyl chloride	ND		0.00100	1	01/09/2018 15:09	WG1060904

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/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Xylenes, Total	ND		0.00300	1	01/09/2018 15:09	WG1060904
Allyl chloride	ND		0.00500	1	01/09/2018 15:09	WG1060904
Chloroprene	ND		0.0500	1	01/09/2018 15:09	WG1060904
trans-1,4-Dichloro-2-butene	ND		0.00250	1	01/09/2018 15:09	WG1060904
Isobutanol	ND		0.100	1	01/09/2018 15:09	WG1060904
1,4-Dioxane	ND		0.100	1	01/09/2018 15:09	WG1060904
Ethanol	ND		0.100	1	01/09/2018 15:09	WG1060904
n-Octane	ND		0.0100	1	01/09/2018 15:09	WG1060904
2-Propanol	ND		0.0250	1	01/09/2018 15:09	WG1060904
Methacrylonitrile	ND		0.0500	1	01/09/2018 15:09	WG1060904
Methyl methacrylate	ND		0.0500	1	01/09/2018 15:09	WG1060904
Ethyl methacrylate	ND		0.00500	1	01/09/2018 15:09	WG1060904
Propionitrile	ND		0.0500	1	01/09/2018 15:09	WG1060904
t-Amyl Alcohol	ND		0.0500	1	01/09/2018 15:09	WG1060904
n-Butanol	ND		0.200	1	01/09/2018 15:09	WG1060904
tert-Butyl alcohol	ND		0.00500	1	01/09/2018 15:09	WG1060904
(S) Toluene-d8	102		80.0-120		01/09/2018 15:09	WG1060904
(S) Toluene-d8	105		80.0-120		01/11/2018 13:57	WG1060904
(S) Dibromofluoromethane	98.5		76.0-123		01/11/2018 13:57	WG1060904
(S) Dibromofluoromethane	104		76.0-123		01/09/2018 15:09	WG1060904
(S) a,a,a-Trifluorotoluene	98.9		80.0-120		01/11/2018 13:57	WG1060904
(S) a,a,a-Trifluorotoluene	98.2		80.0-120		01/09/2018 15:09	WG1060904
(S) 4-Bromofluorobenzene	97.2		80.0-120		01/09/2018 15:09	WG1060904
(S) 4-Bromofluorobenzene	95.4		80.0-120		01/11/2018 13:57	WG1060904

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	0.515		0.100	1	01/09/2018 15:02	WG1060385
(S) o-Terphenyl	122		31.0-160		01/09/2018 15:02	WG1060385

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375
Acenaphthylene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375
Anthracene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375
Benzidine	ND	<u>J3</u>	0.0105	1.05	01/10/2018 18:20	WG1060375
Benzo(a)anthracene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375
Benzo(b)fluoranthene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375
Benzo(k)fluoranthene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375
Benzo(g,h,i)perylene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375
Benzo(a)pyrene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375
Bis(2-chlorethoxy)methane	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
Bis(2-chloroethyl)ether	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
Bis(2-chloroisopropyl)ether	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
4-Bromophenyl-phenylether	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
2-Chloronaphthalene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375
4-Chlorophenyl-phenylether	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
Chrysene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375
Dibenz(a,h)anthracene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375
3,3-Dichlorobenzidine	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
2,4-Dinitrotoluene	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
2,6-Dinitrotoluene	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
Fluoranthene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375



Collected date/time: 01/05/18 11:15

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Fluorene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375
Hexachlorobenzene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375
Hexachloro-1,3-butadiene	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
Hexachlorocyclopentadiene	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
Hexachloroethane	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
Indeno(1,2,3-cd)pyrene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375
Isophorone	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
Naphthalene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375
Nitrobenzene	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
n-Nitrosodimethylamine	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
n-Nitrosodiphenylamine	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
n-Nitrosodi-n-propylamine	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
Phenanthrene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375
Benzylbutyl phthalate	ND		0.00315	1.05	01/10/2018 18:20	WG1060375
Bis(2-ethylhexyl)phthalate	ND		0.00315	1.05	01/10/2018 18:20	WG1060375
Di-n-butyl phthalate	ND		0.00315	1.05	01/10/2018 18:20	WG1060375
Diethyl phthalate	ND		0.00315	1.05	01/10/2018 18:20	WG1060375
Dimethyl phthalate	ND		0.00315	1.05	01/10/2018 18:20	WG1060375
Di-n-octyl phthalate	ND		0.00315	1.05	01/10/2018 18:20	WG1060375
Pyrene	ND		0.00105	1.05	01/10/2018 18:20	WG1060375
1,2,4-Trichlorobenzene	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
4-Chloro-3-methylphenol	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
2-Chlorophenol	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
2,4-Dichlorophenol	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
2,4-Dimethylphenol	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
4,6-Dinitro-2-methylphenol	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
2,4-Dinitrophenol	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
2-Nitrophenol	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
4-Nitrophenol	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
Pentachlorophenol	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
Phenol	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
2,4,6-Trichlorophenol	ND		0.0105	1.05	01/10/2018 18:20	WG1060375
(S) 2-Fluorophenol	39.1		10.0-120		01/10/2018 18:20	WG1060375
(S) Phenol-d5	32.3		10.0-120		01/10/2018 18:20	WG1060375
(S) Nitrobenzene-d5	47.5		10.0-126		01/10/2018 18:20	WG1060375
(S) 2-Fluorobiphenyl	50.6		22.0-127		01/10/2018 18:20	WG1060375
(S) 2,4,6-Tribromophenol	61.9		10.0-153		01/10/2018 18:20	WG1060375
(S) p-Terphenyl-d14	62.6		29.0-141		01/10/2018 18:20	WG1060375

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

Sample Narrative:

L961502-03 WG1060375: Dilution due to sample volume



Method Blank (MB)

(MB) R3278554-5 01/08/18 11:34

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	99.3			77.0-122

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3278554-3 01/08/18 10:28 • (LCSD) R3278554-4 01/08/18 11:12

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 %
TPH (GC/FID) Low Fraction	5.50	5.26	5.21	95.6	94.7	71.0-136			0.920	20
(S) a,a,a-Trifluorotoluene(FID)				104	104	77.0-122				

L961410-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L961410-01 01/08/18 16:08 • (MS) R3278554-8 01/08/18 19:26 • (MSD) R3278554-9 01/08/18 19:49

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 %
TPH (GC/FID) Low Fraction	5.50	ND	5.41	5.95	98.4	108	1	18.0-160			9.47	20
(S) a,a,a-Trifluorotoluene(FID)					101	102		77.0-122				

L961502-01,02,03

Method Blank (MB)

(MB) R3278540-3 01/09/18 13:26

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Acrolein	U		0.00887	0.0500
Acrylonitrile	U		0.00187	0.0100
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
2-Chloroethyl vinyl ether	U		0.00301	0.0500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
Cyclohexane	U		0.000390	0.00100
1,2-Dibromoethane	U		0.000381	0.00100
Dibromomethane	U		0.000346	0.00100
1,2-Dichlorobenzene	U		0.000349	0.00100
1,3-Dichlorobenzene	U		0.000220	0.00100
1,4-Dichlorobenzene	U		0.000274	0.00100
trans-1,4-Dichloro-2-butene	U		0.000866	0.00250
Dichlorodifluoromethane	U		0.000551	0.00500
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
Ethanol	U		0.0420	0.100
2-Hexanone	U		0.00382	0.0100
Iodomethane	0.00463	U	0.00171	0.0100
2-Butanone (MEK)	U		0.00393	0.0100
Methyl Cyclohexane	U		0.000380	0.00100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
2-Propanol	U		0.00500	0.0250

1

Cp

2

Tc

3

Ss

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Cn

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Sr

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Qc

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Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3278540-3 01/09/18 13:26

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Styrene	U		0.000307	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000412	0.00100
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
Trichlorofluoromethane	U		0.00120	0.00500
1,2,3-Trichloropropane	U		0.000807	0.00250
Vinyl acetate	U		0.00163	0.0100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
tert-Butyl alcohol	U		0.00240	0.00500
Allyl Chloride	U		0.00170	0.00500
Chloroprene	U		0.00170	0.0500
Ethyl methacrylate	U		0.00140	0.00500
Isobutanol	U		0.0390	0.100
Methacrylonitrile	U		0.0130	0.0500
Methyl methacrylate	U		0.00120	0.0500
n-Butanol	U		0.0610	0.200
n-Octane	U		0.000390	0.0100
Pentachloroethane	U		0.00360	0.0500
Propionitrile	U		0.0130	0.0500
1,4-Dioxane	U		0.0360	0.100
t-Amyl Alcohol	U		0.00490	0.0500
(S) Toluene-d8	103			80.0-120
(S) Dibromofluoromethane	101			76.0-123
(S) a,a,a-Trifluorotoluene	98.8			80.0-120
(S) 4-Bromofluorobenzene	98.6			80.0-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3278540-1 01/09/18 12:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.125	0.116	92.5	10.0-160	
Acrolein	0.125	0.0920	73.6	10.0-160	
Acrylonitrile	0.125	0.122	97.3	60.0-142	
Benzene	0.0250	0.0254	102	69.0-123	



Laboratory Control Sample (LCS)

(LCS) R3278540-1 01/09/18 12:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Bromodichloromethane	0.0250	0.0233	93.2	76.0-120	
Bromoform	0.0250	0.0262	105	67.0-132	
Bromomethane	0.0250	0.0279	112	18.0-160	
Carbon disulfide	0.0250	0.0254	101	55.0-127	
Carbon tetrachloride	0.0250	0.0250	99.9	63.0-122	
Chlorobenzene	0.0250	0.0256	102	79.0-121	
Chlorodibromomethane	0.0250	0.0251	100	75.0-125	
Chloroethane	0.0250	0.0266	106	47.0-152	
2-Chloroethyl vinyl ether	0.125	0.132	105	10.0-160	
Chloroform	0.0250	0.0236	94.5	72.0-121	
Chloromethane	0.0250	0.0249	99.5	48.0-139	
Cyclohexane	0.0250	0.0257	103	70.0-130	
1,2-Dibromoethane	0.0250	0.0256	102	77.0-123	
Dibromomethane	0.0250	0.0242	96.7	78.0-120	
1,2-Dichlorobenzene	0.0250	0.0264	106	80.0-120	
1,3-Dichlorobenzene	0.0250	0.0266	106	72.0-123	
1,4-Dichlorobenzene	0.0250	0.0261	104	77.0-120	
trans-1,4-Dichloro-2-butene	0.0250	0.0260	104	55.0-134	
Dichlorodifluoromethane	0.0250	0.0272	109	49.0-155	
1,1-Dichloroethane	0.0250	0.0260	104	70.0-126	
1,2-Dichloroethane	0.0250	0.0252	101	67.0-126	
1,1-Dichloroethene	0.0250	0.0244	97.7	64.0-129	
cis-1,2-Dichloroethene	0.0250	0.0240	96.1	73.0-120	
trans-1,2-Dichloroethene	0.0250	0.0253	101	71.0-121	
1,2-Dichloropropane	0.0250	0.0250	100	75.0-125	
cis-1,3-Dichloropropene	0.0250	0.0256	102	79.0-123	
trans-1,3-Dichloropropene	0.0250	0.0259	104	74.0-127	
Ethylbenzene	0.0250	0.0263	105	77.0-120	
2-Hexanone	0.125	0.126	100	58.0-147	
Iodomethane	0.125	0.146	117	57.0-140	
2-Butanone (MEK)	0.125	0.118	94.7	37.0-158	
Methyl Cyclohexane	0.0250	0.0255	102	70.0-130	
Methylene Chloride	0.0250	0.0237	94.9	66.0-121	
4-Methyl-2-pentanone (MIBK)	0.125	0.128	102	59.0-143	
Styrene	0.0250	0.0259	104	78.0-124	
1,1,2,2-Tetrachloroethane	0.0250	0.0244	97.7	71.0-122	
Tetrachloroethene	0.0250	0.0258	103	70.0-127	
Toluene	0.0250	0.0255	102	77.0-120	
1,1,1-Trichloroethane	0.0250	0.0244	97.5	68.0-122	
1,1,2-Trichloroethane	0.0250	0.0244	97.4	78.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Laboratory Control Sample (LCS)

(LCS) R3278540-1 01/09/18 12:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Trichloroethene	0.0250	0.0258	103	78.0-120	
Trichlorofluoromethane	0.0250	0.0276	110	56.0-137	
1,2,3-Trichloropropane	0.0250	0.0242	96.6	72.0-124	
Vinyl acetate	0.125	0.119	94.9	46.0-160	
Vinyl chloride	0.0250	0.0263	105	64.0-133	
Xylenes, Total	0.0750	0.0775	103	77.0-120	
Allyl chloride	0.125	0.139	111	70.0-130	
(S) Toluene-d8			103	80.0-120	
(S) Dibromofluoromethane			99.8	76.0-123	
(S) a,a,a-Trifluorotoluene			101	80.0-120	
(S) 4-Bromofluorobenzene			98.6	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3278540-2 01/09/18 12:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
n-Butanol	2.00	1.96	98.0	50.0-150	
Chloroprene	0.0500	0.0502	100	50.0-150	
1,4-Dioxane	1.00	0.949	94.9	50.0-150	
ethanol	1.00	0.999	99.9	50.0-150	
Ethyl methacrylate	0.0500	0.0504	101	50.0-150	
Isobutanol	1.00	0.994	99.4	50.0-150	
Methacrylonitrile	0.500	0.510	102	50.0-150	
Methyl methacrylate	0.0500	0.0503	101	50.0-150	
n-Octane	0.0100	0.00701	70.1	50.0-150	
Pentachloroethane	0.0500	ND	0.000	10.0-160	J4
2-Propanol	0.0500	0.0508	102	50.0-150	
Propionitrile	0.500	0.497	99.3	50.0-150	
tert-Butyl alcohol	0.0500	0.0684	137	50.0-150	
(S) Toluene-d8			103	80.0-120	
(S) Dibromofluoromethane			102	76.0-123	
(S) a,a,a-Trifluorotoluene			98.5	80.0-120	
(S) 4-Bromofluorobenzene			101	80.0-120	

1
Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

Method Blank (MB)

(MB) R3278209-1 01/08/18 16:41

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	93.4			31.0-160

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

(LCS) R3278209-2 01/08/18 16:59 • (LCSD) R3278209-3 01/08/18 17:17

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 %
TPH (GC/FID) High Fraction	1.50	1.64	1.78	110	118	50.0-150			7.80	20
(S) o-Terphenyl				112	118	31.0-160				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3278793-3 01/10/18 14:44

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acenaphthene	U		0.000316	0.00100
Acenaphthylene	U		0.000309	0.00100
Anthracene	U		0.000291	0.00100
Benzidine	U		0.00432	0.0100
Benzo(a)anthracene	U		0.0000975	0.00100
Benzo(b)fluoranthene	U		0.0000896	0.00100
Benzo(k)fluoranthene	U		0.000355	0.00100
Benzo(g,h,i)perylene	U		0.000161	0.00100
Benzo(a)pyrene	U		0.000340	0.00100
Bis(2-chlorethoxy)methane	U		0.000329	0.0100
Bis(2-chloroethyl)ether	U		0.00162	0.0100
Bis(2-chloroisopropyl)ether	U		0.000445	0.0100
4-Bromophenyl-phenylether	U		0.000335	0.0100
2-Chloronaphthalene	U		0.000330	0.00100
4-Chlorophenyl-phenylether	U		0.000303	0.0100
Chrysene	U		0.000332	0.00100
Dibenz(a,h)anthracene	U		0.000279	0.00100
3,3-Dichlorobenzidine	U		0.00202	0.0100
2,4-Dinitrotoluene	U		0.00165	0.0100
2,6-Dinitrotoluene	U		0.000279	0.0100
Fluoranthene	U		0.000310	0.00100
Fluorene	U		0.000323	0.00100
Hexachlorobenzene	U		0.000341	0.00100
Hexachloro-1,3-butadiene	U		0.000329	0.0100
Hexachlorocyclopentadiene	U		0.00233	0.0100
Hexachloroethane	U		0.000365	0.0100
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100
Isophorone	U		0.000272	0.0100
Naphthalene	U		0.000372	0.00100
Nitrobenzene	U		0.000367	0.0100
n-Nitrosodimethylamine	U		0.00126	0.0100
n-Nitrosodiphenylamine	U		0.000304	0.0100
n-Nitrosodi-n-propylamine	U		0.000403	0.0100
Phenanthrene	U		0.000366	0.00100
Benzylbutyl phthalate	U		0.000275	0.00300
Bis(2-ethylhexyl)phthalate	U		0.000709	0.00300
Di-n-butyl phthalate	U		0.000266	0.00300
Diethyl phthalate	U		0.000282	0.00300
Dimethyl phthalate	U		0.000283	0.00300
Di-n-octyl phthalate	U		0.000278	0.00300

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Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

Method Blank (MB)

(MB) R3278793-3 01/10/18 14:44

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Pyrene	U		0.000330	0.00100
1,2,4-Trichlorobenzene	U		0.000355	0.0100
4-Chloro-3-methylphenol	U		0.000263	0.0100
2-Chlorophenol	U		0.000283	0.0100
2,4-Dichlorophenol	U		0.000284	0.0100
2,4-Dimethylphenol	U		0.000624	0.0100
4,6-Dinitro-2-methylphenol	U		0.00262	0.0100
2,4-Dinitrophenol	U		0.00325	0.0100
2-Nitrophenol	U		0.000320	0.0100
4-Nitrophenol	U		0.00201	0.0100
Pentachlorophenol	U		0.000313	0.0100
Phenol	U		0.000334	0.0100
2,4,6-Trichlorophenol	U		0.000297	0.0100
(S) Nitrobenzene-d5	55.4			10.0-126
(S) 2-Fluorobiphenyl	59.7			22.0-127
(S) p-Terphenyl-d14	60.5			29.0-141
(S) Phenol-d5	38.6			10.0-120
(S) 2-Fluorophenol	49.0			10.0-120
(S) 2,4,6-Tribromophenol	59.2			10.0-153

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3278793-1 01/10/18 13:56 • (LCSD) R3278793-2 01/10/18 14:20

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 %
Acenaphthene	0.0500	0.0322	0.0329	64.5	65.8	42.0-120			2.06	22
Acenaphthylene	0.0500	0.0338	0.0350	67.6	70.1	43.0-120			3.66	22
Anthracene	0.0500	0.0359	0.0370	71.8	74.0	44.0-120			2.97	20
Benidine	0.0500	0.0226	0.0150	45.3	30.1	1.00-120		J3	40.4	36
Benzo(a)anthracene	0.0500	0.0371	0.0372	74.2	74.4	44.0-120			0.245	20
Benzo(b)fluoranthene	0.0500	0.0366	0.0369	73.2	73.8	40.0-120			0.783	21
Benzo(k)fluoranthene	0.0500	0.0358	0.0372	71.5	74.3	41.0-120			3.79	22
Benzo(g,h,i)perylene	0.0500	0.0359	0.0362	71.8	72.4	45.0-121			0.770	20
Benzo(a)pyrene	0.0500	0.0370	0.0369	74.1	73.8	41.0-120			0.410	20
Bis(2-chlorethoxy)methane	0.0500	0.0284	0.0308	56.8	61.7	36.0-120			8.16	25
Bis(2-chloroethyl)ether	0.0500	0.0283	0.0281	56.6	56.2	24.0-120			0.717	29
Bis(2-chloroisopropyl)ether	0.0500	0.0254	0.0272	50.9	54.4	32.0-120			6.75	29
4-Bromophenyl-phenylether	0.0500	0.0351	0.0366	70.2	73.2	42.0-121			4.17	21
2-Chloronaphthalene	0.0500	0.0316	0.0349	63.1	69.9	37.0-120			10.1	24

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

(LCS) R3278793-1 01/10/18 13:56 • (LCSD) R3278793-2 01/10/18 14:20

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 %
4-Chlorophenyl-phenylether	0.0500	0.0361	0.0365	72.1	73.1	44.0-120			1.32	21
Chrysene	0.0500	0.0362	0.0358	72.4	71.7	45.0-120			1.06	20
Dibenz(a,h)anthracene	0.0500	0.0362	0.0365	72.4	73.1	44.0-121			0.964	21
3,3-Dichlorobenzidine	0.0500	0.0382	0.0328	76.4	65.6	29.0-153			15.1	23
2,4-Dinitrotoluene	0.0500	0.0377	0.0404	75.3	80.7	47.0-127			6.90	21
2,6-Dinitrotoluene	0.0500	0.0348	0.0389	69.6	77.9	42.0-120			11.2	22
Fluoranthene	0.0500	0.0386	0.0390	77.3	78.0	46.0-121			0.980	20
Fluorene	0.0500	0.0352	0.0375	70.4	75.0	45.0-120			6.33	21
Hexachlorobenzene	0.0500	0.0355	0.0371	70.9	74.2	41.0-124			4.57	21
Hexachloro-1,3-butadiene	0.0500	0.0288	0.0309	57.6	61.8	26.0-120			6.90	31
Hexachlorocyclopentadiene	0.0500	0.0289	0.0323	57.7	64.6	10.0-120			11.2	31
Hexachloroethane	0.0500	0.0266	0.0269	53.2	53.9	22.0-120			1.24	34
Indeno(1,2,3-cd)pyrene	0.0500	0.0364	0.0379	72.8	75.8	45.0-123			4.09	21
Isophorone	0.0500	0.0291	0.0297	58.2	59.3	37.0-120			1.95	24
Naphthalene	0.0500	0.0259	0.0272	51.8	54.5	33.0-120			4.97	28
Nitrobenzene	0.0500	0.0260	0.0279	51.9	55.9	31.0-120			7.34	28
n-Nitrosodimethylamine	0.0500	0.0147	0.0189	29.3	37.7	10.0-120			25.1	34
n-Nitrosodiphenylamine	0.0500	0.0367	0.0358	73.4	71.7	44.0-120			2.36	21
n-Nitrosodi-n-propylamine	0.0500	0.0303	0.0314	60.6	62.7	29.0-120			3.51	27
Phenanthrene	0.0500	0.0350	0.0360	70.1	72.1	42.0-120			2.76	20
Benzylbutyl phthalate	0.0500	0.0403	0.0377	80.6	75.4	36.0-123			6.69	22
Bis(2-ethylhexyl)phthalate	0.0500	0.0393	0.0386	78.5	77.2	37.0-121			1.63	21
Di-n-butyl phthalate	0.0500	0.0391	0.0398	78.2	79.5	43.0-122			1.67	21
Diethyl phthalate	0.0500	0.0362	0.0375	72.3	75.0	48.0-123			3.57	20
Dimethyl phthalate	0.0500	0.0367	0.0382	73.5	76.4	47.0-120			3.93	20
Di-n-octyl phthalate	0.0500	0.0376	0.0371	75.1	74.1	38.0-120			1.33	22
Pyrene	0.0500	0.0377	0.0367	75.4	73.4	43.0-120			2.73	21
1,2,4-Trichlorobenzene	0.0500	0.0285	0.0292	57.0	58.5	29.0-120			2.60	29
4-Chloro-3-methylphenol	0.0500	0.0331	0.0336	66.3	67.3	39.0-120			1.54	22
2-Chlorophenol	0.0500	0.0318	0.0329	63.6	65.7	28.0-120			3.25	29
2,4-Dichlorophenol	0.0500	0.0330	0.0345	66.1	69.0	37.0-120			4.37	26
2,4-Dimethylphenol	0.0500	0.0310	0.0293	61.9	58.5	35.0-120			5.66	25
4,6-Dinitro-2-methylphenol	0.0500	0.0358	0.0409	71.5	81.7	34.0-125			13.3	27
2,4-Dinitrophenol	0.0500	0.0265	0.0331	53.0	66.3	10.0-120			22.4	40
2-Nitrophenol	0.0500	0.0297	0.0302	59.3	60.4	35.0-120			1.81	28
4-Nitrophenol	0.0500	0.0296	0.0299	59.2	59.8	10.0-120			0.952	35
Pentachlorophenol	0.0500	0.0355	0.0359	70.9	71.8	20.0-126			1.20	32
Phenol	0.0500	0.0238	0.0224	47.7	44.7	10.0-120			6.40	34
2,4,6-Trichlorophenol	0.0500	0.0386	0.0399	77.2	79.8	40.0-122			3.31	24
(S) Nitrobenzene-d5				56.3	58.5	10.0-126				

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

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

(LCS) R3278793-1 01/10/18 13:56 • (LCSD) R3278793-2 01/10/18 14:20

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 %
(S) 2-Fluorobiphenyl				59.6	63.7	22.0-127				
(S) p-Terphenyl-d14				59.9	56.4	29.0-141				
(S) Phenol-d5				48.4	44.9	10.0-120				
(S) 2-Fluorophenol				52.3	51.6	10.0-120				
(S) 2,4,6-Tribromophenol				67.1	71.5	10.0-153				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



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.

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, 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.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

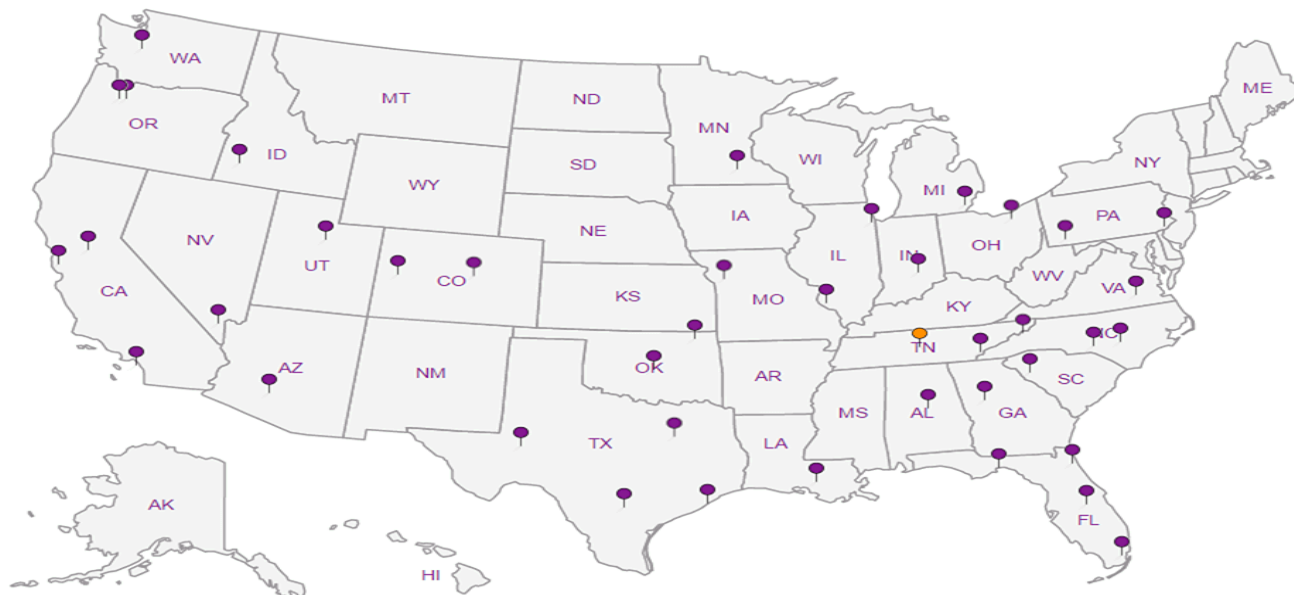
9 Sc

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

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

A2LA – ISO 17025	1461.01	AIHA-LAP, LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA-Crypto	IN00003		

Our Locations



Company Name/Address:

COGCC213 Corundum Rd.
Trinidad, CO 81082

Billing Information:

Attn: Accounts Payable
1120 Lincoln St., Suite 801
Denver, CO 80203

Report to:

Jason Kosola

Email To:

jason.kosola@state.co.us

Project

Description: *Wet Canyon Spill*

City/State

Collected: *Weston, CO*Phone: **719-846-3091**

Client Project #

Spill 453631

Lab Project #

Fax:

Collected by (print):

J Kosola

Site/Facility ID #

P.O. #

Collected by (signature):

*J Kosola***Rush?** (Lab MUST Be Notified)

Same Day 200%

Next Day 100%

Two Day 50%

Three Day 25%

Date Results Needed

Email? ☐ No ☒ YesFAX? ☐ No ☐ YesNo.
of
Cnts

Immediately

Packed on Ice N ☐ Y ☒

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No.
of
Cnts

COGCC #1

Grab

SW

1-5-18

1015

9

COGCC #4

Grab

SW

1-5-18

1025

9

COGCC #3

Grab

SW

1-5-18

11:15

9

Analysis / Container / Preservative

V8260 (3) 40ml Amber 2/HCI

SVOC8270 (2) 100ml Amber No Pres

TPH-GRO (2) 40ml Amber w/HCI

TPH-DRO (2) 40ml Amber w/HCI

Chain of Custody

Page ___ of ___

ESC
L.A.B. S.C.I.E.N.C.E.S.

YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859L# *L961502***H180**Acctnum: **COILGASRCO**

Template:

Prelogin:

TSR: **288 - Daphne R**

Cooler:

Shipped Via:

Item/Contaminant

Sample # (lab only)

*-01**02**03** Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other *Surface Water (SW)*

pH: _____ Temp: _____

Remarks:

7066 8119 241 2343

Flow: _____ Other: _____

Hold #

Relinquished by: (Signature)

Date:

1-5-18

Time:

17:00

Received by: (Signature)

Samples returned via: ☐ UPS

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

☒ FedEx ☐ Courier ☐ _____Temp: *0.3 min 50 27* Bottles Received:COC Seal Intact: ☒ Y ☐ N ☐ NA

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: *1-6-18* Time: *845*

pH Checked:

NCF:

ESC LAB SCIENCES

Cooler Receipt Form

Client:		COILGASCO	SDG#	L961507
Cooler Received/Opened On: 01/ 6 /18		Temperature:		0.8 °C
Received by : Jennifer Royal				
Signature: <i>Jennifer Royal</i>				
Receipt Check List		NP	Yes	No
COC Seal Present / Intact?			/	
COC Signed / Accurate?			/	
Bottles arrive intact?			/	
Correct bottles used?			/	
Sufficient volume sent?			/	
If Applicable				
VOA Zero headspace?			/	
Preservation Correct / Checked?				