

June 29, 2018

Entrada Consulting Group

Sample Delivery Group: L1003699
Samples Received: 06/22/2018
Project Number:
Description: Rock Springs
Site: ROCK SPRINGS
Report To: Robert Stockton
240 Mesa Avenue
Grand Junction, CO 81501

Entire Report Reviewed By:



Jason Romer
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.



Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Sr: Sample Results	5
POND L1003699-01	5
DS L1003699-02	6
RS-3 L1003699-03	7
RS-2 L1003699-04	8
RS-4 L1003699-05	9
RS-7 L1003699-06	10
RS-10 L1003699-07	11
Qc: Quality Control Summary	12
Volatile Organic Compounds (GC) by Method 8015D/GRO	12
Volatile Organic Compounds (GC/MS) by Method 8260B	14
Gl: Glossary of Terms	16
Al: Accreditations & Locations	17
Sc: Sample Chain of Custody	18



SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



POND L1003699-01 GW

			Collected by Robert Stockton	Collected date/time 06/19/18 14:20	Received date/time 06/22/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1130235	1	06/26/18 19:35	06/26/18 19:35	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1128782	1	06/24/18 03:05	06/24/18 03:05	PP
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1129543	1	06/26/18 00:28	06/26/18 00:28	LRL

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

DS L1003699-02 GW

			Collected by Robert Stockton	Collected date/time 06/19/18 15:00	Received date/time 06/22/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1130235	1	06/26/18 19:57	06/26/18 19:57	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1128782	1	06/24/18 03:27	06/24/18 03:27	PP

RS-3 L1003699-03 GW

			Collected by Robert Stockton	Collected date/time 06/19/18 13:45	Received date/time 06/22/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1130235	1	06/26/18 20:19	06/26/18 20:19	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1128782	1	06/24/18 03:49	06/24/18 03:49	PP

RS-2 L1003699-04 GW

			Collected by Robert Stockton	Collected date/time 06/19/18 13:08	Received date/time 06/22/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1130235	1	06/26/18 20:42	06/26/18 20:42	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1128782	1	06/24/18 04:11	06/24/18 04:11	PP

RS-4 L1003699-05 GW

			Collected by Robert Stockton	Collected date/time 06/19/18 12:45	Received date/time 06/22/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1130235	1	06/26/18 21:04	06/26/18 21:04	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1128782	1	06/24/18 04:33	06/24/18 04:33	PP

RS-7 L1003699-06 GW

			Collected by Robert Stockton	Collected date/time 06/19/18 11:05	Received date/time 06/22/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1131109	1	06/28/18 13:24	06/28/18 13:24	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1128782	1	06/24/18 04:55	06/24/18 04:55	PP

RS-10 L1003699-07 GW

			Collected by Robert Stockton	Collected date/time 06/19/18 11:30	Received date/time 06/22/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1130235	1	06/26/18 21:48	06/26/18 21:48	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1128782	1	06/24/18 05:16	06/24/18 05:16	PP
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1129543	10	06/26/18 00:47	06/26/18 00:47	LRL

ACCOUNT:

Entrada Consulting Group

PROJECT:

SDG:

L1003699

DATE/TIME:

06/29/18 15:26

PAGE:

3 of 19



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.

Jason Romer
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	06/26/2018 19:35	WG1130235
(S) a,a,a-Trifluorotoluene(FID)	98.2		77.0-122		06/26/2018 19:35	WG1130235

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	06/24/2018 03:05	WG1128782
Toluene	ND		0.00100	1	06/26/2018 00:28	WG1129543
Ethylbenzene	ND		0.00100	1	06/24/2018 03:05	WG1128782
Total Xylenes	ND		0.00300	1	06/26/2018 00:28	WG1129543
(S) Toluene-d8	102		80.0-120		06/24/2018 03:05	WG1128782
(S) Toluene-d8	95.6		80.0-120		06/26/2018 00:28	WG1129543
(S) Dibromofluoromethane	99.7		76.0-123		06/24/2018 03:05	WG1128782
(S) Dibromofluoromethane	103		76.0-123		06/26/2018 00:28	WG1129543
(S) a,a,a-Trifluorotoluene	103		80.0-120		06/24/2018 03:05	WG1128782
(S) a,a,a-Trifluorotoluene	98.7		80.0-120		06/26/2018 00:28	WG1129543
(S) 4-Bromofluorobenzene	113		80.0-120		06/24/2018 03:05	WG1128782
(S) 4-Bromofluorobenzene	106		80.0-120		06/26/2018 00:28	WG1129543

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ 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	06/26/2018 19:57	WG1130235
(S) a,a,a-Trifluorotoluene(FID)	98.1		77.0-122		06/26/2018 19:57	WG1130235

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	06/24/2018 03:27	WG1128782
Toluene	ND		0.00100	1	06/24/2018 03:27	WG1128782
Ethylbenzene	ND		0.00100	1	06/24/2018 03:27	WG1128782
Total Xylenes	ND		0.00300	1	06/24/2018 03:27	WG1128782
(S) Toluene-d8	102		80.0-120		06/24/2018 03:27	WG1128782
(S) Dibromofluoromethane	99.1		76.0-123		06/24/2018 03:27	WG1128782
(S) a,a,a-Trifluorotoluene	104		80.0-120		06/24/2018 03:27	WG1128782
(S) 4-Bromofluorobenzene	115		80.0-120		06/24/2018 03:27	WG1128782

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ 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	06/26/2018 20:19	WG1130235
(S) a,a,a-Trifluorotoluene(FID)	98.1		77.0-122		06/26/2018 20:19	WG1130235

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	06/24/2018 03:49	WG1128782
Toluene	ND		0.00100	1	06/24/2018 03:49	WG1128782
Ethylbenzene	ND		0.00100	1	06/24/2018 03:49	WG1128782
Total Xylenes	ND		0.00300	1	06/24/2018 03:49	WG1128782
(S) Toluene-d8	102		80.0-120		06/24/2018 03:49	WG1128782
(S) Dibromofluoromethane	98.4		76.0-123		06/24/2018 03:49	WG1128782
(S) a,a,a-Trifluorotoluene	102		80.0-120		06/24/2018 03:49	WG1128782
(S) 4-Bromofluorobenzene	115		80.0-120		06/24/2018 03:49	WG1128782

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ 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	06/26/2018 20:42	WG1130235
(S) a,a,a-Trifluorotoluene(FID)	97.6		77.0-122		06/26/2018 20:42	WG1130235

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	06/24/2018 04:11	WG1128782
Toluene	ND		0.00100	1	06/24/2018 04:11	WG1128782
Ethylbenzene	ND		0.00100	1	06/24/2018 04:11	WG1128782
Total Xylenes	ND		0.00300	1	06/24/2018 04:11	WG1128782
(S) Toluene-d8	101		80.0-120		06/24/2018 04:11	WG1128782
(S) Dibromofluoromethane	100		76.0-123		06/24/2018 04:11	WG1128782
(S) a,a,a-Trifluorotoluene	102		80.0-120		06/24/2018 04:11	WG1128782
(S) 4-Bromofluorobenzene	111		80.0-120		06/24/2018 04:11	WG1128782

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ 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	06/26/2018 21:04	WG1130235
(S) a,a,a-Trifluorotoluene(FID)	98.9		77.0-122		06/26/2018 21:04	WG1130235

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	06/24/2018 04:33	WG1128782
Toluene	ND		0.00100	1	06/24/2018 04:33	WG1128782
Ethylbenzene	ND		0.00100	1	06/24/2018 04:33	WG1128782
Total Xylenes	ND		0.00300	1	06/24/2018 04:33	WG1128782
(S) Toluene-d8	102		80.0-120		06/24/2018 04:33	WG1128782
(S) Dibromofluoromethane	100		76.0-123		06/24/2018 04:33	WG1128782
(S) a,a,a-Trifluorotoluene	102		80.0-120		06/24/2018 04:33	WG1128782
(S) 4-Bromofluorobenzene	114		80.0-120		06/24/2018 04:33	WG1128782

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ 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	06/28/2018 13:24	WG1131109
(S) a,a,a-Trifluorotoluene(FID)	97.0		77.0-122		06/28/2018 13:24	WG1131109

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	06/24/2018 04:55	WG1128782
Toluene	ND		0.00100	1	06/24/2018 04:55	WG1128782
Ethylbenzene	ND		0.00100	1	06/24/2018 04:55	WG1128782
Total Xylenes	ND		0.00300	1	06/24/2018 04:55	WG1128782
(S) Toluene-d8	103		80.0-120		06/24/2018 04:55	WG1128782
(S) Dibromofluoromethane	98.5		76.0-123		06/24/2018 04:55	WG1128782
(S) a,a,a-Trifluorotoluene	104		80.0-120		06/24/2018 04:55	WG1128782
(S) 4-Bromofluorobenzene	114		80.0-120		06/24/2018 04:55	WG1128782

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ 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	9.79		0.100	1	06/26/2018 21:48	WG1130235
(S) a,a,a-Trifluorotoluene(FID)	82.3		77.0-122		06/26/2018 21:48	WG1130235

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.507		0.0100	10	06/26/2018 00:47	WG1129543
Toluene	ND		0.00100	1	06/24/2018 05:16	WG1128782
Ethylbenzene	0.170		0.00100	1	06/24/2018 05:16	WG1128782
Total Xylenes	2.61		0.0300	10	06/26/2018 00:47	WG1129543
(S) Toluene-d8	107		80.0-120		06/24/2018 05:16	WG1128782
(S) Toluene-d8	96.9		80.0-120		06/26/2018 00:47	WG1129543
(S) Dibromofluoromethane	97.7		76.0-123		06/24/2018 05:16	WG1128782
(S) Dibromofluoromethane	102		76.0-123		06/26/2018 00:47	WG1129543
(S) a,a,a-Trifluorotoluene	101		80.0-120		06/24/2018 05:16	WG1128782
(S) a,a,a-Trifluorotoluene	97.3		80.0-120		06/26/2018 00:47	WG1129543
(S) 4-Bromofluorobenzene	124	<u>J1</u>	80.0-120		06/24/2018 05:16	WG1128782
(S) 4-Bromofluorobenzene	102		80.0-120		06/26/2018 00:47	WG1129543

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3321082-3 06/26/18 17:38

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)	98.7			77.0-122

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

(LCS) R3321082-1 06/26/18 16:31 • (LCSD) R3321082-2 06/26/18 16:53

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	5.34	5.47	97.1	99.4	71.0-136			2.38	20
(S) a,a,a-Trifluorotoluene(FID)				101	102	77.0-122				

L1003787-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1003787-08 06/27/18 01:55 • (MS) R3321082-4 06/27/18 02:17 • (MSD) R3321082-5 06/27/18 02:39

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	0.510	2.42	2.41	34.7	34.6	1	18.0-160			0.260	20
(S) a,a,a-Trifluorotoluene(FID)					95.5	95.9		77.0-122				

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc



Method Blank (MB)

(MB) R3321788-3 06/28/18 11:41

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)	95.9			77.0-122

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

(LCS) R3321788-1 06/28/18 10:34 • (LCSD) R3321788-2 06/28/18 10:56

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	5.70	5.67	104	103	71.0-136			0.572	20
(S) a,a,a-Trifluorotoluene(FID)				111	112	77.0-122				

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc



Method Blank (MB)

(MB) R3320720-2 06/23/18 22:22

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.000331	0.00100
Ethylbenzene	U		0.000384	0.00100
Toluene	U		0.000412	0.00100
Xylenes, Total	U		0.00106	0.00300
(S) Toluene-d8	104			80.0-120
(S) Dibromofluoromethane	97.8			76.0-123
(S) a,a,a-Trifluorotoluene	102			80.0-120
(S) 4-Bromofluorobenzene	111			80.0-120

Laboratory Control Sample (LCS)

(LCS) R3320720-1 06/23/18 21:38

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0250	0.0242	96.9	69.0-123	
Ethylbenzene	0.0250	0.0247	98.8	77.0-120	
Toluene	0.0250	0.0237	94.9	77.0-120	
Xylenes, Total	0.0750	0.0766	102	77.0-120	
(S) Toluene-d8			102	80.0-120	
(S) Dibromofluoromethane			96.7	76.0-123	
(S) a,a,a-Trifluorotoluene			101	80.0-120	
(S) 4-Bromofluorobenzene			114	80.0-120	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3321288-4 06/25/18 21:17

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.000331	0.00100
Toluene	U		0.000412	0.00100
Xylenes, Total	U		0.00106	0.00300
(S) Toluene-d8	96.7			80.0-120
(S) Dibromofluoromethane	104			76.0-123
(S) a,a,a-Trifluorotoluene	99.6			80.0-120
(S) 4-Bromofluorobenzene	104			80.0-120

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

(LCS) R3321288-1 06/25/18 19:59 • (LCSD) R3321288-2 06/25/18 20:19

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 %
Benzene	0.0250	0.0278	0.0280	111	112	69.0-123			0.593	20
Toluene	0.0250	0.0237	0.0241	94.8	96.2	77.0-120			1.53	20
Xylenes, Total	0.0750	0.0694	0.0719	92.5	95.9	77.0-120			3.54	20
(S) Toluene-d8				94.0	95.7	80.0-120				
(S) Dibromofluoromethane				102	102	76.0-123				
(S) a,a,a-Trifluorotoluene				97.3	96.2	80.0-120				
(S) 4-Bromofluorobenzene				103	103	80.0-120				

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, 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.
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

J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
----	--

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



ESC Lab Sciences 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 ESC Lab Sciences.

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 ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN2000002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	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 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable


Our Locations

ESC Lab Sciences 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. ESC Lab Sciences performs all testing at our central laboratory.



ESC LAB SCIENCES

Cooler Receipt Form

Client:	SDG#	L1003699	
Cooler Received/Opened On: 6/22/18	Temperature:	4.0	
Received By: Kelsey Stephenson			
Signature: 			
Receipt Check List	NP	Yes	No
COC Seal Present / Intact?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
COC Signed / Accurate?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bottles arrive intact?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Correct bottles used?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sufficient volume sent?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
If Applicable		<input checked="" type="checkbox"/>	<input type="checkbox"/>
VOA Zero headspace?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preservation Correct / Checked?		<input checked="" type="checkbox"/>	<input type="checkbox"/>

October 05, 2018

Entrada Consulting Group

Sample Delivery Group: L1030013
Samples Received: 09/28/2018
Project Number: 017-006
Description: 017-006
Site: ROCK SPRINGS
Report To: Robert Stockton
240 Mesa Avenue
Grand Junction, CO 81501

Entire Report Reviewed By:



Chris Ward
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Sr: Sample Results	5	³ Ss
MW-4 L1030013-01	5	
MW-3 L1030013-02	6	⁴ Cn
MW-2 L1030013-03	7	⁵ Sr
SOUTH SPRING L1030013-04	8	
POND L1030013-05	9	⁶ Qc
Qc: Quality Control Summary	10	
Volatile Organic Compounds (GC) by Method 8015/8021	10	⁷ Gl
Gl: Glossary of Terms	12	⁸ Al
Al: Accreditations & Locations	13	
Sc: Sample Chain of Custody	14	⁹ Sc



MW-4 L1030013-01 GW

			Collected by Robert Stockton	Collected date/time 09/27/18 11:00	Received date/time 09/28/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015/8021	WG1174981	1	10/03/18 15:41	10/03/18 15:41	DWR

¹ Cp² Tc³ Ss

MW-3 L1030013-02 GW

			Collected by Robert Stockton	Collected date/time 09/27/18 11:40	Received date/time 09/28/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015/8021	WG1174981	1	10/03/18 16:02	10/03/18 16:02	DWR

⁴ Cn⁵ Sr

MW-2 L1030013-03 GW

			Collected by Robert Stockton	Collected date/time 09/27/18 12:20	Received date/time 09/28/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015/8021	WG1174981	1	10/03/18 16:24	10/03/18 16:24	DWR

⁶ Qc⁷ Gl

SOUTH SPRING L1030013-04 GW

			Collected by Robert Stockton	Collected date/time 09/27/18 12:40	Received date/time 09/28/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015/8021	WG1174981	1	10/03/18 16:45	10/03/18 16:45	DWR

⁸ Al⁹ Sc

POND L1030013-05 GW

			Collected by Robert Stockton	Collected date/time 09/27/18 12:55	Received date/time 09/28/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015/8021	WG1174981	1	10/03/18 17:06	10/03/18 17:06	DWR



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

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.000500	1	10/03/2018 15:41	WG1174981
Toluene	ND		0.00100	1	10/03/2018 15:41	WG1174981
Ethylbenzene	ND		0.000500	1	10/03/2018 15:41	WG1174981
Total Xylene	ND		0.00150	1	10/03/2018 15:41	WG1174981
TPH (GC/FID) Low Fraction	ND		0.100	1	10/03/2018 15:41	WG1174981
(S) a,a,a-Trifluorotoluene(FID)	101		78.0-120		10/03/2018 15:41	WG1174981
(S) a,a,a-Trifluorotoluene(PID)	96.7		79.0-125		10/03/2018 15:41	WG1174981

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.000500	1	10/03/2018 16:02	WG1174981
Toluene	ND		0.00100	1	10/03/2018 16:02	WG1174981
Ethylbenzene	ND		0.000500	1	10/03/2018 16:02	WG1174981
Total Xylene	ND		0.00150	1	10/03/2018 16:02	WG1174981
TPH (GC/FID) Low Fraction	ND		0.100	1	10/03/2018 16:02	WG1174981
(S) a,a,a-Trifluorotoluene(FID)	103		78.0-120		10/03/2018 16:02	WG1174981
(S) a,a,a-Trifluorotoluene(PID)	99.7		79.0-125		10/03/2018 16:02	WG1174981

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.000500	1	10/03/2018 16:24	WG1174981
Toluene	ND		0.00100	1	10/03/2018 16:24	WG1174981
Ethylbenzene	ND		0.000500	1	10/03/2018 16:24	WG1174981
Total Xylene	ND		0.00150	1	10/03/2018 16:24	WG1174981
TPH (GC/FID) Low Fraction	ND		0.100	1	10/03/2018 16:24	WG1174981
(S) a,a,a-Trifluorotoluene(FID)	104		78.0-120		10/03/2018 16:24	WG1174981
(S) a,a,a-Trifluorotoluene(PID)	96.7		79.0-125		10/03/2018 16:24	WG1174981

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.00344		0.000500	1	10/03/2018 16:45	WG1174981
Toluene	ND		0.00100	1	10/03/2018 16:45	WG1174981
Ethylbenzene	ND		0.000500	1	10/03/2018 16:45	WG1174981
Total Xylene	ND		0.00150	1	10/03/2018 16:45	WG1174981
TPH (GC/FID) Low Fraction	ND		0.100	1	10/03/2018 16:45	WG1174981
(S) a,a,a-Trifluorotoluene(FID)	101		78.0-120		10/03/2018 16:45	WG1174981
(S) a,a,a-Trifluorotoluene(PID)	97.3		79.0-125		10/03/2018 16:45	WG1174981

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.000500	1	10/03/2018 17:06	WG1174981
Toluene	ND		0.00100	1	10/03/2018 17:06	WG1174981
Ethylbenzene	ND		0.000500	1	10/03/2018 17:06	WG1174981
Total Xylene	ND		0.00150	1	10/03/2018 17:06	WG1174981
TPH (GC/FID) Low Fraction	ND		0.100	1	10/03/2018 17:06	WG1174981
(S) a,a,a-Trifluorotoluene(FID)	105		78.0-120		10/03/2018 17:06	WG1174981
(S) a,a,a-Trifluorotoluene(PID)	100		79.0-125		10/03/2018 17:06	WG1174981

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Method Blank (MB)

(MB) R3347175-5 10/03/18 09:22

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.000190	0.000500
Toluene	0.000447	J	0.000412	0.00100
Ethylbenzene	U		0.000160	0.000500
Total Xylene	U		0.000510	0.00150
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	103			78.0-120
(S) a,a,a-Trifluorotoluene(PID)	99.8			79.0-125

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) R3347175-1 10/03/18 07:36 • (LCSD) R3347175-2 10/03/18 07:57

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 %
Benzene	0.0500	0.0478	0.0475	95.5	95.1	77.0-122			0.444	20
Toluene	0.0500	0.0518	0.0515	104	103	80.0-121			0.658	20
Ethylbenzene	0.0500	0.0521	0.0518	104	104	80.0-123			0.605	20
Total Xylene	0.150	0.156	0.155	104	103	47.0-154			0.771	20
(S) a,a,a-Trifluorotoluene(FID)				102	102	78.0-120				
(S) a,a,a-Trifluorotoluene(PID)				98.4	98.4	79.0-125				

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

(LCS) R3347175-3 10/03/18 08:18 • (LCSD) R3347175-4 10/03/18 08:39

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	5.07	5.07	92.1	92.2	72.0-127			0.0243	20
(S) a,a,a-Trifluorotoluene(FID)				93.2	92.8	78.0-120				
(S) a,a,a-Trifluorotoluene(PID)				106	105	79.0-125				



L1030013-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1030013-01 10/03/18 15:41 • (MS) R3347175-6 10/03/18 18:12 • (MSD) R3347175-7 10/03/18 18:34

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 %
Benzene	0.0500	ND	0.0423	0.0450	84.6	89.9	1	10.0-160			6.11	21
Toluene	0.0500	ND	0.0439	0.0474	86.5	93.5	1	12.0-148			7.72	21
Ethylbenzene	0.0500	ND	0.0444	0.0482	88.2	95.9	1	22.0-149			8.28	21
Total Xylene	0.150	ND	0.133	0.144	88.9	96.3	1	13.0-155			7.92	21
(S) a,a,a-Trifluorotoluene(FID)					101	101		78.0-120				
(S) a,a,a-Trifluorotoluene(PID)					99.7	99.3		79.0-125				

L1030013-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1030013-01 10/03/18 15:41 • (MS) R3347175-8 10/03/18 18:55 • (MSD) R3347175-9 10/03/18 19:16

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	4.09	4.37	74.4	79.5	1	10.0-160			6.65	22
(S) a,a,a-Trifluorotoluene(FID)					103	102		78.0-120				
(S) a,a,a-Trifluorotoluene(PID)					104	103		79.0-125				

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, 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.
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.
---	---

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	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 ^{1 6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	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 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ 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.



Company Name/Address: Entrada Consulting Group 330 Grand Avenue, Unit C Grand Junction, CO 81501						Billing Information: 						Analysis / Container / Preservative 						Chain of Custody Page 1 of 1 YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 					
Report to: Robert Stockton						Email To: rstockton@entradainc.com																	
Project Description: 017-006						City/State Collected: Cascade Crk.																	
Phone: (970) 640-0568 Fax:						Client Project # 017-006						Lab Project #											
Collected by (print): Robert Stockton						Site/Facility ID # Rock Springs						P.O. # 017-006											
Collected by (signature): 						Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day200% <input type="checkbox"/> Next Day100% <input type="checkbox"/> Two Day50% <input type="checkbox"/> Three Day25%						Date Results Needed Email? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes FAX? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes											
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>						No. of Cntrs						BTEX / GRO											
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time																		
MW-4	Grab	GW		9-27-18	1100	4 X																	
MW-3	Grab	GW		9-27-18	1140	4 +																	
MW-2	Grab	GW		9-27-18	1200	4 X																	
South Spring Pond	Grab	GW		9-27-18	1240	4 X																	
	Grab	GW		9/27/18	1255	4 X																	
	Grab	GW																					
	Grab	GW																					
	Grab	GW																					

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

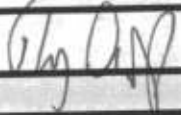
Remarks: 4430 3423 8332 NO SCREENING < 0.5 mg/L

pH _____ Temp _____ Flow _____ Other _____

Relinquished by : (Signature) 		Date: 9/27/18		Time: 1645		Received by: (Signature) 		Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> Other		Condition: (lab use only) OK	
Relinquished by : (Signature) 		Date: 9/27/18		Time: 1700		Received by: (Signature) 		Temp: 40°F °C Bottles Received: 20VP		COC Seal Intact: <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	
Relinquished by : (Signature) 		Date:		Time:		Received for lab by: (Signature) 		Date: 9-28-18 Time: 0845		pH Checked: NCF:	

Pace Analytical National Center for Testing & Innovation

Cooler Receipt Form

Client: ENTCONGSCO	SDG#	L1030013	
Cooler Received/Opened On: 9/28/18	Temperature:		
Received By: Troy Dunlap			
Signature: 			
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?			

November 29, 2018

Entrada Consulting Group

Sample Delivery Group: L1046289
Samples Received: 11/21/2018
Project Number:
Description: Rock Springs
Site: ROCK SPRINGS
Report To: Robert Stockton
240 Mesa Avenue
Grand Junction, CO 81501

Entire Report Reviewed By:



Chris Ward
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Sr: Sample Results	5
RS-2 L1046289-01	5
RS-3 L1046289-02	6
RS-7 L1046289-03	7
RS-9 L1046289-04	8
RS-10 L1046289-05	9
DS L1046289-06	10
POND L1046289-07	11
Qc: Quality Control Summary	12
Volatile Organic Compounds (GC) by Method 8015D/GRO	12
Volatile Organic Compounds (GC/MS) by Method 8260B	13
Gl: Glossary of Terms	15
Al: Accreditations & Locations	16
Sc: Sample Chain of Custody	17





RS-2 L1046289-01 GW

			Collected by Robert Stockton	Collected date/time 11/20/18 12:42	Received date/time 11/21/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1200610	1	11/23/18 13:22	11/23/18 13:22	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1200412	1	11/22/18 05:44	11/22/18 05:44	JCP

¹ Cp² Tc³ Ss

RS-3 L1046289-02 GW

			Collected by Robert Stockton	Collected date/time 11/20/18 13:08	Received date/time 11/21/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1200610	1	11/23/18 13:45	11/23/18 13:45	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1200412	1	11/22/18 06:03	11/22/18 06:03	JCP

⁴ Cn⁵ Sr⁶ Qc

RS-7 L1046289-03 GW

			Collected by Robert Stockton	Collected date/time 11/20/18 11:20	Received date/time 11/21/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1200412	1	11/22/18 06:23	11/22/18 06:23	JCP

⁷ Gl⁸ Al

RS-9 L1046289-04 GW

			Collected by Robert Stockton	Collected date/time 11/20/18 10:55	Received date/time 11/21/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1200610	1	11/23/18 14:08	11/23/18 14:08	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1202200	5	11/28/18 14:57	11/28/18 14:57	BMB

⁹ Sc

RS-10 L1046289-05 GW

			Collected by Robert Stockton	Collected date/time 11/20/18 10:26	Received date/time 11/21/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1200610	1	11/23/18 14:31	11/23/18 14:31	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1200412	1	11/22/18 07:02	11/22/18 07:02	JCP
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1202200	20	11/28/18 15:17	11/28/18 15:17	BMB

DS L1046289-06 GW

			Collected by Robert Stockton	Collected date/time 11/20/18 13:20	Received date/time 11/21/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1200610	1	11/23/18 14:54	11/23/18 14:54	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1200412	1	11/22/18 07:22	11/22/18 07:22	JCP

POND L1046289-07 GW

			Collected by Robert Stockton	Collected date/time 11/20/18 00:00	Received date/time 11/21/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1200610	1	11/23/18 15:16	11/23/18 15:16	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1200412	1	11/22/18 07:41	11/22/18 07:41	JCP



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

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ 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	11/23/2018 13:22	WG1200610
(S) a,a,a-Trifluorotoluene(FID)	93.9		78.0-120		11/23/2018 13:22	WG1200610

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	11/22/2018 05:44	WG1200412
Toluene	ND		0.00100	1	11/22/2018 05:44	WG1200412
Ethylbenzene	ND		0.00100	1	11/22/2018 05:44	WG1200412
Total Xylenes	ND		0.00300	1	11/22/2018 05:44	WG1200412
(S) Toluene-d8	103		80.0-120		11/22/2018 05:44	WG1200412
(S) Dibromofluoromethane	92.2		75.0-120		11/22/2018 05:44	WG1200412
(S) a,a,a-Trifluorotoluene	108		80.0-120		11/22/2018 05:44	WG1200412
(S) 4-Bromofluorobenzene	87.8		77.0-126		11/22/2018 05:44	WG1200412

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	11/23/2018 13:45	WG1200610
(S) a,a,a-Trifluorotoluene(FID)	93.7		78.0-120		11/23/2018 13:45	WG1200610

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	11/22/2018 06:03	WG1200412
Toluene	ND		0.00100	1	11/22/2018 06:03	WG1200412
Ethylbenzene	ND		0.00100	1	11/22/2018 06:03	WG1200412
Total Xylenes	ND		0.00300	1	11/22/2018 06:03	WG1200412
(S) Toluene-d8	104		80.0-120		11/22/2018 06:03	WG1200412
(S) Dibromofluoromethane	92.2		75.0-120		11/22/2018 06:03	WG1200412
(S) a,a,a-Trifluorotoluene	109		80.0-120		11/22/2018 06:03	WG1200412
(S) 4-Bromofluorobenzene	85.5		77.0-126		11/22/2018 06:03	WG1200412

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	11/22/2018 06:23	WG1200412
Toluene	ND		0.00100	1	11/22/2018 06:23	WG1200412
Ethylbenzene	ND		0.00100	1	11/22/2018 06:23	WG1200412
Total Xylenes	0.00408		0.00300	1	11/22/2018 06:23	WG1200412
(S) Toluene-d8	107		80.0-120		11/22/2018 06:23	WG1200412
(S) Dibromofluoromethane	91.7		75.0-120		11/22/2018 06:23	WG1200412
(S) a,a,a-Trifluorotoluene	110		80.0-120		11/22/2018 06:23	WG1200412
(S) 4-Bromofluorobenzene	85.0		77.0-126		11/22/2018 06:23	WG1200412

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ 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	2.31		0.100	1	11/23/2018 14:08	WG1200610
(S) a,a,a-Trifluorotoluene(FID)	90.5		78.0-120		11/23/2018 14:08	WG1200610

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.0788		0.00500	5	11/28/2018 14:57	WG1202200
Toluene	ND		0.00500	5	11/28/2018 14:57	WG1202200
Ethylbenzene	0.0215		0.00500	5	11/28/2018 14:57	WG1202200
Total Xylenes	0.278		0.0150	5	11/28/2018 14:57	WG1202200
(S) Toluene-d8	110		80.0-120		11/28/2018 14:57	WG1202200
(S) Dibromofluoromethane	87.6		75.0-120		11/28/2018 14:57	WG1202200
(S) a,a,a-Trifluorotoluene	110		80.0-120		11/28/2018 14:57	WG1202200
(S) 4-Bromofluorobenzene	91.5		77.0-126		11/28/2018 14:57	WG1202200

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ 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	7.72		0.100	1	11/23/2018 14:31	WG1200610
(S) a,a,a-Trifluorotoluene(FID)	85.5		78.0-120		11/23/2018 14:31	WG1200610

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.262		0.0200	20	11/28/2018 15:17	WG1202200
Toluene	ND		0.00100	1	11/22/2018 07:02	WG1200412
Ethylbenzene	0.164		0.00100	1	11/22/2018 07:02	WG1200412
Total Xylenes	1.82		0.0600	20	11/28/2018 15:17	WG1202200
(S) Toluene-d8	109		80.0-120		11/22/2018 07:02	WG1200412
(S) Toluene-d8	107		80.0-120		11/28/2018 15:17	WG1202200
(S) Dibromofluoromethane	89.6		75.0-120		11/22/2018 07:02	WG1200412
(S) Dibromofluoromethane	88.2		75.0-120		11/28/2018 15:17	WG1202200
(S) a,a,a-Trifluorotoluene	107		80.0-120		11/22/2018 07:02	WG1200412
(S) a,a,a-Trifluorotoluene	109		80.0-120		11/28/2018 15:17	WG1202200
(S) 4-Bromofluorobenzene	88.6		77.0-126		11/22/2018 07:02	WG1200412
(S) 4-Bromofluorobenzene	92.9		77.0-126		11/28/2018 15:17	WG1202200

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Collected date/time: 11/20/18 13:20

L1046289

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	11/23/2018 14:54	WG1200610
(S) a,a,a-Trifluorotoluene(FID)	93.5		78.0-120		11/23/2018 14:54	WG1200610

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	11/22/2018 07:22	WG1200412
Toluene	ND		0.00100	1	11/22/2018 07:22	WG1200412
Ethylbenzene	ND		0.00100	1	11/22/2018 07:22	WG1200412
Total Xylenes	ND		0.00300	1	11/22/2018 07:22	WG1200412
(S) Toluene-d8	107		80.0-120		11/22/2018 07:22	WG1200412
(S) Dibromofluoromethane	93.1		75.0-120		11/22/2018 07:22	WG1200412
(S) a,a,a-Trifluorotoluene	110		80.0-120		11/22/2018 07:22	WG1200412
(S) 4-Bromofluorobenzene	86.0		77.0-126		11/22/2018 07:22	WG1200412

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	11/23/2018 15:16	WG1200610
(S) a,a,a-Trifluorotoluene(FID)	93.9		78.0-120		11/23/2018 15:16	WG1200610

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	11/22/2018 07:41	WG1200412
Toluene	ND		0.00100	1	11/22/2018 07:41	WG1200412
Ethylbenzene	ND		0.00100	1	11/22/2018 07:41	WG1200412
Total Xylenes	ND		0.00300	1	11/22/2018 07:41	WG1200412
(S) Toluene-d8	105		80.0-120		11/22/2018 07:41	WG1200412
(S) Dibromofluoromethane	92.0		75.0-120		11/22/2018 07:41	WG1200412
(S) a,a,a-Trifluorotoluene	109		80.0-120		11/22/2018 07:41	WG1200412
(S) 4-Bromofluorobenzene	88.6		77.0-126		11/22/2018 07:41	WG1200412

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Method Blank (MB)

(MB) R3363400-3 11/23/18 11:47

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	0.0397	⬇	0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	93.6			78.0-120

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) R3363400-1 11/23/18 10:20 • (LCSD) R3363400-2 11/23/18 10:43

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	6.34	6.41	115	117	72.0-127			1.15	20
(S) a,a,a-Trifluorotoluene(FID)				99.6	99.5	78.0-120				



Method Blank (MB)

(MB) R3363416-3 11/22/18 05:24

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.000331	0.00100
Ethylbenzene	U		0.000384	0.00100
Toluene	U		0.000412	0.00100
Xylenes, Total	U		0.00106	0.00300
(S) Toluene-d8	108			80.0-120
(S) Dibromofluoromethane	91.2			75.0-120
(S) a,a,a-Trifluorotoluene	109			80.0-120
(S) 4-Bromofluorobenzene	87.5			77.0-126

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

(LCS) R3363416-1 11/22/18 04:25 • (LCSD) R3363416-2 11/22/18 04:44

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 %
Benzene	0.0250	0.0225	0.0219	90.1	87.8	70.0-123			2.61	20
Ethylbenzene	0.0250	0.0285	0.0289	114	115	79.0-123			1.40	20
Toluene	0.0250	0.0273	0.0275	109	110	79.0-120			0.863	20
Xylenes, Total	0.0750	0.0854	0.0858	114	114	79.0-123			0.467	20
(S) Toluene-d8				105	105	80.0-120				
(S) Dibromofluoromethane				91.6	88.1	75.0-120				
(S) a,a,a-Trifluorotoluene				105	104	80.0-120				
(S) 4-Bromofluorobenzene				86.0	86.0	77.0-126				

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3363805-3 11/28/18 12:02

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.000331	0.00100
Ethylbenzene	U		0.000384	0.00100
Toluene	U		0.000412	0.00100
Xylenes, Total	U		0.00106	0.00300
(S) Toluene-d8	114			80.0-120
(S) Dibromofluoromethane	85.8			75.0-120
(S) a,a,a-Trifluorotoluene	111			80.0-120
(S) 4-Bromofluorobenzene	88.0			77.0-126

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

(LCS) R3363805-1 11/28/18 09:24 • (LCSD) R3363805-2 11/28/18 09:44

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 %
Benzene	0.0250	0.0214	0.0204	85.6	81.4	70.0-123			5.06	20
Ethylbenzene	0.0250	0.0292	0.0276	117	110	79.0-123			5.72	20
Toluene	0.0250	0.0279	0.0271	112	108	79.0-120			2.87	20
Xylenes, Total	0.0750	0.0874	0.0855	117	114	79.0-123			2.20	20
(S) Toluene-d8				111	110	80.0-120				
(S) Dibromofluoromethane				88.8	88.9	75.0-120				
(S) a,a,a-Trifluorotoluene				108	109	80.0-120				
(S) 4-Bromofluorobenzene				91.7	91.3	77.0-126				

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, 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.
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.

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



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

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	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 ^{1 6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	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 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ 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.



Entrada Consulting Group

330 Grand Avenue, Unit C
Grand Junction, CO 81501

Report to:
Robert Stockton

Billing Information:

Email To:
rstockton@entradainc.com

Project Description: **Rock Springs**

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

Phone: **(970) 640-0568**
Fax:

Client Project #

Lab Project #

Collected by (print):
Robert Stockton

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Quote #

Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

Immediately
Packed on Ice: N ☒ Y

No. of
Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	8260 BTEX (2 - 40 mL VOA)	GRO (2 - 40 mL VOA)	DRO (2 - 40 mL VOA)	Dissolved Metals (500 mL poly)	Br, Cl, F, NO2, NO3, SO4 (500 mL poly)	SPCON, pH (500 mL poly)	Total Alkalinity (500 mL poly)	Chlorides, Sulfates
RS-2	G	GW		11/20/18	1242	43x	X						
RS-3		GW			1308	48x	X						
RS-7					1120	23x							
RS-9					1055	4x	X						
RS-10					1026	4x	X						
DS					1320	4x	X						
POMP				11/20/18		4x	X						

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

Remarks:

Samples returned via:
_ UPS _ FedEx _ Courier _

Relinquished by: (Signature)

Date: **11/20/18** Time: **1600**

Relinquished by: (Signature)

Date: **11/20/18** Time: **1800**

Relinquished by: (Signature)

Date: Time:

Received by: (Signature)

Received by: (Signature)

Received for lab by: (Signature)

Trip Blank Received: Yes ☒ No
HCL/MeOH
TBR

Temp: °C Bottles Received: **0.8-0.1473 26**

Date: **11/21/18** Time: **8:45**

Sample Receipt Checklist
COC Seal Present/Intact: ☒ Y ☒ N
COC Signed/Accurate: ☒ Y ☒ N
Bottles arrive intact: ☒ Y ☒ N
Correct bottles used: ☒ Y ☒ N
Sufficient volume sent: ☒ Y ☒ N
If Applicable
VOA Zero Headspace: ☒ Y ☒ N
Preservation Correct/Checked: ☒ Y ☒ N

RAD SCREEN: <0.5 mR/hr

If preservation required by Login: Date/Time

Hold: Condition: **NCF / OK**

Analysis / Container / Preservative

Chain of Custody Page ___ of ___



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



L# **L1646289**

A045

Acctnum:

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Remarks Sample # (lab only)

-01
02
03
04
05
06
07