

May 03, 2018

Utah Gas Corporation

Sample Delivery Group: L989367
Samples Received: 04/27/2018
Project Number: B12
Description: B12
Site: B12
Report To: Mr. Steve Hale
1135 Escalante Drive
Rangely, CO 81648

Entire Report Reviewed By:



Shane Gambill

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.



20180426-B12 SBW01 15' L989367-01 Solid

Collected by
Matt Kasten

Collected date/time
04/26/18 09:25

Received date/time
04/27/18 08:45

¹ Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015/8021	WG1104734	500	04/28/18 08:55	04/30/18 03:06	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105533	20	05/01/18 21:38	05/02/18 12:14	MG

² Tc

³ Ss

20180426-B12 PIT S02 35' L989367-02 Solid

Collected by
Matt Kasten

Collected date/time
04/26/18 10:30

Received date/time
04/27/18 08:45

⁴ Cn

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015/8021	WG1104734	500	04/28/18 08:55	04/29/18 21:54	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105533	5	05/01/18 21:38	05/02/18 12:25	MG

⁵ Sr

⁶ Qc

20180426-B12 PIT N02 30' L989367-03 Solid

Collected by
Matt Kasten

Collected date/time
04/26/18 11:45

Received date/time
04/27/18 08:45

⁷ Gl

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015	WG1104734	10000	04/28/18 08:55	04/30/18 17:46	BMB
Volatile Organic Compounds (GC) by Method 8021	WG1104734	1000	04/28/18 08:55	04/29/18 22:17	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105533	20	05/01/18 21:38	05/02/18 12:36	MG

⁸ Al

⁹ Sc

20180426-B12 SVENW 10' L989367-04 Solid

Collected by
Matt Kasten

Collected date/time
04/26/18 12:45

Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015/8021	WG1104734	100	04/28/18 08:55	04/29/18 22:39	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105533	1	05/01/18 21:38	05/02/18 07:19	MG

20180426-B12 SVENW 20' L989367-05 Solid

Collected by
Matt Kasten

Collected date/time
04/26/18 13:00

Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015/8021	WG1104734	1000	04/28/18 08:55	04/29/18 23:01	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105533	50	05/01/18 21:38	05/02/18 12:46	MG

20180426-B12 SVENW 30' L989367-06 Solid

Collected by
Matt Kasten

Collected date/time
04/26/18 13:25

Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015/8021	WG1104734	500	04/28/18 08:55	04/29/18 23:23	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105533	5	05/01/18 21:38	05/02/18 12:57	MG

20180426-B12 SVENW 40' L989367-07 Solid

Collected by
Matt Kasten

Collected date/time
04/26/18 14:00

Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015/8021	WG1104734	500	04/28/18 08:55	04/29/18 23:46	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105533	5	05/01/18 21:38	05/02/18 13:08	MG

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



20180426-B12 PIT S01 10' L989367-08 Solid

Collected by
Matt KastenCollected date/time
04/26/18 12:05Received date/time
04/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015/8021	WG1104734	1000	04/28/18 08:55	04/30/18 00:08	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1105533	20	05/01/18 21:38	05/02/18 13:19	MG

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc



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.

Shane Gambill
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 8015/8021

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	2.48		0.250	500	04/30/2018 03:06	WG1104734
Toluene	ND		2.50	500	04/30/2018 03:06	WG1104734
Ethylbenzene	16.0		0.250	500	04/30/2018 03:06	WG1104734
Total Xylene	136	J3 J6	0.750	500	04/30/2018 03:06	WG1104734
TPH (GC/FID) Low Fraction	3910	J6	50.0	500	04/30/2018 03:06	WG1104734
(S) a,a,a-Trifluorotoluene(FID)	88.4		77.0-120		04/30/2018 03:06	WG1104734
(S) a,a,a-Trifluorotoluene(PID)	101		75.0-128		04/30/2018 03:06	WG1104734

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) High Fraction	1570		80.0	20	05/02/2018 12:14	WG1105533
(S) o-Terphenyl	81.4	J7	18.0-148		05/02/2018 12:14	WG1105533

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.891	B	0.250	500	04/29/2018 21:54	WG1104734
Toluene	ND		2.50	500	04/29/2018 21:54	WG1104734
Ethylbenzene	8.63		0.250	500	04/29/2018 21:54	WG1104734
Total Xylene	50.0		0.750	500	04/29/2018 21:54	WG1104734
TPH (GC/FID) Low Fraction	1160		50.0	500	04/29/2018 21:54	WG1104734
(S) a,a,a-Trifluorotoluene(FID)	92.7		77.0-120		04/29/2018 21:54	WG1104734
(S) a,a,a-Trifluorotoluene(PID)	100		75.0-128		04/29/2018 21:54	WG1104734

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	588		20.0	5	05/02/2018 12:25	WG1105533
(S) o-Terphenyl	57.5		18.0-148		05/02/2018 12:25	WG1105533

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	9.07		0.500	1000	04/29/2018 22:17	WG1104734
Toluene	ND		5.00	1000	04/29/2018 22:17	WG1104734
Ethylbenzene	105		0.500	1000	04/29/2018 22:17	WG1104734
Total Xylene	715		1.50	1000	04/29/2018 22:17	WG1104734
TPH (GC/FID) Low Fraction	11200		1000	10000	04/30/2018 17:46	WG1104734
(S) a,a,a-Trifluorotoluene(FID)	90.5		77.0-120		04/30/2018 17:46	WG1104734
(S) a,a,a-Trifluorotoluene(FID)	89.8		77.0-120		04/29/2018 22:17	WG1104734
(S) a,a,a-Trifluorotoluene(PID)	100		75.0-128		04/29/2018 22:17	WG1104734
(S) a,a,a-Trifluorotoluene(PID)	102		75.0-128		04/30/2018 17:46	WG1104734

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1890		80.0	20	05/02/2018 12:36	WG1105533
(S) o-Terphenyl	72.4	J7	18.0-148		05/02/2018 12:36	WG1105533

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	2.08		0.0500	100	04/29/2018 22:39	WG1104734
Toluene	2.12		0.500	100	04/29/2018 22:39	WG1104734
Ethylbenzene	7.29		0.0500	100	04/29/2018 22:39	WG1104734
Total Xylene	59.1		0.150	100	04/29/2018 22:39	WG1104734
TPH (GC/FID) Low Fraction	1060		10.0	100	04/29/2018 22:39	WG1104734
(S) a,a,a-Trifluorotoluene(FID)	87.5		77.0-120		04/29/2018 22:39	WG1104734
(S) a,a,a-Trifluorotoluene(PID)	99.5		75.0-128		04/29/2018 22:39	WG1104734

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	128		4.00	1	05/02/2018 07:19	WG1105533
(S) o-Terphenyl	44.1		18.0-148		05/02/2018 07:19	WG1105533

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	20.8		0.500	1000	04/29/2018 23:01	WG1104734
Toluene	7.60		5.00	1000	04/29/2018 23:01	WG1104734
Ethylbenzene	56.6		0.500	1000	04/29/2018 23:01	WG1104734
Total Xylene	266		1.50	1000	04/29/2018 23:01	WG1104734
TPH (GC/FID) Low Fraction	7340		100	1000	04/29/2018 23:01	WG1104734
(S) a,a,a-Trifluorotoluene(FID)	88.6		77.0-120		04/29/2018 23:01	WG1104734
(S) a,a,a-Trifluorotoluene(PID)	103		75.0-128		04/29/2018 23:01	WG1104734

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	5610		200	50	05/02/2018 12:46	WG1105533
(S) o-Terphenyl	75.5	J7	18.0-148		05/02/2018 12:46	WG1105533

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/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	3.14		0.250	500	04/29/2018 23:23	WG1104734
Toluene	ND		2.50	500	04/29/2018 23:23	WG1104734
Ethylbenzene	13.0		0.250	500	04/29/2018 23:23	WG1104734
Total Xylene	51.6		0.750	500	04/29/2018 23:23	WG1104734
TPH (GC/FID) Low Fraction	1690		50.0	500	04/29/2018 23:23	WG1104734
(S) a,a,a-Trifluorotoluene(FID)	85.6		77.0-120		04/29/2018 23:23	WG1104734
(S) a,a,a-Trifluorotoluene(PID)	103		75.0-128		04/29/2018 23:23	WG1104734

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	850		20.0	5	05/02/2018 12:57	WG1105533
(S) o-Terphenyl	61.0		18.0-148		05/02/2018 12:57	WG1105533

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	4.11		0.250	500	04/29/2018 23:46	WG1104734
Toluene	ND		2.50	500	04/29/2018 23:46	WG1104734
Ethylbenzene	21.7		0.250	500	04/29/2018 23:46	WG1104734
Total Xylene	108		0.750	500	04/29/2018 23:46	WG1104734
TPH (GC/FID) Low Fraction	2690		50.0	500	04/29/2018 23:46	WG1104734
(S) a,a,a-Trifluorotoluene(FID)	81.5		77.0-120		04/29/2018 23:46	WG1104734
(S) a,a,a-Trifluorotoluene(PID)	104		75.0-128		04/29/2018 23:46	WG1104734

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	800		20.0	5	05/02/2018 13:08	WG1105533
(S) o-Terphenyl	66.5		18.0-148		05/02/2018 13:08	WG1105533

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	6.11		0.500	1000	04/30/2018 00:08	WG1104734
Toluene	15.4		5.00	1000	04/30/2018 00:08	WG1104734
Ethylbenzene	50.1		0.500	1000	04/30/2018 00:08	WG1104734
Total Xylene	575		1.50	1000	04/30/2018 00:08	WG1104734
TPH (GC/FID) Low Fraction	8450		100	1000	04/30/2018 00:08	WG1104734
(S) a,a,a-Trifluorotoluene(FID)	81.6		77.0-120		04/30/2018 00:08	WG1104734
(S) a,a,a-Trifluorotoluene(PID)	103		75.0-128		04/30/2018 00:08	WG1104734

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1570		80.0	20	05/02/2018 13:19	WG1105533
(S) o-Terphenyl	62.8	J7	18.0-148		05/02/2018 13:19	WG1105533

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3305876-5 04/29/18 20:55

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	0.000189	⌋	0.000120	0.000500
Toluene	0.000245	⌋	0.000150	0.00500
Ethylbenzene	0.000127	⌋	0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	0.0271	⌋	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	95.2			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	103			75.0-128

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) R3305876-1 04/29/18 19:04 • (LCSD) R3305876-2 04/29/18 19:26

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	0.0573	0.0561	115	112	71.0-121			2.14	20
Toluene	0.0500	0.0569	0.0556	114	111	72.0-120			2.36	20
Ethylbenzene	0.0500	0.0604	0.0595	121	119	76.0-121			1.51	20
Total Xylene	0.150	0.181	0.177	121	118	75.0-124			2.46	20
(S) a,a,a-Trifluorotoluene(FID)				94.0	94.2	77.0-120				
(S) a,a,a-Trifluorotoluene(PID)				101	101	75.0-128				

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

(LCS) R3305876-3 04/29/18 19:48 • (LCSD) R3305876-4 04/29/18 20:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.78	5.80	105	106	70.0-136			0.388	20
(S) a,a,a-Trifluorotoluene(FID)				108	108	77.0-120				
(S) a,a,a-Trifluorotoluene(PID)				116	116	75.0-128				

L989367-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L989367-01 04/30/18 03:06 • (MS) R3305876-6 04/30/18 03:28 • (MSD) R3305876-7 04/30/18 03:50												
Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	2.48	24.4	27.5	87.8	100	500	10.0-146			11.9	29
Toluene	0.0500	ND	22.5	23.9	86.5	92.2	500	10.0-143			6.07	30
Ethylbenzene	0.0500	16.0	35.9	44.8	79.8	115	500	10.0-147			21.9	31
Total Xylene	0.150	136	136	200	0.533	86.0	500	10.0-149	J6	J3	38.2	30
(S) a,a,a-Trifluorotoluene(FID)					84.5	89.1		77.0-120				
(S) a,a,a-Trifluorotoluene(PID)					102	102		75.0-128				

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

L989367-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L989367-01 04/30/18 03:06 • (MS) R3305876-8 04/30/18 04:13 • (MSD) R3305876-9 04/30/18 04:35												
Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	3910	3980	3510	2.33	0.000	500	10.0-147	J6	J6	12.4	30
(S) a,a,a-Trifluorotoluene(FID)					92.4	94.3		77.0-120				
(S) a,a,a-Trifluorotoluene(PID)					107	109		75.0-128				



Method Blank (MB)

(MB) R3306270-1 05/02/18 05:51

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	59.3			18.0-148

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) R3306270-2 05/02/18 06:02 • (LCSD) R3306270-3 05/02/18 06:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	50.0	30.2	36.3	60.4	72.6	50.0-150			18.3	20
(S) o-Terphenyl				72.2	90.9	18.0-148				



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
B	The same analyte is found in the associated blank.
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.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

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	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

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.



Utah Gas Corporation
1125 Escalante Dr.
Rangely, CO 81648

Billing Information:

Analysis / Container / Preserve

Pres
Chk

Report to:
Steve Hale

Email To:
shale@utahgascorp.com

Project

Description: B12

City/State
Collected: Mack, Co

Phone: 970-290-2912

Fax:

Client Project #

B12

Lab Project #

Collected by (print):

Noti Kesh

Site/Facility ID #

B12

P.O. #

Collected by (signature):

[Signature]

Rush? (Lab MUST Be Notified)

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

Quote #

Date Results Needed

Immediately
Packed on Ice N ☒ Y ☒

No.
of
Cntrs

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

20180426-B12 SBWD1 IS'

Grab

SS

15'

4/26/18

925

2

20180426-B12 P+SO2

|

|

35'

1030

20180426-B12 P+NO2

|

|

30'

1145

20180426-B12 SVENW

|

|

10'

1245

20180426-B12 SVENW

|

|

20'

100

20180426-B12 SVENW

|

|

30'

125

20180426-B12 SVENW

|

|

40'

200

20180426-B12 P+SO1

↓

↓

10'

1205

20180426-B12

* 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

pH Temp

Flow Other

Tracking # 7474 0928 4780

Relinquished by: (Signature)

Date:

4/26/18

Time:

1800

Received by: (Signature)

Trip Blank Received: Yes ☒ No ☒

Relinquished by: (Signature)

Date:

4/26/18

Time:

1800

Received by: (Signature)

Temp: 2.8 °C Bottles Reel: 16

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: 4/27/18 Time: 0845

n of Custody Page 1 of 1

RESC
S C I E N C E S

UTAH GAS CORPORATION

5 Lebanon Rd
St. Louis, TN 37122
P: 615-758-5858
F: 800-767-5859
15-758-5859



L989367

H080

num: UTAHGASRCO

plate:

igin:

ed Via:

emarks

Sample # (lab only)

-01

02

03

04

05

06

07

08

script Check/Car

/Intact: ☒ Y ☒ N

ate: ☒ Y ☒ N

ntact: ☒ Y ☒ N

used: ☒ Y ☒ N

e sent: ☒ Y ☒ N

pplicable

ce: ☒ Y ☒ N

rect/Checked: ☒ Y ☒ N

ed by Login: Date/Time

Condition:

NCF / OK