

Colorado Oil & Gas Conservation

Sample Delivery Group: L806435
Samples Received: 12/12/2015
Project Number: CWW
Description: Monitoring Well
Site: 754506+30
Report To: Peter Gintautas
213 Corundum Road
Trinidad, CO 81082

Entire Report Reviewed By:



Daphne Richards
Technical Service Representative

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



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¹ Cp
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754506 L806435-01 GW

			Collected by Gintautas	Collected date/time 12/11/15 10:55	Received date/time 12/12/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method RSK175	WG835387	1	12/14/15 15:32	12/14/15 15:32	MBF
Volatile Organic Compounds (GC) by Method RSK175	WG835590	40	12/15/15 11:03	12/15/15 11:03	MBF

¹ Cp² Tc³ Ss

754506 L806435-02 GW

			Collected by Gintautas	Collected date/time 12/11/15 11:15	Received date/time 12/12/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method RSK175	WG835387	1	12/14/15 15:51	12/14/15 15:51	MBF
Volatile Organic Compounds (GC) by Method RSK175	WG835590	40	12/15/15 11:05	12/15/15 11:05	MBF

⁴ Cn⁵ Sr⁶ Qc

754506 L806435-03 GW

			Collected by Gintautas	Collected date/time 12/11/15 11:55	Received date/time 12/12/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method RSK175	WG835387	10	12/14/15 16:04	12/14/15 16:04	MBF
Volatile Organic Compounds (GC) by Method RSK175	WG835590	40	12/15/15 11:08	12/15/15 11:08	MBF

⁷ Gl⁸ Al⁹ Sc



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.

Daphne Richards
Technical Service Representative

Sample Handling and Receiving

The following analysis were performed from an unpreserved, insufficiently or inadequately preserved sample.

ESC Sample ID	Project Sample ID	Method
L806435-01	754506	RSK175
L806435-02	754506	RSK175
L806435-03	754506	RSK175

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Methane	17.5		0.400	40	12/15/2015 11:03	WG835590
Ethane	7.78		0.520	40	12/15/2015 11:03	WG835590
Ethene	ND		0.0130	1	12/14/2015 15:32	WG835387
Propane	3.66		0.760	40	12/15/2015 11:03	WG835590

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Methane	12.1		0.400	40	12/15/2015 11:05	WG835590
Ethane	5.92		0.520	40	12/15/2015 11:05	WG835590
Ethene	ND		0.0130	1	12/14/2015 15:51	WG835387
Propane	3.03		0.760	40	12/15/2015 11:05	WG835590

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Methane	16.4		0.400	40	12/15/2015 11:08	WG835590
Ethane	7.82		0.520	40	12/15/2015 11:08	WG835590
Ethene	ND		0.130	10	12/14/2015 16:04	WG835387
Propane	3.99		0.760	40	12/15/2015 11:08	WG835590

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Method Blank (MB)

(MB) 12/14/15 13:58

	MB Result	MB Qualifier	MB RDL
Analyte	ppm		ppm
Ethene	ND		0.0130

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

(LCS) 12/14/15 16:14 • (LCSD) 12/14/15 16:16

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	ppm	ppm	ppm	%	%	%			%	%
Ethene	0.127	0.114	0.131	90.0	103	85.0-115			13.5	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 12/15/15 10:52

Analyte	MB Result ppm	MB Qualifier	MB RDL ppm
Methane	ND		0.0100
Ethane	ND		0.0130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) 12/15/15 12:12 • (LCSD) 12/15/15 12:14

Analyte	Spike Amount ppm	LCS Result ppm	LCSD Result ppm	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	0.0678	0.0678	0.0763	100	113	85.0-115			11.8	20
Ethane	0.129	0.119	0.127	92.3	98.7	85.0-115			6.62	20



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
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.
(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.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
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The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



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

State Accreditations

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

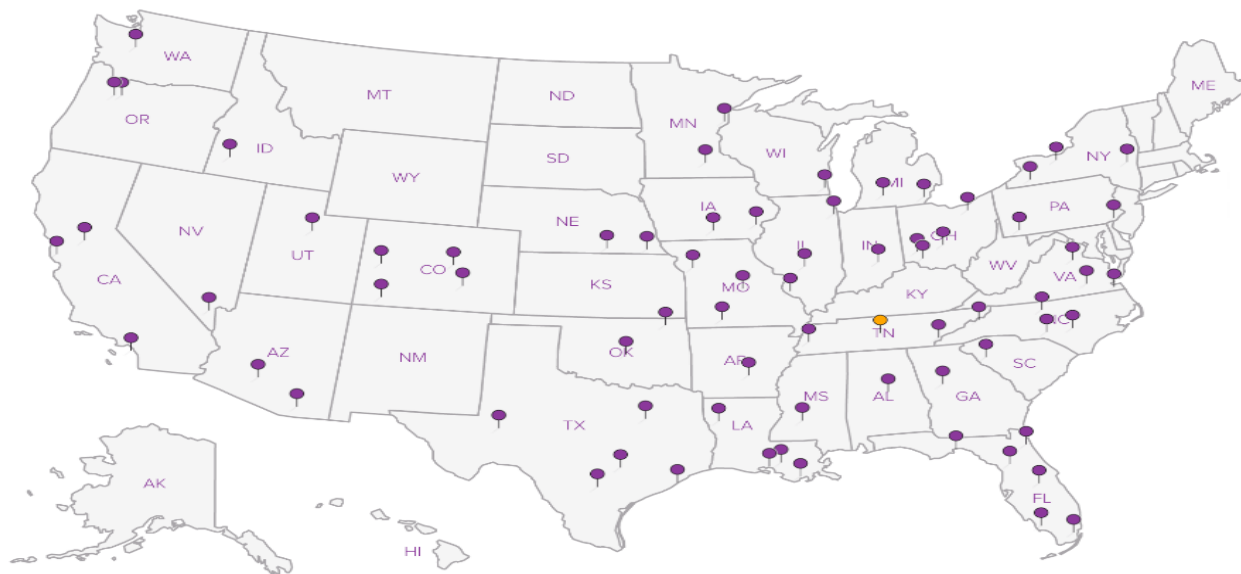
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

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



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