

URSA Resources Group

Sample Delivery Group: L856862
Samples Received: 08/31/2016
Project Number: 609 SUITE-MONUMENT B
Description: URSA - Monument Ridge B - BMP Sample
Site: MR-B (BMP) D.TONDER (168273)
Report To: Kris Rowe / Dwayne Knudson
792 Buckhorn Drive
Rifle, CO 81650

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



D.TONDER-MAIN-WELL #168273 L856862-01 GW

Collected by: Kris Rowe
 Collected date/time: 08/30/16 10:30
 Received date/time: 08/31/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG904443	1	09/02/16 02:32	09/02/16 03:23	JM
Metals (ICP) by Method 6010B	WG904353	1	09/02/16 07:54	09/02/16 10:38	LTB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG904493	1	09/04/16 20:38	09/05/16 18:37	CLG
Volatile Organic Compounds (GC) by Method 8015/8021	WG904279	1	09/01/16 14:43	09/01/16 14:43	LRL
Volatile Organic Compounds (GC) by Method RSK175	WG905036	1	09/04/16 10:41	09/04/16 10:41	MJ
Wet Chemistry by Method 2320 B-2011	WG905692	1	09/07/16 15:03	09/07/16 15:03	MCG
Wet Chemistry by Method 9056A	WG904193	1	09/02/16 20:53	09/02/16 20:53	SAM

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



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. 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.

Shane Gambill
Technical Service Representative

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



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	357		10.0	1	09/02/2016 03:23	WG904443

1 Cp

2 Tc

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Alkalinity	263		20.0	1	09/07/2016 15:03	WG905692
Alkalinity,Bicarbonate	263		20.0	1	09/07/2016 15:03	WG905692
Alkalinity,Carbonate	ND		20.0	1	09/07/2016 15:03	WG905692

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Bromide	ND		1.00	1	09/02/2016 20:53	WG904193
Chloride	21.6		1.00	1	09/02/2016 20:53	WG904193
Fluoride	0.196		0.100	1	09/02/2016 20:53	WG904193
Sulfate	28.9		5.00	1	09/02/2016 20:53	WG904193

6 Qc

7 Gl

8 Al

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Calcium	41.3		1.00	1	09/02/2016 10:38	WG904353
Magnesium	33.9		1.00	1	09/02/2016 10:38	WG904353
Potassium	4.61		1.00	1	09/02/2016 10:38	WG904353
Sodium	48.0		1.00	1	09/02/2016 10:38	WG904353

9 Sc

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.000500	1	09/01/2016 14:43	WG904279
Toluene	ND		0.00500	1	09/01/2016 14:43	WG904279
Ethylbenzene	ND		0.000500	1	09/01/2016 14:43	WG904279
Total Xylene	ND		0.00150	1	09/01/2016 14:43	WG904279
TPH (GC/FID) Low Fraction	ND		0.100	1	09/01/2016 14:43	WG904279
(S) a,a,a-Trifluorotoluene(FID)	98.9		62.0-128		09/01/2016 14:43	WG904279
(S) a,a,a-Trifluorotoluene(PID)	107		55.0-122		09/01/2016 14:43	WG904279

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	09/04/2016 10:41	WG905036
Ethane	ND		0.0130	1	09/04/2016 10:41	WG905036
Ethene	ND		0.0130	1	09/04/2016 10:41	WG905036

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
TPH (GC/FID) High Fraction	ND		0.500	1	09/05/2016 18:37	WG904493
(S) o-Terphenyl	92.6		50.0-150		09/05/2016 18:37	WG904493



Method Blank (MB)

(MB) R3161326-1 09/02/16 03:23

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		2.82	10.0

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L856667-04 Original Sample (OS) • Duplicate (DUP)

(OS) L856667-04 09/02/16 03:23 • (DUP) R3161326-4 09/02/16 03:23

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	261	257	1	1.54		5

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

(LCS) R3161326-2 09/02/16 03:23 • (LCSD) R3161326-3 09/02/16 03:23

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Dissolved Solids	8800	8280	8430	94.1	95.8	85.0-115			1.80	5



Method Blank (MB)

(MB) R3161954-1 09/07/16 10:57

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Alkalinity	U		2.71	20.0
Alkalinity,Bicarbonate	U		2.71	20.0
Alkalinity,Carbonate	U		2.71	20.0

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L857172-01 Original Sample (OS) • Duplicate (DUP)

(OS) L857172-01 09/07/16 11:41 • (DUP) R3161954-2 09/07/16 11:47

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	22.7	23.1	1	2.00		20

L856862-01 Original Sample (OS) • Duplicate (DUP)

(OS) L856862-01 09/07/16 15:03 • (DUP) R3161954-11 09/07/16 15:10

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	263	252	1	4.00		20
Alkalinity,Bicarbonate	263	252	1	4.00		20
Alkalinity,Carbonate	ND	ND	1	0.000		20

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

(LCS) R3161954-3 09/07/16 12:08 • (LCSD) R3161954-10 09/07/16 14:22

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Alkalinity	100	102	103	102	103	85.0-115			1.00	20

L856498-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L856498-01 09/07/16 13:49 • (MS) R3161954-8 09/07/16 13:57 • (MSD) R3161954-9 09/07/16 14:05

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Alkalinity	100	128	185	185	56.0	57.0	1	80.0-120	J6	J6	0.000	20



Method Blank (MB)

(MB) R3161287-1 09/02/16 11:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Bromide	U		0.079	1.00
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

¹ Cp

² Tc

³ Ss

⁴ Cn

L856578-04 Original Sample (OS) • Duplicate (DUP)

(OS) L856578-04 09/02/16 15:51 • (DUP) R3161287-4 09/02/16 16:04

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Bromide	ND	0.000	1	0		15
Chloride	8.06	8.08	1	0		15
Fluoride	0.255	0.253	1	1		15
Sulfate	11.8	11.8	1	0		15

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

L856859-05 Original Sample (OS) • Duplicate (DUP)

(OS) L856859-05 09/02/16 20:24 • (DUP) R3161287-6 09/02/16 20:38

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Bromide	U	0.000	1	0		15
Chloride	3.47	3.63	1	5		15
Fluoride	0.321	0.320	1	0		15
Sulfate	9.71	9.73	1	0		15

⁹ Sc

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

(LCS) R3161287-2 09/02/16 12:00 • (LCSD) R3161287-3 09/02/16 12:15

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Bromide	40.0	39.8	39.8	100	100	80-120			0	15
Chloride	40.0	39.0	39.0	97	97	80-120			0	15
Fluoride	8.00	7.74	7.73	97	97	80-120			0	15
Sulfate	40.0	39.3	39.2	98	98	80-120			0	15



L856858-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L856858-01 09/02/16 18:28 • (MS) R3161287-5 09/02/16 18:43

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Bromide	50.0	ND	89.2	178	1	80-120	<u>J5</u>
Chloride	50.0	10.6	103	185	1	80-120	<u>E J5</u>
Fluoride	5.00	0.356	8.94	172	1	80-120	<u>J5</u>
Sulfate	50.0	32.1	121	177	1	80-120	<u>E J5</u>

¹ Cp

² Tc

³ Ss

⁴ Cn

L856870-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L856870-06 09/02/16 22:48 • (MS) R3161287-7 09/02/16 23:02 • (MSD) R3161287-8 09/02/16 23:17

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromide	50.0	U	46.5	47.3	93	95	1	80-120			2	15
Chloride	50.0	9.45	59.7	54.5	101	90	1	80-120			9	15
Fluoride	5.00	0.291	5.19	5.36	98	101	1	80-120			3	15
Sulfate	50.0	71.0	116	116	90	90	1	80-120	<u>E</u>	<u>E</u>	0	15

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3161116-1 09/02/16 10:21

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Calcium	U		0.0463	1.00
Magnesium	0.0306	J	0.0111	1.00
Potassium	U		0.102	1.00
Sodium	0.288	J	0.0985	1.00

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) R3161116-2 09/02/16 10:23 • (LCSD) R3161116-3 09/02/16 10:26

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Calcium	10.0	10.1	10.0	101	100	80-120			1	20
Magnesium	10.0	10.6	10.6	106	106	80-120			0	20
Potassium	10.0	10.2	10.1	102	101	80-120			1	20
Sodium	10.0	9.80	9.78	98	98	80-120			0	20

L856858-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L856858-01 09/02/16 10:28 • (MS) R3161116-5 09/02/16 10:33 • (MSD) R3161116-6 09/02/16 10:36

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Calcium	10.0	27.7	37.6	37.9	99	102	1	75-125			1	20
Magnesium	10.0	24.9	34.7	35.2	98	103	1	75-125			1	20
Potassium	10.0	4.52	14.7	14.6	102	101	1	75-125			0	20
Sodium	10.0	79.6	87.0	87.3	74	77	1	75-125	V		0	20



Method Blank (MB)

(MB) R3160847-3 09/01/16 07:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.000190	0.000500
Toluene	0.000691	↓	0.000180	0.00500
Ethylbenzene	0.000324	↓	0.000160	0.000500
Total Xylene	0.00107		0.000510	0.00150
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	99.6			62.0-128
(S) a,a,a-Trifluorotoluene(PID)	108			55.0-122

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

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

(LCS) R3160847-1 09/01/16 06:21 • (LCSD) R3160847-2 09/01/16 06:44

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 %
TPH (GC/FID) Low Fraction	5.50	4.96	4.62	90.2	84.0	67.0-132			7.16	20
(S) a,a,a-Trifluorotoluene(FID)				109	108	62.0-128				
(S) a,a,a-Trifluorotoluene(PID)				119	119	55.0-122				

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) R3160847-4 09/01/16 05:37 • (LCSD) R3160847-5 09/01/16 05:59

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	0.0526	0.0529	105	106	70.0-130			0.450	20
Toluene	0.0500	0.0523	0.0517	105	103	70.0-130			1.31	20
Ethylbenzene	0.0500	0.0515	0.0512	103	102	70.0-130			0.520	20
Total Xylene	0.150	0.158	0.155	105	103	70.0-130			1.54	20
(S) a,a,a-Trifluorotoluene(FID)				98.4	99.1	62.0-128				
(S) a,a,a-Trifluorotoluene(PID)				107	107	55.0-122				

L856862-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L856862-01 09/01/16 14:43 • (MS) R3160847-6 09/01/16 12:07 • (MSD) R3160847-7 09/01/16 12:30

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	0.0480	0.0479	95.6	95.3	1	57.2-131			0.250	20
Toluene	0.0500	ND	0.0472	0.0473	93.6	93.7	1	63.7-134			0.0400	20
Ethylbenzene	0.0500	ND	0.0462	0.0466	92.5	93.2	1	67.5-135			0.750	20
Total Xylene	0.150	ND	0.141	0.142	93.4	94.4	1	65.9-138			1.10	20
(S) a,a,a-Trifluorotoluene(FID)					98.7	98.6		62.0-128				



L856862-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L856862-01 09/01/16 14:43 • (MS) R3160847-6 09/01/16 12:07 • (MSD) R3160847-7 09/01/16 12:30

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 %
(S) a,a,a-Trifluorotoluene(PID)					106	107		55.0-122				

L856862-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L856862-01 09/01/16 14:43 • (MS) R3160847-8 09/01/16 12:52 • (MSD) R3160847-9 09/01/16 13:14

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	4.56	5.02	82.8	91.3	1	50.0-143			9.71	20
(S) a,a,a-Trifluorotoluene(FID)					108	108		62.0-128				
(S) a,a,a-Trifluorotoluene(PID)					118	119		55.0-122				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3161371-1 09/04/16 10:32

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Methane	U		0.00291	0.0100
Ethane	U		0.00407	0.0130
Ethene	U		0.00426	0.0130

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L856858-01 Original Sample (OS) • Duplicate (DUP)

(OS) L856858-01 09/04/16 10:39 • (DUP) R3161371-2 09/04/16 11:16

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

L857071-20 Original Sample (OS) • Duplicate (DUP)

(OS) L857071-20 09/04/16 12:20 • (DUP) R3161371-3 09/04/16 12:53

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

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

(LCS) R3161371-4 09/04/16 12:56 • (LCSD) R3161371-5 09/04/16 13:00

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Methane	0.0678	0.0633	0.0635	93.4	93.6	85.0-115			0.230	20
Ethane	0.129	0.121	0.122	93.6	94.4	85.0-115			0.860	20
Ethene	0.127	0.116	0.117	91.7	92.3	85.0-115			0.680	20



Method Blank (MB)

(MB) R3161577-1 09/05/16 12:22

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
TPH (GC/FID) High Fraction	U		0.0247	0.500
(S) o-Terphenyl	85.8			50.0-150

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

(LCS) R3161577-2 09/05/16 12:41 • (LCSD) R3161577-3 09/05/16 12:59

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
TPH (GC/FID) High Fraction	1.50	1.31	1.28	87.4	85.3	50.0-150			2.38	20
(S) o-Terphenyl				91.7	94.3	50.0-150				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
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.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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.

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		

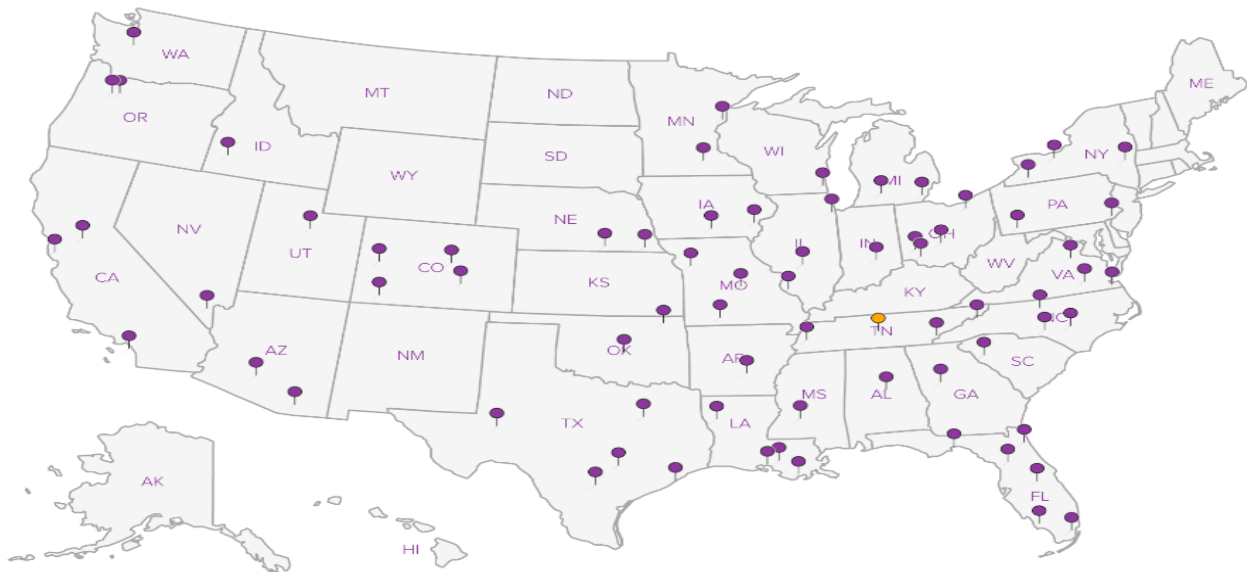
Third Party & Federal Accreditations

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.**



¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

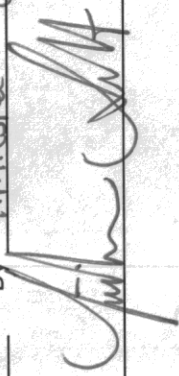
⁸ Al

⁹ Sc

Cooler Receipt Checklist

Client: ARLCSXO SDG# L856867

Cooler Received/Opened On: 8/31/16 By Timiessa Scott

Temperature Upon Receipt: 3.2 °C  (Signature)

Cooler Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?			<input checked="" type="checkbox"/>
Were custody papers properly filled out (ink, signed, etc.)?	<input checked="" type="checkbox"/>		
Did all bottles arrive in good condition?	<input checked="" type="checkbox"/>		
Were correct bottles used for the analyses requested?	<input checked="" type="checkbox"/>		
Was sufficient amount of sample sent in each bottle?	<input checked="" type="checkbox"/>		
Were correct preservatives used?	<input checked="" type="checkbox"/>		
Were all applicable sample containers checked for preservation? (Any samples not in accepted pH range noted on COC.)	<input checked="" type="checkbox"/>		
If applicable, was an observable VOA headspace present?			<input checked="" type="checkbox"/>
Non Conformance Generated? (If yes see attached NCF)			<input checked="" type="checkbox"/>

