

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

September 30, 2019

Jeremy Pike

LT Environmental, Inc.

4600 West 60th Avenue

Arvada, CO 80003

RE: Reservoir Federal #1

Work Order # 1909304

Enclosed are the results of analyses for samples received by Summit Scientific on 09/24/19 18:08. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink on a light blue background. The signature is written in a cursive style and reads "Muri Premier".

Muri Premier For Ben Shrewsbury

Laboratory Manager



LT Environmental, Inc.
4600 West 60th Avenue
Arvada CO, 80003

Project: Reservoir Federal #1

Project Number: 027317021
Project Manager: Jeremy Pike

Reported:
09/30/19 17:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW01R	1909304-01	Water	09/24/19 11:35	09/24/19 18:08
MW02R	1909304-02	Water	09/24/19 12:15	09/24/19 18:08
MW03	1909304-03	Water	09/24/19 14:18	09/24/19 18:08
MW04	1909304-04	Water	09/24/19 15:10	09/24/19 18:08
MW05	1909304-05	Water	09/24/19 13:51	09/24/19 18:08
MW06	1909304-06	Water	09/24/19 14:45	09/24/19 18:08
MW08	1909304-07	Water	09/24/19 13:35	09/24/19 18:08
MW09R	1909304-08	Water	09/24/19 13:05	09/24/19 18:08
MW10	1909304-09	Water	09/24/19 15:32	09/24/19 18:08

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1909304

741 Corporate Circle Suite I ♦ Golden, Colorado 80401
303-277-9310 ♦ 303-374-5933 Fax

Page 1 of 1

Client: LT Environmental, Inc.
Address: 4600 W. 60th Ave.
City/State/Zip: Arvada, Colorado 80003
Phone: 303-433-9788 Fax:
Sampler Name: Nikola B. Welch

Project Manager: Jeremy Pike
E-Mail: jpik@ltenv.com, rrebel@ltenv.com
Project Name: Reservoir Federal #1
Project Number: 027317021

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix			Analyze For:										Special Instructions		
				HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	BTEX EPA 8260											
MW01R	09/24/19	1135	3			✓		✓				✓											
MW02R	09/24/19	1215	3			✓		✓				✓											
MW03	09/24/19	1418	3			✓		✓				✓											
MW04	09/24/19	1510	3			✓		✓				✓											
MW05	09/24/19	1351	3			✓		✓				✓											
MW06	09/24/19	1445	3			✓		✓				✓											
MW07 C-9-24-19																							
MW08	09/24/19	1335	3			✓		✓				✓											
MW09R	09/24/19	1305	3			✓		✓				✓											
MW10	09/24/19	1532	3			✓		✓				✓											

Relinquished by: <u>NB</u>	Date/Time: <u>09/24/19 1808</u>	Received by: <u>[Signature]</u>	Date/Time: <u>9-24-19 18.08</u>	Turn Around Time (Check)	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day <input type="checkbox"/> 72 Hours <input type="checkbox"/> 24 Hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 48 Hours <input type="checkbox"/>	
Relinquished by:	Date/Time:	Received in Lab by:	Date/Time:	Sample Integrity: Temperature Upon Receipt: <u>1.8</u> Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Sample Receipt Checklist

S2 Work Order **1909304**

Client: UT Client Project ID: Reservoir Federal #1

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other Airbill #: _____

Matrix (check all that apply): Air Soil/Solid Water Other: _____
(Describe)

Temp (°C)	<u>1.8</u>
-----------	------------

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.				
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact ⁽¹⁾ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	extra sample listed
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect				
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Record the pH in Comments.				
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.

CS
Custodian Printed Name or Initials

[Signature]
Signature of Custodian

9-24-19 18:10
Date/Time



LT Environmental, Inc.
4600 West 60th Avenue
Arvada CO, 80003

Project: Reservoir Federal #1

Project Number: 027317021
Project Manager: Jeremy Pike

Reported:
09/30/19 17:03

MW01R
1909304-01 (Water)

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Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/24/19 11:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	1909334	09/25/19	09/25/19	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **09/24/19 11:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		108 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		99.3 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %		21-167		"	"	"	"	

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LT Environmental, Inc.
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Project: Reservoir Federal #1

Project Number: 027317021
Project Manager: Jeremy Pike

Reported:
09/30/19 17:03

MW02R
1909304-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/24/19 12:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1909334	09/25/19	09/26/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **09/24/19 12:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		114 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		96.4 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.5 %	21-167		"	"	"	"	

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Project: Reservoir Federal #1

Project Number: 027317021
Project Manager: Jeremy Pike

Reported:
09/30/19 17:03

MW03
1909304-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/24/19 14:18**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	82	1.0	ug/l	1	1909334	09/25/19	09/27/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	14	1.0	"	"	"	"	"	"	
Xylenes (total)	68	2.0	"	"	"	"	"	"	

Date Sampled: **09/24/19 14:18**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		91.5 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		97.4 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	21-167		"	"	"	"	

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Project: Reservoir Federal #1

Project Number: 027317021
Project Manager: Jeremy Pike

Reported:
09/30/19 17:03

MW04
1909304-04 (Water)

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Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/24/19 15:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1909334	09/25/19	09/26/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **09/24/19 15:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		110 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		93.7 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	21-167		"	"	"	"	

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Project: Reservoir Federal #1

Project Number: 027317021
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Reported:
09/30/19 17:03

MW05
1909304-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/24/19 13:51**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	930	100	ug/l	100	1909334	09/25/19	09/27/19	EPA 8260B	
Toluene	ND	1.0	"	1	"	"	"	"	
Ethylbenzene	3.7	1.0	"	"	"	"	"	"	
Xylenes (total)	68	2.0	"	"	"	"	"	"	

Date Sampled: **09/24/19 13:51**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		91.6 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.6 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	21-167		"	"	"	"	

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Reported:
09/30/19 17:03

MW06
1909304-06 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/24/19 14:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1909334	09/25/19	09/26/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **09/24/19 14:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		112 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		96.5 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.1 %	21-167		"	"	"	"	

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Project: Reservoir Federal #1

Project Number: 027317021
Project Manager: Jeremy Pike

Reported:
09/30/19 17:03

MW08
1909304-07 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/24/19 13:35**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1909334	09/25/19	09/26/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **09/24/19 13:35**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		112 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		95.8 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.4 %	21-167		"	"	"	"	

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Reported:
09/30/19 17:03

MW09R
1909304-08 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/24/19 13:05**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1909334	09/25/19	09/26/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **09/24/19 13:05**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		115 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		96.8 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.1 %	21-167		"	"	"	"	

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4600 West 60th Avenue
Arvada CO, 80003

Project: Reservoir Federal #1

Project Number: 027317021
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Reported:
09/30/19 17:03

MW10
1909304-09 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/24/19 15:32**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1909334	09/25/19	09/26/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **09/24/19 15:32**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		110 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		95.3 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.2 %	21-167		"	"	"	"	

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Arvada CO, 80003

Project: Reservoir Federal #1

Project Number: 027317021
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Reported:
09/30/19 17:03

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 1909334 - EPA 5030 Water MS

Blank (1909334-BLK1)

Prepared & Analyzed: 09/25/19

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Surrogate: 1,2-Dichloroethane-d4	14.7		"	13.3		110	23-173			
Surrogate: Toluene-d8	13.2		"	13.3		98.9	20-170			
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		98.7	21-167			

LCS (1909334-BS1)

Prepared & Analyzed: 09/25/19

Benzene	34.2	1.0	ug/l	33.3		103	51-132			
Toluene	35.9	1.0	"	33.3		108	51-138			
Ethylbenzene	37.5	1.0	"	33.3		113	58-146			
m,p-Xylene	69.4	2.0	"	66.7		104	57-144			
o-Xylene	34.9	1.0	"	33.3		105	53-146			
Surrogate: 1,2-Dichloroethane-d4	13.2		"	13.3		98.6	23-173			
Surrogate: Toluene-d8	13.8		"	13.3		103	20-170			
Surrogate: 4-Bromofluorobenzene	12.8		"	13.3		95.6	21-167			

Matrix Spike (1909334-MS1)

Source: 1909304-01

Prepared & Analyzed: 09/25/19

Benzene	35.4	1.0	ug/l	33.3	ND	106	34-141			
Toluene	37.3	1.0	"	33.3	ND	112	27-151			
Ethylbenzene	39.5	1.0	"	33.3	ND	118	29-160			
m,p-Xylene	72.6	2.0	"	66.7	ND	109	20-166			
o-Xylene	36.6	1.0	"	33.3	ND	110	33-159			
Surrogate: 1,2-Dichloroethane-d4	13.6		"	13.3		102	23-173			
Surrogate: Toluene-d8	13.5		"	13.3		101	20-170			
Surrogate: 4-Bromofluorobenzene	12.7		"	13.3		95.3	21-167			

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Project Number: 027317021
Project Manager: Jeremy Pike

Reported:
09/30/19 17:03

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 1909334 - EPA 5030 Water MS

Matrix Spike Dup (1909334-MSD1)		Source: 1909304-01			Prepared & Analyzed: 09/25/19					
Benzene	37.1	1.0	ug/l	33.3	ND	111	34-141	4.63	30	
Toluene	38.8	1.0	"	33.3	ND	116	27-151	3.95	30	
Ethylbenzene	41.6	1.0	"	33.3	ND	125	29-160	5.32	30	
m,p-Xylene	76.2	2.0	"	66.7	ND	114	20-166	4.83	30	
o-Xylene	38.6	1.0	"	33.3	ND	116	33-159	5.40	30	
Surrogate: 1,2-Dichloroethane-d4	13.2		"	13.3		99.1	23-173			
Surrogate: Toluene-d8	13.2		"	13.3		99.3	20-170			
Surrogate: 4-Bromofluorobenzene	12.6		"	13.3		94.1	21-167			

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Project Number: 027317021
Project Manager: Jeremy Pike

Reported:
09/30/19 17:03

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference