

# Summit Scientific

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741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

May 15, 2018

Jeremy Pike

LT Environmental, Inc.

4600 West 60th Avenue

Arvada, CO 80003

RE: Reservoir Federal #1

Enclosed are the results of analyses for samples received by Summit Scientific on 05/08/18 16:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Paul Shrewsbury 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:**  
05/15/18 11:21

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW01	1805086-01	Water	05/08/18 12:50	05/08/18 16:00
MW02	1805086-02	Water	05/08/18 13:05	05/08/18 16:00
MW03	1805086-03	Water	05/08/18 13:50	05/08/18 16:00
MW04	1805086-04	Water	05/08/18 13:35	05/08/18 16:00
MW05	1805086-05	Water	05/08/18 14:05	05/08/18 16:00
MW06	1805086-06	Water	05/08/18 13:20	05/08/18 16:00

Summit Scientific

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# Summit Scientific

1805086

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: Drew Bullinger

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 <sub>3</sub>	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	BTEX EPA 8260													
MW01	5/8/18	12:50	3	X				X						X											
MW02	5/8/18	13:05	3	X				X						X											
MW03	5/8/18	13:50	3	X				X						X											
MW04	5/8/18	13:35	3	X				X						X											
MW05	5/8/18	14:05	3	K				K						X											
MW06	5/8/18	13:20	3	X				X						X											
Relinquished by: <u>Drew Bullinger</u>				Date/Time: <u>5/8/18 16:00</u>	Received by: <u>[Signature]</u>				Date/Time: <u>5-8-18 16:00</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>4.2</u>															
										Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>															

Sample Receipt Checklist

S2 Work Order: 1805086

Client: LT Env. Client Project ID: Reservoir Federal #1

Shipped Via: P.U. Airbill #: \_\_\_\_\_  
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

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

Cooler ID					
Temp (°C)	4.2				

Thermometer ID: 61857155-K

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

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

Muri  
Custodian Printed Name

MA 5-8-18  
Signature or Initials of Custodian

17:40  
Date/Time



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

Project: Reservoir Federal #1

Project Number: 027317021  
 Project Manager: Jeremy Pike

**Reported:**  
 05/15/18 11:21

**MW01**  
**1805086-01 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **05/08/18 12:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1805080	05/08/18	05/11/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **05/08/18 12:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		123 %	70-130		"	"	"	"	
Surrogate: Toluene-d8		95.4 %	70-130		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	70-130		"	"	"	"	

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Project: Reservoir Federal #1

Project Number: 027317021  
 Project Manager: Jeremy Pike

**Reported:**  
 05/15/18 11:21

**MW02**  
**1805086-02 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **05/08/18 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>26</b>	1.0	ug/l	1	1805080	05/08/18	05/11/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **05/08/18 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		118 %	70-130		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		95.6 %	70-130		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		101 %	70-130		"	"	"	"	

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Project Number: 027317021  
 Project Manager: Jeremy Pike

**Reported:**  
 05/15/18 11:21

**MW03**  
**1805086-03 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **05/08/18 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>730</b>	25	ug/l	25	1805080	05/08/18	05/11/18	EPA 8260B	
<b>Toluene</b>	<b>1.1</b>	1.0	"	1	"	"	"	"	
<b>Ethylbenzene</b>	<b>1000</b>	25	"	25	"	"	"	"	
<b>Xylenes (total)</b>	<b>3100</b>	50	"	"	"	"	"	"	

Date Sampled: **05/08/18 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		130 %	70-130		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		98.4 %	70-130		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		110 %	70-130		"	"	"	"	

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 Arvada CO, 80003

Project: Reservoir Federal #1

Project Number: 027317021  
 Project Manager: Jeremy Pike

**Reported:**  
 05/15/18 11:21

**MW04**  
**1805086-04 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **05/08/18 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1805080	05/08/18	05/11/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **05/08/18 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		122 %	70-130		"	"	"	"	
Surrogate: Toluene-d8		96.8 %	70-130		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	70-130		"	"	"	"	

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Project: Reservoir Federal #1

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 Project Manager: Jeremy Pike

**Reported:**  
 05/15/18 11:21

**MW05**  
**1805086-05 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **05/08/18 14:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>1300</b>	25	ug/l	25	1805080	05/08/18	05/11/18	EPA 8260B	
<b>Toluene</b>	<b>3.8</b>	1.0	"	1	"	"	"	"	
<b>Ethylbenzene</b>	<b>600</b>	25	"	25	"	"	"	"	
<b>Xylenes (total)</b>	<b>2100</b>	50	"	"	"	"	"	"	

Date Sampled: **05/08/18 14:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		131 %	70-130		"	"	"	"	S-02
<i>Surrogate: Toluene-d8</i>		98.5 %	70-130		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		109 %	70-130		"	"	"	"	

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 05/15/18 11:21

**MW06**  
**1805086-06 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **05/08/18 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1805080	05/08/18	05/11/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **05/08/18 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		123 %	70-130		"	"	"	"	
Surrogate: Toluene-d8		96.7 %	70-130		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	70-130		"	"	"	"	

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Reported:  
05/15/18 11:21

### Volatile Organic Compounds by EPA Method 8260B - Quality Control

#### Summit Scientific

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

#### Batch 1805080 - EPA 5030 Water MS

##### Blank (1805080-BLK1)

Prepared: 05/08/18 Analyzed: 05/09/18

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Surrogate: 1,2-Dichloroethane-d4	14.0		"	13.2		106	70-130			
Surrogate: Toluene-d8	13.3		"	13.3		99.6	70-130			
Surrogate: 4-Bromofluorobenzene	13.3		"	13.3		100	70-130			

##### LCS (1805080-BS1)

Prepared: 05/08/18 Analyzed: 05/09/18

Benzene	50.8	1.0	ug/l	50.0		102	70-130			
Toluene	50.6	1.0	"	50.0		101	70-130			
Ethylbenzene	51.3	1.0	"	50.0		103	70-130			
m,p-Xylene	100	2.0	"	100		100	70-130			
o-Xylene	52.1	1.0	"	50.0		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	13.7		"	13.2		104	70-130			
Surrogate: Toluene-d8	13.5		"	13.3		101	70-130			
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		99.4	70-130			

##### Matrix Spike (1805080-MS1)

Source: 1805060-01

Prepared: 05/08/18 Analyzed: 05/09/18

Benzene	70.6	1.0	ug/l	50.0		141	70-130			QM-07
Toluene	71.1	1.0	"	50.0		142	70-130			QM-07
Ethylbenzene	72.6	1.0	"	50.0		145	70-130			QM-07
m,p-Xylene	142	2.0	"	100		142	70-130			QM-07
o-Xylene	72.5	1.0	"	50.0		145	70-130			QM-07
Surrogate: 1,2-Dichloroethane-d4	12.8		"	13.2		96.8	70-130			
Surrogate: Toluene-d8	13.6		"	13.3		102	70-130			
Surrogate: 4-Bromofluorobenzene	13.8		"	13.3		103	70-130			

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05/15/18 11:21

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

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

**Batch 1805080 - EPA 5030 Water MS**

<b>Matrix Spike Dup (1805080-MSD1)</b>	<b>Source: 1805060-01</b>			Prepared: 05/08/18	Analyzed: 05/09/18					
Benzene	57.0	1.0	ug/l	50.0	114	70-130	21.4	30	QM-07	
Toluene	57.7	1.0	"	50.0	115	70-130	20.9	30	QM-07	
Ethylbenzene	58.2	1.0	"	50.0	116	70-130	22.0	30	QM-07	
m,p-Xylene	114	2.0	"	100	114	70-130	22.1	30	QM-07	
o-Xylene	59.3	1.0	"	50.0	119	70-130	20.0	30	QM-07	
Surrogate: 1,2-Dichloroethane-d4	13.1		"	13.2	99.2	70-130				
Surrogate: Toluene-d8	13.4		"	13.3	100	70-130				
Surrogate: 4-Bromofluorobenzene	13.0		"	13.3	97.2	70-130				

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### Notes and Definitions

- S-02      The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
- QM-07    The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
- 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