

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

July 26, 2019

Jeremy Pike

LT Environmental, Inc.

4600 West 60th Avenue

Arvada, CO 80003

RE: Vic 1

Work Order # 1907263

Enclosed are the results of analyses for samples received by Summit Scientific on 07/23/19 17:21. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Paul Shrewsbury', written in a cursive style.

Paul Shrewsbury For Ben Shrewsbury

Laboratory Manager



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

Project: Vic 1

Project Number: 027318139  
Project Manager: Jeremy Pike

**Reported:**  
07/26/19 06:48

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS01@19'	1907263-01	Soil	07/23/19 15:45	07/23/19 17:21



**Sample Receipt Checklist**

S2 Work Order 1907263

Client: LTE Client Project ID: Vic 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>9.9°</u>
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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.	✓			on ice
Were all samples received intact <sup>(1)</sup> ?	✓			
Was adequate sample volume provided <sup>(1)</sup> ?	✓			
If custody seals are present, are they intact <sup>(1)</sup> ?			✓	
Are samples with holding times due within 48 hours sample due within 48 hours present?	✓			Same Day
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	✓			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	✓			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	✓			
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	✓			
For volatiles in water – is there headspace present? <b>If yes, contact client and note in narrative.</b>			✓	
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			✓	
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ? Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	

Additional Comments (if any):

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

AT  
Custodian Printed Name or Initials

[Signature]  
Signature of Custodian

7-23-19 17:20  
Date/Time



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07/26/19 06:48

**SS01@19'**  
**1907263-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **07/23/19 15:45**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Benzene</b>	<b>3.3</b>	0.20	mg/kg	100	1907326	07/23/19	07/24/19	EPA 8260B	
<b>Toluene</b>	<b>110</b>	0.50	"	"	"	"	"	"	E
<b>Ethylbenzene</b>	<b>81</b>	0.50	"	"	"	"	"	"	E
<b>Xylenes (total)</b>	<b>690</b>	1.0	"	"	"	"	"	"	E
<b>Gasoline Range Hydrocarbons</b>	<b>11000</b>	50	"	"	"	"	"	"	E

Date Sampled: **07/23/19 15:45**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<i>Surrogate: 1,2-Dichloroethane-d4</i>		88.4 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		95.9 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		338 %	21-167		"	"	"	"	S-02

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **07/23/19 15:45**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>C10-C28 (DRO)</b>	<b>2300</b>	50	mg/kg	1	1907327	07/23/19	07/23/19	EPA 8015M	

Date Sampled: **07/23/19 15:45**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<i>Surrogate: o-Terphenyl</i>		117 %	30-150		"	"	"	"	

Summit Scientific

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Project: Vic 1

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**Reported:**  
07/26/19 06:48

**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 1907326 - EPA 5030 Soil MS**

**Blank (1907326-BLK1)**

Prepared: 07/23/19 Analyzed: 07/24/19

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0233		"	0.0400		58.2	23-173			
Surrogate: Toluene-d8	0.0365		"	0.0400		91.4	20-170			
Surrogate: 4-Bromofluorobenzene	0.0352		"	0.0400		88.0	21-167			

**LCS (1907326-BS1)**

Prepared: 07/23/19 Analyzed: 07/24/19

Benzene	0.0785	0.0020	mg/kg	0.100		78.5	70-130			
Toluene	0.0870	0.0050	"	0.100		87.0	70-130			
Ethylbenzene	0.117	0.0050	"	0.100		117	70-130			
m,p-Xylene	0.231	0.010	"	0.200		115	70-130			
o-Xylene	0.102	0.0050	"	0.100		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0234		"	0.0400		58.6	23-173			
Surrogate: Toluene-d8	0.0377		"	0.0400		94.2	20-170			
Surrogate: 4-Bromofluorobenzene	0.0351		"	0.0400		87.8	21-167			

**Matrix Spike (1907326-MS1)**

Source: 1907262-03

Prepared: 07/23/19 Analyzed: 07/24/19

Benzene	0.0823	0.0020	mg/kg	0.100	ND	82.3	70-130			
Toluene	0.0901	0.0050	"	0.100	ND	90.1	70-130			
Ethylbenzene	0.111	0.0050	"	0.100	ND	111	70-130			
m,p-Xylene	0.221	0.010	"	0.200	0.00351	109	70-130			
o-Xylene	0.100	0.0050	"	0.100	ND	100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0281		"	0.0400		70.2	23-173			
Surrogate: Toluene-d8	0.0382		"	0.0400		95.4	20-170			
Surrogate: 4-Bromofluorobenzene	0.0356		"	0.0400		89.0	21-167			

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**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 1907326 - EPA 5030 Soil MS**

**Matrix Spike Dup (1907326-MSD1)**

**Source: 1907262-03**

Prepared: 07/23/19 Analyzed: 07/24/19

Benzene	0.0790	0.0020	mg/kg	0.100	ND	79.0	70-130	4.09	30
Toluene	0.0860	0.0050	"	0.100	ND	86.0	70-130	4.67	30
Ethylbenzene	0.114	0.0050	"	0.100	ND	114	70-130	2.70	30
m,p-Xylene	0.225	0.010	"	0.200	0.00351	111	70-130	2.01	30
o-Xylene	0.100	0.0050	"	0.100	ND	100	70-130	0.180	30
Surrogate: 1,2-Dichloroethane-d4	0.0245		"	0.0400		61.4	23-173		
Surrogate: Toluene-d8	0.0371		"	0.0400		92.8	20-170		
Surrogate: 4-Bromofluorobenzene	0.0351		"	0.0400		87.8	21-167		

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**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch 1907327 - EPA 3550A**

**Blank (1907327-BLK1)**

Prepared: 07/23/19 Analyzed: 07/24/19

C10-C28 (DRO) ND 50 mg/kg

**LCS (1907327-BS1)**

Prepared: 07/23/19 Analyzed: 07/24/19

C10-C28 (DRO) 531 50 mg/kg 500 106 70-130

**Matrix Spike (1907327-MS1)**

Source: 1907262-03

Prepared: 07/23/19 Analyzed: 07/24/19

C10-C28 (DRO) 523 50 mg/kg 500 28.8 98.8 70-130

**Matrix Spike Dup (1907327-MSD1)**

Source: 1907262-03

Prepared: 07/23/19 Analyzed: 07/24/19

C10-C28 (DRO) 540 50 mg/kg 500 28.8 102 70-130 3.19 20

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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.
- E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.
- 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