

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

July 29, 2019

Jeremy Pike

LT Environmental, Inc.

4600 West 60th Avenue

Arvada, CO 80003

RE: Vic 1

Work Order # 1907322

Enclosed are the results of analyses for samples received by Summit Scientific on 07/26/19 16:35. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. 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:
07/29/19 06:31

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS03@16'	1907322-01	Soil	07/26/19 11:30	07/26/19 16:35
SS04@16'	1907322-02	Soil	07/26/19 12:00	07/26/19 16:35
SS05@18'	1907322-03	Soil	07/26/19 12:30	07/26/19 16:35

Summit Scientific

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Summit Scientific

S₂

1907322

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310 ♦ 303-374-5933 (f)

Page 1 of 1

Client: LT Environmental, Inc. Project Manager: Jeremy Pike
Address: 4600 West 60th Avenue E-Mail: jpik@ltenv.com, rebel@ltenv.com
City/State/Zip: Arvada, Colorado 80003
Phone: 303-433-9788 Project Name: Vic 1
Sampler Name: Brandon Finn Project Number: 027318139

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested				Special Instructions		
					HCl	HNO ₃	None	Other	Water	Soil	Air-Canister #	Other	GBTEX	TPH-DRO					
1	SS03@16'	07/26/19	1130	2			X			X				X	X				
2	SS04@16'	↓	1200	↓										↓	↓				
3	SS05@18'	↓	1230	↓										↓	↓				
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Relinquished by: <u>Brandon Finn</u>	Date/Time: 07/26/2019 1635	Received by: <u>[Signature]</u>	Date/Time: 7-26-19 16:35	Turn Around Time (Check) Same Day <input checked="" type="checkbox"/> 72 hours <input type="checkbox"/> 24 hours <input type="checkbox"/> Standard 48 hours <input type="checkbox"/> Sample Integrity: Temperature Upon Receipt: 134 Samples Intact: <input checked="" type="checkbox"/> Yes No	Just need the results by 11 a.m. Monday 07/29/2019
Relinquished by:	Date/Time:	Received by:	Date/Time:		
Relinquished by:	Date/Time:	Received by:	Date/Time:		

Sample Receipt Checklist

S2 Work Order 1907322

Client: LT Environmental 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)	13.4
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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 ⁽¹⁾ ? 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 ⁽¹⁾ ?	✓			
Was adequate sample volume provided ⁽¹⁾ ?	✓			
If custody seals are present, are they intact ⁽¹⁾ ?			✓	
Are samples with holding times due within 48 hours sample due within 48 hours present?	✓			Same Day TAT
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	✓			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	✓			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	✓			
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	✓			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			✓	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ? 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⁾ ? Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	

Additional Comments (if any):

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

MP
Custodian Printed Name or Initials

Muri Premer
Signature of Custodian

7/26/19
Date/Time



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

Project: Vic 1

Project Number: 027318139
Project Manager: Jeremy Pike

Reported:
07/29/19 06:31

SS03@16'
1907322-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/26/19 11:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	1907377	07/26/19	07/26/19	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **07/26/19 11:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		99.4 %		23-173	"	"	"	"	
Surrogate: Toluene-d8		97.3 %		20-170	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		86.1 %		21-167	"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/26/19 11:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	1907378	"	07/27/19	EPA 8015M	

Date Sampled: **07/26/19 11:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		119 %		30-150	"	"	"	"	

Summit Scientific

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

Project: Vic 1

Project Number: 027318139
Project Manager: Jeremy Pike

Reported:
07/29/19 06:31

SS04@16'
1907322-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/26/19 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1907377	07/26/19	07/26/19	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **07/26/19 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		59.4 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		89.8 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.8 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/26/19 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1907378	"	07/27/19	EPA 8015M	

Date Sampled: **07/26/19 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		126 %	30-150		"	"	"	"	

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Project: Vic 1
Project Number: 027318139
Project Manager: Jeremy Pike

Reported:
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SS05@18'
1907322-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/26/19 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1907377	07/26/19	07/27/19	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **07/26/19 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		94.3 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		86.3 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/26/19 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1907378	"	07/27/19	EPA 8015M	

Date Sampled: **07/26/19 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		113 %	30-150		"	"	"	"	

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Project: Vic 1

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Reported:
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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 1907377 - EPA 5030 Soil MS

Blank (1907377-BLK1)

Prepared & Analyzed: 07/26/19

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	0.0241		"	0.0400		60.2			23-173	
Surrogate: Toluene-d8	0.0364		"	0.0400		91.0			20-170	
Surrogate: 4-Bromofluorobenzene	0.0349		"	0.0400		87.2			21-167	

LCS (1907377-BS1)

Prepared & Analyzed: 07/26/19

Benzene	0.0776	0.0020	mg/kg	0.100		77.6			70-130	
Toluene	0.0846	0.0050	"	0.100		84.6			70-130	
Ethylbenzene	0.110	0.0050	"	0.100		110			70-130	
m,p-Xylene	0.215	0.010	"	0.200		107			70-130	
o-Xylene	0.0977	0.0050	"	0.100		97.7			70-130	
Surrogate: 1,2-Dichloroethane-d4	0.0266		"	0.0400		66.4			23-173	
Surrogate: Toluene-d8	0.0370		"	0.0400		92.6			20-170	
Surrogate: 4-Bromofluorobenzene	0.0356		"	0.0400		89.0			21-167	

Matrix Spike (1907377-MS1)

Source: 1907322-01

Prepared & Analyzed: 07/26/19

Benzene	0.0766	0.0020	mg/kg	0.100	ND	76.6			70-130	
Toluene	0.0840	0.0050	"	0.100	ND	84.0			70-130	
Ethylbenzene	0.113	0.0050	"	0.100	ND	113			70-130	
m,p-Xylene	0.222	0.010	"	0.200	ND	111			70-130	
o-Xylene	0.100	0.0050	"	0.100	ND	100			70-130	
Surrogate: 1,2-Dichloroethane-d4	0.0229		"	0.0400		57.2			23-173	
Surrogate: Toluene-d8	0.0360		"	0.0400		90.0			20-170	
Surrogate: 4-Bromofluorobenzene	0.0347		"	0.0400		86.8			21-167	

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07/29/19 06:31

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

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

Batch 1907377 - EPA 5030 Soil MS

Matrix Spike Dup (1907377-MSD1)	Source: 1907322-01			Prepared & Analyzed: 07/26/19						
Benzene	0.0791	0.0020	mg/kg	0.100	ND	79.1	70-130	3.20	30	
Toluene	0.0872	0.0050	"	0.100	ND	87.2	70-130	3.79	30	
Ethylbenzene	0.115	0.0050	"	0.100	ND	115	70-130	2.02	30	
m,p-Xylene	0.225	0.010	"	0.200	ND	113	70-130	1.46	30	
o-Xylene	0.101	0.0050	"	0.100	ND	101	70-130	0.686	30	
Surrogate: 1,2-Dichloroethane-d4	0.0234		"	0.0400		58.4	23-173			
Surrogate: Toluene-d8	0.0371		"	0.0400		92.7	20-170			
Surrogate: 4-Bromofluorobenzene	0.0338		"	0.0400		84.4	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 1907378 - EPA 3550A

Blank (1907378-BLK1)

Prepared & Analyzed: 07/26/19

C10-C28 (DRO) ND 50 mg/kg

LCS (1907378-BS1)

Prepared & Analyzed: 07/26/19

C10-C28 (DRO) 553 50 mg/kg 500 111 70-130

Matrix Spike (1907378-MS1)

Source: 1907322-01

Prepared & Analyzed: 07/26/19

C10-C28 (DRO) 526 50 mg/kg 500 32.7 98.6 70-130

Matrix Spike Dup (1907378-MSD1)

Source: 1907322-01

Prepared & Analyzed: 07/26/19

C10-C28 (DRO) 539 50 mg/kg 500 32.7 101 70-130 2.52 20

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Project: Vic 1

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Reported:
07/29/19 06:31

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