

Summit Scientific

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December 10, 2015

Chris Roy
LT Environmental, Inc.
4600 West 60th Avenue
Arvada, CO 80003
RE: Castor 3-36-11-9-59

Enclosed are the results of analyses for samples received by Summit Scientific on 12/09/15 17:25. 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', with a stylized, cursive script.

Paul Shrewsbury
President



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

Project: Castor 3-36-11-9-59

Project Number: 0429-15003
Project Manager: Chris Roy

Reported:
12/10/15 06:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS07@6"	1512079-01	Soil	12/09/15 10:00	12/09/15 17:25
SS04@8"	1512079-02	Soil	12/09/15 10:30	12/09/15 17:25
SS06@8"	1512079-03	Soil	12/09/15 11:00	12/09/15 17:25
SS02@6"	1512079-04	Soil	12/09/15 11:30	12/09/15 17:25
SS01@6"	1512079-05	Soil	12/09/15 12:00	12/09/15 17:25
SS10@12"	1512079-06	Soil	12/09/15 12:30	12/09/15 17:25

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

Project: Castor 3-36-11-9-59

Project Number: 0429-15003
Project Manager: Chris Roy

Reported:
12/10/15 06:40

SS07@6"
1512079-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 12/09/15 10:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	99	50	mg/kg	1	1512090	12/09/15	12/09/15	8015M	

Date Sampled: 12/09/15 10:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		94.3 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 12/09/15 10:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1512089	12/09/15	12/09/15	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	1.2	0.50	"	"	"	"	"	"	

Date Sampled: 12/09/15 10:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		103 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		99.9 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	21-167		"	"	"	"	

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LT Environmental, Inc.
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Project: Castor 3-36-11-9-59

Project Number: 0429-15003
Project Manager: Chris Roy

Reported:
12/10/15 06:40

SS04@8"
1512079-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 12/09/15 10:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1512090	12/09/15	12/09/15	8015M	

Date Sampled: 12/09/15 10:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		91.5 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 12/09/15 10:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	0.0029	0.0020	mg/kg	1	1512089	12/09/15	12/09/15	EPA 8260B	
Toluene	0.0056	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.020	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	0.93	0.50	"	"	"	"	"	"	

Date Sampled: 12/09/15 10:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		102 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.0 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	21-167		"	"	"	"	

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Project: Castor 3-36-11-9-59

Project Number: 0429-15003
Project Manager: Chris Roy

Reported:
12/10/15 06:40

SS06@8"
1512079-03 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 12/09/15 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1512090	12/09/15	12/09/15	8015M	

Date Sampled: 12/09/15 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		90.9 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 12/09/15 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1512089	12/09/15	12/09/15	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.015	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	0.64	0.50	"	"	"	"	"	"	

Date Sampled: 12/09/15 11:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		103 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		99.8 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	21-167		"	"	"	"	

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Project: Castor 3-36-11-9-59

Project Number: 0429-15003
Project Manager: Chris Roy

Reported:
12/10/15 06:40

SS02@6"
1512079-04 (Soil)

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Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 12/09/15 11:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1512090	12/09/15	12/09/15	8015M	

Date Sampled: 12/09/15 11:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		92.5 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 12/09/15 11:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1512089	12/09/15	12/09/15	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 12/09/15 11:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		100 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.1 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	21-167		"	"	"	"	

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Project Number: 0429-15003
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Reported:
12/10/15 06:40

SS01@6"
1512079-05 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 12/09/15 12:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	540	50	mg/kg	1	1512090	12/09/15	12/09/15	8015M	

Date Sampled: 12/09/15 12:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		103 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 12/09/15 12:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1512089	12/09/15	12/09/15	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 12/09/15 12:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		101 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		100 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	21-167		"	"	"	"	

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Project: Castor 3-36-11-9-59

Project Number: 0429-15003
Project Manager: Chris Roy

Reported:
12/10/15 06:40

SS10@12"
1512079-06 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 12/09/15 12:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1512090	12/09/15	12/09/15	8015M	

Date Sampled: 12/09/15 12:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		93.1 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 12/09/15 12:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1512089	12/09/15	12/09/15	EPA 8260B	
Toluene	0.0055	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 12/09/15 12:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		101 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		100 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	21-167		"	"	"	"	

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Project: Castor 3-36-11-9-59

Project Number: 0429-15003
Project Manager: Chris Roy

Reported:
12/10/15 06:40

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 1512090 - EPA 3550A

Blank (1512090-BLK1)

Prepared & Analyzed: 12/09/15

C10-C28 (DRO) ND 50 mg/kg

Surrogate: o-Terphenyl 11.8 " 12.5 94.0 30-150

LCS (1512090-BS1)

Prepared & Analyzed: 12/09/15

C10-C28 (DRO) 485 50 mg/kg 499 97.3 73-134

Surrogate: o-Terphenyl 11.8 " 12.5 94.7 30-150

Matrix Spike (1512090-MS1)

Source: 1512078-01

Prepared & Analyzed: 12/09/15

C10-C28 (DRO) 509 50 mg/kg 459 24.1 106 50-148

Surrogate: o-Terphenyl 11.7 " 11.5 102 30-150

Matrix Spike Dup (1512090-MSD1)

Source: 1512078-01

Prepared & Analyzed: 12/09/15

C10-C28 (DRO) 484 50 mg/kg 470 24.1 97.9 50-148 5.10 13

Surrogate: o-Terphenyl 11.2 " 11.8 95.3 30-150

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Project: Castor 3-36-11-9-59
Project Number: 0429-15003
Project Manager: Chris Roy

Reported:
12/10/15 06:40

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 1512089 - EPA 5030 Soil MS

Blank (1512089-BLK1)

Prepared & Analyzed: 12/09/15

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0394</i>		<i>"</i>	<i>0.0400</i>		<i>98.6</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0398</i>		<i>"</i>	<i>0.0400</i>		<i>99.6</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0400</i>		<i>"</i>	<i>0.0400</i>		<i>99.9</i>	<i>21-167</i>			

LCS (1512089-BS1)

Prepared & Analyzed: 12/09/15

Benzene	0.0783	0.0020	mg/kg	0.100		78.3	58-130			
Toluene	0.0827	0.0050	"	0.100		82.7	61-134			
Ethylbenzene	0.0988	0.0050	"	0.0992		99.6	74-139			
m,p-Xylene	0.190	0.010	"	0.200		95.4	73-137			
o-Xylene	0.0911	0.0050	"	0.0984		92.6	73-141			
Xylenes (total)	0.281	0.0050	"				30-150			
Gasoline Range Hydrocarbons	2.20	0.50	"				30-150			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0397</i>		<i>"</i>	<i>0.0400</i>		<i>99.2</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0396</i>		<i>"</i>	<i>0.0400</i>		<i>99.1</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0396</i>		<i>"</i>	<i>0.0400</i>		<i>98.9</i>	<i>21-167</i>			

Matrix Spike (1512089-MS1)

Source: 1512078-01

Prepared & Analyzed: 12/09/15

Benzene	0.0767	0.0020	mg/kg	0.0977	ND	78.5	30-131			
Toluene	0.0816	0.0050	"	0.0977	ND	83.6	30-134			
Ethylbenzene	0.0961	0.0050	"	0.0969	ND	99.2	22-153			
m,p-Xylene	0.185	0.010	"	0.195	ND	94.8	10-159			
o-Xylene	0.0887	0.0050	"	0.0961	ND	92.3	31-151			
Xylenes (total)	0.273	0.0050	"		ND		30-150			
Gasoline Range Hydrocarbons	2.17	0.50	"		ND		30-150			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0394</i>		<i>"</i>	<i>0.0391</i>		<i>101</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0387</i>		<i>"</i>	<i>0.0391</i>		<i>99.2</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0386</i>		<i>"</i>	<i>0.0391</i>		<i>98.8</i>	<i>21-167</i>			

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Project Number: 0429-15003
Project Manager: Chris Roy

Reported:
12/10/15 06:40

Volatile Organic Compounds by EPA Method 8260B - Quality Control
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Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 1512089 - EPA 5030 Soil MS

Matrix Spike Dup (1512089-MSD1)		Source: 1512078-01			Prepared & Analyzed: 12/09/15					
Benzene	0.0755	0.0020	mg/kg	0.0982	ND	76.9	30-131	1.57	34	
Toluene	0.0810	0.0050	"	0.0982	ND	82.4	30-134	0.822	30	
Ethylbenzene	0.0953	0.0050	"	0.0974	ND	97.8	22-153	0.855	24	
m,p-Xylene	0.183	0.010	"	0.196	ND	93.4	10-159	0.898	68	
o-Xylene	0.0890	0.0050	"	0.0967	ND	92.1	31-151	0.290	38	
Xylenes (total)	0.272	0.0050	"		ND		30-150	0.511	20	
Gasoline Range Hydrocarbons	2.18	0.50	"		ND		30-150	0.593	20	
Surrogate: 1,2-Dichloroethane-d4	0.0393		"	0.0393		99.9	23-173			
Surrogate: Toluene-d8	0.0383		"	0.0393		97.3	20-170			
Surrogate: 4-Bromofluorobenzene	0.0379		"	0.0393		96.5	21-167			

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Project: Castor 3-36-11-9-59

Project Number: 0429-15003
Project Manager: Chris Roy

Reported:
12/10/15 06:40

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

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A handwritten signature in black ink, appearing to be 'MSM'.