



November 18, 2014

Mr. John E. Axelson, P.G.
East Environmental Supervisor
Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, Colorado 80203

**Re: Form 27 Supplemental Report/No Further Action Status Request
Wierman #4 – Pump Jack Excavation
API# 05-001-08786
NESW 17-T1S-R67W**

Dear Mr. Axelson:

On behalf of Energy Search Company (Energy Search), LT Environmental, Inc. (LTE) is submitting this Form 27 Supplemental Report as an update to the Form 27, submitted on October 21, 2014, for the Wierman #4 pump jack location. We are requesting a No Further Action (NFA) status for this site.

In response to a Notice of Alleged Violation (NOAV) that identified surface staining near the pump jack, LTE was contracted by Energy Search to provide environmental oversight of excavation and sampling activities at the site. The oversight activities included collection of confirmation soil samples from the excavation base, documentation of field activities, and laboratory analytical results review. A Site Location Map is provided as Figure 1.

On October 3, 2013, following excavation of the visually impacted surface soil, an LTE representative collected three representative soil samples (B01@2', B02@2', and B03@2') from the base of the excavation. The soil samples were submitted for Total Petroleum Hydrocarbon (TPH) analysis by United States Environmental Protection Agency (EPA) Methods 8015 and 8260B and benzene, toluene, ethylbenzene, and total xylenes (BTEX) analysis by EPA Method 8260B. The laboratory analytical results indicated that the TPH and BTEX concentrations were below COGCC allowable levels in all three soil samples.

The final excavation measured approximately 8 feet north-south by 26 feet east-west to an approximate depth of 2 feet below ground surface. The impacted soil was removed from the site and transported to the Buffalo Ridge Landfill in Keenesburg, Colorado for disposal. The disposal documentation was provided with the Form 27 submittal. The general site layout, final excavation dimensions, and soil sample locations are shown on



the Site Map provided as Figure 2. The soil sample analytical results are summarized in Table 1. The laboratory analytical report is attached.

The confirmation soil sample analytical results confirm that TPH and BTEX concentrations are below COGCC allowable levels at the extent of the excavation. Based on the remedial actions undertaken and the soil analytical results, LTE is requesting a NFA status for this site on behalf of Energy Search.

Please call us at (303) 433-9788 if you have any questions regarding this letter report or require additional information.

Sincerely,
LT ENVIRONMENTAL, INC.

Reviewed by

A handwritten signature in blue ink that reads 'Kelly L. Kenyon'.

Kelly L. Kenyon
Project Environmental Scientist

A handwritten signature in black ink that reads 'Justin Solomon'.

Justin Solomon
Senior Environmental Scientist

Attachments

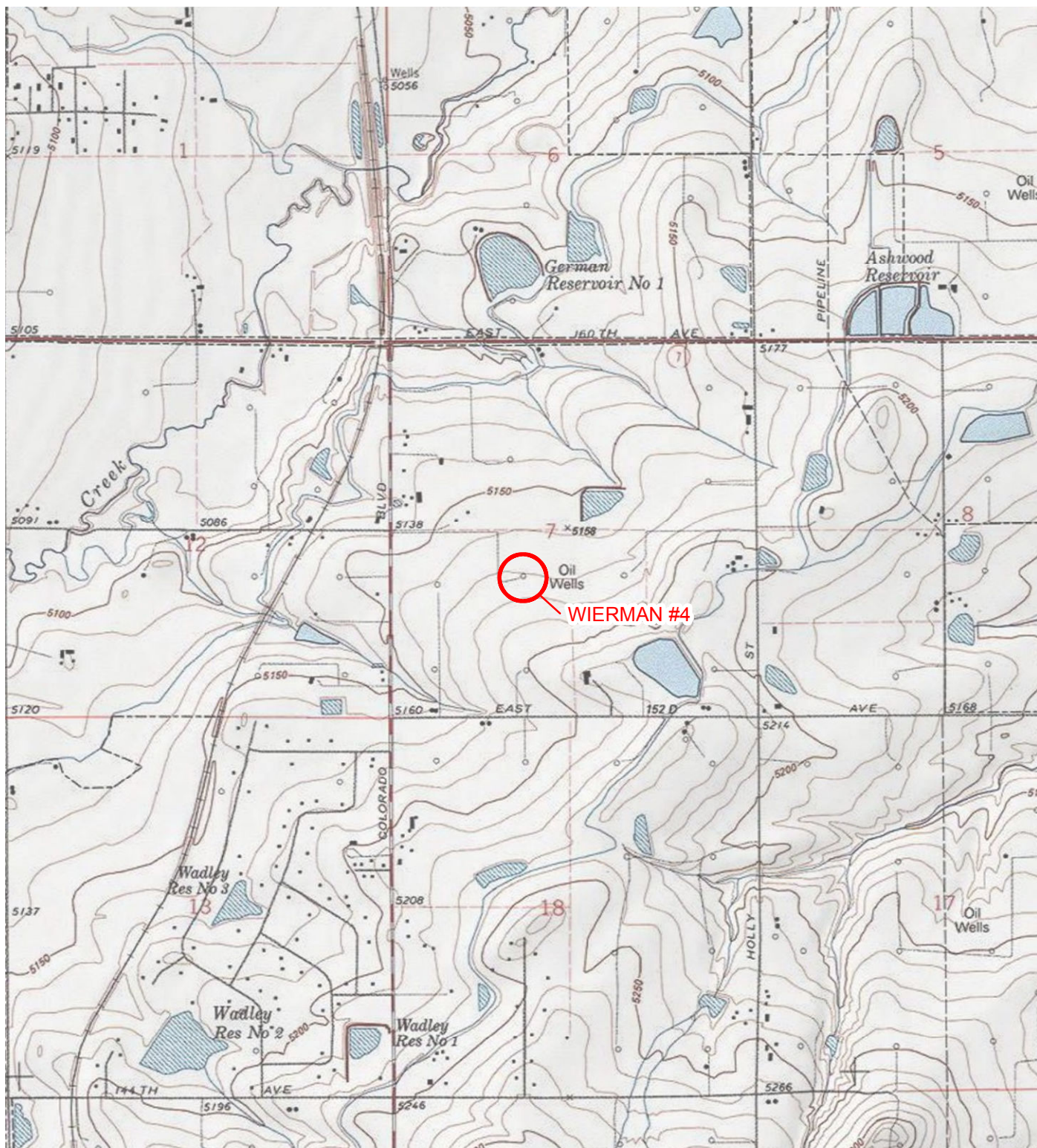


IMAGE COURTESY OF ESRI/USGS

LEGEND

 SITE LOCATION

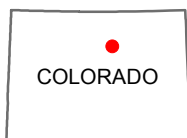
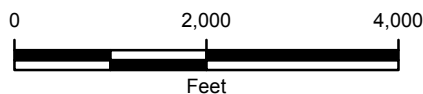


FIGURE 1
SITE LOCATION MAP
WIERMAN #4
NESW SEC 7-T1S-R67W
ADAMS COUNTY, COLORADO
ENERGY SEARCH COMPANY





IMAGE COURTESY OF ESRI

LEGEND

- WELL HEAD
- SOIL SAMPLE
- EXCAVATION EXTENT

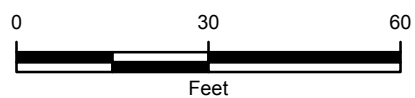


FIGURE 2
SITE MAP
WIERMAN #4
NESW SEC 7-T1S-R67W
ADAMS COUNTY, COLORADO
ENERGY SEARCH COMPANY



TABLE 1
SOIL SAMPLE ANALYTICAL DATA
WIERMAN #4
ENERGY SEARCH COMPANY

SAMPLE ID	SAMPLE DATE	DEPTH (feet bgs)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	XYLENES (Total) (mg/kg)	TPH-GRO (mg/kg)	TPH DRO+ORO (mg/kg)
B01@2'	10/3/2014	2	<0.0020	<0.0050	<0.0050	<0.0050	<0.50	<50
B02@2'	10/3/2014	2	<0.0020	<0.0050	<0.0050	<0.0050	<0.50	<50
B03@2'	10/3/2014	2	0.16	<0.0050	0.027	<0.0050	<0.50	330
COGCC Allowable Level			0.17	85	100	175	500	

Notes:

bgs - below ground surface

mg/kg - milligrams per kilogram

TPH - Total Petroleum Hydrocarbons

GRO - Gasoline Range Organics

TEPH - Total Extractable Petroleum Hydrocarbons

DRO - Diesel Range Organics

ORO - Oil Range Organics

< - less than laboratory reporting limit

COGCC - Colorado Oil and Gas Conservation Commission

Results noted in bold exceed COGCC allowable levels.



Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

October 05, 2014

John Cocroft
LT Environmental, Inc.
4600 West 60th Avenue
Arvada, CO 80003
RE: ES - Wierman #4

Enclosed are the results of analyses for samples received by Summit Scientific on 10/03/14 17:00. 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: ES - Wierman #4

Project Number: [none]
Project Manager: John Cocroft

Reported:
10/05/14 19:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B01@2'	1410024-01	Soil	10/03/14 13:45	10/03/14 17:00
B02@2'	1410024-02	Soil	10/03/14 13:50	10/03/14 17:00
B03@2'	1410024-03	Soil	10/03/14 13:55	10/03/14 17:00

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Project: ES - Wierman #4

Project Number: [none]
Project Manager: John Cocroft

Reported:
10/05/14 19:03

Summit Scientific 1410024

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

Page _____ of _____

Client: LTB	Project Manager: John Corioft
Address: 4600 W 160th	E-Mail: JCorioft@ITENV.com
City/State/Zip: Avon/OH	Project Name: Wielman No. 4
Phone: 760-456-0184	Project Number:
Fax:	
Sampler Name: Chad Tenth	

Preservative						Matrix							Analyze For:	Special Instructions	
						HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)		
Sample Description	Date Sampled	Time Sampled	Number of Containers												
B0102'	10-03-14	1345	1												
B0A02'	↓	1350	1												
B0302'	↓	1355	1												
Relinquished by:	Date/Time:	Received by:	Date/Time:	Turn Around Time (Check)								Notes:			
ALB	10-03-14 1700	NB	10/3/14 1700	Same Day <input checked="" type="checkbox"/> 72 Hours <input type="checkbox"/> 24 Hours <input type="checkbox"/> Standard <input type="checkbox"/> 48 Hours <input type="checkbox"/>								125uH5 Model Monofax			
Relinquished by:	Date/Time:	Received by:	Date/Time:	Sample Integrity:											
				Temperature-Upon Receipt: 9°C											
				Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>											

www.s2scientific.com

Summit Scientific

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

Project: ES - Wierman #4

Project Number: [none]
Project Manager: John Cocroft

Reported:
10/05/14 19:03

B01@2'
1410024-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 10/03/14 13:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (TEPH-DRO)	ND	50	mg/kg	1	1410040	10/03/14	10/04/14	8015M	
C28-C36 (TEPH-ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: 10/03/14 13:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		107 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 10/03/14 13:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1410041	10/03/14	10/03/14	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 10/03/14 13:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		116 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.9 %	21-167		"	"	"	"	

Summit Scientific

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

Project: ES - Wierman #4

Project Number: [none]
Project Manager: John Cocroft

Reported:
10/05/14 19:03

B02@2'
1410024-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/03/14 13:50**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (TEPH-DRO)	ND	50	mg/kg	1	1410040	10/03/14	10/04/14	8015M	
C28-C36 (TEPH-ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/03/14 13:50**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		110 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/03/14 13:50**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	1410041	10/03/14	10/03/14	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/03/14 13:50**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		122 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		97.9 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	21-167		"	"	"	"	

Summit Scientific

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

Project: ES - Wierman #4

Project Number: [none]
Project Manager: John Cocroft

Reported:
10/05/14 19:03

B03@2'
1410024-03 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/03/14 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (TEPH-DRO)	230	50	mg/kg	1	1410040	10/03/14	10/04/14	8015M	
C28-C36 (TEPH-ORO)	100	50	"	"	"	"	"	"	

Date Sampled: **10/03/14 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		112 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/03/14 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1410041	10/03/14	10/03/14	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/03/14 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		118 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		96.7 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	21-167		"	"	"	"	

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

Project: ES - Wierman #4

Project Number: [none]
Project Manager: John Cocroft

Reported:
10/05/14 19:03

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 1410040 - EPA 3550A

Blank (1410040-BLK1)

Prepared & Analyzed: 10/03/14

C10-C28 (TEPH-DRO)	ND	50	mg/kg
C28-C36 (TEPH-ORO)	ND	50	"

LCS (1410040-BS1)

Prepared & Analyzed: 10/03/14

C10-C28 (TEPH-DRO)	589	50	mg/kg	501	118	73-134
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Matrix Spike (1410040-MS1)

Source: 1410015-01

Prepared & Analyzed: 10/03/14

C10-C28 (TEPH-DRO)	609	50	mg/kg	470	59.4	117	50-148
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Matrix Spike Dup (1410040-MSD1)

Source: 1410015-01

Prepared & Analyzed: 10/03/14

C10-C28 (TEPH-DRO)	578	50	mg/kg	484	59.4	107	50-148	5.21	13
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LT Environmental, Inc.
4600 West 60th Avenue
Arvada CO, 80003

Project: ES - Wierman #4

Project Number: [none]
Project Manager: John Cocroft

Reported:
10/05/14 19:03

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 1410041 - EPA 5030 Soil MS

Blank (1410041-BLK1)

Prepared & Analyzed: 10/03/14

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	"							
Surrogate: 1,2-Dichloroethane-d4	0.0433		"	0.0397		109	23-173			
Surrogate: Toluene-d8	0.0397		"	0.0400		99.2	20-170			
Surrogate: 4-Bromofluorobenzene	0.0400		"	0.0400		100	21-167			

LCS (1410041-BS1)

Prepared & Analyzed: 10/03/14

Benzene	0.0950	0.0020	mg/kg	0.100		95.0	58-130			
Toluene	0.0958	0.0050	"	0.100		95.8	61-134			
Ethylbenzene	0.0968	0.0050	"	0.0992		97.6	74-139			
m,p-Xylene	0.198	0.010	"	0.200		99.3	73-137			
o-Xylene	0.0988	0.0050	"	0.0984		100	73-141			
Surrogate: 1,2-Dichloroethane-d4	0.0442		"	0.0397		111	23-173			
Surrogate: Toluene-d8	0.0389		"	0.0400		97.4	20-170			
Surrogate: 4-Bromofluorobenzene	0.0396		"	0.0400		99.1	21-167			

Matrix Spike (1410041-MS1)

Source: 1410015-01

Prepared & Analyzed: 10/03/14

Benzene	0.0694	0.0020	mg/kg	0.0963	0.0269	44.1	30-131			
Toluene	0.205	0.0050	"	0.0963	0.597	NR	30-134			QM-07
Ethylbenzene	0.0762	0.0050	"	0.0956	0.0291	49.3	22-153			
m,p-Xylene	0.358	0.010	"	0.192	0.468	NR	10-159			QM-07
o-Xylene	0.122	0.0050	"	0.0948	0.0760	48.4	31-151			
Surrogate: 1,2-Dichloroethane-d4	0.0431		"	0.0382		113	23-173			
Surrogate: Toluene-d8	0.0429		"	0.0385		111	20-170			
Surrogate: 4-Bromofluorobenzene	0.0405		"	0.0385		105	21-167			

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

Project: ES - Wierman #4

Project Number: [none]
Project Manager: John Cocroft

Reported:
10/05/14 19:03

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 1410041 - EPA 5030 Soil MS

Matrix Spike Dup (1410041-MSD1)	Source: 1410015-01			Prepared & Analyzed: 10/03/14						
Benzene	0.0768	0.0020	mg/kg	0.0994	0.0269	50.1	30-131	10.0	34	
Toluene	0.292	0.0050	"	0.0994	0.597	NR	30-134	35.1	30	QM-07
Ethylbenzene	0.0867	0.0050	"	0.0986	0.0291	58.5	22-153	13.0	24	
m,p-Xylene	0.364	0.010	"	0.198	0.468	NR	10-159	1.70	68	QM-07
o-Xylene	0.122	0.0050	"	0.0978	0.0760	47.4	31-151	0.392	38	
Surrogate: 1,2-Dichloroethane-d4	0.0449		"	0.0395		114	23-173			
Surrogate: Toluene-d8	0.0551		"	0.0398		139	20-170			
Surrogate: 4-Bromofluorobenzene	0.0405		"	0.0398		102	21-167			

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

Project: ES - Wierman #4

Project Number: [none]
Project Manager: John Cocroft

Reported:
10/05/14 19:03

Notes and Definitions

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

Summit Scientific

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