

Kerr-McGee Oil & Gas Onshore LP
1099 18th Street, Suite 1800
Denver, Colorado 80202
720-929-6000 Fax 720-929-7000

April 9, 2012

Mr. John Axelson
Environmental Protection Specialist
Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, Colorado 80203

**Re: No Further Action Status Request
Frank 18-8, 6-8, Zeiler 22-8, 19-8
COGCC Remediation No. 5187
SENW 8-T5N-R67W**

Dear Mr. Axelson:

Kerr-McGee Oil and Gas Onshore, LP (Kerr-McGee) is submitting this letter report as an update to the Form 27, submitted on June 14, 2010, for the Frank 18-8, 6-8, Zeiler 22-8, 19-8 tank battery. We are requesting a No Further Action (NFA) status for this site.

On December 29, 2009, the dumphine between two production tanks froze and cracked releasing approximately five barrels of condensate within the tank battery berm. Kerr-McGee contracted LT Environmental, Inc. (LTE) to oversee excavation activities, collect confirmation soil samples, perform quarterly groundwater monitoring, and interpret the analytical results. The wells were shut in and approximately 680 cubic yards of petroleum hydrocarbon impacted soil was excavated. The impacted soil was transported to the Waste Connections landfill in Erie, Colorado for disposal.

Confirmation soil samples were collected from the excavation sidewalls and submitted for total petroleum hydrocarbon (TPH) analysis by Environmental Protection Agency (EPA) Methods 8015 and 8260B, and benzene, toluene, ethylbenzene and xylenes (BTEX) analysis by EPA Method 8260B. The analytical results confirmed that TPH and BTEX concentrations were below the Colorado Oil and Gas Conservation Commission's (COGCC) allowable levels at the extent of excavation.

Groundwater was encountered in the excavation at approximately 14 feet below ground surface. One groundwater sample (GW01) was collected from the open excavation and submitted for BTEX analysis by EPA Method 8260B. Laboratory results for the excavation groundwater sample indicated that BTEX concentrations exceeded the Colorado Groundwater Quality Standards (CGWQS). Approximately 43 barrels of impacted groundwater were removed from the excavation using a vacuum truck and transported to a licensed injection facility for disposal. Following groundwater removal, ten gallons of MicroBlaze[®] microbial solution were applied to

the groundwater and exposed smear zone prior to backfilling the excavation. The excavation area was restored to its pre-release grade and Kerr-McGee's production facility remains at the site.

In order to assess the extent and magnitude of the residual dissolved phase groundwater impacts, three monitoring wells (MW01 through MW03) were installed at the site in April 2010. The benzene concentration in MW03 exceeded the CGWQS during the initial groundwater sampling event conducted in April 2010. Two additional monitoring wells (TMW04 and TMW05) were installed down-gradient of MW03 in December 2010. BTEX concentrations in TMW04 and TMW05 were below the CGWQS during the January 2011 quarterly sampling event. MW01, MW02, TMW04, and TMW05 were designated as point of compliance wells and groundwater monitoring continued on a quarterly basis.

It should be noted that TMW04 and TMW05 were originally intended as temporary monitoring wells that would be removed at the start of each growing season in the Spring and re-installed after the field was harvested in the Fall. However, the landowner at this site permitted TMW04 and TMW05 to remain in place during the 2011 growing season based on the expectation that site closure would be achieved prior to the 2012 growing season.

As of the October 2011 sampling event, BTEX concentrations in all five monitoring wells (MW01 through TMW05) have remained below the CGWQS for four consecutive quarterly groundwater monitoring events. A Site Map showing the general site layout, excavation outline, and monitoring well locations is provided as Figure 1. The groundwater results are summarized in Table 1 and the laboratory analytical reports are attached.

Remedial actions employed at the site included excavation of the source area, removal of impacted groundwater from the open excavation, and application of the MicroBlaze[®] groundwater amendment. Based on these remedial actions and groundwater sample analytical results showing BTEX concentrations below the CGWQS for four consecutive quarterly monitoring events, Kerr-McGee is requesting NFA status for this site.

Feel free to contact me at 720-929-6726 if you have any questions regarding this information.

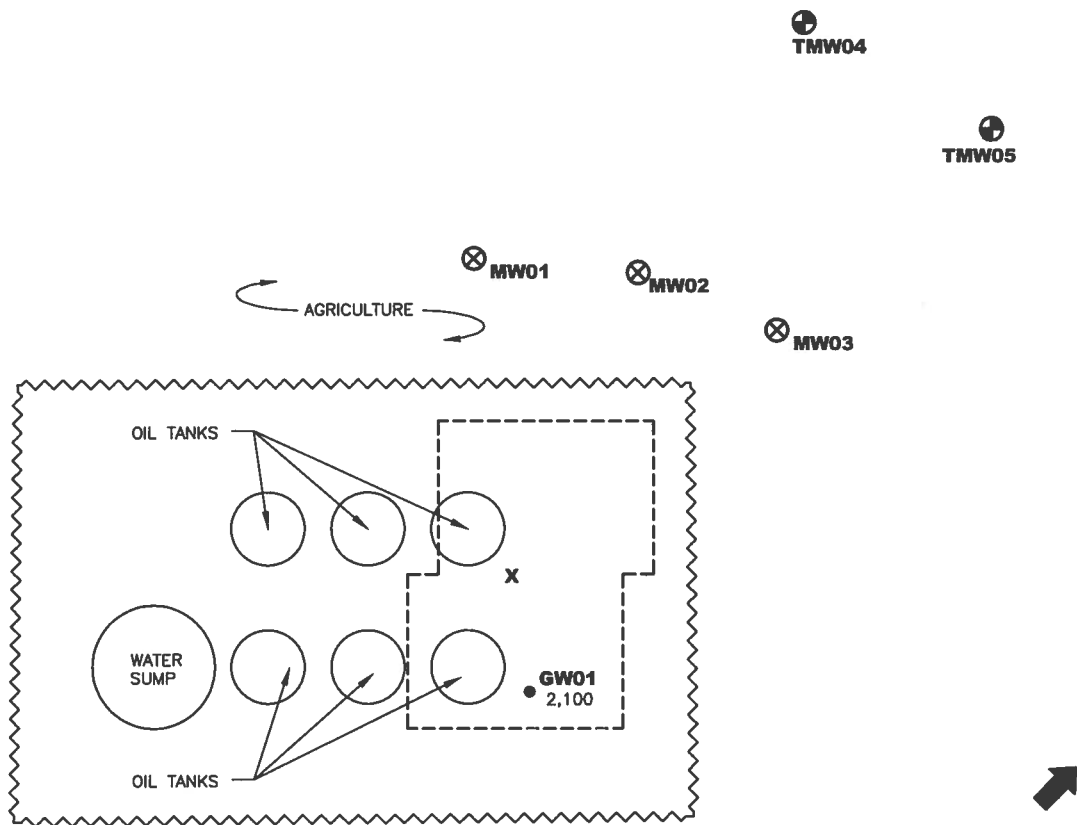
Sincerely,

Kerr-McGee Oil & Gas Onshore LP



Paul D. Schneider, P.G.
Senior Staff EHS Representative

Attachments



LEASE ROAD

LEGEND

- MONITORING WELL
- TEMPORARY MONITORING WELL
- EXCAVATION GROUNDWATER SAMPLE
- B: BENZENE CONCENTRATION IN MICROGRAMS PER LITER
- STEEL BERM
- RELEASE
- EXTENT OF EXCAVATION
- ESTIMATED GROUNDWATER FLOW DIRECTION

SOURCE:
GPS COORDINATE
SYSTEM

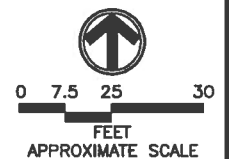


FIGURE 1
SITE MAP
FRANK 18-8, 6-8, ZEILER 22-8, 19-8
SENW 8-T5N-R67W
WELD COUNTY, CO
KERR-McGEE OIL & GAS ONSHORE LP



TABLE 1
GROUNDWATER ANALYTICAL AND FIELD RESULTS
FRANK 18-8, 6-8, ZEILER 22-8, 19-8
WELD COUNTY, COLORADO
KERR-McGEE OIL & GAS ONSHORE LP

Well Name	Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	Depth Water/ (Depth Product) (ft bgs)
GW01	01/19/2010	2100	2400	140	2500	NM
MW01	04/17/2010	<1.0	<1.0	<1.0	<1.0	13.03
	07/08/2010	<1.0	<1.0	<1.0	<1.0	12.41
	10/01/2010	<1.0	<1.0	<1.0	<1.0	11.79
	01/11/2011	<1.0	<1.0	<1.0	<1.0	12.60
	04/04/2011	<1.0	<1.0	<1.0	<1.0	13.10
	07/26/2011	<1.0	<1.0	<1.0	<1.0	12.09
	10/11/2011	<1.0	<1.0	<1.0	<1.0	12.74
MW02	04/17/2010	<1.0	<1.0	<1.0	<1.0	13.29
	07/08/2010	<1.0	<1.0	<1.0	<1.0	12.67
	10/01/2010	<1.0	<1.0	<1.0	<1.0	12.03
	01/11/2011	<1.0	<1.0	<1.0	<1.0	12.95
	04/04/2011	<1.0	<1.0	<1.0	<1.0	13.34
	07/26/2011	<1.0	<1.0	<1.0	<1.0	12.37
	10/11/2011	<1.0	<1.0	<1.0	<1.0	13.03
MW03	04/17/2010	66	<1.0	<1.0	6.5	13.46
	07/08/2010	130	<1.0	<1.0	2.7	12.79
	10/01/2010	210	<1.0	<1.0	<1.0	12.16
	01/11/2011	1.4	<1.0	<1.0	<1.0	13.11
	04/04/2011	<1.0	<1.0	<1.0	<1.0	13.46
	07/26/2011	<1.0	<1.0	<1.0	<1.0	12.44
TMW04	10/11/2011	2.2	<1.0	<1.0	<1.0	13.08
	01/11/2011	<1.0	<1.0	<1.0	<1.0	12.70
	04/04/2011	<1.0	<1.0	<1.0	<1.0	13.07
	07/26/2011	<1.0	<1.0	<1.0	<1.0	12.09
TMW05	10/11/2011	<1.0	<1.0	<1.0	<1.0	12.81
	01/11/2011	<1.0	<1.0	<1.0	<1.0	13.04
	04/04/2011	<1.0	<1.0	<1.0	<1.0	12.09
	07/26/2011	<1.0	<1.0	<1.0	<1.0	12.11
	10/11/2011	<1.0	<1.0	<1.0	<1.0	12.78
Colo GW Quality Standards		5	1000	700	1400	

Notes: NM - Not Measured
ug/L - micrograms per Liter
NA - Not Analyzed/Not Available

GW - Groundwater ft bgs - feet below ground surface
< - less than laboratory reporting limit
Bold numbers indicate result equaled or exceeded standard.



Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

January 18, 2011

John Cocroft
LT Environmental, Inc.
4600 West 60th Avenue
Arvada, CO 80003
RE: KMG - Frank 18-8 / Zeiler 22-8

Enclosed are the results of analyses for samples received by Summit Scientific on 01/11/11 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 be 'LS' or 'Logan Shrewsbury', with a long, sweeping horizontal line extending to the right.

Logan Shrewsbury For Ben Shrewsbury
President / Laboratory Director

S₂

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

Project: KMG - Frank 18-8 / Zeiler 22-8

Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
01/18/11 14:13

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW01	R101055-01	Water	01/11/11 13:50	01/11/11 17:00
MW02	R101055-02	Water	01/11/11 14:00	01/11/11 17:00
MW03	R101055-03	Water	01/11/11 14:10	01/11/11 17:00
TM04	R101055-04	Water	01/11/11 14:20	01/11/11 17:00
TM05	R101055-05	Water	01/11/11 14:30	01/11/11 17:00

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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.

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

Project: KMG - Frank 18-8 / Zeiler 22-8

Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
01/18/11 14:13

741 Corporate Circle - Suite 1
Golden, Colorado 80401
303-277-9310 303-374-5933 Fax

Summit Scientific 2101055

Page 1 of 1

Client: LT Environmental, Inc.
Project: KMG - Frank 18-8 / Zeiler 22-8
Project Manager: John Cocroft
Project Number: KMG 08420

Number	Sample Identification	Matrix	Type	Sample Date	Sample Time	Sampled By	Container	Qty	Analyses
01-001	MW01	Water	Field Sample	1-11-11		JE	Voa Vial - HCl	3	8260B BTEX_TNVL
02-001	MW02	Water	Field Sample				Voa Vial - HCl	3	8260B BTEX_TNVL
03-001	MW03	Water	Field Sample				Voa Vial - HCl	3	8260B BTEX_TNVL

Turn Around Time (Check)

Same Day ☐ 24 Hours ☒ Standard ☐ 48 Hours ☐

Sample Integrity:

Temperature Upon Receipt 4.7
Infect ☐ No ☒

Relinquished By _____ Date Time _____

Received By _____ Date Time _____

Relinquished By John Cocroft Date/Time 1-11-11 5:00pm

Received By John Cocroft Date/Time 1-11-11 5:00pm

Summit Scientific



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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
01/18/11 14:13

MW01
R101055-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 01/11/11 13:50

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1011206	01/12/11	01/13/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 01/11/11 13:50

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		110 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		95.6 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	80.8-120		"	"	"	"	

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
01/18/11 14:13

MW02
R101055-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 01/11/11 14:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1011206	01/12/11	01/13/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 01/11/11 14:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		114 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		95.2 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.7 %	80.8-120		"	"	"	"	

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

Project: KMG - Frank 18-8 / Zeiler 22-8

Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
01/18/11 14:13

MW03
R101055-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 01/11/11 14:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	1.4	1.0	ug/l	1	1011206	01/12/11	01/13/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 01/11/11 14:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		<i>110 %</i>	<i>57.9-139</i>		<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	
<i>Surrogate: Toluene-d8</i>		<i>100 %</i>	<i>83.1-115</i>		<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>		<i>100 %</i>	<i>80.8-120</i>		<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
01/18/11 14:13

TM04
R101055-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 01/11/11 14:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1011206	01/12/11	01/13/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 01/11/11 14:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		114 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		95.0 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.6 %	80.8-120		"	"	"	"	

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

Project: KMG - Frank 18-8 / Zeiler 22-8

Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
01/18/11 14:13

TM05
R101055-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 01/11/11 14:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1011206	01/12/11	01/13/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 01/11/11 14:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		110 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		109 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	80.8-120		"	"	"	"	

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
01/18/11 14:13

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 1011206 - EPA 5030 Water MS

Blank (1011206-BLK1)

Prepared: 01/12/11 Analyzed: 01/13/11

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	15.2		"	13.3	114	57.9-139				
Surrogate: Toluene-d8	14.4		"	13.3	108	83.1-115				
Surrogate: 4-Bromofluorobenzene	15.7		"	13.3	118	80.8-120				

LCS (1011206-BS1)

Prepared: 01/12/11 Analyzed: 01/13/11

Benzene	31.5	1.0	ug/l	33.3	94.4	60.1-131	10.9			
Toluene	32.7	1.0	"	33.3	98.1	65.9-127	11.3			
Ethylbenzene	33.4	1.0	"	33.3	100	65.1-129	20			
m,p-Xylene	69.5	2.0	"	66.7	104	66.8-127	20			
o-Xylene	33.5	1.0	"	33.3	100	61.2-120	20			
Surrogate: 1,2-Dichloroethane-d4	16.3		"	13.3	122	57.9-139				
Surrogate: Toluene-d8	13.2		"	13.3	98.9	83.1-115				
Surrogate: 4-Bromofluorobenzene	13.7		"	13.3	103	80.8-120				

LCS Dup (1011206-BS1)

Prepared: 01/12/11 Analyzed: 01/13/11

Benzene	32.1	1.0	ug/l	33.3	96.3	60.1-131	1.95	10.9		
Toluene	33.3	1.0	"	33.3	99.8	65.9-127	1.76	11.3		
Ethylbenzene	32.6	1.0	"	33.3	97.8	65.1-129	2.45	20		
m,p-Xylene	67.6	2.0	"	66.7	101	66.8-127	2.79	20		
o-Xylene	33.2	1.0	"	33.3	99.5	61.2-120	0.960	20		
Surrogate: 1,2-Dichloroethane-d4	16.2		"	13.3	122	57.9-139				
Surrogate: Toluene-d8	13.0		"	13.3	97.7	83.1-115				
Surrogate: 4-Bromofluorobenzene	12.5		"	13.3	93.8	80.8-120				

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
01/18/11 14:13

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 1011206 - EPA 5030 Water MS

Matrix Spike (1011206-MS1)		Source: R101050-01			Prepared: 01/12/11		Analyzed: 01/13/11			
Benzene	32.5	1.0	ug/l	33.3	2.28	90.6	52.7-130		19.3	
Toluene	33.9	1.0	"	33.3	ND	102	57-127		18.7	
Ethylbenzene	30.9	1.0	"	33.3	ND	92.8	59.2-127		20	
m,p-Xylene	61.8	2.0	"	66.7	ND	92.7	53.2-132		20	
o-Xylene	30.1	1.0	"	33.3	ND	90.3	56.3-117		20	
Surrogate: 1,2-Dichloroethane-d4	12.3		"	13.3		92.6	57.9-139			
Surrogate: Toluene-d8	12.1		"	13.3		91.1	83.1-115			
Surrogate: 4-Bromofluorobenzene	14.1		"	13.3		106	80.8-120			
Matrix Spike Dup (1011206-MSD1)		Source: R101050-01			Prepared: 01/12/11		Analyzed: 01/13/11			
Benzene	32.4	1.0	ug/l	33.3	2.28	90.3	52.7-130	0.339	19.3	
Toluene	38.8	1.0	"	33.3	ND	116	57-127	13.5	18.7	
Ethylbenzene	31.3	1.0	"	33.3	ND	94.0	59.2-127	1.32	20	
m,p-Xylene	62.2	2.0	"	66.7	ND	93.3	53.2-132	0.710	20	
o-Xylene	39.8	1.0	"	33.3	ND	119	56.3-117	27.6	20	
Surrogate: 1,2-Dichloroethane-d4	13.1		"	13.3		98.2	57.9-139			
Surrogate: Toluene-d8	15.1		"	13.3		113	83.1-115			
Surrogate: 4-Bromofluorobenzene	12.6		"	13.3		94.3	80.8-120			

Summit Scientific



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

Project: KMG - Frank 18-8 / Zeiler 22-8

Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
01/18/11 14:13

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

Summit Scientific



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Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

April 05, 2011

John Cocroft

LT Environmental, Inc.

4600 West 60th Avenue

Arvada, CO 80003

RE: KMG - Frank 18-8 / Zeiler 22-8

Enclosed are the results of analyses for samples received by Summit Scientific on 04/04/11 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 be 'PS' followed by a long, sweeping horizontal line.

Paul Shrewsbury For Ben Shrewsbury

President / Laboratory Director

S₂

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
04/05/11 12:44

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW01	R104017-01	Water	04/04/11 14:10	04/04/11 17:00
MW02	R104017-02	Water	04/04/11 14:15	04/04/11 17:00
MW03	R104017-03	Water	04/04/11 14:20	04/04/11 17:00
TM04	R104017-04	Water	04/04/11 14:25	04/04/11 17:00
TM05	R104017-05	Water	04/04/11 14:30	04/04/11 17:00

Summit Scientific



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S₂

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

Project: KMG - Frank 18-8 / Zeiler 22-8

Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
04/05/11 12:44

Page 1 of 1

R104017

Summit Scientific

741 Corporate Circle - Suite 1
Golden, Colorado 80401
303-777-9310 • 303-774-9933 Fax

Client: LT Environmental, Inc.
Project: KMG - Frank 18-8 / Zeiler 22-8
Project Manager: John Cocroft
Project Number: KMG 08420

Number	Sample Identification	Matrix	Type	Sample Date	Sample Time	Sampled By	Container	Qty	Analyses
01-001	MW01	Water	Field Sample	4/4/11	1410	SB	Non Vol. - HCl	3	ES08B BTEX_TYXL
02-001	MW02	Water	Field Sample	4/4/11	1415		Non Vol. - HCl	3	ES08B BTEX_TYXL
03-001	MW03	Water	Field Sample		1420		Non Vol. - HCl	3	ES08B BTEX_TYXL
04-001	TM04	Water	Field Sample		1425		Non Vol. - HCl	3	ES08B BTEX_TYXL
05-001	TM05	Water	Field Sample		1430		Non Vol. - HCl	3	ES08B BTEX_TYXL

Turn Around Time (Check)

Same Day ☒ 24 Hours ☐ 72 Hours ☐ Standard ☐

Sample Integrity:

Temperature Upon Receipt 5.4
Inacc. ☒ No ☐

Relinquished By _____ Date/Time _____

Received By _____ Date/Time _____

Relinquished By 10 4-4-11 5:12 Date/Time _____

Received By 10 4-4-11 17:00 Date/Time _____

Summit Scientific

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S₂

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
04/05/11 12:44

MW01
R104017-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 04/04/11 14:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1040405	04/04/11	04/05/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 04/04/11 14:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		107 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		98.3 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.8 %	80.8-120		"	"	"	"	

Summit Scientific



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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
04/05/11 12:44

MW02
R104017-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 04/04/11 14:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1040405	04/04/11	04/05/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 04/04/11 14:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		107 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		98.2 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.7 %	80.8-120		"	"	"	"	

Summit Scientific



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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
04/05/11 12:44

MW03
R104017-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 04/04/11 14:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1040405	04/04/11	04/05/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 04/04/11 14:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		106 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		98.2 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.1 %	80.8-120		"	"	"	"	

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
04/05/11 12:44

TM04
R104017-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 04/04/11 14:25

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1040405	04/04/11	04/05/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 04/04/11 14:25

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		107 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		98.6 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	80.8-120		"	"	"	"	

Summit Scientific



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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
04/05/11 12:44

TM05
R104017-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 04/04/11 14:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1040405	04/04/11	04/05/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 04/04/11 14:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		107 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		98.0 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.6 %	80.8-120		"	"	"	"	

Summit Scientific



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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
04/05/11 12:44

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 1040405 - EPA 5030 Water MS

Blank (1040405-BLK1)

Prepared & Analyzed: 04/04/11

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	14.2		"	13.3		107	57.9-139			
Surrogate: Toluene-d8	13.2		"	13.3		99.0	83.1-115			
Surrogate: 4-Bromofluorobenzene	13.1		"	13.3		98.3	80.8-120			

LCS (1040405-BS1)

Prepared & Analyzed: 04/04/11

Benzene	20.2	1.0	ug/l	33.3		60.5	60.1-131		10.9	
Toluene	22.5	1.0	"	33.3		67.4	65.9-127		11.3	
Ethylbenzene	24.3	1.0	"	33.3		72.8	65.1-129		20	
m,p-Xylene	50.9	2.0	"	66.7		76.4	66.8-127		20	
o-Xylene	24.8	1.0	"	33.3		74.5	61.2-120		20	
Surrogate: 1,2-Dichloroethane-d4	14.5		"	13.3		109	57.9-139			
Surrogate: Toluene-d8	13.2		"	13.3		99.1	83.1-115			
Surrogate: 4-Bromofluorobenzene	13.1		"	13.3		98.3	80.8-120			

LCS Dup (1040405-BSD1)

Prepared & Analyzed: 04/04/11

Benzene	20.1	1.0	ug/l	33.3		60.2	60.1-131	0.547	10.9	
Toluene	22.6	1.0	"	33.3		67.8	65.9-127	0.666	11.3	
Ethylbenzene	24.6	1.0	"	33.3		73.9	65.1-129	1.47	20	
m,p-Xylene	51.4	2.0	"	66.7		77.1	66.8-127	0.958	20	
o-Xylene	25.0	1.0	"	33.3		75.0	61.2-120	0.682	20	
Surrogate: 1,2-Dichloroethane-d4	14.4		"	13.3		108	57.9-139			
Surrogate: Toluene-d8	13.3		"	13.3		99.5	83.1-115			
Surrogate: 4-Bromofluorobenzene	13.3		"	13.3		100	80.8-120			

Summit Scientific



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S₂

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
04/05/11 12:44

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 1040405 - EPA 5030 Water MS

Matrix Spike (1040405-MS1)				Source: R104011-01		Prepared & Analyzed: 04/04/11				
Benzene	18.6	1.0	ug/l	33.3	ND	55.9	52.7-130		19.3	
Toluene	21.2	1.0	"	33.3	ND	63.7	57-127		18.7	
Ethylbenzene	23.1	1.0	"	33.3	ND	69.2	59.2-127		20	
m,p-Xylene	48.2	2.0	"	66.7	ND	72.2	53.2-132		20	
o-Xylene	23.4	1.0	"	33.3	ND	70.1	56.3-117		20	
Surrogate: 1,2-Dichloroethane-d4	15.0		"	13.3		112	57.9-139			
Surrogate: Toluene-d8	13.3		"	13.3		99.7	83.1-115			
Surrogate: 4-Bromofluorobenzene	13.4		"	13.3		100	80.8-120			

Matrix Spike Dup (1040405-MSD1)				Source: R104011-01		Prepared & Analyzed: 04/04/11				
Benzene	19.1	1.0	ug/l	33.3	ND	57.4	52.7-130	2.65	19.3	
Toluene	21.7	1.0	"	33.3	ND	65.2	57-127	2.23	18.7	
Ethylbenzene	23.7	1.0	"	33.3	ND	71.0	59.2-127	2.65	20	
m,p-Xylene	49.8	2.0	"	66.7	ND	74.7	53.2-132	3.37	20	
o-Xylene	24.0	1.0	"	33.3	ND	72.0	56.3-117	2.66	20	
Surrogate: 1,2-Dichloroethane-d4	14.7		"	13.3		110	57.9-139			
Surrogate: Toluene-d8	13.2		"	13.3		99.2	83.1-115			
Surrogate: 4-Bromofluorobenzene	13.1		"	13.3		98.6	80.8-120			

Summit Scientific



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

Project: KMG - Frank 18-8 / Zeiler 22-8

Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
04/05/11 12:44

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

Summit Scientific



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Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

August 02, 2011

John Cocroft

LT Environmental, Inc.

4600 West 60th Avenue

Arvada, CO 80003

RE: KMG - Frank 18-8 / Zeiler 22-8

Enclosed are the results of analyses for samples received by Summit Scientific on 07/26/11 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 For Ben Shrewsbury

President / Laboratory Director

S₂

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

Project: KMG - Frank 18-8 / Zeiler 22-8

Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
08/02/11 10:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW01	R107158-01	Water	07/26/11 14:40	07/26/11 17:00
MW02	R107158-02	Water	07/26/11 14:45	07/26/11 17:00
MW03	R107158-03	Water	07/26/11 14:50	07/26/11 17:00
TM04	R107158-04	Water	07/26/11 14:55	07/26/11 17:00
TM05	R107158-05	Water	07/26/11 15:00	07/26/11 17:00

Summit Scientific

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

Project: KMG - Frank 18-8 / Zeiler 22-8

Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
08/02/11 10:49

Page 1 of 1

Summit Scientific K107158

741 Corporate Circle - Suite 1
Golden, Colorado 80401
303-277-9310 - 303-374-5933 Fax

Client: LT Environmental, Inc.
Project: KMG - Frank 18-8 / Zeiler 22-8
Project Manager: John Cocroft
Project Number: KMG 08420

Number	Sample Identification	Matrix	Type	Sample Date	Sample Time	Sampled By	Container	Qty	Analytes
01-001	M1W01	Water	Field Sample	7/20/11	1440	SB	Voa Vial - HCl	3	8260B BTEX_TX1L
02-001	M1W02	Water	Field Sample		1445		Voa Vial - HCl	3	8260B BTEX_TX1L
03-001	M1W03	Water	Field Sample		1450		Voa Vial - HCl	3	8260B BTEX_TX1L
04-001	T1W04	Water	Field Sample		1455		Voa Vial - HCl	3	8260B BTEX_TX1L
05-001	T1W05	Water	Field Sample		1500		Voa Vial - HCl	3	8260B BTEX_TX1L

Turn Around Time (Check)

Same Day ☐
24 Hours ☐
48 Hours ☒

Sample Integrity: 9.9

Temperature Receipt ☒
Issued Yes ☒ No ☐

Relinquished By _____ Date/Time _____

Received By _____ Date/Time _____

Relinquished By SB 7/20/11 1700 Date/Time

Received By SB 7-20-11 7:20 Date/Time

Summit Scientific

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
08/02/11 10:49

MW01
R107158-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 07/26/11 14:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1072906	07/29/11	07/30/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 07/26/11 14:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		93.3 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		93.6 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	80.8-120		"	"	"	"	

Summit Scientific

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S₂

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
08/02/11 10:49

MW02
R107158-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 07/26/11 14:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1072906	07/29/11	07/30/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 07/26/11 14:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		91.0 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		91.9 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.8 %	80.8-120		"	"	"	"	

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.



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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
08/02/11 10:49

MW03
R107158-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 07/26/11 14:50

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1072906	07/29/11	07/30/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 07/26/11 14:50

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		94.4 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		93.2 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.2 %	80.8-120		"	"	"	"	

Summit Scientific

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S₂

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
08/02/11 10:49

TM04
R107158-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 07/26/11 14:55

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1072906	07/29/11	07/30/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 07/26/11 14:55

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		92.4 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		93.4 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.5 %	80.8-120		"	"	"	"	

Summit Scientific

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S₂

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
08/02/11 10:49

TM05
R107158-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 07/26/11 15:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1072906	07/29/11	07/30/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 07/26/11 15:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		95.3 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		95.0 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.5 %	80.8-120		"	"	"	"	

Summit Scientific

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S₂

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
08/02/11 10:49

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 1072906 - EPA 5030 Water MS

Blank (1072906-BLK1)

Prepared: 07/29/11 Analyzed: 07/30/11

Benzene	ND	1.0	ug/l
Toluene	ND	1.0	"
Ethylbenzene	ND	1.0	"
Xylenes (total)	ND	1.0	"

Surrogate: 1,2-Dichloroethane-d4	11.7		"	13.3	88.0	57.9-139
Surrogate: Toluene-d8	12.1		"	13.3	91.1	83.1-115
Surrogate: 4-Bromofluorobenzene	12.7		"	13.3	95.6	80.8-120

LCS (1072906-BS1)

Prepared: 07/29/11 Analyzed: 07/30/11

Benzene	29.3	1.0	ug/l	33.3	88.0	60.1-131	10.9
Toluene	27.9	1.0	"	33.3	83.6	65.9-127	11.3
Ethylbenzene	30.7	1.0	"	33.3	92.0	65.1-129	20
m,p-Xylene	62.1	2.0	"	66.7	93.2	66.8-127	20
o-Xylene	31.6	1.0	"	33.3	94.7	61.2-120	20
Surrogate: 1,2-Dichloroethane-d4	12.8		"	13.3	95.7	57.9-139	
Surrogate: Toluene-d8	12.6		"	13.3	94.6	83.1-115	
Surrogate: 4-Bromofluorobenzene	12.4		"	13.3	93.3	80.8-120	

LCS Dup (1072906-BSD1)

Prepared: 07/29/11 Analyzed: 07/30/11

BCE-010 (10/12/2008-2021)								
Benzene	30.3	1.0	ug/l	33.3	90.9	60.1-131	3.25	10.9
Toluene	28.8	1.0	"	33.3	86.3	65.9-127	3.18	11.3
Ethylbenzene	32.3	1.0	"	33.3	96.8	65.1-129	5.09	20
m,p-Xylene	64.5	2.0	"	66.7	96.7	66.8-127	3.71	20
o-Xylene	32.7	1.0	"	33.3	98.0	61.2-120	3.46	20
Surrogate: 1,2-Dichloroethane-d4	12.5		"	13.3	93.7	57.9-139		
Surrogate: Toluene-d8	12.6		"	13.3	94.2	83.1-115		
Surrogate: 4-Bromofluorobenzene	12.4		"	13.3	93.3	80.8-120		

Summit Scientific

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
08/02/11 10:49

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 1072906 - EPA 5030 Water MS

Matrix Spike (1072906-MS1)			Source: R107158-01		Prepared: 07/29/11		Analyzed: 07/30/11			
Benzene	31.3	1.0	ug/l	33.3	ND	93.9	52.7-130		19.3	
Toluene	29.8	1.0	"	33.3	ND	89.3	57-127		18.7	
Ethylbenzene	33.4	1.0	"	33.3	ND	100	59.2-127		20	
m,p-Xylene	67.4	2.0	"	66.7	ND	101	53.2-132		20	
o-Xylene	33.7	1.0	"	33.3	ND	101	56.3-117		20	
Surrogate: 1,2-Dichloroethane-d4	13.0		"	13.3		97.3	57.9-139			
Surrogate: Toluene-d8	12.6		"	13.3		94.3	83.1-115			
Surrogate: 4-Bromofluorobenzene	12.4		"	13.3		93.0	80.8-120			
Matrix Spike Dup (1072906-MSD1)			Source: R107158-01		Prepared: 07/29/11		Analyzed: 07/30/11			
Benzene	30.4	1.0	ug/l	33.3	ND	91.1	52.7-130	3.02	19.3	
Toluene	29.1	1.0	"	33.3	ND	87.3	57-127	2.31	18.7	
Ethylbenzene	33.8	1.0	"	33.3	ND	101	59.2-127	1.19	20	
m,p-Xylene	67.6	2.0	"	66.7	ND	101	53.2-132	0.370	20	
o-Xylene	33.6	1.0	"	33.3	ND	101	56.3-117	0.386	20	
Surrogate: 1,2-Dichloroethane-d4	12.8		"	13.3		95.7	57.9-139			
Surrogate: Toluene-d8	12.6		"	13.3		94.3	83.1-115			
Surrogate: 4-Bromofluorobenzene	12.9		"	13.3		97.0	80.8-120			

Summit Scientific

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

Project: KMG - Frank 18-8 / Zeiler 22-8

Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
08/02/11 10:49

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

Summit Scientific

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Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

October 17, 2011

John Cocroft
LT Environmental, Inc.
4600 West 60th Avenue
Arvada, CO 80003
RE: KMG - Frank 18-8 / Zeiler 22-8

Enclosed are the results of analyses for samples received by Summit Scientific on 10/11/11 17:30. 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
President / Laboratory Director

S₂

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

Project: KMG - Frank 18-8 / Zeiler 22-8

Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
10/17/11 17:38

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW01	R110074-01	Water	10/11/11 11:30	10/11/11 17:30
MW02	R110074-02	Water	10/11/11 11:25	10/11/11 17:30
MW03	R110074-03	Water	10/11/11 11:20	10/11/11 17:30
TM04	R110074-04	Water	10/11/11 11:15	10/11/11 17:30
TM05	R110074-05	Water	10/11/11 11:10	10/11/11 17:30

Summit Scientific

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

Project: KMG - Frank 18-8 / Zeiler 22-8

Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
10/17/11 17:38

Page 1 of 1

Summit Scientific

741 Corporate Circle - Suite 1
Golden, Colorado 80401
303-277-9310 - 303-374-5933 Fax

Client: LT Environmental, Inc.
Project: KMG - Frank 18-8 / Zeiler 22-8
Project Manager: John Cocroft
Project Number: KMG 08420

Number	Sample Identification	Matrix	Type	Sample Date	Sample Time	Sampled By	Container	Qty	Analyses
01-001	MW01	Water	Field Sample	10/16/11	11:30	AV	Voa Vial - HCl	3	8240B BTEX TSYL
02-001	MW02	Water	Field Sample		11:25		Voa Vial - HCl	3	8240B BTEX TSYL
03-001	MW03	Water	Field Sample		11:26		Voa Vial - HCl	3	8240B BTEX TSYL
04-001	TR04	Water	Field Sample		11:15		Voa Vial - HCl	3	8240B BTEX TSYL
05-001	TR05	Water	Field Sample		11:10		Voa Vial - HCl	3	8240B BTEX TSYL

Turn Around Time (Check)

Same Day ☐
24 Hours ☐
48 Hours ☒
72 Hours ☐
Standard ☒

Sample Integrity:

Temperature Upon Receipt 58
Fahrenheit ☒ No

Retiquished By: [Signature]

Date/Time

10-11-11 1730

Date/Time

Retiquished By

Date/Time

10/16/11 1730

Received By

Date/Time

Summit Scientific

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

Project: KMG - Frank 18-8 / Zeiler 22-8

Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
10/17/11 17:38

MW01
R110074-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 10/11/11 11:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1101501	10/15/11	10/16/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 10/11/11 11:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		102 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		95.6 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.5 %	80.8-120		"	"	"	"	

Summit Scientific

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
10/17/11 17:38

MW02
R110074-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 10/11/11 11:25

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1101501	10/15/11	10/16/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 10/11/11 11:25

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		90.8 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		93.7 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.5 %	80.8-120		"	"	"	"	

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
10/17/11 17:38

MW03
R110074-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 10/11/11 11:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	2.2	1.0	ug/l	1	1101501	10/15/11	10/16/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 10/11/11 11:20

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		91.7 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		94.1 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.9 %	80.8-120		"	"	"	"	

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
10/17/11 17:38

TM04
R110074-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 10/11/11 11:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1101501	10/15/11	10/16/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 10/11/11 11:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		89.0 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		93.8 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.4 %	80.8-120		"	"	"	"	

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
10/17/11 17:38

TM05
R110074-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 10/11/11 11:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1101501	10/15/11	10/16/11	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 10/11/11 11:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		90.2 %	57.9-139		"	"	"	"	
Surrogate: Toluene-d8		91.4 %	83.1-115		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.9 %	80.8-120		"	"	"	"	

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

Project: KMG - Frank 18-8 / Zeiler 22-8
Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
10/17/11 17:38

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 1101501 - EPA 5030 Water MS

Blank (1101501-BLK1)

Prepared & Analyzed: 10/15/11

Benzene	ND	1.0	ug/l
Toluene	ND	1.0	"
Ethylbenzene	ND	1.0	"
Xylenes (total)	ND	1.0	"

Surrogate: 1,2-Dichloroethane-d4	11.3		"	13.3	84.5	57.9-139
Surrogate: Toluene-d8	12.8		"	13.3	95.9	83.1-115
Surrogate: 4-Bromofluorobenzene	12.8		"	13.3	96.2	80.8-120

LCS (1101501-BS1)

Prepared & Analyzed: 10/15/11

Benzene	24.9	1.0	ug/l	33.3	74.7	60.1-131	10.9
Toluene	30.8	1.0	"	33.3	92.5	65.9-127	11.3
Ethylbenzene	32.4	1.0	"	33.3	97.1	65.1-129	20
m,p-Xylene	66.7	2.0	"	66.7	100	66.8-127	20
o-Xylene	32.3	1.0	"	33.3	96.8	61.2-120	20

Surrogate: 1,2-Dichloroethane-d4	11.2		"	13.3	84.0	57.9-139
Surrogate: Toluene-d8	12.8		"	13.3	96.1	83.1-115
Surrogate: 4-Bromofluorobenzene	12.8		"	13.3	95.6	80.8-120

LCS Dup (1101501-BSD1)

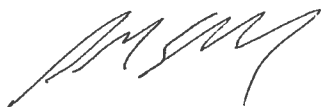
Prepared & Analyzed: 10/15/11

Benzene	27.0	1.0	ug/l	33.3	80.9	60.1-131	8.06	10.9
Toluene	31.0	1.0	"	33.3	93.0	65.9-127	0.485	11.3
Ethylbenzene	33.2	1.0	"	33.3	99.7	65.1-129	2.59	20
m,p-Xylene	68.0	2.0	"	66.7	102	66.8-127	2.00	20
o-Xylene	33.0	1.0	"	33.3	98.9	61.2-120	2.18	20

Surrogate: 1,2-Dichloroethane-d4	11.7		"	13.3	87.9	57.9-139
Surrogate: Toluene-d8	12.9		"	13.3	96.7	83.1-115
Surrogate: 4-Bromofluorobenzene	12.9		"	13.3	96.6	80.8-120

Summit Scientific

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

Project: KMG - Frank 18-8 / Zeiler 22-8

Project Number: KMG 08420
Project Manager: John Cocroft

Reported:
10/17/11 17:38

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

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.

