



October 03, 2014

LT Environmental, Inc.

John Cocroft

4600 West 60th Avenue

Arvada CO 80003

Project Name - KMG - Barefoot 32C-25Hz

Project Number - [none]

Attached are your analytical results for KMG - Barefoot 32C-25Hz received by Origins Laboratory, Inc. October 02, 2014. This project is associated with Origins project number X410027-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.  
303.433.1322  
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

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

John Cocroft  
Project Number: [none]  
Project: KMG - Barefoot 32C-25Hz

### CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B01 @ 3"	X410027-01	Soil	October 2, 2014 9:45	10/02/2014 15:45
B02 @3"	X410027-02	Soil	October 2, 2014 9:50	10/02/2014 15:45
B03 @ 3"	X410027-03	Soil	October 2, 2014 9:55	10/02/2014 15:45
B04 @ 3"	X410027-04	Soil	October 2, 2014 10:00	10/02/2014 15:45

Origins Laboratory, Inc.



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Noelle Doyle Mathis, President

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

John Cocroft  
Project Number: [none]  
Project: KMG - Barefoot 32C-25Hz

www.originslaboratory.com

X410027

page 1 of 1

**ORIGINS**  
LABORATORY, INC

Client: LTG Project Manager/Send Report To: John Cocroft  
Address: 4600 West 60th Ave. Email Address: john@ltg.com  
Arvada, CO 80003 Project Name/Number: Barefoot 32C-25Hz  
Telephone Number: 303-433-9758 Samples Collected By: Mike Liger

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis Method				Sample Instructions	
				Unpreserved	HCl	HNO <sub>3</sub>	Other	Groundwater	Soil	As Summed	Other	BTX	TPH	SAR		EC
B0103"	10/2/14	0945	2	X					X				X	X	X	1
B0203"		0950	2	X					X				X	X	X	2
B0303"		0955	2	X					X				X	X	X	3
B0403"	7	1000	2	X					X				X	X	X	4
Barefoot 0103"	10/2/14	0940	2	X					X							5
																6
																7
																8
																9
																10

  

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Turnaround Time:
Mike Liger	10/2/14	1545	[Signature]	10/2/14	1545	Same Day <input checked="" type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input type="checkbox"/> 54

Print Results Worksheet

Comments:

Origins Laboratory, Inc.

*[Signature]*

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

John Cocroft  
Project Number: [none]  
Project: KMG - Barefoot 32C-25Hz

Origins Laboratory

F-012207-01-R1  
Effective Date: 01/09/12

## Sample Receipt Checklist

Origins Work Order: 410027

Client: LTE

Client Project ID: Barefoot 32C

Checklist Completed by: David Mathis

Shipped Via: H/D  
(UPS, FedEx, Hand Delivered, Pick-Up, etc.)

Date/time completed: 6-02-14

Airbill #: N/A

Matrix(s) Received: (Check all that apply) X Soil/Solid

       Water        Other:       

Cooler Number/Temperature: 1 / 5.4 °C        °C        °C (Describe)        °C

Thermometer ID: 1002

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C <sup>(1)</sup> ?	<u>X</u>			
Is there ice present (document if blue ice is used)	<u>X</u>			
Are custody seals present on cooler? (If so, document in comments if they are signed and dated, broken or intact)		<u>X</u>		
Are custody seals present on each sample container? (If so, document in comments if they are signed and dated, broken or intact)		<u>X</u>		
Were all samples received intact <sup>(1)</sup> ?	<u>X</u>			
Was adequate sample volume provided <sup>(1)</sup> ?	<u>X</u>			
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?		<u>X</u>		
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<u>X</u>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<u>X</u>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<u>X</u>			
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<u>X</u>			
For volatiles in water — Is there headspace (> 1/4 inch bubble) present? If yes, contact client and note in narrative.		<u>X</u>	<u>X</u>	<u>Sal</u>
Are samples preserved that require preservation and was it checked <sup>(1)</sup> ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for sub-sampled analyses in order to insure sample integrity/fort < 2 for samples preserved with HNO <sub>3</sub> , HCL, H <sub>2</sub> SO <sub>4</sub> ) / (pH > 10 for samples preserved with NaAsO <sub>2</sub> +NaOH, ZnAc+NaOH)			<u>X</u>	
Additional Comments (if any):				

<sup>(1)</sup>If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager): [Signature]

Date/Time Reviewed: 6-2-14

Origins Laboratory, Inc.

[Signature]

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LT Environmental, Inc.

4600 West 60th Avenue

Arvada CO 80003

John Cocroft

Project Number: [none]

Project: KMG - Barefoot 32C-25Hz

B01 @ 3"

10/2/2014 9:45:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.  
X410027-01 (Soil)

## BTEX by EPA 8260C

Benzene	ND	0.002	mg/kg	1	4J02017	10/02/2014	10/02/2014
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4

110 % 70-130

" " "

Surrogate: Toluene-d8

96.4 % 70-130

" " "

Surrogate: 4-Bromofluorobenzene

104 % 70-130

" " "

## Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.295	mmhos/cm	1	4J02020	10/02/2014	10/03/2014
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## pH in Soil by EPA 9045D

pH	8.01	pH Units	"	4J02019	10/02/2014	10/03/2014
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## SAR Metals by SW-846 6010C

Calcium	16200	1900	mg/kg	40	952122	10/03/2014	10/03/2014	D
Magnesium	3480	1900	"	"	"	"	"	D
Sodium	340	95.2	"	1	"	"	"	

## Sodium Absorption Ratio

Sodium Absorption Ratio	2.83	1	952129	"	10/03/2014
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Origins Laboratory, Inc.



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4600 West 60th Avenue  
Arvada CO 80003

John Cocroft  
Project Number: [none]  
Project: KMG - Barefoot 32C-25Hz

B01 @ 3"  
10/2/2014 9:45:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**XENCO**  
X410027-01 (Soil)

### TPH-Carbon Chain by EPA Method 8015C

Gasoline (C6-C10)	ND	50.0	mg/kg	1	4J02018	10/02/2014	10/02/2014
Diesel (C10-C28)	ND	50.0	"	"	"	"	"
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"
TPH - Carbon Chain Total	ND	50.0	"	"	"	"	"

Surrogate: o-Terphenyl	69.1 %	65-146	"	"	"
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Origins Laboratory, Inc.



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Noelle Doyle Mathis, President

LT Environmental, Inc.

4600 West 60th Avenue

Arvada CO 80003

John Cocroft

Project Number: [none]

Project: KMG - Barefoot 32C-25Hz

B02 @3"

10/2/2014 9:50:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.  
X410027-02 (Soil)

## BTEX by EPA 8260C

Benzene	ND	0.002	mg/kg	1	4J02017	10/02/2014	10/02/2014
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4

103 % 70-130

" " "

Surrogate: Toluene-d8

99.3 % 70-130

" " "

Surrogate: 4-Bromofluorobenzene

105 % 70-130

" " "

## Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.291	mmhos/cm	1	4J02020	10/02/2014	10/03/2014
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## pH in Soil by EPA 9045D

pH	8.15	pH Units	"	4J02019	10/02/2014	10/03/2014
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## SAR Metals by SW-846 6010C

Calcium	17400	1980	mg/kg	40	952122	10/03/2014	10/03/2014	D
Magnesium	3670	1980	"	"	"	"	"	D
Sodium	279	99	"	1	"	"	"	

## Sodium Absorption Ratio

Sodium Absorption Ratio	2.24	1	952129	"	10/03/2014
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Arvada CO 80003

John Cocroft  
Project Number: [none]  
Project: KMG - Barefoot 32C-25Hz

B02 @3"

10/2/2014 9:50:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**XENCO**

X410027-02 (Soil)

**TPH-Carbon Chain by EPA Method 8015C**

Gasoline (C6-C10)	ND	50.0	mg/kg	1	4J02018	10/02/2014	10/02/2014
Diesel (C10-C28)	ND	50.0	"	"	"	"	"
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"
TPH - Carbon Chain Total	ND	50.0	"	"	"	"	"

Surrogate: o-Terphenyl	66.5 %	65-146	"	"	"
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Origins Laboratory, Inc.



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Noelle Doyle Mathis, President



LT Environmental, Inc.

4600 West 60th Avenue

Arvada CO 80003

John Cocroft

Project Number: [none]

Project: KMG - Barefoot 32C-25Hz

B03 @ 3"

10/2/2014 9:55:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.  
X410027-03 (Soil)

## BTEX by EPA 8260C

Benzene	ND	0.002	mg/kg	1	4J02017	10/02/2014	10/02/2014
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4

109 % 70-130

" " "

Surrogate: Toluene-d8

97.2 % 70-130

" " "

Surrogate: 4-Bromofluorobenzene

104 % 70-130

" " "

## Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.355	mmhos/cm	1	4J02020	10/02/2014	10/03/2014
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## pH in Soil by EPA 9045D

pH	8.07	pH Units	"	4J02019	10/02/2014	10/03/2014
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## SAR Metals by SW-846 6010C

Calcium	16500	1850	mg/kg	40	952122	10/03/2014	10/03/2014	D
Magnesium	4280	1850	"	"	"	"	"	D
Sodium	358	92.6	"	1	"	"	"	

## Sodium Absorption Ratio

Sodium Absorption Ratio	2.87	1	952129	"	10/03/2014
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Arvada CO 80003

John Cocroft  
Project Number: [none]  
Project: KMG - Barefoot 32C-25Hz

B03 @ 3"  
10/2/2014 9:55:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**XENCO**  
X410027-03 (Soil)

### TPH-Carbon Chain by EPA Method 8015C

Gasoline (C6-C10)	ND	50.0	mg/kg	1	4J02018	10/02/2014	10/02/2014
Diesel (C10-C28)	ND	50.0	"	"	"	"	"
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"
TPH - Carbon Chain Total	ND	50.0	"	"	"	"	"

Surrogate: o-Terphenyl	70.0 %	65-146	"	"	"
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Origins Laboratory, Inc.



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LT Environmental, Inc.  
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Arvada CO 80003

John Cocroft  
Project Number: [none]  
Project: KMG - Barefoot 32C-25Hz

B04 @ 3"  
10/2/2014 10:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.  
X410027-04 (Soil)

## BTEX by EPA 8260C

Benzene	ND	0.002	mg/kg	1	4J02017	10/02/2014	10/02/2014
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	100 %	70-130			"	"	"
Surrogate: Toluene-d8	97.4 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	104 %	70-130			"	"	"

## Conductance/Specific Conductance by EPA 120.1

Specific Conductance (EC)	0.307		mmhos/cm	1	4J02020	10/02/2014	10/03/2014
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## pH in Soil by EPA 9045D

pH	8.45		pH Units	"	4J02019	10/02/2014	10/03/2014
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## SAR Metals by SW-846 6010C

Calcium	21700	1920	mg/kg	40	952122	10/03/2014	10/03/2014	D
Magnesium	4270	1920	"	"	"	"	"	D
Sodium	338	96.2	"	1	"	"	"	

## Sodium Absorption Ratio

Sodium Absorption Ratio	2.46			1	952129	"	10/03/2014
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4600 West 60th Avenue  
Arvada CO 80003

John Cocroft  
Project Number: [none]  
Project: KMG - Barefoot 32C-25Hz

B04 @ 3"

10/2/2014 10:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**XENCO**

X410027-04 (Soil)

**TPH-Carbon Chain by EPA Method 8015C**

Gasoline (C6-C10)	ND	50.0	mg/kg	1	4J02018	10/02/2014	10/02/2014
Diesel (C10-C28)	ND	50.0	"	"	"	"	"
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"
TPH - Carbon Chain Total	ND	50.0	"	"	"	"	"

Surrogate: o-Terphenyl	67.8 %	65-146	"	"	"
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4600 West 60th Avenue

Arvada CO 80003

John Cocroft

Project Number: [none]

Project: KMG - Barefoot 32C-25Hz

**Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4J02017 - EPA 5030 (soil)

Blank (4J02017-BLK1)

Prepared: 10/02/2014 Analyzed: 10/02/2014

Benzene	ND	0.002	mg/kg							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Surrogate: 1,2-Dichloroethane-d4	64		ug/kg	62.5	102		70-130			
Surrogate: Toluene-d8	62		"	62.5	98.8		70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5	105		70-130			

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LT Environmental, Inc.

4600 West 60th Avenue

Arvada CO 80003

John Cocroft

Project Number: [none]

Project: KMG - Barefoot 32C-25Hz

**Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4J02017 - EPA 5030 (soil)

LCS (4J02017-BS1)

Prepared: 10/02/2014 Analyzed: 10/02/2014

Benzene	0.09	0.002	mg/kg	0.100		93.7	77.1-124			
Toluene	0.08	0.002	"	0.100		81.8	74.5-128			
Ethylbenzene	0.08	0.002	"	0.100		82.4	66.4-127			
m,p-Xylene	0.21	0.004	"	0.200		106	76.6-124			
o-Xylene	0.09	0.002	"	0.100		87.3	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	64		ug/kg	62.5		102	70-130			
Surrogate: Toluene-d8	60		"	62.5		96.2	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.2	70-130			

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4600 West 60th Avenue

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John Cocroft

Project Number: [none]

Project: KMG - Barefoot 32C-25Hz

**Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4J02017 - EPA 5030 (soil)

Matrix Spike (4J02017-MS1)		Source: X410026-02			Prepared: 10/02/2014 Analyzed: 10/02/2014					
Benzene	0.10	0.002	mg/kg	0.100	ND	99.2	71.8-126			
Toluene	0.09	0.002	"	0.100	0.004	87.1	65.1-130			
Ethylbenzene	0.08	0.002	"	0.100	0.004	80.1	62.2-130			
m,p-Xylene	0.21	0.004	"	0.200	0.005	105	46.5-137			
o-Xylene	0.09	0.002	"	0.100	0.005	86.0	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	62		ug/kg	62.5		98.9	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.3	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		102	70-130			

Origins Laboratory, Inc.



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LT Environmental, Inc.

4600 West 60th Avenue

Arvada CO 80003

John Cocroft

Project Number: [none]

Project: KMG - Barefoot 32C-25Hz

**Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4J02017 - EPA 5030 (soil)

Matrix Spike Dup (4J02017-MSD1)		Source: X410026-02			Prepared: 10/02/2014 Analyzed: 10/02/2014					
Benzene	0.10	0.002	mg/kg	0.100	ND	97.5	71.8-126	1.71	11.3	
Toluene	0.09	0.002	"	0.100	0.004	91.0	65.1-130	4.28	15.4	
Ethylbenzene	0.09	0.002	"	0.100	0.004	82.2	62.2-130	2.43	19.6	
m,p-Xylene	0.22	0.004	"	0.200	0.005	107	46.5-137	2.04	19.2	
o-Xylene	0.08	0.002	"	0.100	0.005	77.1	54.2-134	10.3	17.9	
Surrogate: 1,2-Dichloroethane-d4	58		ug/kg	62.5		92.6	70-130			
Surrogate: Toluene-d8	65		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	66		"	62.5		105	70-130			

Origins Laboratory, Inc.



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LT Environmental, Inc.  
4600 West 60th Avenue  
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John Cocroft  
Project Number: [none]  
Project: KMG - Barefoot 32C-25Hz

**Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Extractable Petroleum Hydrocarbons by 8015M - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4J02018 - EPA 3580**

**Blank (4J02018-BLK1)**

Prepared: 10/02/2014 Analyzed: 10/03/2014

Gasoline (C6-C10)	ND	50.0	mg/kg
Diesel (C10-C28)	ND	50.0	"
Residual Range Organics (C28-C36)	ND	200	"
TPH - Carbon Chain Total	ND	50.0	"

*Surrogate: o-Terphenyl*

38

g

50.0

75.2

65-146

**LCS (4J02018-BS1)**

Prepared: 10/02/2014 Analyzed: 10/02/2014

Gasoline (C6-C10)	978	50.0	mg/kg	1000	97.8	66.7-119
Diesel (C10-C28)	1050	50.0	"	1000	105	70.1-127
Residual Range Organics (C28-C36)	1080	200	"	1000	108	54.5-139

*Surrogate: o-Terphenyl*

46

g

50.0

91.4

65-146

**Matrix Spike (4J02018-MS1)**

Source: X410026-03

Prepared: 10/02/2014 Analyzed: 10/02/2014

Gasoline (C6-C10)	1080	50.0	mg/kg	1000	ND	108	56.4-132
Diesel (C10-C28)	1130	50.0	"	1000	185	94.4	57.4-138
Residual Range Organics (C28-C36)	1090	200	"	1000	ND	109	47.7-129

*Surrogate: o-Terphenyl*

38

g

50.0

77.0

65-146

**Matrix Spike Dup (4J02018-MSD1)**

Source: X410026-03

Prepared: 10/02/2014 Analyzed: 10/02/2014

Gasoline (C6-C10)	1060	50.0	mg/kg	1000	ND	106	56.4-132	2.35	22
Diesel (C10-C28)	1100	50.0	"	1000	185	91.5	57.4-138	2.60	18.3
Residual Range Organics (C28-C36)	994	200	"	1000	ND	99.4	47.7-129	8.93	30.1

Origins Laboratory, Inc.

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LT Environmental, Inc.

4600 West 60th Avenue

Arvada CO 80003

John Cocroft

Project Number: [none]

Project: KMG - Barefoot 32C-25Hz

Extractable Petroleum Hydrocarbons by 8015M - Quality Control  
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4J02018 - EPA 3580

Matrix Spike Dup (4J02018-MSD1)

Source: X410026-03

Prepared: 10/02/2014 Analyzed: 10/02/2014

Surrogate: o-Terphenyl

40

g

50.0

80.8

65-146

Origins Laboratory, Inc.



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Noelle Doyle Mathis, President

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

John Cocroft  
Project Number: [none]  
Project: KMG - Barefoot 32C-25Hz

Classical Chemistry Parameters - Quality Control  
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J02019 - NO PREP										
Duplicate (4J02019-DUP1)		Source: X410027-01			Prepared: 10/02/2014 Analyzed: 10/03/2014					
pH	8.07		pH Units		8.01			0.721	25	
Batch 4J02020 - NO PREP										
Blank (4J02020-BLK1)		Prepared: 10/02/2014 Analyzed: 10/03/2014								
Specific Conductance (EC)	0.00130		mmhos/cm							
Duplicate (4J02020-DUP1)		Source: X410027-01			Prepared: 10/02/2014 Analyzed: 10/03/2014					
Specific Conductance (EC)	0.301		mmhos/cm		0.295			2.01	25	

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

John Cocroft  
Project Number: [none]  
Project: KMG - Barefoot 32C-25Hz

## SAR Metals by SW-846 6010C - Quality Control XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 952122 - SW3050B										
<b>MS (494297-047 S)</b>		<b>Source: 494297-047 S</b>			Prepared: 10/03/2014 Analyzed: 10/03/2014					
Calcium	12000	105	mg/kg	946	14000		75-125		20	
Magnesium	1180	105	"	946	208	103	75-125		20	
Sodium	1030	105	"	946	43	104	75-125		20	
<b>MSD (494297-047 SD)</b>		<b>Source: 494297-047 SD</b>			Prepared: 10/03/2014 Analyzed: 10/03/2014					
Sodium	1080	110	mg/kg	993	43	104	75-125	5	20	
Calcium	12600	110	"	993	14000		75-125	5	20	
Magnesium	1250	110	"	993	208	105	75-125	6	20	
<b>LCS (662414-1-BKS)</b>		<b>Source: 662414-1-BKS</b>			Prepared: 10/03/2014 Analyzed: 10/03/2014					
Sodium	896	100	mg/kg	900	1.17	100	75-125		20	
Calcium	918	100	"	900	5.44	102	75-125		20	
Magnesium	918	100	"	900	<1.22	102	75-125		20	
<b>BLANK (662414-1-BLK)</b>		<b>Source: 662414-1-BLK</b>			Prepared: 10/03/2014 Analyzed: 10/03/2014					
Calcium	5.44	100	mg/kg	900			-		20	J
Magnesium	ND	100	"	900			-		20	
Sodium	1.17	100	"	900			-		20	J
<b>LCSD (662414-1-BSD)</b>		<b>Source: 662414-1-BSD</b>			Prepared: 10/03/2014 Analyzed: 10/03/2014					
Sodium	888	100	mg/kg	900	1.17	99	75-125	1	20	
Calcium	913	100	"	900	5.44	101	75-125	1	20	
Magnesium	912	100	"	900	<1.22	101	75-125	1	20	

Origins Laboratory, Inc.



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

John Cocroft  
Project Number: [none]  
Project: KMG - Barefoot 32C-25Hz

### Notes and Definitions

- J Sample result was detected between the MDL and PQL, result is considered estimated.
- D Analyzed at an additional dilution to get target analyte within calibration range of instrument.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



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Noelle Doyle Mathis, President