



April 17, 2015

LT Environmental, Inc.

John Cocroft

4600 West 60th Avenue

Arvada CO 80003

Project Name - KMG - UPRC - 5-3K

Project Number - 014215102

Attached are your analytical results for KMG - UPRC - 5-3K received by Origins Laboratory, Inc. April 16, 2015. This project is associated with Origins project number X504208-01.

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: 014215102  
Project: KMG - UPRC - 5-3K

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N01 @ 4'	X504208-01	Soil	April 16, 2015 15:25	04/16/2015 18:00
E01 @ 4'	X504208-02	Soil	April 16, 2015 15:30	04/16/2015 18:00
S01 @ 4'	X504208-03	Soil	April 16, 2015 15:35	04/16/2015 18:00
W01 @ 4'	X504208-04	Soil	April 16, 2015 15:40	04/16/2015 18:00
GW01	X504208-05	Water	April 16, 2015 15:45	04/16/2015 18:00

Origins Laboratory, Inc.



*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.*

Jen Pellegrini For Noelle Doyle Mathis, President

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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

www.originslaboratory.com

X504208

**ORIGINS**  
 LABORATORY, INC

page 1 of 1

Client: LTE  
 Address: 4600 W 60th Ave  
 Telephone Number: (303) 433-9788  
 Email Address: Jcocroft@ltenv.com

Project Manager: J. Cocroft  
 Project Name: UPRC 5-3K  
 Project Number: 014215102  
 Samples Collected By: Kris Shepherd

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

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis				Sample Instructions		
				Unpreserved	HCl	HNO <sub>3</sub>	Other	Groundwater	Soil	Air Summa #	Other	TPH	TPH	ETC		SAR	
N0104'	4/16/15	15:25	2	X				X				X	X	X	Hold all	1	
E0104'		15:30	2	X				X				X	X	X	Run (add S&E)	2	
S0104'		15:35	2	X				X				X	X	X	Hold all	3	
W0104'		15:40	2	X				X				X	X	X	Hold all	4	
G201		15:45	3	X				X				X			Run BTEX	5	
																6	
																7	
																8	
																9	
																10	
Relinquished By: <u>[Signature]</u>	Date: 4/16/15	Time: 1710	Time: 1710	Received By: <u>[Signature]</u>	Date: 4/16/15	Time: 1710	Date: 4/16/15	Time: 1710	Turnaround Time: 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"/>						
Relinquished By: <u>[Signature]</u>	Date: 4/16/15	Time: 1800	Time: 1800	Received By: <u>[Signature]</u>	Date: 4/16/15	Time: 1800	Date: 4/16/15	Time: 1800									

Temp Received: 3.4 Date Results Needed: 4/15 (0800)

Origins Laboratory, Inc.

*Jefe Pellegrini*

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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

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

**Sample Receipt Checklist**

Origins Work Order: XSCM208 Client: LTE  
 Client Project ID: UPRC 5-3K  
 Checklist Completed by: Jee Smith Shipped Via: HTD  
 Date/time completed: 4/16/15 (UPS, FedEx, Hand Delivered, Pick-up, etc.)  
 Airbill #: NSA  
 Matrix(s) Received: (Check all that apply):  Soil/Solid  Water  Other: \_\_\_\_\_  
 Cooler Number/Temperature: 1 / 3.4 °C \_\_\_\_\_ / \_\_\_\_\_ °C \_\_\_\_\_ / \_\_\_\_\_ °C (Describe)  
 Thermometer ID: 7253

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> ?	<input checked="" type="checkbox"/>			
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
For volatiles in water — is there headspace (> ¼ inch bubble) present? <b>If yes, contact client and note in narrative.</b>		<input checked="" type="checkbox"/>		W/LEAS <input checked="" type="checkbox"/> (5)
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 subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)		<input checked="" type="checkbox"/>		W/LEAS <input checked="" type="checkbox"/> (3)
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.

Jee Smith Reviewed by (Project Manager) 4/16/15  
Date/Time Reviewed

Origins Laboratory, Inc.



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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**N01 @ 4'**  
**4/16/2015 3:25:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

**Origins Laboratory, Inc.**  
**X504208-01 (Soil)**

**BTEX by EPA 8260C**

Benzene	ND	0.002	mg/kg	1	5D17005	04/17/2015	04/17/2015	
Toluene	ND	0.002	"	"	"	"	"	
Ethylbenzene	ND	0.002	"	"	"	"	"	
Xylenes, total	ND	0.002	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	105 %	70-130			"	"	"	
Surrogate: Toluene-d8	97.9 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	103 %	70-130			"	"	"	

**pH in Soil by EPA 9045D**

pH	8.69		pH Units	1	5D17007	04/17/2015	04/17/2015	
----	------	--	----------	---	---------	------------	------------	--

**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.0730		mmhos/cm	"	5D17008	04/17/2015	"	
---------------------------	--------	--	----------	---	---------	------------	---	--

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

Gasoline (C6-C10)	ND	50	mg/kg	1	5D17006	04/17/2015	04/17/2015	
Diesel (C10-C28)	ND	50	"	"	"	"	"	
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"	

Surrogate: o-Terphenyl	98.8 %	65-146			"	"	"	
------------------------	--------	--------	--	--	---	---	---	--

Origins Laboratory, Inc.



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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**E01 @ 4'**  
**4/16/2015 3:30:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

**Origins Laboratory, Inc.**  
**X504208-02 (Soil)**

**BTEX by EPA 8260C**

Benzene	ND	0.002	mg/kg	1	5D16012	04/16/2015	04/16/2015	
Toluene	ND	0.002	"	"	"	"	"	
Ethylbenzene	ND	0.002	"	"	"	"	"	
Xylenes, total	ND	0.002	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	110 %	70-130			"	"	"	
Surrogate: Toluene-d8	97.9 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	104 %	70-130			"	"	"	

**pH in Soil by EPA 9045D**

pH	8.37		pH Units	1	5D16010	04/16/2015	04/16/2015	
----	------	--	----------	---	---------	------------	------------	--

**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.0980		mmhos/cm	"	5D16011	"	"	
---------------------------	--------	--	----------	---	---------	---	---	--

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

Gasoline (C6-C10)	ND	50	mg/kg	1	5D16009	04/16/2015	04/16/2015	
Diesel (C10-C28)	ND	50	"	"	"	"	"	
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"	

Surrogate: o-Terphenyl	113 %	65-146			"	"	"	
------------------------	-------	--------	--	--	---	---	---	--

Origins Laboratory, Inc.



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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**S01 @ 4'**  
**4/16/2015 3:35:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

**Origins Laboratory, Inc.**  
**X504208-03 (Soil)**

**BTEX by EPA 8260C**

Benzene	0.003	0.002	mg/kg	1	5D17005	04/17/2015	04/17/2015	
Toluene	0.016	0.002	"	"	"	"	"	
Ethylbenzene	ND	0.002	"	"	"	"	"	
Xylenes, total	0.024	0.002	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	106 %	70-130			"	"	"	
Surrogate: Toluene-d8	97.9 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	102 %	70-130			"	"	"	

**pH in Soil by EPA 9045D**

pH	9.30		pH Units	1	5D17007	04/17/2015	04/17/2015	
----	------	--	----------	---	---------	------------	------------	--

**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.0852		mmhos/cm	"	5D17008	04/17/2015	"	
---------------------------	--------	--	----------	---	---------	------------	---	--

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

Gasoline (C6-C10)	ND	50	mg/kg	1	5D17006	04/17/2015	04/17/2015	
Diesel (C10-C28)	ND	50	"	"	"	"	"	
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"	

Surrogate: o-Terphenyl	99.6 %	65-146			"	"	"	
------------------------	--------	--------	--	--	---	---	---	--

Origins Laboratory, Inc.



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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**W01 @ 4'**  
**4/16/2015 3:40:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

**Origins Laboratory, Inc.**  
**X504208-04 (Soil)**

**BTEX by EPA 8260C**

Benzene	ND	0.002	mg/kg	1	5D17005	04/17/2015	04/17/2015	
Toluene	ND	0.002	"	"	"	"	"	
Ethylbenzene	ND	0.002	"	"	"	"	"	
Xylenes, total	ND	0.002	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	106 %	70-130			"	"	"	
Surrogate: Toluene-d8	98.8 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	103 %	70-130			"	"	"	

**pH in Soil by EPA 9045D**

pH	8.56		pH Units	1	5D17007	04/17/2015	04/17/2015	
----	------	--	----------	---	---------	------------	------------	--

**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.0675		mmhos/cm	"	5D17008	04/17/2015	"	
---------------------------	--------	--	----------	---	---------	------------	---	--

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

Gasoline (C6-C10)	ND	50	mg/kg	1	5D17006	04/17/2015	04/17/2015	
Diesel (C10-C28)	ND	50	"	"	"	"	"	
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"	

Surrogate: o-Terphenyl	95.3 %	65-146			"	"	"	
------------------------	--------	--------	--	--	---	---	---	--

Origins Laboratory, Inc.



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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**GW01**  
**4/16/2015 3:45:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

**Origins Laboratory, Inc.**  
**X504208-05 (Water)**

**BTEX by EPA 8260C**

Benzene	5.2	1.0	ug/L	1	5D16008	04/16/2015	04/16/2015	
Toluene	16.1	1.0	"	"	"	"	"	
Ethylbenzene	3.9	1.0	"	"	"	"	"	
Xylenes, total	9.3	1.0	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	101 %	87.3-113			"	"	"	
Surrogate: Toluene-d8	98.2 %	90.9-108			"	"	"	
Surrogate: 4-Bromofluorobenzene	104 %	88.6-111			"	"	"	

Origins Laboratory, Inc.



*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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 5D16008 - EPA 5030B (Water)**

**Blank (5D16008-BLK1)**

Prepared: 04/16/2015 Analyzed: 04/16/2015

Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	62		"	625000	0.00998		87.3-113			
Surrogate: Toluene-d8	63		"	625000	0.0100		90.9-108			
Surrogate: 4-Bromofluorobenzene	62		"	625000	0.00990		88.6-111			

Origins Laboratory, Inc.



*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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 5D16008 - EPA 5030B (Water)**

**LCS (5D16008-BS1)**

Prepared: 04/16/2015 Analyzed: 04/16/2015

Benzene	49.0	1.0	ug/L	50.0		97.9	75-126			
Toluene	47.8	1.0	"	50.0		95.7	78.7-126			
Ethylbenzene	50.2	1.0	"	50.0		100	80-130			
m,p-Xylene	100	2.0	"	100		100	77.2-133			
o-Xylene	50.2	1.0	"	50.0		100	77.9-126			
Surrogate: 1,2-Dichloroethane-d4	62		"	625000		0.00989	87.3-113			
Surrogate: Toluene-d8	61		"	625000		0.00970	90.9-108			
Surrogate: 4-Bromofluorobenzene	65		"	625000		0.0103	88.6-111			

Origins Laboratory, Inc.



*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.*

Jen Pellegrini For Noelle Doyle Mathis, President

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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 5D16008 - EPA 5030B (Water)**

Matrix Spike (5D16008-MS1)	Source: X504175-01			Prepared: 04/16/2015 Analyzed: 04/16/2015						
Benzene	51.8	1.0	ug/L	50.0	0.3	103	74-130			
Toluene	50.3	1.0	"	50.0	0.4	99.9	73-131			
Ethylbenzene	52.1	1.0	"	50.0	ND	104	76-132			
m,p-Xylene	104	2.0	"	100	ND	104	69-139			
o-Xylene	52.0	1.0	"	50.0	ND	104	74-131			
Surrogate: 1,2-Dichloroethane-d4	63		"	625000		0.0101	87.3-113			
Surrogate: Toluene-d8	63		"	625000		0.0101	90.9-108			
Surrogate: 4-Bromofluorobenzene	62		"	625000		0.00989	88.6-111			

Origins Laboratory, Inc.



*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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 5D16008 - EPA 5030B (Water)**

Matrix Spike Dup (5D16008-MSD1)	Source: X504175-01			Prepared: 04/16/2015 Analyzed: 04/16/2015						
Benzene	48.7	1.0	ug/L	50.0	0.3	96.7	74-130	6.21	20	
Toluene	46.8	1.0	"	50.0	0.4	92.9	73-131	7.20	20	
Ethylbenzene	48.8	1.0	"	50.0	ND	97.5	76-132	6.64	20	
m,p-Xylene	97.5	2.0	"	100	ND	97.5	69-139	6.65	20	
o-Xylene	47.7	1.0	"	50.0	ND	95.5	74-131	8.48	20	
Surrogate: 1,2-Dichloroethane-d4	63		"	625000		0.0100	87.3-113			
Surrogate: Toluene-d8	61		"	625000		0.00984	90.9-108			
Surrogate: 4-Bromofluorobenzene	63		"	625000		0.0101	88.6-111			

Origins Laboratory, Inc.



*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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 5D16012 - EPA 5030 (soil)**

**Blank (5D16012-BLK1)**

Prepared: 04/16/2015 Analyzed: 04/16/2015

Benzene	ND	0.002	mg/kg							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Surrogate: 1,2-Dichloroethane-d4	74		ug/kg	625000		0.0119	70-130			
Surrogate: Toluene-d8	59		"	625000		0.00949	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	625000		0.00986	70-130			

Origins Laboratory, Inc.



*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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 5D16012 - EPA 5030 (soil)**

**LCS (5D16012-BS1)**

Prepared: 04/16/2015 Analyzed: 04/16/2015

Benzene	0.082	0.002	mg/kg	0.100		82.0	77.1-124			
Toluene	0.080	0.002	"	0.100		80.1	74.5-128			
Ethylbenzene	0.081	0.002	"	0.100		81.1	66.4-127			
m,p-Xylene	0.163	0.004	"	0.200		81.5	76.6-124			
o-Xylene	0.082	0.002	"	0.100		82.4	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	63		ug/kg	625000		0.0101	70-130			
Surrogate: Toluene-d8	62		"	625000		0.00997	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	625000		0.0101	70-130			

Origins Laboratory, Inc.



*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.*

Jen Pellegrini For Noelle Doyle Mathis, President

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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 5D16012 - EPA 5030 (soil)

Matrix Spike (5D16012-MS1)	Source: X504205-01			Prepared: 04/16/2015 Analyzed: 04/16/2015						
Benzene	0.084	0.002	mg/kg	0.100	ND	84.1	71.8-126			
Toluene	0.083	0.002	"	0.100	ND	82.5	65.1-130			
Ethylbenzene	0.084	0.002	"	0.100	ND	84.0	62.2-130			
m,p-Xylene	0.168	0.004	"	0.200	ND	84.1	46.5-137			
o-Xylene	0.084	0.002	"	0.100	ND	84.5	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	63		ug/kg	625000		0.0101	70-130			
Surrogate: Toluene-d8	62		"	625000		0.00985	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	625000		0.0101	70-130			

Origins Laboratory, Inc.



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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 5D16012 - EPA 5030 (soil)**

Matrix Spike Dup (5D16012-MSD1)	Source: X504205-01			Prepared: 04/16/2015 Analyzed: 04/16/2015						
Benzene	0.084	0.002	mg/kg	0.100	ND	84.1	71.8-126	0.00	11.3	
Toluene	0.082	0.002	"	0.100	ND	82.1	65.1-130	0.486	15.4	
Ethylbenzene	0.083	0.002	"	0.100	ND	83.4	62.2-130	0.764	19.6	
m,p-Xylene	0.168	0.004	"	0.200	ND	83.8	46.5-137	0.381	19.2	
o-Xylene	0.084	0.002	"	0.100	ND	84.2	54.2-134	0.332	17.9	
Surrogate: 1,2-Dichloroethane-d4	64		ug/kg	625000		0.0102	70-130			
Surrogate: Toluene-d8	61		"	625000		0.00981	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	625000		0.0100	70-130			

Origins Laboratory, Inc.



*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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 5D17005 - EPA 5030 (soil)**

**Blank (5D17005-BLK1)**

Prepared: 04/17/2015 Analyzed: 04/17/2015

Benzene	ND	0.002	mg/kg							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Surrogate: 1,2-Dichloroethane-d4	66		ug/kg	62.5		105	70-130			
Surrogate: Toluene-d8	62		"	62.5		98.6	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		102	70-130			

Origins Laboratory, Inc.



*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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 5D17005 - EPA 5030 (soil)**

**LCS (5D17005-BS1)**

Prepared: 04/17/2015 Analyzed: 04/17/2015

Benzene	0.088	0.002	mg/kg	0.100		88.4	77.1-124			
Toluene	0.086	0.002	"	0.100		86.1	74.5-128			
Ethylbenzene	0.087	0.002	"	0.100		86.9	66.4-127			
m,p-Xylene	0.174	0.004	"	0.200		87.1	76.6-124			
o-Xylene	0.088	0.002	"	0.100		88.2	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	63		ug/kg	62.5		101	70-130			
Surrogate: Toluene-d8	62		"	62.5		98.7	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		103	70-130			

Origins Laboratory, Inc.



*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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 5D17005 - EPA 5030 (soil)**

<b>Matrix Spike (5D17005-MS1)</b>	<b>Source: X504208-01</b>			<b>Prepared: 04/17/2015 Analyzed: 04/17/2015</b>						
Benzene	0.089	0.002	mg/kg	0.100	ND	89.2	71.8-126			
Toluene	0.089	0.002	"	0.100	ND	88.9	65.1-130			
Ethylbenzene	0.096	0.002	"	0.100	ND	96.4	62.2-130			
m,p-Xylene	0.193	0.004	"	0.200	ND	96.4	46.5-137			
o-Xylene	0.097	0.002	"	0.100	ND	96.9	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	63		ug/kg	62.5		100	70-130			
Surrogate: Toluene-d8	63		"	62.5		100	70-130			
Surrogate: 4-Bromofluorobenzene	66		"	62.5		106	70-130			

Origins Laboratory, Inc.



*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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 5D17005 - EPA 5030 (soil)**

<b>Matrix Spike Dup (5D17005-MSD1)</b>	<b>Source: X504208-01</b>			<b>Prepared: 04/17/2015 Analyzed: 04/17/2015</b>						
Benzene	0.088	0.002	mg/kg	0.100	ND	87.7	71.8-126	1.67	11.3	
Toluene	0.086	0.002	"	0.100	ND	85.7	65.1-130	3.69	15.4	
Ethylbenzene	0.091	0.002	"	0.100	ND	91.5	62.2-130	5.24	19.6	
m,p-Xylene	0.182	0.004	"	0.200	ND	91.1	46.5-137	5.66	19.2	
o-Xylene	0.092	0.002	"	0.100	ND	91.8	54.2-134	5.42	17.9	
Surrogate: 1,2-Dichloroethane-d4	63		ug/kg	62.5		101	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.1	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		103	70-130			

Origins Laboratory, Inc.



*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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

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

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

**Batch 5D16009 - EPA 3580**

**Blank (5D16009-BLK1)**

Prepared: 04/16/2015 Analyzed: 04/16/2015

Gasoline (C6-C10)	ND	50	mg/kg							
Diesel (C10-C28)	ND	50	"							
Residual Range Organics (C28-C36)	ND	200	"							

Surrogate: o-Terphenyl 51.7 " 50.0 103 65-146

**LCS (5D16009-BS1)**

Prepared: 04/16/2015 Analyzed: 04/16/2015

Gasoline (C6-C10)	930	50	mg/kg	1000		93.3	66.7-119			
Diesel (C10-C28)	1100	50	"	1000		107	70.1-127			
Residual Range Organics (C28-C36)	870	200	"	1000		87.3	54.5-139			

Surrogate: o-Terphenyl 47.2 " 50.0 94.4 65-146

**LCS Dup (5D16009-BSD1)**

Prepared: 04/16/2015 Analyzed: 04/16/2015

Gasoline (C6-C10)	960	50	mg/kg	1000		96.1	66.7-119	2.91	28.2	
Diesel (C10-C28)	1100	50	"	1000		114	70.1-127	6.44	19.1	
Residual Range Organics (C28-C36)	930	200	"	1000		92.8	54.5-139	6.14	21.2	

Surrogate: o-Terphenyl 49.1 " 50.0 98.3 65-146

**Batch 5D17006 - EPA 3580**

**Blank (5D17006-BLK1)**

Prepared: 04/17/2015 Analyzed: 04/17/2015

Gasoline (C6-C10)	ND	50	mg/kg							
Diesel (C10-C28)	ND	50	"							

Origins Laboratory, Inc.



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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 5D17006 - EPA 3580</b>										
<b>Blank (5D17006-BLK1)</b>					Prepared: 04/17/2015 Analyzed: 04/17/2015					
Residual Range Organics (C28-C36)	ND	200	mg/kg							
Surrogate: o-Terphenyl	50.0		"	50.0		100	65-146			
<b>LCS (5D17006-BS1)</b>					Prepared: 04/17/2015 Analyzed: 04/17/2015					
Gasoline (C6-C10)	890	50	mg/kg	1000		89.2	66.7-119			
Diesel (C10-C28)	1100	50	"				70.1-127			
Residual Range Organics (C28-C36)	620	200	"	1000		62.5	54.5-139			
Surrogate: o-Terphenyl	47.0		"	50.0		94.1	65-146			
<b>Matrix Spike (5D17006-MS1)</b>		<b>Source: X504208-01</b>			Prepared: 04/17/2015 Analyzed: 04/17/2015					
Gasoline (C6-C10)	910	50	mg/kg	1000	17	88.9	56.4-132			
Diesel (C10-C28)	1100	50	"		ND		57.4-138			
Residual Range Organics (C28-C36)	640	200	"	1000	ND	63.7	47.7-129			
Surrogate: o-Terphenyl	45.1		"	50.0		90.2	65-146			
<b>Matrix Spike Dup (5D17006-MSD1)</b>		<b>Source: X504208-01</b>			Prepared: 04/17/2015 Analyzed: 04/17/2015					
Gasoline (C6-C10)	920	50	mg/kg	1000	17	90.7	56.4-132	1.96	22	
Diesel (C10-C28)	1100	50	"		ND		57.4-138	2.63	18.3	
Residual Range Organics (C28-C36)	660	200	"	1000	ND	66.1	47.7-129	3.70	30.1	
Surrogate: o-Terphenyl	48.4		"	50.0		96.8	65-146			

Origins Laboratory, Inc.



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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**Classical Chemistry Parameters - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 5D16010 - NO PREP</b>										
<b>Duplicate (5D16010-DUP1)</b>		<b>Source: X504205-01</b>			Prepared: 04/16/2015 Analyzed: 04/16/2015					
pH	7.50		pH Units		7.54			0.532	25	
<b>Batch 5D16011 - NO PREP</b>										
<b>Blank (5D16011-BLK1)</b>		Prepared: 04/16/2015 Analyzed: 04/16/2015								
Specific Conductance (EC)	0.00300		mmhos/cm							
<b>Duplicate (5D16011-DUP1)</b>		<b>Source: X504205-01</b>			Prepared: 04/16/2015 Analyzed: 04/16/2015					
Specific Conductance (EC)	0.0905		mmhos/cm		0.0894			1.22	25	
<b>Batch 5D17007 - NO PREP</b>										
<b>Duplicate (5D17007-DUP1)</b>		<b>Source: X504208-03</b>			Prepared: 04/17/2015 Analyzed: 04/17/2015					
pH	9.25		pH Units		9.30			0.539	25	
<b>Batch 5D17008 - NO PREP</b>										
<b>Blank (5D17008-BLK1)</b>		Prepared: 04/17/2015 Analyzed: 04/17/2015								
Specific Conductance (EC)	0.00340		mmhos/cm							
<b>Duplicate (5D17008-DUP1)</b>		<b>Source: X504208-03</b>			Prepared: 04/17/2015 Analyzed: 04/17/2015					
Specific Conductance (EC)	0.0794		mmhos/cm		0.0852			7.05	25	

Origins Laboratory, Inc.



*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

John Cocroft  
Project Number: 014215102  
Project: KMG - UPRC - 5-3K

---

**Notes and Definitions**

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.



*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.*

---

Jen Pellegrini For Noelle Doyle Mathis, President



April 28, 2015

LT Environmental, Inc.

John Cocroft

4600 West 60th Avenue

Arvada CO 80003

Project Name - KMG - UPRC - 5-3K

Project Number - 014215102

Attached are your analytical results for KMG - UPRC - 5-3K received by Origins Laboratory, Inc. April 27, 2015. This project is associated with Origins project number X504313-01.

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: 014215102  
Project: KMG - UPRC - 5-3K

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW02	X504313-01	Water	April 27, 2015 10:45	04/27/2015 17:05

Origins Laboratory, Inc.



*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.*

Jen Pellegrini For Noelle Doyle Mathis, President



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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: X504313

Client: LTE

Client Project ID: UPRC 5-3K

Checklist Completed by: Jesse Smith

Shipped Via: PICK UP  
 (UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 4/27/15

Airbill #: 23A

Matrix(s) Received: (Check all that apply):  Soil/Solid  Water  Other: \_\_\_\_\_

Cooler Number/Temperature: 1 / 2.9 °C 1 °C 1 °C (Describe)

Thermometer ID: T003

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> ?	<input checked="" type="checkbox"/>			
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? <b>If yes, contact client and note in narrative.</b>		<input checked="" type="checkbox"/>		
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 subcontracted analyses in order to insure sample integrity)/(pH <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)		<input checked="" type="checkbox"/>		
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.

Jesse Smith  
 Reviewed by (Project Manager)

4/27/15  
 Date/Time Reviewed

Origins Laboratory, Inc.



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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**GW02**

**4/27/2015 10:45:00AM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

**Origins Laboratory, Inc.**  
**X504313-01 (Water)**

**BTEX by EPA 8260C**

Benzene	1.0	1.0	ug/L	1	5D27012	04/27/2015	04/27/2015	
Toluene	1.6	1.0	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	
Xylenes, total	4.3	1.0	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	107 %	87.3-113			"	"	"	
Surrogate: Toluene-d8	100 %	90.9-108			"	"	"	
Surrogate: 4-Bromofluorobenzene	90.5 %	88.6-111			"	"	"	

Origins Laboratory, Inc.



*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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 5D27012 - EPA 5030B (Water)**

**Blank (5D27012-BLK1)**

Prepared: 04/27/2015 Analyzed: 04/27/2015

Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	67		"	62.5	107		87.3-113			
Surrogate: Toluene-d8	62		"	62.5	98.9		90.9-108			
Surrogate: 4-Bromofluorobenzene	57		"	62.5	91.7		88.6-111			

Origins Laboratory, Inc.



*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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 5D27012 - EPA 5030B (Water)**

**LCS (5D27012-BS1)**

Prepared: 04/27/2015 Analyzed: 04/27/2015

Benzene	53.7	1.0	ug/L	50.0		107	75-126			
Toluene	54.9	1.0	"	50.0		110	78.7-126			
Ethylbenzene	59.1	1.0	"	50.0		118	80-130			
m,p-Xylene	116	2.0	"	100		116	77.2-133			
o-Xylene	55.0	1.0	"	50.0		110	77.9-126			
Surrogate: 1,2-Dichloroethane-d4	62		"	62.5		99.6	87.3-113			
Surrogate: Toluene-d8	62		"	62.5		99.5	90.9-108			
Surrogate: 4-Bromofluorobenzene	58		"	62.5		93.0	88.6-111			

Origins Laboratory, Inc.



*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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 5D27012 - EPA 5030B (Water)**

<b>Matrix Spike (5D27012-MS1)</b>	<b>Source: X504282-01</b>			<b>Prepared: 04/27/2015 Analyzed: 04/27/2015</b>						
Benzene	46.9	1.0	ug/L	50.0	ND	93.9	74-130			
Toluene	48.0	1.0	"	50.0	ND	96.1	73-131			
Ethylbenzene	49.1	1.0	"	50.0	ND	98.2	76-132			
m,p-Xylene	94.8	2.0	"	100	ND	94.8	69-139			
o-Xylene	45.2	1.0	"	50.0	ND	90.5	74-131			
Surrogate: 1,2-Dichloroethane-d4	63		"	62.5		101	87.3-113			
Surrogate: Toluene-d8	62		"	62.5		99.4	90.9-108			
Surrogate: 4-Bromofluorobenzene	58		"	62.5		93.4	88.6-111			

Origins Laboratory, Inc.



*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

John Cocroft  
 Project Number: 014215102  
 Project: KMG - UPRC - 5-3K

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 5D27012 - EPA 5030B (Water)**

Matrix Spike Dup (5D27012-MSD1)	Source: X504282-01			Prepared: 04/27/2015 Analyzed: 04/27/2015						
Benzene	48.2	1.0	ug/L	50.0	ND	96.4	74-130	2.67	20	
Toluene	48.1	1.0	"	50.0	ND	96.2	73-131	0.146	20	
Ethylbenzene	49.7	1.0	"	50.0	ND	99.3	76-132	1.13	20	
m,p-Xylene	97.7	2.0	"	100	ND	97.7	69-139	3.03	20	
o-Xylene	48.4	1.0	"	50.0	ND	96.7	74-131	6.67	20	
Surrogate: 1,2-Dichloroethane-d4	62		"	62.5		99.5	87.3-113			
Surrogate: Toluene-d8	62		"	62.5		98.9	90.9-108			
Surrogate: 4-Bromofluorobenzene	58		"	62.5		92.8	88.6-111			

Origins Laboratory, Inc.



*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

John Cocroft  
Project Number: 014215102  
Project: KMG - UPRC - 5-3K

---

### Notes and Definitions

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.



*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.*

---

Jen Pellegrini For Noelle Doyle Mathis, President