

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
NEWBY STATE 27N-33HZ
WELD COUNTY, COLORADO
KERR-MCGEE OIL & GAS ONSHORE, LP

COGCC Allowable Concentration (Soil) -->				Organics (mg/kg)										
				500			0.17	85	100	175	23	4	(6-9)	12
Sample ID:	Sample Date:	Sample Depth (feet bgs):	Photoionization Detector Reading (ppm):	TPH-GRO (C6-C10) Low Fraction	TPH-DRO (C10-C28) High Fraction	TPH-RRO (C28-C40) High Fraction	Benzene	Toluene	Ethylbenzene	Xylenes - total	Naphthalene	EC (<4 mmhos/cm or 2x background)	pH (unit)	SAR
B01@ 1.5'	06/17/2020	1.5'	342.2	16.2	131	<100	<0.050	<0.050	<0.050	<0.050	<0.200	0.203	8.27	1.50
B02@ 1.5'	06/17/2020	1.5'	706.5	<5.00	<25.0	<100	<0.050	<0.050	<0.050	<0.050	<0.200	0.181	8.21	1.08
B03@ 1.5'	06/17/2020	1.5'	385.0	<5.00	<25.0	<100	<0.050	<0.050	<0.050	<0.050	<0.200	0.181	8.15	1.05
B04@ 1.5'	06/17/2020	1.5'	694.8	<5.00	<25.0	<100	<0.050	<0.050	<0.050	<0.050	<0.200	0.176	8.07	0.99

Notes: mg/kg - milligrams per kilogram
COGCC - Colorado Oil and Gas Conservation Commission
bgs - below ground surface
ppm - parts per million
TPH - total petroleum hydrocarbons
GRO - gasoline range organics
DRO - diesel range organics

RRO - residual range organics
EC - Specific Conductance
mmhos/cm - millimhos per centimeter
SAR - Sodium Adsorption Ratio
NA - not analyzed
Bold indicates result exceeds allowable level





June 26, 2020

LT Environmental, Inc.

Brian Sulzberger

4600 West 60th Avenue

Arvada

CO 80003

Project Name - KMG - Newby State 27N-33HZ

Project Number - 014219120

Attached are your analytical results for KMG - Newby State 27N-33HZ received by Origins Laboratory, Inc. June 17, 2020. This project is associated with Origins project number Y006299-01.

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

Brian Sulzberger
Project Number: 014219120
Project: KMG - Newby State 27N-33HZ

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B01@1.5'	Y006299-01	Soil	June 17, 2020 14:45	06/17/2020 16:00
B02@1.5'	Y006299-02	Soil	June 17, 2020 14:47	06/17/2020 16:00
B03@1.5'	Y006299-03	Soil	June 17, 2020 14:49	06/17/2020 16:00
B04@1.5'	Y006299-04	Soil	June 17, 2020 14:51	06/17/2020 16:00

The project name was changed to "Newby State 27N-33HZ" per the email request from Michael Furtaw on 06/26/2020. JAM

Origins Laboratory, Inc.



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Temp Received- 8.4

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

Brian Sulzberger
Project Number: 014219120
Project: KMG - Newby State 27N-33HZ

Origins Laboratory

Sample Receipt Checklist

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

Origins Work Order: Y006259

Client: LTE

Client Project ID: Newby State 27N-33HZ *jm*

Checklist Completed by: JG

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

Date/Time completed: 6/17/2020

Airbill #: N/A

Matrix(s) Received: (Check all that apply): ☒ Soil/Solid ☐ Water ☐ Other: _____

Cooler Number/Temperature: 1 16.4 °C 1 °C 1 °C (Describe) °C

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 ⁽¹⁾ ?		<input checked="" type="checkbox"/>		<u>Same Day</u>
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 ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
For volatiles in water - is there headspace (> 1/4 inch bubble) present? If yes, contact client and note in narrative.	<input checked="" type="checkbox"/>			
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (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 ₃ , HCL, H ₂ SO ₄) / (pH > 10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)			<input checked="" type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾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)

6/17/20
Date/Time Reviewed

Origins Laboratory, Inc.

Jordan A. Merrill

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

Brian Sulzberger
Project Number: 014219120
Project: KMG - Newby State 27N-33HZ

B01@1.5'
6/17/2020 2:45:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y006299-01 (Soil)

DRO/ORO by EPA 8015D

Diesel (C10-C28)	131	25.0	mg/kg	1	B0F1709	TEM	06/17/2020	06/18/2020	
Residual Range Organics (C28-C40)	ND	100	"	"	"	TEM	"	"	U

Surrogate: o-Terphenyl 78.2 % 50-150 " "

GBTEX + Naphthalene by EPA 8260D

Gasoline Range Hydrocarbons	16.2	5.00	mg/kg	25	B0F1712	KDK	06/17/2020	06/18/2020	
Benzene	ND	0.050	"	"	"	KDK	"	"	U
Toluene	ND	0.050	"	"	"	KDK	"	"	U
Ethylbenzene	ND	0.050	"	"	"	KDK	"	"	U
Xylenes, total	ND	0.050	"	"	"	KDK	"	"	U
Naphthalene	ND	0.200	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4 102 % 70-130 " "
Surrogate: Toluene-d8 95.6 % 70-130 " "
Surrogate: 4-Bromofluorobenzene 103 % 70-130 " "

Metals (Saturated Paste Prep)

Calcium	4.06	me/L	1	[none]		06/18/2020	06/22/2020
Magnesium	2.14	"	"	"		"	"
Sodium	2.64	"	"	"		"	"

Origins Laboratory, Inc.



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

Brian Sulzberger
Project Number: 014219120
Project: KMG - Newby State 27N-33HZ

B01@1.5'
6/17/2020 2:45:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y006299-01 (Soil)

pH in Soil by EPA 9045D

pH	8.27	pH Units	1	B0F1710	DJL	06/17/2020	06/17/2020
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SAR by 20B Saturated Paste

SAR	1.50		1	[none]		06/18/2020	06/22/2020
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.203	0.00500	mmhos/cm	1	B0F1711	DJL	06/17/2020	06/17/2020
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Origins Laboratory, Inc.



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

Brian Sulzberger
Project Number: 014219120
Project: KMG - Newby State 27N-33HZ

B02@1.5'
6/17/2020 2:47:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y006299-02 (Soil)

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B0F1709	TEM	06/17/2020	06/18/2020	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	TEM	"	"	U

Surrogate: o-Terphenyl 68.3 % 50-150 " " "

GBTEX + Naphthalene by EPA 8260D

Gasoline Range Hydrocarbons	ND	5.00	mg/kg	25	B0F1712	KDK	06/17/2020	06/18/2020	U
Benzene	ND	0.050	"	"	"	KDK	"	"	U
Toluene	ND	0.050	"	"	"	KDK	"	"	U
Ethylbenzene	ND	0.050	"	"	"	KDK	"	"	U
Xylenes, total	ND	0.050	"	"	"	KDK	"	"	U
Naphthalene	ND	0.200	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4 101 % 70-130 " " "
Surrogate: Toluene-d8 95.4 % 70-130 " " "
Surrogate: 4-Bromofluorobenzene 104 % 70-130 " " "

Metals (Saturated Paste Prep)

Calcium	4.51	me/L	1	[none]	06/18/2020	06/22/2020
Magnesium	2.33	"	"	"	"	"
Sodium	2.00	"	"	"	"	"

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

Brian Sulzberger
Project Number: 014219120
Project: KMG - Newby State 27N-33HZ

B02@1.5'
6/17/2020 2:47:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y006299-02 (Soil)

pH in Soil by EPA 9045D

pH	8.21		pH Units	1	B0F1710	DJL	06/17/2020	06/17/2020	
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SAR by 20B Saturated Paste

SAR	1.08			1	[none]		06/18/2020	06/22/2020	
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.181	0.00500	mmhos/cm	1	B0F1711	DJL	06/17/2020	06/17/2020	
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LT Environmental, Inc.
4600 West 60th Avenue
Arvada CO 80003

Brian Sulzberger
Project Number: 014219120
Project: KMG - Newby State 27N-33HZ

B03@1.5'
6/17/2020 2:49:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y006299-03 (Soil)

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B0F1709	TEM	06/17/2020	06/18/2020	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	TEM	"	"	U

Surrogate: o-Terphenyl 69.3 % 50-150 " " "

GBTEX + Naphthalene by EPA 8260D

Gasoline Range Hydrocarbons	ND	5.00	mg/kg	25	B0F1712	KDK	06/17/2020	06/18/2020	U
Benzene	ND	0.050	"	"	"	KDK	"	"	U
Toluene	ND	0.050	"	"	"	KDK	"	"	U
Ethylbenzene	ND	0.050	"	"	"	KDK	"	"	U
Xylenes, total	ND	0.050	"	"	"	KDK	"	"	U
Naphthalene	ND	0.200	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4 97.3 % 70-130 " " "
Surrogate: Toluene-d8 96.5 % 70-130 " " "
Surrogate: 4-Bromofluorobenzene 102 % 70-130 " " "

Metals (Saturated Paste Prep)

Calcium	4.78	me/L	1	[none]	06/18/2020	06/22/2020
Magnesium	2.51	"	"	"	"	"
Sodium	2.00	"	"	"	"	"

Origins Laboratory, Inc.

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

Brian Sulzberger
Project Number: 014219120
Project: KMG - Newby State 27N-33HZ

B03@1.5'
6/17/2020 2:49:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y006299-03 (Soil)

pH in Soil by EPA 9045D

pH	8.15	pH Units	1	B0F1710	DJL	06/17/2020	06/17/2020
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SAR by 20B Saturated Paste

SAR	1.05		1	[none]		06/18/2020	06/22/2020
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.181	0.00500	mmhos/cm	1	B0F1711	DJL	06/17/2020	06/17/2020
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Origins Laboratory, Inc.



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

Brian Sulzberger
Project Number: 014219120
Project: KMG - Newby State 27N-33HZ

B04@1.5'
6/17/2020 2:51:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y006299-04 (Soil)

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B0F1709	TEM	06/17/2020	06/18/2020	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	TEM	"	"	U

Surrogate: o-Terphenyl 67.0 % 50-150 " " "

GBTEX + Naphthalene by EPA 8260D

Gasoline Range Hydrocarbons	ND	5.00	mg/kg	25	B0F1712	KDK	06/17/2020	06/18/2020	U
Benzene	ND	0.050	"	"	"	KDK	"	"	U
Toluene	ND	0.050	"	"	"	KDK	"	"	U
Ethylbenzene	ND	0.050	"	"	"	KDK	"	"	U
Xylenes, total	ND	0.050	"	"	"	KDK	"	"	U
Naphthalene	ND	0.200	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4 98.6 % 70-130 " " "
Surrogate: Toluene-d8 96.0 % 70-130 " " "
Surrogate: 4-Bromofluorobenzene 101 % 70-130 " " "

Metals (Saturated Paste Prep)

Calcium	6.20	me/L	1	[none]	06/18/2020	06/22/2020
Magnesium	3.28	"	"	"	"	"
Sodium	2.15	"	"	"	"	"

Origins Laboratory, Inc.



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

Brian Sulzberger
Project Number: 014219120
Project: KMG - Newby State 27N-33HZ

B04@1.5'
6/17/2020 2:51:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y006299-04 (Soil)

pH in Soil by EPA 9045D

pH	8.07		pH Units	1	B0F1710	DJL	06/17/2020	06/17/2020
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SAR by 20B Saturated Paste

SAR	0.99			1	[none]		06/18/2020	06/22/2020
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.176	0.00503	mmhos/cm	1	B0F1711	DJL	06/17/2020	06/17/2020
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LT Environmental, Inc.
4600 West 60th Avenue
Arvada CO 80003

Brian Sulzberger
Project Number: 014219120
Project: KMG - Newby State 27N-33HZ

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0F1709 - EPA 3580										
Blank (B0F1709-BLK1)					Prepared: 06/17/2020 Analyzed: 06/18/2020					
Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	15		"	25.0		60.1	50-150			

Origins Laboratory, Inc.



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

Brian Sulzberger
Project Number: 014219120
Project: KMG - Newby State 27N-33HZ

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0F1709 - EPA 3580										
LCS (B0F1709-BS1)					Prepared: 06/17/2020 Analyzed: 06/18/2020					
Diesel (C10-C28)	924	50.0	mg/kg	1000		92.4	70-130			
Residual Range Organics (C28-C40)	807	200	"	1000		80.7	70-130			
Surrogate: o-Terphenyl	40		"	50.0		80.2	50-150			

Origins Laboratory, Inc.



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

Brian Sulzberger
Project Number: 014219120
Project: KMG - Newby State 27N-33HZ

Extractable Petroleum Hydrocarbons by 8015D - 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 B0F1709 - EPA 3580

Matrix Spike (B0F1709-MS1)		Source: Y006302-12			Prepared: 06/17/2020 Analyzed: 06/18/2020					
Diesel (C10-C28)	772	50.0	mg/kg	1000	ND	77.2	70-130			
Residual Range Organics (C28-C40)	612	200	"	1000	50.8	56.1	70-130			QM-07
Surrogate: o-Terphenyl	35		"	50.0		70.9	50-150			

Origins Laboratory, Inc.



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4600 West 60th Avenue
Arvada CO 80003

Brian Sulzberger
Project Number: 014219120
Project: KMG - Newby State 27N-33HZ

Extractable Petroleum Hydrocarbons by 8015D - 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 B0F1709 - EPA 3580

Matrix Spike Dup (B0F1709-MSD1)		Source: Y006302-12			Prepared: 06/17/2020 Analyzed: 06/18/2020					
Diesel (C10-C28)	909	50.0	mg/kg	1000	ND	90.9	70-130	16.3	35	
Residual Range Organics (C28-C40)	722	200	"	1000	50.8	67.1	70-130	17.9	35	QM-07
Surrogate: o-Terphenyl	39		"	50.0		77.6	50-150			

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

Brian Sulzberger
Project Number: 014219120
Project: KMG - Newby State 27N-33HZ

Extractable Petroleum Hydrocarbons by 8015D - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0F1712 - EPA 5030 (soil)										
Blank (B0F1712-BLK1)					Prepared: 06/17/2020 Analyzed: 06/17/2020					
Gasoline Range Hydrocarbons	ND	0.200	mg/kg							U
Benzene	ND	0.002	"							U
Toluene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Naphthalene	ND	0.008	"							U
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		103	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		94.3	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		102	70-130			

Origins Laboratory, Inc.



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

Brian Sulzberger
Project Number: 014219120
Project: KMG - Newby State 27N-33HZ

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0F1712 - EPA 5030 (soil)										
LCS (B0F1712-BS1)					Prepared: 06/17/2020 Analyzed: 06/17/2020					
Benzene	0.060	0.002	mg/kg	0.0500		119	70-130			
Toluene	0.051	0.002	"	0.0500		101	70-130			
Ethylbenzene	0.052	0.002	"	0.0500		103	70-130			
m,p-Xylene	0.105	0.004	"	0.100		105	70-130			
o-Xylene	0.051	0.002	"	0.0500		102	70-130			
Naphthalene	0.047	0.008	"	0.0500		93.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		102	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		92.9	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		103	70-130			

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

Brian Sulzberger
Project Number: 014219120
Project: KMG - Newby State 27N-33HZ

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0F1712 - EPA 5030 (soil)										
Matrix Spike (B0F1712-MS1)		Source: Y006299-01			Prepared: 06/17/2020 Analyzed: 06/17/2020					
Benzene	0.060	0.002	mg/kg	0.0500	0.006	107	70-130			
Toluene	0.051	0.002	"	0.0500	0.030	43.7	70-130			QM-07
Ethylbenzene	0.053	0.002	"	0.0500	0.009	89.0	70-130			
m,p-Xylene	0.113	0.004	"	0.100	0.084	29.2	70-130			QM-07
o-Xylene	0.054	0.002	"	0.0500	0.028	51.0	70-130			QM-07
Naphthalene	0.047	0.008	"	0.0500	0.080	NR	70-130			QM-07
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		102	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		94.3	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		106	70-130			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0F1712 - EPA 5030 (soil)										
Matrix Spike Dup (B0F1712-MSD1)		Source: Y006299-01			Prepared: 06/17/2020 Analyzed: 06/17/2020					
Benzene	0.061	0.002	mg/kg	0.0500	0.006	110	70-130	1.86	20	
Toluene	0.053	0.002	"	0.0500	0.030	46.9	70-130	3.07	20	QM-07
Ethylbenzene	0.056	0.002	"	0.0500	0.009	93.3	70-130	3.99	20	
m,p-Xylene	0.115	0.004	"	0.100	0.084	31.5	70-130	2.00	20	QM-07
o-Xylene	0.056	0.002	"	0.0500	0.028	55.8	70-130	4.35	20	QM-07
Naphthalene	0.050	0.008	"	0.0500	0.080	NR	70-130	6.05	20	QM-07
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		101	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		96.0	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		106	70-130			

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Volatile Organic Compounds by GC/MS SW846 8260D - 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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Classical Chemistry Parameters - 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 B0F1710 - NO PREP

Duplicate (B0F1710-DUP1)		Source: Y006299-01		Prepared: 06/17/2020 Analyzed: 06/17/2020						
pH	8.10		pH Units		8.27			2.08	25	

Batch B0F1711 - NO PREP

Blank (B0F1711-BLK1)		Prepared: 06/17/2020 Analyzed: 06/17/2020								
Specific Conductance (EC)	0.00310	0.00500	mmhos/cm							
Duplicate (B0F1711-DUP1)		Source: Y006299-01		Prepared: 06/17/2020 Analyzed: 06/17/2020						
Specific Conductance (EC)	0.189	0.00500	mmhos/cm		0.203			6.73	25	

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Notes and Definitions

U Sample is Non-Detect.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

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