

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
RICE 1
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)
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)
E01@12'	11/06/2018	12'	NA	2000	570	<100	0.141	0.361	12.7	152	NA	0.110	7.73
N01@12'	11/06/2018	12'	NA	1770	332	<100	1.60	0.260	9.72	106	NA	0.130	7.42
S01@9'	11/06/2018	9'	NA	<0.200	<25.0	<100	<0.002	<0.002	<0.002	0.005	NA	0.0352	8.53
W01@12'	11/06/2018	12'	NA	128	110	<100	<0.050	<0.050	0.596	7.36	NA	0.102	8.19
S02@13'	11/14/2018	13'	NA	42.1	98.1	<100	<0.050	<0.050	0.138	2.15	NA	0.0262	8.15
S03@13'	11/14/2018	13'	NA	143	136	<100	<0.050	<0.050	0.368	3.33	NA	0.0245	7.98
W02@13'	11/14/2018	13'	NA	308	113	<100	<0.050	<0.050	1.75	3.83	NA	0.174	8.04
W03@13'	11/14/2018	13'	NA	209	275	<100	<0.050	<0.050	<0.050	<0.050	NA	0.251	7.71
E02@12'	11/15/2018	12'	NA	239	114	<100	<0.050	0.268	0.831	10.4	NA	0.0798	7.90
E03@13'	11/15/2018	13'	NA	266	200	<100	<0.050	0.128	1.02	10.7	NA	0.0753	7.56
E04@13'	11/16/2018	13'	NA	5.50	<25.0	<100	<0.050	<0.050	<0.050	<0.050	NA	0.352	7.15
N02@13'	11/19/2018	13'	NA	100	29.9	<100	0.130	0.358	0.226	3.11	NA	0.0739	7.86
N03@13'	11/19/2018	13'	NA	1870	247	<100	2.22	10.1	12.9	139	NA	0.0892	7.86
E05@12'	11/20/2018	12'	NA	<5.00	<25.0	<100	<0.050	<0.050	<0.050	<0.050	NA	0.166	7.53
N04@12'	11/20/2018	12'	NA	36.0	<25.0	<100	<0.050	<0.050	<0.050	0.260	NA	0.229	7.47
W04@12'	11/20/2018	12'	NA	1220	976	<100	1.70	0.508	9.03	84.3	NA	0.155	7.88
N05@10'	11/26/2018	10'	NA	59.2	39.5	<100	<0.050	<0.050	<0.050	0.188	NA	0.122	7.80
W05@10'	11/26/2018	10'	NA	1300	211	<100	0.248	0.098	4.22	54.8	NA	0.0756	8.31
N06@10'	11/27/2018	10'	NA	1790	195	<100	0.890	23.8	8.79	102	NA	0.0961	8.05
S04@10'	11/27/2018	10'	NA	547	99.2	<100	0.060	0.138	1.34	20.6	NA	0.0998	8.18
W06@10'	11/27/2018	10'	NA	968	95.1	<100	0.210	2.64	2.42	35.3	NA	0.0308	7.73



TABLE 1 (Continued)
SOIL SAMPLE ANALYTICAL RESULTS
RICE 1
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)
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)
E06@10'	11/29/2018	10'	NA	211	91.8	<100	<0.050	0.280	0.338	4.53	NA	0.118	8.19
N07@10'	11/29/2018	10'	NA	20.5	<25.0	<100	<0.050	<0.050	<0.050	<0.050	NA	0.0399	8.34
W07@10'	11/29/2018	10'	NA	<5.00	<25.0	<100	<0.050	<0.050	<0.050	<0.050	NA	0.0791	8.19
W08@12'	11/29/2018	12'	NA	11.9	<25.0	<100	<0.050	0.214	<0.050	0.430	NA	0.0174	8.50
S05@12'	11/30/2018	12'	NA	421	175	<100	0.055	3.05	1.64	27.4	NA	0.0271	7.37
W09@12'	11/30/2018	12'	NA	276	26.4	<100	<0.050	<0.050	0.923	14.1	NA	0.118	7.50
S06@12'	12/03/2018	12'	NA	0.484	<25.0	<100	0.123	0.010	0.014	0.166	NA	0.0854	7.96

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
NA - not analyzed
Bold indicates result exceeds allowable level
† - Sample was collected at a depth greater than 3 feet bgs



TABLE 2
GROUNDWATER ANALYTICAL AND FIELD RESULTS
RICE 1
WELD COUNTY, COLORADO
KERR-MCGEE OIL & GAS ONSHORE, LP

Well Name	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Depth to Water/ (Product Thickness) (ft bgs)	Relative GW Elev. (ft)
COGCC Allowable Levels		5	560	700	1400		
GW01	11/6/2018	6.44	19.6	50.1	347	14	NA
MW01	2/13/2019	1.13	<1.00	<1.00	2.13	14.17	86.36
	5/6/2019	<1.00	<1.00	<1.00	<1.00	14.76	85.77
	8/15/2019	19.7	<1.00	<1.00	<1.00	9.16	91.37
	11/4/2019	1.21	<1.00	<1.00	<1.00	12.17	88.36
	2/26/2020	<1.00	<1.00	<1.00	<1.00	13.68	86.85
	5/5/2020	1.27	<1.00	<1.00	<1.00	11.54	88.99
	8/7/2020	<1.00	<1.00	<1.00	<1.00	10.14	90.39
MW02	2/13/2019	<1.00	<1.00	<1.00	<1.00	13.56	86.01
	5/6/2019	<1.00	<1.00	<1.00	<1.00	14.01	85.56
	8/15/2019	6.30	<1.00	<1.00	<1.00	8.02	91.55
	11/4/2019	<1.00	<1.00	<1.00	<1.00	10.45	89.12
	2/26/2020	1.61	<1.00	<1.00	<1.00	12.58	86.99
	5/5/2020	<1.00	<1.00	<1.00	<1.00	10.54	89.03
	8/7/2020	<1.00	<1.00	<1.00	<1.00	9.27	90.30
MW03	2/13/2019	2.23	<1.00	<1.00	171	12.97	85.85
	5/6/2019	1.56	<1.00	<1.00	<1.00	14.21	84.61
	8/15/2019	<1.00	<1.00	<1.00	<1.00	7.77	91.05
	11/4/2019	1.11	<1.00	68.5	816	10.70	88.12
	2/26/2020	<1.00	<1.00	<1.00	10.3	12.25	86.57
	5/5/2020	<4.00	<4.00	50.4	700	9.40	89.42
	8/7/2020	<1.00	<1.00	3.67	69.7	8.39	90.43
MW04	2/13/2019	<1.00	<1.00	<1.00	<1.00	12.68	84.72
	5/6/2019	<1.00	<1.00	<1.00	<1.00	12.65	84.75
	8/15/2019	<1.00	<1.00	<1.00	<1.00	8.45	88.95
	11/4/2019	<1.00	<1.00	<1.00	<1.00	9.51	87.89
	2/26/2020	<1.00	<1.00	<1.00	<1.00	11.37	86.03
	5/5/2020	<1.00	<1.00	<1.00	<1.00	10.08	87.32
	8/7/2020	<1.00	<1.00	<1.00	<1.00	7.69	89.71
MW05	2/13/2019	<1.00	<1.00	<1.00	<1.00	15.86	86.13
	5/6/2019	<1.00	<1.00	<1.00	<1.00	15.77	86.22
	8/15/2019	<1.00	<1.00	<1.00	<1.00	10.11	91.88



TABLE 2
GROUNDWATER ANALYTICAL AND FIELD RESULTS
RICE 1
WELD COUNTY, COLORADO
KERR-MCGEE OIL & GAS ONSHORE, LP

Well Name	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Depth to Water/ (Product Thickness) (ft bgs)	Relative GW Elev. (ft)
COGCC Allowable Levels		5	560	700	1400		
	11/4/2019	<1.00	<1.00	<1.00	<1.00	13.35	88.64
	2/26/2020	Not Found - Not Sampled				NM	NA
	5/5/2020	<1.00	<1.00	<1.00	<1.00	13.05	88.94
	8/7/2020	Not Found - Not Sampled				NM	NA
MW06	2/13/2019	<1.00	<1.00	<1.00	<1.00	14.49	85.68
	5/6/2019	<1.00	<1.00	<1.00	<1.00	15.00	85.17
	8/15/2019	<1.00	<1.00	<1.00	<1.00	9.54	90.63
	11/4/2019	<1.00	<1.00	<1.00	<1.00	12.66	87.51
	2/26/2020	<1.00	<1.00	<1.00	<1.00	14.00	86.17
	5/5/2020	<1.00	<1.00	<1.00	<1.00	12.38	87.79
	8/7/2020	<1.00	<1.00	<1.00	<1.00	10.71	89.46
MW07	2/13/2019	<1.00	<1.00	<1.00	<1.00	15.22	83.54
	5/6/2019	<1.00	<1.00	<1.00	<1.00	13.94	84.82
	8/15/2019	<1.00	<1.00	<1.00	<1.00	9.96	88.80
	11/4/2019	<1.00	<1.00	<1.00	<1.00	11.71	87.05
	2/26/2020	<1.00	<1.00	<1.00	<1.00	12.79	85.97
	5/5/2020	<1.00	<1.00	<1.00	<1.00	11.52	87.24
	8/7/2020	<1.00	<1.00	<1.00	<1.00	10.45	88.31
MW08	2/13/2019	<1.00	<1.00	<1.00	<1.00	12.13	83.95
	5/6/2019	<1.00	<1.00	<1.00	<1.00	12.20	83.88
	8/15/2019	<1.00	<1.00	<1.00	<1.00	8.83	87.25
	11/4/2019	<1.00	<1.00	<1.00	<1.00	10.56	85.52
	2/26/2020	Not Found - Not Sampled				NM	NA
	2/28/2020	<1.00	<1.00	<1.00	<1.00	NM	NA
	5/5/2020	<1.00	<1.00	<1.00	<1.00	10.09	85.99
	8/7/2020	<1.00	<1.00	<1.00	<1.00	9.69	86.39

Notes: COGCC - Colorado Oil and Gas Conservation Commission

µg/L - micrograms per liter

ft bgs - feet below ground surface

< - less than laboratory reporting limit

NA - not analyzed/not available

Excavation groundwater depth is approximate

NM - not measured

Corrected Relative GW Elev. is used when LNAPL is present.

BOLD = Analytical result is in exceedance of COGCC Table 910-1 groundwater standards.





November 06, 2019

LT Environmental, Inc.

Brian Sulzberger

4600 West 60th Avenue

Arvada

CO 80003

Project Name - KMG - Rice #1

Project Number - 014218228/WO #897110

Attached are your analytical results for KMG - Rice #1 received by Origins Laboratory, Inc. November 04, 2019. This project is associated with Origins project number Y911038-01.

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: 014218228/WO #89711015
Project: KMG - Rice #1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW01	Y911038-01	Water	November 4, 2019 12:00	11/04/2019 15:25
MW02	Y911038-02	Water	November 4, 2019 12:08	11/04/2019 15:25
MW03	Y911038-03	Water	November 4, 2019 12:15	11/04/2019 15:25
MW04	Y911038-04	Water	November 4, 2019 12:22	11/04/2019 15:25
MW05	Y911038-05	Water	November 4, 2019 12:30	11/04/2019 15:25
MW06	Y911038-06	Water	November 4, 2019 12:38	11/04/2019 15:25
MW07	Y911038-07	Water	November 4, 2019 12:45	11/04/2019 15:25
MW08	Y911038-08	Water	November 4, 2019 12:52	11/04/2019 15:25

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.

Jen Pellegrini, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

Y911038

1725 Elk Place, Denver, CO 80211
Laboratory # - 303.433.1322

Pg 1 of 1

Client: LT Environmental, Inc.
Project: KMG - Rice #1
Project Manager: Brian Sulzberger
Project Number: 014218228/WO #89711015

Number	Sample Identification	Matrix	Sample Date	Sample Time	Sampled By	Container	Qty	Analyses
01-001	MW01	Water	11-4-19	1200	RS	40mL Clear Vial Cool to 4°	3	BTEX by EPA 8260C
02-001	MW02	Water		1208		40mL Clear Vial Cool to 4°	3	BTEX by EPA 8260C
03-001	MW03	Water		1215		40mL Clear Vial Cool to 4°	3	BTEX by EPA 8260C
04-001	MW04	Water		1222		40mL Clear Vial Cool to 4°	3	BTEX by EPA 8260C
05-001	MW05	Water		1230		40mL Clear Vial Cool to 4°	3	BTEX by EPA 8260C
06-001	MW06	Water		1238		40mL Clear Vial Cool to 4°	2	BTEX by EPA 8260C
07-001	MW07	Water		1245		40mL Clear Vial Cool to 4°	3	BTEX by EPA 8260C
08-001	MW08	Water		1252		40mL Clear Vial Cool to 4°	3	BTEX by EPA 8260C

Relinquished By: *John DeLong* 11-4-19 1525
Date / Time

Received By: _____
Date / Time

Relinquished By: *[Signature]* 11-4-19 1525
Date / Time

Temperature on Receipt: 4.5
Turn Around Time:
Same Day: ☐ 72-hr: ☒
24-hr: ☐ Standard
48-hr: ☐

Origins Laboratory, Inc.

Jen Pellegrini

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: Y911038

Client: LTE

Client Project ID: KMG-Rice #1

Checklist Completed by: JE KDK

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

Date/time completed: 11 / 05 / 2019

Airbill #: N/A

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

Cooler Number/Temperature: 1 / 4.5 °C / °C / °C / °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"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact ^{(1)?}	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ^{(1)?}	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present ^{(1)?}	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely ^{(1)?}	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ^{(1)?}	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ^{(1)?}	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded ^{(1)?}	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	<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) CP

Date/Time Reviewed 11/6/19

Origins Laboratory, Inc.

Jen Pellegrini

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Jen Pellegrini, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW01

11/4/2019 12:00:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y911038-01 (Water)

BTEX by EPA 8260D

Benzene	1.21	1.00	ug/L	1	B9K0507	KDK	11/05/2019	11/05/2019	
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	96.0 %	70-130			"	"	"
Surrogate: Toluene-d8	99.2 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	99.2 %	70-130			"	"	"

Origins Laboratory, Inc.



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Jen Pellegrini, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW02

11/4/2019 12:08:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y911038-02 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B9K0507	KDK	11/05/2019	11/05/2019	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	94.8 %	70-130	"	"	"
Surrogate: Toluene-d8	101 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	98.4 %	70-130	"	"	"

Origins Laboratory, Inc.



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Jen Pellegrini, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW03

11/4/2019 12:15:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y911038-03 (Water)

BTEX by EPA 8260D

Benzene	1.11	1.00	ug/L	1	B9K0507	KDK	11/05/2019	11/05/2019	
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	68.5	10.0	"	10	"	KDK	"	11/06/2019	
Xylenes, total	816	10.0	"	"	"	KDK	"	"	

Surrogate: 1,2-Dichloroethane-d4	93.6 %	70-130			"	"	11/05/2019
Surrogate: Toluene-d8	102 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	99.1 %	70-130			"	"	"

Origins Laboratory, Inc.



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Jen Pellegrini, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW04

11/4/2019 12:22:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y911038-04 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B9K0507	KDK	11/05/2019	11/05/2019	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	96.7 %	70-130	"	"	"
Surrogate: Toluene-d8	98.5 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	96.6 %	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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW05

11/4/2019 12:30:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y911038-05 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B9K0507	KDK	11/05/2019	11/05/2019	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	96.4 %	70-130	"	"	"
Surrogate: Toluene-d8	101 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	99.2 %	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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW06

11/4/2019 12:38:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y911038-06 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B9K0507	KDK	11/05/2019	11/05/2019	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	95.0 %	70-130	"	"	"
Surrogate: Toluene-d8	99.2 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	97.6 %	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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW07

11/4/2019 12:45:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y911038-07 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B9K0507	KDK	11/05/2019	11/05/2019	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	97.1 %	70-130	"	"	"
Surrogate: Toluene-d8	101 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	96.5 %	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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW08

11/4/2019 12:52:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
Y911038-08 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B9K0507	KDK	11/05/2019	11/05/2019	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	96.2 %	70-130	"	"	"
Surrogate: Toluene-d8	100 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	99.7 %	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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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 B9K0507 - EPA 5030B (Water)										
Blank (B9K0507-BLK1)					Prepared: 11/05/2019 Analyzed: 11/05/2019					
Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	62		"	62.5		98.9	70-130			
Surrogate: Toluene-d8	63		"	62.5		101	70-130			
Surrogate: 4-Bromofluorobenzene	60		"	62.5		95.7	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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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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Batch B9K0507 - EPA 5030B (Water)

LCS (B9K0507-BS1)

Prepared: 11/05/2019 Analyzed: 11/05/2019

Benzene	55.8	1.00	ug/L	50.0		112	70-130			
Toluene	53.5	1.00	"	50.0		107	70-130			
Ethylbenzene	50.8	1.00	"	50.0		102	70-130			
m,p-Xylene	98.2	2.00	"	100		98.2	70-130			
o-Xylene	49.0	1.00	"	50.0		98.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	63		"	62.5		100	70-130			
Surrogate: Toluene-d8	63		"	62.5		100	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.3	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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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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Batch B9K0507 - EPA 5030B (Water)

Matrix Spike (B9K0507-MS1)		Source: Y911037-02			Prepared: 11/05/2019 Analyzed: 11/05/2019					
Benzene	61.5	1.00	ug/L	50.0	ND	123	70-130			
Toluene	58.9	1.00	"	50.0	ND	118	70-130			
Ethylbenzene	57.9	1.00	"	50.0	ND	116	70-130			
m,p-Xylene	112	2.00	"	100	ND	112	70-130			
o-Xylene	54.6	1.00	"	50.0	ND	109	70-130			
Surrogate: 1,2-Dichloroethane-d4	56		"	62.5		89.1	70-130			
Surrogate: Toluene-d8	62		"	62.5		98.6	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		98.0	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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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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Batch B9K0507 - EPA 5030B (Water)

Matrix Spike Dup (B9K0507-MSD1)		Source: Y911037-02			Prepared: 11/05/2019 Analyzed: 11/05/2019					
Benzene	62.8	1.00	ug/L	50.0	ND	126	70-130	2.06	20	
Toluene	59.2	1.00	"	50.0	ND	118	70-130	0.457	20	
Ethylbenzene	57.6	1.00	"	50.0	ND	115	70-130	0.485	20	
m,p-Xylene	112	2.00	"	100	ND	112	70-130	0.383	20	
o-Xylene	54.2	1.00	"	50.0	ND	108	70-130	0.753	20	
Surrogate: 1,2-Dichloroethane-d4	55		"	62.5		88.0	70-130			
Surrogate: Toluene-d8	63		"	62.5		101	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.4	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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

Notes and Definitions

U Sample is Non-Detect.

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, Project Manager



March 03, 2020

LT Environmental, Inc.

Brian Sulzberger

4600 West 60th Avenue

Arvada

CO 80003

Project Name - KMG - Rice #1

Project Number - 014218228/WO #897110

Attached are your analytical results for KMG - Rice #1 received by Origins Laboratory, Inc. February 26, 2020. This project is associated with Origins project number Y002383-01.

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: 014218228/WO #89711015
Project: KMG - Rice #1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW01	Y002383-01	Water	February 26, 2020 13:00	02/26/2020 14:48
MW02	Y002383-02	Water	February 26, 2020 13:05	02/26/2020 14:48
MW03	Y002383-03	Water	February 26, 2020 13:11	02/26/2020 14:48
MW04	Y002383-04	Water	February 26, 2020 13:17	02/26/2020 14:48
MW06	Y002383-05	Water	February 26, 2020 13:30	02/26/2020 14:48
MW07	Y002383-06	Water	February 26, 2020 13:36	02/26/2020 14:48

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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

www.originslaboratory.com

4002383

ORIGINS
LABORATORY, INC

page | of |

Client: LT Environmental Inc
Address: 4600 W 60th Ave, Arvada, CO 80003
Telephone Number: 303-473-4788
Email Address: KMG Group

Project Manager: Brian Sulzberger
Project Name: Rice #1
Project Number: 014218228
Samples Collected By: Taylor Cup

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 ₃	Other	Groundwater	Soil	Air Summa Canister #		
Mw01	09/26/30	1300	3	X				X			BTEX	1
Mw02		1305										2
Mw03		1311										3
Mw04		1317										4
Mw06		1330										5
Mw07		1336										6
												7
												8
												9
												10
Relinquished By: <i>yaf</i>	Date: 09/26/30	Time: 1448	Received By: <i>[Signature]</i>	Date: 2-26-20	Time: 1448	Turnaround Time: Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input checked="" type="checkbox"/>						
Relinquished By:	Date:	Time:	Received By:	Date:	Time:							

Date Results Needed

Temp Received- 56

Origins Laboratory, Inc.

Jen 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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

Origins Laboratory

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

4002383 Sample Receipt Checklist

Origins Work Order: 4002383

Client: LTE

Client Project ID: KMG-Rice#1

Checklist Completed by: JP

Shipped Via: 4D
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 2/26/20

Airbill #: NA

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

Cooler Number/Temperature: 1 / 5.6 °C / °C / °C / °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 ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	<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) JP

Date/Time Reviewed 2-27-20

Origins Laboratory, Inc.

Jen 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.

Jen Pellegrini, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW01

2/26/2020 1:00:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y002383-01 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0B2702	ZZZ	02/27/2020	03/02/2020	U
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	1.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	1.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	110 %	70-130			"	"	03/02/2020
Surrogate: Toluene-d8	90.0 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW02

2/26/2020 1:05:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y002383-02 (Water)

BTEX by EPA 8260D

Benzene	1.61	1.00	ug/L	1	B0B2702	ZZZ	02/27/2020	03/02/2020	
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	1.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	1.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	96.8 %	70-130			"	"		03/02/2020
Surrogate: Toluene-d8	82.4 %	70-130			"	"		"
Surrogate: 4-Bromofluorobenzene	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.

Jen Pellegrini, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW03

2/26/2020 1:11:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y002383-03 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0B2702	KDK	02/27/2020	03/02/2020	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	10.3	1.00	"	"	"	KDK	"	"	

Surrogate: 1,2-Dichloroethane-d4	108 %	70-130			"	"	"
Surrogate: Toluene-d8	101 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW04

2/26/2020 1:17:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y002383-04 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0B2702	KDK	02/27/2020	03/02/2020	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	109 %	70-130	"	"	"
Surrogate: Toluene-d8	99.0 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	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.

Jen Pellegrini, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW06

2/26/2020 1:30:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y002383-05 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0B2702	ZZZ	02/27/2020	03/02/2020	U
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	1.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	1.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	110 %	70-130			"	"	03/02/2020
Surrogate: Toluene-d8	101 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	93.5 %	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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW07

2/26/2020 1:36:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y002383-06 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0B2702	KDK	02/27/2020	03/02/2020	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	147 %	70-130			"	"	"	S-07
Surrogate: Toluene-d8	102 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	118 %	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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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 B0B2702 - EPA 5030B (Water)										
Blank (B0B2702-BLK1)					Prepared: 02/27/2020 Analyzed: 03/02/2020					
Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	66		"	62.5		105	70-130			
Surrogate: Toluene-d8	54		"	62.5		86.0	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.3	70-130			

Origins Laboratory, Inc.



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Jen Pellegrini, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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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Batch B0B2702 - EPA 5030B (Water)

LCS (B0B2702-BS1)

Prepared: 02/27/2020 Analyzed: 03/02/2020

Benzene	53.6	1.00	ug/L	50.0		107	70-130			
Toluene	57.5	1.00	"	50.0		115	70-130			
Ethylbenzene	53.4	1.00	"	50.0		107	70-130			
m,p-Xylene	109	2.00	"	100		109	70-130			
o-Xylene	52.7	1.00	"	50.0		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	66		"	62.5		105	70-130			
Surrogate: Toluene-d8	64		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		98.6	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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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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Batch B0B2702 - EPA 5030B (Water)

Matrix Spike (B0B2702-MS1)		Source: Y002383-03			Prepared: 02/27/2020 Analyzed: 03/02/2020					
Benzene	36.9	1.00	ug/L	50.0	ND	73.7	70-130			
Toluene	42.3	1.00	"	50.0	ND	84.6	70-130			
Ethylbenzene	55.1	1.00	"	50.0	ND	110	70-130			
m,p-Xylene	122	2.00	"	100	ND	122	70-130			
o-Xylene	70.2	1.00	"	50.0	10.3	120	70-130			
Surrogate: 1,2-Dichloroethane-d4	41		"	62.5		65.7	70-130			S-04
Surrogate: Toluene-d8	51		"	62.5		81.9	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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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Batch B0B2702 - EPA 5030B (Water)

Matrix Spike Dup (B0B2702-MSD1)		Source: Y002383-03			Prepared: 02/27/2020 Analyzed: 03/02/2020					
Benzene	64.1	1.00	ug/L	50.0	ND	128	70-130	53.9	20	QR-02
Toluene	54.0	1.00	"	50.0	ND	108	70-130	24.4	20	QR-02
Ethylbenzene	54.5	1.00	"	50.0	ND	109	70-130	1.09	20	
m,p-Xylene	103	2.00	"	100	ND	103	70-130	17.3	20	
o-Xylene	63.2	1.00	"	50.0	10.3	106	70-130	10.5	20	
Surrogate: 1,2-Dichloroethane-d4	74		"	62.5		118	70-130			
Surrogate: Toluene-d8	62		"	62.5		98.9	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.6	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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

Notes and Definitions

- U Sample is Non-Detect.
- S-07 High surrogate in sample, however sample is non-detect. High surrogate indicates result values are biased high.
- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- 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, Project Manager



March 04, 2020

LT Environmental, Inc.

Brian Sulzberger

4600 West 60th Avenue

Arvada

CO 80003

Project Name - KMG - Rice #1

Project Number - 014218228/WO #897110

Attached are your analytical results for KMG - Rice #1 received by Origins Laboratory, Inc. February 28, 2020. This project is associated with Origins project number Y002435-01.

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: 014218228/WO #89711015

Project: KMG - Rice #1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW08	Y002435-01	Water	February 28, 2020 11:35	02/28/2020 15:01

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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

ORIGINS

LABORATORY, INC

www.originslaboratory.com

Y002435

page | of |

Client: LT Environmental Inc

Address: 4600 W 60th Ave, Arvada, CO

80003

Telephone Number: 303-433-9780

Email Address: KMG Group

Fax: 303.265.9645

Phone: 303.433.1322

Denver, CO 80211

1725 Elk Place

Project Manager: Brian Sulzberger

Project Name: Rice #1

Project Number: TC

Samples Collected By: TC

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions	
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summ #			Other
M6-08	07/26/10	1135	3	X				X					1
													2
													3
													4
													5
													6
													7
													8
													9
													10

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Turnaround Time:
<u>[Signature]</u>	07/28/10	1501	<u>[Signature]</u>	7-28-10	1501	Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input checked="" type="checkbox"/>

Temp Received: 3.1 Date Results Needed

Origins Laboratory, Inc.

Jen 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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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

Sample Receipt Checklist

Origins Work Order: 4002435 Client: LRE
Client Project ID: KMG-Rice #1

Checklist Completed by: JP Shipped Via: HV
Date/time completed: 2/28/20 (UPS, FedEx, Hand Delivered, Pick-up, etc.)
Airbill #: NA

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

Cooler Number/Temperature: 1 / 3.1 °C / °C / °C (Describe) °C
Thermometer ID: TAB

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"/>			
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 (> ¼ 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"/>		<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) [Signature] Date/Time Reviewed 03-02-20 0744

Origins Laboratory, Inc.

Jen 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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW08

2/28/2020 11:35:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y002435-01 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0B2811	KDK	02/28/2020	03/03/2020	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	96.9 %	70-130	"	"	"
Surrogate: Toluene-d8	94.1 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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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Batch B0B2811 - EPA 5030B (Water)

Blank (B0B2811-BLK1)

Prepared: 02/28/2020 Analyzed: 03/03/2020

Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5	95.9		70-130			
Surrogate: Toluene-d8	59		"	62.5	94.1		70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5	101		70-130			

Origins Laboratory, Inc.



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Jen Pellegrini, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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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Batch B0B2811 - EPA 5030B (Water)

LCS (B0B2811-BS1)

Prepared: 02/28/2020 Analyzed: 03/03/2020

Benzene	52.4	1.00	ug/L	50.0		105	70-130			
Toluene	54.9	1.00	"	50.0		110	70-130			
Ethylbenzene	55.7	1.00	"	50.0		111	70-130			
m,p-Xylene	112	2.00	"	100		112	70-130			
o-Xylene	59.4	1.00	"	50.0		119	70-130			
Surrogate: 1,2-Dichloroethane-d4	57		"	62.5		91.4	70-130			
Surrogate: Toluene-d8	64		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.8	70-130			

Origins Laboratory, Inc.



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Jen Pellegrini, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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 B0B2811 - EPA 5030B (Water)										
Matrix Spike (B0B2811-MS1)		Source: Y002433-01			Prepared: 02/28/2020 Analyzed: 03/03/2020					
Benzene	58.8	1.00	ug/L	50.0	10.9	95.8	70-130			
Toluene	117	1.00	"	50.0	78.2	77.7	70-130			
Ethylbenzene	188	1.00	"	50.0	153	69.7	70-130			QM-07
m,p-Xylene	503	2.00	"	100	2720	NR	70-130			QM-07
o-Xylene	314	1.00	"	50.0	540	NR	70-130			QM-07
Surrogate: 1,2-Dichloroethane-d4	55		"	62.5		87.3	70-130			
Surrogate: Toluene-d8	64		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	68		"	62.5		108	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, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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 B0B2811 - EPA 5030B (Water)										
Matrix Spike Dup (B0B2811-MSD1)			Source: Y002433-01		Prepared: 02/28/2020 Analyzed: 03/03/2020					
Benzene	61.7	1.00	ug/L	50.0	10.9	102	70-130	4.78	20	
Toluene	121	1.00	"	50.0	78.2	85.7	70-130	3.33	20	
Ethylbenzene	191	1.00	"	50.0	153	76.0	70-130	1.66	20	
m,p-Xylene	501	2.00	"	100	2720	NR	70-130	0.211	20	QM-07
o-Xylene	318	1.00	"	50.0	540	NR	70-130	1.47	20	QM-07
Surrogate: 1,2-Dichloroethane-d4	53		"	62.5		85.4	70-130			
Surrogate: Toluene-d8	63		"	62.5		100	70-130			
Surrogate: 4-Bromofluorobenzene	67		"	62.5		107	70-130			

Origins Laboratory, Inc.



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Jen Pellegrini, Project Manager

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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.

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, Project Manager



May 12, 2020

LT Environmental, Inc.

Brian Sulzberger

4600 West 60th Avenue

Arvada

CO 80003

Project Name - KMG - Rice #1

Project Number - 014218228/WO #897110

Attached are your analytical results for KMG - Rice #1 received by Origins Laboratory, Inc. May 05, 2020. This project is associated with Origins project number Y005049-01.

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: 014218228/WO #89711015
Project: KMG - Rice #1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW01	Y005049-01	Water	May 5, 2020 11:05	05/05/2020 14:12
MW02	Y005049-02	Water	May 5, 2020 11:11	05/05/2020 14:12
MW03	Y005049-03	Water	May 5, 2020 11:17	05/05/2020 14:12
MW04	Y005049-04	Water	May 5, 2020 11:22	05/05/2020 14:12
MW05	Y005049-05	Water	May 5, 2020 11:29	05/05/2020 14:12
MW06	Y005049-06	Water	May 5, 2020 11:35	05/05/2020 14:12
MW07	Y005049-07	Water	May 5, 2020 11:42	05/05/2020 14:12
MW08	Y005049-08	Water	May 5, 2020 11:47	05/05/2020 14:12

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

ORIGINS
LABORATORY, INC

Y005049

all unpreserved VOCs

1725 Elk Place, Denver, CO 80211
Laboratory # - 303.433.1322

Client: LT Environmental, Inc.		Project Manager: Brian Sulzberger		Project: 014218228/WO #89711015	
Project: KMG - Rice #1		Number: 1105		Container: 40mL Clear Vial Cool to 4	
Sample Number	Sample Identification	Matrix	Sample Date	Sample Time	Analyses
01-001	MW01	Water	05/05/20	1105	3 BTEX by EPA 8260C
02-001	MW02	Water		1111	3 BTEX by EPA 8260C
03-001	MW03	Water		1117	3 BTEX by EPA 8260C
04-001	MW04	Water		1122	3 BTEX by EPA 8260C
05-001	MW05	Water		1139	3 BTEX by EPA 8260C
06-001	MW06	Water		1135	3 BTEX by EPA 8260C
07-001	MW07	Water		1143	3 BTEX by EPA 8260C
08-001	MW08	Water		1147	3 BTEX by EPA 8260C

Temperature on Receipt
Turn Around Time:
Same Day ☐ 72-hr ☐
24-hr ☐ Standard ☐

Relinquished By _____ Date / Time _____
Received By _____ Date / Time _____

Relinquished By *Jaylen* 05/05/20 1411
Received By *Jaylen* 5/5/20 1412

Origins Laboratory, Inc.

Jordan A. Merrill

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: Y005049 Client: LTE
Client Project ID: KMG-Rice #1
Checklist Completed by: JS KDK Shipped Via: HD
Date/time completed: 05/06/2020 (UPS, FedEx, Hand Delivered, Pick-up, etc.)
Airbill #: N/A
Matrix(s) Received: (Check all that apply): Soil/Solid ☒ Water ☐ Other: (Describe)
Cooler Number/Temperature: 1 7.6 °C °C °C °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"/>		Same Day
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 (> ¼ 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) Jm

Date/Time Reviewed 5-7-20

Origins Laboratory, Inc.

Jm

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW01

5/5/2020 11:05:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y005049-01 (Water)

BTEX by EPA 8260D

Benzene	1.27	1.00	ug/L	1	B0E0602	KDK	05/06/2020	05/06/2020	
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	70-130			"	"	"
Surrogate: Toluene-d8	104 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	125 %	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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW02

5/5/2020 11:11:00AM

Analyte	Result	Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y005049-02 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0E0602	KDK	05/06/2020	05/06/2020	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	70-130	"	"	"
Surrogate: Toluene-d8	105 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	124 %	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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW03

5/5/2020 11:17:00AM

Analyte	Result	Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y005049-03 (Water)

BTEX by EPA 8260D

Benzene	ND	4.00	ug/L	4	B0E0602	KDK	05/06/2020	05/06/2020	U
Toluene	ND	4.00	"	"	"	KDK	"	"	U
Ethylbenzene	50.4	4.00	"	"	"	KDK	"	"	
Xylenes, total	700	4.00	"	"	"	KDK	"	"	

Surrogate: 1,2-Dichloroethane-d4	101 %	70-130	"	"	"
Surrogate: Toluene-d8	103 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	123 %	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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW04

5/5/2020 11:22:00AM

Analyte	Result	Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y005049-04 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0E0602	KDK	05/06/2020	05/06/2020	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	102 %	70-130	"	"	"
Surrogate: Toluene-d8	104 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	125 %	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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW05

5/5/2020 11:29:00AM

Analyte	Result	Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y005049-05 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0E0602	KDK	05/06/2020	05/06/2020	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	100 %	70-130	"	"	"
Surrogate: Toluene-d8	102 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	123 %	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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW06

5/5/2020 11:35:00AM

Analyte	Result	Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y005049-06 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0E0602	KDK	05/06/2020	05/06/2020	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	100 %	70-130	"	"	"
Surrogate: Toluene-d8	103 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	124 %	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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW07

5/5/2020 11:42:00AM

Analyte	Result	Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y005049-07 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0E0602	KDK	05/06/2020	05/06/2020	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	100 %	70-130	"	"	"
Surrogate: Toluene-d8	103 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	122 %	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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW08

5/5/2020 11:47:00AM

Analyte	Result	Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y005049-08 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0E0602	KDK	05/06/2020	05/06/2020	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	98.2 %	70-130	"	"	"
Surrogate: Toluene-d8	104 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	123 %	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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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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Batch B0E0602 - EPA 5030B (Water)

Blank (B0E0602-BLK1)

Prepared: 05/06/2020 Analyzed: 05/06/2020

Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	63		"	62.5	102		70-130			
Surrogate: Toluene-d8	64		"	62.5	103		70-130			
Surrogate: 4-Bromofluorobenzene	77		"	62.5	123		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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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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Batch B0E0602 - EPA 5030B (Water)

LCS (B0E0602-BS1)

Prepared: 05/06/2020 Analyzed: 05/06/2020

Benzene	50.0	1.00	ug/L	50.0		100	70-130			
Toluene	54.4	1.00	"	50.0		109	70-130			
Ethylbenzene	49.3	1.00	"	50.0		98.6	70-130			
m,p-Xylene	103	2.00	"	100		103	70-130			
o-Xylene	49.6	1.00	"	50.0		99.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5		96.6	70-130			
Surrogate: Toluene-d8	64		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	77		"	62.5		123	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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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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Batch B0E0602 - EPA 5030B (Water)

Matrix Spike (B0E0602-MS1)		Source: Y005043-01			Prepared: 05/06/2020 Analyzed: 05/06/2020					
Benzene	56.7	1.00	ug/L	50.0	ND	113	70-130			
Toluene	61.8	1.00	"	50.0	ND	124	70-130			
Ethylbenzene	57.1	1.00	"	50.0	ND	114	70-130			
m,p-Xylene	118	2.00	"	100	ND	118	70-130			
o-Xylene	55.0	1.00	"	50.0	ND	110	70-130			
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5		96.1	70-130			
Surrogate: Toluene-d8	65		"	62.5		104	70-130			
Surrogate: 4-Bromofluorobenzene	78		"	62.5		124	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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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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Batch B0E0602 - EPA 5030B (Water)

Matrix Spike Dup (B0E0602-MSD1)		Source: Y005043-01			Prepared: 05/06/2020 Analyzed: 05/06/2020					
Benzene	49.5	1.00	ug/L	50.0	ND	99.1	70-130	13.4	20	
Toluene	54.6	1.00	"	50.0	ND	109	70-130	12.2	20	
Ethylbenzene	49.5	1.00	"	50.0	ND	99.0	70-130	14.3	20	
m,p-Xylene	102	2.00	"	100	ND	102	70-130	13.9	20	
o-Xylene	47.6	1.00	"	50.0	ND	95.3	70-130	14.4	20	
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5		96.1	70-130			
Surrogate: Toluene-d8	65		"	62.5		105	70-130			
Surrogate: 4-Bromofluorobenzene	77		"	62.5		123	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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

Notes and Definitions

U Sample is Non-Detect.

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.



August 14, 2020

LT Environmental, Inc.

Brian Sulzberger

4600 West 60th Avenue

Arvada

CO 80003

Project Name - KMG - Rice #1

Project Number - 014218228/WO #897110

Attached are your analytical results for KMG - Rice #1 received by Origins Laboratory, Inc. August 07, 2020. This project is associated with Origins project number Y008115-01.

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: 014218228/WO #89711015
Project: KMG - Rice #1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW01	Y008115-01	Water	August 7, 2020 12:00	08/07/2020 14:15
MW02	Y008115-02	Water	August 7, 2020 12:06	08/07/2020 14:15
MW03	Y008115-03	Water	August 7, 2020 12:12	08/07/2020 14:15
MW04	Y008115-04	Water	August 7, 2020 12:20	08/07/2020 14:15
MW06	Y008115-05	Water	August 7, 2020 12:26	08/07/2020 14:15
MW07	Y008115-06	Water	August 7, 2020 12:36	08/07/2020 14:15
MW08	Y008115-07	Water	August 7, 2020 12:42	08/07/2020 14:15

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

ORIGINS

LABORATORY, INC

Y008115

1725 Elk Place, Denver, CO 80211
Laboratory # - 303.433.1322

Client: LT Environmental, Inc.		Project Manager: Brian Sulzberger					
Project: KMG - Rice #1		Project Number: 014218228/WO #89711015					
Number	Sample Identification	Matrix	Sample Date	Sample Time	Container	Qty	Analyses
01-001	MW01	Water	8-1-10	1200	RS	3	BTEX by EPA 8260C
02-001	MW02	Water		1206		3	BTEX by EPA 8260C
03-001	MW03	Water		1212		3	BTEX by EPA 8260C
04-001	MW04	Water		1226		3	BTEX by EPA 8260C
05-001	MW05	Water			40mL Clear Vial Cool to 4°	3	BTEX by EPA 8260C
06-001	MW06	Water		1226	40mL Clear Vial Cool to 4°	3	BTEX by EPA 8260C
07-001	MW07	Water		1236	40mL Clear Vial Cool to 4°	3	BTEX by EPA 8260C
08-001	MW08	Water		1242	40mL Clear Vial Cool to 4°	3	BTEX by EPA 8260C

Temperature on Receipt: 26.1
Turn Around Time: ☒ 24-hr ☐ 72-hr ☐ Standard
Same Day: ☐ 24-hr ☐ 48-hr

Relinquished By: [Signature] Date / Time: 8-7-20 1415
Received By: [Signature] Date / Time: 8-7-20 1415

Origins Laboratory, Inc.

[Signature]

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

Origins Laboratory

Sample Receipt Checklist

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

Origins Work Order: Y008115

Client: LT

Client Project ID: KMG-Rice #1

Checklist Completed by: Jm

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

Date/time completed: 8-8-20

Airbill #:

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

Cooler Number/Temperature: 1 20.1 °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 (> ¼ 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) Jm

8-10-20
Date/Time Reviewed

Origins Laboratory, Inc.

Jm

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW01

8/7/2020 12:00:00PM

Analyte	Result	Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y008115-01 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0H1001	ZZZ	08/10/2020	08/10/2020	U
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	1.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	1.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	102 %	70-130	"	"	"
Surrogate: Toluene-d8	98.5 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	95.7 %	70-130	"	"	"

Origins Laboratory, Inc.



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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW02

8/7/2020 12:06:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y008115-02 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0H1001	ZZZ	08/10/2020	08/10/2020	U
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	1.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	1.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	105 %	70-130	"	"	"
Surrogate: Toluene-d8	101 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	96.3 %	70-130	"	"	"

Origins Laboratory, Inc.



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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW03

8/7/2020 12:12:00PM

Analyte	Result	Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y008115-03 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0H1001	ZZZ	08/10/2020	08/10/2020	U
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	3.67	1.00	"	"	"	ZZZ	"	"	
Xylenes, total	69.7	1.00	"	"	"	ZZZ	"	"	

Surrogate: 1,2-Dichloroethane-d4	103 %	70-130			"	"	"
Surrogate: Toluene-d8	95.3 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	99.0 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW04

8/7/2020 12:20:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y008115-04 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0H1001	ZZZ	08/10/2020	08/10/2020	U
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	1.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	1.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	103 %	70-130	"	"	"
Surrogate: Toluene-d8	102 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	95.8 %	70-130	"	"	"

Origins Laboratory, Inc.



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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW06

8/7/2020 12:26:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y008115-05 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0H1001	ZZZ	08/10/2020	08/10/2020	U
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	1.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	1.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	102 %	70-130	"	"	"
Surrogate: Toluene-d8	97.3 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	98.2 %	70-130	"	"	"

Origins Laboratory, Inc.



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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW07

8/7/2020 12:36:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y008115-06 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0H1001	ZZZ	08/10/2020	08/10/2020	U
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	1.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	1.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	102 %	70-130	"	"	"
Surrogate: Toluene-d8	98.3 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	98.6 %	70-130	"	"	"

Origins Laboratory, Inc.



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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

MW08

8/7/2020 12:42:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y008115-07 (Water)

BTEX by EPA 8260D

Benzene	ND	1.00	ug/L	1	B0H1001	ZZZ	08/10/2020	08/10/2020	U
Toluene	ND	1.00	"	"	"	ZZZ	"	"	U
Ethylbenzene	ND	1.00	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	1.00	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	105 %	70-130	"	"	"
Surrogate: Toluene-d8	96.4 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	99.2 %	70-130	"	"	"

Origins Laboratory, Inc.

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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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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Batch B0H1001 - EPA 5030B (Water)

Blank (B0H1001-BLK1)

Prepared: 08/10/2020 Analyzed: 08/10/2020

Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	64		"	62.5	103		70-130			
Surrogate: Toluene-d8	62		"	62.5	99.1		70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5	98.3		70-130			

Origins Laboratory, Inc.



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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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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Batch B0H1001 - EPA 5030B (Water)

LCS (B0H1001-BS1)

Prepared: 08/10/2020 Analyzed: 08/10/2020

Benzene	46.9	1.00	ug/L	50.0		93.8	70-130			
Toluene	51.4	1.00	"	50.0		103	70-130			
Ethylbenzene	50.3	1.00	"	50.0		101	70-130			
m,p-Xylene	101	2.00	"	100		101	70-130			
o-Xylene	50.4	1.00	"	50.0		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	66		"	62.5		106	70-130			
Surrogate: Toluene-d8	64		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		98.1	70-130			

Origins Laboratory, Inc.



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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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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Batch B0H1001 - EPA 5030B (Water)

Matrix Spike (B0H1001-MS1)		Source: Y008115-01			Prepared: 08/10/2020 Analyzed: 08/10/2020					
Benzene	45.5	1.00	ug/L	50.0	ND	91.1	70-130			
Toluene	48.9	1.00	"	50.0	ND	97.7	70-130			
Ethylbenzene	48.5	1.00	"	50.0	ND	97.0	70-130			
m,p-Xylene	98.5	2.00	"	100	0.320	98.2	70-130			
o-Xylene	49.0	1.00	"	50.0	ND	98.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	67		"	62.5		107	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.0	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.6	70-130			

Origins Laboratory, Inc.



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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

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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Batch B0H1001 - EPA 5030B (Water)

Matrix Spike Dup (B0H1001-MSD1)		Source: Y008115-01			Prepared: 08/10/2020 Analyzed: 08/10/2020					
Benzene	49.0	1.00	ug/L	50.0	ND	98.1	70-130	7.42	20	
Toluene	52.6	1.00	"	50.0	ND	105	70-130	7.28	20	
Ethylbenzene	51.5	1.00	"	50.0	ND	103	70-130	6.00	20	
m,p-Xylene	104	2.00	"	100	0.320	104	70-130	5.32	20	
o-Xylene	52.9	1.00	"	50.0	ND	106	70-130	7.65	20	
Surrogate: 1,2-Dichloroethane-d4	66		"	62.5		106	70-130			
Surrogate: Toluene-d8	63		"	62.5		101	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		98.3	70-130			

Origins Laboratory, Inc.



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

Brian Sulzberger
Project Number: 014218228/WO #89711015
Project: KMG - Rice #1

Notes and Definitions

U Sample is Non-Detect.

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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