

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303) 894-2100 Fax 894-2109



FOR OGCC USE ONLY

REM 9606
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Date 04/07/2016

SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

OGCC Employee:

☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV

Tracking No:

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

☐ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☒ Site/Facility Closure ☐ Other (describe):

GENERAL INFORMATION

OGCC Operator Number: 47120		Contact Name and Telephone	
Name of Operator: Kerr-McGee Oil and Gas Onshore LP		Name: Phillip Hamlin	
Address: P.O. Box 173779		No: (970) 336-3500	
City: Denver State: CO Zip: 80217-3779		Fax: (970) 336-3656	
API/Facility No: 05-123-08601		County: Weld	
Facility Name: Jack Berger C #1		Facility Number:	
Well Name:		Well Number:	
Location (Qtr, Sec, Twp, Rng, Meridian): SWNE Sec 3-T1N-R67W		Latitude: 40.081505 Longitude: -104.873791	

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc.):		Oil, Produced Water, and Condensate	
Site Conditions: Is location within a sensitive area (according to Rule 901e)?		<input checked="" type="checkbox"/> Y <input type="checkbox"/> N If yes, attach evaluation. Groundwater < 20 ft.	
Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.):		Agriculture	
Soil type, if not previously identified on Form 2A or Federal Surface Use Plan:		Sandy clay	
Potential receptors (water wells within 1/4 mi, surface waters, etc.):		Surface water approximately 590' S, wetlands approximately 890' N, water well approximately 270' NW, livestock approximately 1,450' SE, building approximately 810' SE, and excavation groundwater approximately 9' below ground surface (bgs).	
Description of Impact (if previously provided, refer to that form or document):			
Impacted Media (check):	Extent of Impact:	How Determined:	
<input checked="" type="checkbox"/> Soils	Excavation activities are ongoing	Collected soil samples for laboratory analysis	
<input type="checkbox"/> Vegetation			
<input checked="" type="checkbox"/> Groundwater	See attached data	Collected groundwater samples for laboratory analysis	
<input type="checkbox"/> Surface water			

REMEDIAL WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):

The facility operator discovered a condensate release that surfaced near the Jack Berger C #1 flow line. While investigating the release, a leak in the Jack Berger C #1 flow line was discovered. The volume of the release is unknown. The petroleum hydrocarbon impacted soil was excavated. Impacted groundwater was encountered in the excavation. A topographic Site Location Map showing the geographic setting of the release is provided as Figure 1.

Describe how source is to be removed:

Impacted soil was excavated into the phreatic zone to address potential hydrocarbon impacts that may have been present below the current water table due to past seasonal fluctuations. The flowline excavation was bounded on three sides by unmarked third party lines, which were active or abandoned in place. Some of the abandoned lines had significant corrosion and associated historical impacts. On December 11, 2015, four sidewall soil samples (N01@3', E01@3', S01@3', and W01@3') and one base soil sample (B01@6') were collected from the flow line excavation and submitted for laboratory analysis of total petroleum hydrocarbons (TPH) by United States Environmental Protection Agency (USEPA) Methods 8015C and 8260C, benzene, toluene, ethylbenzene, and total xylenes (BTEX) by USEPA Method 8260C, pH by USEPA Method 9045D, and specific conductivity (EC) by USEPA Method 9050D. Laboratory analytical results indicated that sidewall soil sample N01@3' exceeded the Colorado Oil and Gas Conservation Commission (COGCC) Table 910-1 allowable level for pH at 9.12 below the root zone and base soil sample B01@6' exceeded the COGCC Table 910-1 allowable levels for TPH and benzene at concentrations of 1,230 milligrams per kilogram (mg/kg) and 1.21 mg/kg, respectively. On December 17, 2015, following the removal of additional soil from the base of the excavation, a second base soil sample (B02@8.5') was collected for TPH, BTEX, pH, and EC analysis. Laboratory analytical results indicated that the TPH concentration in sample B02@8.5' exceeded the allowable level for TPH at 808.1 mg/kg. Following the removal of additional soil from the base of the excavation, groundwater was encountered. On December 18, 2015, an excavation groundwater sample (GW01) was collected for BTEX analysis. Laboratory analytical results indicated the benzene concentration in sample GW01 exceeded the Colorado Groundwater Quality Standard (CGWQS) for benzene at a concentration of 1,990 micrograms per liter (µg/L).

In February 2016, additional impacted soil was encountered while deconstructing the tank battery. However, there was no indication of a secondary release associated with the tanks or dunnage. On February 18, 2016, four sidewall soil samples (TB-N01@7', TB-E01@7', TB-S01@7', and TB-W01@7') and one base soil sample (TB-B01@11') were collected from the tank battery excavation. Laboratory analytical results indicated that the TPH concentrations in samples TB-W01@7' and TB-E01@7' exceeded the allowable level for TPH at concentrations of 1,222 mg/kg and 2,326 mg/kg, respectively. The TPH and benzene concentrations in base soil sample TB-B01@11' exceeded the allowable levels at concentrations of 4,000 mg/kg and 2.78 mg/kg, respectively.

On February 25, 2016, a subsurface assessment was conducted to delineate the lateral extent of unsaturated soil impacts exceeding COGCC Table 910-1 allowable levels that were left in place to the east and west of the tank battery excavation. Using a combination of a hydro-vacuum truck and a hand auger, two soil borings (SB01 and SB02) were advanced to the east of the excavation and three soil borings (SB03 through SB05) were advanced to the west of the excavation. One unsaturated soil sample from each boring was selected based on the highest photoionization detector (PID) headspace readings and submitted for laboratory analysis of TPH, BTEX, pH, and EC. TPH, BTEX, pH, and EC levels/concentrations in soil samples SB01@8', SB02@8', and SB05@6' were compliant with the COGCC Table 910-1 allowable levels. TPH concentrations in soil samples SB03@8' and SB04@8' exceeded the TPH allowable level at 1,772 mg/kg and 713 mg/kg, respectively. On March 1, 2016, six additional soil borings (SB06 through SB11) were advanced at the site. Laboratory analytical results indicated TPH and benzene concentrations in soil samples SB08@8' and SB09@8' exceeded the allowable levels for TPH and benzene. Soil boring SB10 was abandoned and not sampled after daylighting an unmarked third party line. The extent of the soil exceeding COGCC Table 910-1 allowable levels has been delineated to the north, east, and west of the flow line excavation and to the east and west of the tank battery excavation. The extent of soil exceeding allowable levels has not been defined to the south of the flow line excavation or to the north and southwest of the tank battery excavation due to unmarked active and abandoned third party lines.



Tracking Number: _____
Name of Operator: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: _____
Facility Name & No.: _____

REMEDIAL WORKPLAN (CONT.)

OGCC Employee: _____

Describe how source is to be removed: *(continued)*

Assessment activities are ongoing at the site. The general site layout, excavation dimensions, and soil and groundwater sample locations are depicted on the Assessment Site Map provided as Figure 2. The assessment soil sample analytical results are summarized in Table 1 and depicted on Figure 3. The laboratory analytical reports are attached. The soil boring logs are attached.

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:

The impacted soil was transported to the Front Range Regional Landfill in Erie, Colorado, for disposal. The impacted groundwater slurry was transported to the Conservation Services Inc. Landfill in Bennett, Colorado, for disposal.

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

During the February through March 2016 subsurface assessment activities, ten assessment soil borings were advanced to groundwater at the site using a hydro-vacuum truck and a hand auger. Ten groundwater samples (SB01GW through SB09GW and SB11GW) were collected from the assessment soil borings and submitted for laboratory analysis of BTEX by USEPA Method 8260C. Laboratory analytical results indicated benzene and/or total xylenes concentrations in groundwater samples SB01GW, SB03GW through SB09GW, and SB11GW exceeded the CGWQS. The groundwater sample analytical results are summarized in Table 2 and depicted on Figure 4. The laboratory analytical reports are attached.

Groundwater monitoring wells will be installed at the site to fully define the extent and magnitude of the release. The monitoring wells will be surveyed to determine groundwater elevations and flow direction. Groundwater monitoring activities will be conducted on a quarterly basis and samples will be submitted for laboratory analysis of BTEX.

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

The site will be restored to its pre-release grade and the tank battery will be deconstructed.

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? ☒ Y ☐ N If yes, describe:

Assessment activities are ongoing at the site. Additional impacted soil will be excavated based on assessment borehole soil analytical results. After installing the monitoring wells and establishing points of compliance, groundwater monitoring will be conducted on a quarterly basis.

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

The impacted soil was transported to the Front Range Regional Landfill in Erie, Colorado, for disposal. The impacted groundwater slurry was transported to the Conservation Services Inc. Landfill in Bennett, Colorado, for disposal.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 12/11/2015	Date Site Investigation Completed: Active	Remediation Plan Submitted: _____
Remediation Start Date: 12/21/2015	Anticipated Completion Date: TBD	Actual Completion Date: _____

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Phillip Hamlin

Signed: Title: Senior HSE Representative Date: 4/6/2016

OGCC Approved: _____ Title: _____ Date: _____



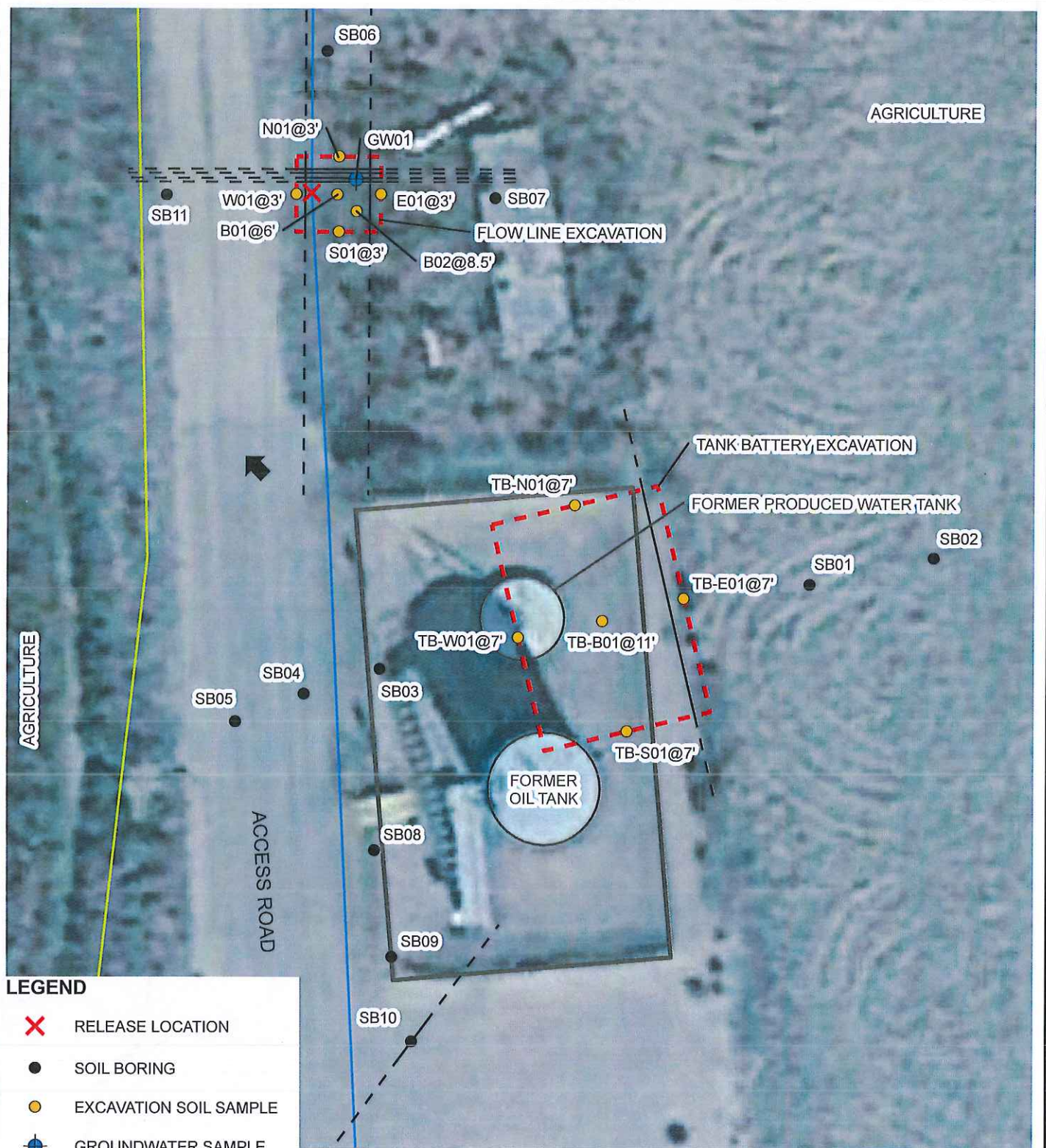


IMAGE COURTESY OF GOOGLE EARTH 2015

LEGEND

- X RELEASE LOCATION
- SOIL BORING
- EXCAVATION SOIL SAMPLE
- GROUNDWATER SAMPLE
- ↑ ESTIMATED GROUNDWATER FLOW DIRECTION
- THIRD PARTY LINE
- - - INFERRED THIRD PARTY LINE
- KERR-MCGEE FLOW LINE
- KERR-MCGEE GAS LINE
- - - EXCAVATION EXTENT
- ▭ FORMER BERM

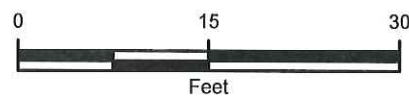


FIGURE 2
ASSESSMENT SITE MAP
JACK BERGER C #1
SWNE SEC 3-T1N-R67W
WELD COUNTY, COLORADO
KERR-MCGEE OIL & GAS ONSHORE LP





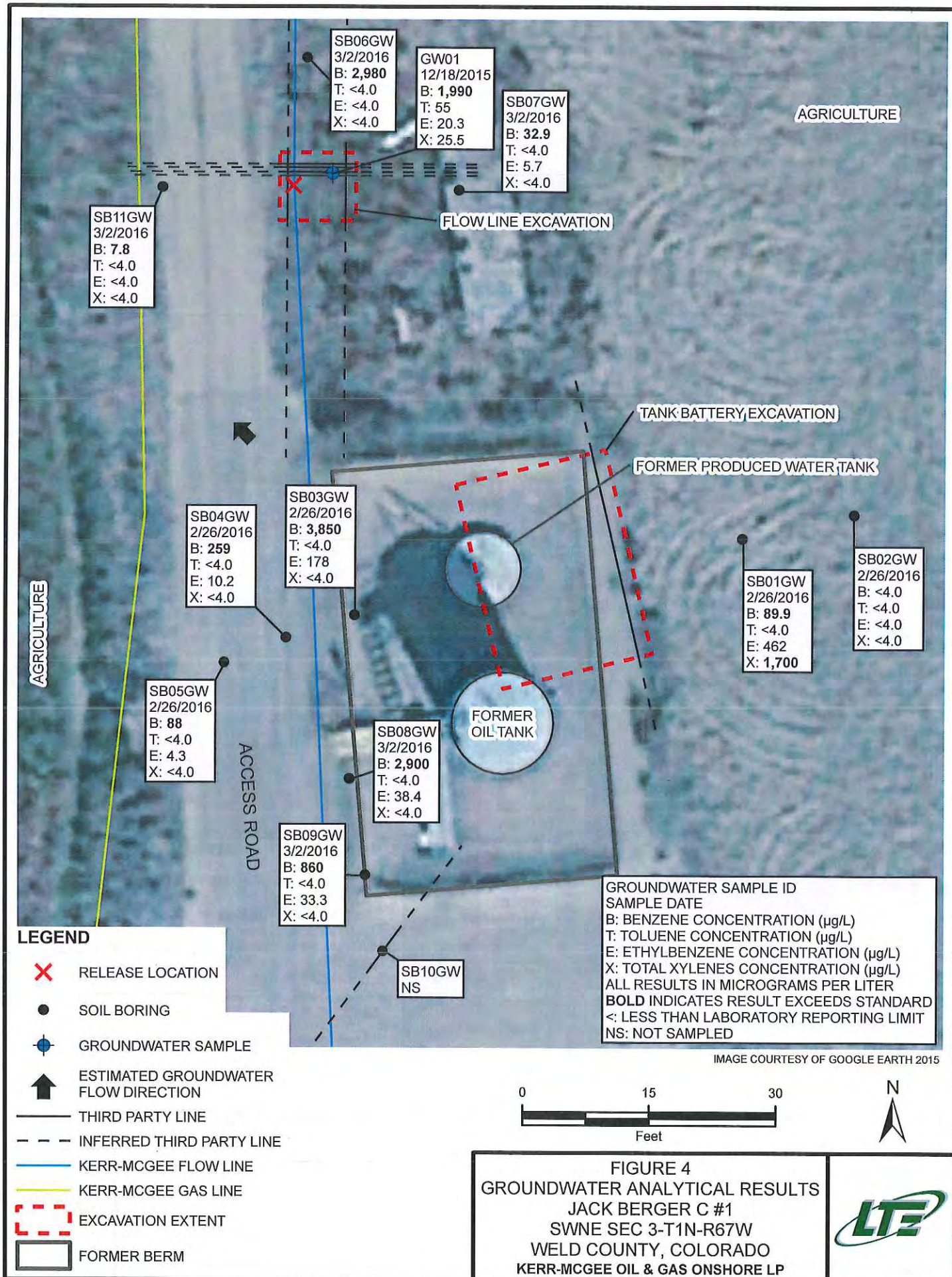


TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
JACK BERGER C #1
WELD COUNTY, COLORADO
KERR-MCGEE OIL & GAS ONSHORE LP

Soil Sample ID	Depth (bgs)	Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	DRO (mg/kg)	GRO (mg/kg)	ORO (mg/kg)	pH (su)	Specific Conductance (mmhos/cm)
B01 @ 6'	6'	12/11/2015	1.21	0.218	0.392	1.18	620	400	210	8.68	0.202
E01 @ 3'	3'	12/11/2015	<0.050	0.075	<0.050	1.10	130	21.6	330	8.59	0.236
N01 @ 3'	3'	12/11/2015	<0.050	0.087	<0.050	0.788	<25	12.9	<100	9.12	0.280
S01 @ 3'	3'	12/11/2015	<0.002	<0.002	<0.002	<0.002	<25	0.211	<100	8.86	0.0481
W01 @ 3'	3'	12/11/2015	0.009	0.034	0.009	0.304	<25	2.90	<100	8.68	0.236
B02 @ 8.5'	8.5'	12/17/2015	0.146	1.77	0.180	0.126	620	88.1	100	8.53	0.221
TB-B01 @ 11'	11'	02/18/2016	2.78	0.078	21.6	12.0	2300	1700	<100	8.10	0.112
TB-E01 @ 7'	7'	02/18/2016	0.142	<0.050	3.12	0.807	1900	256	170	8.37	0.0903
TB-N01 @ 7'	7'	02/18/2016	<0.050	<0.050	<0.050	<0.050	52	76.3	<100	7.98	0.329
TB-S01 @ 7'	7'	02/18/2016	0.005	<0.002	<0.002	0.011	<25	1.33	<100	7.80	0.282
TB-W01 @ 7'	7'	02/18/2016	<0.050	<0.050	0.074	0.382	1000	222	<100	8.08	0.185
SB01 @ 8'	8'	02/25/2016	<0.002	<0.002	<0.002	<0.002	<25	<0.200	<100	8.40	0.153
SB02 @ 8'	8'	02/25/2016	<0.002	<0.002	<0.002	0.005	<25	<0.200	<100	8.60	0.109
SB03 @ 8'	8'	02/25/2016	<0.050	<0.050	0.052	<0.050	1300	262	210	8.26	0.122
SB04 @ 8'	8'	02/25/2016	0.096	<0.050	<0.050	<0.050	350	363	<100	8.18	0.131
SB05 @ 6'	6'	02/25/2016	<0.050	<0.050	<0.050	<0.050	<25	67.3	<100	8.32	0.146
SB06 @ 6'	6'	03/01/2016	0.125	<0.050	<0.050	<0.050	<25	19.4	<100	8.71	0.137
SB07 @ 6'	6'	03/01/2016	<0.050	<0.050	<0.050	<0.050	<25	<5.00	<100	8.06	0.201
SB08 @ 8'	8'	03/01/2016	0.897	0.075	1.97	<0.050	150	375	<100	8.22	0.118
SB09 @ 8'	8'	03/01/2016	2.21	<0.050	0.353	<0.050	500	1000	150	8.36	0.117
SB11 @ 6'	6'	03/01/2016	<0.002	<0.002	<0.002	<0.002	<25	<0.200	<100	7.75	0.120



TABLE 1 (Continued)
SOIL SAMPLE ANALYTICAL RESULTS
JACK BERGER C #1
WELD COUNTY, COLORADO
KERR-MCGEE OIL & GAS ONSHORE LP

Soil Sample ID	Depth (bgs)	Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	DRO (mg/kg)	GRO (mg/kg)	ORO (mg/kg)	pH (su)	Specific Conductance (mmhos/cm)
COGCC Allowable Levels											
Notes: bgs - below ground surface			NA - not analyzed/not available								
COGCC - Colorado Oil and Gas Conservation Commission			ORO - oil range organics								
DRO - diesel range organics			su - standard units								
GRO - gasoline range organics			* - Standard applies to combined DRO-GRO-ORO								
mg/kg - milligrams per kilogram			< - less than laboratory reporting limit								
mmhos/cm - millimhos per centimeter			Bold indicates result exceeds allowable level								
			0.17	85	100	175	500*	500*	500*	6-9	4



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

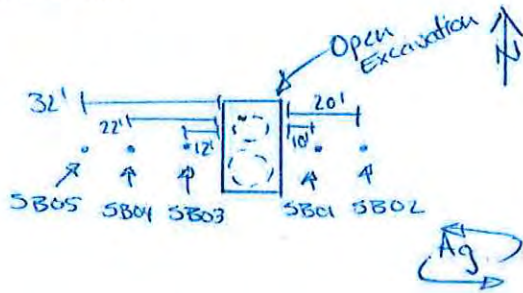
Well Name	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Depth Water/ (Product Thickness) (ft bgs)
GW01	12/18/2015	1990	55.0	20.3	25.5	9.00
SB01GW	02/26/2016	89.9	<4.0	462	1700	12.00
SB02GW	02/26/2016	<4.0	<4.0	<4.0	<4.0	10.00
SB03GW	02/26/2016	3850	<4.0	178	<4.0	10.00
SB04GW	02/26/2016	259	<4.0	10.2	<4.0	10.00
SB05GW	02/26/2016	88.0	<4.0	4.3	<4.0	8.00
SB06GW	03/02/2016	2980	<4.0	<4.0	<4.0	8.00
SB07GW	03/02/2016	32.9	<4.0	5.7	<4.0	8.00
SB08GW	03/02/2016	2900	<4.0	38.4	<4.0	10.00
SB09GW	03/02/2016	860	<4.0	33.3	<4.0	10.00
SB11GW	03/02/2016	7.8	<4.0	<4.0	<4.0	8.00
CGWQS		5	1000	700	1400	

Notes: CGWQS - Colorado Groundwater Quality Standards
ft bgs - feet below ground surface
NA - not analyzed/not available
NM - not measured

µg/L - micrograms per liter
< - less than laboratory reporting limit
Bold indicates result exceeds allowable level
Excavation groundwater depth is approximate



Well Location Sketch:



Compliance • Engineering • Remediation

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: <u>SB01</u>		Project: <u>Berger Jack C GU #1</u>	
Date: <u>2/25/2016</u>		Project Number: <u>14215255</u>	
Logged By: <u>Kris Shepherd</u>		Drilled By: <u>LTE</u>	
Drilling Method: <u>Hand Auger</u>		Sampling Method: <u>Continuous</u>	
Seal: <u>Bentonite</u>		Grout: <u>-</u>	
Diameter: <u>1"</u>	Length: <u>—</u>	Hole Diameter: <u>3"</u>	Depth to Liquid: <u>-</u>
Diameter: <u>1"</u>	Length: <u>—</u>	Total Depth: <u>~15'</u>	Depth to Water: <u>~12'</u>

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	moist	0.1	none	@2'	2			CL	-2': Silty clay, brown, trace coarse sand, low cohesion, mod. plasticity, no odor, no stain, moist	
		0.1		@4'	4			CL	-4': SAA	
		0.1		@6'	6			CL	-6': SAA	
		0.2		@8'	8			SM/SC	-8': clayey, silty wfy sand, dark brown, no stain, no odor, moist	
		37.2	stain	@10'	10			SM/SC	-10': SAA, gray stain & odor	
	wet	83.6		@12'	12			SM/SC	-12': SAA, wet	
					14					
					16					
					18					
					20					
					22					
					24					
					26					
					28					
					30					
					32					
					34					
					36					
					38					
					40					

→ hydrovac to 15'

→ No well set

Well Location Sketch:



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Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

SB02

Project:

Berger Jack C GU #1

Date:

2/25/2016

Project Number:

14215255

Logged By:

Kris Shephard

Drilled By:

LTE

Drilling Method:

Hand Auger

Sampling Method:

Continuous

Elevation:

Detector:

PID

Gravel Pack:

Silica Sand

Seal:

Bentonite

Grout:

-

Casing Type:

PVC

Diameter:

Length:

1"

Hole Diameter:

3"

Depth to Liquid:

-

Screen Type:

PVC

Slot:

0.01

Diameter:

Length:

1"

Total Depth:

~15'

Depth to Water:

~10'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Moist	0.6	none	@2' (1020)	2			CL	2': Silty clay, brown, low cohesion, low plasticity, no odor, no stain, moist	
		0.3		@4' (1025)	4			SP	4': vfg → fg sand, trace silty, trace clay, light brown, no odor, no stain, moist	
		0.3		@6' (1030)	6					
		1.1		@8' (1040)	8			SC	6': clayey vfg → fg sand, brown, no odor, no stain, moist	
		0.2		@10' (1050)	10			SC	8': SAA	
					12			SC	10': SAA, wet	
					14					
					16				→ hydrovac to 15'	
					18				→ No well set	
					20					
					22					
					24					
					26					
					28					
					30					
					32					
					34					
					36					
					38					
					40					

NOTES:

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Well Location Sketch:



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Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: SB03	Project: Berger Jack C GU #1
Date: 2/25/2016	Project Number: 14215255
Logged By: Kris Shepherd	Drilled By: LTE
Elevation:	Detector: PID
Drilling Method: Hand Auger	Sampling Method: Continuous
Gravel Pack: Silica Sand	Seal: Bentonite
Casing Type: PVC	Grout: -
Screen Type: PVC	Slot: 0.01
Diameter: 1"	Length: —
Hole Diameter: 3"	Depth to Liquid: -
Total Depth: ~15'	Depth to Water: ~10'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	moist	0.2	none	@2'	2			CH	2': clay, gray, high plasticity, high cohesion, no stain, no odor, moist	
		124	↓ stain	@4'	4			CL	4': Sandy clay, gray, med. cohesion, med. plasticity, odor, black stain, moist	
		24.3		@6'	6			CL	6': SAA	
	↓ wet	973		@8'	8			SC	8': clayey fg sand, gray stain, odor, moist	
		804		@10'	10			SC	10': SAA, wet	
					12					
					14					
					16				→ hydrovac to 15'	
					18				→ No well set	
					20					
					22					
					24					
					26					
					28					
					30					
					32					
					34					
					36					
					38					
					40					

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Well Location Sketch:



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LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

SB04

Project:

Berger Jack C GU #1

Date:

2/25/2016

Project Number:

14215255

Logged By:

Kris Shepherd

Drilled By:

LTE

Elevation:

Detector:

PID

Drilling Method:

Hand Auger

Sampling Method:

Continuous

Gravel Pack:

Silica Sand

Seal:

Bentonite

Grout:

-

Casing Type:

PVC

Diameter:

1"

Length:

—

Hole Diameter:

3"

Depth to Liquid:

-

Screen Type:

PVC

Slot:

0.01

Diameter:

1"

Length:

—

Total Depth:

~15'

Depth to Water:

~10'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Moist ↓ Wet	26.3 16.0 456 897 414	Stain ↓	@ 2' (1310) @ 4' (1315) @ 6' (1325) @ 8' (1330) @ 10' (1340)	2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40				- 2': Sandy clay, gray w/ black stain, odor, low cohesion, med. plasticity, moist - 4': SAA - 6': Clayey fg sand, black stain, odor, moist - 8': SAA - 10': v. fg - ofg sand, gray/black stain, odor, wet - No well set - Hydrovaced to 15'	

NOTES:

Page ____ of ____

Well Location Sketch:



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LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: SB05	Project: Berger Jack C GU #1
Date: 2/25/2016	Project Number: 14215255
Logged By: Kris Shepherd	Drilled By: LTE
Drilling Method: Hand Auger	Sampling Method: Continuous
Seal: Bentonite	Grout: -
Diameter: 1"	Hole Diameter: 3"
Length: —	Depth to Liquid: -
Diameter: 1"	Total Depth: 12'
Length: —	Depth to Water: ~8'

Elevation:

Detector:

PID

Gravel Pack:

Silica Sand

Casing Type:

PVC

Screen Type:

PVC

Slot:
0.01

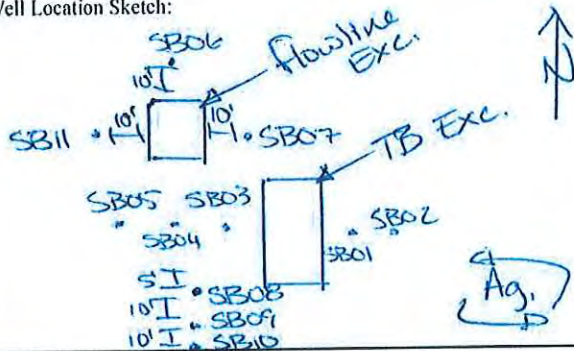
Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Moist ↓	2.2	Stain ↓	@2' (1355)	2			SC	- 2': silty, clayey, fg sand, brown w/gray streaked staining, no odor, moist	
		381		@4' (1400)	4			SM	- 4': silty fg sand, black stain, odor, moist	
		254		@6' (1405)	6			SM	- 6': SAA	
		271		@8' (1415)	8			SM	- 8': SAA, wet	
					10					
					12					
					14					
					16					
					18					
					20					
					22					
					24					
					26					
					28					
					30					
					32					
					34					
					36					
					38					
					40					

- Hydrovac to 12'
- No well set

NOTES:

Page ____ of ____

Well Location Sketch:



Compliance • Engineering • Remediation

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	SBO6			Project:	Berger Jack C GU #1		
Date:	3/1/2016			Project Number:	14215255		
Logged By:	Kris Shepherd			Drilled By:	LTE		
Drilling Method:	Hand Auger			Sampling Method:	Continuous		
Seal:	Bentonite			Grout:	-		
Casing Type:	PVC			Diameter:	Length:	Hole Diameter:	Depth to Liquid:
Screen Type:	PVC			Diameter:	Length:	Total Depth:	Depth to Water:
Slot:	0.01			Diameter:	Length:	Total Depth:	Depth to Water:
						~12'	~8'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Moist	4.6	none		2			CL	2': Sandy clay, brown, low cohesion, low plasticity, no odor, no stain, moist	
		6.6	stain		4			CL	4': Same lithology as above w/ black stain, no odor	
		83.7		@6' (850)	6					
	Wet	157		@8' (1000)	8			SC	6': Clayey fg sand, gray stain, odor, moist	
					10					
					12			SM	8': Silty fg sand, gray, odor, wet	
					14			N/A	10': No recovery w/ hand Auger, vfg, saturated	
					16					
					18				→ No well set	
					20				→ Hydrovac to 12'	
					22					
					24					
					26					
					28					
					30					
					32					
					34					
					36					
					38					
					40					

NOTES:

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Well Location Sketch:



Compliance • Engineering • Remediation

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

SS07

Project:

Berger Jack C GU #1

Date:

3/1/2016

Project Number:

14215255

Logged By:

Kris Shepherd

Drilled By:

LTE

Elevation:

Detector:

PID

Drilling Method:

Hand Auger

Sampling Method:

Continuous

Gravel Pack:

Silica Sand

Seal:

Bentonite

Grout:

-

Casing Type:

PVC

Diameter:

1"

Length:

Hole Diameter:

3"

Depth to Liquid:

-

Screen Type:

PVC

Slot:

0.01

Diameter:

1"

Length:

Total Depth:

~12'

Depth to Water:

~8'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Moist	0.3	none		2			CL	-2': Sandy clay, brown, low cohesion, med. plasticity, no stain, no odor, moist	2
		0.7			4			CL	-4': SAA	4
		6.5		@6'	6			SC	-6': Clayey fg sand, brown, no stain, no odor, moist	6
	Wet	174	Stain	@8'	8			SC	-8': SAA, w/ stain + odor, wet	8
				(1100)	10			N/A	-10': No recovery w/ Auger	10
					12				vfg / saturated	12
					14				→ hydrofracture 12'	14
					16				→ No well set	16
					18					18
					20					20
					22					22
					24					24
					26					26
					28					28
					30					30
					32					32
					34					34
					36					36
					38					38
					40					40

NOTES:

Page 1 of 1

Well Location Sketch:



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Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	SB08	Project:	Berger Jack C GU #1
Date:	3/1/2016	Project Number:	14215255
Logged By:	Kris Shepherd	Drilled By:	LTE
Drilling Method:	Hand Auger	Sampling Method:	Continuous
Seal:	Bentonite	Grout:	-
Diameter:	1"	Hole Diameter:	3"
Length:	—	Depth to Liquid:	-
Diameter:	1"	Total Depth:	~13'
Length:	—	Depth to Water:	~10'

Elevation:

Detector:

PID

Gravel Pack:

Silica Sand

Casing Type:

PVC

Screen Type:

PVC

Slot:

0.01

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Moist 63.6		Stain	@2'	2			CL	-2': Sandy clay, black stain	2
				(1150)					odor, low cohesion, med.	
	56.8			@4'	4				plasticity, moist	4
				(1200)				CL	-4': SAA	6
	76.1			@6'	6					
				(1210)				SC	-6': clayey fg sand, black	8
	212			@8'	8				gray stain, odor, moist	
				(1220)				SC	-8': SAA	10
	18.6			@10'	10					
				(1230)				SP	-10': fg sand, gray/black	12
					12				stain, odor, wet	14
					14					16
					16					18
					18				→ hydrovac to 13'	20
					20				→ No well set	22
					22					24
					24					26
					26					28
					28					30
					30					32
					32					34
					34					36
					36					38
					38					40
					40					

NOTES:

Page ____ of ____

Well Location Sketch:



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: SB09 Project: Berger Jack C GU #1Date: 3/1/2016 Project Number: 14215255Logged By: Kris Shepherd Drilled By: LTEElevation: _____ Detector: PID Drilling Method: Hand Auger Sampling Method: ContinuousGravel Pack: Silica Sand Seal: Bentonite Grout: -Casing Type: PVC Diameter: 1" Length: _____ Hole Diameter: 3" Depth to Liquid: -Screen Type: PVC Slot: 0.01 Diameter: 1" Length: _____ Total Depth: ~15' Depth to Water: ~10'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Moist	36.5	Stain	2'	2			CL	2': Sandy clay, gray & black stain, odor, low cohesion, low plasticity, moist	2
		7.2		4'	4			CL	4': Sandy clay, gray stain, no odor, low cohesion, mod. plasticity, moist	4
		508		6'	6			SC	6': clayey fg sand, gray stain, odor, moist	6
		485		8'	8			SC	8': SAA	8
		393		10'	10			SP	10': vfg → fg sand, gray stain, odor, wet	10
				12'	12					12
				14'	14					14
				16'	16					16
				18'	18					18
				20'	20					20
				22'	22					22
				24'	24					24
				26'	26					26
				28'	28					28
				30'	30					30
				32'	32					32
				34'	34					34
				36'	36					36
				38'	38					38
				40'	40					40

NOTES:

Page ____ of ____

Well Location Sketch:



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Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

SB10

Project:

Berger Jack C GU #1

Date:

3/1/2016

Project Number:

14215255

Logged By:

Drilled By:

LTE

Elevation:

Detector:

PID

Drilling Method:

Hand Auger

Sampling Method:

Continuous

Gravel Pack:

Silica Sand

Seal:

Bentonite

Grout:

-

Casing Type:

PVC

Diameter:

Length:

Hole Diameter:

3"

Depth to Liquid:

-

Screen Type:

PVC

Slot:

0.01

Diameter:

Length:

Total Depth:

~6'

Depth to Water:

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Moist ↓	130	Stain ↓	@2' (1410)	2			CL	-2': Sandy clay, gray/black stain, odor, moist, low cohesion, low plasticity,	
		24.3		@4' (1420)	4			CL	-4': Sandy clay, gray/black stain, odor, mod. cohesion, mod. plasticity, moist	
				@6' (1440)	6			N/A	-6': KFK line discovered, no soil sample collected	
					8					
					10					
					12					
					14					
					16					
					18					
					20					
					22					
					24					
					26					
					28					
					30					
					32					
					34					
					36					
					38					
					40					

→ No well set

Well Location Sketch:



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LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, Colorado 80003

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:

SBI

Project:

Berger Jack C GU #1

Date:

3/1/2016

Project Number:

14215255

Logged By:

Kris Shepherd

Drilled By:

LTE

Elevation:

Detector:

PID

Drilling Method:

Hand Auger

Sampling Method:

Continuous

Gravel Pack:

Silica Sand

Seal:

Bentonite

Grout:

-

Casing Type:

PVC

Diameter:

1"

Length:

—

Hole Diameter:

3"

Depth to Liquid:

-

Screen Type:

PVC

Slot:

0.01

Diameter:

1"

Length:

—

Total Depth:

~12'

Depth to Water:

~8'

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion Diagram
					0					
	Moist	0.5	None		2				CL - 2': Sandy clay, brown, low cohesion, mod. plasticity, no odor, no stain, moist	
		1.0		@4' (1505)	4				CL - 4': SAA	
		1.4		@6' (1515)	6				SP - 6': fg sand, trace clay, brown, no odor, no stain, wet	
	Wet	0.8		@8' (1525)	8				SP - 8': SAA, wet	
					10					
					12					
					14				→ No well set	
					16				→ hydrovac to 12'	
					18					
					20					
					22					
					24					
					26					
					28					
					30					
					32					
					34					
					36					
					38					
					40					

NOTES:

Page ____ of ____

December 14, 2015

LT Environmental, Inc.

John Cocroft

4600 West 60th Avenue

Arvada

CO 80003

Project Name - KMG - Berger Jack C GU #1

Project Number - WO#88926630

Attached are your analytical results for KMG - Berger Jack C GU #1 received by Origins Laboratory, Inc. December 11, 2015. This project is associated with Origins project number X512216-01.

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



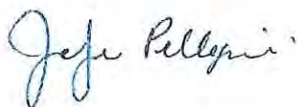
LT Environmental, Inc.
4600 West 60th Avenue
Arvada CO 80003

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N01@3	X512216-01	Soil	December 11, 2015 14:40	12/11/2015 17:30
E01@3	X512216-02	Soil	December 11, 2015 14:45	12/11/2015 17:30
S01@3	X512216-03	Soil	December 11, 2015 14:50	12/11/2015 17:30
W01@3	X512216-04	Soil	December 11, 2015 14:55	12/11/2015 17:30
B01@6	X512216-05	Soil	December 11, 2015 15:00	12/11/2015 17:30

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.

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

[illegible]

Origins Laboratory, Inc.

Jeff Pellgrini

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: 1512216

Client: LT

Client Project ID: Berger Jack C GU #1

Checklist Completed by: SW Henderson

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

Date/time completed: 12/11/15 8:13

Airbill #: AT

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

Cooler Number/Temperature: 1 15.0 °C 1 °C 1 °C 1 °C (Describe)

Thermometer ID: TC03

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	X			
Is there ice present (document if blue ice is used)	X			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact ⁽¹⁾ ?	X			
Was adequate sample volume provided ⁽¹⁾ ?	X			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?	X			
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	X			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	X			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	X			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			X	
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)			X	
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) John Cocroft

Date/Time Reviewed 12/11/15

Origins Laboratory, Inc.

Jefe Pellegrini

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

N01@3

12/11/2015 2:40:00PM

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

Origins Laboratory, Inc.
X512216-01 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	25	mg/kg	1	B5L1110	12/11/2015	12/12/2015	
Residual Range Organics (C28-C36)	ND	100	"	"	"	"	"	

Surrogate: o-Terphenyl 75.0 % 59-131 " " "

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	12.9	5.00	mg/kg	25	B5L1109	12/11/2015	12/11/2015	
Benzene	ND	0.050	"	"	"	"	"	
Toluene	0.087	0.050	"	"	"	"	"	
Ethylbenzene	ND	0.050	"	"	"	"	"	
Xylenes, total	0.788	0.050	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 98.4 % 70-130 " " "
Surrogate: Toluene-d8 102 % 70-130 " " "
Surrogate: 4-Bromofluorobenzene 96.6 % 70-130 " " "

pH in Soil by EPA 9045D

pH	9.12		pH Units	1	B5L1112	12/11/2015	12/11/2015	
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.280		mmhos/cm	"	B5L1111	12/11/2015	12/11/2015	
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Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

E01@3
12/11/2015 2:45:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X512216-02 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	130	25	mg/kg	1	B5L1110	12/11/2015	12/12/2015	
Residual Range Organics (C28-C36)	330	100	"	"	"	"	"	

Surrogate: o-Terphenyl	86.1 %	59-131			"	"	"	
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GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	21.6	5.00	mg/kg	25	B5L1109	12/11/2015	12/11/2015	
Benzene	ND	0.050	"	"	"	"	"	
Toluene	0.075	0.050	"	"	"	"	"	
Ethylbenzene	ND	0.050	"	"	"	"	"	
Xylenes, total	1.10	0.050	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	95.1 %	70-130			"	"	"	
Surrogate: Toluene-d8	101 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	95.7 %	70-130			"	"	"	

pH in Soil by EPA 9045D

pH	8.59		pH Units	1	B5L1112	12/11/2015	12/11/2015	
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.236		mmhos/cm	"	B5L1111	12/11/2015	12/11/2015	
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Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

S01@3

12/11/2015 2:50:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X512216-03 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	25	mg/kg	1	B5L1110	12/11/2015	12/12/2015
Residual Range Organics (C28-C36)	ND	100	"	"	"	"	"

Surrogate: o-Terphenyl	84.5 %	59-131			"	"	"
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GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	0.211	0.200	mg/kg	1	B5L1109	12/11/2015	12/11/2015
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	106 %	70-130			"	"	"
Surrogate: Toluene-d8	99.5 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	97.5 %	70-130			"	"	"

pH in Soil by EPA 9045D

pH	8.86		pH Units	1	B5L1112	12/11/2015	12/11/2015
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.0481		mmhos/cm	"	B5L1111	12/11/2015	12/11/2015
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Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

W01@3
12/11/2015 2:55:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X512216-04 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	25	mg/kg	1	B5L1110	12/11/2015	12/12/2015	
Residual Range Organics (C28-C36)	ND	100	"	"	"	"	"	

Surrogate: o-Terphenyl	84.3 %	59-131			"	"	"	
------------------------	--------	--------	--	--	---	---	---	--

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	2.90	0.200	mg/kg	1	B5L1109	12/11/2015	12/11/2015	
Benzene	0.009	0.002	"	"	"	"	"	
Toluene	0.034	0.002	"	"	"	"	"	
Ethylbenzene	0.009	0.002	"	"	"	"	"	
Xylenes, total	0.304	0.002	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	104 %	70-130			"	"	"	
Surrogate: Toluene-d8	99.2 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	98.8 %	70-130			"	"	"	

pH in Soil by EPA 9045D

pH	8.68		pH Units	1	B5L1112	12/11/2015	12/11/2015	
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.236		mmhos/cm	"	B5L1111	12/11/2015	12/11/2015	
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Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

B01@6

12/11/2015 3:00:00PM

Reporting

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X512216-05 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	620	25	mg/kg	1	B5L1110	12/11/2015	12/12/2015
Residual Range Organics (C28-C36)	210	100	"	"	"	"	"

Surrogate: o-Terphenyl	92.0 %	59-131			"	"	"
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GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	400	5.00	mg/kg	25	B5L1109	12/11/2015	12/12/2015
Benzene	1.21	0.050	"	"	"	"	"
Toluene	0.218	0.050	"	"	"	"	"
Ethylbenzene	0.392	0.050	"	"	"	"	"
Xylenes, total	1.18	0.050	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	98.1 %	70-130			"	"	"
Surrogate: Toluene-d8	112 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	106 %	70-130			"	"	"

pH in Soil by EPA 9045D

pH	8.68		pH Units	1	B5L1112	12/11/2015	12/11/2015
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.202		mmhos/cm	"	B5L1111	12/11/2015	12/11/2015
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Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
 Project Number: WO#88926630
 Project: KMG - Berger Jack C GU #1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5L1109 - EPA 5030 (soil)										
Blank (B5L1109-BLK1)					Prepared: 12/11/2015 Analyzed: 12/11/2015					
Gasoline Range Hydrocarbons	ND	0.200	mg/kg							
Benzene	ND	0.002	"							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Surrogate: 1,2-Dichloroethane-d4	62.3		ug/kg	62.5		99.7	70-130			
Surrogate: Toluene-d8	62.5		"	62.5		100	70-130			
Surrogate: 4-Bromofluorobenzene	60.9		"	62.5		97.5	70-130			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5L1109 - EPA 5030 (soil)										
LCS (B5L1109-BS1)					Prepared: 12/11/2015 Analyzed: 12/11/2015					
Benzene	0.095	0.002	mg/kg	0.100		95.2	77.1-124			
Toluene	0.095	0.002	"	0.100		95.4	74.5-128			
Ethylbenzene	0.090	0.002	"	0.100		90.4	66.4-127			
m,p-Xylene	0.182	0.004	"	0.200		91.1	76.6-124			
o-Xylene	0.090	0.002	"	0.100		89.9	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	63.5		ug/kg	62.5		102	70-130			
Surrogate: Toluene-d8	63.6		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	63.5		"	62.5		102	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

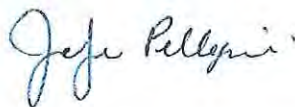
Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B5L1109 - EPA 5030 (soil)

Matrix Spike (B5L1109-MS1)		Source: X512207-01			Prepared: 12/11/2015 Analyzed: 12/11/2015					
Benzene	0.105	0.002	mg/kg	0.100	ND	105	71.8-126			
Toluene	0.103	0.002	"	0.100	ND	103	65.1-130			
Ethylbenzene	0.098	0.002	"	0.100	ND	98.5	62.2-130			
m,p-Xylene	0.197	0.004	"	0.200	ND	98.4	46.5-137			
o-Xylene	0.098	0.002	"	0.100	ND	98.2	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	65.2		ug/kg	62.5		104	70-130			
Surrogate: Toluene-d8	62.4		"	62.5		99.9	70-130			
Surrogate: 4-Bromofluorobenzene	59.8		"	62.5		95.8	70-130			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B5L1109 - EPA 5030 (soil)

Matrix Spike Dup (B5L1109-MSD1)			Source: X512207-01		Prepared: 12/11/2015 Analyzed: 12/12/2015					
Benzene	0.104	0.002	mg/kg	0.100	ND	104	71.8-126	1.19	11.3	
Toluene	0.104	0.002	"	0.100	ND	104	65.1-130	1.80	15.4	
Ethylbenzene	0.100	0.002	"	0.100	ND	99.8	62.2-130	1.27	19.6	
m,p-Xylene	0.199	0.004	"	0.200	ND	99.7	46.5-137	1.33	19.2	
o-Xylene	0.100	0.002	"	0.100	ND	100	54.2-134	2.00	17.9	
Surrogate: 1,2-Dichloroethane-d4	61.0		ug/kg	62.5		97.7	70-130			
Surrogate: Toluene-d8	60.9		"	62.5		97.4	70-130			
Surrogate: 4-Bromofluorobenzene	61.2		"	62.5		98.0	70-130			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Extractable Petroleum Hydrocarbons by 8015C - 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 B5L1110 - EPA 3580

Blank (B5L1110-BLK1)

Prepared: 12/11/2015 Analyzed: 12/11/2015

Diesel (C10-C28)	ND	50	mg/kg							
Residual Range Organics (C28-C36)	ND	200	"							
Surrogate: o-Terphenyl	43		"	50.0		85.8	59-131			

LCS (B5L1110-BS1)

Prepared: 12/11/2015 Analyzed: 12/11/2015

Diesel (C10-C28)	820	50	mg/kg	1000		81.6	64-121			
Residual Range Organics (C28-C36)	880	200	"	1000		88.3	58-124			
Surrogate: o-Terphenyl	46		"	50.0		91.5	59-131			

Matrix Spike (B5L1110-MS1)

Source: X512207-01

Prepared: 12/11/2015 Analyzed: 12/11/2015

Diesel (C10-C28)	840	50	mg/kg	1000	ND	83.6	53-125			
Residual Range Organics (C28-C36)	890	200	"	1000	35	85.5	47-133			
Surrogate: o-Terphenyl	46		"	50.0		92.7	59-131			

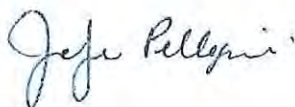
Matrix Spike Dup (B5L1110-MSD1)

Source: X512207-01

Prepared: 12/11/2015 Analyzed: 12/11/2015

Diesel (C10-C28)	720	50	mg/kg	1000	ND	72.0	53-125	14.9	20	
Residual Range Organics (C28-C36)	770	200	"	1000	35	73.8	47-133	14.1	20	
Surrogate: o-Terphenyl	43		"	50.0		85.6	59-131			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

Classical Chemistry Parameters - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5L1111 - NO PREP										
Blank (B5L1111-BLK1)					Prepared: 12/11/2015 Analyzed: 12/11/2015					
Specific Conductance (EC)	0.00230		mmhos/cm							
Duplicate (B5L1111-DUP1)					Source: X512210-02		Prepared: 12/11/2015 Analyzed: 12/11/2015			
Specific Conductance (EC)	0.209		mmhos/cm		0.202			3.41	25	
Batch B5L1112 - NO PREP										
Duplicate (B5L1112-DUP1)					Source: X512210-02		Prepared: 12/11/2015 Analyzed: 12/11/2015			
pH	8.83		pH Units		8.86			0.339	25	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

LT Environmental, Inc.

4600 West 60th Avenue

Arvada CO 80003

John Cocroft

Project Number: WO#88926630

Project: KMG - Berger Jack C GU #1

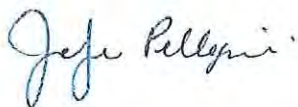
Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Noelle Doyle Mathis, President



December 18, 2015

LT Environmental, Inc.

John Cocroft

4600 West 60th Avenue

Arvada

CO 80003

Project Name - KMG - Burger Jack C GU 1

Project Number - WO#88926630

Attached are your analytical results for KMG - Burger Jack C GU 1 received by Origins Laboratory, Inc. December 17, 2015. This project is associated with Origins project number X512278-01.

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

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

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

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

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

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



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

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

John Cocroft
Project Number: WO#88926630
Project: KMG - Burger Jack C GU 1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B02 @ 8.5'	X512278-01	Soil	December 17, 2015 15:00	12/17/2015 16:19

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.

John Cocroft
Project Number: WO#88926630
Project: KMG - Burger Jack C GU 1

www.originslaboratory.com

Page 1 of 1

847215X

ORIGINS

LABORATORY, INC.

Client: LITE
Address: 4600 W 60th Ave
Aurora, CO 80003
Telephone Number: 720-556-7159
Email Address: jcc@litesoft.com

Project Manager: John Cuscraft
Project Name: Perry-Jack C GU 2
Project Number:
Samples Collected By: Jeremy Espinoza
APC contact: Sam LaRue
WFO# 00001690

Client: 莊

Address: 4600 W 60th Ave

Aruda CO 80003

Telephone Number: 720-556-7159

Email Address: colcraft@hawaii.com

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix		Analysis				Sample Instructions		
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Alt Summed #	Other	GD/EX	TPH		PH	EC
B02@ 8.5'	12/7/15	1500	1	X					X			X	X	X	X	Hold SAR
Relinquished By: <i>[Signature]</i>	Date: 12/17/15	Time: 1617		Received By:	Date:	Time:		Received By:	Date:	Time:		Turnaround Time:	Same Day <input checked="" type="checkbox"/> 24 Hr <input type="checkbox"/>	48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/>		
Relinquished By: <i>[Signature]</i>	Date:	Time:		Received By: <i>[Signature]</i>	Date: 12/17/15	Time: 1617		Received By:	Date:	Time:		Turnaround Time:	Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/>	48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/>		

Date Results Needed

Temp Received-2.3

Jose Pellegrini

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: WO#88926630
Project: KMG - Burger Jack C GU 1

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: XS12278

Client: LTE

Client Project ID: Burger Jack C GU 1

Checklist Completed by: Jeff Smith

Shipped Via: HAD

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/Time completed: 12/17/15

Airbill #: N/A

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

Cooler Number/Temperature: 1 / 2.3 °C 1 / _____ °C 1 / _____ °C (Describe) _____ °C

Thermometer ID: T903

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 checked="" type="checkbox"/>	<input 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"/>	PH
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 type="checkbox"/>	<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 analytes 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 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): Jeff Smith

Date/Time Reviewed: 12/17/15

Origins Laboratory, Inc.

Jeff Pellegrini

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: WO#88926630
Project: KMG - Burger Jack C GU 1

B02 @ 8.5'
12/17/2015 3:00:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X512278-01 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	620	25	mg/kg	1	B5L1702	12/17/2015	12/17/2015	
Residual Range Organics (C28-C36)	100	100	"	"	"	"	"	

Surrogate: o-Terphenyl	80.4 %	59-131			"	"	"	
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GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	88.1	5.00	mg/kg	25	B5L1701	"	12/17/2015	
Benzene	0.146	0.050	"	"	"	"	"	
Toluene	1.77	0.050	"	"	"	"	"	
Ethylbenzene	0.180	0.050	"	"	"	"	"	
Xylenes, total	0.126	0.002	"	1	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	97.6 %	70-130			"	"	"	
Surrogate: Toluene-d8	101 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	100 %	70-130			"	"	"	

pH in Soil by EPA 9045D

pH	8.53		pH Units	1	B5L1707	12/17/2015	12/17/2015	
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.221		mmhos/cm	"	B5L1708	"	12/17/2015	
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Origins Laboratory, Inc.

Jefe Pellegrini

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: WO#88926630
Project: KMG - Burger Jack C GU 1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5L1701 - EPA 5030 (soil)										
Blank (B5L1701-BLK1)					Prepared: 12/17/2015 Analyzed: 12/17/2015					
Gasoline Range Hydrocarbons	ND	0.200	mg/kg							
Benzene	ND	0.002	"							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Surrogate: 1,2-Dichloroethane-d4	64.1		ug/kg	62.5		103	70-130			
Surrogate: Toluene-d8	64.3		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	59.2		"	62.5		94.7	70-130			

Origins Laboratory, Inc.



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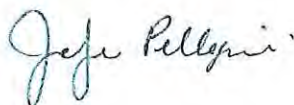
LT Environmental, Inc.
4600 West 60th Avenue
Arvada CO 80003

John Cocroft
Project Number: WO#88926630
Project: KMG - Burger Jack C GU 1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5L1701 - EPA 5030 (soil)										
LCS (B5L1701-BS1)					Prepared: 12/17/2015 Analyzed: 12/17/2015					
Benzene	0.103	0.002	mg/kg	0.100		103	77.1-124			
Toluene	0.104	0.002	"	0.100		104	74.5-128			
Ethylbenzene	0.095	0.002	"	0.100		94.7	66.4-127			
m,p-Xylene	0.191	0.004	"	0.200		95.6	76.6-124			
o-Xylene	0.095	0.002	"	0.100		94.7	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	65.1		ug/kg	62.5		104	70-130			
Surrogate: Toluene-d8	63.7		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	61.5		"	62.5		98.4	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 For Noelle Doyle Mathis, President

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

John Cocroft
Project Number: WO#88926630
Project: KMG - Burger Jack C GU 1

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

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

Batch B5L1701 - EPA 5030 (soil)

Matrix Spike (B5L1701-MS1)		Source: X512222-01			Prepared: 12/17/2015 Analyzed: 12/17/2015					
Benzene	0.103	0.002	mg/kg	0.100	ND	103	71.8-126			
Toluene	0.107	0.002	"	0.100	ND	107	65.1-130			
Ethylbenzene	0.095	0.002	"	0.100	ND	94.9	62.2-130			
m,p-Xylene	0.192	0.004	"	0.200	ND	96.1	46.5-137			
o-Xylene	0.094	0.002	"	0.100	ND	93.9	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	67.9		ug/kg	62.5		109	70-130			
Surrogate: Toluene-d8	63.6		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	63.9		"	62.5		102	70-130			

Origins Laboratory, Inc.



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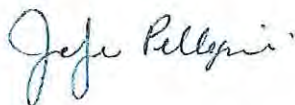
LT Environmental, Inc.
4600 West 60th Avenue
Arvada CO 80003

John Cocroft
Project Number: WO#88926630
Project: KMG - Burger Jack C GU 1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5L1701 - EPA 5030 (soil)										
Matrix Spike Dup (B5L1701-MSD1)			Source: X512222-01		Prepared: 12/17/2015 Analyzed: 12/17/2015					
Benzene	0.103	0.002	mg/kg	0.100	ND	103	71.8-126	0.0583	11.3	
Toluene	0.102	0.002	"	0.100	ND	102	65.1-130	4.78	15.4	
Ethylbenzene	0.092	0.002	"	0.100	ND	91.7	62.2-130	3.49	19.6	
m,p-Xylene	0.185	0.004	"	0.200	ND	92.5	46.5-137	3.78	19.2	
o-Xylene	0.091	0.002	"	0.100	ND	91.2	54.2-134	2.96	17.9	
Surrogate: 1,2-Dichloroethane-d4	68.6		ug/kg	62.5		110	70-130			
Surrogate: Toluene-d8	64.2		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	62.2		"	62.5		99.6	70-130			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: WO#88926630
Project: KMG - Burger Jack C GU 1

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

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B5L1702 - EPA 3580

Blank (B5L1702-BLK1)

Prepared: 12/17/2015 Analyzed: 12/17/2015

Diesel (C10-C28)	ND	50	mg/kg							
Residual Range Organics (C28-C36)	ND	200	"							
Surrogate: o-Terphenyl	40		"	50.0		81.0	59-131			

LCS (B5L1702-BS1)

Prepared: 12/17/2015 Analyzed: 12/17/2015

Diesel (C10-C28)	830	50	mg/kg	1000		83.0	64-121			
Residual Range Organics (C28-C36)	910	200	"	1000		90.8	58-124			
Surrogate: o-Terphenyl	47		"	50.0		93.2	59-131			

Matrix Spike (B5L1702-MS1)

Source: X512270-01

Prepared: 12/17/2015 Analyzed: 12/17/2015

Diesel (C10-C28)	870	50	mg/kg	1000	ND	86.5	53-125			
Residual Range Organics (C28-C36)	850	200	"	1000	20	83.3	47-133			
Surrogate: o-Terphenyl	49		"	50.0		97.7	59-131			

Matrix Spike Dup (B5L1702-MSD1)

Source: X512270-01

Prepared: 12/17/2015 Analyzed: 12/17/2015

Diesel (C10-C28)	890	50	mg/kg	1000	ND	88.6	53-125	2.36	20	
Residual Range Organics (C28-C36)	920	200	"	1000	20	90.4	47-133	7.93	20	
Surrogate: o-Terphenyl	50		"	50.0		99.5	59-131			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: WO#88926630
Project: KMG - Burger Jack C GU 1

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 B5L1707 - NO PREP

Duplicate (B5L1707-DUP1)		Source: X512278-01			Prepared: 12/17/2015 Analyzed: 12/17/2015					
pH	8.48		pH Units		8.53			0.588	25	

Batch B5L1708 - NO PREP

Blank (B5L1708-BLK1)		Prepared: 12/17/2015 Analyzed: 12/17/2015								
Specific Conductance (EC)	0.00240		mmhos/cm							
Duplicate (B5L1708-DUP1)		Source: X512278-01			Prepared: 12/17/2015 Analyzed: 12/17/2015					
Specific Conductance (EC)	0.239		mmhos/cm		0.221			7.83	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 For Noelle Doyle Mathis, President

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

John Cocroft
Project Number: WO#88926630
Project: KMG - Burger Jack C GU 1

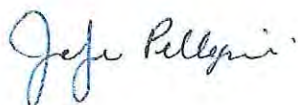
Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Noelle Doyle Mathis, President



December 21, 2015

LT Environmental, Inc.

John Cocroft

4600 West 60th Avenue

Arvada

CO 80003

Project Name - KMG - Berger Jack C GU #1

Project Number - WO#88926630

Attached are your analytical results for KMG - Berger Jack C GU #1 received by Origins Laboratory, Inc. December 18, 2015. This project is associated with Origins project number X512296-01.

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

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

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

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

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

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



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

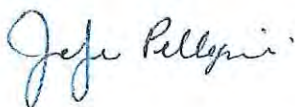
LT Environmental, Inc.
4600 West 60th Avenue
Arvada CO 80003

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW01	X512296-01	Water	December 18, 2015 16:30	12/18/2015 17:40

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Noelle Doyle Mathis, President

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

ORIGINS
LABORATORY, INC

www.originslaboratory.com

page 1 of 1

Client: LT
Address: 4100 W 60th Ave
Arvode, CO 80003
Telephone Number: 303-933-9788
Email Address: TEC@TEC.ITENV.COM/SXC1ST

Project Manager: John Colloff
Project Name: Bayer Jack C Gun
Project Number: _____
Samples Collected By: David Teich
APC Consult Sam Laine
WO #88926630

Sample ID Description	Date Sampled	Time Sampled	Preservative		Matrix			Analysis	Sample Instructions
			# of Containers	Unpreserved	HCl	HNO ₃	Other		
GW01	12/18/15	1630	3	X			X		1
									2
									3
									4
									5
									6
									7
									8
									9
									10

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Turnaround Time:
<u>ALZ</u>	<u>12/18/15</u>	<u>1740</u>	<u>John Am</u>	<u>12/18/15</u>	<u>1740</u>	Same Day <input checked="" type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input type="checkbox"/>

Temp Received: 19 Date Rec'd: 12/18/15 6:07 PM

Origins Laboratory, Inc.

Jose Pelloni

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: X52296

Client: LTE

Client Project ID: Berger Jack C GU 1

Checklist Completed by: Jeff Smith

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

Date/time completed: 12/18/15

Airbill #: NA

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

Cooler Number/Temperature: 1 / 1.9 °C 1 °C 1 °C 1 °C (Describe)

Thermometer ID: T003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽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 checked="" type="checkbox"/>	<input 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) Jeff Smith

Date/Time Reviewed 12/18/15

Origins Laboratory, Inc.

Jeff Pellegrini

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

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

GW01

12/18/2015 4:30:00PM

Reporting

Analyte

Result

Limit

Units

Dilution

Batch

Prepared

Analyzed

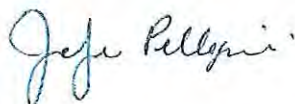
Notes

Origins Laboratory, Inc.
X512296-01 (Water)

BTEX by EPA 8260C

Benzene	1990	50.0	ug/L	50	B5L1703	12/18/2015	12/18/2015
Toluene	55.0	4.0	"	4	"	"	12/18/2015
Ethylbenzene	20.3	4.0	"	"	"	"	"
Xylenes, total	25.5	4.0	"	"	"	"	"
Surrogate: 1,2-Dichloroethane-d4	98.4 %	84-121			"	"	"
Surrogate: Toluene-d8	95.8 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	96.9 %	84-114			"	"	"

Origins Laboratory, Inc.



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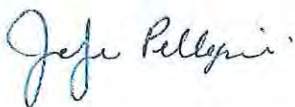
LT Environmental, Inc.
4600 West 60th Avenue
Arvada CO 80003

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5L1703 - EPA 5030B (Water)										
Blank (B5L1703-BLK1)										
Prepared: 12/17/2015 Analyzed: 12/18/2015										
Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	58		"	62.5		92.7	84-121			
Surrogate: Toluene-d8	63		"	62.5		101	85-115			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		98.0	84-114			

Origins Laboratory, Inc.



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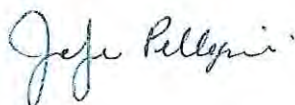
LT Environmental, Inc.
4600 West 60th Avenue
Arvada CO 80003

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5L1703 - EPA 5030B (Water)										
LCS (B5L1703-BS1)					Prepared: 12/17/2015 Analyzed: 12/18/2015					
Benzene	43.8	1.0	ug/L	50.0		87.7	73.3-129			
Toluene	44.5	1.0	"	50.0		89.0	76.2-123			
Ethylbenzene	44.6	1.0	"	50.0		89.1	73.6-130			
m,p-Xylene	87.4	2.0	"	100		87.4	76.1-126			
o-Xylene	43.4	1.0	"	50.0		86.8	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5		93.8	84-121			
Surrogate: Toluene-d8	61		"	62.5		97.8	85-115			
Surrogate: 4-Bromofluorobenzene	66		"	62.5		106	84-114			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B5L1703 - EPA 5030B (Water)

Matrix Spike (B5L1703-MS1)		Source: X512228-03			Prepared: 12/17/2015 Analyzed: 12/18/2015					
Benzene	50.6	1.0	ug/L	50.0	ND	101	74-130			
Toluene	50.8	1.0	"	50.0	ND	102	73-131			
Ethylbenzene	51.0	1.0	"	50.0	ND	102	76-132			
m,p-Xylene	100	2.0	"	100	ND	100	69-139			
o-Xylene	49.6	1.0	"	50.0	ND	99.2	74-131			
Surrogate: 1,2-Dichloroethane-d4	57		"	62.5		90.5	84-121			
Surrogate: Toluene-d8	63		"	62.5		101	85-115			
Surrogate: 4-Bromofluorobenzene	66		"	62.5		105	84-114			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

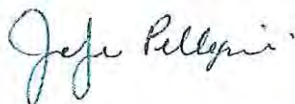
Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B5L1703 - EPA 5030B (Water)

Matrix Spike Dup (B5L1703-MSD1)			Source: X512228-03			Prepared: 12/17/2015 Analyzed: 12/18/2015				
Benzene	50.1	1.0	ug/L	50.0	ND	100	74-130	0.834	20	
Toluene	50.2	1.0	"	50.0	ND	100	73-131	1.09	20	
Ethylbenzene	52.2	1.0	"	50.0	ND	104	76-132	2.38	20	
m,p-Xylene	102	2.0	"	100	ND	102	69-139	2.31	20	
o-Xylene	49.6	1.0	"	50.0	ND	99.1	74-131	0.0403	20	
Surrogate: 1,2-Dichloroethane-d4	57		"	62.5		91.5	84-121			
Surrogate: Toluene-d8	60		"	62.5		95.9	85-115			
Surrogate: 4-Bromofluorobenzene	66		"	62.5		105	84-114			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: WO#88926630
Project: KMG - Berger Jack C GU #1

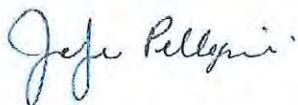
Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



February 19, 2016

LT Environmental, Inc.

John Cocroft

4600 West 60th Avenue

Arvada

CO 80003

Project Name - KMG - Burger Jack C GU 1

Project Number - 014215255/WO#889266

Attached are your analytical results for KMG - Burger Jack C GU 1 received by Origins Laboratory, Inc. February 18, 2016. This project is associated with Origins project number X602206-01.

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

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

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

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

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

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



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

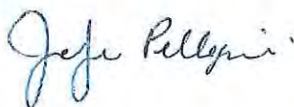
LT Environmental, Inc.
4600 West 60th Avenue
Arvada CO 80003

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-N01 @ 7'	X602206-01	Soil	February 18, 2016 9:50	02/18/2016 16:58
TB-E01 @ 7'	X602206-02	Soil	February 18, 2016 9:55	02/18/2016 16:58
TB-S01 @ 7'	X602206-03	Soil	February 18, 2016 10:00	02/18/2016 16:58
TB-W01 @ 7'	X602206-04	Soil	February 18, 2016 10:05	02/18/2016 16:58
TB-B01 @ 11'	X602206-05	Soil	February 18, 2016 10:10	02/18/2016 16:58

Origins Laboratory, Inc.



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John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

ORIGINS

LABORATORY, INC

www.originslaboratory.com

X602206

page 1 of 1

Client: LTE
Address: 4600 W 60TH Ave
Telephone Number: 303-433-9788
Email Address: APC-Team

Project Manager: J. Cocroft
Project Name: Besser Ice C GU #1
Project Number: 041215255
Samples Collected By: Kris Shepherd

Address: Snow LaRue APC DO# 889266-30

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analyst	Sample Instructions		
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	As Sampled			Other	
TB-20107	2/18/16	0950	2	X				X		X	X	X	1	Hold SAR
TB-ED107		0955	2	X				X		X	X	X	2	
TB-S0107		1000	2	X				X		X	X	X	3	
TB-20107		1005	2	X				X		X	X	X	4	
TB-B0107		1010	2	X				X		X	X	X	5	▽
B502	▽	1015	2	X				X					6	Hold All
													7	
													8	
													9	
													10	
Relinquished By: <u>[Signature]</u>	Date: <u>2/18/2016</u>	Time: <u>1540</u>	Received By: <u>Donny Thacker</u>	Date: <u>2/18/16</u>	Time: <u>3:00</u>	Turnaround Time: <input checked="" type="checkbox"/> Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard								
Relinquished By: <u>Donny Thacker</u>	Date: <u>2/18/16</u>	Time: <u>16:08</u>	Received By: <u>[Signature]</u>	Date: <u>2/18/16</u>	Time: <u>1658</u>									

Date Results Needed: 2/19/16 (0700)

Origins Laboratory, Inc.

Jose Pellegrini

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: X602206

Client: LTE

Client Project ID: Burger Jack C GU #1

Checklist Completed by: Jeff Smith

Shipped Via: HQ

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 2/18/16

Airbill #: N/A

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

Water

Other:

(Describe)

Cooler Number/Temperature: 1 57 °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⁾ ?	<u>X</u>			
Is there ice present (document if blue ice is used)	<u>X</u>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<u>X</u>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<u>X</u>		
Were all samples received intact ⁽¹⁾ ?	<u>X</u>			
Was adequate sample volume provided ⁽¹⁾ ?	<u>X</u>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?	<u>X</u>			
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<u>X</u>			<u>PH</u>
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<u>X</u>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<u>X</u>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<u>X</u>			
For volatiles in water -- is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			<u>X</u>	
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)			<u>X</u>	
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 2/18/16 1757

Origins Laboratory, Inc.

Jeff Pellegrini

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

TB-N01 @ 7'
2/18/2016 9:50:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X602206-01 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	52	25	mg/kg	1	B6B1807	02/18/2016	02/18/2016	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl 61.3 % 59-131 " " "

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	76.3	5.00	mg/kg	25	B6B1806	02/18/2016	02/18/2016	
Benzene	ND	0.050	"	"	"	"	"	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	ND	0.050	"	"	"	"	"	U
Xylenes, total	ND	0.050	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4 72.9 % 70-130 " " "

Surrogate: Toluene-d8 100 % 70-130 " " "

Surrogate: 4-Bromofluorobenzene 95.8 % 70-130 " " "

pH in Soil by EPA 9045D

pH	7.98	pH Units	1	B6B1808	02/18/2016	02/18/2016	
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.329	mmhos/cm	"	B6B1809	02/18/2016	02/18/2016	
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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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

TB-E01 @ 7'
2/18/2016 9:55:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X602206-02 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	1900	25	mg/kg	1	B6B1807	02/18/2016	02/18/2016	
Residual Range Organics (C28-C40)	170	100	"	"	"	"	"	

Surrogate: o-Terphenyl 95.6 % 59-131 " " "

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	256	5.00	mg/kg	25	B6B1806	02/18/2016	02/18/2016	
Benzene	0.142	0.050	"	"	"	"	"	
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	3.12	0.050	"	"	"	"	"	
Xylenes, total	0.807	0.050	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 70.3 % 70-130 " " "

Surrogate: Toluene-d8 109 % 70-130 " " "

Surrogate: 4-Bromofluorobenzene 111 % 70-130 " " "

pH in Soil by EPA 9045D

pH	8.37		pH Units	1	B6B1808	02/18/2016	02/18/2016	
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.0903		mmhos/cm	"	B6B1809	02/18/2016	02/18/2016	
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Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

TB-S01 @ 7'
2/18/2016 10:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X602206-03 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	25	mg/kg	1	B6B1807	02/18/2016	02/18/2016	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	66.2 %	59-131			"	"	"	
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GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	1.33	0.200	mg/kg	1	B6B1806	02/18/2016	02/18/2016	
Benzene	0.005	0.002	"	"	"	"	"	
Toluene	ND	0.002	"	"	"	"	"	U
Ethylbenzene	ND	0.002	"	"	"	"	"	U
Xylenes, total	0.011	0.002	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	81.1 %	70-130			"	"	"	
Surrogate: Toluene-d8	102 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	93.4 %	70-130			"	"	"	

pH in Soil by EPA 9045D

pH	7.80		pH Units	1	B6B1808	02/18/2016	02/18/2016	
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.282		mmhos/cm	"	B6B1809	02/18/2016	02/18/2016	
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Origins Laboratory, Inc.

Jefe Pellegrini

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

TB-W01 @ 7'
2/18/2016 10:05:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X602206-04 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	1000	25	mg/kg	1	B6B1807	02/18/2016	02/18/2016	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl 87.9 % 59-131 " " "

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	222	5.00	mg/kg	25	B6B1806	02/18/2016	02/18/2016	
Benzene	ND	0.050	"	"	"	"	"	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	0.074	0.050	"	"	"	"	"	
Xylenes, total	0.382	0.050	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 72.1 % 70-130 " " "

Surrogate: Toluene-d8 105 % 70-130 " " "

Surrogate: 4-Bromofluorobenzene 104 % 70-130 " " "

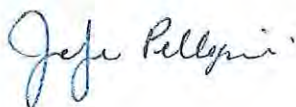
pH in Soil by EPA 9045D

pH	8.08		pH Units	1	B6B1808	02/18/2016	02/18/2016	
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.185		mmhos/cm	"	B6B1809	02/18/2016	02/18/2016	
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Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

TB-B01 @ 11'
2/18/2016 10:10:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X602206-05 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	2300	25	mg/kg	1	B6B1807	02/18/2016	02/18/2016	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl 93.8 % 59-131 " " "

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	1700	50.0	mg/kg	250	B6B1806	02/18/2016	02/18/2016	
Benzene	2.78	0.050	"	25	"	"	02/18/2016	
Toluene	0.078	0.050	"	"	"	"	"	
Ethylbenzene	21.6	0.498	"	250	"	"	02/18/2016	
Xylenes, total	12.0	0.050	"	25	"	"	02/18/2016	

Surrogate: 1,2-Dichloroethane-d4 73.8 % 70-130 " " 02/18/2016
Surrogate: Toluene-d8 103 % 70-130 " " "
Surrogate: 4-Bromofluorobenzene 98.9 % 70-130 " " "

pH in Soil by EPA 9045D

pH	8.10		pH Units	1	B6B1808	02/18/2016	02/18/2016	
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.112		mmhos/cm	"	B6B1809	02/18/2016	02/18/2016	
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Origins Laboratory, Inc.

Jefe Pellegrini

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B6B1806 - EPA 5030 (soil)										
Blank (B6B1806-BLK1)					Prepared: 02/18/2016 Analyzed: 02/18/2016					
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
Surrogate: 1,2-Dichloroethane-d4	49.3		ug/kg	62.5		78.8	70-130			
Surrogate: Toluene-d8	65.3		"	62.5		104	70-130			
Surrogate: 4-Bromofluorobenzene	57.1		"	62.5		91.4	70-130			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B6B1806 - EPA 5030 (soil)										
LCS (B6B1806-BS1)					Prepared: 02/18/2016 Analyzed: 02/18/2016					
Benzene	0.096	0.002	mg/kg	0.100		95.7	77.1-124			
Toluene	0.095	0.002	"	0.100		95.1	74.5-128			
Ethylbenzene	0.092	0.002	"	0.100		92.3	66.4-127			
m,p-Xylene	0.187	0.004	"	0.200		93.6	76.6-124			
o-Xylene	0.092	0.002	"	0.100		91.7	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	50.3		ug/kg	62.5		80.4	70-130			
Surrogate: Toluene-d8	58.8		"	62.5		94.0	70-130			
Surrogate: 4-Bromofluorobenzene	61.2		"	62.5		97.9	70-130			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B6B1806 - EPA 5030 (soil)										
LCS Dup (B6B1806-BSD1)					Prepared: 02/18/2016 Analyzed: 02/18/2016					
Benzene	0.103	0.002	mg/kg	0.100		103	77.1-124	7.01	20	
Toluene	0.103	0.002	"	0.100		103	74.5-128	7.90	20	
Ethylbenzene	0.098	0.002	"	0.100		97.6	66.4-127	5.56	20	
m,p-Xylene	0.193	0.004	"	0.200		96.4	76.6-124	2.99	20	
o-Xylene	0.096	0.002	"	0.100		96.4	76.6-124	4.98	20	
Surrogate: 1,2-Dichloroethane-d4	49.6		ug/kg	62.5		79.3	70-130			
Surrogate: Toluene-d8	59.8		"	62.5		95.7	70-130			
Surrogate: 4-Bromofluorobenzene	59.2		"	62.5		94.7	70-130			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Extractable Petroleum Hydrocarbons by 8015C - 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 B6B1807 - EPA 3580

Blank (B6B1807-BLK1)

Prepared: 02/18/2016 Analyzed: 02/18/2016

Diesel (C10-C28)	ND	50	mg/kg							U
Residual Range Organics (C28-C40)	ND	200	"							U
Surrogate: o-Terphenyl	48		"	50.0		96.6	59-131			

LCS (B6B1807-BS1)

Prepared: 02/18/2016 Analyzed: 02/18/2016

Diesel (C10-C28)	1000	50	mg/kg	1000		101	64-121			
Residual Range Organics (C28-C40)	960	200	"	1000		95.5	58-124			
Surrogate: o-Terphenyl	50		"	50.0		99.5	59-131			

Matrix Spike (B6B1807-MS1)

Source: X602188-01

Prepared: 02/18/2016 Analyzed: 02/18/2016

Diesel (C10-C28)	930	50	mg/kg	1000	38	88.7	53-125			
Residual Range Organics (C28-C40)	840	200	"	1000	44	79.6	47-133			
Surrogate: o-Terphenyl	44		"	50.0		88.8	59-131			

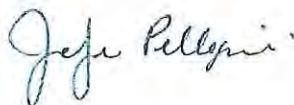
Matrix Spike Dup (B6B1807-MSD1)

Source: X602188-01

Prepared: 02/18/2016 Analyzed: 02/18/2016

Diesel (C10-C28)	950	50	mg/kg	1000	38	90.9	53-125	2.35	20	
Residual Range Organics (C28-C40)	830	200	"	1000	44	78.7	47-133	1.05	20	
Surrogate: o-Terphenyl	40		"	50.0		80.0	59-131			

Origins Laboratory, Inc.



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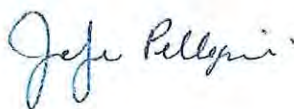
LT Environmental, Inc.
4600 West 60th Avenue
Arvada CO 80003

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

Classical Chemistry Parameters - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B6B1808 - NO PREP										
Duplicate (B6B1808-DUP1)		Source: X602188-01			Prepared: 02/18/2016 Analyzed: 02/18/2016					
pH	8.01		pH Units		7.98			0.375	25	
Batch B6B1809 - NO PREP										
Blank (B6B1809-BLK1)		Prepared: 02/18/2016 Analyzed: 02/18/2016								
Specific Conductance (EC)	0.00340		mmhos/cm							
Duplicate (B6B1809-DUP1)		Source: X602188-01			Prepared: 02/18/2016 Analyzed: 02/18/2016					
Specific Conductance (EC)	0.110		mmhos/cm		0.104			5.33	25	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 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 For Noelle Doyle Mathis, President



February 26, 2016

LT Environmental, Inc.

John Cocroft

4600 West 60th Avenue

Arvada

CO 80003

Project Name - KMG - Berger Jack C GU #1

Project Number - 014215255/WO#889266

Attached are your analytical results for KMG - Berger Jack C GU #1 received by Origins Laboratory, Inc. February 25, 2016. This project is associated with Origins project number X602284-04.

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

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

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

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

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

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



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

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB01 @ 8'	X602284-04	Soil	February 25, 2016 9:30	02/25/2016 16:50
SB02 @ 8'	X602284-08	Soil	February 25, 2016 10:40	02/25/2016 16:50
SB03 @ 8'	X602284-12	Soil	February 25, 2016 11:45	02/25/2016 16:50
SB04 @ 8'	X602284-16	Soil	February 25, 2016 13:30	02/25/2016 16:50
SB05 @ 6'	X602284-19	Soil	February 25, 2016 14:05	02/25/2016 16:50

Origins Laboratory, Inc.



Jen Pellegrini For Noelle Doyle Mathis, President

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

www.originslaboratory.com

X602284



page 1 of 2

ORIGINS
LABORATORY, INC

Client: **LTE**
Address: **4600 W 60th Ave Arvada CO**
Telephone Number: **(303) 433-9788**
Email Address: **APC.Teams**

Project Manager: **John Cocroft**
Project Name: **Berger Jack C GU #1**
Project Number: **014215255**
Samples Collected By: **Kris Sheppard**

Attn: Sam LaRue WO#88926630

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative					Matrix				Analysis	Sample Instructions	
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	As Summed	Other				
SB01C21	2/25/16	0915	2	X					X				Hold All	1	Only Sample Instructions
SB01C41		0920	2	X					X				1	2	
SB01C61		0925	2	X					X				1	3	
SB01C81		0930	2	X					X	X	X		Hold SAR	4	
SB01C101		0940	2	X					X				Hold All	5	
SB02C21		1020	2	X					X				Hold All	6	
SB02C41		1025	2	X					X				1	7	
SB02C61		1030	2	X					X				1	8	
SB02C81		1040	2	X					X	X	X		Hold SAR	9	
SB03C21		1115	2	X					X				Hold All	10	
Relinquished By: 	Date: 2/25/16		Time: 1010	Received By: Holly Thacker				Date: 2/25/16	Time: 1610	Turnaround Time: Same Day <input checked="" type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> Standard <input type="checkbox"/>					
Relinquished By: 	Date: 2/25/16		Time: 1630	Received By: Holly Thacker				Date: 2/25/16	Time: 1630						

Turnaround Time:
Same Day ☐ 24 Hr ☐
48 Hr ☐ 72 Hr ☐
Standard ☐

5.8°

Date Results Needed 2/24/16 (0900)

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

www.originslaboratory.com

X607284

ORIGINS
LABORATORY, INC

page 2 of 2

Project Manager: John Cocroft
Project Name: Berger Jack C GU #1
Project Number: 014215255
Samples Collected By: Kris Shephard

Client: LTE
Address: 4600 W 60th Ave Arvada CO
Telephone Number: (303) 433-9788
Email Address: APC Team

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.255.9645

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis			Sample Instructions
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Sampling	Other	Asbestos	Trace Metals	
SB03@4'	2/25/16	11:25	2	X					X					Hold All
SB03@6'		11:35	2	X					X					↓
SB03@8'		11:45	2	X					X		X	X	X	Hold SAR
SB04@2'		13:10	2	X					X					Hold All
SB04@4'		13:15	2	X					X					↓
SB04@6'		13:25	2	X					X					↓
SB04@8'		13:30	2	X					X		X	X	X	Hold SAR
SB05@2'		13:55	2	X					X					↓
SB05@4'		14:00	2	X					X					↓
SB05@6'		14:05	2	X					X		X	X	X	Hold SAR

Relinquished By: [Signature] Date: 2/25/16 Time: 6:10
Received By: John Thacker Date: 2/25/16 Time: 11:10
Relinquished By: John Thacker Date: 2/25/16 Time: 16:50
Received By: [Signature] Date: 2/26/16 Time: 16:50

Date Results Needed 2/26/16 (0500)

5.8

Origins Laboratory, Inc.

John Pellegrini

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: X607284

Client: LTE

Client Project ID: Berger Jack C GU #1

Checklist Completed by: Jeff Smith

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

Date/time completed: 2/25/16

Airbill #: NA

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

Cooler Number/Temperature: 1 / 5.8 °C 1 / _____ °C 1 / _____ °C (Describe)

Thermometer ID: T003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽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 ₂ •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) Jeff Smith

Date/Time Reviewed 2/25/16

Origins Laboratory, Inc.

Jeff Pellegrini

Jen Pellegrini For Noelle Doyle Mathis, President

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

SB01 @ 8'

2/25/2016 9:30:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X602284-04 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	25	mg/kg	1	B6B2503	02/25/2016	02/25/2016	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	59.4 %	59-131			"	"	"	
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GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	B6B2504	02/25/2016	02/25/2016	U
Benzene	ND	0.002	"	"	"	"	"	U
Toluene	ND	0.002	"	"	"	"	"	U
Ethylbenzene	ND	0.002	"	"	"	"	"	U
Xylenes, total	ND	0.002	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	110 %	70-130			"	"	"	
Surrogate: Toluene-d8	101 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	95.8 %	70-130			"	"	"	

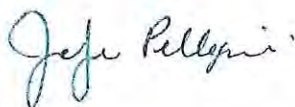
pH in Soil by EPA 9045D

pH	8.40		pH Units	1	B6B2505	02/25/2016	02/25/2016	
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.153		mmhos/cm	"	B6B2506	02/25/2016	02/25/2016	
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Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

SB02 @ 8'
2/25/2016 10:40:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X602284-08 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	25	mg/kg	1	B6B2503	02/25/2016	02/25/2016	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	62.9 %	59-131			"	"	"	
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GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	B6B2504	02/25/2016	02/25/2016	U
Benzene	ND	0.002	"	"	"	"	"	U
Toluene	ND	0.002	"	"	"	"	"	U
Ethylbenzene	ND	0.002	"	"	"	"	"	U
Xylenes, total	0.005	0.002	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	109 %	70-130			"	"	"	
Surrogate: Toluene-d8	98.3 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	97.8 %	70-130			"	"	"	

pH in Soil by EPA 9045D

pH	8.60	pH Units	1	B6B2505	02/25/2016	02/25/2016	
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.109	mmhos/cm	"	B6B2506	02/25/2016	02/25/2016	
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Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

SB03 @ 8'

2/25/2016 11:45:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X602284-12 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	1300	25	mg/kg	1	B6B2503	02/25/2016	02/26/2016	
Residual Range Organics (C28-C40)	210	100	"	"	"	"	"	

Surrogate: o-Terphenyl 67.5 % 59-131 " " "

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	262	5.00	mg/kg	25	B6B2504	02/25/2016	02/26/2016	
Benzene	ND	0.050	"	"	"	"	"	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	0.052	0.050	"	"	"	"	"	
Xylenes, total	ND	0.050	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4 110 % 70-130 " " 02/25/2016
Surrogate: Toluene-d8 100 % 70-130 " " "
Surrogate: 4-Bromofluorobenzene 98.5 % 70-130 " " "

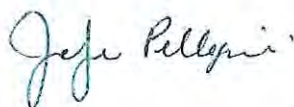
pH in Soil by EPA 9045D

pH	8.26		pH Units	1	B6B2505	02/25/2016	02/25/2016	
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.122		mmhos/cm	"	B6B2506	02/25/2016	02/25/2016	
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Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

SB04 @ 8'

2/25/2016 1:30:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X602284-16 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	350	25	mg/kg	1	B6B2503	02/25/2016	02/25/2016	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	71.4 %	59-131			"	"	"	
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GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	363	5.00	mg/kg	25	B6B2504	02/25/2016	02/26/2016	
Benzene	0.096	0.050	"	"	"	"	"	
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	ND	0.050	"	"	"	"	"	U
Xylenes, total	ND	0.050	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	110 %	70-130			"	"	02/25/2016	
Surrogate: Toluene-d8	102 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	105 %	70-130			"	"	"	


pH in Soil by EPA 9045D

pH	8.18		pH Units	1	B6B2505	02/25/2016	02/25/2016	
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.131		mmhos/cm	"	B6B2506	02/25/2016	02/25/2016	
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Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

SB05 @ 6'
2/25/2016 2:05:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X602284-19 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	25	mg/kg	1	B6B2503	02/25/2016	02/25/2016	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	64.9 %	59-131			"	"	"	
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GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	67.3	5.00	mg/kg	25	B6B2504	02/25/2016	02/26/2016	
Benzene	ND	0.050	"	"	"	"	"	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	ND	0.050	"	"	"	"	"	U
Xylenes, total	ND	0.050	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	108 %	70-130			"	"	"	
Surrogate: Toluene-d8	101 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	103 %	70-130			"	"	"	

pH in Soil by EPA 9045D

pH	8.32	pH Units	1	B6B2505	02/25/2016	02/25/2016
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.146	mmhos/cm	"	B6B2506	02/25/2016	02/25/2016
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Origins Laboratory, Inc.

Jefe Pellegrini

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B6B2504 - EPA 5030 (soil)										
Blank (B6B2504-BLK1)					Prepared: 02/25/2016 Analyzed: 02/25/2016					
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
Surrogate: 1,2-Dichloroethane-d4	70.0		ug/kg	62.5		112	70-130			
Surrogate: Toluene-d8	67.0		"	62.5		107	70-130			
Surrogate: 4-Bromofluorobenzene	63.0		"	62.5		101	70-130			

Origins Laboratory, Inc.



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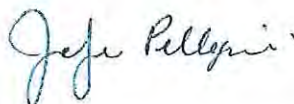
LT Environmental, Inc.
4600 West 60th Avenue
Arvada CO 80003

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B6B2504 - EPA 5030 (soil)										
LCS (B6B2504-BS1)					Prepared: 02/25/2016 Analyzed: 02/25/2016					
Benzene	0.112	0.002	mg/kg	0.100		112	77.1-124			
Toluene	0.102	0.002	"	0.100		102	74.5-128			
Ethylbenzene	0.107	0.002	"	0.100		107	66.4-127			
m,p-Xylene	0.213	0.004	"	0.200		106	76.6-124			
o-Xylene	0.106	0.002	"	0.100		106	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	66.8		ug/kg	62.5		107	70-130			
Surrogate: Toluene-d8	60.3		"	62.5		96.4	70-130			
Surrogate: 4-Bromofluorobenzene	64.6		"	62.5		103	70-130			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B6B2504 - EPA 5030 (soil)										
Matrix Spike (B6B2504-MS1)			Source: X602282-01		Prepared: 02/25/2016 Analyzed: 02/25/2016					
Benzene	0.118	0.002	mg/kg	0.100	ND	118	71.8-126			
Toluene	0.108	0.002	"	0.100	ND	108	65.1-130			
Ethylbenzene	0.106	0.002	"	0.100	ND	106	62.2-130			
m,p-Xylene	0.222	0.004	"	0.200	ND	111	46.5-137			
o-Xylene	0.107	0.002	"	0.100	ND	107	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	69.6		ug/kg	62.5		111	70-130			
Surrogate: Toluene-d8	59.2		"	62.5		94.7	70-130			
Surrogate: 4-Bromofluorobenzene	64.4		"	62.5		103	70-130			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B6B2504 - EPA 5030 (soil)

Matrix Spike Dup (B6B2504-MSD1)		Source: X602282-01			Prepared: 02/25/2016 Analyzed: 02/25/2016					
Benzene	0.119	0.002	mg/kg	0.100	ND	119	71.8-126	0.960	11.3	
Toluene	0.109	0.002	"	0.100	ND	109	65.1-130	1.01	15.4	
Ethylbenzene	0.112	0.002	"	0.100	ND	112	62.2-130	4.95	19.6	
m,p-Xylene	0.220	0.004	"	0.200	ND	110	46.5-137	0.970	19.2	
o-Xylene	0.109	0.002	"	0.100	ND	109	54.2-134	2.26	17.9	
Surrogate: 1,2-Dichloroethane-d4	67.2		ug/kg	62.5		108	70-130			
Surrogate: Toluene-d8	58.4		"	62.5		93.5	70-130			
Surrogate: 4-Bromofluorobenzene	61.1		"	62.5		97.8	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Noelle Doyle Mathis, President

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

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

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

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

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

Batch B6B2503 - EPA 3580

Blank (B6B2503-BLK1)

Prepared: 02/25/2016 Analyzed: 02/25/2016

Diesel (C10-C28)	ND	50	mg/kg							U
Residual Range Organics (C28-C40)	ND	200	"							U
Surrogate: o-Terphenyl	42		"	50.0		83.8	59-131			

LCS (B6B2503-BS1)

Prepared: 02/25/2016 Analyzed: 02/25/2016

Diesel (C10-C28)	810	50	mg/kg	1000		80.9	64-121			
Residual Range Organics (C28-C40)	850	200	"	1000		84.8	58-124			
Surrogate: o-Terphenyl	43		"	50.0		85.1	59-131			

Matrix Spike (B6B2503-MS1)

Source: X602282-01

Prepared: 02/25/2016 Analyzed: 02/25/2016

Diesel (C10-C28)	750	50	mg/kg	1000	ND	75.3	53-125			
Residual Range Organics (C28-C40)	850	200	"	1000	ND	85.4	47-133			
Surrogate: o-Terphenyl	38		"	50.0		77.0	59-131			

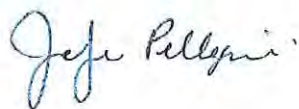
Matrix Spike Dup (B6B2503-MSD1)

Source: X602282-01

Prepared: 02/25/2016 Analyzed: 02/25/2016

Diesel (C10-C28)	760	50	mg/kg	1000	ND	75.5	53-125	0.311	20	
Residual Range Organics (C28-C40)	810	200	"	1000	ND	81.5	47-133	4.66	20	
Surrogate: o-Terphenyl	37		"	50.0		73.4	59-131			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

Classical Chemistry Parameters - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B6B2505 - NO PREP										
Duplicate (B6B2505-DUP1)		Source: X602284-04			Prepared: 02/25/2016 Analyzed: 02/25/2016					
pH	8.84		pH Units		8.40			5.10	25	
Batch B6B2506 - NO PREP										
Blank (B6B2506-BLK1)		Prepared: 02/25/2016 Analyzed: 02/25/2016								
Specific Conductance (EC)	0.00320		mmhos/cm							
Duplicate (B6B2506-DUP1)		Source: X602284-04			Prepared: 02/25/2016 Analyzed: 02/25/2016					
Specific Conductance (EC)	0.156		mmhos/cm		0.153			1.62	25	

Origins Laboratory, Inc.



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Jen Pellegrini For Noelle Doyle Mathis, President

LT Environmental, Inc.

4600 West 60th Avenue

Arvada CO 80003

John Cocroft

Project Number: 014215255/WO#88926630

Project: KMG - Berger Jack C GU #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.



February 29, 2016

LT Environmental, Inc.

John Cocroft

4600 West 60th Avenue

Arvada

CO 80003

Project Name - KMG - Berger Jack C GU #1

Project Number - 014215255/WO#889266

Attached are your analytical results for KMG - Berger Jack C GU #1 received by Origins Laboratory, Inc. February 26, 2016. This project is associated with Origins project number X602292-01.

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

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

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

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

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

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



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

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB01GW	X602292-01	Water	February 26, 2016 11:30	02/26/2016 17:00
SB02GW	X602292-02	Water	February 26, 2016 11:40	02/26/2016 17:00
SB03GW	X602292-03	Water	February 26, 2016 11:50	02/26/2016 17:00
SB04GW	X602292-04	Water	February 26, 2016 12:00	02/26/2016 17:00
SB05GW	X602292-05	Water	February 26, 2016 12:10	02/26/2016 17:00

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

www.originslaboratory.com





X607292

ORIGINS
LABORATORY, INC

Client: LTE
Address: 4600 W 60th Ave Arvada CO
Telephone Number: (303) 433-9788
Email Address: ARC Team

Project Manager: John Cocroft
Project Name: Berger Jack C GU #1
Project Number: 014215255
Samples Collected By: Kris Shepherd
130 #88926630 14th St Lake

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 Summ #	Other		
SB01 GW	2/26/16	1130	3	X				X				X	1
SB02 GW		1140	3	X				X				X	2
SB03 GW		1150	3	X				X				X	3
SB04 GW		1200	3	X				X				X	4
SB05 GW		1210	3	X				X				X	5
													6
													7
													8
													9
													10
Relinquished By: 	Date: 2/26/16	Time: 555	Received By: 	Date: 2/26/16	Time: 1555	Turnaround Time: <input checked="" type="checkbox"/> Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard							
Relinquished By: 	Date: 2/26/16	Time: 1700	Received By: 	Date: 2/26/16	Time: 1700								

Date Results Needed 2/26/16 (0700)

S-3

Origins Laboratory, Inc.

Jefe Pellegrini

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: X602292

Client: LTE

Client Project ID: Berger Jack C GU #1

Checklist Completed by: Jeff Smith

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

Date/time completed: 2/26/16

Airbill #: NA

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

Cooler Number/Temperature: 1 / 5.5 °C 1 / °C 1 / °C (Describe)

Thermometer ID: 7003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 5°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"/>		
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)

Date/Time Reviewed: 2/26/16

Origins Laboratory, Inc.

Jeff Pellegrini

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

SB01GW

2/26/2016 11:30:00AM

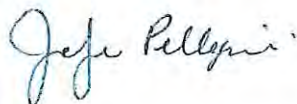
Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.
X602292-01 (Water)

BTEX by EPA 8260C

Benzene	89.9	4.0	ug/L	4	B6B2501	02/26/2016	02/26/2016	
Toluene	ND	4.0	"	"	"	"	"	U
Ethylbenzene	462	4.0	"	"	"	"	"	
Xylenes, total	1700	50.0	"	50	"	"	02/26/2016	
Surrogate: 1,2-Dichloroethane-d4	100 %	84-121			"	"	02/26/2016	
Surrogate: Toluene-d8	101 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	105 %	84-114			"	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

SB02GW
2/26/2016 11:40:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X602292-02 (Water)

BTEX by EPA 8260C

Benzene	ND	4.0	ug/L	4	B6B2501	02/26/2016	02/27/2016	U
Toluene	ND	4.0	"	"	"	"	"	U
Ethylbenzene	ND	4.0	"	"	"	"	"	U
Xylenes, total	ND	4.0	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	95.1 %	84-121			"	"	"	
Surrogate: Toluene-d8	103 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	104 %	84-114			"	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

SB03GW**2/26/2016 11:50:00AM**

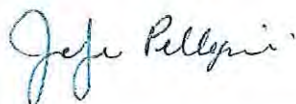
Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.
X602292-03 (Water)

BTEX by EPA 8260C

Benzene	3850	50.0	ug/L	50	B6B2501	02/26/2016	02/26/2016	
Toluene	ND	4.0	"	4	"	"	02/27/2016	U
Ethylbenzene	178	4.0	"	"	"	"	"	
Xylenes, total	ND	4.0	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	97.3 %	84-121			"	"	"	
Surrogate: Toluene-d8	105 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	103 %	84-114			"	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

SB04GW**2/26/2016 12:00:00PM**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.
X602292-04 (Water)

BTEX by EPA 8260C

Benzene	259	4.0	ug/L	4	B6B2501	02/26/2016	02/27/2016	
Toluene	ND	4.0	"	"	"	"	"	U
Ethylbenzene	10.2	4.0	"	"	"	"	"	
Xylenes, total	ND	4.0	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	95.6 %	84-121		"	"	"
Surrogate: Toluene-d8	107 %	85-115		"	"	"
Surrogate: 4-Bromofluorobenzene	105 %	84-114		"	"	"

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

SB05GW**2/26/2016 12:10:00PM**

Reporting

Analyte

Result

Limit

Units

Dilution

Batch

Prepared

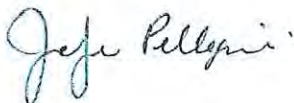
Analyzed

Notes

Origins Laboratory, Inc.
X602292-05 (Water)**BTEX by EPA 8260C**

Benzene	88.0	4.0	ug/L	4	B6B2501	02/26/2016	02/27/2016	
Toluene	ND	4.0	"	"	"	"	"	U
Ethylbenzene	4.3	4.0	"	"	"	"	"	
Xylenes, total	ND	4.0	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	96.5 %	84-121			"	"	"	
Surrogate: Toluene-d8	106 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	105 %	84-114			"	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

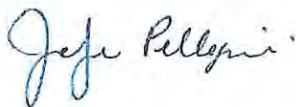
LT Environmental, Inc.
4600 West 60th Avenue
Arvada CO 80003

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B6B2501 - EPA 5030B (Water)										
Blank (B6B2501-BLK1)					Prepared: 02/26/2016 Analyzed: 02/26/2016					
Benzene	ND	1.0	ug/L							U
Toluene	ND	1.0	"							U
Ethylbenzene	ND	1.0	"							U
Xylenes, total	ND	1.0	"							U
Surrogate: 1,2-Dichloroethane-d4	61		"	62.5		96.9	84-121			
Surrogate: Toluene-d8	62		"	62.5		98.5	85-115			
Surrogate: 4-Bromofluorobenzene	66		"	62.5		106	84-114			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

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

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

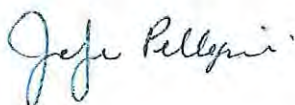
Batch B6B2501 - EPA 5030B (Water)

LCS (B6B2501-BS1)

Prepared: 02/26/2016 Analyzed: 02/26/2016

Benzene	55.8	1.0	ug/L	50.0	112	73.3-129
Toluene	55.7	1.0	"	50.0	111	76.2-123
Ethylbenzene	54.8	1.0	"	50.0	110	73.6-130
m,p-Xylene	112	2.0	"	100	112	76.1-126
o-Xylene	57.5	1.0	"	50.0	115	76.6-124
Surrogate: 1,2-Dichloroethane-d4	61		"	62.5	97.3	84-121
Surrogate: Toluene-d8	63		"	62.5	101	85-115
Surrogate: 4-Bromofluorobenzene	65		"	62.5	104	84-114

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B6B2501 - EPA 5030B (Water)

Matrix Spike (B6B2501-MS1)		Source: X602271-07			Prepared: 02/26/2016 Analyzed: 02/26/2016					
Benzene	54.0	1.0	ug/L	50.0	ND	108	74-130			
Toluene	53.4	1.0	"	50.0	ND	107	73-131			
Ethylbenzene	53.5	1.0	"	50.0	ND	107	76-132			
m,p-Xylene	108	2.0	"	100	ND	108	69-139			
o-Xylene	54.2	1.0	"	50.0	ND	108	74-131			
Surrogate: 1,2-Dichloroethane-d4	61		"	62.5		96.9	84-121			
Surrogate: Toluene-d8	64		"	62.5		102	85-115			
Surrogate: 4-Bromofluorobenzene	66		"	62.5		106	84-114			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

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

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

Batch B6B2501 - EPA 5030B (Water)

Matrix Spike Dup (B6B2501-MSD1)		Source: X602271-07			Prepared: 02/26/2016 Analyzed: 02/26/2016					
Benzene	57.5	1.0	ug/L	50.0	ND	115	74-130	6.39	20	
Toluene	56.8	1.0	"	50.0	ND	114	73-131	6.10	20	
Ethylbenzene	56.2	1.0	"	50.0	ND	112	76-132	4.87	20	
m,p-Xylene	112	2.0	"	100	ND	112	69-139	3.48	20	
o-Xylene	55.1	1.0	"	50.0	ND	110	74-131	1.55	20	
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5		94.4	84-121			
Surrogate: Toluene-d8	64		"	62.5		102	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	84-114			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

Notes and Definitions

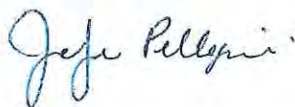
U Sample is Non-Detect.

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.



March 02, 2016

LT Environmental, Inc.

John Cocroft

4600 West 60th Avenue

Arvada

CO 80003

Project Name - KMG - Burger Jack C GU 1

Project Number - 014215255/WO#889266:

Attached are your analytical results for KMG - Burger Jack C GU 1 received by Origins Laboratory, Inc. March 01, 2016. This project is associated with Origins project number X603009-01.

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

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

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

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

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

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



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

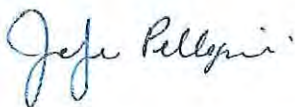
LT Environmental, Inc.
4600 West 60th Avenue
Arvada CO 80003

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB06 @ 6'	X603009-01	Soil	March 1, 2016 9:50	03/01/2016 16:57
SB07 @ 6'	X603009-03	Soil	March 1, 2016 10:50	03/01/2016 16:57
SB08 @ 8'	X603009-08	Soil	March 1, 2016 12:20	03/01/2016 16:57
SB09 @ 8'	X603009-13	Soil	March 1, 2016 13:45	03/01/2016 16:57
SB11 @ 6'	X603009-18	Soil	March 1, 2016 15:15	03/01/2016 16:57

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1





www.originslaboratory.com

X603009

ORIGINS
LABORATORY, INC

Client: **LTE**
Address: **4600 W 60th Ave Arvada CO**
Telephone Number: **(303)433-9788**
Email Address: **APL Tesoro**

Project Manager: **John Cocroft**
Project Name: **Burger Jack C GU #1**
Project Number: **014215255**
Samples Collected By: **Kris Shepherd**
100 #88926630 Alt. Sam In Rec

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative					Matrix			Analysis					Sample Instructions
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air	Other	CEC	TPH	EL	PAH		
SB06G1	3/1/16	0950	2	X					X		X	X	X			Hold SAR	1
SB06G8		1000	2	X					X							Hold All	2
SB07G1		1050	2	X					X		X	X	V			Hold SAR	3
SB07G8		1100	2	X					X							Hold All	4
SB08G1		1150	2	X					X								5
SB08G4		1200	2	X					X								6
SB08G6		1210	2	X					X						V		7
SB08G8		1220	2	X					X		X	X	X			Hold SAR	8
SB08G10		1230	2	X					X							Hold All	9
SB09G1		1320	2	X					X							6	10
Relinquished By: 	Date: 3/1/16	Time: 1015						Received By: 	Date: 3/1/16	Time: 4:12						Turnaround Time: Same Day <input checked="" type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input type="checkbox"/>	
Relinquished By: 	Date: 3/1/16	Time: 457						Received By: 	Date: 3/1/16	Time: 1657							

Date Results Needed **3/2/16 10:00**

OS

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

Origins Laboratory, Inc.

Jefe Pellegrini

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

ORIGINS LABORATORY, INC

www.originslaboratory.com

page of

Client: LTE

Address: 4600 W 60th Ave Arvada CO

Telephone Number: (303) 433-9788

Email Address: APL Team

Project Manager: John Cocroft

Project Name: Burger Jack C GU 1

Project Number: 014215255

Samples Collected By: Kim Shepherd

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	As Summed		
SB01@4'	3/1/16	1330	2	X				X				Hold All
SB01@6'		1335	2	X				X				Hold All
SB01@8'		1345	2	X				X				Hold SAR
SB01@10'		1355	2	X				X				Hold All
SB10@2'		1410	2	X				X				
SB10@4'		1420	2	X				X				
SB11@4'		1505	2	X				X				Hold SAR
SB11@6'		1515	2	X				X				Hold SAR
SB11@8'		1525	2	X				X				Hold All

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Turnaround Time:
<i>[Signature]</i>	3/1/16	1015	<i>[Signature]</i>	3/1/16	412	Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input type="checkbox"/>
<i>[Signature]</i>	3/1/16	457	<i>[Signature]</i>	3/1/16	1132	

Date Results Needed

Origins Laboratory, Inc.

Jefe Pellegrini

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: X603009

Client: LTE

Client Project ID: Burger Jack C GU #1

Checklist Completed by: Jef Smith

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

Date/time completed: 3/1/12

Airbill #: NA

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

Cooler Number/Temperature: 1105 °C 1 °C 1 °C 1 °C

Thermometer ID: 2203

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<u>X</u>			
Is there ice present (document if blue ice is used)	<u>X</u>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<u>X</u>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<u>X</u>		
Were all samples received intact ⁽¹⁾ ?	<u>X</u>			
Was adequate sample volume provided ⁽¹⁾ ?	<u>X</u>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?	<u>X</u>			<u>PH</u>
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<u>X</u>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<u>X</u>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<u>X</u>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<u>X</u>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			<u>X</u>	
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)			<u>X</u>	
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) Jef Smith

Date/Time Reviewed 3/1/12

Origins Laboratory, Inc.

Jef Pellegrini

Jen Pellegrini For Noelle Doyle Mathis, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

SB06 @ 6'

3/1/2016 9:50:00AM

Reporting

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X603009-01 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	25	mg/kg	1	B6C0103	03/01/2016	03/01/2016	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	64.9 %	59-131			"	"	"	
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GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	19.4	5.00	mg/kg	25	B6C0102	03/01/2016	03/01/2016	
Benzene	0.125	0.050	"	"	"	"	"	
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	ND	0.050	"	"	"	"	"	U
Xylenes, total	ND	0.050	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	70-130			"	"	"	
Surrogate: Toluene-d8	99.9 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %	70-130			"	"	"	

pH in Soil by EPA 9045D

pH	8.71		pH Units	1	B6C0107	03/01/2016	03/01/2016	
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.137		mmhos/cm	"	B6C0108	"	03/01/2016	
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Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

SB07 @ 6'
3/1/2016 10:50:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X603009-03 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	25	mg/kg	1	B6C0103	03/01/2016	03/01/2016	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl 58.1 % 59-131 " " " S-04

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	5.00	mg/kg	25	B6C0102	03/01/2016	03/01/2016	U
Benzene	ND	0.050	"	"	"	"	"	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	ND	0.050	"	"	"	"	"	U
Xylenes, total	ND	0.050	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4 102 % 70-130 " " "

Surrogate: Toluene-d8 103 % 70-130 " " "

Surrogate: 4-Bromofluorobenzene 103 % 70-130 " " "

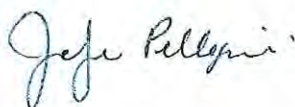
pH in Soil by EPA 9045D

pH 8.06 pH Units 1 B6C0107 03/01/2016 03/01/2016

Specific Conductance by Modified 9050A

Specific Conductance (EC) 0.201 mmhos/cm " B6C0108 " 03/01/2016

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

SB08 @ 8'

3/1/2016 12:20:00PM

Reporting

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X603009-08 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	150	25	mg/kg	1	B6C0103	03/01/2016	03/01/2016	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl 102 % 59-131 " " "

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	375	5.00	mg/kg	25	B6C0102	03/01/2016	03/01/2016	
Benzene	0.897	0.050	"	"	"	"	"	
Toluene	0.075	0.050	"	"	"	"	"	
Ethylbenzene	1.97	0.050	"	"	"	"	"	
Xylenes, total	ND	0.050	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4 103 % 70-130 " " 03/01/2016
Surrogate: Toluene-d8 107 % 70-130 " " "
Surrogate: 4-Bromofluorobenzene 98.9 % 70-130 " " "

pH in Soil by EPA 9045D

pH	8.22		pH Units	1	B6C0107	03/01/2016	03/01/2016	
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.118		mmhos/cm	"	B6C0108	"	03/01/2016	
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Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

SB09 @ 8'
3/1/2016 1:45:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X603009-13 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	500	25	mg/kg	1	B6C0103	03/01/2016	03/01/2016	
Residual Range Organics (C28-C40)	150	100	"	"	"	"	"	

Surrogate: o-Terphenyl	63.2 %	59-131			"	"	"	
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GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	1000	50.0	mg/kg	250	B6C0102	03/01/2016	03/01/2016	
Benzene	2.21	0.050	"	25	"	"	03/01/2016	
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	0.353	0.050	"	"	"	"	"	
Xylenes, total	ND	0.050	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	70-130			"	"	03/01/2016	
Surrogate: Toluene-d8	114 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	108 %	70-130			"	"	"	

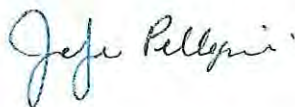
pH in Soil by EPA 9045D

pH	8.36		pH Units	1	B6C0107	03/01/2016	03/01/2016	
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.117		mmhos/cm	"	B6C0108	"	03/01/2016	
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Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

SB11 @ 6'

3/1/2016 3:15:00PM

Reporting

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X603009-18 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	25	mg/kg	1	B6C0103	03/01/2016	03/01/2016	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl 58.5 % 59-131 " " " S-04

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	B6C0102	03/01/2016	03/01/2016	U
Benzene	ND	0.002	"	"	"	"	"	U
Toluene	ND	0.002	"	"	"	"	"	U
Ethylbenzene	ND	0.002	"	"	"	"	"	U
Xylenes, total	ND	0.002	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4 97.4 % 70-130 " " "

Surrogate: Toluene-d8 102 % 70-130 " " "

Surrogate: 4-Bromofluorobenzene 97.0 % 70-130 " " "

pH in Soil by EPA 9045D

pH	7.75	pH Units	1	B6C0107	03/01/2016	03/01/2016
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Specific Conductance by Modified 9050A

Specific Conductance (EC)	0.120	mmhos/cm	"	B6C0108	"	03/01/2016
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Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B6C0102 - EPA 5030 (soil)										
Blank (B6C0102-BLK1)				Prepared: 03/01/2016 Analyzed: 03/01/2016						
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
Surrogate: 1,2-Dichloroethane-d4	66.8		ug/kg	62.5		107	70-130			
Surrogate: Toluene-d8	60.6		"	62.5		96.9	70-130			
Surrogate: 4-Bromofluorobenzene	60.3		"	62.5		96.5	70-130			

Origins Laboratory, Inc.



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Jen Pellegrini For Noelle Doyle Mathis, President

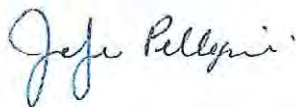
LT Environmental, Inc.
4600 West 60th Avenue
Arvada CO 80003

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B6C0102 - EPA 5030 (soil)										
LCS (B6C0102-BS1)					Prepared: 03/01/2016 Analyzed: 03/01/2016					
Benzene	0.097	0.002	mg/kg	0.100		97.1	77.1-124			
Toluene	0.091	0.002	"	0.100		91.4	74.5-128			
Ethylbenzene	0.082	0.002	"	0.100		81.8	66.4-127			
m,p-Xylene	0.164	0.004	"	0.200		81.8	76.6-124			
o-Xylene	0.081	0.002	"	0.100		81.3	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	59.3		ug/kg	62.5		94.9	70-130			
Surrogate: Toluene-d8	61.7		"	62.5		98.8	70-130			
Surrogate: 4-Bromofluorobenzene	59.0		"	62.5		94.5	70-130			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B6C0102 - EPA 5030 (soil)										
Matrix Spike (B6C0102-MS1)		Source: X602307-01			Prepared: 03/01/2016 Analyzed: 03/01/2016					
Benzene	0.117	0.002	mg/kg	0.100	ND	117	71.8-126			
Toluene	0.113	0.002	"	0.100	ND	113	65.1-130			
Ethylbenzene	0.106	0.002	"	0.100	ND	106	62.2-130			
m,p-Xylene	0.213	0.004	"	0.200	ND	106	46.5-137			
o-Xylene	0.106	0.002	"	0.100	ND	106	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	55.6		ug/kg	62.5		88.9	70-130			
Surrogate: Toluene-d8	62.8		"	62.5		101	70-130			
Surrogate: 4-Bromofluorobenzene	60.1		"	62.5		96.2	70-130			

Origins Laboratory, Inc.



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Jen Pellegrini For Noelle Doyle Mathis, President

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B6C0102 - EPA 5030 (soil)										
Matrix Spike Dup (B6C0102-MSD1)			Source: X602307-01		Prepared: 03/01/2016 Analyzed: 03/01/2016					
Benzene	0.109	0.002	mg/kg	0.100	ND	109	71.8-126	6.54	11.3	
Toluene	0.106	0.002	"	0.100	ND	106	65.1-130	6.15	15.4	
Ethylbenzene	0.100	0.002	"	0.100	ND	100	62.2-130	5.88	19.6	
m,p-Xylene	0.199	0.004	"	0.200	ND	99.7	46.5-137	6.53	19.2	
o-Xylene	0.099	0.002	"	0.100	ND	99.2	54.2-134	6.33	17.9	
Surrogate: 1,2-Dichloroethane-d4	57.2		ug/kg	62.5		91.4	70-130			
Surrogate: Toluene-d8	62.6		"	62.5		100	70-130			
Surrogate: 4-Bromofluorobenzene	60.4		"	62.5		96.7	70-130			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

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

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B6C0103 - EPA 3580

Blank (B6C0103-BLK1)

Prepared: 03/01/2016 Analyzed: 03/01/2016

Diesel (C10-C28)	ND	50	mg/kg							U
Residual Range Organics (C28-C40)	ND	200	"							U
Surrogate: o-Terphenyl	35		"	50.0		69.9	59-131			

LCS (B6C0103-BS1)

Prepared: 03/01/2016 Analyzed: 03/01/2016

Diesel (C10-C28)	690	50	mg/kg	1000		69.3	64-121			
Residual Range Organics (C28-C40)	800	200	"	1000		79.9	58-124			
Surrogate: o-Terphenyl	37		"	50.0		74.3	59-131			

Matrix Spike (B6C0103-MS1)

Source: X602307-01

Prepared: 03/01/2016 Analyzed: 03/01/2016

Diesel (C10-C28)	700	50	mg/kg	1000	ND	69.9	53-125			
Residual Range Organics (C28-C40)	810	200	"	1000	ND	81.3	47-133			
Surrogate: o-Terphenyl	33		"	50.0		66.1	59-131			

Matrix Spike Dup (B6C0103-MSD1)

Source: X602307-01

Prepared: 03/01/2016 Analyzed: 03/01/2016

Diesel (C10-C28)	720	50	mg/kg	1000	ND	71.8	53-125	2.76	20	
Residual Range Organics (C28-C40)	840	200	"	1000	ND	83.8	47-133	3.03	20	
Surrogate: o-Terphenyl	39		"	50.0		77.7	59-131			

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

Classical Chemistry Parameters - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B6C0107 - NO PREP										
Duplicate (B6C0107-DUP1)		Source: X602312-05			Prepared: 03/01/2016 Analyzed: 03/01/2016					
pH	7.97		pH Units		7.59			4.88	25	
Batch B6C0108 - NO PREP										
Blank (B6C0108-BLK1)		Prepared: 03/01/2016 Analyzed: 03/01/2016								
Specific Conductance (EC)	0.00300		mmhos/cm							
Duplicate (B6C0108-DUP1)		Source: X602312-05			Prepared: 03/01/2016 Analyzed: 03/01/2016					
Specific Conductance (EC)	0.0478		mmhos/cm		0.0456			4.71	25	

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Burger Jack C GU 1

Notes and Definitions

U Sample is Non-Detect.

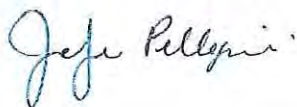
S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Noelle Doyle Mathis, President

March 03, 2016

LT Environmental, Inc.

John Cocroft

4600 West 60th Avenue

Arvada

CO 80003

Project Name - KMG - Berger Jack C GU #1

Project Number - 014215255/WO#889266

Attached are your analytical results for KMG - Berger Jack C GU #1 received by Origins Laboratory, Inc. March 02, 2016. This project is associated with Origins project number X603026-01.

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



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB06GW	X603026-01	Water	March 2, 2016 11:40	03/02/2016 17:25
SB07GW	X603026-02	Water	March 2, 2016 11:50	03/02/2016 17:25
SB08GW	X603026-03	Water	March 2, 2016 12:00	03/02/2016 17:25
SB09GW	X603026-04	Water	March 2, 2016 12:10	03/02/2016 17:25
SB11GW	X603026-05	Water	March 2, 2016 12:20	03/02/2016 17:25

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

www.originslaboratory.com page 1 of 1

ORIGINS LABORATORY, INC

Client: **LTE**
Address: **4600 W 60th Ave Arvada CO**
Telephone Number: **(303) 433-9788**
Email Address: **APC Team**

Project Manager: **John Cocroft**
Project Name: **Berger Jack C GU #1**
Project Number: **014215255**
Samples Collected By: **Kris Shepherd**
230 # 88926630 Afternoon

X603026

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Sample		
SB016 G10	3/2/16	11:40	3	X				X				1
SB017 G10		11:50	3	X				X				2
SB018 G10		12:00	3	X				X				3
SB019 G10		12:10	3	X				X				4
SB011 G10		12:20	3	X				X				5
												6
												7
												8
												9
												10

Requisitioned By: **[Signature]** Date: **3/2/16** Time: **10:00** Received By: **Jim Walker** Date: **3/2/16** Time: **16:30** Turnaround Time: ☒ Same Day ☐ 24 Hr ☐ 48 Hr ☐ 72 Hr ☐ Standard

Requisitioned By: **Jim Walker** Date: **3/2/16** Time: **14:30** Received By: **[Signature]** Date: **3/2/16** Time: **17:05**

Date Results Needed: **3/3/16** **10:00**

29

Origins Laboratory, Inc.

Jefe Pellegrini

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: X603026

Client: LTE

Client Project ID: Burger Jack C GU #1

Checklist Completed by: Jeff Smith

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

Date/time completed: 3/2/12

Airbill #: K24

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

Cooler Number/Temperature: 1 12.9 °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"/>			
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) Jeff Smith

Date/Time Reviewed 3/2/12

Origins Laboratory, Inc.

Jeff Pellegrini

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

SB06GW

3/2/2016 11:40:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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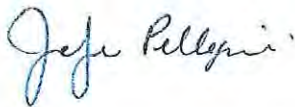
Origins Laboratory, Inc.
X603026-01 (Water)

BTEX by EPA 8260C

Benzene	2980	50.0	ug/L	50	B6C0203	03/02/2016	03/02/2016	
Toluene	ND	4.0	"	4	"	"	03/02/2016	U
Ethylbenzene	ND	4.0	"	"	"	"	"	U
Xylenes, total	ND	4.0	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	98.8 %	84-121	"	"	"
Surrogate: Toluene-d8	102 %	85-115	"	"	"
Surrogate: 4-Bromofluorobenzene	95.6 %	84-114	"	"	"

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

SB07GW

3/2/2016 11:50:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X603026-02 (Water)

BTEX by EPA 8260C

Benzene	32.9	4.0	ug/L	4	B6C0203	03/02/2016	03/02/2016	
Toluene	ND	4.0	"	"	"	"	"	U
Ethylbenzene	5.7	4.0	"	"	"	"	"	
Xylenes, total	ND	4.0	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"	
Surrogate: Toluene-d8	103 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	96.2 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Jen Pellegrini For Noelle Doyle Mathis, President

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

SB08GW**3/2/2016 12:00:00PM**

Reporting


Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X603026-03 (Water)**BTEX by EPA 8260C**

Benzene	2900	4.0	ug/L	4	B6C0203	03/02/2016	03/02/2016	
Toluene	ND	4.0	"	"	"	"	"	U
Ethylbenzene	38.4	4.0	"	"	"	"	"	
Xylenes, total	ND	4.0	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	98.6 %	84-121			"	"	"	
Surrogate: Toluene-d8	108 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	96.9 %	84-114			"	"	"	

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

SB09GW**3/2/2016 12:10:00PM**

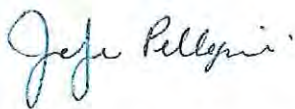
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.
X603026-04 (Water)**BTEX by EPA 8260C**

Benzene	860	50.0	ug/L	50	B6C0203	03/02/2016	03/02/2016	
Toluene	ND	4.0	"	4	"	"	03/03/2016	U
Ethylbenzene	33.3	4.0	"	"	"	"	"	
Xylenes, total	ND	4.0	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	99.6 %	84-121			"	"	"	
Surrogate: Toluene-d8	107 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	95.9 %	84-114			"	"	"	

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

SB11GW

3/2/2016 12:20:00PM

Reporting

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.

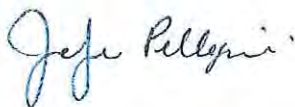
X603026-05 (Water)

BTEX by EPA 8260C

Benzene	7.8	4.0	ug/L	4	B6C0203	03/02/2016	03/03/2016	
Toluene	ND	4.0	"	"	"	"	"	U
Ethylbenzene	ND	4.0	"	"	"	"	"	U
Xylenes, total	ND	4.0	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"	
Surrogate: Toluene-d8	99.5 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	95.4 %	84-114			"	"	"	

Origins Laboratory, Inc.



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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B6C0203 - EPA 5030B (Water)

Blank (B6C0203-BLK1)

Prepared: 03/02/2016 Analyzed: 03/02/2016

Benzene	ND	1.0	ug/L							U
Toluene	ND	1.0	"							U
Ethylbenzene	ND	1.0	"							U
Xylenes, total	ND	1.0	"							U
Surrogate: 1,2-Dichloroethane-d4	64		"	62.5		103	84-121			
Surrogate: Toluene-d8	61		"	62.5		98.0	85-115			
Surrogate: 4-Bromofluorobenzene	60		"	62.5		95.6	84-114			

Origins Laboratory, Inc.



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Jen Pellegrini For Noelle Doyle Mathis, President

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B6C0203 - EPA 5030B (Water)										
LCS (B6C0203-BS1)					Prepared: 03/02/2016 Analyzed: 03/02/2016					
Benzene	47.9	1.0	ug/L	50.0		95.8	73.3-129			
Toluene	45.9	1.0	"	50.0		91.8	76.2-123			
Ethylbenzene	45.8	1.0	"	50.0		91.5	73.6-130			
m,p-Xylene	93.1	2.0	"	100		93.1	76.1-126			
o-Xylene	48.1	1.0	"	50.0		96.2	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5		96.3	84-121			
Surrogate: Toluene-d8	61		"	62.5		97.4	85-115			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		96.8	84-114			

Origins Laboratory, Inc.



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Jen Pellegrini For Noelle Doyle Mathis, President

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B6C0203 - EPA 5030B (Water)

Matrix Spike (B6C0203-MS1)		Source: X603015-01			Prepared: 03/02/2016 Analyzed: 03/02/2016					
Benzene	45.2	1.0	ug/L	50.0	ND	90.5	74-130			
Toluene	43.9	1.0	"	50.0	ND	87.7	73-131			
Ethylbenzene	44.3	1.0	"	50.0	ND	88.7	76-132			
m,p-Xylene	90.5	2.0	"	100	ND	90.5	69-139			
o-Xylene	45.9	1.0	"	50.0	ND	91.7	74-131			
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5		95.1	84-121			
Surrogate: Toluene-d8	62		"	62.5		98.8	85-115			
Surrogate: 4-Bromofluorobenzene	59		"	62.5		94.7	84-114			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

John Cocroft
Project Number: 014215255/WO#88926630
Project: KMG - Berger Jack C GU #1

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B6C0203 - EPA 5030B (Water)										
Matrix Spike Dup (B6C0203-MSD1)			Source: X603015-01		Prepared: 03/02/2016 Analyzed: 03/02/2016					
Benzene	44.6	1.0	ug/L	50.0	ND	89.2	74-130	1.47	20	
Toluene	42.5	1.0	"	50.0	ND	85.0	73-131	3.10	20	
Ethylbenzene	41.7	1.0	"	50.0	ND	83.5	76-132	6.02	20	
m,p-Xylene	85.4	2.0	"	100	ND	85.4	69-139	5.83	20	
o-Xylene	45.5	1.0	"	50.0	ND	91.0	74-131	0.832	20	
Surrogate: 1,2-Dichloroethane-d4	58		"	62.5		92.9	84-121			
Surrogate: Toluene-d8	61		"	62.5		97.3	85-115			
Surrogate: 4-Bromofluorobenzene	60		"	62.5		95.8	84-114			

Origins Laboratory, Inc.



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LT Environmental, Inc.

4600 West 60th Avenue

Arvada CO 80003

John Cocroft

Project Number: 014215255/WO#88926630

Project: KMG - Berger Jack C GU #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 For Noelle Doyle Mathis, President