

State of Colorado  
**Oil and Gas Conservation Commission**

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



#8436

FOR OGCC USE ONLY

RECEIVED  
5/20/2014

OGCC Employee:

Spill Complaint  
Inspection NOAV

Tracking No: 2147887

**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.

**CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED**

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

OGCC Operator Number: _____	Contact Name and Telephone: _____
Name of Operator: _____	_____
Address: _____	No: _____
City: _____ State: _____ Zip: _____	Fax: _____
API Number: _____	County: _____
Facility Name: _____	Facility Number: _____
Well Name: _____	Well Number: _____
Location: (QtrQtr, Sec, Twp, Rng, Meridian): _____ Latitude: _____ Longitude: _____	

**TECHNICAL CONDITIONS**

Type of Waste Causing Impact (crude oil, condensate, produced water, etc.): \_\_\_\_\_

Site Conditions: Is location within a sensitive area (according to Rule 901e)? Y N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): \_\_\_\_\_

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: \_\_\_\_\_

Potential receptors (water wells within 1/4 mi, surface waters, etc.): \_\_\_\_\_

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):	Extent of Impact:	How Determined:
Soils	_____	_____
Vegetation	_____	_____
Groundwater	_____	_____
Surface Water	_____	_____

**REMEDIATION WORKPLAN**

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

Describe how source is to be removed:

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.:



**REMEDIATION WORKPLAN (Cont.)**

Tracking Number: \_\_\_\_\_  
Name of Operator: \_\_\_\_\_  
OGCC Operator No: \_\_\_\_\_  
Received Date: \_\_\_\_\_  
Well Name & No: State Craig 2-16  
Facility Name & No: State Craig 204781

Page 2

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

No groundwater was encountered during excavation activities.

**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 excavation was backfilled with clean fill to re-establish the pre-existing grade. Oil and gas facilities remain onsite.

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:

No further investigation is required. Per the excavation activities and confirmation laboratory soil analytical results, the impacted soil in exceedance of applicable COGCC Table 910-1 standards has been removed. As a result, Overland Resources respectfully requests a No Further Action status be granted for this site.

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

Approximately 20 cubic yards of soil was excavated and transported to Denver Arapahoe Disposal in Aurora, Colorado, for final disposal.

**IMPLEMENTATION SCHEDULE**

Date Site Investigation Began: 3-4-2014	Date Site Investigation Completed: 3-4-2014	Date Remediation Plan Submitted: 5-20-14
Remediation Start Date: 3-4-2014	Anticipated Completion Date: 4-29-14	Actual Completion Date: 4-29-14

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

Print Name: Robert Anderson

Signed:

Title: Operations Manager

Date: 5-20-14

OGCC Approved: \_\_\_\_\_ Title: EPS Date: 5/21/2014

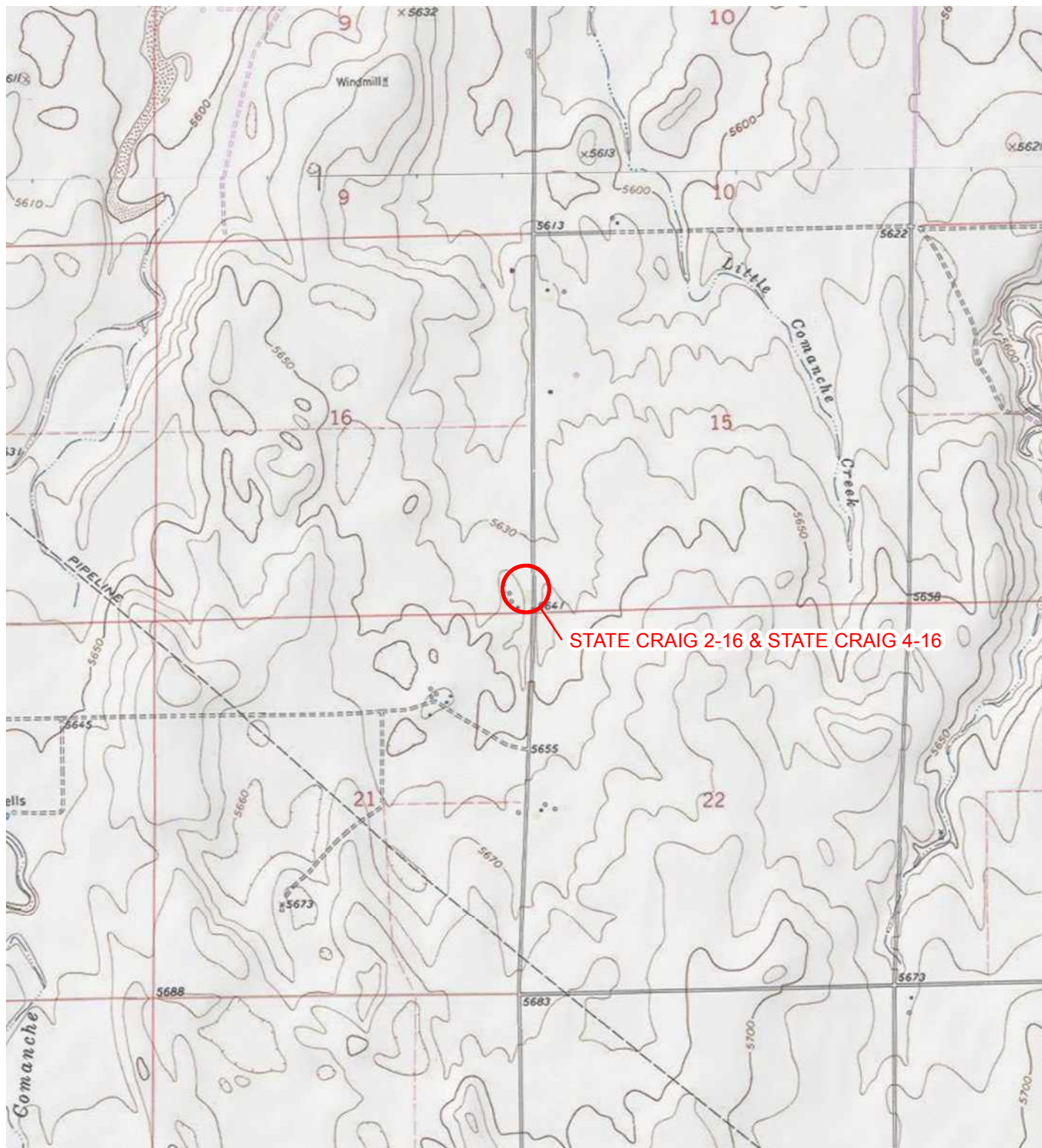


IMAGE COURTESY OF ESRI/USGS

# LEGEND

○ SITE LOCATION

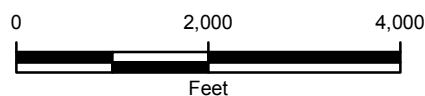


FIGURE 1  
SITE LOCATION MAP  
STATE CRAIG 2-16 & STATE CRAIG 4-16  
ARAPAHOE COUNTY, COLORADO

OVERLAND RESOURCES LLC.







IMAGE COURTESY OF GOOGLE EARTH 2013

## LEGEND

● SOIL SAMPLE

✗ RELEASE

□ BERM

▤ EXCAVATION EXTENT

AST: ABOVEGROUND STORAGE TANK

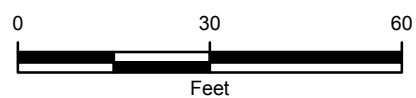


FIGURE 2  
SITE MAP  
STATE CRAIG 2-16 & STATE CRAIG 4-16  
ARAPAHOE COUNTY, COLORADO

OVERLAND RESOURCES LLC.



TABLE 1

**SOIL ANALYTICAL RESULTS**  
**STATE CRAIG 2-16 & STATE CRAIG 4-16 TANK BATTERY**  
**ARAPAHOE COUNTY, COLORADO**  
**OVERLAND RESOURCES LLC**

Soil Sample	Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	TPH (mg/kg)	EC (mmhos/cm)	pH (SU)
SW1@1'	3/14/2014	<0.0020	<0.0050	<0.0050	<0.0050	<0.50	<50	<50.50	0.437	8.29
SE1@1'	3/14/2014	<0.0020	<0.0050	<0.0050	<0.0050	<0.50	<50	<50.50	3.37	8.37
NE1@2'	3/14/2014	0.0041	<0.0050	<0.0050	<0.0050	<0.50	<50	<50.50	1.18	8.13
NW1@2'	3/14/2014	<0.0018	<0.0044	<0.0044	<0.0044	<0.44	<50	<50.44	2.44	8.48
<b>COGCC Table 910-1 Standard</b>		<b>0.17</b>	<b>85</b>	<b>100</b>	<b>175</b>	<b>--</b>	<b>--</b>	<b>500</b>	<b>4</b>	<b>6-9</b>

**NOTES:**

mg/kg - milligrams per kilogram

DRO - diesel range organics analyzed by EPA Method 8015

GRO - gasoline range organics analyzed by EPA Method 8260B

TPH - total petroleum hydrocarbons

TPH is the sum of GRO and DRO

EC - electrical conductivity analyzed by Method SM 2510B

mmhos/cm - milimhos per centimeter

pH analyzed by EPA Method 9045

SU - standard units

&lt; - indicates result is less than the stated laboratory reporting limit

-- - not applicable

**BOLD** indicates result exceeds the applicable standard

COGCC - Colorado Oil and Gas Conservation Commission

Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B

# Summit Scientific

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741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

March 20, 2014

Rob Rebel

LT Environmental, Inc.

4600 West 60th Avenue

Arvada, CO 80003

RE: State Craig 2-16 and 4-16

Enclosed are the results of analyses for samples received by Summit Scientific on 03/14/14 17:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to be 'BS' or 'Shrewsbury', with a long, sweeping horizontal line extending to the right.

Ben Shrewsbury

President / Laboratory Manager



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

Project: State Craig 2-16 and 4-16

Project Number: 0531-14001  
Project Manager: Rob Rebel

**Reported:**  
03/20/14 15:10

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW1@1'	1403107-01	Soil	03/14/14 10:10	03/14/14 17:00
SE1@1'	1403107-02	Soil	03/14/14 10:15	03/14/14 17:00
NE1@2'	1403107-03	Soil	03/14/14 10:35	03/14/14 17:00
NW1@2'	1403107-04	Soil	03/14/14 10:30	03/14/14 17:00

Summit Scientific

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

Project: State Craig 2-16 and 4-16

Project Number: 0531-14001  
Project Manager: Rob Rebel

Reported:  
03/20/14 15:10

1403107

Summit Scientific

741 Corporate Circle Suite 1 • Golden, Colorado 80401  
303-277-4510 • 303-277-4531 Fax

Client: LT Environmental, Inc. Project Manager: Rob Rebel  
Address: 4600 West 60th Avenue  
City/State/Zip: Arvada, CO 80003  
Phone: (303) 433-9788 Fax: (303) 433-1432  
Sample Name: Rob Rebel Project Name: State Craig 2-16 and 4-16  
Project Number: 0531-14001

Page 1 of 1

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix				Analyze For:	Special Instructions	
				HCl	HNO <sub>3</sub>	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)			
SW101'	3/14/14	1010	2			X				X	X	X	5AR	HOLD SAR
SE101'	3/14/14	1015	2			X				X	X	X	5AR	HOLD SAR
NE102'	3/14/14	1055	2			X				X	X	X	5AR	HOLD SAR
NW102'	3/14/14	1050	2			X				X	X	X	5AR	HOLD SAR
SW102'	3/14/14	1045	2			X				X	X	X	5AR	HOLD
SE102'	3/14/14	1040	2			X				X	X	X	5AR	HOLD
NE103'	3/14/14	1100	2			X				X	X	X	5AR	HOLD
Background	3/14/14	1105	2			X				X	X	X	5AR	HOLD

Relinquished by: J. T. M. Date: 3/14/14 Time: 1400  
Received by: J. T. M. Date: 3/14/14 Time: 1700

Relinquished by: Date: Time: Received by: Date: Time: 48 Hours

Relinquished by: Date: Time: Received in Lab by: Date: Time: 72 Hours

Standard

Notes:

Sample Integrity: Temperature Upon Receipt: 4.4  
Impact: Yes No

www.s2scientific.com

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

Project: State Craig 2-16 and 4-16

Project Number: 0531-14001  
Project Manager: Rob Rebel

**Reported:**  
03/20/14 15:10

**SW1@1'**  
**1403107-01 (Soil)**

### Summit Scientific

#### Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/14 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1403126	03/17/14	03/19/14	8015M	

Date Sampled: **03/14/14 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		114 %	30-150		"	"	"	"	

#### Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/14 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1403125	03/17/14	03/19/14	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **03/14/14 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		100 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.1 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	21-167		"	"	"	"	

#### Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/14 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	<b>0.437</b>	0.0100	mmhos/cm	1	1403123	03/17/14	03/19/14	SM 2510B	

Summit Scientific

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

Project: State Craig 2-16 and 4-16

Project Number: 0531-14001  
Project Manager: Rob Rebel

**Reported:**  
03/20/14 15:10

**SW1@1'**  
**1403107-01 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **03/14/14 10:10**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>pH</b>	<b>8.29</b>	0.100	pH Units	1	1403124	03/17/14	03/18/14	EPA 9045	

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4600 West 60th Avenue  
Arvada CO, 80003

Project: State Craig 2-16 and 4-16

Project Number: 0531-14001  
Project Manager: Rob Rebel

Reported:  
03/20/14 15:10

**SE1@1'**  
**1403107-02 (Soil)**

**Summit Scientific**

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **03/14/14 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1403126	03/17/14	03/19/14	8015M	

Date Sampled: **03/14/14 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		115 %	30-150		"	"	"	"	

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **03/14/14 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1403125	03/17/14	03/19/14	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **03/14/14 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		96.0 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		97.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.9 %	21-167		"	"	"	"	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **03/14/14 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	3.37	0.0100	mmhos/cm	1	1403123	03/17/14	03/19/14	SM 2510B	

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Project: State Craig 2-16 and 4-16

Project Number: 0531-14001  
Project Manager: Rob Rebel

**Reported:**  
03/20/14 15:10

**SE1@1'**  
**1403107-02 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **03/14/14 10:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>pH</b>	<b>8.37</b>	0.100	pH Units	1	1403124	03/17/14	03/18/14	EPA 9045	

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Project: State Craig 2-16 and 4-16

Project Number: 0531-14001  
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Reported:  
03/20/14 15:10

**NE1@2'**  
**1403107-03 (Soil)**

### Summit Scientific

#### Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/14 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1403126	03/17/14	03/19/14	8015M	

Date Sampled: **03/14/14 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		107 %	30-150		"	"	"	"	

#### Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/14 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>0.0041</b>	0.0020	mg/kg	1	1403125	03/17/14	03/19/14	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **03/14/14 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		94.2 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		97.0 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.6 %	21-167		"	"	"	"	

#### Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/14 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Specific Conductance (EC)</b>	<b>1.18</b>	0.0100	mmhos/cm	1	1403123	03/17/14	03/19/14	SM 2510B	

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**Reported:**  
03/20/14 15:10

**NE1@2'**  
**1403107-03 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **03/14/14 10:35**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>pH</b>	<b>8.13</b>	0.100	pH Units	1	1403124	03/17/14	03/18/14	EPA 9045	

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Project: State Craig 2-16 and 4-16

Project Number: 0531-14001  
Project Manager: Rob Rebel

**Reported:**  
03/20/14 15:10

**NW1@2'**  
**1403107-04 (Soil)**

### Summit Scientific

#### Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/14/14 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1403126	03/17/14	03/19/14	8015M	

Date Sampled: **03/14/14 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: <i>o</i> -Terphenyl		114 %	30-150		"	"	"	"	

#### Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/14/14 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0018	mg/kg	1	1403125	03/17/14	03/19/14	EPA 8260B	
Toluene	ND	0.0044	"	"	"	"	"	"	
Ethylbenzene	ND	0.0044	"	"	"	"	"	"	
Xylenes (total)	ND	0.0044	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.44	"	"	"	"	"	"	

Date Sampled: **03/14/14 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		105 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		96.6 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.1 %	21-167		"	"	"	"	

#### Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/14/14 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	<b>2.44</b>	0.0100	mmhos/cm	1	1403123	03/17/14	03/19/14	SM 2510B	

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**Reported:**  
03/20/14 15:10

**NW1@2'**  
**1403107-04 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **03/14/14 10:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>pH</b>	<b>8.48</b>	0.100	pH Units	1	1403124	03/17/14	03/18/14	EPA 9045	

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Project: State Craig 2-16 and 4-16

Project Number: 0531-14001  
Project Manager: Rob Rebel

**Reported:**  
03/20/14 15:10

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch 1403126 - EPA 3550A**

**Blank (1403126-BLK1)**

Prepared: 03/17/14 Analyzed: 03/18/14

C10-C28 (DRO) ND 50 mg/kg

**LCS (1403126-BS1)**

Prepared: 03/17/14 Analyzed: 03/18/14

C10-C28 (DRO) 436 50 mg/kg 469 93.0 73-134

**Matrix Spike (1403126-MS1)**

**Source: 1403106-01**

Prepared: 03/17/14 Analyzed: 03/18/14

C10-C28 (DRO) 471 50 mg/kg 488 ND 96.4 50-148

**Matrix Spike Dup (1403126-MSD1)**

**Source: 1403106-01**

Prepared: 03/17/14 Analyzed: 03/18/14

C10-C28 (DRO) 448 50 mg/kg 463 ND 96.7 50-148 4.97 13

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

Project: State Craig 2-16 and 4-16

Project Number: 0531-14001  
Project Manager: Rob Rebel

Reported:  
03/20/14 15:10

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Summit Scientific**

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

**Batch 1403125 - EPA 5030 Soil MS**

**Blank (1403125-BLK1)**

Prepared: 03/17/14 Analyzed: 03/19/14

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0342		"	0.0379		90.2	23-173			
Surrogate: Toluene-d8	0.0374		"	0.0382		98.0	20-170			
Surrogate: 4-Bromofluorobenzene	0.0387		"	0.0382		101	21-167			

**LCS (1403125-BS1)**

Prepared: 03/17/14 Analyzed: 03/19/14

Benzene	0.0932	0.0020	mg/kg	0.0972		96.0	58-130			
Toluene	0.101	0.0050	"	0.0975		104	61-134			
Ethylbenzene	0.0995	0.0050	"	0.0967		103	74-139			
m,p-Xylene	0.203	0.010	"	0.195		104	73-137			
o-Xylene	0.0976	0.0050	"	0.0963		101	73-141			
Surrogate: 1,2-Dichloroethane-d4	0.0347		"	0.0387		89.6	23-173			
Surrogate: Toluene-d8	0.0389		"	0.0390		99.7	20-170			
Surrogate: 4-Bromofluorobenzene	0.0372		"	0.0390		95.4	21-167			

**Matrix Spike (1403125-MS1)**

**Source: 1403106-01**

Prepared: 03/17/14 Analyzed: 03/19/14

Benzene	0.0924	0.0020	mg/kg	0.0951	ND	97.2	30-131			
Toluene	0.0994	0.0050	"	0.0954	ND	104	30-134			
Ethylbenzene	0.101	0.0050	"	0.0947	ND	107	22-153			
m,p-Xylene	0.205	0.010	"	0.191	ND	107	10-159			
o-Xylene	0.0993	0.0050	"	0.0943	ND	105	31-151			
Surrogate: 1,2-Dichloroethane-d4	0.0333		"	0.0379		88.0	23-173			
Surrogate: Toluene-d8	0.0368		"	0.0382		96.3	20-170			
Surrogate: 4-Bromofluorobenzene	0.0365		"	0.0382		95.6	21-167			

Summit Scientific

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

Project: State Craig 2-16 and 4-16

Project Number: 0531-14001  
Project Manager: Rob Rebel

Reported:  
03/20/14 15:10

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Summit Scientific**

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

**Batch 1403125 - EPA 5030 Soil MS**

Matrix Spike Dup (1403125-MSD1)		Source: 1403106-01			Prepared: 03/17/14		Analyzed: 03/19/14			
Benzene	0.0858	0.0020	mg/kg	0.0932	ND	92.0	30-131	7.48	34	
Toluene	0.0965	0.0050	"	0.0935	ND	103	30-134	2.92	30	
Ethylbenzene	0.0970	0.0050	"	0.0927	ND	105	22-153	4.00	24	
m,p-Xylene	0.197	0.010	"	0.187	ND	106	10-159	3.68	68	
o-Xylene	0.0959	0.0050	"	0.0923	ND	104	31-151	3.50	38	
Surrogate: 1,2-Dichloroethane-d4	0.0322		"	0.0371		86.7	23-173			
Surrogate: Toluene-d8	0.0368		"	0.0374		98.3	20-170			
Surrogate: 4-Bromofluorobenzene	0.0356		"	0.0374		95.2	21-167			

Summit Scientific

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

Project: State Craig 2-16 and 4-16

Project Number: 0531-14001  
Project Manager: Rob Rebel

**Reported:**  
03/20/14 15:10

**Physical Parameters by APHA/ASTM/EPA Methods - Quality Control**  
**Summit Scientific**

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

**Batch 1403123 - General Preparation**

**Blank (1403123-BLK1)**

Prepared: 03/17/14 Analyzed: 03/19/14

Specific Conductance (EC) ND 0.0100 mmhos/cm

**Duplicate (1403123-DUP1)**

**Source: 1403106-02**

Prepared: 03/17/14 Analyzed: 03/19/14

Specific Conductance (EC) 4.11 0.0100 mmhos/cm 0.934 126 20

**Duplicate (1403123-DUP2)**

**Source: 1403106-01**

Prepared: 03/17/14 Analyzed: 03/19/14

Specific Conductance (EC) 0.810 0.0100 mmhos/cm 3.86 131 20

**Batch 1403124 - General Preparation**

**LCS (1403124-BS1)**

Prepared: 03/17/14 Analyzed: 03/18/14

pH 8.09 0.100 pH Units 8.00 101 0-200

**LCS (1403124-BS2)**

Prepared: 03/17/14 Analyzed: 03/18/14

pH 8.04 0.100 pH Units 8.00 100 0-200

**Duplicate (1403124-DUP1)**

**Source: 1403106-01**

Prepared: 03/17/14 Analyzed: 03/18/14

pH 8.13 0.100 pH Units 8.07 0.741 20

**Duplicate (1403124-DUP2)**

**Source: 1403106-02**

Prepared: 03/17/14 Analyzed: 03/18/14

pH 8.39 0.100 pH Units 8.41 0.238 20

Summit Scientific

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

Project: State Craig 2-16 and 4-16

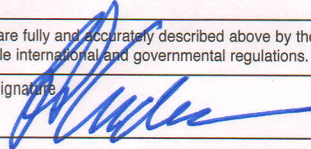
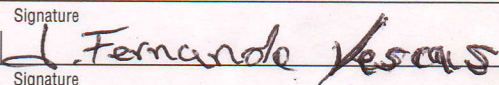
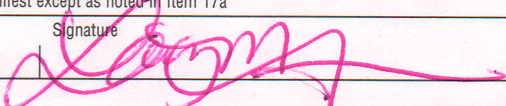
Project Number: 0531-14001  
Project Manager: Rob Rebel

**Reported:**  
03/20/14 15:10

### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference

A handwritten signature in black ink, appearing to be 'JMM' followed by a long horizontal stroke.

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>N/A</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800)424-9300</b>	4. Waste Tracking Number <b>035146</b>	
5. Generator's Name and Mailing Address <b>OVERLAND RESOURCES LLC COUNTY RD 157 STRASBURG CO 80136</b>			Generator's Site Address (if different than mailing address)			
Generator's Phone: <b>(512)791-2818</b>						
6. Transporter 1 Company Name <b>JAYHAWK GRADING INC.</b>			U.S. EPA ID Number			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address <b>DENVER ARAPAHOE DISPOSAL 3500 S GUN CLUB RD AURORA CO 80018</b>			U.S. EPA ID Number			
Facility's Phone: <b>(720)876-2620</b>						
9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit Wt./Vol.	
		No.	Type			
1. <b>NON REGULATED SOLID (EXPLORATION AND PRODUCTION WASTE)</b> <b>116889CO</b>					<b>X</b>	<b>NONE</b>
2.						
3.						
4.						
13. Special Handling Instructions and Additional Information						
<b>Customer Acct #: D 15359 Customer Name: OVERLAND RESOURCES LLC</b> <b>Transporter 1 address &amp; phone #: 2000 S. CR 181 BYERS CO. 80103</b> <b>Transporter 2 address &amp; phone #: 303-210-8567</b>						
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and governmental regulations.						
Generator's/Offor's Printed/Typed Name <b>Robert Anderson</b>			Signature 		Month <b>4</b>	Day <b>29</b>
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.			Port of entry/exit:		Year <b>14</b>	
Transporter Signature (for exports only):			Date leaving U.S.:			
16. Transporter Acknowledgement of Receipt of Materials						
Transporter 1 Printed/Typed Name <b>JESUS FERNANDO YESCAS</b>			Signature 		Month <b>4</b>	Day <b>29</b>
Transporter 2 Printed/Typed Name			Signature		Year <b>14</b>	
17. Discrepancy						
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
Manifest Reference Number:						
17b. Alternate Facility (or Generator)			U.S. EPA ID Number			
Facility's Phone:						
17c. Signature of Alternate Facility (or Generator)					Month	Day
					Year	
<b>Landfill</b> <input checked="" type="checkbox"/> <b>Monofill</b> <input type="checkbox"/> <b>Location:</b> <b>DADS 2139204</b>						
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a						
Printed/Typed Name <b>Lacy M. Adams</b>			Signature 		Month <b>4</b>	Day <b>29</b>
					Year <b>14</b>	



23620

CWM

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>N/A</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800)424-9300</b>	4. Waste Tracking Number <b>035145</b>	
5. Generator's Name and Mailing Address <b>OVERLAND RESOURCES LLC COUNTY RD 157 STRASBURG CO 80136</b>			Generator's Site Address (if different than mailing address)			
Generator's Phone: <b>(512)791-2818</b>						
6. Transporter 1 Company Name <b>JAYHAWK GRADING INC.</b>			U.S. EPA ID Number			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address <b>DENVER ARAPAHOE DISPOSAL 3500 S GUN CLUB RD AURORA CO 80018</b>			U.S. EPA ID Number			
Facility's Phone: <b>(720)876-2620</b>						
9. Waste Shipping Name and Description <b>1. NON REGULATED SOLID (EXPLORATION AND PRODUCTION WASTE) 116889CO</b>			10. Containers		11. Total Quantity <b>11.40</b>	12. Unit Wt./Vol. <b>x f</b>
			No.	Type		
2.						NONE
3.						
4.						
13. Special Handling Instructions and Additional Information						
<b>Customer Acct #: D 15359 Customer Name: OVERLAND RESOURCES LLC</b> <b>Transporter 1 address &amp; phone #: 2000 S. CR 181 Byers CO. 80103</b> <b>Transporter 2 address &amp; phone #: 303.210.8567</b>						
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and governmental regulations.						
Generator's/Offero's Printed/Typed Name <b>Robert Anderson</b>			Signature <i>[Signature]</i>		Month <b>4</b>	Day <b>29</b>
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.			Port of entry/exit:		Year <b>14</b>	
Transporter Signature (for exports only):			Date leaving U.S.:			
16. Transporter Acknowledgement of Receipt of Materials						
Transporter 1 Printed/Typed Name <b>JESUS FERNANDO YESCAS</b>			Signature <i>[Signature]</i>		Month <b>4</b>	Day <b>29</b>
Transporter 2 Printed/Typed Name			Signature		Year <b>14</b>	
17. Discrepancy						
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
Manifest Reference Number:						
17b. Alternate Facility (or Generator)			U.S. EPA ID Number			
Facility's Phone:						
17c. Signature of Alternate Facility (or Generator)					Month	Day
					Year	
<b>Landfill</b> <input checked="" type="checkbox"/> <b>Monofill</b> <input type="checkbox"/> <b>Location:</b> <b>DAOS 2189352</b>						
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a						
Printed/Typed Name <b>Aspen Peterson</b>			Signature <i>[Signature]</i>		Month <b>4</b>	Day <b>29</b>
					Year <b>14</b>	