



April 23, 2014

Mr. Robert Young
Northeast Region Environmental Protection Specialist
Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, Colorado 80203

**RE: Semi-Annual Monitoring Report
Wright Oil Skim Pit Material Landfarm
Facility ID: 107607
API – 121-05259
Remediation #7368
SWSW Sec. 31 T3S R53W, 6th Principal Meridian
Washington County, Colorado**

Dear Mr. Young:

LT Environmental, Inc. (LTE), under the direction of the Beren Corporation (Beren), conducted soil monitoring at the Beren Wright Landfarm (Site). The Site is located approximately 2.04 miles southeast of the town of Lindon, Washington County, Colorado, and 0.22 miles north-northeast of the intersection of County Road (CR) U and Highway 36 (Figure 1). This correspondence is provided as the *2015 Semi-annual Monitoring Report* and summarizes soil monitoring activities conducted at the Site from October 2014 through April 2015.

Landfarm Description

The Site is located on grassland to the north and west of the former oil skim pit at the Wright Tank Battery where Beren and the landowner have agreed to remediate petroleum hydrocarbon-impacted soil identified at the Site during pit-closure activities conducted in October 2012. Approximately 100 cubic yards of impacted soil was applied in July 2013 at the Site per the Colorado Oil and Gas Conservation Commission (COGCC) Rule 907 (d) (3) and the COGCC approved *E&P Waste Management Plan* (December 2012). The impacted soil was thoroughly mixed and spread approximately 12 inches thick by Beren contractors on the landfarm cell. Ditch and berm stormwater controls were installed around the perimeter of the landfarm cell to ensure sediment from the landfarming activities is kept on site and runoff does not migrate onto the surrounding grassland.

Landfarm Maintenance

On February 8, 2015, the soil was disked for aeration. Manure was applied after the sampling event (See Summary).

Soil Sampling Procedures

On March 31, 2015, LTE, under the direction of Beren, one, five-point composite soil sample (Comp01) was collected from a depth of 0.0 to 12 inches below ground surface (bgs). The sample ID was based on its corresponding landfarm cell values (i.e. Comp01 was collected in cell 1). The sampling was



done in accordance with the COGCC Waste Management plan Conditions of Approval Letter dated January 30, 2013. Soil sample locations are depicted on Figure 2.

The composite soil samples were submitted to Summit Scientific Laboratory in Golden, Colorado, for analysis of total petroleum hydrocarbons (TPH)-diesel range organics (DRO) by United States Environmental Protection Agency (EPA) Modified Method 8015. Analytes selected for laboratory analysis were based on contaminant of concern screening through the collection of four worst-case discreet grab samples from stockpiled soil prior to landfarming, as directed by the COGCC in the Conditions of Approval Letter, dated January 30, 2013.

Soil Sampling Results

One composite soil samples were collected at the Site on March 31, 2015, and submitted for laboratory analysis to monitor the progress of landfarming to remediate the impacted soil. Laboratory analytical results indicate TPH-DRO concentration of 7,700 milligrams per kilogram (mg/kg) in soil sample Comp01 exceeded the COGCC Table 910-1 Concentration Levels for TPH in soil of 500 mg/kg. Laboratory analytical results are summarized in Table 1. The laboratory analytical report is included as Attachment A.

Summary and Conclusions

LTE, on behalf of Beren, collected one composite soil sample which was submitted for laboratory analysis. The composite soil sample laboratory results indicated that concentration of TPH-DRO exceeded COGCC Table 910-1 Concentration Level.

As of the time of this report, sampling has been conducted to collect data to aid in the design of a manure/fertilizer blend to maximize the biological remediation potential of the landfarm. It was determined that the landfarms were deficient in both moisture and nitrogen. As such, 12 cubic yards of chicken manure (for the addition of bacteria) and approximately 400 lbs of hay were added (for bulking of the soil to encourage biologic activity) and were tilled/disked into the soil. An increased schedule of disking and moisturization has been implemented (at a minimum of every two weeks) to take advantage of the warm months ahead. LTE and Beren also have plans to increase the frequency of sampling the landfarm with intention to close cells expeditiously following passing results. The COGCC requires that landfarm activities be completed and the site reclamation to be underway by October 31, 2015. LTE and Beren will be working diligently over the next 6 months to accomplish this goal.



Please call us at 303-433-9788 if you have any questions or comments regarding this report.

Sincerely,

LT ENVIRONMENTAL, INC.

A handwritten signature in black ink, appearing to be "E. Lang", written over a light gray rectangular background.

Eric Lang, P.G.
Staff Geologist

A handwritten signature in black ink, appearing to be "C. Purcell", written over a light gray rectangular background.

Chris Purcell, C.P.G.
Client Manager/Project Geologist

Attachments:

Figure 1	Site Location Map
Figure 2	Site Map
Table 1	Soil Analytical Results
Attachment A	Photolog
Attachment B	Laboratory Analytical Report

FIGURE



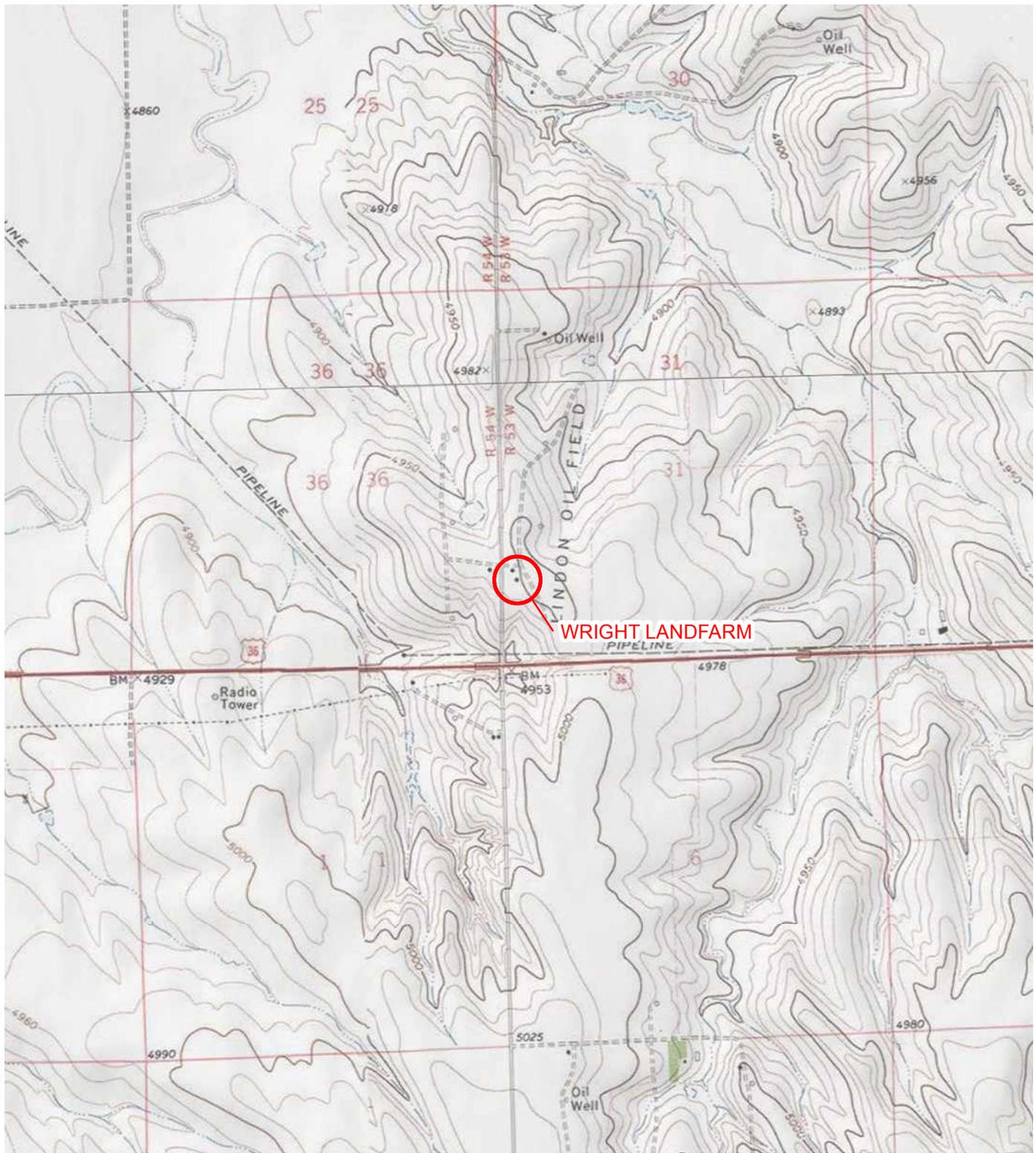


IMAGE COURTESY OF ESRI/BING MAPS

LEGEND

 SITE LOCATION

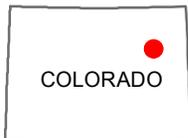
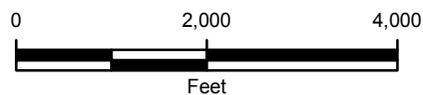


FIGURE 1
SITE LOCATION MAP
WRIGHT LANDFARM
SWSW SEC 31-T3S-R53W
WASHINGTON COUNTY, COLORADO
BEREN CORPORATION



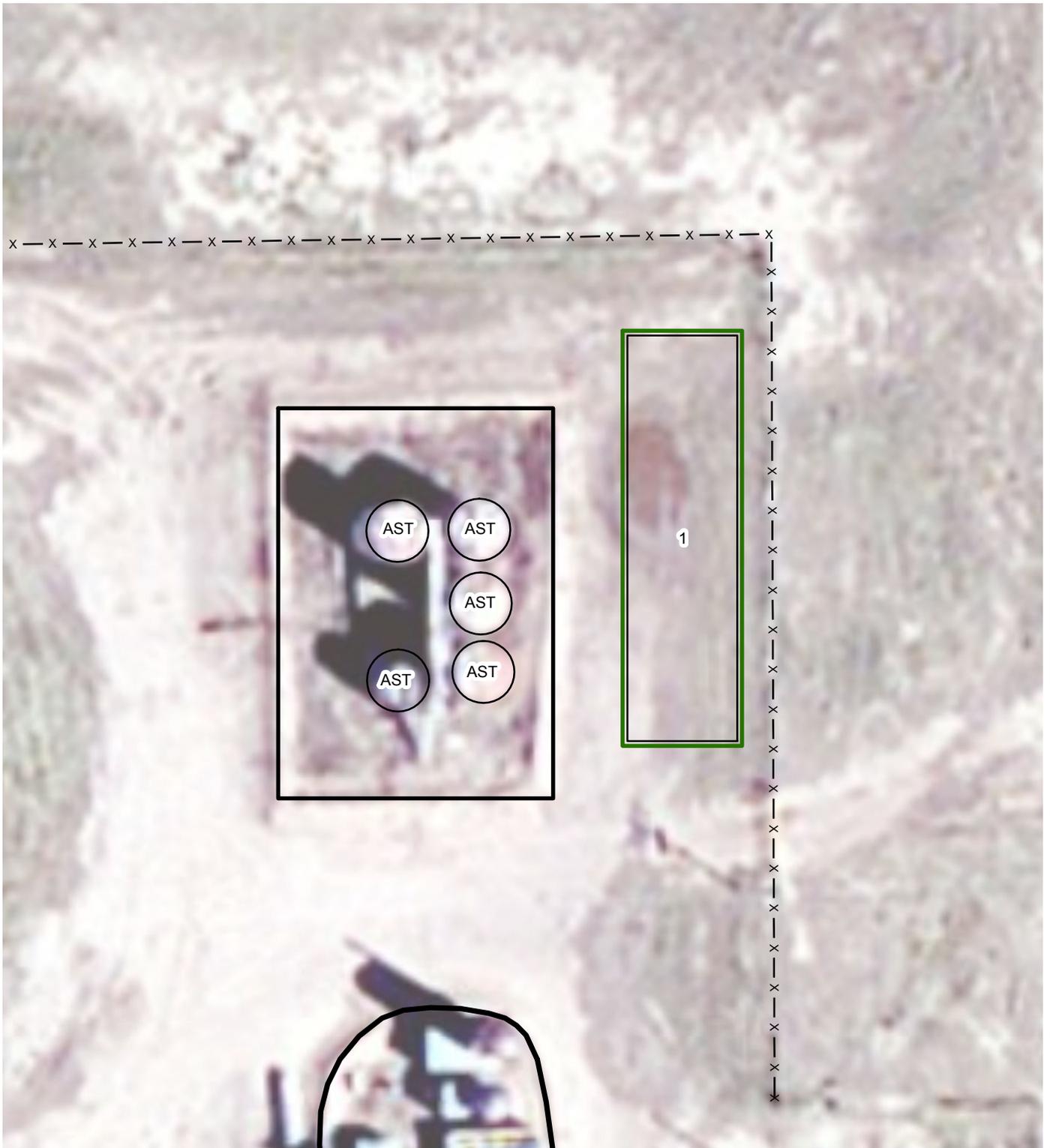


IMAGE COURTESY OF ESRI

LEGEND

x — x FENCE

1 LANDFARM CELL

LANDFARM EXTENT

BERM

AST: ABOVEGROUND STORAGE TANK

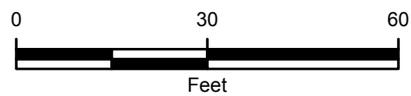


FIGURE 2
SITE MAP
 WRIGHT LANDFARM
 SWSW SEC 31-T3S-R53W
 WASHINGTON COUNTY, COLORADO
BEREN CORPORATION



TABLE



TABLE 1
SOIL ANALYTICAL RESULTS
WRIGHT OIL SKIM PIT LANDFARM
WASHINGTON COUNTY, COLORADO
BEREN CORPORATION

Sample ID	Sample Date	TPH-DRO (mg/kg)
Comp01	3/31/2015	7,900
COGCC Table 910-1 Concentration Level		500

NOTES:

COGCC - Colorado Oil and Gas Conservation Commission

TPH-DRO - Total Petroleum Hydrocarbons-Diesel Range Organics

mg/kg - milligrams per kilograms

< - less than the stated laboratory method reporting limit

Bold indicates value exceeds COGCC concentration level



ATTACHMENT A
LABORATORY ANALYTICAL REPORT



Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

April 08, 2015

Eric Lang
LT Environmental, Inc.
4600 West 60th Avenue
Arvada, CO 80003
RE: BNC - Cook - Wright

Enclosed are the results of analyses for samples received by Summit Scientific on 04/02/15 16:15. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Paul Shrewsbury
President



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

Project: BNC - Cook - Wright

Project Number: 041512004
Project Manager: Eric Lang

Reported:
04/08/15 15:28

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CS01	1504021-01	Soil	03/31/15 14:00	04/02/15 16:15

Summit Scientific *1504021*

S₂

741 Corporate Circle, Suite J&K ♦ Golden, Colorado 80401
303-277-9310 ♦ 303-374-5933

Page 1 of 1

Client: *LT Environmental* Project Manager: *Eric Lange*
 Address: *4600 W. 60th Avenue* E-Mail: *elange@ltenv.com*
 City/State/Zip: *Arvada, CO 80003*
 Phone: Fax: Project Name: *Cook - Wright*
 Sampler Name: *B. Finn* Project Number: *041512004*

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested				Special Instructions	
					HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air-Canister #	Other (Specify)	DRG				
1	CS01	03/31/2015	1400	1			X			X				X			
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Relinquished by: <i>[Signature]</i> Date/Time: <i>04/02/2015 1615</i>	Received by: <i>[Signature]</i> Date/Time: <i>4/2/15 1615</i>	Turn Around Time (Check) Same Day <input type="checkbox"/> 72 hours <input type="checkbox"/> 24 hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 48 hours <input type="checkbox"/>	Notes:
Relinquished by:	Received by:	Sample Integrity: Temperature Upon Receipt: <i>5.3°C</i> Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	
Relinquished by:	Received by:		

www.s2scientific.com

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: BNC - Cook - Wright

Project Number: 041512004
 Project Manager: Eric Lang

Reported:
 04/08/15 15:28

CS01
1504021-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/31/15 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	7900	50	mg/kg	1	1504047	04/06/15	04/07/15	8015M	

Date Sampled: **03/31/15 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: o-Terphenyl</i>		1950 %	30-150		"	"	"	"	S-02

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: BNC - Cook - Wright

Project Number: 041512004
Project Manager: Eric Lang

Reported:
04/08/15 15:28

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 1504047 - EPA 3550A

Blank (1504047-BLK1)

Prepared & Analyzed: 04/06/15

C10-C28 (DRO)	ND	50	mg/kg								
<i>Surrogate: o-Terphenyl</i>	13.2		"	12.2		109	30-150				

LCS (1504047-BS1)

Prepared & Analyzed: 04/06/15

C10-C28 (DRO)	439	50	mg/kg	501		87.6	73-134				
<i>Surrogate: o-Terphenyl</i>	13.1		"	12.2		107	30-150				

Matrix Spike (1504047-MS1)

Source: 1504031-01

Prepared & Analyzed: 04/06/15

C10-C28 (DRO)	668	50	mg/kg	477	120	115	50-148				
<i>Surrogate: o-Terphenyl</i>	14.1		"	11.6		121	30-150				

Matrix Spike Dup (1504047-MSD1)

Source: 1504031-01

Prepared & Analyzed: 04/06/15

C10-C28 (DRO)	667	50	mg/kg	469	120	117	50-148	0.196	13		
<i>Surrogate: o-Terphenyl</i>	14.0		"	11.4		122	30-150				

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: BNC - Cook - Wright

Project Number: 041512004
Project Manager: Eric Lang

Reported:
04/08/15 15:28

Notes and Definitions

- S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
- 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