

**August 1<sup>st</sup>, 2014**

**Mr. Mike Bratcher**

New Mexico Energy, Minerals, & Natural Resources  
Oil Conservation Division – District 2  
811 S. First Street  
Artesia, NM 88210

**RE: Corrective Action Plan  
Burnett Oil Co. – Jackson B 67  
UL/G sec. 24 T17S R30E  
API No. 30-015-41968**

Mr. Bratcher:

Burnett Oil Co. (Burnett) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site.

**Background and Previous Work**

The site is located approximately 3.4 miles east of Loco Hills, New Mexico at UL/G sec. 24 T17S R30E. The overspray is located in UL/B, C, F, G sec. 24 T17S R30E. This site is in an area of no known groundwater (Figure 1).

On July 5<sup>th</sup>, 2014, Burnett had a well tester on the well head that when pressured up popped off causing an overspray of 136 barrels of oil and produced water over 1,014,373 square feet of lease pad, lease road and pasture land. NMOCD and BLM were notified of the release on July 7<sup>th</sup>, 2014 and an initial C-141 was submitted on July 9<sup>th</sup>, 2014 to NMOCD for their approval (Appendix A).

RECS personnel were on site beginning on July 7<sup>th</sup>, 2014 to assess the release. Surface samples were taken at seven points within the release area, and two points were sampled with depth (Figure 2). The samples were field tested for chlorides and organic vapors, and all samples were taken to a commercial laboratory for analysis (Appendix B). Point 1 and Point 2 were sampled to a depth of 6 inches bgs where chlorides, Gasoline Range Organics (GRO), Diesel Range Organics (DRO) and BTEX readings were all below regulatory standards. Points 3 through 7 returned laboratory readings below regulatory standards at the surface.

Photo documentation of the release can be found in Appendix C.

**Corrective Action Plan**

Based on the laboratory analysis, the areas around Point 1 and Point 2 will be scraped up to 6 inches bgs (Figure 3). A composite sample from the base of the scrape will be taken and sent to

a commercial laboratory to confirm that chloride, GRO, DRO and BTEX values are below regulatory standards. The area closer to the well head, where pooling of fluids occurred, will be scraped down until a composite sample of the scrape shows laboratory chloride, GRO, DRO and BTEX values below regulatory standards.

All soils from the scrapes will be evaluated for use as backfill and any soils that do not meet regulatory standards will be sent to a NMOCD approved facility for disposal. Clean soil will be imported to the site to replace any soils taken for disposal. A sample of the blended soil will be taken and sent to a commercial laboratory for analysis to confirm that all constituents are below regulatory standards. The scrapes will be backfilled with the blended soil and contoured to the surrounding location. The areas in the pasture will be seeded with a blend of native vegetation.

The remainder of the site is oil overspray that has partially covered the vegetation in the area. Therefore, the areas around Point 3-7 will be sprayed with Micro-Blaze to wash the vegetation. Micro-Blaze contains a proprietary blend of wetting agents, nutrients, and several strains of safe, non-pathogenic *Bacillus* bacteria. When applied to a hydrocarbon-based or organic spill, the wetting agent begins breaking down the contaminants into smaller molecules for more efficient degradation by the microbes into harmless byproducts like carbon dioxide, water and trace salts.

Once these activities have been completed, a Termination Request will be sent to NMOCD and BLM requesting 'remediation termination' and site closure.

RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-2967 or me if you have any questions or wish to discuss the site.

Sincerely,



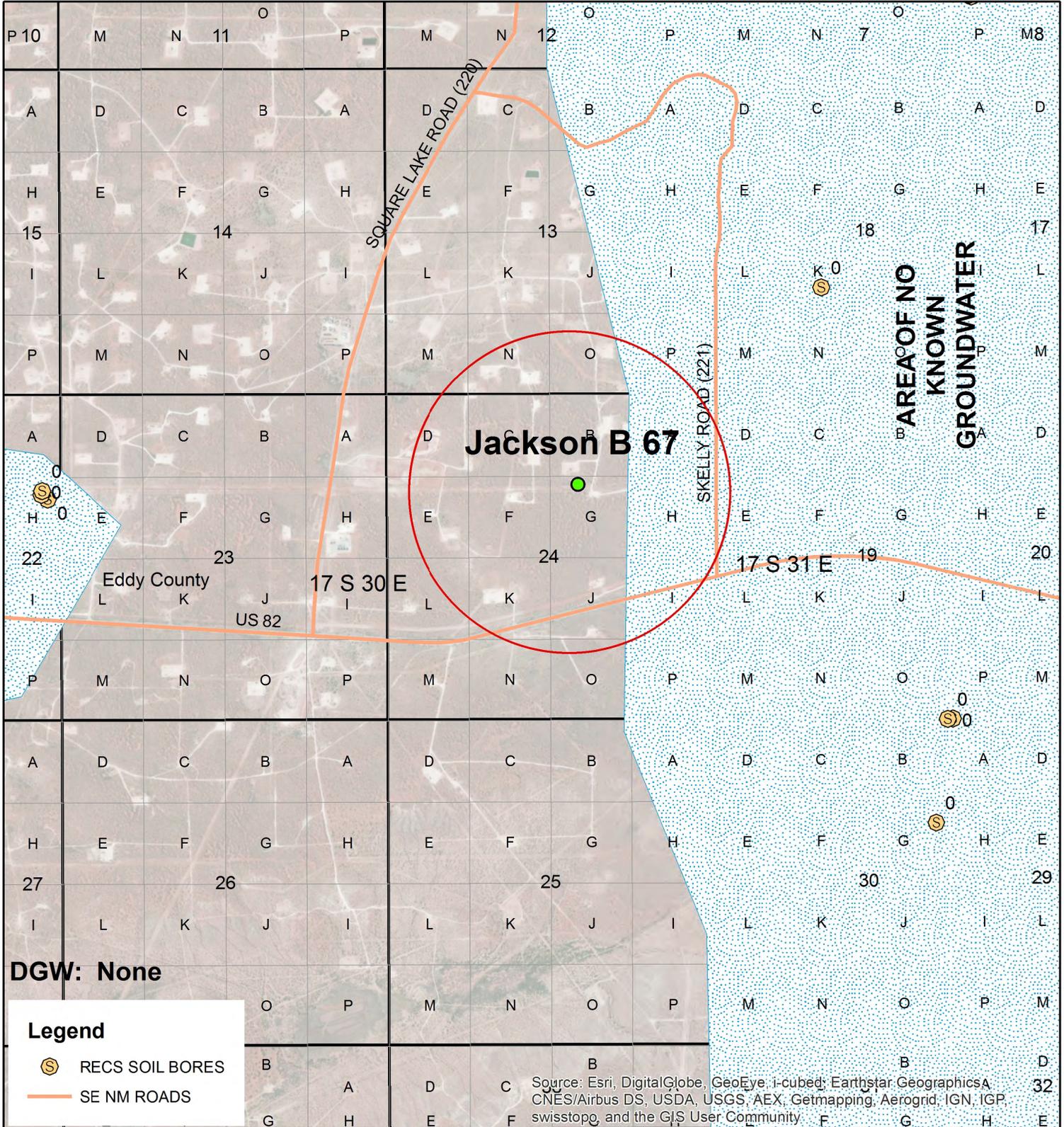
Lara Weinheimer  
Project Scientist  
RECS  
(575) 441-0431

Attachments:

- Figure 1 – Groundwater
- Figure 2 – Initial Sampling Data
- Figure 3 – Proposed Corrective Action
- Appendix A – Initial C-141
- Appendix B – Initial Sampling Lab
- Appendix C – Photo Documentation

# Figures

# Depth to Groundwater



**BURNETT OIL  
JACKSON B 67**

UL G SECTION 24  
T-17-S R-30-E  
EDDY COUNTY, NM

**Figure 1**

0 0.25 0.5  
Miles

Drawing date: 7/22/14  
Drafted by: L. Weinheimer

# Initial Sampling Data

		Point 1								
		Cl-	PID	GRO	DRO	B	T	E	X	BTEX
Surface		4400	332.6	141	11900	<0.1	<0.1	0.146	0.359	<0.6
6"		160	1.3	<10	47.3	<0.05	<0.05	<0.05	<0.15	<0.3

		Point 2								
		Cl-	PID	GRO	DRO	B	T	E	X	BTEX
Surface		1120	59.3	<50	2170	<0.05	<0.05	<0.05	<0.15	<0.3
6"		48	1.8	<10	14.2	<0.05	<0.05	<0.05	<0.15	<0.3

		Initial Surface Samples								
		Cl-	PID	GRO	DRO	B	T	E	X	BTEX
Pt. 3		176	2.8	<10	58.2	<0.05	<0.05	<0.05	<0.15	<0.3
Pt. 4		80	3.4	<10	22.8	<0.05	<0.05	<0.05	<0.15	<0.3
Pt. 5		160	23.2	<10	19.9	<0.05	<0.05	<0.05	<0.15	<0.3
Pt. 6		80	27.1	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
Pt. 7		176	23.9	<10	38.6	<0.05	<0.05	<0.05	<0.15	<0.3



Landowner: BLM  
DGW: None

### Legend

- OIL WELL
- ▲ SAMPLE POINT 7/8/14
- ROAD EDGE
- LIGHTER OVERSPRAY- 863,497 SQ FT
- HEAVIER OVERSPRAY- 154,853 SQ FT
- SATURATED AREA

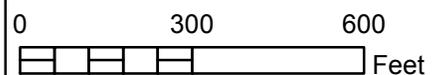
Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



## BURNETT OIL JACKSON B 67

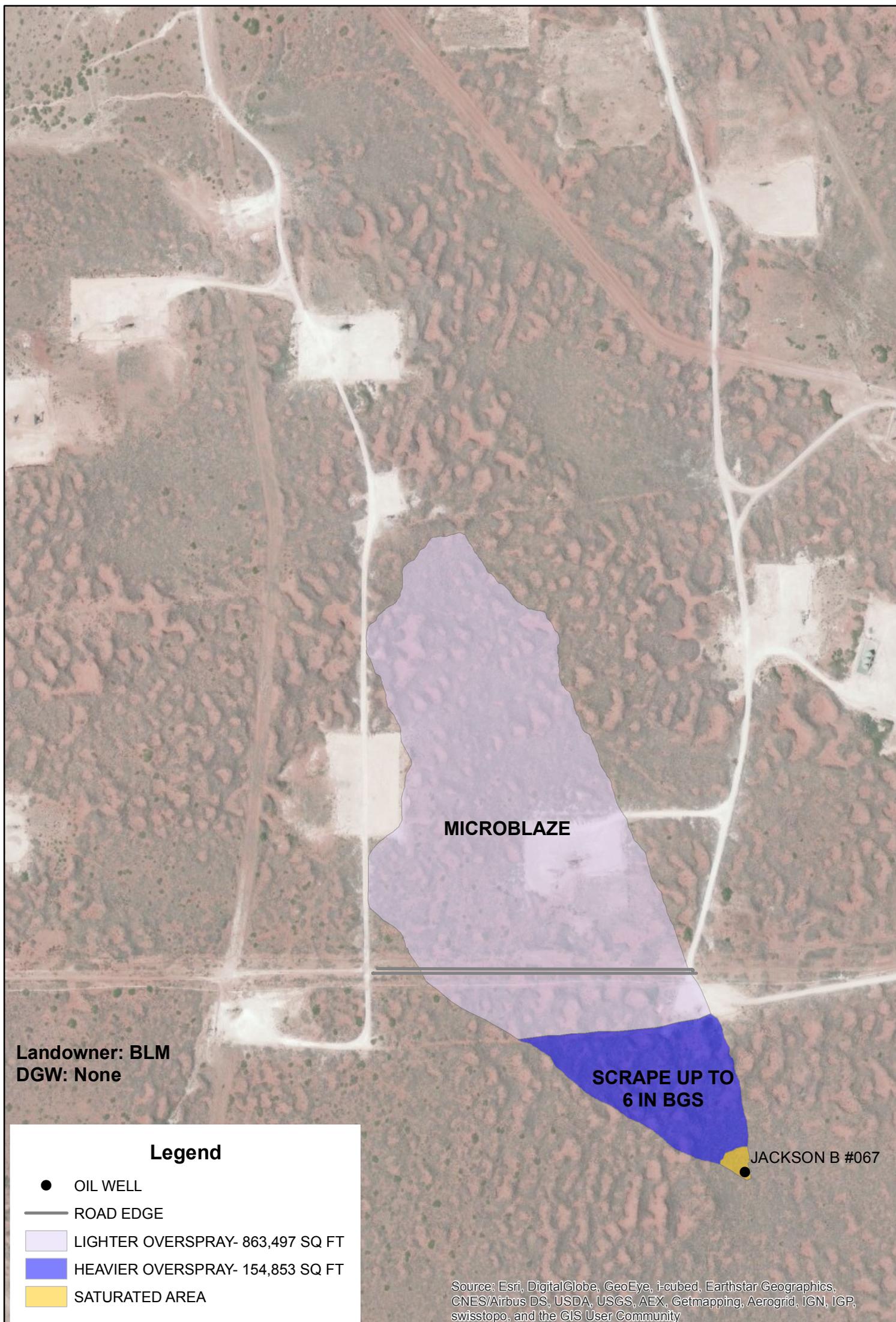
UL G SECTION 24  
T-17-S R-30-E  
EDDY COUNTY, NM

### Figure 2



GPS date: 7/7/14 JB & KS, 7/8/14 KS  
Drawing date: 7/18/14  
Drafted by: T. Grieco/L.Weinheimer

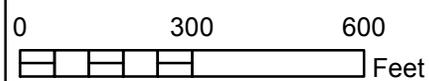
# Proposed Corrective Action



## ***BURNETT OIL JACKSON B 67***

UL G SECTION 24  
T-17-S R-30-E  
EDDY COUNTY, NM

### Figure 3



GPS date: 7/7/14 JB & KS, 7/8/14 KS  
Drawing date: 7/18/14  
Drafted by: T. Grieco/L.Weinheimer

# Appendix A

Initial C-141

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 2948 Hobbs, NM 88241  
Phone 575.393.2967

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised August 8, 2011

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company Burnett Oil Co.	Contact Shawna Matthews
Address 87 Square Lake Rd., Loco Hills, NM 88255	Telephone No. (575) 219-6370
Facility Name Jackson B 67	Facility Type Well tester on site
Surface Owner BLM	Mineral Owner
API No. 30-015-41968	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	24	17S	30E	2130	FNL	1785	FEL	Eddy

Latitude 32.821405 Longitude -103.922745

**NATURE OF RELEASE**

Type of Release An overspray of oil and produced water	Volume of Release 136 bbls	Volume Recovered 0 bbls
Source of Release Well Tester	Date and Hour of Occurrence 7/5/2014 7:00 PM	Date and Hour of Discovery 7/5/2014 7:00 PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom? Kyle Norman	Date and Hour: Email BLM and NMOCD on 7/7/2014	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

The well had a well tester on it. The well tester pressured up and popped off causing an over spray of oil and produced water.

Describe Area Affected and Cleanup Action Taken.\*

A total of 1,014,373 sq ft of lease pad and pasture land was affected by the release. The site will be assessed and a Corrective Action Plan will be submitted for NMOCD and BLM approval.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Shawna Matthews	Approved by Environmental Specialist:	
Title: Senior Production Technician	Approval Date:	Expiration Date:
E-mail Address: smatthews@burnettoil.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 7-9-14	Phone: (575) 219-6370	

\* Attach Additional Sheets If Necessary

# Appendix B

## Initial Sampling Lab

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 2948 Hobbs, NM 88241  
Phone 575.393.2967



July 18, 2014

LAURA FLORES

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: JACKSON B #67

Enclosed are the results of analyses for samples received by the laboratory on 07/11/14 16:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

 RICE ENVIRONMENTAL CONSULTING & SAFETY  
 LAURA FLORES  
 419 W. CAIN  
 HOBBS NM, 88240  
 Fax To: (575) 397-1471

Received:	07/11/2014	Sampling Date:	07/08/2014
Reported:	07/18/2014	Sampling Type:	Soil
Project Name:	JACKSON B #67	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: POINT 1 @ SURFACE (H402118-01)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	07/17/2014	ND	2.06	103	2.00	12.6	
Toluene*	<0.100	0.100	07/17/2014	ND	2.06	103	2.00	12.3	
<b>Ethylbenzene*</b>	<b>0.146</b>	0.100	07/17/2014	ND	2.13	106	2.00	12.2	
<b>Total Xylenes*</b>	<b>0.359</b>	0.300	07/17/2014	ND	6.39	106	6.00	12.7	
Total BTEX	<0.600	0.600	07/17/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>4400</b>	16.0	07/16/2014	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>141</b>	100	07/15/2014	ND	192	95.9	200	0.641		
<b>DRO &gt;C10-C28</b>	<b>11900</b>	100	07/15/2014	ND	203	102	200	3.60		

Surrogate: 1-Chlorooctane 171 % 65.2-140

Surrogate: 1-Chlorooctadecane 295 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 RICE ENVIRONMENTAL CONSULTING & SAFETY  
 LAURA FLORES  
 419 W. CAIN  
 HOBBS NM, 88240  
 Fax To: (575) 397-1471

Received:	07/11/2014	Sampling Date:	07/08/2014
Reported:	07/18/2014	Sampling Type:	Soil
Project Name:	JACKSON B #67	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: POINT 2 @ SURFACE (H402118-02)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/17/2014	ND	2.26	113	2.00	3.51	
Toluene*	<0.050	0.050	07/17/2014	ND	2.08	104	2.00	3.14	
Ethylbenzene*	<0.050	0.050	07/17/2014	ND	2.18	109	2.00	3.52	
Total Xylenes*	<0.150	0.150	07/17/2014	ND	6.55	109	6.00	3.43	
Total BTEX	<0.300	0.300	07/17/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1120</b>	16.0	07/16/2014	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<50.0	50.0	07/15/2014	ND	192	95.9	200	0.641		
<b>DRO &gt;C10-C28</b>	<b>2170</b>	50.0	07/15/2014	ND	203	102	200	3.60		

Surrogate: 1-Chlorooctane 127 % 65.2-140

Surrogate: 1-Chlorooctadecane 178 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 RICE ENVIRONMENTAL CONSULTING & SAFETY  
 LAURA FLORES  
 419 W. CAIN  
 HOBBS NM, 88240  
 Fax To: (575) 397-1471

Received:	07/11/2014	Sampling Date:	07/08/2014
Reported:	07/18/2014	Sampling Type:	Soil
Project Name:	JACKSON B #67	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: POINT 3 @ SURFACE (H402118-03)**

BTEX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/17/2014	ND	2.26	113	2.00	3.51		
Toluene*	<0.050	0.050	07/17/2014	ND	2.08	104	2.00	3.14		
Ethylbenzene*	<0.050	0.050	07/17/2014	ND	2.18	109	2.00	3.52		
Total Xylenes*	<0.150	0.150	07/17/2014	ND	6.55	109	6.00	3.43		
Total BTEX	<0.300	0.300	07/17/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>176</b>	16.0	07/16/2014	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/15/2014	ND	192	95.9	200	0.641		
<b>DRO &gt;C10-C28</b>	<b>58.2</b>	10.0	07/15/2014	ND	203	102	200	3.60		

Surrogate: 1-Chlorooctane 123 % 65.2-140

Surrogate: 1-Chlorooctadecane 132 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 RICE ENVIRONMENTAL CONSULTING & SAFETY  
 LAURA FLORES  
 419 W. CAIN  
 HOBBS NM, 88240  
 Fax To: (575) 397-1471

Received:	07/11/2014	Sampling Date:	07/08/2014
Reported:	07/18/2014	Sampling Type:	Soil
Project Name:	JACKSON B #67	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: POINT 4 @ SURFACE (H402118-04)**

BTEX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/17/2014	ND	2.26	113	2.00	3.51		
Toluene*	<0.050	0.050	07/17/2014	ND	2.08	104	2.00	3.14		
Ethylbenzene*	<0.050	0.050	07/17/2014	ND	2.18	109	2.00	3.52		
Total Xylenes*	<0.150	0.150	07/17/2014	ND	6.55	109	6.00	3.43		
Total BTEX	<0.300	0.300	07/17/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>80.0</b>	16.0	07/16/2014	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/15/2014	ND	192	95.9	200	0.641		
<b>DRO &gt;C10-C28</b>	<b>22.8</b>	10.0	07/15/2014	ND	203	102	200	3.60		

Surrogate: 1-Chlorooctane 125 % 65.2-140

Surrogate: 1-Chlorooctadecane 132 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 RICE ENVIRONMENTAL CONSULTING & SAFETY  
 LAURA FLORES  
 419 W. CAIN  
 HOBBS NM, 88240  
 Fax To: (575) 397-1471

Received:	07/11/2014	Sampling Date:	07/08/2014
Reported:	07/18/2014	Sampling Type:	Soil
Project Name:	JACKSON B #67	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: POINT 5 @ SURFACE (H402118-05)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/17/2014	ND	2.26	113	2.00	3.51	
Toluene*	<0.050	0.050	07/17/2014	ND	2.08	104	2.00	3.14	
Ethylbenzene*	<0.050	0.050	07/17/2014	ND	2.18	109	2.00	3.52	
Total Xylenes*	<0.150	0.150	07/17/2014	ND	6.55	109	6.00	3.43	
Total BTEX	<0.300	0.300	07/17/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>160</b>	16.0	07/16/2014	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/15/2014	ND	192	95.9	200	0.641	
<b>DRO &gt;C10-C28</b>	<b>19.9</b>	10.0	07/15/2014	ND	203	102	200	3.60	

Surrogate: 1-Chlorooctane 116 % 65.2-140

Surrogate: 1-Chlorooctadecane 121 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 RICE ENVIRONMENTAL CONSULTING & SAFETY  
 LAURA FLORES  
 419 W. CAIN  
 HOBBS NM, 88240  
 Fax To: (575) 397-1471

Received:	07/11/2014	Sampling Date:	07/08/2014
Reported:	07/18/2014	Sampling Type:	Soil
Project Name:	JACKSON B #67	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: POINT 6 @ SURFACE (H402118-06)**

BTEX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/17/2014	ND	2.26	113	2.00	3.51		
Toluene*	<0.050	0.050	07/17/2014	ND	2.08	104	2.00	3.14		
Ethylbenzene*	<0.050	0.050	07/17/2014	ND	2.18	109	2.00	3.52		
Total Xylenes*	<0.150	0.150	07/17/2014	ND	6.55	109	6.00	3.43		
Total BTEX	<0.300	0.300	07/17/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	07/16/2014	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/15/2014	ND	192	95.9	200	0.641		
DRO >C10-C28	<10.0	10.0	07/15/2014	ND	203	102	200	3.60		

Surrogate: 1-Chlorooctane 123 % 65.2-140

Surrogate: 1-Chlorooctadecane 125 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 RICE ENVIRONMENTAL CONSULTING & SAFETY  
 LAURA FLORES  
 419 W. CAIN  
 HOBBS NM, 88240  
 Fax To: (575) 397-1471

Received:	07/11/2014	Sampling Date:	07/08/2014
Reported:	07/18/2014	Sampling Type:	Soil
Project Name:	JACKSON B #67	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: POINT 7 @ SURFACE (H402118-07)**

BTEX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/16/2014	ND	2.28	114	2.00	2.77		
Toluene*	<0.050	0.050	07/16/2014	ND	2.28	114	2.00	1.94		
Ethylbenzene*	<0.050	0.050	07/16/2014	ND	2.39	119	2.00	2.07		
Total Xylenes*	<0.150	0.150	07/16/2014	ND	7.18	120	6.00	1.62		
Total BTEX	<0.300	0.300	07/16/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>176</b>	16.0	07/16/2014	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/15/2014	ND	192	95.9	200	0.641		
<b>DRO &gt;C10-C28</b>	<b>38.6</b>	10.0	07/15/2014	ND	203	102	200	3.60		

Surrogate: 1-Chlorooctane 124 % 65.2-140

Surrogate: 1-Chlorooctadecane 131 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 RICE ENVIRONMENTAL CONSULTING & SAFETY  
 LAURA FLORES  
 419 W. CAIN  
 HOBBS NM, 88240  
 Fax To: (575) 397-1471

Received:	07/11/2014	Sampling Date:	07/10/2014
Reported:	07/18/2014	Sampling Type:	Soil
Project Name:	JACKSON B #67	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: POINT 1 @ 6" (H402118-08)**

BTEX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/16/2014	ND	2.28	114	2.00	2.77		
Toluene*	<0.050	0.050	07/16/2014	ND	2.28	114	2.00	1.94		
Ethylbenzene*	<0.050	0.050	07/16/2014	ND	2.39	119	2.00	2.07		
Total Xylenes*	<0.150	0.150	07/16/2014	ND	7.18	120	6.00	1.62		
Total BTEX	<0.300	0.300	07/16/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>160</b>	16.0	07/16/2014	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/15/2014	ND	192	95.9	200	0.641		
<b>DRO &gt;C10-C28</b>	<b>47.3</b>	10.0	07/15/2014	ND	203	102	200	3.60		

Surrogate: 1-Chlorooctane 121 % 65.2-140

Surrogate: 1-Chlorooctadecane 127 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 RICE ENVIRONMENTAL CONSULTING & SAFETY  
 LAURA FLORES  
 419 W. CAIN  
 HOBBS NM, 88240  
 Fax To: (575) 397-1471

Received:	07/11/2014	Sampling Date:	07/10/2014
Reported:	07/18/2014	Sampling Type:	Soil
Project Name:	JACKSON B #67	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: POINT 2 @ 6" (H402118-09)**

BTEX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/16/2014	ND	2.28	114	2.00	2.77		
Toluene*	<0.050	0.050	07/16/2014	ND	2.28	114	2.00	1.94		
Ethylbenzene*	<0.050	0.050	07/16/2014	ND	2.39	119	2.00	2.07		
Total Xylenes*	<0.150	0.150	07/16/2014	ND	7.18	120	6.00	1.62		
Total BTEX	<0.300	0.300	07/16/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>48.0</b>	16.0	07/16/2014	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	07/15/2014	ND	192	95.9	200	0.641		
<b>DRO &gt;C10-C28</b>	<b>14.2</b>	10.0	07/15/2014	ND	203	102	200	3.60		

Surrogate: 1-Chlorooctane 122 % 65.2-140

Surrogate: 1-Chlorooctadecane 127 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report



---

Celey D. Keene, Lab Director/Quality Manager



# Appendix C

Photo Documentation

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 2948 Hobbs, NM 88241  
Phone 575.393.2967

# Burnett Oil Co. Jackson B 67

Unit Letter G, Section 24, T17S, R30E



Initial site photo, facing east

7/7/14



Initial site photo, facing northeast

7/7/14



Initial site photo, facing northwest

7/7/14



Initial site photo, facing north

7/7/14