

August 19th, 2014

Mike Bratcher

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

**RE: Corrective Action Plan
Burnett Oil Gissler A 19 (2RP-2387)
UL/J sec. 14 T17S R30E
API No. 30-015-32835**

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 2.5 miles northeast of Loco Hills, New Mexico at UL/J sec. 14 T17S R30E. This site is in an area of no known groundwater.

On June 30th, 2014, Burnett discovered a release of 20 barrels of produced water and oil from the well head at the site. The threads on the 5 ½ inch casing pin failed and released the fluid over 7,132 square feet of the lease pad and pasture land. A vacuum truck was called to the site and recovered 15 barrels of fluid. An initial C-141 was submitted to NMOCD and BLM on July 9th, 2014 and was approved by NMOCD on July 23rd, 2014 (Appendix A).

RECS personnel were on site beginning on July 7th, 2014, to assess the release. Five points within the release area were field sampled at the surface, and four of the points were sampled with depth (Figure 1). Representative samples were taken to a commercial laboratory for analysis (Appendix B). The surface sample at Point 1 returned a laboratory chloride reading, Gasoline Range Organics (GRO) reading and Diesel Range Organics (DRO) reading below regulatory standards. BTEX levels returned slightly elevated results. The surface sample at Point 2 returned a laboratory chloride reading, a DRO reading and BTEX readings that were elevated. The GRO reading returned a value of non-detect. The 2.5 ft bgs sample returned a laboratory chloride reading, GRO, DRO and BTEX readings below regulatory standards. The field data for Point 2 indicates that soil taken at 6 inches bgs will return all constituents below regulatory standards. The surface sample at Point 3 returned a laboratory chloride reading, GRO, DRO and BTEX readings that were elevated. The 3.5 ft bgs sample returned a laboratory chloride reading, GRO, DRO and BTEX readings below regulatory standards. The field data for Point 3 indicates that soil taken at 1.5 ft bgs will return all constituents below regulatory

standards. The surface sample at Point 4 returned a laboratory chloride reading below regulatory standards. However, GRO, DRO and BTEX readings were elevated. The 4 ft bgs sample returned a laboratory chloride reading, GRO, DRO and BTEX readings below regulatory standards. The field data for Point 4 indicates that soil taken at 1 ft bgs will return all constituents below regulatory standards. The surface sample at Point 5 returned a laboratory chloride reading and GRO reading below regulatory standards. However, DRO and BTEX readings were elevated. The 6 inch bgs sample returned a laboratory chloride reading, GRO, DRO and BTEX readings below regulatory standards. The field data for Point 5 indicates that soil taken at 6 inches bgs will return all constituents below regulatory standards.

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

Corrective Action Plan

Based on the field sampling data and laboratory analysis, the release will be remediated in five parts (Figure 2). The area around Point 1 is oil overspray that has lightly covered the vegetation in the area. Therefore, the area around Point 1 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.

The area around Point 2 and the area around Point 5 will be scraped down to 6 inches bgs. The scrape around Point 2 will not impinge on the well head or pump jack for safety reasons. The area around Point 3 will be scraped down to 1.5 ft bgs, and the area around Point 4 will be scraped down to 1 ft bgs. Once all the scrapes are completed, a bottom composite sample will be taken from each scrape and sent to a commercial laboratory to confirm that chlorides, GRO, DRO and BTEX readings are all below regulatory standards.

The excavated soil will be evaluated for use as backfill, and any soils that do not meet regulatory standards will be taken to a NMOCD approved facility for disposal. Clean soil will be imported to the site to replace any soils taken for disposal. The clean soil will be blended with the remaining excavated soil and used to backfill the site. A sample of the blended soil will be taken to a commercial laboratory to confirm that chloride, GRO and DRO readings are all below regulatory standards. Once the site is backfilled, the area will be contoured to the surrounding location.

Once these activities have been completed, a report will be submitted 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,

A handwritten signature in black ink, appearing to read "Lara Weinheimer". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

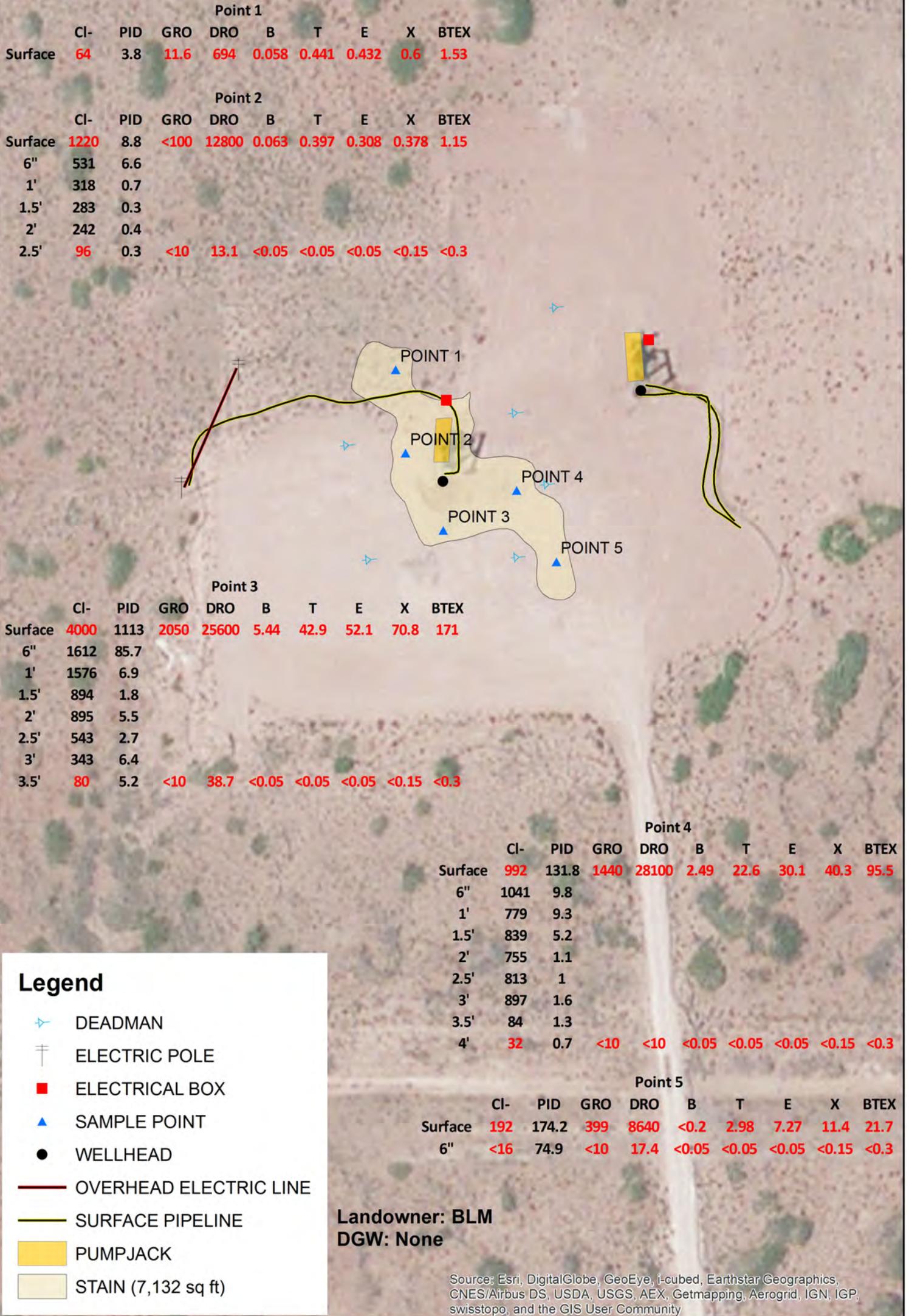
Lara Weinheimer
Project Scientist
RECS
(575) 441-0431

Attachments:

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

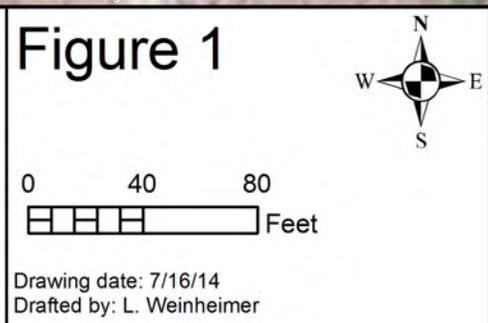
Figures

Initial Sampling Data

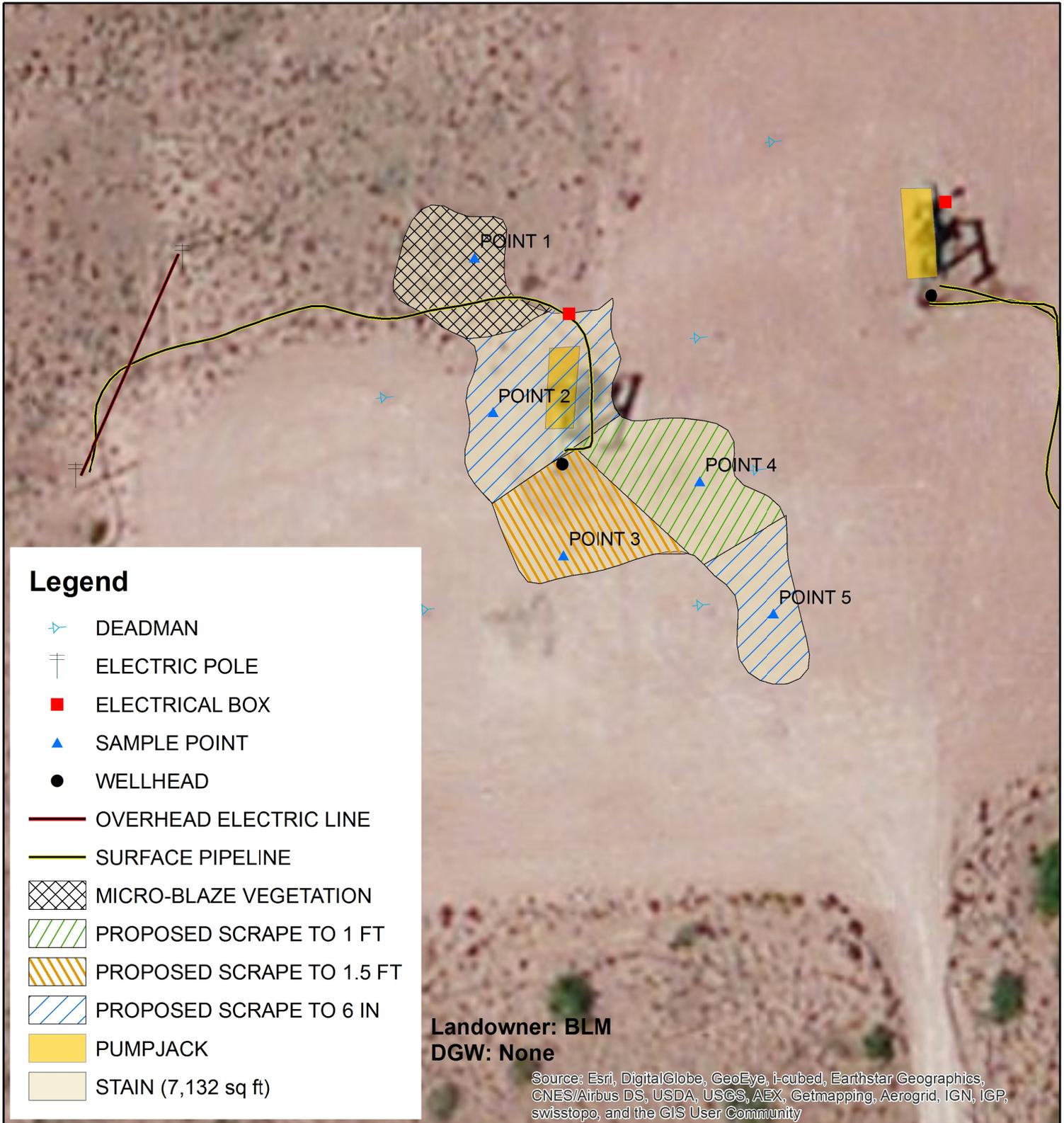


**BURNETT OIL
GISSLER A 19**

Legals: UL/J sec. 14
T-17-S R-30-E
EDDY COUNTY, NM



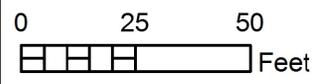
Proposed Corrective Actions



BURNETT OIL GISSLER A 19

**Legals: UL/J sec. 14
T-17-S R-30-E
EDDY COUNTY, NM**

Figure 2



Drawing date: 8/11/14
Drafted by: L. Weinheimer

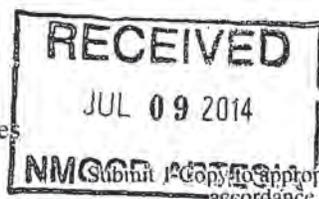
Appendix A

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



Form C-141
Revised August 8, 2011

Release Notification and Corrective Action

nHMP 1420430499

OPERATOR		<input checked="" type="checkbox"/> Initial Report	<input type="checkbox"/> Final Report
Name of Company	Burnett Oil Co. <i>3080</i>	Contact	Shawna Matthews
Address	87 Square Lake Rd., Loco Hills, NM 88255	Telephone No.	(575) 219-6370
Facility Name	Gissler A 19	Facility Type	Well head
Surface Owner	BLM	Mineral Owner	
		API No.	30-015-32835

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	14	17S	30E	2310	FSL	2310	FEL	Eddy

Latitude 32.8336322529691 Longitude -103.941654295496

NATURE OF RELEASE

Type of Release	Produced water and oil	Volume of Release	20 bbls	Volume Recovered	15 bbls
Source of Release	Well head	Date and Hour of Occurrence	Unknown	Date and Hour of Discovery	6/30/14 7:30 am
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?		Date and Hour			
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 threads on the 5 1/2 in casing pin failed releasing 20 bbls of produced water and oil.

Describe Area Affected and Cleanup Action Taken.*
A total of 7,132 sq ft of lease pad and pasture land was affected by the release. A vacuum truck was called to the site and recovered 15 bbls of fluid. The site will be remediated to NMOCD and BLM standards.

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: <i>Shawna Matthews</i>	OIL CONSERVATION DIVISION	
Printed Name: Shawna Matthews	Approved by Environmental Specialist:	<i>[Signature]</i>
Title: Senior Production Technician	Approval Date: <i>7/23/14</i>	Expiration Date: <i>NA</i>
E-mail Address: smatthews@burnettoil.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 7-9-14 Phone: (575) 219-6370	remediation per OGD rule & Guidelines, & like approval by BLM. SUBMIT REMEDIATION PROPOSAL NO LATER THAN:	

* Attach Additional Sheets If Necessary

PROPOSAL NO LATER THAN:
8/23/14

2RP-238B

Appendix B

Initial Sampling Lab

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



July 16, 2014

LAURA FLORES

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: GISSLER A #19

Enclosed are the results of analyses for samples received by the laboratory on 07/09/14 16:30.

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.

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 black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

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:	07/09/2014	Sampling Date:	07/07/2014
Reported:	07/16/2014	Sampling Type:	Soil
Project Name:	GISSLER A #19	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT 1 @ SURFACE (H402094-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.058	0.050	07/14/2014	ND	1.88	94.1	2.00	4.05	
Toluene*	0.441	0.050	07/14/2014	ND	1.88	93.8	2.00	4.05	
Ethylbenzene*	0.432	0.050	07/14/2014	ND	1.85	92.6	2.00	3.40	
Total Xylenes*	0.600	0.150	07/14/2014	ND	5.68	94.7	6.00	3.57	
Total BTEX	1.53	0.300	07/14/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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	64.0	16.0	07/15/2014	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	11.6	10.0	07/11/2014	ND	184	92.2	200	2.67	
DRO >C10-C28	694	10.0	07/11/2014	ND	196	98.2	200	3.22	

Surrogate: 1-Chlorooctane 91.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 108 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

Received:	07/09/2014	Sampling Date:	07/07/2014
Reported:	07/16/2014	Sampling Type:	Soil
Project Name:	GISSLER A #19	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT 2 @ SURFACE (H402094-02)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	0.063	0.050	07/14/2014	ND	1.88	94.1	2.00	4.05		
Toluene*	0.397	0.050	07/14/2014	ND	1.88	93.8	2.00	4.05		
Ethylbenzene*	0.308	0.050	07/14/2014	ND	1.85	92.6	2.00	3.40		
Total Xylenes*	0.378	0.150	07/14/2014	ND	5.68	94.7	6.00	3.57		
Total BTEX	1.15	0.300	07/14/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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	1220	16.0	07/15/2014	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	<100	100	07/12/2014	ND	184	92.2	200	2.67			
DRO >C10-C28	12800	100	07/12/2014	ND	196	98.2	200	3.22			

Surrogate: 1-Chlorooctane 87.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 452 % 63.6-154

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* = Accredited Analyte

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 LAURA FLORES
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 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	07/09/2014	Sampling Date:	07/07/2014
Reported:	07/16/2014	Sampling Type:	Soil
Project Name:	GISSLER A #19	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT 2 @ 2.5' (H402094-03)

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	07/14/2014	ND	1.88	94.1	2.00	4.05		
Toluene*	<0.050	0.050	07/14/2014	ND	1.88	93.8	2.00	4.05		
Ethylbenzene*	<0.050	0.050	07/14/2014	ND	1.85	92.6	2.00	3.40		
Total Xylenes*	<0.150	0.150	07/14/2014	ND	5.68	94.7	6.00	3.57		
Total BTEX	<0.300	0.300	07/14/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	
Chloride	96.0	16.0	07/15/2014	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	07/12/2014	ND	184	92.2	200	2.67		
DRO >C10-C28	13.1	10.0	07/12/2014	ND	196	98.2	200	3.22		

Surrogate: 1-Chlorooctane 97.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 101 % 63.6-154

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* = Accredited Analyte

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Analytical Results For:

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 LAURA FLORES
 419 W. CAIN
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	07/09/2014	Sampling Date:	07/07/2014
Reported:	07/16/2014	Sampling Type:	Soil
Project Name:	GISSLER A #19	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT 3 @ SURFACE (H402094-04)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	5.44	2.00	07/14/2014	ND	1.88	94.1	2.00	4.05		
Toluene*	42.9	2.00	07/14/2014	ND	1.88	93.8	2.00	4.05		
Ethylbenzene*	52.1	2.00	07/14/2014	ND	1.85	92.6	2.00	3.40		
Total Xylenes*	70.8	6.00	07/14/2014	ND	5.68	94.7	6.00	3.57		
Total BTEX	171	12.0	07/14/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 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	4000	16.0	07/15/2014	ND	416	104	400	0.00		

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	2050	200	07/12/2014	ND	184	92.2	200	2.67			
DRO >C10-C28	25600	200	07/12/2014	ND	196	98.2	200	3.22			

Surrogate: 1-Chlorooctane 176 % 65.2-140

Surrogate: 1-Chlorooctadecane 695 % 63.6-154

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*=Accredited Analyte

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 LAURA FLORES
 419 W. CAIN
 HOBBS NM, 88240
 Fax To: (575) 397-1471

Received:	07/09/2014	Sampling Date:	07/09/2014
Reported:	07/16/2014	Sampling Type:	Soil
Project Name:	GISSLER A #19	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT 3 @ 3.5' (H402094-05)

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	07/14/2014	ND	1.88	94.1	2.00	4.05		
Toluene*	<0.050	0.050	07/14/2014	ND	1.88	93.8	2.00	4.05		
Ethylbenzene*	<0.050	0.050	07/14/2014	ND	1.85	92.6	2.00	3.40		
Total Xylenes*	<0.150	0.150	07/14/2014	ND	5.68	94.7	6.00	3.57		
Total BTEX	<0.300	0.300	07/14/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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	
Chloride	80.0	16.0	07/15/2014	ND	416	104	400	0.00		

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	07/12/2014	ND	184	92.2	200	2.67		
DRO >C10-C28	38.7	10.0	07/12/2014	ND	196	98.2	200	3.22		

Surrogate: 1-Chlorooctane 91.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 99.8 % 63.6-154

Cardinal Laboratories

* = Accredited Analyte

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

Received:	07/09/2014	Sampling Date:	07/07/2014
Reported:	07/16/2014	Sampling Type:	Soil
Project Name:	GISSLER A #19	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT 4 @ SURFACE (H402094-06)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	2.49	1.00	07/14/2014	ND	1.88	94.1	2.00	4.05		
Toluene*	22.6	1.00	07/14/2014	ND	1.88	93.8	2.00	4.05		
Ethylbenzene*	30.1	1.00	07/14/2014	ND	1.85	92.6	2.00	3.40		
Total Xylenes*	40.3	3.00	07/14/2014	ND	5.68	94.7	6.00	3.57		
Total BTEX	95.5	6.00	07/14/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 122 % 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	
Chloride	992	16.0	07/15/2014	ND	416	104	400	0.00		

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	1440	200	07/12/2014	ND	184	92.2	200	2.67			
DRO >C10-C28	28100	200	07/12/2014	ND	196	98.2	200	3.22			

Surrogate: 1-Chlorooctane 158 % 65.2-140

Surrogate: 1-Chlorooctadecane 807 % 63.6-154

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*=Accredited Analyte

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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:	07/09/2014	Sampling Date:	07/07/2014
Reported:	07/16/2014	Sampling Type:	Soil
Project Name:	GISSLER A #19	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT 4 @ 4' (H402094-07)

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	07/14/2014	ND	1.88	94.1	2.00	4.05	
Toluene*	<0.050	0.050	07/14/2014	ND	1.88	93.8	2.00	4.05	
Ethylbenzene*	<0.050	0.050	07/14/2014	ND	1.85	92.6	2.00	3.40	
Total Xylenes*	<0.150	0.150	07/14/2014	ND	5.68	94.7	6.00	3.57	
Total BTEX	<0.300	0.300	07/14/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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
Chloride	32.0	16.0	07/15/2014	ND	416	104	400	0.00	

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	07/12/2014	ND	184	92.2	200	2.67	
DRO >C10-C28	<10.0	10.0	07/12/2014	ND	196	98.2	200	3.22	

Surrogate: 1-Chlorooctane 94.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 98.6 % 63.6-154

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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:	07/09/2014	Sampling Date:	07/07/2014
Reported:	07/16/2014	Sampling Type:	Soil
Project Name:	GISSLER A #19	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT 5 @ SURFACE (H402094-08)

BTEX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	07/14/2014	ND	1.88	94.1	2.00	4.05	
Toluene*	2.98	0.200	07/14/2014	ND	1.88	93.8	2.00	4.05	
Ethylbenzene*	7.27	0.200	07/14/2014	ND	1.85	92.6	2.00	3.40	
Total Xylenes*	11.4	0.600	07/14/2014	ND	5.68	94.7	6.00	3.57	
Total BTEX	21.7	1.20	07/14/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 149 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	07/15/2014	ND	416	104	400	0.00	

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	399	100	07/12/2014	ND	184	92.2	200	2.67	
DRO >C10-C28	8640	100	07/12/2014	ND	196	98.2	200	3.22	

Surrogate: 1-Chlorooctane 147 % 65.2-140

Surrogate: 1-Chlorooctadecane 233 % 63.6-154

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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:	07/09/2014	Sampling Date:	07/07/2014
Reported:	07/16/2014	Sampling Type:	Soil
Project Name:	GISSLER A #19	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT 5 @ 6" (H402094-09)

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	07/14/2014	ND	1.88	94.1	2.00	4.05		
Toluene*	<0.050	0.050	07/14/2014	ND	1.88	93.8	2.00	4.05		
Ethylbenzene*	<0.050	0.050	07/14/2014	ND	1.85	92.6	2.00	3.40		
Total Xylenes*	<0.150	0.150	07/14/2014	ND	5.68	94.7	6.00	3.57		
Total BTEX	<0.300	0.300	07/14/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 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	
Chloride	<16.0	16.0	07/15/2014	ND	416	104	400	0.00		

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	07/12/2014	ND	184	92.2	200	2.67		
DRO >C10-C28	17.4	10.0	07/12/2014	ND	196	98.2	200	3.22		

Surrogate: 1-Chlorooctane 96.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 103 % 63.6-154

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* = Accredited Analyte

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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.
- 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
- ** 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



CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>RECS</u>		BILL TO		ANALYSIS REQUEST																																																																																																																																							
Project Manager: <u>Laura Flores, Kyle Norman</u>		P.O. #:		<table border="1"> <tr><td>Chlorides</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>TPH 8015 M</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>BTEX</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>Texas TPH</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>Complete Cations/Anions</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>TDS</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>										Chlorides																					TPH 8015 M																					BTEX																					Texas TPH																					Complete Cations/Anions																					TDS																				
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Project Location: <u>Gissler AB #19</u>		Phone #:																																																																																																																																									
Sampler Name: <u>Kyle Schmidt</u>		Fax #:																																																																																																																																									

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX					PRESERV.		SAMPLING		DATE	TIME										
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:												
<u>H402094</u>	<u>1 Point 1 @ surface</u>	<u>G</u>	<u>1</u>			<u>X</u>				<u>X</u>		<u>7-7-14</u>	<u>11:45</u>	<u>X</u>	<u>X</u>	<u>X</u>								
	<u>2 Point 2 @ surface</u>	<u>G</u>	<u>1</u>			<u>X</u>				<u>X</u>		<u>7-7-14</u>	<u>11:50</u>	<u>X</u>	<u>X</u>	<u>X</u>								
	<u>3 Point 2 @ 2.5'</u>	<u>G</u>	<u>1</u>			<u>X</u>				<u>X</u>		<u>7-7-14</u>	<u>12:00</u>	<u>X</u>	<u>X</u>	<u>X</u>								
	<u>4 Point 3 @ surface</u>	<u>G</u>	<u>1</u>			<u>X</u>				<u>X</u>		<u>7-7-14</u>	<u>12:05</u>	<u>X</u>	<u>X</u>	<u>X</u>								
	<u>5 Point 3 @ 3.5'</u>	<u>G</u>	<u>1</u>			<u>X</u>				<u>X</u>		<u>7-9-14</u>	<u>12:30</u>	<u>X</u>	<u>X</u>	<u>X</u>								
	<u>6 Point 4 @ surface</u>	<u>G</u>	<u>1</u>			<u>X</u>				<u>X</u>		<u>7-7-14</u>	<u>12:15</u>	<u>X</u>	<u>X</u>	<u>X</u>								
	<u>7 Point 4 @ 4'</u>	<u>G</u>	<u>1</u>			<u>X</u>				<u>X</u>		<u>7-7-14</u>	<u>12:20</u>	<u>X</u>	<u>X</u>	<u>X</u>								
	<u>8 Point 5 @ surface</u>	<u>G</u>	<u>1</u>			<u>X</u>				<u>X</u>		<u>7-7-14</u>	<u>12:25</u>	<u>X</u>	<u>X</u>	<u>X</u>								
	<u>9 Point 5 @ 6"</u>	<u>G</u>	<u>1</u>			<u>X</u>				<u>X</u>		<u>7-7-14</u>	<u>12:40</u>	<u>X</u>	<u>X</u>	<u>X</u>								

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Relinquished By: <u>Kyle Schmidt</u>	Date: <u>7-9-14</u> Time: <u>4:30</u>	Received By: <u>Wendi Henson</u>	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Date:	Received By:	Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Sample Condition Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No	REMARKS: email: hconder@riceswd.com; lflores@rice-ecs.com; lweinheimer@rice-ecs.com; knorman@rice-ecs.com; jkamplain@rice-ecs.com; sedwards@rice-ecs.com; cursanic@rice-ecs.com Environmental Tech: <u>K Schmidt</u> @rice-ecs.com	
CHECKED BY: (Initials) <u>KS</u>				

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#54

Appendix C

Photo Documentation

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

Burnett Oil Gissler A 19

Unit Letter J, Section 14, T17S, R30E



Initial release area, facing northwest

7/7/14



Initial release area, facing northeast

7/7/14



Initial release area, facing southeast

7/7/14



Hand augur for depth, facing north

7/9/14