



## **LINN ENERGY**

2130 W. Bender Blvd.  
Hobbs, NM 88241  
Phone 575.738.1739

**Max Friess #1**  
(2RP-960)

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# Termination Request

API No. 3001505459

Release Date: November 15<sup>th</sup>, 2011

Unit Letter B, Section 30, Township 17S, Range 31E

**July 30<sup>th</sup>, 2014**

**Mike Bratcher**

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

**RE: Termination Request  
Linn Energy – Linn Max Friess #1 (2RP-960)  
UL/B sec. 30 T17S R31E  
API No. 3001505459**

Mr. Bratcher:

Linn Energy (Linn) 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 4.3 miles east of Loco Hills, New Mexico at UL/B sec. 30 T17S R31E. This site is in an area of no known groundwater.

On November 15<sup>th</sup>, 2011, Linn discovered a release of produced water and oil. A 500 barrel was tied to the well head to flow back for an acid job. The well flowed steady for 5 hours and then the well kicked off, shunting the fluid to the overflow tank. The tank overflowed releasing 2 barrels of produced water and 8 barrels of oil. A total of 10,756 square feet of lease pad and pasture land was affected by the release. Vacuum trucks were called to the site and recovered ½ barrel of produced water and 1 barrel of oil. NMOCD and BLM were notified of the release on November 16<sup>th</sup>, 2011 and an initial C-141 was submitted to NMOCD for their approval (Appendix A).

RECS personnel were on site beginning on February 6<sup>th</sup>, 2014 to assess the site. Five points throughout the release were sampled at the surface and with depth (Figure 1). Representative samples were taken to a commercial laboratory for analysis (Appendix B). Point 1 returned laboratory results below regulatory standards at the surface. Point 2 was sampled to a depth of 1 ft bgs and all samples returned laboratory results below regulatory standards. Point 3 was installed to a depth of 3 ft bgs. Field data showed results below regulatory standards and 1.5 ft bgs and laboratory data showed results below regulatory standards at 2.5 ft bgs. Point 4 was installed to the depth of 6 inches and both the surface sample and the 6 inch sample showed laboratory results below regulatory standards. Point 5 was installed to a depth of 2 ft bgs and all laboratory samples showed results below regulatory standards.

Based on the laboratory data, a Corrective Action Plan (CAP) was submitted to NMOCD and BLM on April 21<sup>st</sup>, 2014. BLM approved the CAP on April 28<sup>th</sup>, 2014 and NMOCD approved the CAP on April 29<sup>th</sup>, 2014. The CAP recommended that the area around Point 3 would be scraped to overall dimensions of 91 ft x 73 ft to a depth of 1.5 ft (Figure 2). In addition, all caliche from the lease pad would be scraped off the lease pad to prepare the site for reclamation. All scraped soils would be evaluated for use as backfill or for reclamation activities. Any soils that could not meet regulatory standards would be disposed of at a NMOCD approved facility. Once the 91 ft x 73 ft scrape was completed, a 5 point bottom composite would be taken and submitted to a commercial laboratory to verify that all constituents were below regulatory standards. Soil would be imported to the site and blended with the remaining scraped soils. A sample of the blended soils would be taken to a commercial laboratory to confirm that constituents were below regulatory standards. The blended top soil would be used to backfill the entire site to ground surface and contour the site to the surrounding area. The blended caliche would be used to place berms around the site to impede soil erosion and vehicular traffic. Soil amendments would be added to the top soil as needed and the site would be seeded with a blend of native vegetation.

Corrective actions began at the site on April 28<sup>th</sup>, 2014. The site was excavated to a depth of 1.5 ft bgs as approved in the CAP (Figure 3). A total of 512 cubic yards of contaminated soil was taken to a NMOCD approved facility for disposal. At the base of the 1.5 ft excavation, a 5 point bottom composite sample was taken and sent to a commercial laboratory for analysis (Appendix C). The 5 point composite returned a laboratory chloride value of 800 mg/kg and GRO, DRO and BTEX results of non-detect. The caliche on the pad was scraped up as part of the reclamation activities.

A request to backfill the site was sent to NMOCD and BLM on May 5<sup>th</sup>, 2014. BLM approved the site to be backfilled on May 6<sup>th</sup>, 2014, and NMOCD approved the site to be backfilled on May 7<sup>th</sup>, 2014. A total of 24 cubic yards of caliche and 552 cubic yards of top soil were imported to the site. The imported caliche was blended with the scraped caliche. Composite samples of the imported top soil and the blended caliche were taken to a commercial laboratory for analysis. The imported top soil returned a laboratory chloride reading of non-detect. The blended caliche returned a laboratory chloride reading of 160 mg/kg and GRO, DRO and BTEX results of non-detect. The scraped areas and excavated areas were backfilled with the imported top soil and contoured to the surrounding location. The blended caliche was used to create berms along the lease road to inhibit vehicular traffic and provide erosion controls. On May 13<sup>th</sup>, 2014, the site was seeded with LPC mix.

Photo documentation of all the activities can be found in Appendix D.

Given that Linn has completed all activities as stated in the approved CAP, Linn respectfully request 'remediation termination' and site closure. And final C-141 can be found in Appendix E.

The reclamation activities at the site have been completed per guidelines and a Re-vegetation form will be found in Appendix F.

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 "L.W.", followed by a long, horizontal flourish.

Lara Weinheimer  
Project Scientist  
RECS  
(575) 441-0431

Attachments:

- Figure 1 – Initial Sampling Data
- Figure 2 – Proposed Corrective Action
- Figure 3 – Excavation
- Appendix A – Initial C-141
- Appendix B – Initial Sampling Labs
- Appendix C – Final Sampling Labs
- Appendix D – Photo Documentation
- Appendix E – Final C-141
- Appendix F – Re-Vegetation Form

# Figures

# Initial Sampling Data

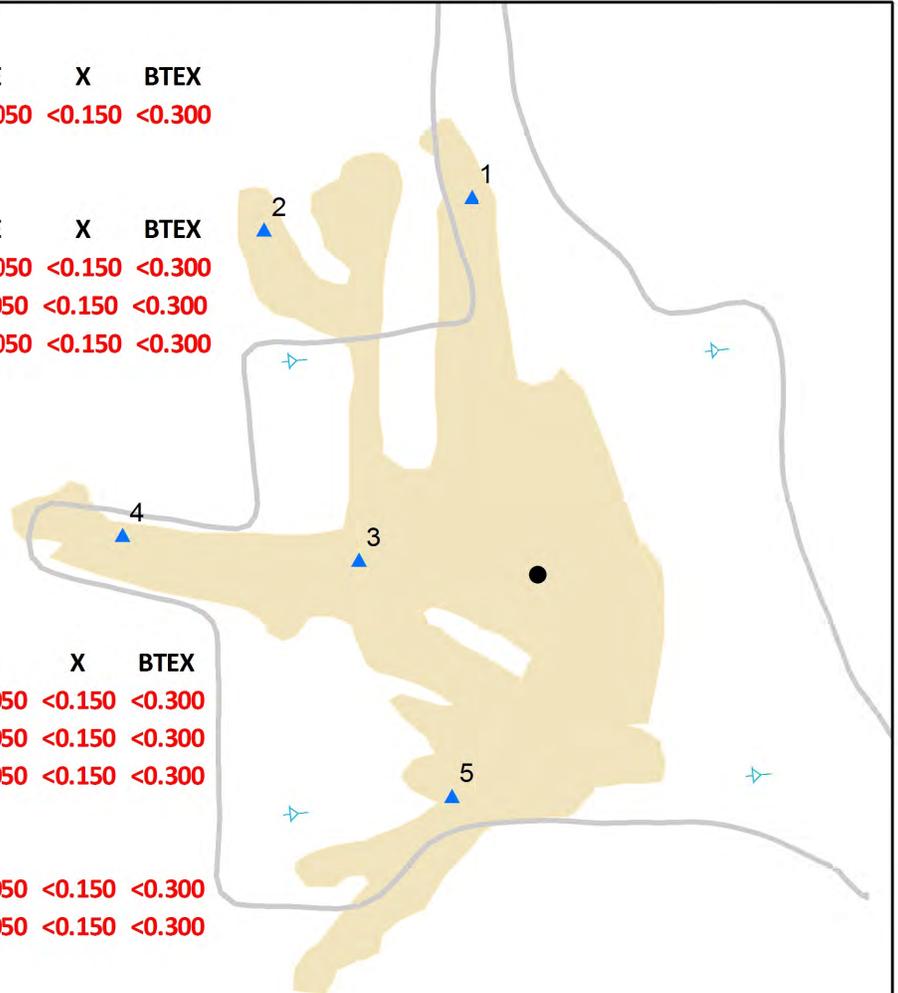
Point 1									
	CI-	PID	GRO	DRO	B	T	E	X	BTEX
SS	384	1.6	<10	<10	<0.050	<0.050	<0.050	<0.150	<0.300

Point 2									
	CI-	PID	GRO	DRO	B	T	E	X	BTEX
SS	208	3.5	<10	<10	<0.050	<0.050	<0.050	<0.150	<0.300
6"	144	4.4	<10	<10	<0.050	<0.050	<0.050	<0.150	<0.300
1'	880	29.1	<10	<10	<0.050	<0.050	<0.050	<0.150	<0.300

Point 3									
	CI-	PID	GRO	DRO	B	T	E	X	BTEX
SS	3440	39.4	<10	<10	<0.050	<0.050	<0.050	<0.150	<0.300
6"	3000	31.6	<10	27.5	<0.050	<0.050	<0.050	<0.150	<0.300
1'	1880	77	<10	32.8	<0.050	<0.050	<0.050	<0.150	<0.300
1.5'	845	0.6							
2'	526	0.6							
2.5'	320	0.6	<10	<10	<0.050	<0.050	<0.050	<0.150	<0.300
3'	272	0.3	<10	57	<0.050	<0.050	<0.050	<0.150	<0.300

Point 4									
	CI-	PID	GRO	DRO	B	T	E	X	BTEX
SS	256	0.2	<10	<10	<0.050	<0.050	<0.050	<0.150	<0.300
6"	96	0.1	<10	35.6	<0.050	<0.050	<0.050	<0.150	<0.300

Point 5									
	CI-	PID	GRO	DRO	B	T	E	X	BTEX
SS	256	28.3	<10	<10	<0.050	<0.050	<0.050	<0.150	<0.300
6"	428	23.9							
1'	912	60.7	<10	<10	<0.050	<0.050	<0.050	<0.150	<0.300
1.5'	874	6.3							
2'	176	2.7	<10	<10	<0.050	<0.050	<0.050	<0.150	<0.300



## Legend

- DEADMAN
- SAMPLE POINT
- WELL HEAD
- CURRENT PAD
- RELEASE (10,756 SQ FT)

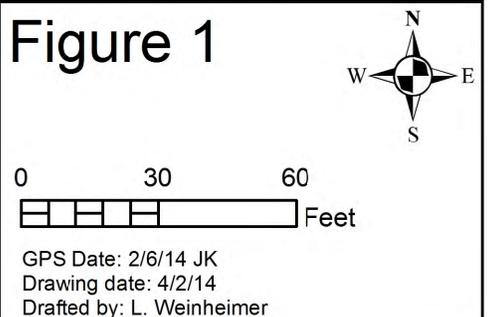
Landowner: BLM  
DGW: None

CI- FIELD DATA  
CI- LAB DATA

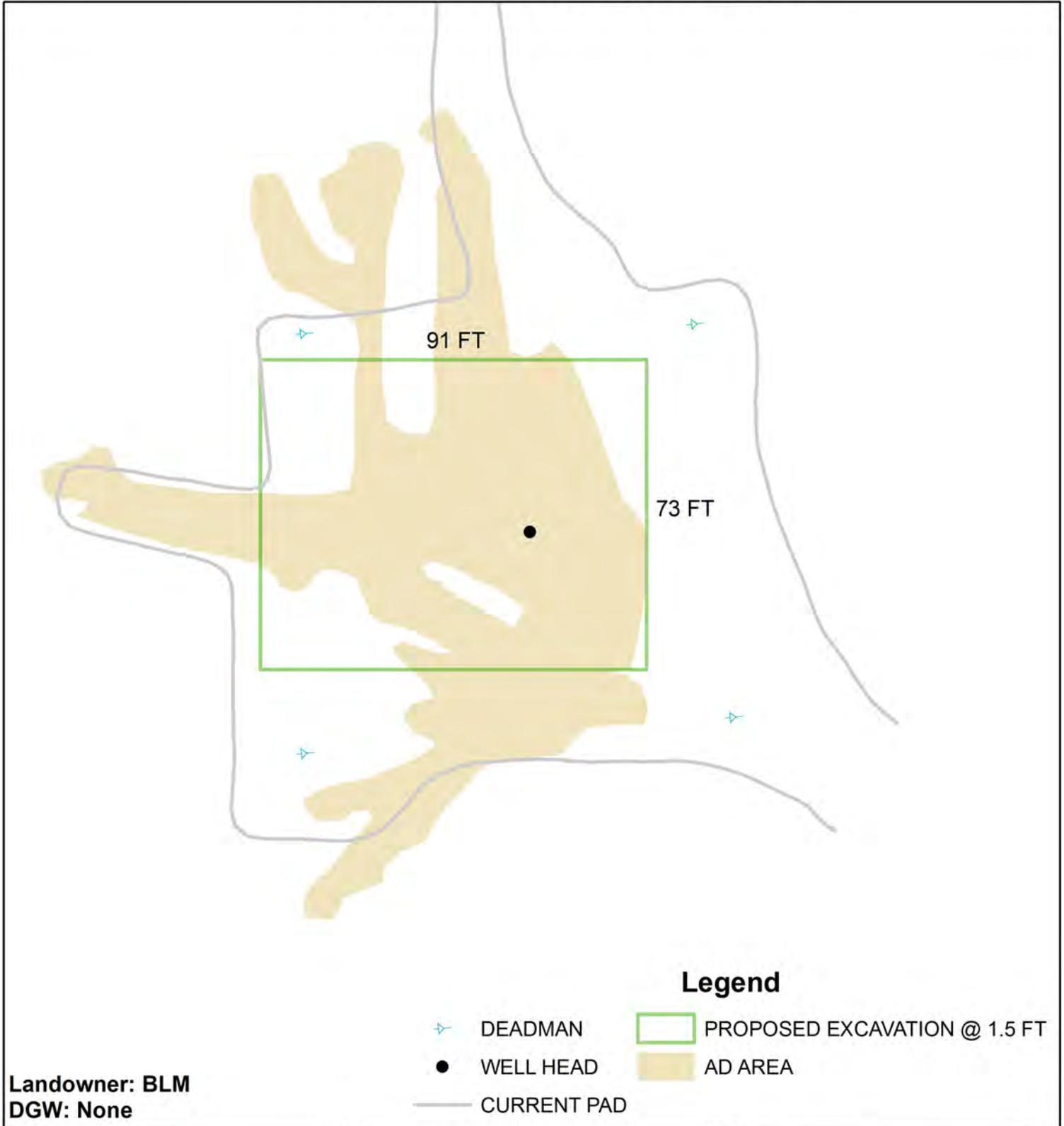


**LINN MAX  
FRIESS #1**  
Legals: UL/B sec. 30  
T-17-S R-31-E  
EDDY COUNTY, NM  
API. No. 3001505459  
NMOCD Case # 2RP-960

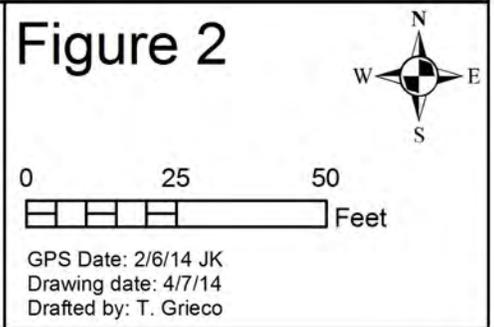
Figure 1



# Proposed Corrective Action

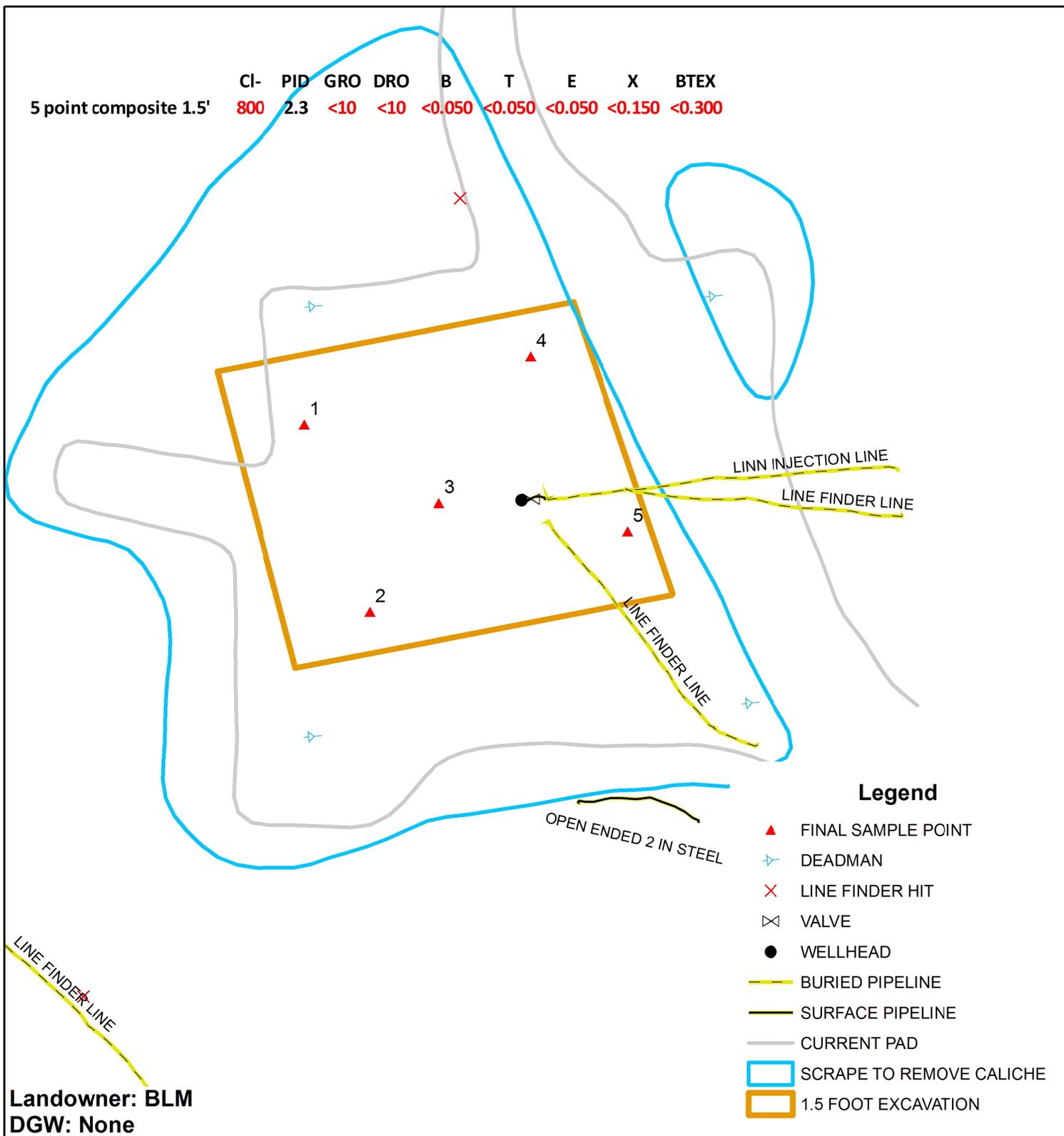


**LINN MAX  
FRIESS #1**  
Legals: UL/B sec. 30  
T-17-S R-31-E  
EDDY COUNTY, NM  
API. No. 3001505459  
NMOCD Case # 2RP-960



# Excavation

5 point composite 1.5' **Cl- 800 PID 2.3 GRO <10 DRO <10 B <0.050 T <0.050 E <0.050 X <0.150 BTEX <0.300**

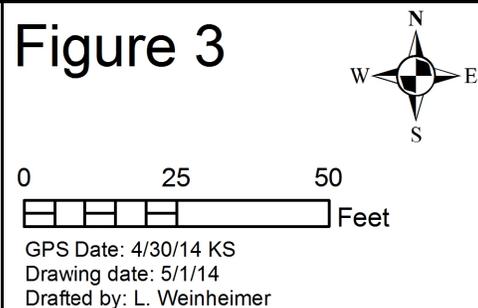


Landowner: BLM  
DGW: None



**LINN MAX  
FRIESS #1**  
Legals: UL/B sec. 30  
T-17-S R-31-E  
EDDY COUNTY, NM  
API. No. 3001505459  
NMOCD Case # 2RP-960

Figure 3



# 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  
1301 W. Grand Avenue, 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

**RECEIVED**  
NOV 18 2011  
**NMOCD ARTESIA**

Form C-141  
Revised October 10, 2003  
Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC

**Release Notification and Corrective Action**

NMLB/133634980 OPERATOR  Initial Report  Final Report

Name of Company: Linn Operating <u>269324</u>	Contact: Joe Hernandez
Address: 2130 W. Bender Hobbs, NM 88240	Telephone No.: 575-738-1739
Facility Name: Max Friess # 1	Facility Type: Injection well

Surface Owner: BLM	Mineral Owner: BLM	API No.: 3001505459
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**LOCATION OF RELEASE**

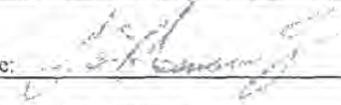
Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	30	17S	31E	660	N	1980	E	Eddy

Latitude: 32° 48' 39.1" Longitude: -103° 54' 24.6"

**NATURE OF RELEASE**

Type of Release: Produced Water / Oil	Volume of Release: 2 / 8	Volume Recovered: 0.5 / 1
Source of Release: Tank	Date and Hour of Occurrence: 11/15/2011 4:54pm	Date and Hour of Discovery: 11/15/2011 5:15pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? M. Bratcher- NM OCD / T. Gregston- BLM	
By Whom? Joe Hernandez	Date and Hour 11/16/2011 10:00am	
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.*: Tied 500bbl flow back to well head to flow back for acid job, well flowed at steady for 5hr and well kicked off overflowed tank oil/produced water came out top. Flow direction SW off location, N NW, on location and then off NW location. Contractor drove up to location as tank started to run over, and shut well in. Called vac truck.		
Describe Area Affected and Cleanup Action Taken.*: M & R Trucking recovered 1.5 bbl further remedial action pending.		

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: Joe Hernandez	Signed By <u>Mike Bratcher</u> Approved by District Supervisor:	
Title: Production Foreman	DEC 02 2011	Expiration Date:
E-mail Address: jhernandez@linenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 11/18/2011 Phone: 575-942-9492	Remediation per OCD Rules & Guidelines. <b>SUBMIT REMEDIATION PROPOSAL NOT LATER THAN:</b>	

\* Attach Additional Sheets If Necessary

**1/2/2012**

2RP-960

# Appendix B

## Initial Sampling Labs

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



February 21, 2014

JACOB KAMPLAIN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: MAX FRIESS MA #1

Enclosed are the results of analyses for samples received by the laboratory on 02/14/14 12:05.

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

Received:	02/14/2014	Sampling Date:	02/12/2014
Reported:	02/21/2014	Sampling Type:	Soil
Project Name:	MAX FRIESS MA #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 1 @ SURFACE (H400449-01)**

BTEX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2014	ND	2.46	123	2.00	2.42		
Toluene*	<0.050	0.050	02/20/2014	ND	2.17	108	2.00	2.14		
Ethylbenzene*	<0.050	0.050	02/20/2014	ND	2.18	109	2.00	3.74		
Total Xylenes*	<0.150	0.150	02/20/2014	ND	6.35	106	6.00	3.42		
Total BTEX	<0.300	0.300	02/20/2014	ND						

Surrogate: Dibromofluoromethane 104 % 61.3-142

Surrogate: Toluene-d8 97.0 % 71.3-129

Surrogate: 4-Bromofluorobenzene 105 % 65.7-141

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>384</b>	16.0	02/18/2014	ND	400	100	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	02/17/2014	ND	192	96.0	200	7.22		
DRO >C10-C28	<10.0	10.0	02/17/2014	ND	187	93.7	200	11.7		

Surrogate: 1-Chlorooctane 89.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 92.5 % 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  
 JACOB KAMPLAIN  
 419 W. CAIN  
 HOBBS NM, 88240  
 Fax To: (575) 397-1471

Received:	02/14/2014	Sampling Date:	02/12/2014
Reported:	02/21/2014	Sampling Type:	Soil
Project Name:	MAX FRIESS MA #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 2 @ SURFACE (H400449-02)**

BTEX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2014	ND	2.46	123	2.00	2.42		
Toluene*	<0.050	0.050	02/20/2014	ND	2.17	108	2.00	2.14		
Ethylbenzene*	<0.050	0.050	02/20/2014	ND	2.18	109	2.00	3.74		
Total Xylenes*	<0.150	0.150	02/20/2014	ND	6.35	106	6.00	3.42		
Total BTEX	<0.300	0.300	02/20/2014	ND						

Surrogate: Dibromofluoromethane 101 % 61.3-142

Surrogate: Toluene-d8 97.6 % 71.3-129

Surrogate: 4-Bromofluorobenzene 107 % 65.7-141

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>208</b>	16.0	02/18/2014	ND	400	100	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	02/17/2014	ND	192	96.0	200	7.22		
DRO >C10-C28	<10.0	10.0	02/17/2014	ND	187	93.7	200	11.7		

Surrogate: 1-Chlorooctane 111 % 65.2-140

Surrogate: 1-Chlorooctadecane 115 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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 Fax To: (575) 397-1471

Received:	02/14/2014	Sampling Date:	02/12/2014
Reported:	02/21/2014	Sampling Type:	Soil
Project Name:	MAX FRIESS MA #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 2 @ 6" (H400449-03)**

BTEX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2014	ND	2.46	123	2.00	2.42		
Toluene*	<0.050	0.050	02/20/2014	ND	2.17	108	2.00	2.14		
Ethylbenzene*	<0.050	0.050	02/20/2014	ND	2.18	109	2.00	3.74		
Total Xylenes*	<0.150	0.150	02/20/2014	ND	6.35	106	6.00	3.42		
Total BTEX	<0.300	0.300	02/20/2014	ND						

Surrogate: Dibromofluoromethane 106 % 61.3-142

Surrogate: Toluene-d8 95.6 % 71.3-129

Surrogate: 4-Bromofluorobenzene 103 % 65.7-141

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>144</b>	16.0	02/18/2014	ND	400	100	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	02/17/2014	ND	192	96.0	200	7.22		
DRO >C10-C28	<10.0	10.0	02/17/2014	ND	187	93.7	200	11.7		

Surrogate: 1-Chlorooctane 108 % 65.2-140

Surrogate: 1-Chlorooctadecane 117 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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Received:	02/14/2014	Sampling Date:	02/12/2014
Reported:	02/21/2014	Sampling Type:	Soil
Project Name:	MAX FRIESS MA #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 2 @ 1' (H400449-04)**

BTEX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2014	ND	2.46	123	2.00	2.42		
Toluene*	<0.050	0.050	02/20/2014	ND	2.17	108	2.00	2.14		
Ethylbenzene*	<0.050	0.050	02/20/2014	ND	2.18	109	2.00	3.74		
Total Xylenes*	<0.150	0.150	02/20/2014	ND	6.35	106	6.00	3.42		
Total BTEX	<0.300	0.300	02/20/2014	ND						

Surrogate: Dibromofluoromethane 102 % 61.3-142

Surrogate: Toluene-d8 94.4 % 71.3-129

Surrogate: 4-Bromofluorobenzene 100 % 65.7-141

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>880</b>	16.0	02/18/2014	ND	400	100	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	02/17/2014	ND	192	96.0	200	7.22		
DRO >C10-C28	<10.0	10.0	02/17/2014	ND	187	93.7	200	11.7		

Surrogate: 1-Chlorooctane 101 % 65.2-140

Surrogate: 1-Chlorooctadecane 103 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	02/14/2014	Sampling Date:	02/12/2014
Reported:	02/21/2014	Sampling Type:	Soil
Project Name:	MAX FRIESS MA #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 3 @ SURFACE (H400449-05)**

BTEX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2014	ND	2.46	123	2.00	2.42		
Toluene*	<0.050	0.050	02/20/2014	ND	2.17	108	2.00	2.14		
Ethylbenzene*	<0.050	0.050	02/20/2014	ND	2.18	109	2.00	3.74		
Total Xylenes*	<0.150	0.150	02/20/2014	ND	6.35	106	6.00	3.42		
Total BTEX	<0.300	0.300	02/20/2014	ND						

Surrogate: Dibromofluoromethane 105 % 61.3-142

Surrogate: Toluene-d8 96.3 % 71.3-129

Surrogate: 4-Bromofluorobenzene 104 % 65.7-141

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>3440</b>	16.0	02/18/2014	ND	400	100	400	0.00		

TPH 8015M		mg/kg		Analyzed By: ms							S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10	<10.0	10.0	02/17/2014	ND	192	96.0	200	7.22			
<b>DRO &gt;C10-C28</b>	<b>6720</b>	10.0	02/17/2014	ND	187	93.7	200	11.7			

Surrogate: 1-Chlorooctane 107 % 65.2-140

Surrogate: 1-Chlorooctadecane 222 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

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

Received:	02/14/2014	Sampling Date:	02/12/2014
Reported:	02/21/2014	Sampling Type:	Soil
Project Name:	MAX FRIESS MA #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 3 @ 6" (H400449-06)**

BTEX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2014	ND	2.46	123	2.00	2.42		
Toluene*	<0.050	0.050	02/20/2014	ND	2.17	108	2.00	2.14		
Ethylbenzene*	<0.050	0.050	02/20/2014	ND	2.18	109	2.00	3.74		
Total Xylenes*	<0.150	0.150	02/20/2014	ND	6.35	106	6.00	3.42		
Total BTEX	<0.300	0.300	02/20/2014	ND						

Surrogate: Dibromofluoromethane 104 % 61.3-142

Surrogate: Toluene-d8 93.9 % 71.3-129

Surrogate: 4-Bromofluorobenzene 105 % 65.7-141

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>3000</b>	16.0	02/18/2014	ND	400	100	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	02/18/2014	ND	192	96.0	200	7.22		
<b>DRO &gt;C10-C28</b>	<b>27.5</b>	10.0	02/18/2014	ND	187	93.7	200	11.7		

Surrogate: 1-Chlorooctane 102 % 65.2-140

Surrogate: 1-Chlorooctadecane 111 % 63.6-154

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**Analytical Results For:**

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

Received:	02/14/2014	Sampling Date:	02/12/2014
Reported:	02/21/2014	Sampling Type:	Soil
Project Name:	MAX FRIESS MA #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 3 @ 1' (H400449-07)**

BTEX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2014	ND	2.46	123	2.00	2.42		
Toluene*	<0.050	0.050	02/20/2014	ND	2.17	108	2.00	2.14		
Ethylbenzene*	<0.050	0.050	02/20/2014	ND	2.18	109	2.00	3.74		
Total Xylenes*	<0.150	0.150	02/20/2014	ND	6.35	106	6.00	3.42		
Total BTEX	<0.300	0.300	02/20/2014	ND						

Surrogate: Dibromofluoromethane 110 % 61.3-142

Surrogate: Toluene-d8 96.4 % 71.3-129

Surrogate: 4-Bromofluorobenzene 101 % 65.7-141

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>1880</b>	16.0	02/18/2014	ND	400	100	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	02/18/2014	ND	192	96.0	200	7.22		
<b>DRO &gt;C10-C28</b>	<b>32.8</b>	10.0	02/18/2014	ND	187	93.7	200	11.7		

Surrogate: 1-Chlorooctane 113 % 65.2-140

Surrogate: 1-Chlorooctadecane 127 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 02/14/2014  
 Reported: 02/21/2014  
 Project Name: MAX FRIESS MA #1  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 02/12/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: PT. 4 @ SURFACE (H400449-08)**

BTEX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2014	ND	2.46	123	2.00	2.42		
Toluene*	<0.050	0.050	02/20/2014	ND	2.17	108	2.00	2.14		
Ethylbenzene*	<0.050	0.050	02/20/2014	ND	2.18	109	2.00	3.74		
Total Xylenes*	<0.150	0.150	02/20/2014	ND	6.35	106	6.00	3.42		
Total BTEX	<0.300	0.300	02/20/2014	ND						

Surrogate: Dibromofluoromethane 101 % 61.3-142  
 Surrogate: Toluene-d8 94.6 % 71.3-129  
 Surrogate: 4-Bromofluorobenzene 101 % 65.7-141

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>16.0</b>	16.0	02/18/2014	ND	400	100	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	02/18/2014	ND	192	96.0	200	7.22		
DRO >C10-C28	<10.0	10.0	02/18/2014	ND	187	93.7	200	11.7		

Surrogate: 1-Chlorooctane 103 % 65.2-140  
 Surrogate: 1-Chlorooctadecane 106 % 63.6-154

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**Analytical Results For:**

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

 Received: 02/14/2014  
 Reported: 02/21/2014  
 Project Name: MAX FRIESS MA #1  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 02/12/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: PT. 4 @ 6" (H400449-09)**

BTEX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2014	ND	2.46	123	2.00	2.42		
Toluene*	<0.050	0.050	02/20/2014	ND	2.17	108	2.00	2.14		
Ethylbenzene*	<0.050	0.050	02/20/2014	ND	2.18	109	2.00	3.74		
Total Xylenes*	<0.150	0.150	02/20/2014	ND	6.35	106	6.00	3.42		
Total BTEX	<0.300	0.300	02/20/2014	ND						

Surrogate: Dibromofluoromethane 100 % 61.3-142

Surrogate: Toluene-d8 95.5 % 71.3-129

Surrogate: 4-Bromofluorobenzene 104 % 65.7-141

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	02/18/2014	ND	400	100	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	02/18/2014	ND	192	96.0	200	7.22		
DRO >C10-C28	<10.0	10.0	02/18/2014	ND	187	93.7	200	11.7		

Surrogate: 1-Chlorooctane 104 % 65.2-140

Surrogate: 1-Chlorooctadecane 111 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 02/14/2014  
 Reported: 02/21/2014  
 Project Name: MAX FRIESS MA #1  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 02/12/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: PT. 5 @ SURFACE (H400449-10)**

BTEX 8260B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/20/2014	ND	2.46	123	2.00	2.42	
Toluene*	<0.050	0.050	02/20/2014	ND	2.17	108	2.00	2.14	
Ethylbenzene*	<0.050	0.050	02/20/2014	ND	2.18	109	2.00	3.74	
Total Xylenes*	<0.150	0.150	02/20/2014	ND	6.35	106	6.00	3.42	
Total BTEX	<0.300	0.300	02/20/2014	ND					

Surrogate: Dibromofluoromethane 108 % 61.3-142

Surrogate: Toluene-d8 96.7 % 71.3-129

Surrogate: 4-Bromofluorobenzene 102 % 65.7-141

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>256</b>	16.0	02/18/2014	ND	400	100	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	02/18/2014	ND	192	96.0	200	7.22	
DRO >C10-C28	<10.0	10.0	02/18/2014	ND	187	93.7	200	11.7	

Surrogate: 1-Chlorooctane 107 % 65.2-140

Surrogate: 1-Chlorooctadecane 112 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

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

Received:	02/14/2014	Sampling Date:	02/12/2014
Reported:	02/21/2014	Sampling Type:	Soil
Project Name:	MAX FRIESS MA #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 5 @ 1' (H400449-11)**

BTEX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2014	ND	2.46	123	2.00	2.42		
Toluene*	<0.050	0.050	02/20/2014	ND	2.17	108	2.00	2.14		
Ethylbenzene*	<0.050	0.050	02/20/2014	ND	2.18	109	2.00	3.74		
Total Xylenes*	<0.150	0.150	02/20/2014	ND	6.35	106	6.00	3.42		
Total BTEX	<0.300	0.300	02/20/2014	ND						

Surrogate: Dibromofluoromethane 103 % 61.3-142

Surrogate: Toluene-d8 96.9 % 71.3-129

Surrogate: 4-Bromofluorobenzene 103 % 65.7-141

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>912</b>	16.0	02/18/2014	ND	400	100	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	02/18/2014	ND	192	96.0	200	7.22		
DRO >C10-C28	<10.0	10.0	02/18/2014	ND	187	93.7	200	11.7		

Surrogate: 1-Chlorooctane 112 % 65.2-140

Surrogate: 1-Chlorooctadecane 118 % 63.6-154

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

Received:	02/14/2014	Sampling Date:	02/12/2014
Reported:	02/21/2014	Sampling Type:	Soil
Project Name:	MAX FRIESS MA #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 5 @ 2' (H400449-12)**

BTEX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2014	ND	2.46	123	2.00	2.42		
Toluene*	<0.050	0.050	02/20/2014	ND	2.17	108	2.00	2.14		
Ethylbenzene*	<0.050	0.050	02/20/2014	ND	2.18	109	2.00	3.74		
Total Xylenes*	<0.150	0.150	02/20/2014	ND	6.35	106	6.00	3.42		
Total BTEX	<0.300	0.300	02/20/2014	ND						

Surrogate: Dibromofluoromethane 105 % 61.3-142

Surrogate: Toluene-d8 94.5 % 71.3-129

Surrogate: 4-Bromofluorobenzene 102 % 65.7-141

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	02/18/2014	ND	400	100	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	02/18/2014	ND	192	96.0	200	7.22		
DRO >C10-C28	<10.0	10.0	02/18/2014	ND	187	93.7	200	11.7		

Surrogate: 1-Chlorooctane 93.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 97.5 % 63.6-154

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

### Notes and Definitions

- 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







April 01, 2014

JACOB KAMPLAIN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: MAX FRIESS MA #1

Enclosed are the results of analyses for samples received by the laboratory on 03/25/14 15:55.

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 black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, flowing "C" and "K".

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	03/25/2014	Sampling Date:	03/25/2014
Reported:	04/01/2014	Sampling Type:	Soil
Project Name:	MAX FRIESS MA #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 3 VERTICAL 2.5' (H400889-01)**

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	03/31/2014	ND	2.48	124	2.00	12.9	
Toluene*	<0.050	0.050	03/31/2014	ND	2.36	118	2.00	12.8	
Ethylbenzene*	<0.050	0.050	03/31/2014	ND	2.32	116	2.00	13.3	
Total Xylenes*	<0.150	0.150	03/31/2014	ND	6.70	112	6.00	12.8	
Total BTEX	<0.300	0.300	03/31/2014	ND					

*Surrogate: 4-Bromofluorobenzene (PID) 109 % 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>320</b>	16.0	03/28/2014	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	03/28/2014	ND	215	108	200	6.62	
DRO >C10-C28	<10.0	10.0	03/28/2014	ND	196	98.2	200	1.52	

*Surrogate: 1-Chlorooctane 67.6 % 65.2-140*
*Surrogate: 1-Chlorooctadecane 71.3 % 63.6-154*

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	03/25/2014	Sampling Date:	03/25/2014
Reported:	04/01/2014	Sampling Type:	Soil
Project Name:	MAX FRIESS MA #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 3 VERTICAL 3' (H400889-02)**

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	04/01/2014	ND	2.48	124	2.00	12.9		
Toluene*	<0.050	0.050	04/01/2014	ND	2.36	118	2.00	12.8		
Ethylbenzene*	<0.050	0.050	04/01/2014	ND	2.32	116	2.00	13.3		
Total Xylenes*	<0.150	0.150	04/01/2014	ND	6.70	112	6.00	12.8		
Total BTEX	<0.300	0.300	04/01/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 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>272</b>	16.0	03/28/2014	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	03/28/2014	ND	215	108	200	6.62		
<b>DRO &gt;C10-C28</b>	<b>57.0</b>	10.0	03/28/2014	ND	196	98.2	200	1.52		

Surrogate: 1-Chlorooctane 93.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 104 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	03/25/2014	Sampling Date:	03/25/2014
Reported:	04/01/2014	Sampling Type:	Soil
Project Name:	MAX FRIESS MA #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 4 VERTICAL SURFACE (H400889-03)**

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	04/01/2014	ND	2.48	124	2.00	12.9		
Toluene*	<0.050	0.050	04/01/2014	ND	2.36	118	2.00	12.8		
Ethylbenzene*	<0.050	0.050	04/01/2014	ND	2.32	116	2.00	13.3		
Total Xylenes*	<0.150	0.150	04/01/2014	ND	6.70	112	6.00	12.8		
Total BTEX	<0.300	0.300	04/01/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 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	256	16.0	03/31/2014	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	03/28/2014	ND	215	108	200	6.62		
DRO >C10-C28	<10.0	10.0	03/28/2014	ND	196	98.2	200	1.52		

Surrogate: 1-Chlorooctane 85.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 89.3 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	03/25/2014	Sampling Date:	03/25/2014
Reported:	04/01/2014	Sampling Type:	Soil
Project Name:	MAX FRIESS MA #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 4 VERTICAL 6" (H400889-04)**

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	04/01/2014	ND	2.48	124	2.00	12.9	
Toluene*	<0.050	0.050	04/01/2014	ND	2.36	118	2.00	12.8	
Ethylbenzene*	<0.050	0.050	04/01/2014	ND	2.32	116	2.00	13.3	
Total Xylenes*	<0.150	0.150	04/01/2014	ND	6.70	112	6.00	12.8	
Total BTEX	<0.300	0.300	04/01/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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>96.0</b>	16.0	03/31/2014	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	03/28/2014	ND	215	108	200	6.62	
<b>DRO &gt;C10-C28</b>	<b>35.6</b>	10.0	03/28/2014	ND	196	98.2	200	1.52	

Surrogate: 1-Chlorooctane 94.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 95.0 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

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

## Final Sampling Labs

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



May 01, 2014

JACOB KAMPLAIN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: MAX FRIESS MA #1

Enclosed are the results of analyses for samples received by the laboratory on 04/30/14 16:20.

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

Received:	04/30/2014	Sampling Date:	04/30/2014
Reported:	05/01/2014	Sampling Type:	Soil
Project Name:	MAX FRIESS MA #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: 5 PT COMP 1.5' EXC (H401308-01)**

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	05/01/2014	ND	2.03	102	2.00	1.90	
Toluene*	<0.050	0.050	05/01/2014	ND	2.03	102	2.00	2.53	
Ethylbenzene*	<0.050	0.050	05/01/2014	ND	2.01	101	2.00	3.40	
Total Xylenes*	<0.150	0.150	05/01/2014	ND	6.14	102	6.00	5.05	
Total BTEX	<0.300	0.300	05/01/2014	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
<b>Chloride</b>	<b>800</b>	16.0	05/01/2014	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	05/01/2014	ND	184	92.1	200	3.15	
DRO >C10-C28	<10.0	10.0	05/01/2014	ND	203	101	200	3.24	

*Surrogate: 1-Chlorooctane 98.2 % 65.2-140*
*Surrogate: 1-Chlorooctadecane 91.3 % 63.6-154*

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

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



# ARDINAL 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

RUSH X

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: RECS			<b>BILL TO</b>			Chlorides TPH 8015 M BTEX Texas TPH Complete Cations/Anions TDS														
Project Manager: Jacob Kamplain <i>Lara Flores</i>			P.O. #:																	
Address:			Company:																	
City: Hobbs State: NM Zip: 88240			Attn:																	
Phone #: Fax #:			Address:																	
Project #: Project Owner:			City:																	
Project Name:			State: Zip:																	
Project Location: <i>Max Finess MA #1</i>			Phone #:																	
Sampler Name: Kyle Schnaidt			Fax #:																	
FOR LAB USE ONLY			MATRIX				PRESERV.			SAMPLING										
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME						
<i>H401308</i>	<i>1 5 point composite 1.5' excavation</i>	<i>C1</i>		<i>X</i>							<i>X</i>		<i>4-30-14</i>	<i>2:00</i>	<i>X</i>	<i>X</i>	<i>X</i>			

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 the client for the 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 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <i>Kyle Schnaidt</i>	Date: <i>4-30-14</i> Time: <i>4:20</i>	Received By: <i>Jodi Benson</i>	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 Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: <i>[Signature]</i>	REMARKS: email results Knorman@rice-ecs.com <i>lflores@rice-ecs.com</i> Kjones@riceswd.com; jkamplain@rice-ecs.com hconder@rice-ecs.com; Lweinheimer@rice-ecs.com	

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

A54



June 11, 2014

JACOB KAMPLAIN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: MAX FRIESS MA #1

Enclosed are the results of analyses for samples received by the laboratory on 06/10/14 15:50.

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

Received:	06/10/2014	Sampling Date:	06/10/2014
Reported:	06/11/2014	Sampling Type:	Soil
Project Name:	MAX FRIESS MA #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: 5 PT. COMP IMPORT SOIL (H401767-01)**

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	06/11/2014	ND	416	104	400	3.77	

**Sample ID: 5 PT. COMP BLENDED CALICHE (H401767-02)**

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	06/11/2014	ND	2.00	99.9	2.00	2.96	
Toluene*	<0.050	0.050	06/11/2014	ND	2.15	107	2.00	3.33	
Ethylbenzene*	<0.050	0.050	06/11/2014	ND	1.92	96.2	2.00	3.37	
Total Xylenes*	<0.150	0.150	06/11/2014	ND	5.97	99.5	6.00	3.41	
Total BTEX	<0.300	0.300	06/11/2014	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
<b>Chloride</b>	<b>160</b>	16.0	06/11/2014	ND	416	104	400	3.77	

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	06/11/2014	ND	173	86.4	200	6.38	
DRO >C10-C28	<10.0	10.0	06/11/2014	ND	173	86.3	200	6.55	

Surrogate: 1-Chlorooctane 73.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 73.6 % 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**

- 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



# ARDINAL 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

RUSH !!

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <b>RECS</b>				<b>BILL TO</b>				ANALYSIS REQUEST							
Project Manager: Laura Flores, Jacob Kamplain				P.O. #:				Chlorides TPH 8015 M BTEX Texas TPH Complete Cations/Anions TDS							
Address:				Company:											
City: Hobbs State: NM Zip: 88240				Attn:											
Phone #: Fax #:				Address:											
Project #: Project Owner:				City:											
Project Name:				State: Zip:											
Project Location: Max Friess MA#1				Phone #: Fax #:											
Sampler Name: Kyle Schmidt				Date: Time:											
FOR LAB USE ONLY				DATE								TIME			
Lab I.D.	Sample I.D.	(G/RAB OR C/OMP. # CONTAINERS)	MATRIX	PRESERV.	DATE		TIME								
H401767	1 5 point composite impact soil	C1	SOIL	ACID/BASE: X	6-10-14	2:15			X						
	2 5 point composite blended caliche	C1	SOIL	ICE / COOL X	6-10-14	2:20			X	X	X				

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 the client for the 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 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Kyle Schmidt	Date: 6-10-14 Time: 3:50	Received By: Jodi Henson	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 Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initials) JH	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: @rice-ecs.com	

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

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# Appendix D

Photo Documentation

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

# Linn Max Friess #1

Unit Letter B, Section 30, T17S, R31E



Initial site photo, facing southeast 2/12/14



Hand auguring for depth, facing southwest 2/12/14



GPS mapping site, facing northeast 2/12/14



Line spot using a hydrovac, facing southwest 2/21/14



Installing verticals, facing southeast 3/25/14



Excavating site to 1.5 ft, facing northeast 4/28/14



Completed 1.5 ft excavation, facing southeast 4/29/14



Scraping caliche from the pad, facing southwest 4/29/14



Exporting soil, facing northeast

4/30/14



Conducting excavation around well head, facing northwest

5/1/14



Importing soil, facing south

5/2/14



Blending the caliche, facing southwest

5/5/14



Constructing berms, facing southwest 5/6/14



Backfilling the scrapes and excavation, facing north 5/7/14



Backfilling completed, facing northwest 5/13/14



Backfilling completed, facing southeast 5/13/14



Tilling site prior to seeding, facing north 5/13/14



Seeding site, facing west 5/13/14



Site completed, facing north 5/13/14



Site completed, facing west 5/13/14

# Appendix E

Final 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 Linn Operating	Contact Brian Wall
Address 2130 W. Bender, Hobbs, NM 88240	Telephone No. (806) 367-0645
Facility Name Max Friess #1	Facility Type Injection well

Surface Owner BLM	Mineral Owner BLM	API No. 3001505459
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	30	17S	31E	660	N	1980	E	Eddy

Latitude 32°48'39.1" Longitude -103°54'24.6"

**NATURE OF RELEASE**

Type of Release Produced Water/Oil	Volume of Release 2/8	Volume Recovered 0.5/1
Source of Release Tank	Date and Hour of Occurrence 11/15/2011 4:54pm	Date and Hour of Discovery 11/15/2011 5:15pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? M. Bratcher - NMOCD / T. Gregston - BLM	
By Whom? Joe Hernandez	Date and Hour 11/16/2011 10:00am	
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.\* Tied 500 bbl flow back to well head to flow back for acid job, well flowed at steady for 5hr and well kicked off overflowed tank oil/produced water came out top. Flow direction SW off location, N NW, on location and then off location. Contractor drove up to location as tank started to run over, and shut well in. Called vac truck.

Describe Area Affected and Cleanup Action Taken.\* A total of 10,756 square feet of lease pad and pasture land was affected by the release. RECS personnel were on site beginning on February 6<sup>th</sup>, 2014 to assess the site. Five points throughout the release were sampled at the surface and with depth. Representative samples were taken to a commercial laboratory for analysis. Based on the laboratory data, a Corrective Action Plan (CAP) was submitted to NMOCD and BLM on April 21<sup>st</sup>, 2014. BLM approved the CAP on April 28<sup>th</sup>, 2014 and NMOCD approved the CAP on April 29<sup>th</sup>, 2014. Corrective actions began at the site on April 28<sup>th</sup>, 2014. The site was excavated to a depth of 1.5 ft bgs as approved in the CAP. A total of 512 cubic yards of contaminated soil was taken to a NMOCD approved facility for disposal. At the base of the 1.5 ft excavation, a 5 point bottom composite sample was taken and sent to a commercial laboratory for analysis. The 5 point composite returned a laboratory chloride value of 800 mg/kg and GRO, DRO and BTEX results of non-detect. The caliche on the pad was scraped up as part of the reclamation activities. A request to backfill the site was sent to NMOCD and BLM on May 5<sup>th</sup>, 2014. BLM approved the site to be backfilled on May 6<sup>th</sup>, 2014, and NMOCD approved the site to be backfilled on May 7<sup>th</sup>, 2014. A total of 24 cubic yards of caliche and 552 cubic yards of top soil were imported to the site. The imported caliche was blended with the scraped caliche. Composite samples of the imported top soil and the blended caliche were taken to a commercial laboratory for analysis. The imported top soil returned a laboratory chloride reading of non-detect. The blended caliche returned a laboratory chloride reading of 160 mg/kg and GRO, DRO and BTEX results of non-detect. The scraped areas and excavated areas were backfilled with the imported top soil and contoured to the surrounding location. The blended caliche was used to create berms along the lease road to inhibit vehicular traffic and provide erosion controls. On May 13<sup>th</sup>, 2014, the site was seeded with LPC mix.

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>Fred B Wall</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Brian Wall	Approved by Environmental Specialist:	
Title: Construction Foreman II	Approval Date:	Expiration Date:
E-mail Address: Bwall@linenergy.com	Conditions of Approval:	
Date: 7/30/14	Phone: (806) 367-0645	Attached <input type="checkbox"/>

# Appendix F

## Re-Vegetation Form

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



PO Box 5630  
 Hobbs, NM 88241  
 Phone: (575) 393-4411  
 Fax: (575) 393-0293

## REVEGETATION FORM

### 1. General Information

Site name: Linn Energy Max Friess MA #1						
U/L B	Section 30	Township 17S	Range 31E	County Eddy	Latitude	Longitude
Contact Name: Jacob Kamplain						
Email: JKamplain@rice-ecs.com						
Site size: 16,500 square feet			Map detail of site attached <input type="checkbox"/>			
Additional information:						

### 2. Soils

*\*Do not rip caliche subsoils; caliche rocks brought to the surface by ripping shall be removed.*

Salvaged from site <input type="checkbox"/>	Bioremediated <input type="checkbox"/>	Imported <input checked="" type="checkbox"/>	Blended <input type="checkbox"/>	Depth (in):
Texture:		Describe soil & subsoil: Top Soil		
Soil prep methods: Rip <input type="checkbox"/>	Depth(in):	Disc <input checked="" type="checkbox"/>	Depth (in):	Rollerpack <input type="checkbox"/>
Date completed:				

### 3. Bioremediation

Fertilizer <input type="checkbox"/>	Hay <input type="checkbox"/>	Other <input type="checkbox"/>
Type:	Describe:	
Lbs/acre:		

### 4. Seeding

*\*Attach seed bag tags to this form. Seed bag tags shall contain the site name and S-T-R.*

Custom seed mix <input type="checkbox"/>	Prescribed mix <input checked="" type="checkbox"/>	Seed mix name: 25 LBS of LPC Mix	Seeding date: 5/13/14
Broadcast <input checked="" type="checkbox"/>			
Method: Seeder			
Soil conditions during seeding: Dry <input checked="" type="checkbox"/> Damp <input type="checkbox"/> Wet <input type="checkbox"/>			
Photos attached <input checked="" type="checkbox"/>		Observations:	
Number of photos:			

### 5. Certification

I hereby certify that the information in this form and attachments is true and complete to the best of my knowledge and belief.

Name: Jose Flores	Title: Gang Pusher	Date: 5/13/14
Signature: <i>Jose Flores</i>		