

LINN ENERGY

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

J.L. Keel A #28
2RP-2028

Corrective Action Plan

API No. 3001528231

Release Date: Discovered on June 27th, 2011

Unit Letter J, Section 7, Township 17S, Range 31E

Rice Environmental Consulting & Safety

P.O. Box 2948, Hobbs, NM 88241
Phone 575.393.2967

November 14th, 2013

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 (CAP)
Linn Energy – J.L. Keel A #28 (2RP-2028)
UL/J sec. 7 T17S R31E
API No. 3001528231**

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 4.7 miles northeast of Loco Hills, New Mexico at UL/J sec. 7 T17S R31E. This site is in an area of no known groundwater.

While BLM was inspecting another site in the area on June 27th, 2011, BLM discovered a flow line release to the J.L. Keel A #28 injection well. A total of 6,762 sq ft of pasture land was affected by the release. An initial C-141 was sent to NMOCD and BLM on October 28th, 2013 (Appendix A). NMOCD responded on October 29th, 2013 with the remediation permit number.

RECS personnel were on site beginning on October 25th, 2013 to assess the site. The release was sampled at the surface and at depth at six points throughout the release area (Figure 1). The samples were field tested for chlorides and hydrocarbons and representative samples were taken to a commercial laboratory for analysis (Appendix B). The release on the east side of the road was located over a former pit area. Laboratory chloride readings from the surface on the east side were above 250 mg/kg, except at Point 4 where the chloride reading was non-detect. Gasoline Range Organics (GRO) readings and BTEX readings from the surface samples on the east side were non-detect. Diesel Range Organics (DRO) readings at the surface on the east side were elevated, except for Point 4, but still below regulatory standards. Point 2 was augured to determine the depth of contamination. At 7 ft bgs, laboratory sampling showed a chloride value below 250 mg/kg and GRO, DRO and BTEX values of non-detect.

On the west side of the release road, laboratory analysis showed chloride, GRO, DRO and BTEX values of non-detect or near non-detect.

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

Corrective Action Plan

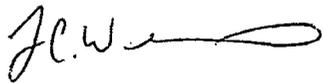
On November 1st, 2013, RECS met with BLM at the site. BLM recommended that the release on the east side of the lease road and the pit area be capped with 6 inches of caliche and then 2 ft of clean, imported top soil. The site would then be seeded with a blend of native vegetation. Vegetation provides an infiltration barrier for the site, since plants capture water through their roots thereby reducing the amount of water traveling through the vadose zone to groundwater.

The area to the west side of the lease road does not need to be addressed since sampling indicates no ecological detriment occurred to the area.

Once the CAP activities are completed, Linn will submit a report detailing the CAP activities and a request for 'remediation termination' or 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 'L.W.', followed by a long, horizontal flourish.

Lara Weinheimer
Project Scientist
RECS
(575) 441-0431

Attachments:

- Figure 1 – Initial Sampling Data
- Appendix A – Initial C-141
- Appendix B – Laboratory Analysis
- Appendix C – Photo Documentation

Figures

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

Initial Sampling Data

	CI-	PID	GRO	DRO	B	T	E	X	BTEX
Point 2 Surface	3080	388.3	<10	1700	<0.05	<0.05	<0.05	<0.15	<0.3
6"	1186	194.4							
1'	1125	185.1							
1.5'	1543	83.4							
2'	2221	49.9							
2.5'	2840	65.5	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
3'	2660	33.2							
3.5'	2171	65.7							
4'	1306	27.5							
4.5'	873	28.9							
5'	845	12.2							
5.5'	441	9.2							
6'	320	22.8	<10	22.7	<0.05	<0.05	<0.05	<0.15	<0.3
6.5'	239	35.5							
7'	160	3.9	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3

	CI-	PID	GRO	DRO	B	T	E	X	BTEX
Point 4 Surface	<16	585.2	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3

	CI-	PID	GRO	DRO	B	T	E	X	BTEX
Point 3 Surface	416	398.9	<50	600	<0.05	<0.05	<0.05	<0.15	<0.3

	CI-	PID	GRO	DRO	B	T	E	X	BTEX
Point 1 Surface	800	398.4	<10	919	<0.05	<0.05	<0.05	<0.15	<0.3

	CI-	PID	GRO	DRO	B	T	E	X	BTEX
Point 5 Surface	64	395.6	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3

	CI-	PID	GRO	DRO	B	T	E	X	BTEX
Point 6 Surface	<16	390.7	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3

CI- LAB DATA
CI- FIELD DATA

Legend

- ▲ SAMPLE POINT
- SURFACE PIPELINE
- STAIN

DGW: None

Landowner: BLM

Source: Esri, DigitalGlobe, GeoEye, Getmapping, Aerogrid, IGN, IGP,



Linn J.L. Keel
A #28

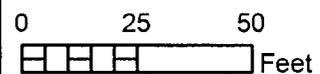
LEGALS: UL/J sec. 7

T-17-S R-31-E

EDDY COUNTY, NM

NMOCD Case #: 2RP-2028

Figure 1



GPS date: 10/25/13 KS
Drawing date: 11/4/13
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

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 Energy	Contact Brian Wall
Address 2130 W. Bender Blvd., Hobbs, NM 88240	Telephone No. (806) 367-0645
Facility Name J.L. Keel A #28	Facility Type Flow Line Release
Surface Owner BLM	Mineral Owner
API No. 3001528231	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	7	17S	31E	2196	FSL	2028	FEL	EDDY

Latitude 32°50'52.24"N Longitude 103°54'26.222"W

NATURE OF RELEASE

Type of Release Produced water/Oil	Volume of Release Unknown	Volume Recovered None
Source of Release Break in flow line	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 6/27/11
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.*	<div style="border: 2px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p style="margin: 0;">RECEIVED</p> <p style="margin: 0;">NOV 19 2013</p> <p style="margin: 0;">NMOCD ARTESIA</p> </div>	

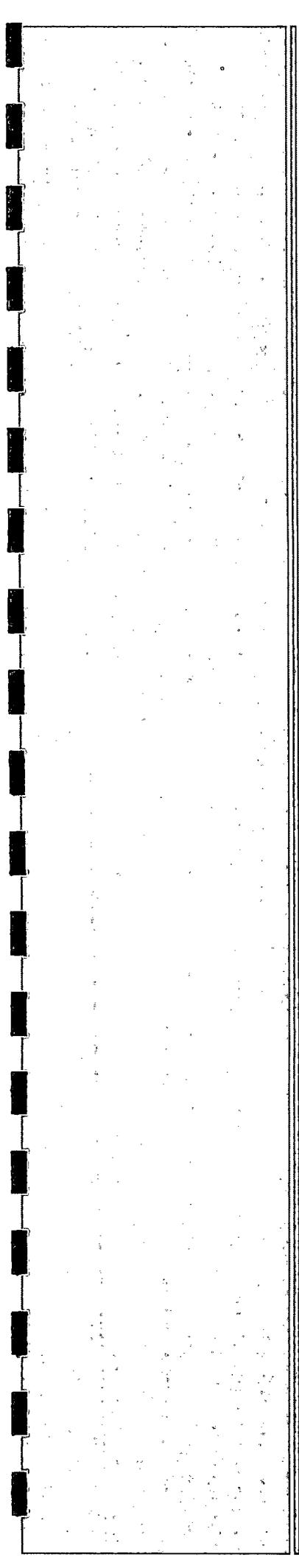
Describe Cause of Problem and Remedial Action Taken.*
While BLM was inspecting another site in the area, BLM discovered a flow line release to the J.L. Keel A #28 injection well. A total of 6762 sq ft of pasture land was affected by the release.

Describe Area Affected and Cleanup Action Taken.*
The site will be assessed vertically and horizontally and a Corrective Action Plan will be written with recommendations to remediate the site.

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>		OIL CONSERVATION DIVISION	
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:		Attached <input type="checkbox"/>
Date:	Phone: (806) 367-0645		

* Attach Additional Sheets If Necessary



Appendix B

Laboratory Analyses

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

November 04, 2013

JACOB KAMPLAIN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: J. L. KEEL A #28

Enclosed are the results of analyses for samples received by the laboratory on 10/25/13 16:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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,



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:	10/25/2013	Sampling Date:	10/25/2013
Reported:	11/04/2013	Sampling Type:	Soil
Project Name:	J. L. KEEL A #28	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT 1 @ SURFACE (H302605-01)

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	10/29/2013	ND	1.68	83.8	2.00	3.80		
Toluene*	<0.050	0.050	10/29/2013	ND	1.71	85.5	2.00	3.52		
Ethylbenzene*	<0.050	0.050	10/29/2013	ND	1.72	86.0	2.00	3.73		
Total Xylenes*	<0.150	0.150	10/29/2013	ND	5.10	85.0	6.00	3.31		
Total BTEX	<0.300	0.300	10/29/2013	ND						

Surrogate: 4-Bromofluorobenzene (PII) 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	800	16.0	10/29/2013	ND	400	100	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	10/29/2013	ND	210	105	200	1.98		
DRO >C10-C28	919	10.0	10/29/2013	ND	202	101	200	1.03		

Surrogate: 1-Chlorooctane 98.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 127 % 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:	10/25/2013	Sampling Date:	10/25/2013
Reported:	11/04/2013	Sampling Type:	Soil
Project Name:	J. L. KEEL A #28	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT 2 @ SURFACE (H302605-02)

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	10/29/2013	ND	1.68	83.8	2.00	3.80		
Toluene*	<0.050	0.050	10/29/2013	ND	1.71	85.5	2.00	3.52		
Ethylbenzene*	<0.050	0.050	10/29/2013	ND	1.72	86.0	2.00	3.73		
Total Xylenes*	<0.150	0.150	10/29/2013	ND	5.10	85.0	6.00	3.31		
Total BTEX	<0.300	0.300	10/29/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 107% 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	3080	16.0	10/29/2013	ND	400	100	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	10/29/2013	ND	210	105	200	1.98		
DRO >C10-C28	1700	10.0	10/29/2013	ND	202	101	200	1.03		

Surrogate: 1-Chlorooctane 98.0% 65.2-140

Surrogate: 1-Chlorooctadecane 142% 63.6-154

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

Received:	10/25/2013	Sampling Date:	10/25/2013
Reported:	11/04/2013	Sampling Type:	Soil
Project Name:	J. L. KEEL A #28	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT 3 @ SURFACE (H302605-03)

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	10/29/2013	ND	1.68	83.8	2.00	3.80		
Toluene*	<0.050	0.050	10/29/2013	ND	1.71	85.5	2.00	3.52		
Ethylbenzene*	<0.050	0.050	10/29/2013	ND	1.72	86.0	2.00	3.73		
Total Xylenes*	<0.150	0.150	10/29/2013	ND	5.10	85.0	6.00	3.31		
Total BTEX	<0.300	0.300	10/29/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	416	16.0	10/29/2013	ND	400	100	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	<50.0	50.0	10/29/2013	ND	210	105	200	1.98		
DRO >C10-C28	600	50.0	10/29/2013	ND	202	101	200	1.03		

Surrogate: 1-Chlorooctane 89.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 121 % 63.6-154

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*=Accredited Analyte

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Received:	10/25/2013	Sampling Date:	10/25/2013
Reported:	11/04/2013	Sampling Type:	Soil
Project Name:	J. L. KEEL A #28	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT 4 @ SURFACE (H302605-04)

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	10/29/2013	ND	1.68	83.8	2.00	3.80		
Toluene*	<0.050	0.050	10/29/2013	ND	1.71	85.5	2.00	3.52		
Ethylbenzene*	<0.050	0.050	10/29/2013	ND	1.72	86.0	2.00	3.73		
Total Xylenes*	<0.150	0.150	10/29/2013	ND	5.10	85.0	6.00	3.31		
Total BTEX	<0.300	0.300	10/29/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 105 % 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	<16.0	16.0	10/29/2013	ND	400	100	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	10/29/2013	ND	210	105	200	1.98		
DRO >C10-C28	<10.0	10.0	10/29/2013	ND	202	101	200	1.03		

Surrogate: 1-Chlorooctane 96.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 100 % 63.6-154

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Reported:	11/04/2013	Sampling Type:	Soil
Project Name:	J. L. KEEL A #28	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT 5 @ SURFACE (H302605-05)

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	10/29/2013	ND	1.68	83.8	2.00	3.80		
Toluene*	<0.050	0.050	10/29/2013	ND	1.71	85.5	2.00	3.52		
Ethylbenzene*	<0.050	0.050	10/29/2013	ND	1.72	86.0	2.00	3.73		
Total Xylenes*	<0.150	0.150	10/29/2013	ND	5.10	85.0	6.00	3.31		
Total BTEX	<0.300	0.300	10/29/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 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	64.0	16.0	10/29/2013	ND	400	100	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	10/29/2013	ND	210	105	200	1.98		
DRO >C10-C28	<10.0	10.0	10/29/2013	ND	202	101	200	1.03		

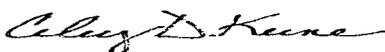
Surrogate: 1-Chlorooctane 100 % 65.2-140

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:	10/25/2013	Sampling Date:	10/25/2013
Reported:	11/04/2013	Sampling Type:	Soil
Project Name:	J. L. KEEL A #28	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT 6 @ SURFACE (H302605-06)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/01/2013	ND	2.06	103	2.00	0.153		
Toluene*	<0.050	0.050	11/01/2013	ND	2.05	103	2.00	0.309		
Ethylbenzene*	<0.050	0.050	11/01/2013	ND	2.07	104	2.00	0.301		
Total Xylenes*	<0.150	0.150	11/01/2013	ND	5.96	99.4	6.00	0.106		
Total BTEX	<0.300	0.300	11/01/2013	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	10/29/2013	ND	400	100	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	10/29/2013	ND	210	105	200	1.98		
DRO >C10-C28	<10.0	10.0	10/29/2013	ND	202	101	200	1.03		

Surrogate: 1-Chlorooctane 97.5 % 65.2-140
Surrogate: 1-Chlorooctadecane 97.4 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

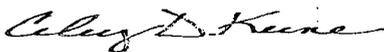
Notes and Definitions

- 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

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

November 04, 2013

JACOB KAMPLAIN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: J. L. KEEL A #28

Enclosed are the results of analyses for samples received by the laboratory on 10/28/13 16:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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,



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:	10/28/2013	Sampling Date:	10/28/2013
Reported:	11/04/2013	Sampling Type:	Soil
Project Name:	J. L. KEEL A #28	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT 2 @ 2.5' (H302611-01)

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	11/01/2013	ND	2.06	103	2.00	0.153		
Toluene*	<0.050	0.050	11/01/2013	ND	2.05	103	2.00	0.309		
Ethylbenzene*	<0.050	0.050	11/01/2013	ND	2.07	104	2.00	0.301		
Total Xylenes*	<0.150	0.150	11/01/2013	ND	5.96	99.4	6.00	0.106		
Total BTEX	<0.300	0.300	11/01/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 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	2840	16.0	10/29/2013	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	10/29/2013	ND	199	99.5	200	3.71		
DRO >C10-C28	<10.0	10.0	10/29/2013	ND	189	94.6	200	5.97		

Surrogate: 1-Chlorooctane 89.6% 65.2-140

Surrogate: 1-Chlorooctadecane 97.8% 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
 JACOB KAMPLAIN
 419 W. CAIN
 HOBBS NM, 88240
 Fax To: (575) 397-1471

 Received: 10/28/2013
 Reported: 11/04/2013
 Project Name: J. L. KEEL A #28
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 10/28/2013
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: POINT 2 @ 6' (H302611-02)

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	11/01/2013	ND	2.06	103	2.00	0.153		
Toluene*	<0.050	0.050	11/01/2013	ND	2.05	103	2.00	0.309		
Ethylbenzene*	<0.050	0.050	11/01/2013	ND	2.07	104	2.00	0.301		
Total Xylenes*	<0.150	0.150	11/01/2013	ND	5.96	99.4	6.00	0.106		
Total BTEX	<0.300	0.300	11/01/2013	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	10/29/2013	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	10/29/2013	ND	199	99.5	200	3.71		
DRO >C10-C28	22.7	10.0	10/29/2013	ND	189	94.6	200	5.97		

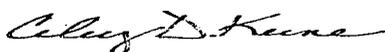
Surrogate: 1-Chlorooctane 74.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 76.4 % 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: 10/28/2013
 Reported: 11/04/2013
 Project Name: J. L. KEEL A #28
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 10/28/2013
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: POINT 2 @ 7' (H302611-03)

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	11/01/2013	ND	2.06	103	2.00	0.153		
Toluene*	<0.050	0.050	11/01/2013	ND	2.05	103	2.00	0.309		
Ethylbenzene*	<0.050	0.050	11/01/2013	ND	2.07	104	2.00	0.301		
Total Xylenes*	<0.150	0.150	11/01/2013	ND	5.96	99.4	6.00	0.106		
Total BTEX	<0.300	0.300	11/01/2013	ND						

Surrogate: 4-Bromofluorobenzene (PII) 106 % 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	160	16.0	10/29/2013	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	10/29/2013	ND	199	99.5	200	3.71		
DRO >C10-C28	<10.0	10.0	10/29/2013	ND	189	94.6	200	5.97		

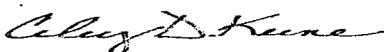
Surrogate: 1-Chlorooctane 89.1 % 65.2-140

Surrogate: 1-Chlorooctadecane 93.9 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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- 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

Cardinal Laboratories

*=Accredited Analyte

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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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: RECS		BILL TO		ANALYSIS REQUEST									
Project Manager: 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: J.L. Keel A #28		Phone #:											
Sampler Name: Kyle Schnaidt		Fax #:											

FOR LAB USE ONLY		(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.		SAMPLING		DATE	TIME	Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS
Lab I.D.	Sample I.D.			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE/COOL	OTHER:									
H302611																					
1	point 2 @ 2.5'	6	1			X				X			10-28-13	10:30	X	X	X				
2	point 2 @ 6'	6	1			X				X			5	10:35	X	X	X				
3	point 2 @ 7'	6	1			X				X			5	10:45	X	X	X				

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Relinquished By: Kyle Schnaidt	Date: 10-28-13 Time: 4:20	Received By: Jodi Benson	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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No	CHECKED BY: [Signature]	REMARKS: kschnaidt@rice-ecs.com Knorman@rice-ecs.com 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

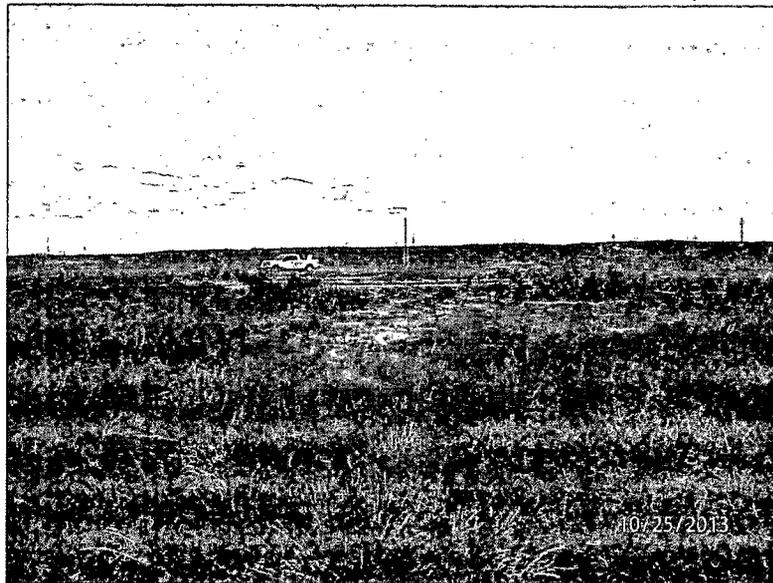
#54

Appendix C

Photo Documentation

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

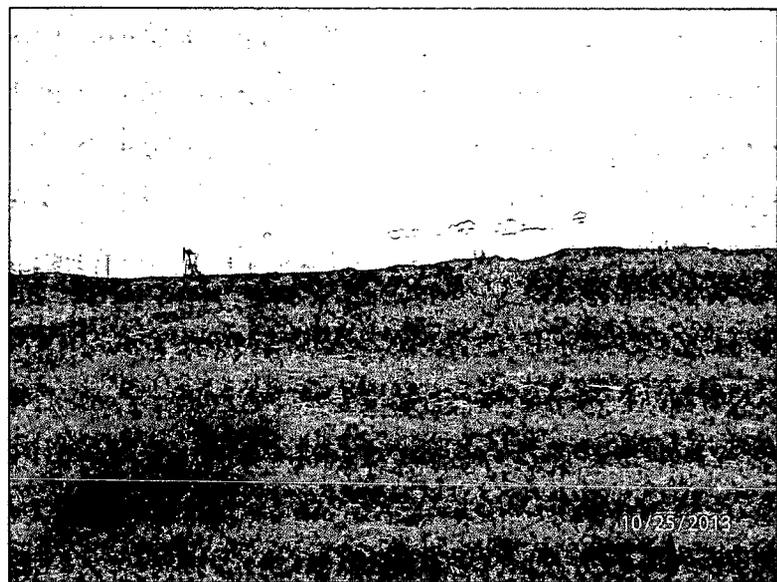
Linn J.L. Keel A #28
Unit Letter J, Section 7, T17S, R31E



Initial release area, facing south 10/25/13



Initial release area, facing east 10/25/13



Initial release area, facing northwest 10/25/13



Initial release area, facing southwest 10/25/13

Bratcher, Mike, EMNRD

From: Bratcher, Mike, EMNRD
Sent: Thursday, February 13, 2014 8:54 AM
To: 'Jacob Kamplain'
Cc: 'Lara Weinheimer'; hconder@rice-ecs.com; 'Wall, Fred'
Subject: RE: Linn JL Keel A #28

Jacob,

As discussed, this CAP is approved.

Thank you,

Mike Bratcher
NMOCD District 2
811 S. First Street
Artesia, NM 88210
O: 575-748-1283 X108
C: 575-626-0857
F: 575-748-9720

From: Jacob Kamplain [<mailto:jkamplain@rice-ecs.com>]
Sent: Tuesday, February 11, 2014 2:30 PM
To: Bratcher, Mike, EMNRD
Cc: 'Lara Weinheimer'; hconder@rice-ecs.com; 'Wall, Fred'
Subject: Linn JL Keel A #28

Mr. Bratcher as per our conversation on 2/10/14. RECS received verbal CAP approval from NMOCD for the Linn JL Keel A #28 (2RP-2028). Let me know if you have any questions or concerns. Thanks.



Jacob Kamplain
Project Leader
419 W. Cain
Hobbs, NM 88240
575-942-8221

Bratcher, Mike, EMNRD

From: Jacob Kamplain <jkamplain@rice-ecs.com>
Sent: Tuesday, February 11, 2014 2:30 PM
To: Bratcher, Mike, EMNRD
Cc: 'Lara Weinheimer'; hconder@rice-ecs.com; 'Wall, Fred'
Subject: Linn JL Keel A #28

Mr. Bratcher as per our conversation on 2/10/14. RECS received verbal CAP approval from NMOCD for the Linn JL Keel A #28 (2RP-2028). Let me know if you have any questions or concerns. Thanks.



Jacob Kamplain
Project Leader
419 W. Cain
Hobbs, NM 88240
575-942-8221

Bratcher, Mike, EMNRD

From: Burton, Michael <mburton@blm.gov>
Sent: Friday, November 15, 2013 7:08 AM
To: Lara Weinheimer
Cc: Bratcher, Mike, EMNRD; Brian Wall
Subject: Re: Linn J.L. Keel A #28 (2RP-2028) Corrective Action Plan

Lara,
This plan is approved as written. Please keep myself and NMOCD informed of any changing conditions to this plan.
Thanks

Mike Burton
BLM-CFO
Environmental Protection Specialist
575-234-2226 office
575-361-3574 cell
mburton@blm.gov

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On Thu, Nov 14, 2013 at 5:15 PM, Lara Weinheimer <lweinheimer@rice-ecs.com> wrote:

Mike, attached is the Corrective Action Plan for the Linn J.L. Keel A #28 (2RP-2028). If you have any questions, please let me know. Otherwise, we will await your approval.

Thanks!

Lara Weinheimer
Rice Environmental Consulting & Safety
Project Scientist
419 West Cain
Hobbs, NM 88240

(575) 441-0431