

## **LINN ENERGY**

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

# McClay Federal #7 2RP-1959

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## Corrective Action Plan

API No. 3001510370

Release Date: September 24<sup>th</sup>, 2013

Unit Letter C, Section 33, Township 18S, Range 30E

# Initial Sampling Data

## Point 1

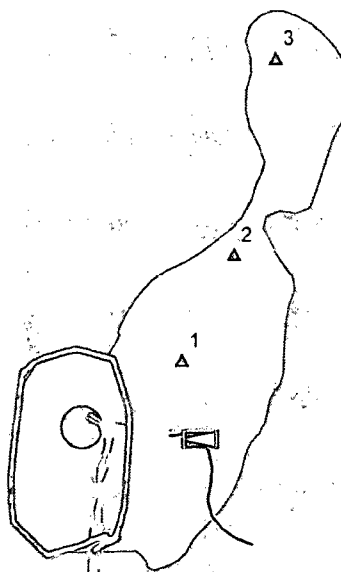
	CI-	PID	GRO	DRO	B	T	E	X	BTEX
SS	464	308.6	893	15100	<1	2.8	10.5	19.5	32.8
6"	32	96.8	<10	72.6	<0.05	<0.05	<0.05	<0.15	<0.3
1'	<16	27.2	<10	23.6	<0.05	<0.05	<0.05	<0.15	<0.3

## Point 2

	CI-	PID	GRO	DRO	B	T	E	X	BTEX
SS	3520	414.4	685	18900	0.235	3.11	6.67	11.5	21.5
6"	750	88.7							
1'	64	23.2	<10	13	<0.05	<0.05	0.059	<0.15	<0.3
1.5'	48	27.3	<10	14.2	<0.05	<0.05	<0.05	<0.15	<0.3

## Point 3

	CI-	PID	GRO	DRO	B	T	E	X	BTEX
SS	3320	709.3	1830	26700	<2	9.42	19	33.1	61.6
6"	2009	1377							
1'	4684	587.6							
1.5'	6672	105.7							
2'	5015	22.7							
2.5'	4915	30							
3'	5120	14.7	<10	28.2	<0.05	<0.05	<0.05	<0.15	<0.3
3.5'	3730	11.3							
4'	2630	29							
4.5'	2884	20.1							
5'	2558	23.6							
5.5'	1792	31.3							
6'	1282	27.2							
6.5'	721	12.6							
7'	699	144.3							
7.5'	460	35.2							
8'	560	49.2	<10	69.3	<0.05	<0.05	<0.05	<0.15	<0.3
8.5'	208	20.1	<10	44.4	<0.05	<0.05	<0.05	<0.15	<0.3



## Legend

- △ AUGUR POINTS
- LINED BERM
- ☐ GAS REGULATOR
- 3 in SURFACE POLY
- 3 in SURFACE STEEL
- ☐ HEATER
- ☐ STAIN (2,486 sq ft)

DGW: None

Landowner: BLM

Sources: Esri, DigitalGlobe, GeoEye, AeroGRID, IGN, ICF



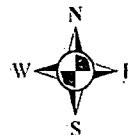
**LINN MCCLAY  
FEDERAL #7  
(2RP-1959)**

LEGALS: UL/C sec. 33

T-18-S R-30-E

EDDY COUNTY, NM

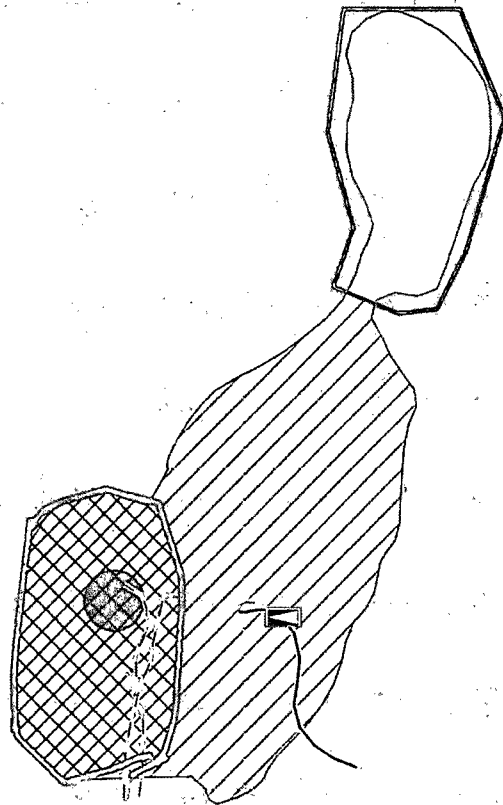
Figure 1



0 20 40  
Feet

GPS date: 9/30/13 EC  
Drawing date: 10/22/13  
Drafted by: L. Weinheimer

# Proposed CAP Activities



## Legend

— LINED BERM

⬢ GAS REGULATOR

— 3 in SURFACE POLY

— 3 in SURFACE STEEL

⊠ REMOVE AND REPLACE CALICHE OVER LINER

▨ SCRAPE AREA TO 6 INCHES

◻ PROPOSED 20-MIL REINFORCED POLY LINER AT 4 FT BGS

■ HEATER

◻ STAIN (2,486 sq ft)

DGW: None

Landowner: BLM



**LINN MCCLAY  
FEDERAL #7  
(2RP-1959)**

LEGALS: UL/C sec. 33

T-18-S R-30-E

EDDY COUNTY, NM

Figure 2



0 10 20  
Feet

GPS date: 9/30/13 EC  
Drawing date: 10/22/13  
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  
1635 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

SEP 26 2013

Form C-141  
Revised October 10, 2003

NMOCD ARTESIA

Appropriate District Office in  
accordance with 19.15.29 NMAC

### Release Notification and Corrective Action

NJMW 327537083

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Linn Operating	Contact: Brian Wall
Address: 2130 W. Bender Hobbs, NM 88240	Telephone No.: 575-738-1739
Facility Name: McClay Federal # 7	Facility Type: Oil

Surface Owner: Federal	Mineral Owner:	API No.: 3001510370
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### LOCATION OF RELEASE

Unit Letter C	Section 53	Township 18S	Range 30E	Feet from the 330	North/South Line North	Feet from the 1650	East/West Line West	County Eddy
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Latitude: 32.7103208597655 Longitude: -103.980175130974

### NATURE OF RELEASE

Type of Release: Oil	Volume of Release: 10 bbls.	Volume Recovered: 0.
Source of Release: Heater	Date and Hour of Occurrence: 09/24/2013, 12:00am	Date and Hour of Discovery: 09/24/2013
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES: To Whom? Mike Burton: BLM Mike Bratcher: NMOCD	
By Whom? Brian Wall	Date and Hour 09/26/2013 7:43am	
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: Missed opening valve when restarting well. Heater exceeded operating pressure blew oil through pressure relief valve on top of the heater.

Describe Area Affected and Cleanup Action Taken: Contaminated soil to be removed and replaced with clean, reseeded to requirements.

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>[Signature]</i>		OIL CONSERVATION DIVISION	
Printed Name: Brian Wall		Approved by District Supervisor:	
Title: Construction Foreman II		Signed By: <i>[Signature]</i>	
E-mail Address: bwall@linnenergy.com		Approval Date: OCT 02 2013	Expiration Date:
Date: 09/26/2013 Phone: 806-367-0645		Conditions of Approval:	
Attach Additional Sheets If Necessary:		Attached <input type="checkbox"/>	

Remediation per OCD Rule & Guidelines, &  
like approval by BLM. SUBMIT REMEDIATION  
PROPOSAL NO LATER THAN:

November 2, 2013

2 R.P. = 1959

# Appendix B

## Initial Sampling Lab

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

October 22, 2013

JACOB KAMPLAIN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

419 W. CAIN

HOBBS, NM 88240

RE: MC CLAY FEDERAL #7

Enclosed are the results of analyses for samples received by the laboratory on 10/16/13 8:45.

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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

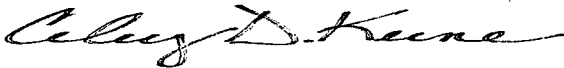
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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,



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: 10/16/2013  
Reported: 10/22/2013  
Project Name: MC CLAY FEDERAL #7  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 10/09/2013  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: POINT 1 @ SURFACE (H302503-01)**

BTEX 8021B		mg/kg	Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	10/18/2013	ND	1.93	96.4	2.00	1.36	
<b>Toluene*</b>	<b>2.80</b>	1.00	10/18/2013	ND	1.99	99.3	2.00	2.92	
<b>Ethylbenzene*</b>	<b>10.5</b>	1.00	10/18/2013	ND	2.01	100	2.00	2.99	
<b>Total Xylenes*</b>	<b>19.5</b>	3.00	10/18/2013	ND	5.85	97.4	6.00	2.79	
<b>Total BTEX</b>	<b>32.8</b>	6.00	10/18/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 141 % 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>464</b>	16.0	10/17/2013	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>893</b>	200	10/17/2013	ND	191	95.3	200	2.37	
<b>DRO &gt;C10-C28</b>	<b>15100</b>	200	10/17/2013	ND	191	95.5	200	3.62	

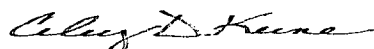
Surrogate: 1-Chlorooctane 172 % 65.2-140

Surrogate: 1-Chlorooctadecane 527 % 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:	10/16/2013	Sampling Date:	10/09/2013
Reported:	10/22/2013	Sampling Type:	Soil
Project Name:	MC CLAY FEDERAL #7	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: POINT 1 @ 6" (H302503-02)**

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	10/18/2013	ND	1.93	96.4	2.00	1.36		
Toluene*	<0.050	0.050	10/18/2013	ND	1.99	99.3	2.00	2.92		
Ethylbenzene*	<0.050	0.050	10/18/2013	ND	2.01	100	2.00	2.99		
Total Xylenes*	<0.150	0.150	10/18/2013	ND	5.85	97.4	6.00	2.79		
Total BTEX	<0.300	0.300	10/18/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 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	32.0	16.0	10/17/2013	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	10/17/2013	ND	189	94.6	200	4.47	
DRO >C10-C28	72.6	10.0	10/17/2013	ND	181	90.6	200	1.79	


Surrogate: 1-Chlorooctane 100 % 65.2-140

Surrogate: 1-Chlorooctadecane 110 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

 Received: 10/16/2013  
 Reported: 10/22/2013  
 Project Name: MC CLAY FEDERAL #7  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 10/09/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: POINT 1 @ 1' (H302503-03)**

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	10/21/2013	ND	1.93	96.4	2.00	1.36	
Toluene*	<0.050	0.050	10/21/2013	ND	1.99	99.3	2.00	2.92	
Ethylbenzene*	<0.050	0.050	10/21/2013	ND	2.01	100	2.00	2.99	
Total Xylenes*	<0.150	0.150	10/21/2013	ND	5.85	97.4	6.00	2.79	
Total BTEX	<0.300	0.300	10/21/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 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	10/17/2013	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	10/17/2013	ND	189	94.6	200	4.47	
DRO >C10-C28	23.6	10.0	10/17/2013	ND	181	90.6	200	1.79	

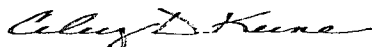
Surrogate: 1-Chlorooctane 99.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 106 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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

Received:	10/16/2013	Sampling Date:	10/09/2013
Reported:	10/22/2013	Sampling Type:	Soil
Project Name:	MC CLAY FEDERAL #7	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: POINT 2 @ SURFACE (H302503-04)**

BTEX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.235</b>	0.050	10/18/2013	ND	1.93	96.4	2.00	1.36	
<b>Toluene*</b>	<b>3.11</b>	0.050	10/18/2013	ND	1.99	99.3	2.00	2.92	
<b>Ethylbenzene*</b>	<b>6.67</b>	0.050	10/18/2013	ND	2.01	100	2.00	2.99	
<b>Total Xylenes*</b>	<b>11.5</b>	0.150	10/18/2013	ND	5.85	97.4	6.00	2.79	
<b>Total BTEX</b>	<b>21.5</b>	0.300	10/18/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 383 % 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>3520</b>	16.0	10/17/2013	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>685</b>	200	10/17/2013	ND	189	94.6	200	4.47	
<b>DRO &gt;C10-C28</b>	<b>18900</b>	200	10/17/2013	ND	181	90.6	200	1.79	

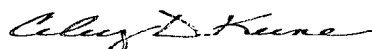
Surrogate: 1-Chlorooctane 166 % 65.2-140

Surrogate: 1-Chlorooctadecane 242 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

Received:	10/16/2013	Sampling Date:	10/09/2013
Reported:	10/22/2013	Sampling Type:	Soil
Project Name:	MC CLAY FEDERAL #7	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: POINT 2 @ 1' (H302503-05)**

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	10/18/2013	ND	1.93	96.4	2.00	1.36	
Toluene*	<0.050	0.050	10/18/2013	ND	1.99	99.3	2.00	2.92	
Ethylbenzene*	0.069	0.050	10/18/2013	ND	2.01	100	2.00	2.99	
Total Xylenes*	<0.150	0.150	10/18/2013	ND	5.85	97.4	6.00	2.79	
Total BTEx	<0.300	0.300	10/18/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	10/17/2013	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	10/17/2013	ND	189	94.6	200	4.47	
DRO >C10-C28	13.0	10.0	10/17/2013	ND	181	90.6	200	1.79	

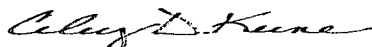
Surrogate: 1-Chlorooctane 105 % 65.2-140

Surrogate: 1-Chlorooctadecane 110 % 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: 10/16/2013  
Reported: 10/22/2013  
Project Name: MC CLAY FEDERAL #7  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 10/09/2013  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: POINT 2 @ 1.5' (H302503-06)**

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	10/18/2013	ND	1.93	96.4	2.00	1.36	
Toluene*	<0.050	0.050	10/18/2013	ND	1.99	99.3	2.00	2.92	
Ethylbenzene*	<0.050	0.050	10/18/2013	ND	2.01	100	2.00	2.99	
Total Xylenes*	<0.150	0.150	10/18/2013	ND	5.85	97.4	6.00	2.79	
Total BTEX	<0.300	0.300	10/18/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 101 % 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	48.0	16.0	10/17/2013	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	10/17/2013	ND	189	94.6	200	4.47	
DRO >C10-C28	14.2	10.0	10/17/2013	ND	181	90.6	200	1.79	

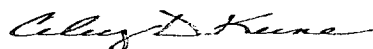
Surrogate: 1-Chlorooctane 111 % 65.2-140

Surrogate: 1-Chlorooctadecane 120 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

 Received: 10/16/2013  
 Reported: 10/22/2013  
 Project Name: MC CLAY FEDERAL #7  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 10/09/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: POINT 3 @ SURFACE (H302503-07)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	10/18/2013	ND	1.93	96.4	2.00	1.36	
Toluene*	9.42	2.00	10/18/2013	ND	1.99	99.3	2.00	2.92	
Ethylbenzene*	19.0	2.00	10/18/2013	ND	2.01	100	2.00	2.99	
Total Xylenes*	33.1	6.00	10/18/2013	ND	5.85	97.4	6.00	2.79	
Total BTEX	61.6	12.0	10/18/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 117 % 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	3320	16.0	10/17/2013	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	1830	200	10/17/2013	ND	189	94.6	200	4.47		
DRO >C10-C28	26700	200	10/17/2013	ND	181	90.6	200	1.79		

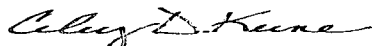
Surrogate: 1-Chlorooctane 190 % 65.2-140

Surrogate: 1-Chlorooctadecane 984 % 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:	10/16/2013	Sampling Date:	10/09/2013
Reported:	10/22/2013	Sampling Type:	Soil
Project Name:	MC CLAY FEDERAL #7	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: POINT 3 @ 3' (H302503-08)**

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	10/18/2013	ND	1.93	96.4	2.00	1.36	
Toluene*	<0.050	0.050	10/18/2013	ND	1.99	99.3	2.00	2.92	
Ethylbenzene*	<0.050	0.050	10/18/2013	ND	2.01	100	2.00	2.99	
Total Xylenes*	<0.150	0.150	10/18/2013	ND	5.85	97.4	6.00	2.79	
Total BTEX	<0.300	0.300	10/18/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 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	5120	16.0	10/17/2013	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	10/17/2013	ND	189	94.6	200	4.47	
DRO >C10-C28	28.2	10.0	10/17/2013	ND	181	90.6	200	1.79	

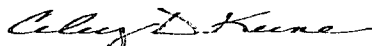
Surrogate: 1-Chlorooctane 104 % 65.2-140

Surrogate: 1-Chlorooctadecane 110 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

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Celest 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:	10/16/2013	Sampling Date:	10/09/2013
Reported:	10/22/2013	Sampling Type:	Soil
Project Name:	MC CLAY FEDERAL #7	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: POINT 3 @ 8' (H302503-09)**

BTX 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	10/18/2013	ND	1.93	96.4	2.00	1.36		
Toluene*	<0.050	0.050	10/18/2013	ND	1.99	99.3	2.00	2.92		
Ethylbenzene*	<0.050	0.050	10/18/2013	ND	2.01	100	2.00	2.99		
Total Xylenes*	<0.150	0.150	10/18/2013	ND	5.85	97.4	6.00	2.79		
Total BTX	<0.300	0.300	10/18/2013	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 101 % 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	560	16.0	10/17/2013	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	10/17/2013	ND	189	94.6	200	4.47	
DRO >C10-C28	69.3	10.0	10/17/2013	ND	181	90.6	200	1.79	

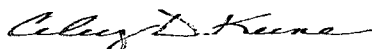
Surrogate: 1-Chlorooctane 109 % 65.2-140

Surrogate: 1-Chlorooctadecane 120 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/16/2013	Sampling Date:	10/09/2013
Reported:	10/22/2013	Sampling Type:	Soil
Project Name:	MC CLAY FEDERAL #7	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: POINT 3 @ 8.5' (H302503-10)**

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	10/18/2013	ND	1.93	96.4	2.00	1.36	
Toluene*	<0.050	0.050	10/18/2013	ND	1.99	99.3	2.00	2.92	
Ethylbenzene*	<0.050	0.050	10/18/2013	ND	2.01	100	2.00	2.99	
Total Xylenes*	<0.150	0.150	10/18/2013	ND	5.85	97.4	6.00	2.79	
Total BTEx	<0.300	0.300	10/18/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 99.1 % 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	208	16.0	10/17/2013	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	10/17/2013	ND	189	94.6	200	4.47	
DRO >C10-C28	44.4	10.0	10/17/2013	ND	181	90.6	200	1.79	

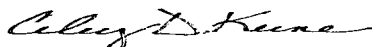
Surrogate: 1-Chlorooctane 109 % 65.2-140

Surrogate: 1-Chlorooctadecane 116 % 63.6-154

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\*=Accredited Analyte

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Celestine D. Keene, Lab Director/Quality Manager

### Notes and Definitions

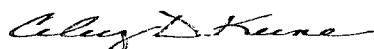
S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
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

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Celey D. Keene, Lab Director/Quality Manager



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 13 of 13

[illegible]

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

~~A~~ 54

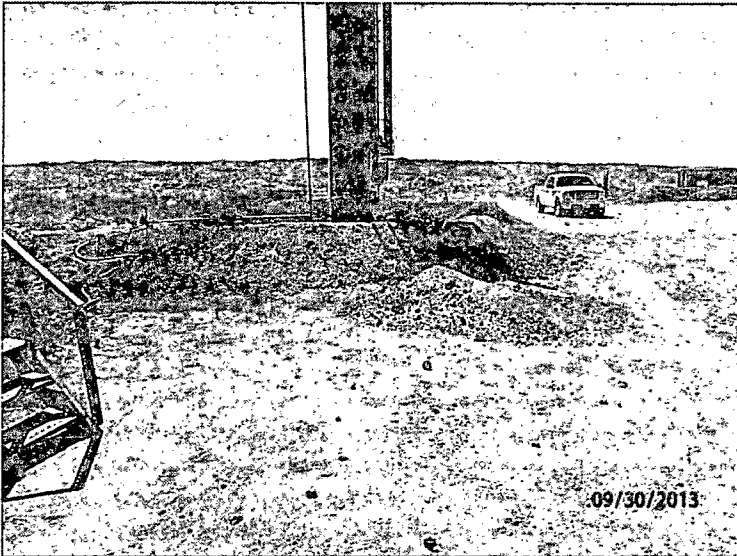
# Appendix C

## Photo Documentation

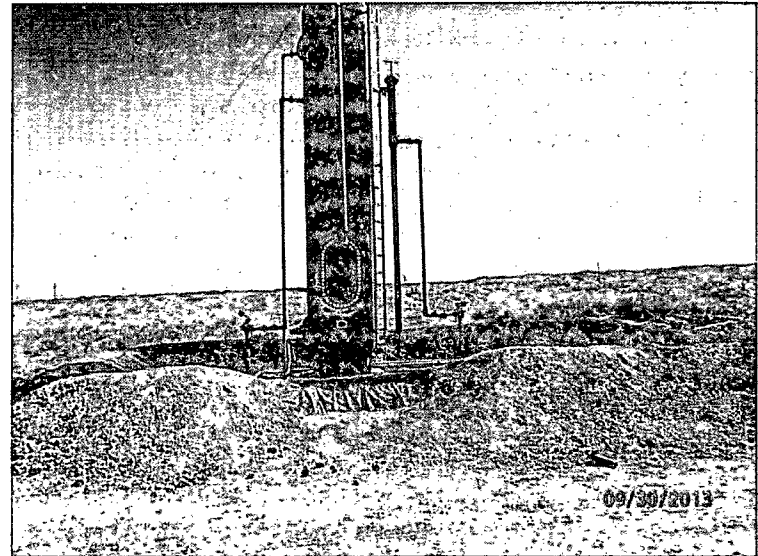
**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 2948 Hobbs, NM 88241  
Phone 575.393.2967

# Linn McClay Federal #7

Unit Letter C, Section 33, T18S, R30E



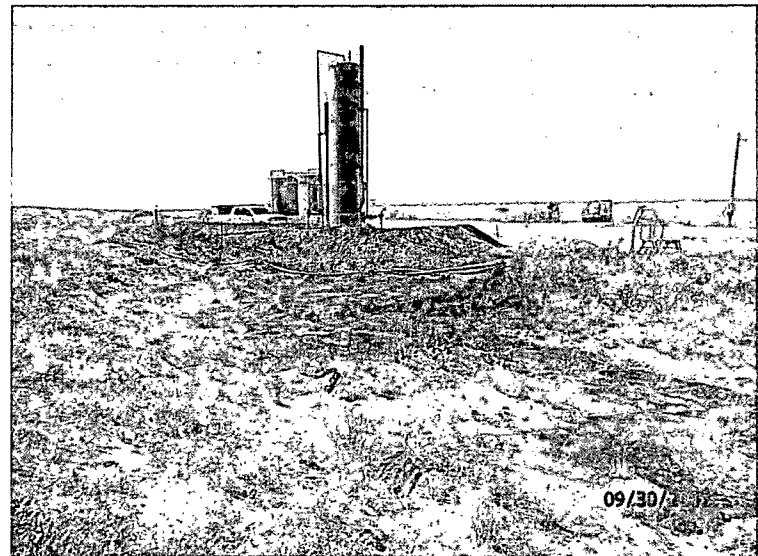
Initial release area, facing west 9/30/13



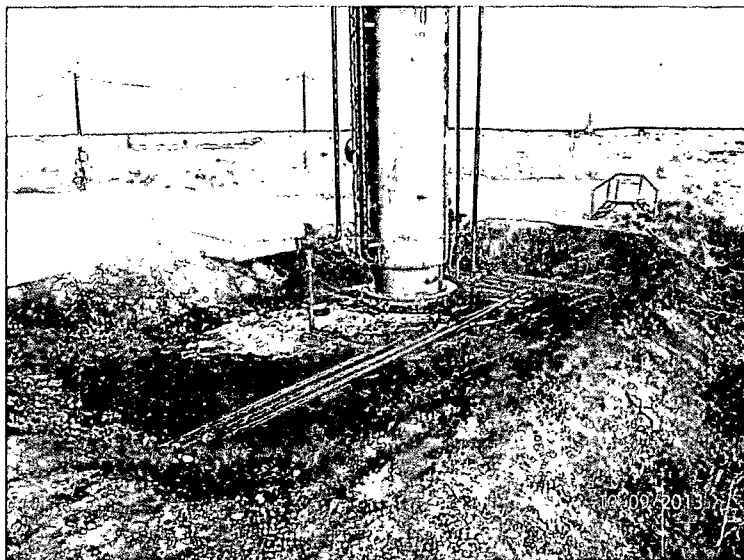
Showing liner beneath release, facing south 9/30/13



Initial release area, facing east 9/30/13

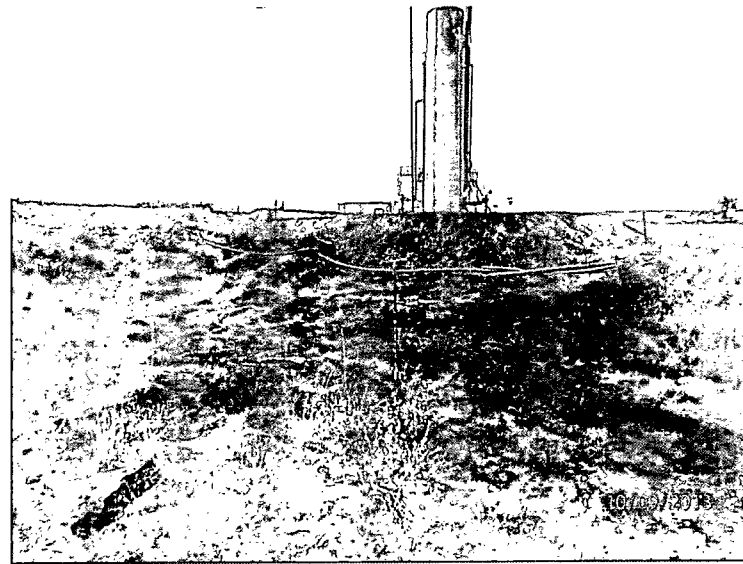


Initial release area, facing northwest 9/30/13



Initial release area, facing northeast

10/9/13



Hand augur site for depth, facing northwest

10/9/13

Jean, enclosed are 3 Corrective Action Plans that need Mike's approval. If you have any questions, please let us know. Otherwise, we will await his approval.

Thanks!

Lara

RECS