

# LINN ENERGY

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

# McClay Federal #7 2RP-1924 2RP-1959

# Termination Request

API No. 3001510370

Release Date: September 8<sup>th</sup>, 2013 & September 24<sup>th</sup>, 2013

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

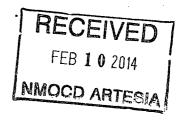
#### Rice Environmental Consulting & Safety

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

February 6<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: CAP Report and Termination Request Linn Energy McClay Federal #7 (2RP-1914) McClay Federal #7 (2RP-1959) UL/C sec. 33 T18S R30E API No. 3001510370

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 7.5 miles south of Loco Hills, New Mexico at UL/C sec. 33 T18S R30E. This site is located in an area of no known groundwater.

Two releases occurred at the site in September 2013. The first (2RP-1914), which occurred on September 8<sup>th</sup>, 2013, was a release of 4 barrels of produced water and 1 barrel oil from a hole in the bottom of the heater. All the fluid remained in the lined heater dike. A vacuum truck was called to the site and recovered all the fluid. NMOCD and BLM were notified of the release on September 10<sup>th</sup>, 2013 and NMOCD approved the initial C-141 on September 19<sup>th</sup>, 2013.

The second release (2RP-1959), which occurred on September 24<sup>th</sup>, 2013, was a release of 10 barrels of oil. When the heater was restarted, a valve was not opened. The heater exceeded operating pressure and blew oil through the pressure relief valve on the top of the heater. None of this fluid was recovered. NMOCD and BLM were notified on the release on September 26<sup>th</sup>, 2013 and NMOCD approved the initial C-141 on October 2<sup>nd</sup>, 2013 (Appendix A).

Together the two releases covered 2,486 sq ft of lease pad and pasture land. RECS personnel were on site beginning on September 10<sup>th</sup>, 2013 and then on September 30<sup>th</sup>, 2013 to assess the releases. The first release was in the lined dike surrounding the heater and was not sampled. Soil samples from the surface and with depth were taken from the second release (Figure 1). The samples were field tested for chlorides and organic vapors and representative samples were taken to a commercial laboratory for analysis (Appendix

B). Point 1 returned laboratory chloride, GRO, DRO and BTEX below regulatory standards beginning at 6 inches. Point 2 returned laboratory chloride, GRO, DRO and BTEX below regulatory standards beginning at 1 foot. Point 3 returned laboratory chloride, GRO, DRO and BTEX below regulatory standards beginning at 8.5 feet.

A Corrective Action Plan (CAP) for the first release (2RP-1914) was sent to NMOCD and BLM on September 30<sup>th</sup>, 2013 and approved by BLM on October 30<sup>th</sup>, 2013 and by NMOCD on November 15<sup>th</sup>, 2013. As part of the CAP, the caliche above the liner would be removed and taken to a NMOCD approved facility for disposal. Clean caliche would be imported to the site to replace the contaminated caliche.

A CAP for the second release (2RP-1959) was sent to NMOCD and BLM on October 29<sup>th</sup>, 2013 and approved by BLM the same day. NMOCD approved the CAP on November 15<sup>th</sup>, 2013. As part of the CAP, the release area around Point 1 and Point 2, indicated that this area would reach acceptable standards by 6 inches bgs. Thus, this area would be scraped down 6 inches and a 5 point bottom composite would be taken to a commercial laboratory to show that the chloride level is below 1,000 mg/kg and the combined GRO/DRO reading is below 1,000 mg/kg.

The area around Point 3 will be excavated to depth of 4 ft bgs. The walls of the excavation would be advanced horizontally until laboratory analyses showed the walls to have a chloride reading below 1,000 mg/kg and combined GRO/DRO below 1,000 mg/kg. At the base of the 4 ft bgs excavation, a 20 mil reinforced poly liner would be installed at properly seated (Figure 2).

All excavated soils would be taken to a NMOCD approved facility for disposal. The 6 inch scrape and the 4 ft excavation would be backfilled with clean, imported soil to ground surface and contoured to the surrounding location. The site would be seeded with a blend of native vegetation. Vegetation acts as 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.

#### **CAP Report**

On November 6<sup>th</sup>, 2013, CAP activities began at the site. The area inside the treater berm, the contaminated berm, the 6 inch scrape and the 4 foot excavation were completed and a total of 228 yards of contaminated soil was taken to a NMOCD approved facility for disposal.

A total of 72 yards of clean caliche was imported to the site to backfill the treater area and replace the contaminated berm. The remaining caliche was backfilled into the 4 foot excavation.

Once the 4 foot excavation was completed, wall samples were taken to a commercial laboratory for analysis to confirm all constituents were below regulatory standards (Appendix C). At the base of the 6 inch scrape, a 5 point bottom composite was taken

and sent to a commercial laboratory for analysis. The bottom composite returned a chloride value of 320 mg/kg, a DRO value of 306 mg/kg and GRO and BTEX values of non-detect. This data was sent to BLM and NMOCD with a request to backfill the site. BLM approved the site to be backfilled on November 25<sup>th</sup>, 2013 and NMOCD approved the site to be backfilled on December 2<sup>nd</sup>, 2013.

A trench was installed along the periphery of the 4 foot excavation and a 20-mil reinforced poly liner was key set into the excavation. A total of 108 yards of top soil was imported to site to serve as backfill. The liner was padded with 6 inches of the top soil and the remaining caliche was backfilled over the padded liner. A sample of the imported top soil was taken to a commercial laboratory and returned a laboratory chloride reading of 64 mg/kg. The 6 inch scrape and the remainder of the 4 foot excavation was backfilled with the imported top soil and the area was contoured to the surrounding location.

On December 10<sup>th</sup>, 2013, soil amendments were added to the pasture area and the site was seeded with LPC seed mix.

Photo documentation of these activities can be found in Appendix D.

Given that the site was remediated per the approved CAP and backfilled with clean, imported soil, Linn respectfully requests that the site be granted 'remediation termination' and site closure. Final C-141s for both sites can be found in Appendix E.

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

Sincerely,

Lara Weinheimer

Project Scientist

**RECS** 

(575) 441-0431

#### Attachments:

Figure 1 – Initial Sampling Data

Figure 2 – Proposed CAP Activities

Figure 3 – Excavation Data

Appendix A – Initial C-141s

Appendix B – Initial Sampling Lab

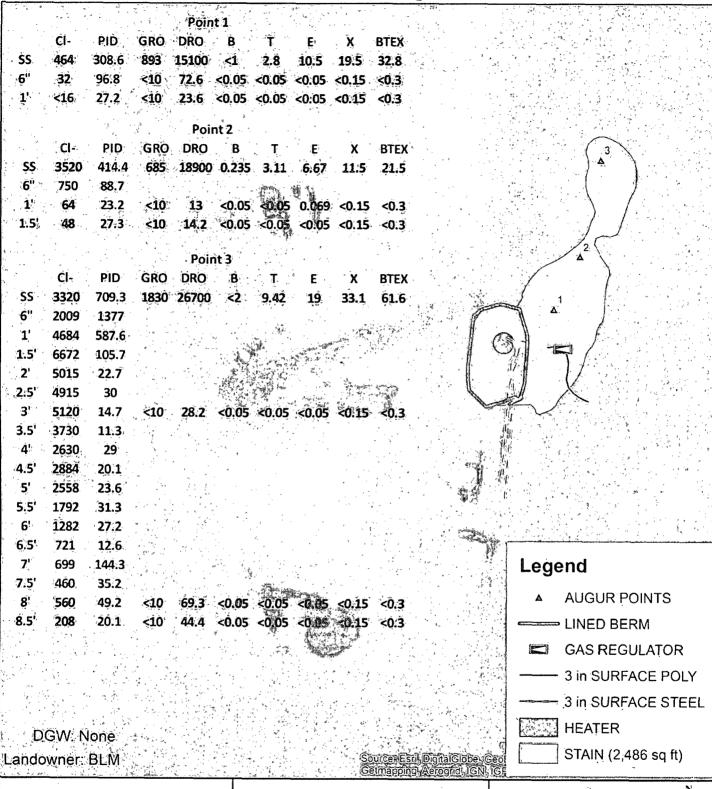
Appendix C – CAP Activities Labs

Appendix D – Photo Documentation

Appendix E – Final C-141s



# Initial Sampling Data





# LINN MCCLAY FEDERAL #7

2RP-1914 2RP-1959

LEGALS: UL/C sec. 33 T-18-S R-30-E EDDY COUNTY, NM

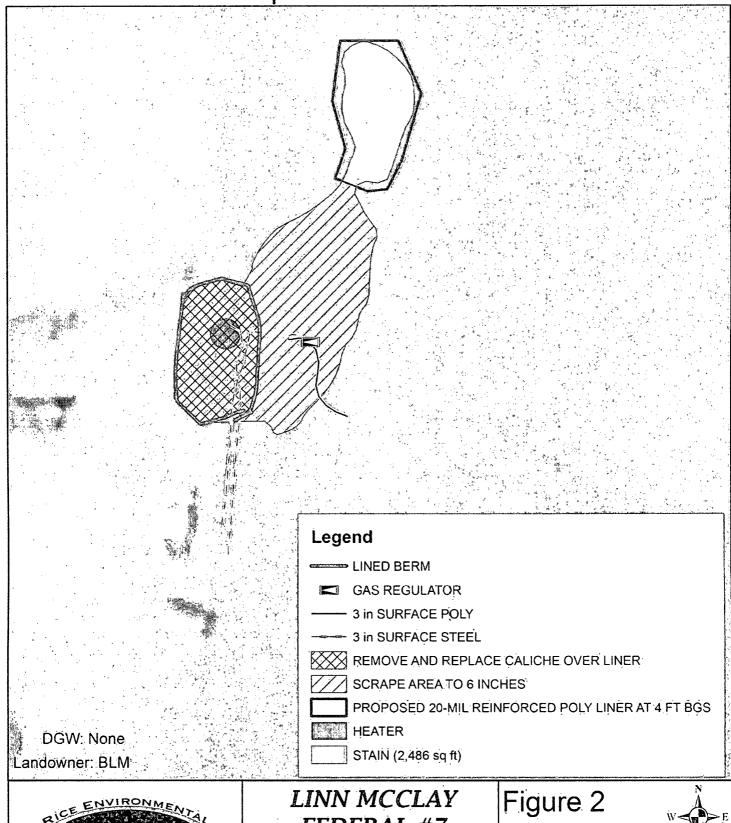
# Figure 1



0 20 40 HH Feet

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

# **Proposed CAP Activities**





# FEDERAL #7

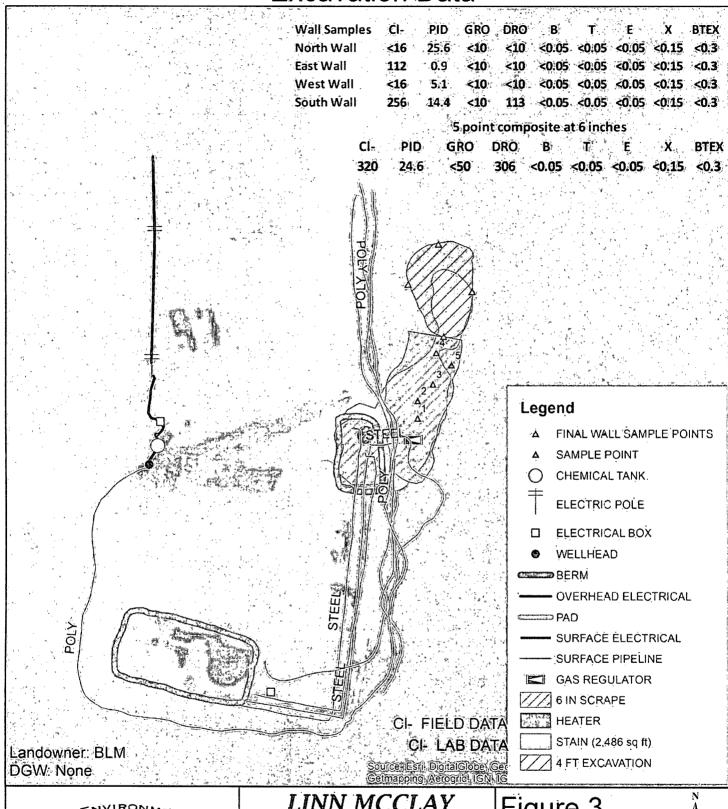
(2RP-1914)(2RP-1959)

LEGALS: UL/C sec. 33 T-18-S R-30-E **EDDY COUNTY, NM** 



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

### **Excavation Data**





### LINN MCCLAY FEDERAL #7

(2RP-1914)(2RP-1959)

LEGALS: UL/C sec. 33 T-18-S R-30-E EDDY COUNTY, NM

# Figure 3



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Drawing date: 11/7/13, 11/15/13 Drafted by: T. Grieco

Appendix A
Initial C-141s

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

District 1
1,625 N. Franch Dim Hobbs; NM. 88240
District II.
1301 W. Grand Weinus, Artesin, NM. 88210
District III.
1000 Rio Brazos Road, Aztec, NM. 87410,
District V.
1220 S. St. Francis Dim Sauta FE, NM 87505

State of New Mexico Energy Minerals and Natural Resources

ŞEP 1 0 2013

RECEIVED

Form C-141 keried Octoberdo, 2003;

NMOSDIARTES Propriate district office in accordance with 19-13-29 NMAC

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

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Signature: 1/1/20099	- Alexander	OIL CONSERVATION DIVISION:
Approved by District Supervisors	101	Antonia de la confesio de la concentración
Printed Name: Brian Walf Signed By Pully Distriction	Printed Name: Brian Wall:	Signed By Mile Destruction
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Uzīmāti Address: Itwall@ifinienergy.com Conditions of Approval.	4E-mail Address: bwall@limenergy.com	Conditions of Approval
Dite: 09/10/2013 Illione: 806-367-0645 Remediation: per OCD Rule & Guidelines, &	Date: 09/10/2013 - Reme: 1806-367-0645 - Reme	
Muach Additional Slicers If Necessary like approval by BLM, SUBMIT REMEDIATION 220 1914		

District I 1635/N. Freitch Dr.: Hobbs; NM:88240 District II 1301 W. Grand Aventic, Anesiel NM 88210 District III 1000 Kio Brazos Road, Azicc NM:87410 District IV 1220/S. St. Francis Dr. Santo Fe, NM 87505

# State of New Mexico Energy Minerals and Natural Resources

SEP-26-2013.

Form C-141, Revised October 10, 2003

Oil: Conservation Division - NMOCDIARTES And oprime District Office in 1220 South St. Francis Dr. . Santa Fe, NM 87505

Release Notificațio	n and Corrective Action
NW 327537083	ORERATOR: [Signatural Report   Marinal Report
Name of Company: Linn Operating 26932-4.	Contact: Brian Wall
Address: 2130 W. Bender (Hobbs, NM, 88240) Facility Name: McClay Federal # 7	FTelephone No.: 575-738-1739
Surface Owner, Federalt Mineral Owner	APIN67 30015103708
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Was Immediate Notice Given?'	
- By Whom? Brian Wall	Date and Hour 09/26/2013 7:45am
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<b>*5</b>	
I hereby certify that the information given above is true and complete to	the best of my knowledge and understand that pursuant to NMOCD futes and
Hregulations altroperators me release.	ૡૡ૽૽૽૽ૼૡ૽ૢૺૡ૽ૡ૽૽ૡ૽૽ૡ૽૽ૡ૽૽ૡ૽૽ૡ૽ઌ૽૽ૡ૽ૺૡ૽ૡ૽ૡ૽ૡ૽ૡ૽૽ૡ૽ૡ૽ઌઌ૽૽ૹ૽૽ૡ૽ૡ૽ૡ૽ૹ૽૽૱ઌ૽૽ૺૡ૽ૺઌ૽૽ૹ૽ૢ૽૾ૡ૽ૺૡ૽ૡ૽ૡ૽ ૡૢ૽૱ૢૢૢૢૢૢૢૢૹૢઌૢઌ૽ૺૢ૽ૡ૽૽ૡ૽ૡ૽૽ૡ૽૽ૡ૽ૡઌઌ૽૽૽૽ૡૡ૱ઌઌ૽૽૱ઌઌ૽૽ૡ૽ૡ૽ૺ૱ઌ૽૽ઌ૽૽ઌ૽૽ઌ૽૽ૡ૽૽ઌ૽૽ઌ૽૽ૡ૽ૺૡૢઌ
should their operations have failed to adequately investigate and remedi	and stands to the district of the standard of
projutivelen vironnient. Itt fäddirfon: NMOCD acceptance ob a C=141 report Tiederal: sinic actiocal laws and foregulations.	ques not telieve que discultor of testions but it for complique migrand other
a neueron singrounden inwagniorinegoganinas.	TOIL CONSERVATION DIVISION:
aSignatures MISSU	
instrument of the state of the	Approved by District Supervisor
Printed Name: Brian Walf	Signed By Mily Describe
illues Construction Foremans II	Approval QCI 0.2.2013 Expiration Dates
1 17-mail Address-bwall@linneflergy(com:	Čondrinons of Approals Anached [1]
*Artach Additional Sheets If Necessary	tion iper OCD Rule & Guidelines &
Astronomy distribution of the contraction of the state of	ival by BLM (SUBMIT REMEDIATION) 2 RP 1960

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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

Cardinal Laboratories is accreditated 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.

Celey & Keene

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



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

Fax To:

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 @ SURFACE (H302503-01)

BTEX 80218	mg/	'kg	Analyze	d 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	
Toluene*	2.80	1.00	10/18/2013	ND	1.99	99.3	2.00	2.92	
Ethylbenzene*	10.5	1.00	10/18/2013	ND	2.01	100	2.00	2.99	
Total Xylenes*	19.5	3.00	10/18/2013	ND	5.85	97.4	6.00	2.79	
Total BTEX	32.8	6.00	10/18/2013	ND			,		
Surrogate: 4-Bromofluorobenzene (PIL	141 9	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	· % Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	10/17/2013	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	893	200	10/17/2013	ND	191	95.3	200	2.37	
DRO >C10-C28	15100	200	10/17/2013	ND	191	95.5	200	3.62	
Surrogate: 1-Chlorooctane	172 5	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	527	% 63.6-15	4		•				

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Kune



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)

Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
< 0.050								
	0.050	10/18/2013	ND	1.93	96.4	2.00	1.36	
<0.050	0.050	10/18/2013	ND	1.99	99.3	2.00	2.92	
<0.050	0.050	10/18/2013	ND	2.01	100	2.00	2.99	
<0.150	0.150	10/18/2013	ND	5.85	97.4	6.00	2.79	
<0.300	0.300	10/18/2013	ND					
105 %	6 89.4-12	6						
mg/	kg	Analyze	d By: AP					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
32.0	16.0	10/17/2013	ND	416	104	400	0.00	
mg/	kg	Analyze	d By: MS					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<10.0	10.0	10/17/2013	ND	189	94.6	200	4.47	
72.6	10.0	10/17/2013	ND	181	90.6	200	1.79	
	<0.050 <0.150 <0.300  //05 % mg/ Result 32.0 mg/ Result <10.0	<0.050 0.050 <0.150 0.150 <0.300 0.300  105 % 89.4-120 mg/kg  Result Reporting Limit 32.0 16.0 mg/kg  Result Reporting Limit <10.0 10.0	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050

Surrogate: 1-Chlorooctadecane

110 %

63.6-154

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 13



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 @ 1' (H302503-03)

BTEX 8021B	mg/	kg	Analyze	d 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 (PIE	1049	6 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d 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	Analyze	d 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 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	106 %	63.6-15	4						

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Celeg D. Keene



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 @ SURFACE (H302503-04)

BTEX 8021B	mg/	kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.235	0.050	10/18/2013	ND	1.93	96.4	2.00	1.36	
Toluene*	3.11	0.050	10/18/2013	ND	1.99	99.3	2.00	2.92	
Ethylbenzene*	6.67	0.050	10/18/2013	ND	2.01	100	2.00	2.99	
Total Xylenes*	11.5	0.150	10/18/2013	ND	5,85	97.4	6.00	2.79	
Total BTEX	21.5	0.300	10/18/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	383 9	6 89.4-12	6						
Chiloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3520	16.0	10/17/2013	ND	416	104	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	685	200	10/17/2013	ND	189	94.6	200	4.47	
DRO >C10-C28	18900	200	10/17/2013	ND	181	90.6	200	1.79	
Surrogate: 1-Chlorooctane	166 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	242 9	63.6-15	4						

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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	Analyze	d 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 (PIL	108 9	% 89.4-12	6				-		
Chloride, SM4500CI-B	mg/	kg	Analyze	d 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	٠
TPH 8015M	mg/	kg	Analyze	d 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 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	110 9	63.6-15	4						

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Celeg D. Keene



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 @ 1.5' (H302503-06)

BTEX 8021B	mg/	'kg	Analyze	d 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 (PIL	101 5	% 89.4-12	6				,		
Chloride, SM4500CI-B	mg/	/kg	Analyze	d 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	Analyze	d 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 9	% 65.2-14	0			,			
Surrogate: 1-Chlorooctadecane	120 9	% 63.6-15	4						

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\*=Accredited Analyte

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Celey D. Keine



RICE ENVIRONMENTAL CONSULTING & SAFETY JACOB KAMPLAIN 419 W. CAIN HOBBS NM, 88240

Fax To: (575) 397-1471

Received: Reported:

10/16/2013

10/22/2013

Project Name: Project Number: MC CLAY FEDERAL #7
NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

Sampling Type:

: Soil

Sampling Condition:

Cool & Intact

10/09/2013

Sample Received By:

Jodi Henson

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

BTEX 8021B	mg/	kg	Analyze	d By: MS	_				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	ŔPD	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	NÖ	5.85	97.4	6.00	2.79	
Total BTEX	61.6	12.0	10/18/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIC	117 9	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP		<u>-</u>			<del></del>
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	Analyze	d 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 9	65.2-14	o		***				
Surrogate: 1-Chlorooctadecane	984 9	63.6-15	4						-

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\*=Accredited Analyte

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Celey D. Keene



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:

DTEV QA21B

10/22/2013

Sampling Type:

Soil

Project Name:

MC CLAY FEDERAL #7

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sample Received By:

Jodi Henson

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

BTEX 8021B	mg/	kg	Analyze	d 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 (PIL	105 9	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d 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	Analyze	d 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 5	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	110 9	% 63.6-15	4						

Applyand By: MC

#### Cardinal Laboratories

\*=Accredited Analyte

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Celeg D. Keine



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:

NONE GIVEN

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

BTEX 8021B	mg/	kg	Analyze	d 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 (PIL	101 9	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d 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	Analyze	d 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 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	120 9	63.6-15	4						

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\*=Accredited Analyte

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Celey D. Keine



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

Project Location:

NOT GIVEN

Sample Received By:

Jodi Henson

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

BTEX 8021B	mg/kg
D. L. COLLE	

	97	**9		= ,					
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	% 89.4-120	6				· · · · · · · · · · · · · · · · · · ·		
Chloride, SM4500Cl-B	mg/	kg	Analyze	ed 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	Analyze	ed 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 9	% 65.2-140	0						
Surrogate: 1-Chlorooctadecane	1169	63.6-15-	4						

Analyzed By: MS

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\*=Accredited Analyte

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Celey D. Keene



#### **Notes and Definitions**

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

S-06

\*\* 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. Keine

# ARDINAL LABORAT

#### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name	" Unn				Date   Time   Date   Time   Date   Date   Time   Date   Date															
Project Manage	r: Jado Kamphin				P.0	0. #:														
Address:				٠.	Co	mpany:	<u> </u>						S							
City: Hobbs	State: NM	Zip:	882	240	Att	tn:				٠.	on	!		Ì			!			
Phone #:	Fax #:				Àd	ldress:					·		Ē			١.				
Project #:	Project Owns	er;			Cit	tv:				Σ		-	1		·	ļ ·	. !		. !	
Project Name:					T		Zip:		es			급	ยน						•	
	n: McClay Foderal #7				${}^{+}$			<del></del>	은	01	$\widetilde{\Box}$		tic	S						
Sampler Name:					-				ᅙ	∞	3.T	as	Ca						'	ŀ .
FOR LAB USE ONLY	Nyle Schhaldt	T	Т	MATRIX			SAMPL	NG	5	픘	ш	e l	l .	٠.						
Lab I.D. H <i>3025</i> 0	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER:	ACID/BASE: ICE / COOL OTHER:	DATE	TIME		11			Complet							
	Point 1@ Surface	6	7	X			10-4-13	11:45	1	/	<b>V</b>		-					25	100 m	
2	Point 2 @ 6"	6	7	o(	$\Box$	X	. /	11:50	1	1	<b>√</b>						18 de .	10.7V# -1	37.5	
3	Point 1 @ 1'	6	1	~		Q	(	11:55	1	7	<b>V</b>						700		(1) T	
4	point 2 D Surface	6	7	X		X		12:06	~	>	<b>V</b>						100			
3	Doint 2 0 1'	6	П	X		×		12:05	V	<b>V</b>		·			,					
<b>b</b>	point 2 0 1.5	6	1	×		X		12:10	1	>	1									
	point 3 @ surface	6	1	X		₩		12:15	1	>	>									
4	points P. 3'	6	1	- X		N.		12:20	✓	√	5						ļ			
9	paint 3 @ 8.	6	1	-   🐰		X		h:25	✓	<b>\</b>	<b>√</b>				· .					
	noin + 3	6	<u> </u>	~		X	(	12:30		1	₹.							,		

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Relinquished By:	Date:	Received By:	Phone Result: ☐ Yes ☑ No Add'l Phone #:
	10-16-13	10 d No was	Fax Result: ☐ Yes ☑ No Add'l Fax #:
Kule Shraidt	13.45	all senson	REMARKS:
Relinquished By:	Date:	Received By:	kschnaidt@rice-ecs.com
	Time:		Knorman@rice-ecs.com
Delivered By: (Circle One)	<u> </u>	Sample Condition CHECKED BY:	Kjones@riceswd.com; jkamplain@rice-ecs.com
Delivered by. (Circle Oile)			hconder@rice-ecs.com; Lweinheimer@rice-ecs.com
Sampler - UPS - Bus - Other:		Byes Dyes	Theoride (@nce-ecs.com, Ewelline line) @nce-ecs.com

<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2496





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



November 19, 2013

HOBBS, NM 88240

JACOB KAMPLAIN
RICE ENVIRONMENTAL CONSULTING & SAFETY LLC
419 W. CAIN

RE: MC CLAY FEDERAL #7

Enclosed are the results of analyses for samples received by the laboratory on 11/15/13 16:10.

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 <a href="https://www.tceq.texas.gov/field/qa/lab-accred-certif.html">www.tceq.texas.gov/field/qa/lab-accred-certif.html</a>.

Cardinal Laboratories is accreditated 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.

Celes & Keene

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



RICE ENVIRONMENTAL CONSULTING & SAFETY JACOB KAMPLAIN 419 W. CAIN HOBBS NM, 88240

Fax To:

(575) 397-1471

Received:

11/15/2013

Sampling Date:

11/15/2013

Reported:

11/19/2013

Sampling Type:

Soil

Project Name:

MC CLAY FEDERAL #7

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

T18S R30E

Sample ID: EAST WALL (H302804-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	< 0.050	0.050	11/18/2013	ND	1.98	99.2	2.00	5.01	
Toluene*	<0.050	0.050	11/18/2013	ND	1.96	98.2	2.00	5.59	
Ethylbenzene*	ene* <0.050 0.050		11/18/2013	ND	1.95	97.4	2.00	5.81	
Total Xylenes*	<0.150 0.150		11/18/2013	ND	5.71	95.2	6.00	5.49	
Total BTEX	<0.300	0.300	11/18/2013	ND				•	
Surrogate: 4-Bromofluorobenzene (PIL	106 %	6 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride `	112	16.0	11/18/2013	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/18/2013	ND	215	108	200	0.572	
DRO >C10-C28	-C10-C28 <10.0 10.0		11/18/2013	ND	210	105	200	2.06	
Surrogate: 1-Chlorooctane	72.2 9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	82.2 9	% 63.6-15	4						

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\*=Accredited Analyte

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Celeg & Keine



RICE ENVIRONMENTAL CONSULTING & SAFETY JACOB KAMPLAIN 419 W. CAIN HOBBS NM, 88240

Fax To:

(575) 397-1471

Received:

11/15/2013

Sampling Date:

11/15/2013

Reported:

11/19/2013

Sampling Type:

Soil

Project Name:

MC CLAY FEDERAL #7

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

T18S R30E

Sample ID: SOUTH WALL (H302804-02)

BTEX 8021B	mg/	kg	Analyze	d By: MS		<u></u>				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050 0.050		11/18/2013	ND	1.98	99.2	2.00	5.01		
Toluene*	Toluene* <0.050		11/18/2013	ND	1.96	98.2	2.00	2.00 5.59		
Ethylbenzene*	nzene* <0.050 0.050		11/18/2013	ND	1.95	97.4	2.00	5.81		
Total Xylenes*	es* <0.150 0.150		11/18/2013	ND	5.71	95.2	6.00	5.49		
Total BTEX <0.300		0.300	11/18/2013	ND						
Surrogate: 4-Bromofluorobenzene (PIL	107 %	6 89.4-12	6					-		
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	25 <b>6</b>	16.0	11/18/2013	ND	432	108	400	0.00		
TPH 8015M	mg/	kg	Analyze	d By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	11/18/2013	ND	215	108	200	0.572		
DRO >C10-C28	<b>10-C28 113</b> 10.0		11/18/2013	ND	210	105	200	2.06		
Surrogate: 1-Chlorooctáne	69.9 9	65.2-14	0				·			
Surrogate: 1-Chlorooctadecane	83.9 9	63.6-15	4							

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\*=Accredited Analyte

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Celey D. Keine



RICE ENVIRONMENTAL CONSULTING & SAFETY JACOB KAMPLAIN 419 W. CAIN HOBBS NM, 88240

Fax To:

(575) 397-1471

Received:

11/15/2013

Sampling Date:

11/15/2013

Reported:

11/19/2013

Sampling Type:

Soil

Project Name:

MC CLAY FEDERAL #7

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

T18S R30E

Sample ID: WEST WALL (H302804-03)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050 0.050		11/18/2013	ND	1.98	99.2	2.00	5.01	
Toluene*	<0.050	<0.050 0.050		ND	1.96	98.2	2.00	5.59	
Ethylbenzene*	<0.050 0.050		11/18/2013	ND	1.95	97.4	2.00	5.81	
Total Xylenes*	<0.150 0.150		11/18/2013	· ND	5.71	95.2	6.00	5.49	
Total BTEX	<0.300	0.300	11/18/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	108	% 89.4-12	6				,		
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	` Result´	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/18/2013	ND	432	108	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/18/2013	ND	215	108	200	0.572	
DRO >C10-C28	<10.0	10.0	11/18/2013	ND	210	105	200	2.06	
Surrogate: 1-Chlorooctane	83.8	% 65.2-14	0			•			
Surrogate: 1-Chlorooctadecane	94.0	% 63.6-15	4 .			•			

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\*=Accredited Analyte

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Celey D. Kune



RICE ENVIRONMENTAL CONSULTING & SAFETY JACOB KAMPLAIN 419 W. CAIN HOBBS NM, 88240

Fax To: (575) 397-1471

Received:

11/15/2013

Sampling Date:

11/15/2013

Reported:

11/19/2013

Sampling Type:

Soil

Project Name:

MC CLAY FEDERAL #7

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

T18S R30E

Sample ID: NORTH WALL (H302804-04)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/18/2013	ND	1.98	99.2	2.00	5.01	
Toluene*	<0.050	0.050	11/18/2013	ND	1.96	98.2	2.00	5.59	
Ethylbenzene*	<0.050	0.050	11/18/2013	ND	1.95	97.4	2.00	5.81	
Total Xylenes*	al Xylenes* <0.150 0.150		11/18/2013	ND	5.71	95.2	6.00	5.49	
Total BTEX	<0.300	0.300	11/18/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	107 %	6 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/18/2013	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS			•		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery,	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/18/2013	ND	215	108	200	0.572	
DRO >C10-C28	<10.0	10.0	11/18/2013	ND	210	105	200	2.06	
Surrogate: 1-Chlorooctane	75.5	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	88.13	% 63.6-15	4 .						

#### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and clients' 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 whistoever shall be deemed waved 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 subcidaries, affiliates or successors alising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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. Keine



#### **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

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# ARDINAL LABORATORIES

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

roject Manager: Jacob Kamplain  Address:  Company:  State: NM Zlp: 88240  Attn:  Address:  Project #: Project Owner:  Clty:  Project Location: T185 R305  Phone #:  Project Location: T185 R305  Phone #:  Project Name: Ambey Grows  Fax #:  Project Name: Ambey Gro		(303) 333-2326 FF	17 (000) 393-24	70	132	3) 0	73-1	00		$\sim 7$	325	1013	)-1	020			•		-								
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† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-247





November 21, 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 11/14/13 16:45.

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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

Cardinal Laboratories is accreditated 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.

Celey & Keene

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



RICE ENVIRONMENTAL CONSULTING & SAFETY JACOB KAMPLAIN 419 W. CAIN HOBBS NM, 88240

Fax To:

(575) 397-1471

Received:

11/14/2013

Sampling Date:

11/14/2013

Reported:

11/21/2013

Sampling Type:

Soil

Project Name:

MC CLAY FEDERAL #7

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

T18S R30E

Sample ID: 5 PT. COMPOSITE (H302788-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/18/2013	ND	2.14	107	2.00	2.60	
Toluene*	<0.050	0.050	11/18/2013	ND	2.12	106	2.00	2.40	
Ethylbenzene*	<0.050	0.050	11/18/2013	ND	2.12	106	2.00	2.58	
Total Xylenes*	<0.150	0.150	11/18/2013	ND	6.19	103	6.00	2.34	
Total BTEX	<0.300	0.300	11/18/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	113 9	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	11/21/2013	ND	432	108	400	0.00	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	11/15/2013	ND	182	91.1	200	5.05	
DRO >C10-C28	306	50.0	11/15/2013	ND	182	90.8	200	6.00	
Surrogate: 1-Chlorooctane	81.7	% 65.2-14	0						

Surrogate: 1-Chlorooctadecane

141 %

63.6-154

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Celeg D. Keene



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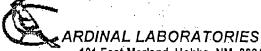
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keine



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Delivered By	: (Circle One)		1	Sam		Conc		וי	CF	IE A	KEDBY:	Lpena										•		

agroves@rice-ecs.com

Sampler - UPS - Bus - Other:

<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to 505-393-24/6



November 18, 2013

HOBBS, NM 88240

JACOB KAMPLAIN RICE ENVIRONMENTAL CONSULTING & SAFETY LLC 419 W. CAIN

RE: MC CLAY FEDERAL #7

Enclosed are the results of analyses for samples received by the laboratory on 11/13/13 10:45.

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 <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accred certif.html.

Cardinal Laboratories is accreditated 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 (TTḤM)

Method EPA 524.4 Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celey D. Keene

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:

11/13/2013

Sampling Date:

11/12/2013

Reported:

11/18/2013

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: IMPORTED SOIL (H302765-01)

Chloride, SM4500CI-B	ride, SM4500CI-B mg/kg			d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD <sub>.</sub>	Qualifier
Chloride	64.0	16.0	11/15/2013	ND	416	104	400	3.92	

Cardinal Laboratories \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and clients 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 whetsoever 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 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 claims 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.

Celeg & Keine



#### **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

PLEASE NOTE: Liability and Damages, Cardinal's liability and client for analyses. All claims, including those for negligence and any other cause whatsoever shall be firmted to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed walved unless made in writing and received by Clerdinal 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 incidental or consequential damages, affiliates or successors arising out 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. Keine

### ARDINAL LABORATORIES

#### **CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

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

Company Name	: RECS								BILL-TO						ANALYSIS REQUEST											
Project Manager	: Jacob Kamo	lain							P.O. #:												ŀ					
Address:									Co	mpa	any:				,				S		·					
City:		State: NM	Zip	: 88	240				Attn:								-		on							
Phone #:		Fax #:					-		Address:							•			۱'n							
Project #:		Project Owner	:						City:							Σ		ェ	//s							
Project Name:	ing Energy								State: Zip:						ğ	5	×	Ū	. uc							
Project Location	ing Energy McClay Fed	eral #7							Phone #:						j:	801	<u>[</u> ]	S	iji.	TDS		[				
Sampler Name:	Chris Flore	S							Fax #:						Chlorides	1 2	BTEX	g	Ö			·			. !	
FOR LAB USE ONLY		•				MA	TRIX			PRE	SER	/. SA	AMPLI	NG .	$\overline{\mathbf{c}}$	Hd.		Texas TPH	te							
,		•	(C)OMP	<u></u>	<u>ابرا</u>											<del> </del>		'	9		•		]			
Lab I.D.	Sample	I.D.	R	NTAINER	GROUNDWATER			SLUDGE	ER:	ACID/BASE:	COOL								Complete Cations/Anions							
H302765		,	(G)RAB	8	3RO	SOL	등	J) (I	OTHER:	ACID	ICE / CO	DA	ATE	TIME												
]	Imported	Soil	4	Ī				<u> </u>	Ť			_	L-13	3:00 pm	X									,	•	
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analyses. All claims includin service. In no event shall Ca affiliates or successors erisin	d Damages. Cardinal's liability and c g those for negligence and any other ardinal be liable for incidental or cons g out of or related to the performance	r cause whatsoever shall be equental damages, including	deeme withou ardina	d waive at limite , regar	ed unless ition, bus diess of v	made iness ir vhether	in writin Itarrupti	g and ioлs, h	receh oss of	ved by use, c	Cardina or toss of	l within 30 o profits inc.	days efte	r completion of the lient, its subsidial asons or otherwis	ne applica nes, e.											
Relinquished By	_	Date: //-/3-/3 Time: '45	l	ceiv	red B	y: .	-	1	lo	M	12	Ov		Phone Res Fax Resul REMARKS	t:	□ Ye			Add'i i Add'i i	Phone : Fax #:	#:.					

Relinquished By:	Date:	Received By: , #	·	Phone Result:	☐ Yes	☑ No	Add'i Phone #:		
	11-13-13	1.00 1. 1	. A @	Fax Result:	☐ Yes	☑ No	Add'i Fax #:		
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Reinduished by:	Date:	Received by.		email resi	มแร้ ี		C C 51000 :		
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	Time:							*	
5.19.10.10	L			Sales Com		Sec. 15.	ા, ા નિલ્લ્ડ @ri	ce-ecs.com:	
Delivered By: (Circle One)		Sample Condition	CHECKED BY:						
		Cool Intact	(Initials)	A35-35-1			::: Lweinheime	er@rice-ecs.com	
Sampler - UPS - Bus - Other:	•	∐ Yes ☐ Xes	1 UN	CFlorese				•	
		No No	/ V	C110.076	ارزو - در	. 2 + Cor-	<u> </u>		

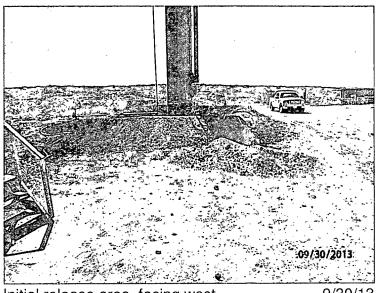
#54

<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

Appendix D
Photo Documentation

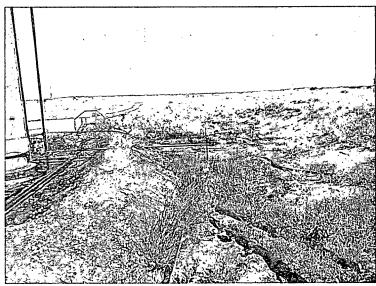
RICE Environmental Consulting and Safety (RECS)
P.O. Box 2948 Hobbs, NM 88241
Phone 575.393.2967

## Linn McClay Federal #7 Unit Letter C, Section 33, T18S, R30E



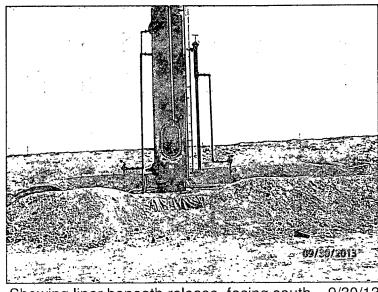
Initial release area, facing west

9/30/13

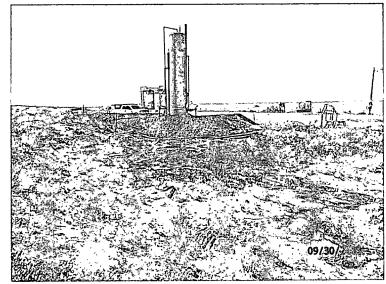


Initial release area, facing east

9/30/13

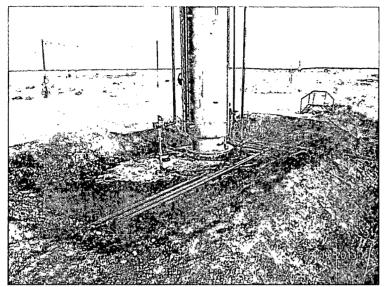


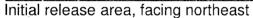
Showing liner beneath release, facing south 9/30/13



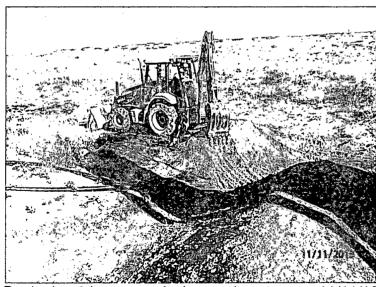
Initial release area, facing northwest

9/30/13



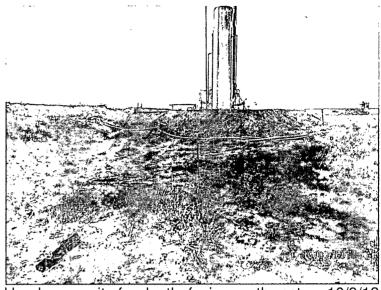


10/9/13



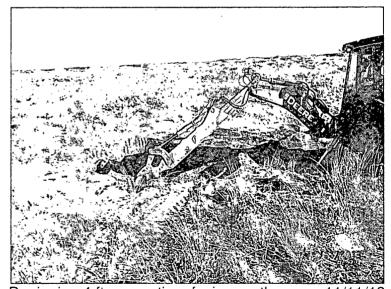
Beginning 6 in scrape, facing northeast

11/11/13



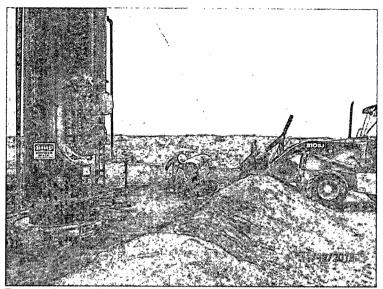
Hand augur site for depth, facing northwest

10/9/13

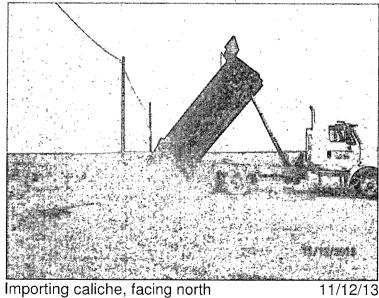


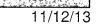
Beginning 4 ft excavation, facing north

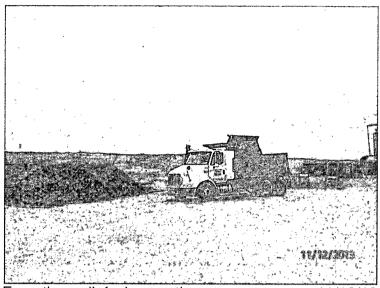
11/11/13



Removing caliche over liner, facing southeast 11/12/13





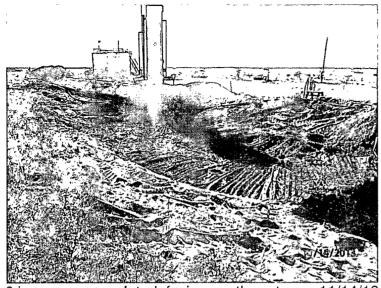


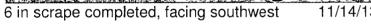
Exporting soil, facing southeast

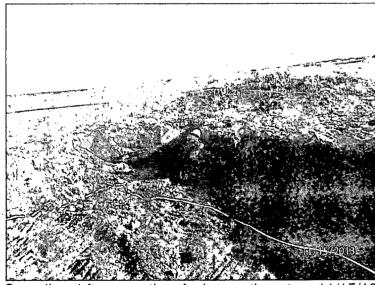


Taking final samples, facing south

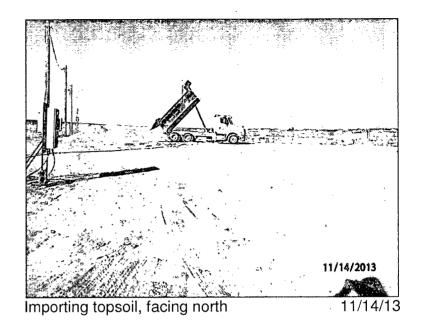
11/14/13

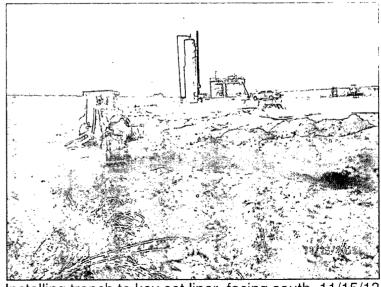




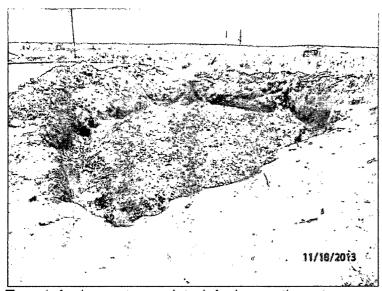


Sampling 4 ft excavation, facing northeast 11/15/13

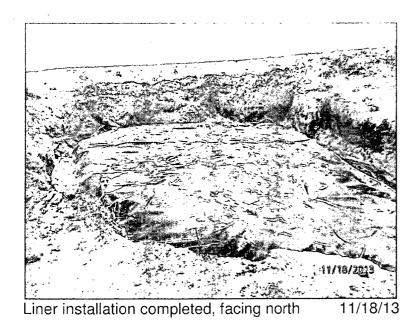


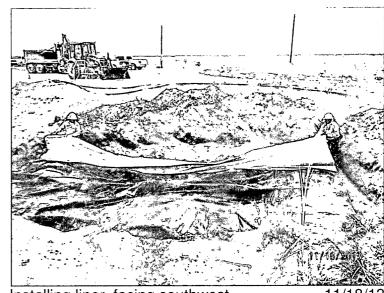


Installing trench to key set liner, facing south 11/15/13

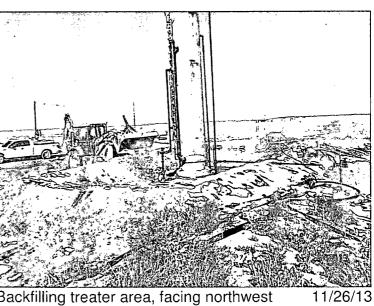


Trench for key set completed, facing northwest 11/18/13

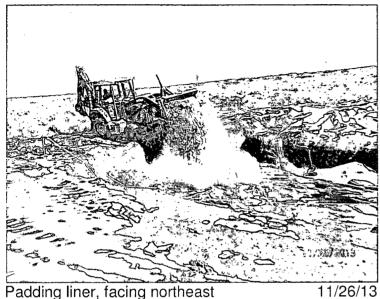


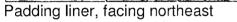


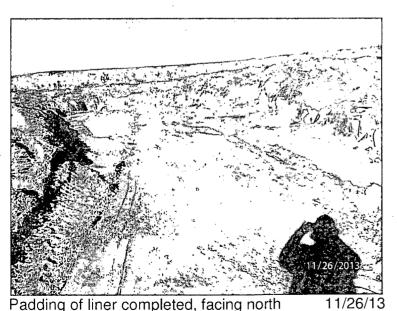
Installing liner, facing southwest



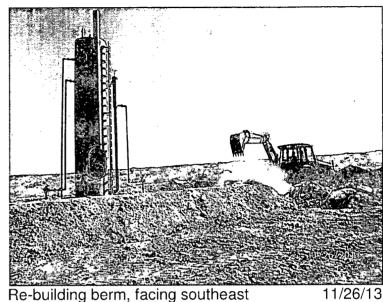
Backfilling treater area, facing northwest



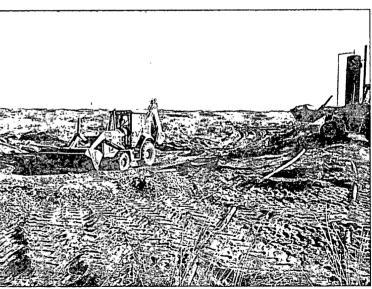




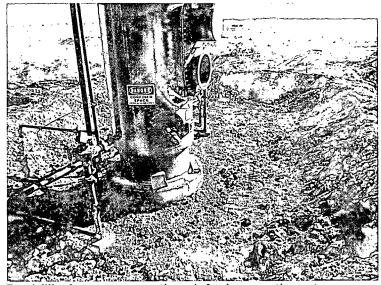
Padding of liner completed, facing north



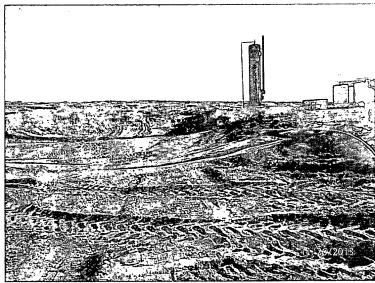
Re-building berm, facing southeast



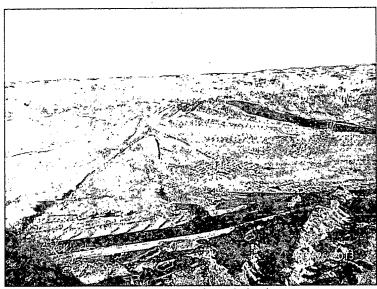
Backfilling excavation and scrape, facing southeast 11/26/13



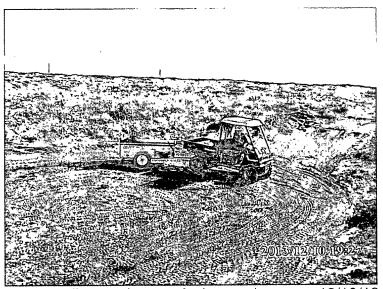
Backfill of treater completed, facing southeast 11/26/13



Backfill of pasture area completed, facing south 11/26/13

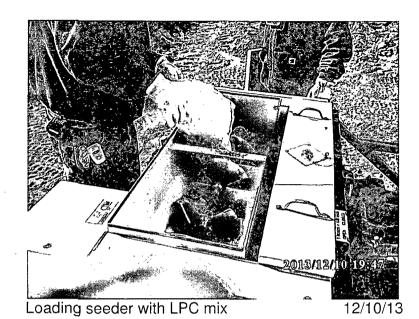


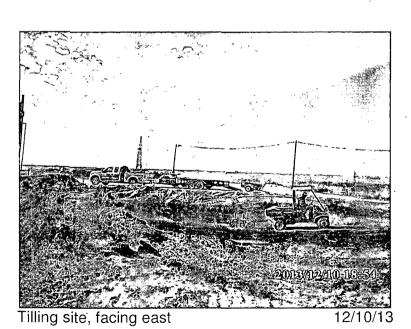
Backfill of pasture area completed, facing east 11/26/13



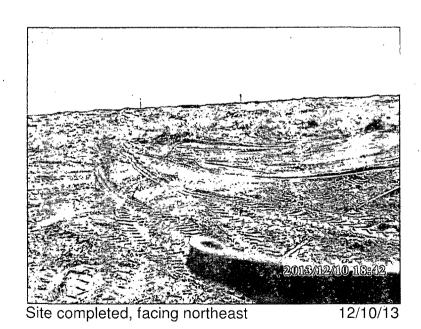
Adding soil amendments, facing north

12/10/13









# Appendix E Final C-141s

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

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

Form C-141

Revised August 8, 2011

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

			Rele	ease Notific	ation	and Co	rrective A	ction							
•			-			<b>OPERA</b> T	TOR .		☐ Initia	al Report	Final R	leport			
Name of Co	mpany: L	inn Operatin	g		(	Contact: Brian Wall									
		nder Hobbs,		10	7	Telephone No.: 806-367-0645									
Facility Nar	ne: McCla	ny Federal #7	7			Facility Type: Oil Producer									
Surface Ow	ner: Feder	al		Mineral O	wner				API No	.: 30015103	70				
				LOCA	TION	OF REI	LEASE								
Unit Letter C	Section 33	Township 18S	Range 30E	Feet from the 330		South Line North	Feet from the 1650		Vest Line Vest	County Ed	dy				
		Lati	tude_32.	7103208597655	L	ongitude_	-103.980175	130974	<u> </u>						
				NAT	URE	OF REL	EASE								
		ed Water/Oil					Release: 4bbls/1			Recovered: 4b					
Source of Re	lease: Heat	er			Date and F 9/8/2013	Iour of Occurrenc 12:00 am	e:	Date and 09/08/201	Hour of Disco	overy:					
Was Immedia	ate Notice (		Yes [	No Not Re	quired	If YES, To Whom?									
By Whom? E	Brian Wall					Date and Hour 09/10/2013									
Was a Water		ched?	] Yes 🛚	] No		If YES, Vo	lume Impacting t	the Wate	ercourse.						
If a Watercon	urca was Im	pacted, Descr	ibe Fully '	<u> </u>											
		lem and Reme e degradation.		n Taken.* Hole in	bottom	of heater ins	ide base ring. All	l fluid in	dike area p	picked up wit	h vacuum trucl	k			
arrived on sit	te on Septer side the line	mber 10th, 201	13. The site	ken.* A total of 31 e was photographe liche above the linated caliche.	ed and m	napped. The	liner was found a	cross the	base of th	e heater and r	none of the rele	ease			
regulations a public health should their or or the enviro	Il operators or the envioperations length.	are required to ronment. The nave failed to	to report are acceptance acceptan	e is true and completed in the certain rece of a C-141 report investigate and restance of a C-141 received in the certain cert	elease no ort by the emediate	otifications a NMOCD m contaminati	nd perform correct arked as "Final R on that pose a thr	ctive act eport" d eat to gr	ions for rel loes not rel ound water	eases which r ieve the opera r, surface wat	may endanger ator of liability er, human heal	,			
							OIL CON	<u>SERV</u>	<u>ATION</u>	DIVISIO	<u>N</u> .				
Signature:	Fred B	Wall.													
						Approved by	Environmental S	pecialis	t:						
Printed Name															
Title: Constr	uction Fore	man II			- 1	Approval Da	te:		Expiration	Date:					
E-mail Addre	ess: bwall@	linnenery.cor	n		(	Conditions o	f Approval:			Attached					
Date: 2/5	/14		1	Phone: 806-367-0	0645					1					

<sup>\*</sup> Attach Additional Sheets If Necessary

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	on and Co	rrective A	ction								
	<b>OPERA</b>	ГOR	☐ Initi	al Report		Report					
Name of Company: Linn Operating	Contact: Bri	an Wall		· ·							
Address: 2130 W. Bender Hobbs, NM 88240		No.: 806-367-064	5								
Facility Name: McClay Federal #7	Facility Typ	e: Oil									
Surface Owner: Federal Mineral Owner	•		APINO	o.: 30015103	70	<u></u>					
Surface Owner, Tederal			11111	3.1. 5 0 0 1 5 1 0 5							
	ON OF RELEASE										
Unit Letter   Section   Township   Range   Feet from the   Nort	th/South Line North	Feet from the 1650	East/West Line West	County	County Eddy						
105 302 350	NOTELL	1030	W C3t		Ludy						
Latitude: 32.7103208597655	Longitude	: <u>-103.98017</u>	5130974								
NATUR	E OF REL	EASE									
Type of Release: Oil		Release: 10 bbls		Recovered: 0							
Source of Release: Heater	Date and F 09/24/2013	lour of Occurrenc 3 12:00am	e: Date and 9/24/201	Hour of Disco	very:						
Was Immediate Notice Given?	If YES, To	Whom?									
Yes ☐ No ☐ Not Required Mike Burton- BLM Mike Bratcher- NM OCD											
By Whom? Brian Wall		lour 09/26/2013 7									
Was a Watercourse Reached?  ☐ Yes ☒ No	If YES, Vo	lume Impacting t	he Watercourse.								
If a Watercourse was Impacted, Describe Fully.*											
Describe Cause of Problem and Remedial Action Taken.*: Missed opening relief valve on top of the heater.	ng valve when res	tarting well. Heater	exceeded operating	pressure blew o	il through pres	ssure					
Describe Area Affected and Cleanup Action Taken.*: The release covere	d 2,486 sq ft of le	ase pad and pasture	land. RECS person	nel were on site	beginning on						
September 30 <sup>th</sup> , 2013 to assess the releases. Soil samples from the surface and worganic vapors and representative samples were taken to a commercial laborator											
standards beginning at 6 inches. Point 2 returned laboratory chloride, GRO, DR	O and BTEX belo	w regulatory standa	irds beginning at 1 fe	oot. Point 3 retu	med laborator	ry					
chloride, GRO, DRO and BTEX below regulatory standards beginning at 8.5 fee and approved by BLM the same day. NMOCD approved the CAP on November	et. A CAP for the	release (2RP-1959)	was sent to NMOC	D and BLM on (	October 29th, 2	2013					
treater berm, the contaminated berm, the 6 inch scrape and the 4 foot excavation						11C					
approved facility for disposal. A total of 72 yards of clean caliche was imported	to the site to back	cfill the treater area	and replace the cont	aminated berm.	The remaining						
caliche was backfilled into the 4 foot excavation. Once the 4 foot excavation was constituents were below regulatory standards. At the base of the 6 inch scrape, a		•		•	•						
bottom composite returned a chloride value of 320 mg/kg, a DRO value of 306 m	ng/kg and GRO a	nd BTEX values of	non-detect. This da	a was sent to Bl	LM and NMO	CD					
with a request to backfill the site. BLM approved the site to be backfilled on No											
trench was installed along the periphery of the 4 foot excavation and a 20-mil rei imported to site to serve as backfill. The liner was padded with 6 inches of the to											
imported top soil was taken to a commercial laboratory and returned a laboratory	chloride reading	of 64 mg/kg. The	inch scrape and the	remainder of th	ie 4 foot excav	vation					
was backfilled with the imported top soil and the area was contoured to the surro and the site was seeded with LPC seed mix.	unding location.	On December 10",	2013, soil amendine	nts were added t	o the pasture a	area					
I hereby certify that the information given above is true and complete to the best			•			perators					
are required to report and/or file certain release notifications and perform correct acceptance of a C-141 report by the NMOCD marked as "Final Report" does not						icata					
and remediate contamination that pose a threat to ground water, surface water, he	•	•	•			_					
relieve the operator of responsibility for compliance with any other federal, state	, or local laws and										
Signature: Fred B Wall		OIL CON	SERVATION	DIVISIO	<u> </u>						
Printed Name: Brian Wall	Approved by	Environmental S	pecialist:			·					
Title: Construction Foreman II	Approval Dat	e:	Expiration								
E-mail Address: bwall@linnenergy.com	Conditions of	Approval:		Attached							
Date: 2/5/14 Phone: 806-367-0645				Attached							
* Attach Additional Sheets If Necessary				1.							