

## H E West B Federal #33

### **CLOSURE REPORT**

API No. 30-015-25944

Release Date: February 12th, 2015

Unit Letter L, Section 3, Township 17 South, Range 31 East

### March 26, 2015

#### Prepared by:

Environmental Department Diversified Field Service, Inc. 206 W. Snyder Hobbs, NM 88240 Phone: (575)964-8394 Fax: (575)393-8396

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### HE West B Federal #033

#### **1** INTRODUCTION

Linn Energy (Linn) has retained Diversified Field Service, Inc. (DFSI) to address environmental issues for the site detailed herein.

The site is located northeast of Loco Hills, NM, in Eddy County. The leak site resulted from a truck hitting the well and breaking off a tubing valve. The impacted area is the caliche pad and south into the pasture. A site map is attached. A C-141 (Appendix I) was submitted to the NMOCD on February 17, 2015.

#### 2 SITE ACTIVITIES

On February 17, 2015 DFSI personnel responded to the location and placed a berm around the well to contain the fluid. DFSI personnel scraped up the saturated soil in the pasture and on the caliche pad. Four soil samples of the spill area were taken. Each sample was tested for chloride levels as well as TPH. The TPH samples were performed using a Mini Rae Photoionization Detector (PID). All field samples that field tested below state/BLM requirements were taken to Cardinal Lab of Hobbs to obtain confirmation samples. The results are attached (Appendix IV).

On March 19, 2015, DFSI personnel returned to the site to start excavation. The impacted caliche pad was removed at 6" below ground surface.

On March 20, 2015, the impacted soil in the pasture was excavated to 3'bgs. DFSI personnel returned to the site on March 23, 2015 to backfill the excavated area on the pad with fresh caliche. DFSI used the surrounding terrain for backfill in the pasture area, and the site was completed on March 25, 2015. Photographs are attached (Appendix II). All contaminated soil was hauled to a BLM/NMOCD approved facility.

#### 3 CONCLUSION

According to the U.S. Geological Survey and the NM Office of the State Engineer, there were no records of groundwater in the immediate vicinity, however depth to groundwater in the area averages greater than 250'bgs indicating no potential threat to groundwater or life forms.

# Appendix I

**INITIAL FORM C-141** 

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	n and Corrective Actio	n					
		OPERATOR	🖂 In	nitial Report	Final Report			
Name of Company Linn Operating Inc.		Contact E.L. Gonzales						
Address 2130 W Bender Blvd Hobbs, NM 88	3240	Telephone No. 575-738-1739						
Facility Name H.E. West B # 33		Facility Type Injection						
Surface OwnerFederalMineral OwnerAPI No.30-015-25944								

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	03	17S	31E	1980	South	660	West	Eddy

Latitude 32.86183 Longitude -103.86335

#### NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 70 bbls	Volume Recovered 60 bbls
Source of Release Well head	Date and Hour of Occurrence	Date and Hour of Discovery
	02/12/2015	02/12/2015 0600
Was Immediate Notice Given?	If YES, To Whom?	
🗌 Yes 🗌 No 🗌 Not Requi	red	
By Whom?	Date and Hour	
Was a Watercourse Reached?	If YES, Volume Impacting the W	atercourse.
🗌 Yes 🖾 No		
If a Watercourse was Impacted, Describe Fully.*		
n a Walercourse was impacted, Deserver rang.		
Describe Cause of Problem and Remedial Action Taken.* drilling rig		
responded along with Eddie Jaramillo and Rick Rickman. It appeared		
The damage results were the tubing valve and tubing below being bro	ken off at the top of the well head and fl	uid was back flowing on to location
Describe Area Affected and Cleanup Action Taken.* estimated 40 bb	la Offlyid nicked yn in adiaeant nastyr	a and astimate of 20 kbls from location
equipment near location was used to dike well pad and contain fluid a		
with Apache drilling company man Chris Johnson 806-787-9911 requ		
with Apache drining company man emits joinison 600-707-7711 requ	lesting ins help to identify the company	that may have int the wen
I hereby certify that the information given above is true and complete		
regulations all operators are required to report and/or file certain relea		
public health or the environment. The acceptance of a C-141 report b		
should their operations have failed to adequately investigate and reme		
or the environment. In addition, NMOCD acceptance of a C-141 repo	ort does not relieve the operator of respo	nsibility for compliance with any other
federal, state, or local laws and/or regulations.		
	<u>OIL CONSER</u>	VATION DIVISION
Signature:		
Signature.		
Printed Name: E.L. Gonzales	Approved by Environmental Specia	list:
Times Fune, D.D. OonEuros		
Title: Production Supervisor	Approval Date:	Expiration Date:
	FF	
E-mail Address: elgonzales@linnenergy.com	Conditions of Approval:	
<u> </u>		Attached

Date: 02/17/2015 Phone: 505-504-8002

\* Attach Additional Sheets If Necessary

# Appendix II

SITE PHOTOS

### Linn Energy, HE West B Federal #033

Unit Letter L, Section 03, T17S R31E



Sign marking location



Spill area around wellhead, pasture area



Excavating pad area



Excavating area around injection well on pad



Excavated pad area



Excavating pasture area



Backfilling pad with fresh caliche



Contoured and blended pasture area



Backfilled pad area, closure pic

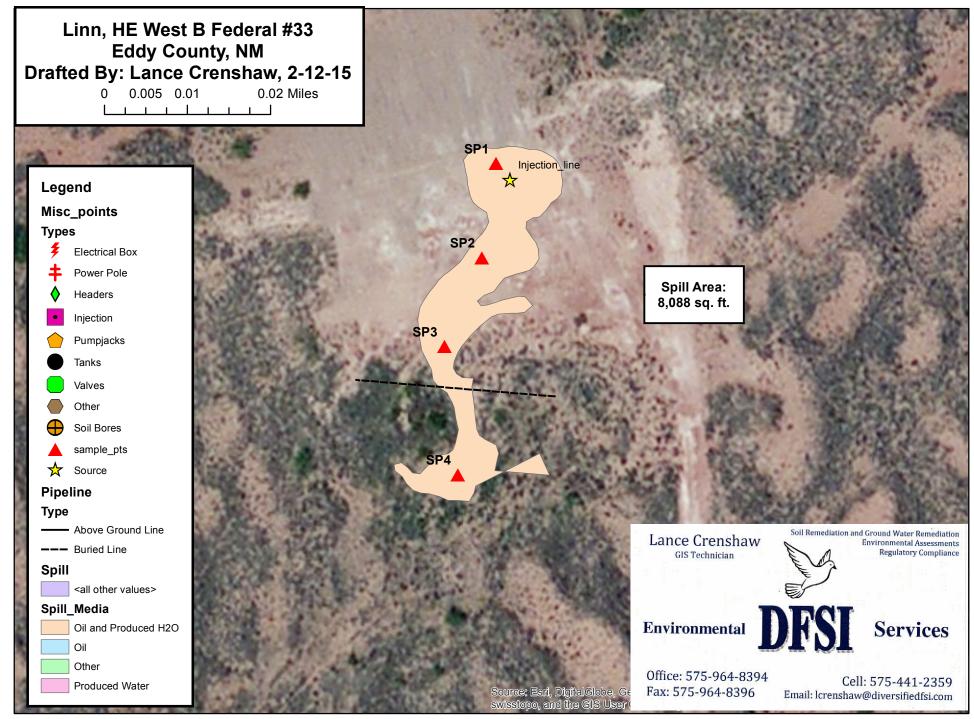


Backfilled and contoured pasture area, closure pic

# Appendix III

SITE MAP

### Site Diagram



## Appendix IV

LABORATORY ANALYSES



February 20, 2015

RICK RICKMAN LINN OPERATING-HOBBS 2130 W. BENDER HOBBS, NM 88240

RE: H. E. WEST B #33

Enclosed are the results of analyses for samples received by the laboratory on 02/13/15 14:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/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.

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. Keine

Celey D. Keene Lab Director/Quality Manager



LINN OPERATING-HOBBS RICK RICKMAN 2130 W. BENDER HOBBS NM, 88240 Fax To: (575) 738-1740

Received:	02/13/2015	Sampling Date:	02/13/2015
Reported:	02/20/2015	Sampling Type:	Soil
Project Name:	H. E. WEST B #33	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

#### Sample ID: SP 1 @ 3' (H500437-01)

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	02/20/2015	ND	1.76	87.9	2.00	14.0	
Toluene*	<0.050	0.050	02/20/2015	ND	1.77	88.3	2.00	14.6	
Ethylbenzene*	<0.050	0.050	02/20/2015	ND	1.77	88.6	2.00	14.2	
Total Xylenes*	<0.150	0.150	02/20/2015	ND	5.20	86.7	6.00	14.8	
Total BTEX	<0.300	0.300	02/20/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 9	61-154							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	02/17/2015	ND	416	104	400	3.92	
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	02/18/2015	ND	208	104	200	0.438	
DRO >C10-C28	<10.0	10.0	02/18/2015	ND	196	98.0	200	0.534	
Surrogate: 1-Chlorooctane	94.2	% 47.2-15	7						

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



LINN OPERATING-HOBBS RICK RICKMAN 2130 W. BENDER HOBBS NM, 88240 Fax To: (575) 738-1740

Received:	02/13/2015	Sampling Date:	02/13/2015
Reported:	02/20/2015	Sampling Type:	Soil
Project Name:	H. E. WEST B #33	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

#### Sample ID: SP 2 @ 9' (H500437-02)

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	02/20/2015	ND	1.76	87.9	2.00	14.0	
Toluene*	<0.050	0.050	02/20/2015	ND	1.77	88.3	2.00	14.6	
Ethylbenzene*	<0.050	0.050	02/20/2015	ND	1.77	88.6	2.00	14.2	
Total Xylenes*	<0.150	0.150	02/20/2015	ND	5.20	86.7	6.00	14.8	
Total BTEX	<0.300	0.300	02/20/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	61-154							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	02/17/2015	ND	416	104	400	3.92	
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	02/18/2015	ND	208	104	200	0.438	
DRO >C10-C28	<10.0	10.0	02/18/2015	ND	196	98.0	200	0.534	
Surrogate: 1-Chlorooctane	96.5	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	89.8	52.1-17	6						

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



LINN OPERATING-HOBBS RICK RICKMAN 2130 W. BENDER HOBBS NM, 88240 Fax To: (575) 738-1740

Received:	02/13/2015	Sampling Date:	02/13/2015
Reported:	02/20/2015	Sampling Type:	Soil
Project Name:	H. E. WEST B #33	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

#### Sample ID: SP 3 @ SURFACE AFTER SCRAPE (H500437-03)

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	02/20/2015	ND	1.76	87.9	2.00	14.0	
Toluene*	<0.050	0.050	02/20/2015	ND	1.77	88.3	2.00	14.6	
Ethylbenzene*	<0.050	0.050	02/20/2015	ND	1.77	88.6	2.00	14.2	
Total Xylenes*	<0.150	0.150	02/20/2015	ND	5.20	86.7	6.00	14.8	
Total BTEX	<0.300	0.300	02/20/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 %	% 61-154	!						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	02/17/2015	ND	416	104	400	3.92	
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	02/18/2015	ND	208	104	200	0.438	
DRO >C10-C28	<10.0	10.0	02/18/2015	ND	196	98.0	200	0.534	
Surrogate: 1-Chlorooctane	96.8	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	97.4	% 52.1-17	6						

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



LINN OPERATING-HOBBS RICK RICKMAN 2130 W. BENDER HOBBS NM, 88240 Fax To: (575) 738-1740

Received:	02/13/2015	Sampling Date:	02/13/2015
Reported:	02/20/2015	Sampling Type:	Soil
Project Name:	H. E. WEST B #33	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

#### Sample ID: SP 4 @ 3' (H500437-04)

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	02/20/2015	ND	1.76	87.9	2.00	14.0	
Toluene*	<0.050	0.050	02/20/2015	ND	1.77	88.3	2.00	14.6	
Ethylbenzene*	<0.050	0.050	02/20/2015	ND	1.77	88.6	2.00	14.2	
Total Xylenes*	<0.150	0.150	02/20/2015	ND	5.20	86.7	6.00	14.8	
Total BTEX	<0.300	0.300	02/20/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 9	61-154							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	02/17/2015	ND	416	104	400	3.92	
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	02/18/2015	ND	208	104	200	0.438	
DRO >C10-C28	<10.0	10.0	02/18/2015	ND	196	98.0	200	0.534	
Surrogate: 1-Chlorooctane	96.7	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	92.5	52.1-17	6						

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **Notes and Definitions**

- ND
   Analyte NOT DETECTED at or above the reporting limit

   RPD
   Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

#### Cardinal Laboratories

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Loratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

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Ters P

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

PLEASE NOTE. Lukulthy and Damages. Cardinal's liability and cardinales including those for megligence and or one attention or successors ansing out of or related to the performance of the cardinal By: Relinquished By: CUU CUU Relinquished By: (Circle One) Sampler - UPS - Bus - Other: 1 Cardinal cannot accept verbal cl	Address: City: Sta Project Name: Sta Project Name: Project Name: Project Sampler Name: PALON LOW ST 33 FOR UNE CONLY Lab I.D. Sample I.D. Lab I.D. Sample I.D. 1 SP 1 & 23 2 SP 2 & 9' 2 SP 3 & Suff AFter Sc	anager: M/MC
PLASE NOTE: Liability and Damages: Cadrals is lability and dient's exclusive remedy for any claim surgy writer label of contract or lot, visit be limited to the amount pair by the dient's to the performance of services memory writerie takes to contract or lot, visit be limited to the amount pair by the dient's to	Sample I.D. Sample I.D. Sample State: Zip: Fax #: Project Owner: Project	Ene ray Burgon
PLASE NUTE: Liability and Clearcy actionals hashing and clearcy exclusions numbers. All chains incluming the case in contrast or exclusion including with and clear exclusions numbers. All chains including the labele for including and clearcy exclusion without manages. In one events while Carbon the performance of services here under the modern of the approximate of the induced to the performance of services here under the performance of services here under the transformation of the approximate of the induced to the performance of services here under the performance of services here under the transformation of the approximation of the approximation of the approximation of the approximate of the induced to the performance of services here under the transformation of the approximation of the approximate of the approximation of the approximate of the approximation of the approximate of the approximation of the approximate approximate approximate approximation of the approxima	P.O. #: Company: Livin Attn: Ri <sup>1</sup> CK R Address: Phone #: Phone #: Phone #: Phone #: Zip: Phone #: Zip: DAT OTHER X 2-13- X-13-	BILL TO
□ No Add"I Phone #:		

Page 7 of 7

# Appendix V

FINAL C-141

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action								
					OPERAT	OR	Initial	Report 🛛 Final Report
Name of Company Linn Operating Inc.				Contact	E.L. Gonzales			
Address 2130 W Bender Blvd Hobbs, NM 88240				Telephone N	Telephone No. 575-738-1739			
Facility Name H.E. West B # 33				Facility Typ	Facility Type Injection			
Surface Owner Federal Mineral Owner				Wner		API No	. 30-015-25944	
LOCATION OF RELEASE								
Unit Letter L	Section 03	Township 17S	Range 31E	Feet from the 1980	North/South Line South	Feet from the 660	East/West Line West	County Eddy
	•	•				•	•	· · · · ·

Latitude 32.86183 Longitude -103.86335

#### NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 70 bbls		covered 60 bbls			
Source of Release Well head	Date and Hour of Occurrence	Date and H	our of Discovery			
	02/12/2015	02/12/2015	0600			
Was Immediate Notice Given?	If YES, To Whom?					
Yes No Not Required						
By Whom?	Date and Hour					
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	tercourse.				
🗌 Yes 🖾 No						
If a Watercourse was Impacted, Describe Fully.*						
Describe Cause of Problem and Remedial Action Taken.* drilling rig nea						
responded along with Eddie Jaramillo and Rick Rickman. It appeared that						
The damage results were the tubing valve and tubing below being broken	off at the top of the well head and flu	id was back fl	owing on to location			
Describe Area Affected and Cleanup Action Taken.* estimated 40 bbls. Of fluid picked up in adjacent pasture and estimate of 30 bbls from location,						
equipment near location was used to dike well pad and contain fluid along			Si So bois nom location,			
equipitent neur rocation was ased to alke won plut and contain nuit atong with a vacuatin duck ded to the won neud.						
On February 17, 2015 DFSI personnel responded to the location and place	ed a berm around the well to contain t	the fluid. DFS	I personnel scraped up the			
saturated soil in the pasture and on the caliche pad. Four soil samples of the						
TPH. The TPH samples were performed using a Mini Rae Photoionization						
requirements were taken to Cardinal Lab of Hobbs to obtain confirmation			On March 19, 2015, DFSI			
personnel returned to the site to start excavation. The impacted caliche part						
On March 20, 2015, the impacted soil in the pasture was excavated to 3'b						
excavated area on the pad with fresh caliche. DFSI used the surrounding t			as completed on March 25,			
2015. Photographs are attached (Appendix II). All contaminated soil was	hauled to a BLM/NMOCD approved	facility.				
Therefore and for the table information along a base is the and a second to the table			ant to NMOCD miles and			
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.						
	OIL CONSER	VATION I	DIVISION			
S D / /	<u>OIL CONSER</u>					
Signature: Jongala						
	Approved by Environmental Specialist:					
Printed Name: É.L. Gonzales						
Tida. Destastion Commission	A manager 1 Defer	Engla di D				
Title: Production Supervisor	Approval Date:	Expiration D	ate:			
E-mail Address: elgonzales@linnenergy.com	Conditions of Approval:					
E-man Address. eigonzaies@mineneigy.com	conditions of Approval.		Attached			
Date: 03/26/2015 Phone: 505-504-8002						

\* Attach Additional Sheets If Necessary