



H E West B Federal #85

CLOSURE REPORT

API No. 30-015-28387

Release Date: April 7th, 2015

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

October 6, 2015

Prepared by:

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

HE West B #85

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 Lea County. The leak site resulted from a failure in a poly joint. The impacted area is in the pasture just before the location. A site map is attached (Appendix III). A C-141 was submitted to the NMOCD on April 8, 2015 (Appendix I).

2 SITE ACTIVITIES

On April 7, 2015, DFSI personnel responded to the location and placed a berm around the leak to contain the fluid. After the fluid was recovered, DFSI personnel scraped up the saturated soil in the pasture to approximately 4' BGS. The contaminated soil was hauled to an approved disposal. One composite sample of the spill area was taken. This sample was tested for chloride levels as well as BTEX. The BTEX samples were performed using a Mini Rae Photoionization Detector (PID). All field samples that tested below state/BLM requirements were taken to Cardinal Labs of Hobbs to obtain confirmation sample. The results are attached. August 28, 2015, DFSI personnel responded to the location to attain measurements of the cement pit and take preliminary photos.

DFSI personnel returned to the location to re-contour the affected area where the spill/scrape occurred. Twenty percent of 1-acre of LPC seed mix was planted. The site was restored to its previous state.

3 CONCLUSION

DFSI has conducted a groundwater study of the area and has determined that according to the New Mexico Office of the State Engineer the average depth to groundwater for this area is 250 foot below ground surface.

Appendix I

INITIAL FORM C-141

Diversified Field Service, Inc.
206 W. Snyder
Hobbs, NM 88240
(575) 964-8394

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

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Linn Operating Inc.	Contact	E.L. Gonzales
Address	2130 W Bender Blvd Hobbs, NM 88240	Telephone No.	575-738-1739
Facility Name	H.E. West B #85	Facility Type	Oil
Surface Owner	Federal	Mineral Owner	API No. 30-015-28387

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	03	17S	31E	2614	South	2621	West	Eddy

Latitude 32.86357 Longitude -103.85696

NATURE OF RELEASE


Type of Release	Oil / Produced Water	Volume of Release	1 bbl / 2 bbl	Volume Recovered	0 / 0
Source of Release	Polyline – Joint failure	Date and Hour of Occurrence	04/07/2015	Date and Hour of Discovery	04/07/2015 10:47am
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?	Date and Hour				
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* Upon making the lease at the WB#85 noticed fluid in a puddle at flowline just before location on ground. After shutting well in and containing leak, notified Rick Rickman of spill.

Describe Area Affected and Cleanup Action Taken.* Area affected was 5ft x 4ft. After picking fluid off ground picked up 3 BBLS, Had a backhoe in area. Scraped up contaminated dirt up, put in dump truck hauled off replaced with clean dirt. Hauled off to and approved disposal, replaced with clean dirt.

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: 	<u>OIL CONSERVATION DIVISION</u>		
Printed Name: E.L. Gonzales	Approved by Environmental Specialist:		
Title: Production Supervisor	Approval Date:	Expiration Date:	
E-mail Address: elgonzales@linenergy.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 04/08/2015	Phone: 505-504-8002		

* Attach Additional Sheets If Necessary

Appendix II

SITE PHOTOS

Linn Energy, HE West B #85



Initial spill photo



Initial spill photo



Photo after initial scrape



Photo after initial scrape



Completed location after contouring, seeding



Completed location after contouring, seeding

Appendix III

SITE MAP

Diversified Field Service, Inc.
206 W. Snyder
Hobbs, NM 88240
(575) 964-8394

Site Diagram




Linn, HE West 85
UL/L, Sec. 20 T17S R31E
Eddy County, NM
Drafted By: Lance Crenshaw, 4-8-15

0 0.0025 0.005 0.01 Miles

Legend



Misc_points

Types


-  Electrical Box
-  Power Pole
-  Headers
-  Injection
-  Pumpjacks
-  Tanks
-  Valves
-  Other
-  Soil Bores
-  sample_pts
-  Source

Pipeline





Type

-  Above Ground Line
-  Buried Line

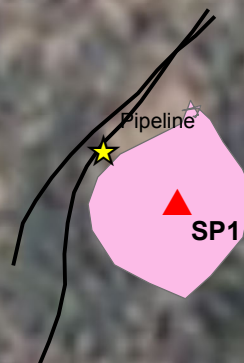
Spill

-  <all other values>

Spill_Media

-  Oil and Produced H2O
-  Oil
-  Other
-  Produced Water

Spill Area:
538 sq. ft.



Lance Crenshaw
 GIS Technician

Soil Remediation and Ground Water Remediation
 Environmental Assessments
 Regulatory Compliance



Environmental

DFS

Services

Office: 575-964-8394

Fax: 575-964-8396

Cell: 575-441-2359

Email: lcrenshaw@diversifiedfsi.com

Source: Esri, DigitalGlobe, GeoEye, AeroGRID, IGN, and the GIS User Community

Appendix IV

LABORATORY ANALYSES

Diversified Field Service, Inc.
206 W. Snyder
Hobbs, NM 88240
(575) 964-8394



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

April 14, 2015

RICK RICKMAN

LINN OPERATING-HOBBS

2130 W. BENDER

HOBBS, NM 88240

RE: H. E. WEST #85

Enclosed are the results of analyses for samples received by the laboratory on 04/08/15 11:10.

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 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:

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

 Received: 04/08/2015
 Reported: 04/14/2015
 Project Name: H. E. WEST #85
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/07/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP. 1 @ SURFACE (H500930-01)

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	04/10/2015	ND	2.04	102	2.00	1.34	
Toluene*	<0.050	0.050	04/10/2015	ND	1.85	92.7	2.00	1.29	
Ethylbenzene*	<0.050	0.050	04/10/2015	ND	1.85	92.4	2.00	1.72	
Total Xylenes*	<0.150	0.150	04/10/2015	ND	5.90	98.3	6.00	2.17	
Total BTX	<0.300	0.300	04/10/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/10/2015	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/09/2015	ND	198	98.9	200	5.38	
DRO >C10-C28	<10.0	10.0	04/09/2015	ND	209	104	200	7.52	

Surrogate: 1-Chlorooctane 88.2 % 47.2-157

Surrogate: 1-Chlorooctadecane 91.2 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

BILL TO

ANALYSIS REQUEST

Company Name: <u>Lincoln Energy</u>		P.O. #:	
Project Manager: <u>Mike Burden</u>		Company: <u>Lincoln Energy</u>	
Address:		Attn: <u>Rick Kichman</u>	
City:	State:	City:	Address:
Phone #:	Fax #:	State:	Zip:
Project #:	Project Owner:	Phone #:	
Project Name:		Fax #:	
Project Location: <u>HE West 85</u>			
Sample Name: <u>Water Cont</u>			
FOR LAB USE ONLY			
Lab I.D. <u>H500930</u>	Sample I.D. <u>SR1 @ surf</u>		
		(G)RAB OR (C)OMP	
		# CONTAINERS	
		GROUNDWATER	
		WASTEWATER	
		SOIL	X
		OIL	
		SLUDGE	
		OTHER	
		ACID/BASE	
		ICE / COOL	X
		OTHER	
		DATE	TIME
		4-7-15	4:15
		X	CL
		X	TPH
		X	BTEX

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates, or successors arising out of or related to the performance of services rendered by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Mike Burden

Date: 4/3/15

Received By: Scott Burden

REMARKS:

Phone Result: ☐ Yes ☐ No

Add'l Phone #:

Add'l Fax #:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Sample Condition

Cool ☒ Intact ☒

Yes ☒ No ☒

CHECKED BY: (Initials)

MB

Appendix V

SEED REPORT

Diversified Field Service, Inc.
206 W. Snyder
Hobbs, NM 88240
(575) 964-8394

DIVERSIFIED FIELD SERVICES, INC.

Project: He West BGS
 Seed and lbs used: 20% of 1-acre

Date Started: 5-22-15
 Date Completed: 6-1-15

Curtis and Curtis, Inc.

4500 North Prince
 Clovis, NM 88130
 Phone: (575) 762-4780
 www.curtisseed.com

Mike Burton
 4 Acre LPC Mix
 4 - 1 Acre Bags @ 40.35 Bulk Pounds Each

Lot#: M-13029

Item	Origin	Purity	Germ	Dormant	Total Germination	Test Date	Total PLS Pounds
Plains Bristlegrass VNS	Oklahoma	12.91%	15.00%	81.00%	96.00%	03/15	20.00
Sideoats Grama Vaughn	Texas	16.10%	46.00%	31.00%	77.00%	11/14	20.00
Little Bluestem Blaze	Nebraska	15.66%	97.00%	0.00%	97.00%(TZ)	02/15	12.00
Big Bluestem Kaw	Missouri	15.18%	93.00%	5.00%	98.00%	10/14	24.00
Coreopsis Plains	Oregon	9.97%	83.00%	0.00%	83.00%(TZ)	11/14	8.00
Sand Dropseed VNS	Colorado	2.61%	21.00%	74.00%	95.00%	01/15	4.00
Four Wing Saltbush VNS	New Mexico	21.01%	37.00%	22.00%	59.00%	03/15	20.00
Other Crop:	0.36%	There are 4 Bags For This Mix This Bag Weighs 40.35 Bulk Pounds Use This Bag For 1 Acres			Total Bulk Pounds:		161
Weed Seed:	0.30%						
Inert Matter:	17.90%						

Supervisor: *Therese Gail*

Appendix VI

FINAL C-141

Diversified Field Service, Inc.
206 W. Snyder
Hobbs, NM 88240
(575) 964-8394

District I
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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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
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Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

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Facility Name	H.E. West B #85	Facility Type	Oil
Surface Owner	Federal	Mineral Owner	API No. 30-015-28387

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	03	17S	31E	2614	South	2621	West	Eddy

Latitude 32.86357 Longitude -103.85696

NATURE OF RELEASE

Type of Release	Oil / Produced Water	Volume of Release	1 bbl / 2 bbl	Volume Recovered	1 bbl / 1 bbl
Source of Release	Polyline – Joint failure	Date and Hour of Occurrence	04/07/2015	Date and Hour of Discovery	04/07/2015 10:47am
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?	Date and Hour				
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*


Describe Cause of Problem and Remedial Action Taken.* Upon making the lease at the WB#85 noticed fluid in a puddle at flow line just before location on ground. After shutting well in and containing leak, notified Rick Rickman of spill.

Describe Area Affected and Cleanup Action Taken.* Area affected was 5ft x 4ft, After picking fluid off ground picked up 2 BBLS, Had a backhoe in area. Scraped up contaminated dirt up, put in dump truck hauled off replaced with clean dirt. Hauled off to an approved disposal.

On April 7, 2015, DFSI personnel responded to the location and placed a berm around the leak to contain the fluid. After the fluid was recovered, DFSI personnel scraped up the saturated soil in the pasture to approximately 4' BGS. The contaminated soil was hauled to an approved disposal. One composite sample of the spill area was taken. This sample was tested for chloride levels as well as BTEX. The BTEX samples were performed using a Mini Rae Photoionization Detector (PID). All field samples that tested below state/BLM requirements were taken to Cardinal Labs of Hobbs to obtain confirmation sample. The results are attached. August 28, 2015, DFSI personnel responded to the location to attain measurements of the cement pit and take preliminary photos.

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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: 	OIL CONSERVATION DIVISION		
Printed Name: E.L. Gonzales	Approved by Environmental Specialist:		
Title: Production Supervisor	Approval Date:	Expiration Date:	
E-mail Address: elgonzales@linenergy.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 10/07/2015	Phone: 505-504-8002		

* Attach Additional Sheets If Necessary