



H E West A #35

REMEDIATION WORK PLAN

API No. 30-015-29346

Release Date: July 16th. 2014

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

May 20th, 2015

Prepared by:

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

Mike Bratcher
Environmental Specialist
NM Oil Conservation District-Division 2
811 S. First St.
Artesia, NM 88210

RE: Linn Energy H E West A #35 – Remediation Work Plan
UL/f, Section 03, T17S, R31E
API No. 30-015-29346

Mr. Bratcher,

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 an injection line failure. The impacted area is the caliche lease road and north into the pasture. Approximately 4 bbl of produced water was released. Nothing was recovered. A site map is attached. A C-141 was submitted to the NMOCD on July 17th, 2014.

Site Assessment and Delineation

On May 15th, 2015 DFSI personnel sampled the spill area north of the lease road. We took one sample of the spill area. The sample was tested for chloride levels as well as BTEX. The BTEX sample was performed using a Mini Rae Photoionization Detector (PID). The field sample that field tested below state/BLM requirements were taken to Cardinal Lab of Hobbs to obtain confirmation sample. The results are attached.

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 350 foot below ground surface. Therefore, no eminent danger of groundwater impact or threat to life is anticipated.

Conclusion

After careful review DFSI, on behalf of Linn Energy, would like to propose the following:

Because the surface sample came back clean we propose to re seed the affected area with a BLM, OCD approved seed mix.

Following the approval of the above plan, DFSI will submit all proper closure documentation to the NMOCD and BLM in accordance to the State and Federal Guidelines set forth.

Please feel free to contact me with any questions concerning this remediation plan request.

Sincerely,



Michael Burton
Environmental Operations Director
Diversified Field Service, Inc.
206 West Snyder
Hobbs, NM 88240
Office: (575)964-8394
Mobile: (575)390-5454
Fax: (575)964-8396
Email: Mburton@diversifiedfsi.com

cc Jeff Robertson

Attachments: Initial Form C-141
Site/Sample Map
Sample Data
Lab Analytical Data



H E West A #35

PHOTO PAGE

5/15/2015



Facing North



Facing South

Site Diagram

Linn, H.E. West A #35
UL/F, Sec. 03 T17S R31E
Eddy County, NM
Drafted By: Lance Crenshaw, 5-15-15

0 0.003 0.006 0.012 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:
563 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, IGN, swisstopo, and the GIS User Community

5/15/2015

SP Date: 5/15/2015
Rel Date:

[illegible]

	Lab Confirmation Sample
	Field Sampling
	Needs Delineation and confirmation samples



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

May 21, 2015

RICK RICKMAN

LINN OPERATING-HOBBS

2130 W. BENDER

HOBBS, NM 88240

RE: H. E. WEST A #35

Enclosed are the results of analyses for samples received by the laboratory on 05/15/15 13:35.

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:	05/15/2015	Sampling Date:	05/15/2015
Reported:	05/21/2015	Sampling Type:	Soil
Project Name:	H. E. WEST A #35	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP. 1 @ SURFACE (H501254-01)

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	05/20/2015	ND	1.77	88.3	2.00	0.512		
Toluene*	<0.050	0.050	05/20/2015	ND	1.89	94.5	2.00	0.771		
Ethylbenzene*	<0.050	0.050	05/20/2015	ND	1.79	89.7	2.00	1.34		
Total Xylenes*	<0.150	0.150	05/20/2015	ND	5.33	88.8	6.00	0.885		
Total BTX	<0.300	0.300	05/20/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 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	48.0	16.0	05/18/2015	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	05/18/2015	ND	173	86.6	200	1.90	
DRO >C10-C28	<10.0	10.0	05/18/2015	ND	198	99.0	200	1.16	

Surrogate: 1-Chlorooctane 101 % 47.2-157

Surrogate: 1-Chlorooctadecane 113 % 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

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



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

Page 4 of 4



New Mexico Office of the State Engineer **Water Column/Average Depth to Water**

No records found.

Basin/County Search:

County: Eddy

PLSS Search:

Section(s): 3

Township: 17S

Range: 31E

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-141
Revised October 10, 2003

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

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Linn Operating	Contact: Brian Wall	
Address: 2130 W. Bender Hobbs, NM 88240	Telephone No.: 575-738-1739	
Facility Name: H.E. West A #35	Facility Type: Injection	
Surface Owner: Federal	Mineral Owner:	API No.: 30-015-29346

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	03	17S	31E	1980	North	860	West	Eddy

Latitude: 32.8653 Longitude: -103.8627

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: 4 bbls	Volume Recovered: 0
Source of Release: 2" Fiberglass pipeline	Date and Hour of Occurrence: 07/16/2014	Date and Hour of Discovery: 07/16/2014 7:30am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Jeff Robertson-BLM / Mike Bratcher- NMOCD	
By Whom? Brian Wall	Date and Hour 07/17/2014 0650	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

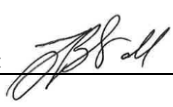
If a Watercourse was Impacted, Describe Fully.*:

Describe Cause of Problem and Remedial Action Taken.*: while driving my route I drove through a water puddle and smelled produced water. I got off my truck to inspect and see where the smell was coming from and found that an injection line had started leaking. The water was coming from a line that was already underwater from a rainstorm the previous day and night and mixed in with the rainwater. i shut in the lateral line and called a vacuum truck to clean up the spill. the ground was already wet from the rainstorms so it didnt have time to soak in. instead the water ran down the side of the road and into an already pooled area of rainwater. i wasnt sure so i had the vacuum truck pick up all fluid including rainwater.

Describe Area Affected and Cleanup Action Taken.* : affected areas were a 50'x15' puddle about a half inch deep, and about 500'x10' path along the lease road. i called the operator of the injection plant to notify him that there was a leak. the leak was small enough that the line pressure from the pump had stayed up and not killed the pump from low discharge pressure.

Directions to site: from US 82 and CR221 N on 221 1.4m, turn NE.5m, E.5m, N.5m, E 2miles, N.2m, E.2m, N .5m, E.3m to dry hole marker and tinhorn

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: Brian Wall	Approved by District Supervisor:		
Title: Construction Foreman II	Approval Date:	Expiration Date:	
E-mail Address: bwall@linenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>	

Date: 07/17/2014	Phone: 806-367-0645	
------------------	---------------------	--

* Attach Additional Sheets If Necessary