



# H E West B #92

## REMEDIATION WORK PLAN

---

API No. 30-015-28535

Release Date: May 11<sup>th</sup>, 2015

Unit Letter J, Section 9, Township 17 South, Range 31 East

### May 19, 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 B #92 – Remediation Work Plan**  
UL/J, Section 09, T17S, R31E  
API No. 30-015-28538

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 a truck hitting the flow line. The impacted area is the caliche lease road and south into the pasture. Approx. 1 bbl of produced water and 1 bbl of oil were released. One bbl of produced water and oil was recovered. A site map is attached. A C-141 was submitted to the NMOCD on May 12<sup>th</sup>, 2015.

### **Site Assessment and Delineation**

On May 11<sup>th</sup>, 2015 DFSI personnel responded to the release point on the lease road. DFSI personnel scraped up the contamination in the lease road. We took two samples of the spill area. Each 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 field tested below state/BLM requirements were taken to Cardinal Lab of Hobbs to obtain confirmation samples. 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:

The impacted road has been scraped and fixed. Remove the pasture impacted soil down to 4' bgs. All contaminated soil will be hauled to a NM state approved disposal facility. DFSI proposes to use the surrounding terrain for backfill and contour; then seed 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 B #92

## PHOTO PAGE

---

5/11/2015





# Site Diagram

Linn, H.E. West B #92  
UL/J, Sec. 09 T17S R31E  
Eddy County, NM  
Drafted By: Lance Crenshaw, 5-12-15

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

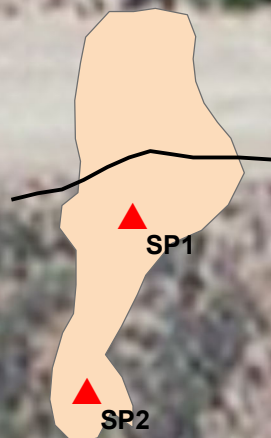
-  Above Ground Line
-  Buried Line

### Spill

-  <all other values>

### Spill\_Media

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



Spill Area:  
1,603 sq. ft.

Source: Esri, DigitalGlobe, GeoEye, i-cube, swisstopo, and the GIS User Community

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

## Diversified Environmental Services

Company Name:	LINN ENERGY
Location Name:	H E WEST B 92

SP Date: 5/12/2015  
Rel Date:

[illegible]

	Lab Confirmation Sample
	Field Sampling
	Needs Delineation and confirmation samples



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

---

May 18, 2015

DENNIS POTTER

LINN OPERATING-HOBBS

2130 W. BENDER

HOBBS, NM 88240

RE: H. E. WEST B #92

Enclosed are the results of analyses for samples received by the laboratory on 05/13/15 8:20.

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 [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	05/13/2015	Sampling Date:	05/12/2015
Reported:	05/18/2015	Sampling Type:	Soil
Project Name:	H. E. WEST B #92	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SP 1 @ 4' (H501225-01)**

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	05/13/2015	ND	1.86	93.0	2.00	2.85	
Toluene*	<0.050	0.050	05/13/2015	ND	1.99	99.3	2.00	1.31	
Ethylbenzene*	<0.050	0.050	05/13/2015	ND	1.89	94.3	2.00	3.15	
Total Xylenes*	<0.150	0.150	05/13/2015	ND	5.57	92.8	6.00	3.15	
Total BTX	<0.300	0.300	05/13/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 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	05/13/2015	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/13/2015	ND	174	87.2	200	0.453	
DRO >C10-C28	<10.0	10.0	05/13/2015	ND	200	99.9	200	0.790	

Surrogate: 1-Chlorooctane 100 % 47.2-157

Surrogate: 1-Chlorooctadecane 111 % 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

**Analytical Results For:**

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

Received: 05/13/2015  
 Reported: 05/18/2015  
 Project Name: H. E. WEST B #92  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 05/12/2015  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP 2 @ 6' (H501225-02)**

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	05/13/2015	ND	1.86	93.0	2.00	2.85		
Toluene*	<0.050	0.050	05/13/2015	ND	1.99	99.3	2.00	1.31		
Ethylbenzene*	<0.050	0.050	05/13/2015	ND	1.89	94.3	2.00	3.15		
Total Xylenes*	<0.150	0.150	05/13/2015	ND	5.57	92.8	6.00	3.15		
Total BTX	<0.300	0.300	05/13/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	05/13/2015	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/13/2015	ND	174	87.2	200	0.453	
DRO >C10-C28	<10.0	10.0	05/13/2015	ND	200	99.9	200	0.790	

Surrogate: 1-Chlorooctane 95.1 % 47.2-157

Surrogate: 1-Chlorooctadecane 110 % 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



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 # 92	Facility Type	Oil Producer
Surface Owner	Federal	Mineral Owner	API No. 30-015-28538

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	09	17S	31E	1350	South	1440	East	Eddy

Latitude 32.8456 Longitude, -103.87019

### NATURE OF RELEASE

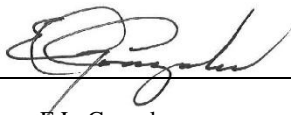
Type of Release	Oil / Produce Water	Volume of Release	1 bbl / 1 bbl	Volume Recovered	1 bbl / 1 bbl
Source of Release	Poly Pipeline	Date and Hour of Occurrence	05/11/2015	Date and Hour of Discovery	05/11/2015 2:30pm
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <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.\* Mario Garcia (432)202-4333 with M&G rental tools was avoiding driving through mud puddle in road and drove off road and over flow lines. Flow line on WB#92 was damaged releasing fluid on the road into a puddle of fresh water, adjacent shrubbery, and a small amount into the pasture. Total fluid released was approximately 2 bbl total fluid. Mario Garcia called in Double R trucking to pick up liquids and will accept full liability and cost for the spill. Manuel with BTS (575) 942-8307 repaired the line.

Describe Area Affected and Cleanup Action Taken.\* Puddle was apprx 30ft x 20ft, area affected in pasture was to the south apprx. 2ft x 30ft. Michael Burton with DFSI (575)942-4115 will handle further assessment.

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: 	<b>OIL CONSERVATION DIVISION</b>		
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: 05/12/2015	Phone: 505-504-8002		

\* Attach Additional Sheets If Necessary