

# HE West A #022 Flowline

## CLOSURE REQUEST

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API No. 30-015-27127

Unit Letter I, Section 4, Township 17 South, Range 31 East

NMOCD Case #: 2R-976

**August 7, 2017**

**Prepared by:**

Michael Alves

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 HE West A #022 Flowline  
Closure Request**  
UL/H, Section 4, T17S, R31E  
API No. 30-015-27127  
NMOCD Case #: 2R-976  
NMOCD Score: 0

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 west of Maljamar, NM, in Lea County. The spill resulted from a ruptured flowline, releasing a total of 3 barrels of oil and 5 barrels of produced water, with 1 barrel of oil recovered. An initial C-141 was submitted to NMOCD on September 14, 2011 and was approved on December 19, 2011 (Appendix I).

### **Site Assessment and Delineation**

After the release occurred, the release area was scraped, with contaminated soils properly disposed of. On July 5, 2017, DFSI personnel were on site to obtain samples within the leak area (Appendix II). Two samples were obtained and field sampled for chloride levels, as well as BTEX (Figure 1). The BTEX samples were screened using a Mini Rae Photoionization Detector (PID). Clean field samples under regulatory guidelines were submitted for analysis at Hall Environmental of Albuquerque, NM, resulting in concentrations below regulatory limits throughout (Appendix III).

DFSI has conducted a groundwater study of the area and has determined, according to the New Mexico Office of the State Engineer, there is no known groundwater beneath this site. Therefore, no eminent danger of groundwater impact or threat to life is anticipated (Appendix IV).

## Conclusion

Due to the low concentrations of chlorides, TPH and BTEX, and any remaining constituents will not impact groundwater, DFSI, on behalf of Linn Energy, submits the final C-141 (Appendix V) and respectfully requests the closure of the regulatory file for this site.

Please feel free to contact myself with any questions concerning this closure request.

Sincerely,



Michael Alves  
Environmental Operations Foreman | Diversified Field Service, Inc.  
206 West Snyder | Hobbs, NM 88240  
Office: (575)964-8394 | Mobile: (575)631-3364  
Fax: (575)964-8396 | Email: Malves@diversifiedfsi.com

CC: Shelly Tucker, BLM

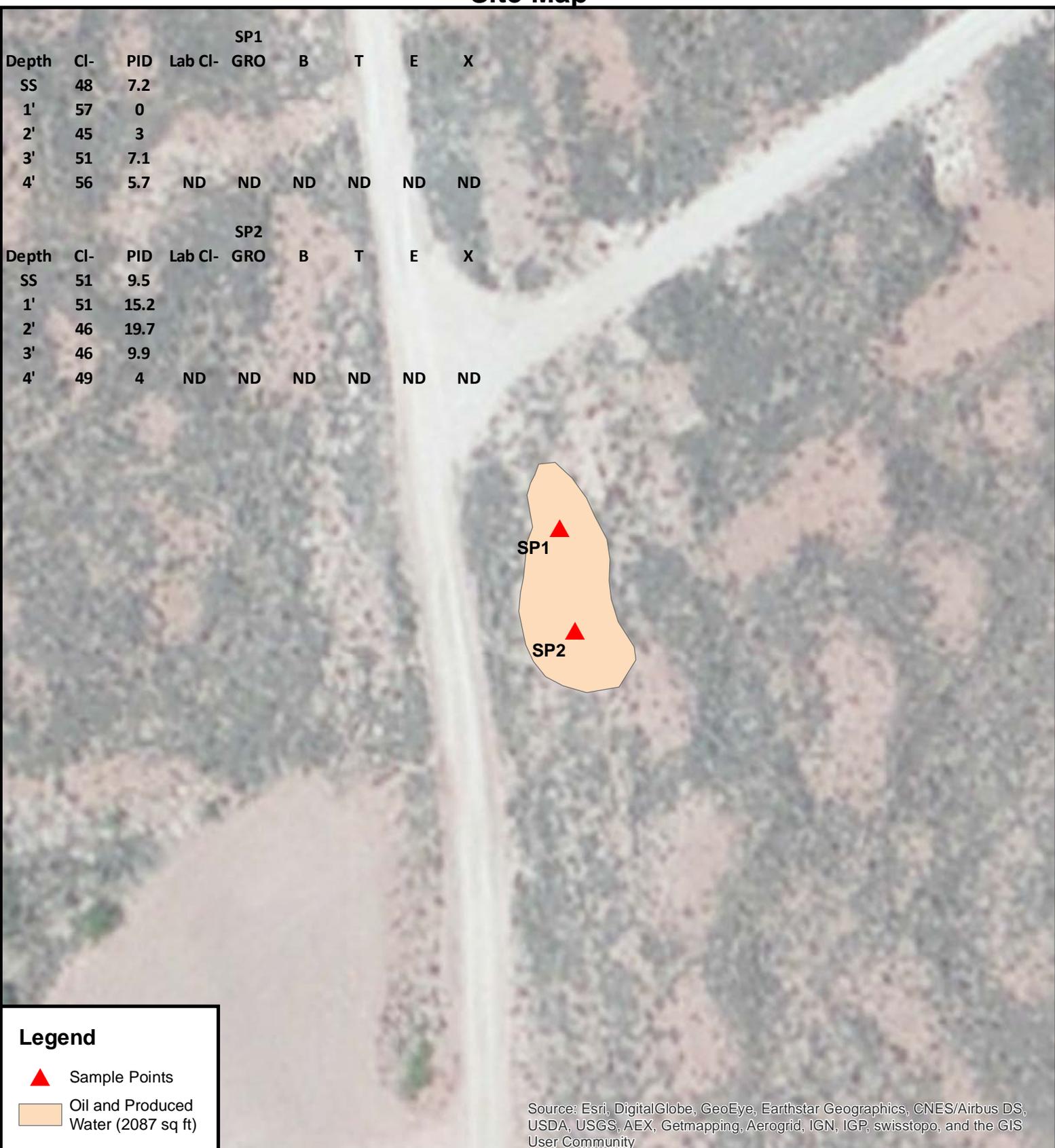
Figures: Site Diagram

Appendices: Initial C-141  
Site Photos  
Laboratory Analysis  
Groundwater Study  
Final C-141

# Site Map

SP1								
Depth	Cl-	PID	Lab Cl-	GRO	B	T	E	X
SS	48	7.2						
1'	57	0						
2'	45	3						
3'	51	7.1						
4'	56	5.7	ND	ND	ND	ND	ND	ND

SP2								
Depth	Cl-	PID	Lab Cl-	GRO	B	T	E	X
SS	51	9.5						
1'	51	15.2						
2'	46	19.7						
3'	46	9.9						
4'	49	4	ND	ND	ND	ND	ND	ND



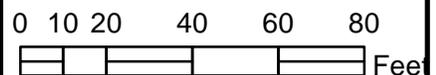
## Legend

-  Sample Points
-  Oil and Produced Water (2087 sq ft)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



**Linn**  
**HE West A #022**  
**UL/H, Section 4, T17S, R31E**  
**API No. 30-015-27127**  
**NMOCD Case #: 2R-976**



# Appendix I

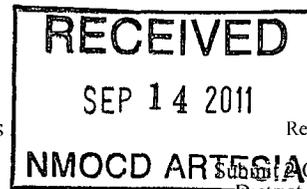
INITIAL C-141

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

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



Form C-141  
Revised October 10, 2003  
Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

30-015-27127

**Release Notification and Corrective Action**

MLB1135340848

**OPERATOR**

Initial Report  Final Report

Name of Company: LINN Energy <b>269324</b>	Contact: Joe Hernandez
Address: 2130 W Bender Blvd. - Hobbs, NM	Telephone No.: 575-942-8675
Facility Name: HE West A Well 22 & 23 Flowline	Facility Type: Oil Well - Flowline

Surface Owner: BLM	Mineral Owner: BLM	Lease No.: LC 029429-A
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**HE WEST A 22**

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
II	4	17S	31E	1345	S	35	E	Eddy

Latitude: 32.8588629 Longitude: -103.8721308

**NATURE OF RELEASE**

Type of Release: Oil/Produced Water	Volume of Release: 3/5	Volume Recovered: 1
Source of Release: Flowline	Date and Hour of Occurrence: 08/23/11 - 1430	Date and Hour of Discovery: 08/23/1430
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? T. Gregston, BLM - M. Bratcher OCD	
By Whom? Joe Hernandez	Date and Hour: 09/14/11, 1400	
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.\*: Line pressure built up causing the line to rupture. Suspected cause of pressure buildup was scale. Shut in wells, removed and replaced damaged section of line.

Describe Area Affected and Cleanup Action Taken.\*: Overspray impacted road and pasture area. Some accumulations of hydrocarbons are in the pasture area. Spill area on road is ~ 180' x 10'. Spill area in pasture is ~ 60' in diameter at the north end with a smaller path ~ 70' x 5' migrating south next to the east side of the road. Impacted soils in pasture area will be removed. Impacted area of road (1'-2") and will be stripped out. Corrective action plan, Photographs and Site Map Attached Corrective action plan will be pending BLM approval and any other stipulations

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: <i>Jose Hernandez</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jose Hernandez	Signed By <i>M. Bratcher</i> Approved by District Supervisor:	
Title: Foreman	DEC 19 2011 Approval Date:	Expiration Date:
E-mail Address: jhernandez@linneenergy.com	Conditions of Approval: Remediation per OCD Rules & Guidelines. <b>SUBMIT REMEDIATION PROPOSAL NOT LATER THAN:</b>	Attached <input type="checkbox"/>
Date: 09/14/11 Phone: 575-738-1739	<u>1/19/2012</u>	

\* Attach Additional Sheets If Necessary

**SUBMIT REMEDIATION PROPOSAL NOT LATER THAN: 1/19/2012**

2RP-976  
<LATE ENTRY>

# Appendix II

## SITE PHOTOS

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# HE West A #022 Flowline



Site prior



Site prior



Site prior



Site prior



Collecting sample by hand auger



Collecting sample by hand auger

# Appendix III

## LABORATORY ANALYSIS

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



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

July 14, 2017

Michael Burton  
Diversified Field Services, Inc  
315 S. Leech St  
Hobbs, NM 88240  
TEL: (575) 964-8394  
FAX

RE: HE West A 22 Flow Line

OrderNo.: 1707331

Dear Michael Burton:

Hall Environmental Analysis Laboratory received 2 sample(s) on 7/7/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a white background.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1707331

Date Reported: 7/14/2017

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** SP1 @ 4'

**Project:** HE West A 22 Flow Line

**Collection Date:** 7/5/2017

**Lab ID:** 1707331-001

**Matrix:** SOIL

**Received Date:** 7/7/2017 10:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 418.1: TPH</b>							Analyst: <b>MAB</b>
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	7/12/2017 9:30:00 AM	32723
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	7/12/2017 3:53:14 PM	32761
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/11/2017 3:56:09 PM	32708
Surr: BFB	93.2	54-150		%Rec	1	7/11/2017 3:56:09 PM	32708
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.098		mg/Kg	1	7/11/2017 3:56:09 PM	32708
Benzene	ND	0.025		mg/Kg	1	7/11/2017 3:56:09 PM	32708
Toluene	ND	0.049		mg/Kg	1	7/11/2017 3:56:09 PM	32708
Ethylbenzene	ND	0.049		mg/Kg	1	7/11/2017 3:56:09 PM	32708
Xylenes, Total	ND	0.098		mg/Kg	1	7/11/2017 3:56:09 PM	32708
Surr: 4-Bromofluorobenzene	124	66.6-132		%Rec	1	7/11/2017 3:56:09 PM	32708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1707331

Date Reported: 7/14/2017

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** SP2 @ 4'

**Project:** HE West A 22 Flow Line

**Collection Date:** 7/5/2017

**Lab ID:** 1707331-002

**Matrix:** SOIL

**Received Date:** 7/7/2017 10:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 418.1: TPH</b>							Analyst: <b>MAB</b>
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	7/12/2017 9:30:00 AM	32723
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	7/12/2017 4:05:39 PM	32761
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/11/2017 5:09:07 PM	32708
Surr: BFB	94.9	54-150		%Rec	1	7/11/2017 5:09:07 PM	32708
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	7/11/2017 5:09:07 PM	32708
Benzene	ND	0.025		mg/Kg	1	7/11/2017 5:09:07 PM	32708
Toluene	ND	0.050		mg/Kg	1	7/11/2017 5:09:07 PM	32708
Ethylbenzene	ND	0.050		mg/Kg	1	7/11/2017 5:09:07 PM	32708
Xylenes, Total	ND	0.10		mg/Kg	1	7/11/2017 5:09:07 PM	32708
Surr: 4-Bromofluorobenzene	123	66.6-132		%Rec	1	7/11/2017 5:09:07 PM	32708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1707331

14-Jul-17

**Client:** Diversified Field Services, Inc

**Project:** HE West A 22 Flow Line

Sample ID <b>MB-32723</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 418.1: TPH</b>							
Client ID: <b>PBS</b>	Batch ID: <b>32723</b>		RunNo: <b>44146</b>							
Prep Date: <b>7/11/2017</b>	Analysis Date: <b>7/12/2017</b>		SeqNo: <b>1393196</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID <b>LCS-32723</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 418.1: TPH</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>32723</b>		RunNo: <b>44146</b>							
Prep Date: <b>7/11/2017</b>	Analysis Date: <b>7/12/2017</b>		SeqNo: <b>1393197</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	100	61.7	138			

Sample ID <b>LCSD-32723</b>	SampType: <b>LCSD</b>		TestCode: <b>EPA Method 418.1: TPH</b>							
Client ID: <b>LCSS02</b>	Batch ID: <b>32723</b>		RunNo: <b>44146</b>							
Prep Date: <b>7/11/2017</b>	Analysis Date: <b>7/12/2017</b>		SeqNo: <b>1393198</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	97	20	100.0	0	97.0	61.7	138	3.37	20	

**Qualifiers:**

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1707331

14-Jul-17

**Client:** Diversified Field Services, Inc

**Project:** HE West A 22 Flow Line

Sample ID <b>MB-32708</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>32708</b>		RunNo: <b>44123</b>							
Prep Date: <b>7/10/2017</b>	Analysis Date: <b>7/11/2017</b>		SeqNo: <b>1392985</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		104	54	150			

Sample ID <b>LCS-32708</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>32708</b>		RunNo: <b>44123</b>							
Prep Date: <b>7/10/2017</b>	Analysis Date: <b>7/11/2017</b>		SeqNo: <b>1392986</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.0	76.4	125			
Surr: BFB	1200		1000		116	54	150			

Sample ID <b>1707331-001AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>SP1 @ 4'</b>	Batch ID: <b>32708</b>		RunNo: <b>44123</b>							
Prep Date: <b>7/10/2017</b>	Analysis Date: <b>7/11/2017</b>		SeqNo: <b>1392993</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.8	24.25	0	114	77.8	128			
Surr: BFB	1100		969.9		112	54	150			

Sample ID <b>1707331-001AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>SP1 @ 4'</b>	Batch ID: <b>32708</b>		RunNo: <b>44123</b>							
Prep Date: <b>7/10/2017</b>	Analysis Date: <b>7/11/2017</b>		SeqNo: <b>1392994</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.9	24.61	0	105	77.8	128	6.02	20	
Surr: BFB	1100		984.3		110	54	150	0	0	

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1707331

14-Jul-17

**Client:** Diversified Field Services, Inc

**Project:** HE West A 22 Flow Line

Sample ID <b>MB-32708</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>32708</b>		RunNo: <b>44123</b>							
Prep Date: <b>7/10/2017</b>	Analysis Date: <b>7/11/2017</b>		SeqNo: <b>1393004</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.4		1.000		136	66.6	132			S

Sample ID <b>LCS-32708</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>32708</b>		RunNo: <b>44123</b>							
Prep Date: <b>7/10/2017</b>	Analysis Date: <b>7/11/2017</b>		SeqNo: <b>1393005</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.0	0.10	1.000	0	103	66.5	120			
Benzene	1.1	0.025	1.000	0	111	80	120			
Toluene	1.1	0.050	1.000	0	112	80	120			
Ethylbenzene	1.1	0.050	1.000	0	113	80	120			
Xylenes, Total	3.4	0.10	3.000	0	115	80	120			
Surr: 4-Bromofluorobenzene	1.4		1.000		141	66.6	132			S

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
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- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

**Sample Log-In Check List**

Client Name: **DIVERSIFIED FIELD SE**

Work Order Number: **1707331**

RcptNo: **1**

Received By: **Erin Melendrez**

7/7/2017 10:25:00 AM

*EM*

Completed By: **Ashley Gallegos**

7/9/2017 1:40:18 PM

*AG*

Reviewed By:

*AG/ke*

*07/09/17  
10*

**Chain of Custody**

- 1. Custody seals intact on sample bottles? Yes  No  Not Present
- 2. Is Chain of Custody complete? Yes  No  Not Present
- 3. How was the sample delivered? Courier

**Log In**

- 4. Was an attempt made to cool the samples? Yes  No  NA
- 5. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
- 6. Sample(s) in proper container(s)? Yes  No
- 7. Sufficient sample volume for indicated test(s)? Yes  No
- 8. Are samples (except VOA and ONG) properly preserved? Yes  No
- 9. Was preservative added to bottles? Yes  No  NA
- 10. VOA vials have zero headspace? Yes  No  No VOA Vials
- 11. Were any sample containers received broken? Yes  No
- 12. Does paperwork match bottle labels? Yes  No
- (Note discrepancies on chain of custody)
- 13. Are matrices correctly identified on Chain of Custody? Yes  No
- 14. Is it clear what analyses were requested? Yes  No
- 15. Were all holding times able to be met? Yes  No
- (If no, notify customer for authorization.)

# of preserved bottles checked for pH: \_\_\_\_\_  
 (<2 or >12 unless noted)  
 Adjusted? \_\_\_\_\_  
 Checked by: \_\_\_\_\_

**Special Handling (if applicable)**

- 16. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

**18. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.0	Good	Yes			



# Appendix IV

## GROUNDWATER STUDY

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



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

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

PLSS Search:

Section(s): 3, 5, 8, 9, 10      Township: 17S      Range: 31E

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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.

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WATER COLUMN/ AVERAGE  
DEPTH TO WATER



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

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

PLSS Search:

Section(s): 32, 33, 34      Township: 16S      Range: 31E

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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.

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WATER COLUMN/ AVERAGE  
DEPTH TO WATER

# Appendix V

FINAL C-141

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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 Energy	Contact: Aaron Hickert
Address: 2130 W Bender, Hobbs, NM 88240	Telephone No. 432-363-9496
Facility Name: HE West A Well 22 & 23 Flowline	Facility Type: Oil Well – Flowline
Surface Owner: Federal	Mineral Owner: Federal
API No. 30-015-27127	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from	East/West Line	County
H	4	17S	31E	1345	South	35	East	Eddy

Latitude: 32.8588629 Longitude: -103.8721308

**NATURE OF RELEASE**

Type of Release: Oil/Produced Water	Volume of Release: 3 bbls / 5 bbls	Volume Recovered: 1 bbls / 0 bbls
Source of Release: Flowline	Date and Hour of Occurrence: 08/23/2011 2:30 PM	Date and Hour of Discovery: 08/23/2011 2:30 PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom? Joe Hernandez	Date and Hour: 09/14/2011 2:00 PM	
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.\***

Line pressure built up causing the line to rupture. Suspected cause of pressure buildup was scale. Shut in wells, removed and replaced damaged section of line. Overspray impacted road and pasture area. Some accumulations of hydrocarbons are in the pasture area. Spill area on road is ~ 180' x 10'. Spill area in pasture is ~ 60' in diameter at the north end with a smaller path ~ 70' x 5' migrating south next to the east side of the road.

**Describe Area Affected and Cleanup Action Taken.**

After the release occurred, the release area was scraped, with contaminated soils properly disposed of. On July 5, 2017, DFSI personnel were on site to obtain samples within the leak area. Two samples were obtained and field sampled for chloride levels, as well as BTEX. The BTEX samples were screened using a Mini Rae Photoionization Detector (PID). Clean field samples under regulatory guidelines were submitted for analysis at Hall Environmental of Albuquerque, NM, resulting in concentrations below regulatory limits throughout.

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: Aaron Hickert	Approved by Environmental Specialist:	
Title: Sr EH&S Representative	Approval Date:	Expiration Date:
E-mail Address: ahickert@linenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 08/07/2017 Phone: 432-363-9496		

\* Attach Additional Sheets If Necessary