



Lea D #23

CLOSURE REPORT

Release Date: July 3, 2015

Unit Letter F, Section 26, Township 17 South, Range 31 East

API No. 30-015-29703

NMOCD Case #: 2R-3095

May 26, 2015

Prepared by:

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

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Lea D #023

1 INTRODUCTION

Linn Energy (Linn) has retained Diversified Environmental (DFSI) to address environmental issues for the site detailed herein.

The site is located southwest of Maljamar, NM, in Eddy County. An initial C-141 was submitted to the NMOCD on July 7, 2015 and approved on July 10, 2015. An amended initial C-141, requested by NMOCD, is attached to reflect the change from gallons to barrels (Appendix I).

On July 3, 2015, the spill site resulted from a failure of flow line fuse. Approximately 3 barrels of produced water and 3 barrels of oil were released, with none recovered. The impacted area is a small area of the pasture.

2 SITE ACTIVITIES

On November 20, 2015, DFSI personnel on site to obtain samples within the leak area (Appendix II). Three samples were obtained and field sampled for chloride levels, as well as BTEX. The BTEX samples were performed using a Mini Rae Photoionization Detector (PID). Auger refusal was encountered at 8' and 9', SP2 and SP3, respectively. A clean field sample at SP1 was obtained and submitted for laboratory analysis at Cardinal Laboratories of Hobbs, NM for confirmation (Appendix III).

On December 8, 2015, DFSI personnel returned to the location to install one soil bore. At 50' bgs, refusal was encountered. The 50' sample was submitted for laboratory analysis at Cardinal Laboratories of Hobbs, NM (Appendix IV).

A work plan was submitted to NMOCD and BLM on January 21, 2016, and approved on February 4, 2016 by BLM and on February 18, 2016 by NMOCD, with stipulations. Beginning May 5, 2016, DFSI personnel were on site to excavate to 4' bgs around SP2 and SP3. At the base of the excavation, a 20-mil liner was installed and properly seated. As per NMOCD request, sidewall samples of the excavation were obtained and submitted for analysis at Cardinal Laboratories of Hobbs, NM, resulting in low chloride, TPH and BTEX concentrations below regulatory limits (Appendix V). The excavation was backfilled with clean, imported soil to ground surface and contoured to the surrounding area (Appendix VI). Contaminated soil was properly disposed of at an NMOCD approved facility. The pasture area of the site was seeded with a mixture of blended vegetation (Appendix VII).

3 CONCLUSION

An updated study of the New Mexico Office of State Engineer well records indicates the site is located in a known area of no groundwater (Appendix VIII). Based on the report and work completed, any remaining chloride and BTEX components in the vadose zone will not affect groundwater beneath this site, with vegetation expected to return to normal; therefore, DFSI, on behalf of Linn, submits the final C-141 (Appendix IX) and respectfully requests the closure of this regulatory file.

Appendix I

REVISED INITIAL 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: Lea D #023	Facility Type: Oil Producer	
Surface Owner: Federal	Mineral Owner:	API No. 30-015-29703

LOCATION OF RELEASE

Unit Letter F	Section 26	Township 17S	Range 31E	Feet from the 1322	North/South Line North	Feet from 1322	East/West Line West	County Eddy
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Latitude: 32.8092232 Longitude: -103.8445892

NATURE OF RELEASE

Type of Release: Oil / Produced Water	Volume of Release: 3 bbls / 3 bbls	Volume Recovered: 0 / 0
Source of Release: Flow Line Fuse	Date and Hour of Occurrence 07/03/15	Date and Hour of Discovery 07/03/15 1:13 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?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

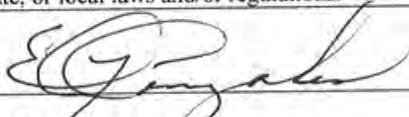
If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

As I was driving to the Lea D #023, just north east of Lea D #007 injection well, I saw the flow line from well #023 spraying fluid into the pasture. I drove to the Lea D #023 and shut the well in to stop it from making a bigger mess. The fluid was coming out from an old fuse that gave out. I called the roustabout gang to come and refuse the flow line and also called a backhoe to come and clean up the impacted area.

Describe Area Affected and Cleanup Action Taken.
The impacted area was about a 10 ft by 10 ft area.

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: 05-26-2016 Phone: 505-504-8002			

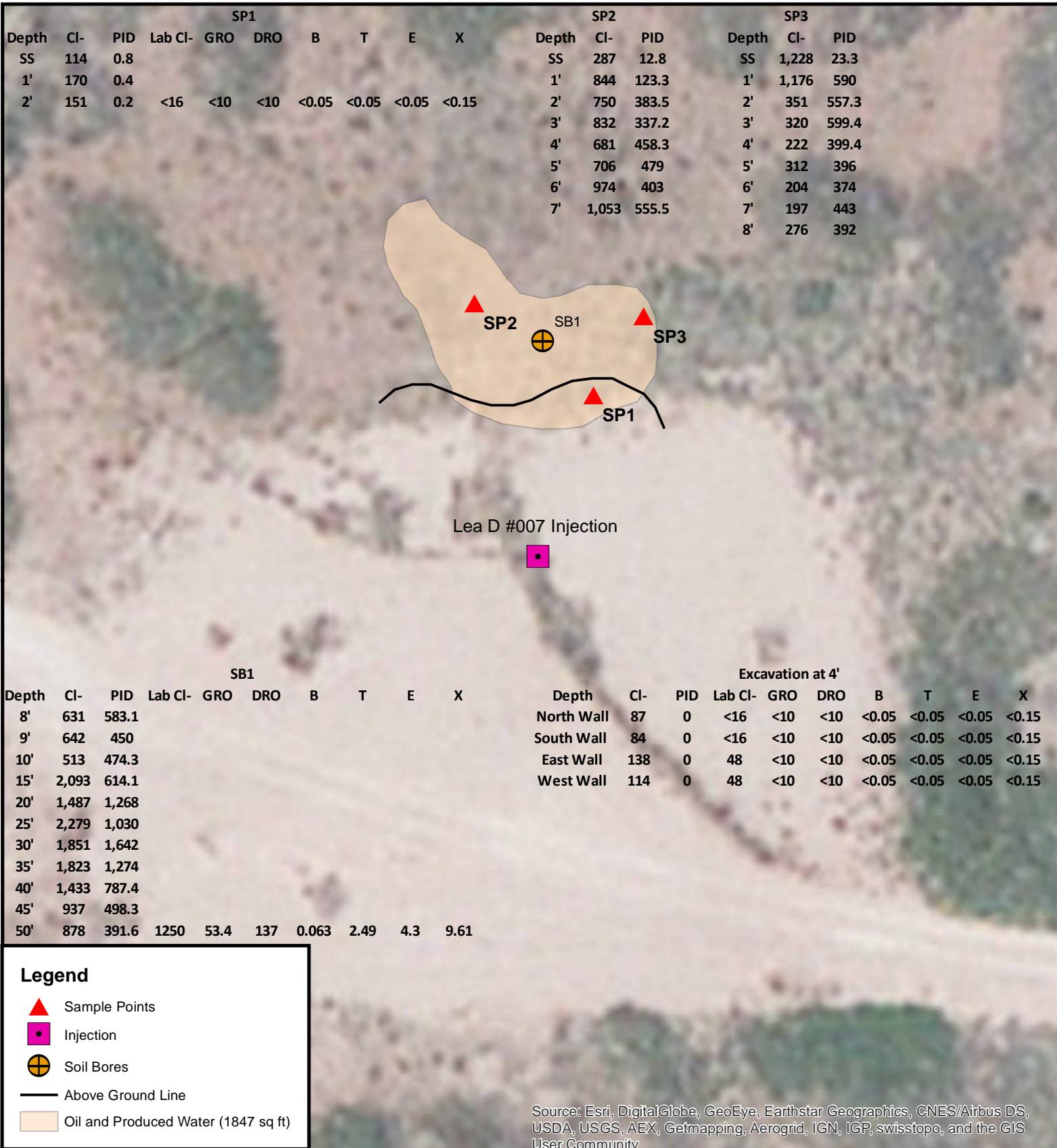
* Attach Additional Sheets If Necessary

Appendix II

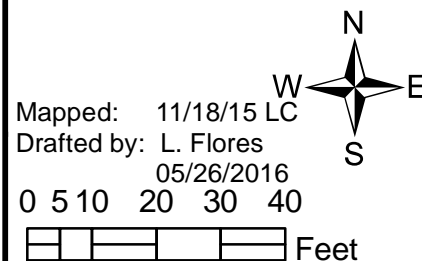
SITE MAP

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

Site Diagram



Linn
Lea D #023
Unit Letter F, Section 26, T17S, R31E
Eddy County, NM
API #: 30-15-29703
NMOCD Case #: 2R-3095



Appendix III

SOIL DELINEATION LABORATORY ANALYSIS

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



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

November 30, 2015

DENNIS POTTER

LINN OPERATING-HOBBS

2130 W. BENDER

HOBBS, NM 88240

RE: LEA D #23

Enclosed are the results of analyses for samples received by the laboratory on 11/20/15 16:40.

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,

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: 11/20/2015
 Reported: 11/30/2015
 Project Name: LEA D #23
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 11/20/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SAMPLE POINT 1 @ 2' (H503085-01)

BTEX 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	11/25/2015	ND	2.11	106	2.00	3.99	
Toluene*	<0.050	0.050	11/25/2015	ND	2.11	105	2.00	4.90	
Ethylbenzene*	<0.050	0.050	11/25/2015	ND	2.22	111	2.00	4.05	
Total Xylenes*	<0.150	0.150	11/25/2015	ND	6.40	107	6.00	3.31	
Total BTEX	<0.300	0.300	11/25/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.6-140

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	11/25/2015	ND	400	100	400	14.8		

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	11/24/2015	ND	198	98.8	200	2.97	
DRO >C10-C28	<10.0	10.0	11/24/2015	ND	197	98.6	200	3.60	

Surrogate: 1-Chlorooctane 105 % 35-147

Surrogate: 1-Chlorooctadecane 111 % 28-171

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



CARDINAL
Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

[illegible]

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 hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:		Date:	Received By:	Phone Result:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By:		Date:	Received By:	Fax Result:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One)		Time:	Sample Condition	REMARKS:		
Sampler - UPS - Bus - Other:		Time:	Cool <input type="checkbox"/> Yes <input type="checkbox"/> No Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY:		
		Time:		(Initials)		

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

Appendix IV

SOIL BORE INSTALLATION LABORATORY ANALYSIS

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

December 14, 2015

DENNIS POTTER

LINN OPERATING-HOBBS

2130 W. BENDER

HOBBS, NM 88240

RE: LEA D #23

Enclosed are the results of analyses for samples received by the laboratory on 12/08/15 16:45.

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

 Received: 12/08/2015
 Reported: 12/14/2015
 Project Name: LEA D #23
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 12/08/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SOIL BORE 1 @ 50' (H503200-01)

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.063	0.050	12/11/2015	ND	1.75	87.7	2.00	2.38	
Toluene*	2.49	0.050	12/11/2015	ND	1.75	87.5	2.00	2.03	
Ethylbenzene*	4.30	0.050	12/11/2015	ND	1.82	91.1	2.00	2.56	
Total Xylenes*	9.61	0.150	12/11/2015	ND	5.38	89.7	6.00	2.04	
Total BTX	16.5	0.300	12/11/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 168 % 73.6-140

Chloride, SM4500Cl-B			mg/kg					Analyzed By: AP	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1250	16.0	12/11/2015	ND	400	100	400	3.92	

TPH 8015M			mg/kg					Analyzed By: MS	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	53.4	10.0	12/10/2015	ND	203	101	200	0.611	
DRO >C10-C28	137	10.0	12/10/2015	ND	195	97.4	200	1.22	

Surrogate: 1-Chlorooctane 85.6 % 35-147

Surrogate: 1-Chlorooctadecane 84.8 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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

Page 4 of 4

Company Name: <u>Linn Operating</u> Project Manager: <u>Dennis Potter</u> Address: City: State: Zip: Phone #: Fax #: Project #: Project Owner: Project Name: <u>Linn</u> Project Location: <u>State Hwy 2 Lea D #23</u> Sampler Name: <u>Chris Flores</u>				BILL TO P.O. #: Company: <u>Linn</u> Attn: <u>Dennis Potter</u> Address: City: State: Zip: Phone #: Fax #:				ANALYSIS REQUEST																	
FOR LAB USE ONLY Lab I.D. Sample I.D.				(G)RAB OR (C)OMP. # CONTAINERS		MATRIX GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:				PRESERV. ACID/BASE: ICE / COOL OTHER:		SAMPLING DATE TIME		Chloride TPH BTEX											
<u>H503260</u> 1. Soil Bore 1 @ 50'				G 1		/				/		12-8-15 12:30 PM		X X X											

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 hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: 		Date: 12/8/15 Time: 4:45		Received By: Jodi Henson		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #: Add'l Fax #:	
Relinquished By: 		Date: Time:		Received By:		REMARKS: email to : i.crenshaw@diversifiedfsi.com m.alvas@diversifiedfsi.com m.burton@diversifiedfsi.com m.patterson@diversifiedfsi.com c.flores@diversifiedfsi.com			
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		4.6°C		Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

Appendix V

EXCAVATION SIDEWALLS LABORATORY ANALYSIS

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



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

May 20, 2016

DENNIS POTTER

LINN OPERATING-HOBBS

2130 W. BENDER

HOBBS, NM 88240

RE: LEA D #023

Enclosed are the results of analyses for samples received by the laboratory on 05/19/16 16:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. 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,

Mike Snyder For 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: 05/19/2016
 Reported: 05/20/2016
 Project Name: LEA D #023
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/19/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: 4' EXCAVATION N WALL (H601099-01)

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	05/19/2016	ND	2.19	110	2.00	1.30	
Toluene*	<0.050	0.050	05/19/2016	ND	2.11	106	2.00	1.27	
Ethylbenzene*	<0.050	0.050	05/19/2016	ND	1.88	94.0	2.00	0.958	
Total Xylenes*	<0.150	0.150	05/19/2016	ND	5.85	97.4	6.00	0.568	
Total BTX	<0.300	0.300	05/19/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 73.6-140

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	05/20/2016	ND	416	104	400	3.77		

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	05/19/2016	ND	173	86.3	200	4.67	
DRO >C10-C28	<10.0	10.0	05/19/2016	ND	179	89.6	200	9.25	


Surrogate: 1-Chlorooctane 81.8 % 35-147

Surrogate: 1-Chlorooctadecane 106 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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Mike Snyder For 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: 05/19/2016
 Reported: 05/20/2016
 Project Name: LEA D #023
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/19/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: 4' EXCAVATION S WALL (H601099-02)

BTEx 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	05/19/2016	ND	2.19	110	2.00	1.30	
Toluene*	<0.050	0.050	05/19/2016	ND	2.11	106	2.00	1.27	
Ethylbenzene*	<0.050	0.050	05/19/2016	ND	1.88	94.0	2.00	0.958	
Total Xylenes*	<0.150	0.150	05/19/2016	ND	5.85	97.4	6.00	0.568	
Total BTEx	<0.300	0.300	05/19/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 73.6-140

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	05/20/2016	ND	416	104	400	3.77	

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	05/19/2016	ND	173	86.3	200	4.67	
DRO >C10-C28	<10.0	10.0	05/19/2016	ND	179	89.6	200	9.25	

Surrogate: 1-Chlorooctane 70.5 % 35-147

Surrogate: 1-Chlorooctadecane 89.7 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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Mike Snyder For 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: 05/19/2016
Reported: 05/20/2016
Project Name: LEA D #023
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 05/19/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: 4' EXCAVATION E WALL (H601099-03)

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	05/19/2016	ND	2.19	110	2.00	1.30	
Toluene*	<0.050	0.050	05/19/2016	ND	2.11	106	2.00	1.27	
Ethylbenzene*	<0.050	0.050	05/19/2016	ND	1.88	94.0	2.00	0.958	
Total Xylenes*	<0.150	0.150	05/19/2016	ND	5.85	97.4	6.00	0.568	
Total BTX	<0.300	0.300	05/19/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 73.6-140

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	05/20/2016	ND	416	104	400	3.77	

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	05/19/2016	ND	173	86.3	200	4.67	
DRO >C10-C28	<10.0	10.0	05/19/2016	ND	179	89.6	200	9.25	

Surrogate: 1-Chlorooctane 76.6 % 35-147

Surrogate: 1-Chlorooctadecane 98.6 % 28-171

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Mike Snyder For 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: 05/19/2016
 Reported: 05/20/2016
 Project Name: LEA D #023
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 05/19/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: 4' EXCAVATION W WALL (H601099-04)

BTEX 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	05/19/2016	ND	2.19	110	2.00	1.30	
Toluene*	<0.050	0.050	05/19/2016	ND	2.11	106	2.00	1.27	
Ethylbenzene*	<0.050	0.050	05/19/2016	ND	1.88	94.0	2.00	0.958	
Total Xylenes*	<0.150	0.150	05/19/2016	ND	5.85	97.4	6.00	0.568	
Total BTEX	<0.300	0.300	05/19/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 73.6-140

Chloride, SM4500CI-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	05/20/2016	ND	416	104	400	3.77	

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	05/19/2016	ND	173	86.3	200	4.67	
DRO >C10-C28	<10.0	10.0	05/19/2016	ND	179	89.6	200	9.25	

Surrogate: 1-Chlorooctane 73.4 % 35-147

Surrogate: 1-Chlorooctadecane 99.6 % 28-171

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Mike Snyder For 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

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Appendix VI

SITE PHOTOS

Lea D #023

Unit Letter F, Section 25, T17S, R31E

NMOCD Case #: 2R-3095

PHOTO PAGE



Site prior



Site prior



Collecting samples by auger, facing southwest

11/20/2015



Collecting soil samples by soil bore installation, facing northwest

12/7/2015



Collecting excavation wall samples, facing northeast 5/19/2016



Importing topsoil, facing northwest 5/19/2016



Exporting soil, facing northeast 5/19/2016



Excavating site down to 4', facing north 5/19/2016



Excavating site, facing northwest 5/19/2016



Excavating site, facing southwest 5/19/2016

Appendix VII

SEEDING REPORT

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

DIVERSIFIED FIELD SERVICES, INC.

Project: Lea D #23

Date Started: 5/23/16

Seed and lbs used: 2,000 sq. ft.

Date Completed: 5/23/16

Curtis and Curtis, Inc.

4500 North Prince
Clovis, NM 88101
Phone: (575) 762-4759
www.curtisseed.com

Diversified Construction
2,000 Sq. Ft. LPC Mix
1 - 2,000 Sq. Ft. Bag @ 3.71 Bulk Pounds
Job: Lea #23

Lot# M-13685-1

Item	Origin	Purity	Germ	Dormant	Total Germination	Test Date	Total PLS Pounds
Plains Bristlegrass VNS	Oklahoma	12.93%	84.00%	12.00%	96.00%	12/15	0.46
Sand Bluestem Woodward	Texas	0.60%	95.00%	0.00%	95.00%	11/15	0.46
Little Bluestem Cimarron	Texas	7.95%	79.00%	16.00%	95.00%	01/16	0.28
Sideoats Grama El Reno	Texas	0.74%	86.00%	7.00%	93.00%	09/15	0.55
Coreopsis Plains	Colorado	0.25%	84.00%	6.00%	90.00%	09/15	0.18
Sand Dropseed VNS	Texas	2.50%	32.00%	65.00%	97.00%	05/16	0.09
Four-Wing Saltbush VNS	New Mexico	0.88%	18.00%	47.00%	65.00%	05/16	0.46
Other Crop:	5.97%	There are 1 Bags For This Mix This Bag Weighs 3.71 Bulk Pounds Use This Bag For 2,000 Sq. Ft.			Total Bulk Pounds: 4		
Weed Seed:	0.06%						
Inert Matter:	17.07%						

Supervisor: 

Appendix VIII

UPDATED GROUNDWATER STUDY



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

No records found.

PLSS Search:

Section(s): 22, 23, 24, 25,
26, 27, 34, 35,
36 **Township:** 17S **Range:** 31E

Appendix IX

FINAL 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

Form C-141
Revised August 8, 2011

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 Inc.	Contact: E. L. Gonzales	
Address: 2130 W Bender Blvd, Hobbs, NM 88240	Telephone No: 575-738-1739	
Facility Name: Lea D #023	Facility Type: Oil Producer	
Surface Owner: Federal	Mineral Owner:	API No. 30-015-29703

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from	East/West Line	County
F	26	17S	31E	1322	North	1322	West	Eddy

Latitude: 32.8092232 Longitude: -103.8445892

NATURE OF RELEASE

Type of Release: Oil / Produced Water	Volume of Release: 3 bbls / 3 bbls	Volume Recovered: 0 / 0
Source of Release: Flow Line Fuse	Date and Hour of Occurrence 07/03/15	Date and Hour of Discovery 07/03/15 1:13 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?	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.*

As I was driving to the Lea D #023, just north east of Lea D #007 injection well, I saw the flow line from well #023 spraying fluid into the pasture. I drove to the Lea D #023 and shut the well in to stop it from making a bigger mess. The fluid was coming out from an old fuse that gave out. I called the roustabout gang to come and refuse the flow line and also called a backhoe to come and clean up the impacted area. The impacted area was about a 10 ft by 10 ft area.

Describe Area Affected and Cleanup Action Taken.

On November 20, 2015, DFSI personnel on site to obtain samples within the leak area. Three samples were obtained and field sampled for chloride levels, as well as BTEX. The BTEX samples were performed using a Mini Rae Photoionization Detector (PID). Auger refusal was encountered at 8' and 9', SP2 and SP3, respectively. A clean field sample at SP1 was obtained and submitted for laboratory analysis at Cardinal Laboratories of Hobbs, NM for confirmation. On December 8, 2015, DFSI personnel returned to the location to install one soil bore. At 50' bgs, refusal was encountered. The 50' sample was submitted for laboratory analysis at Cardinal Laboratories of Hobbs, NM. A work plan was submitted to NMOCD and BLM on January 21, 2016, and approved on February 4, 2016 by BLM and on February 18, 2016 by NMOCD, with stipulations. Beginning May 5, 2016, DFSI personnel were on site to excavate to 4' bgs around SP2 and SP3. At the base of the excavation, a 20-mil liner was installed and properly seated. As per NMOCD request, sidewall samples of the excavation were obtained and submitted for analysis at Cardinal Laboratories of Hobbs, NM, resulting in low chloride, TPH and BTEX concentrations below regulatory limits. The excavation was backfilled with clean, imported soil to ground surface and contoured to the surrounding area. Contaminated soil was properly disposed of at an NMOCD approved facility. The pasture area of the site was seeded with a mixture of blended vegetation.

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: EL 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: 05-26-2016 Phone: 505-504-8002			

* Attach Additional Sheets If Necessary