

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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Diversified Field Service, Inc. 206 W Snyder Hobbs, NM 88240 (575) 964-8394 Linn Energy May 26, 2016

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

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

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

220 S. St. Fran	cis Dr., Santa	a Fe, NM 87505		Sa	anta Fe	, NM 875	05					
			Rele	ase Notific	eation	and Co	rrective A	Action				
						OPERAT	OR			l Report		Final Report
Name of Co	ompany: L	inn Operatir	ig Inc.		- (Contact: E. I	. Gonzales		77.			1 1 1 4 3 4 4
		der Blvd, Ho		88240	- 1	Telephone N	lo: 575-738-1	739				
Facility Nar	All the second to the second t			111.7		Facility Typ	e: Oil Produce	er				
Surface Ow	ner: Fede	ral		Mineral C	Owner:				API No	. 30-015-2	9703	
				LOC	ATION	OF REI	FASE					
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from	East/	West Line	County		
F	26	178	31E	1322	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	North	1322	E.3 (C.502)	West	Eddy		
				Latitude: 32.0		Longitude		92				
Type of Rele	ease: Oil / P	roduced Wate	r				Release:3 bbls	/3 bbls	Volume I	Recovered:	0/0	
Source of Re	elease: Flo	w Line Fuse	,			Date and I	lour of Occurre			Hour of Dis	scovery	
ar colored	ne di Co	et a				07/03/15 If YES, To	Whom?	7.1	07/03/15	1:13 PM		
Was Immedi	iate Notice	Given?	Yes D	No □ Not R	Required	11 1 1 2 3, 10	Whom?					
By Whom?						Date and I						
Was a Water	rcourse Rea		Yes [☑ No		If YES, V	olume Impactin	g the Wa	tercourse.			
If a Waterco	urce was Ir	npacted, Desc	ribe Fully	*								
Describe At	rea Affecte	d and Cleanup	Action T	aken.								
The impacts	ed area was	about a 10 ft	by 10 ft a	ea.								
regulations public heal should their	all operato th or the en r operations ronment. Ir	rs are required vironment. The	to report ne accepta adequate 10CD acc	ve is true and con and/or file certain nce of a C-141 re sly investigate and eptance of a C-14	release port by t	notifications he NMOCD i	and perform co marked as "Fina tion that pose a eve the operator	al Report' threat to of respon	does not reground wat ground wat asibility for	elieve the op er, surface v compliance	perator of water, hu with an	f liability ıman health
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Title: Prod	luction Supe	ervisor				Approval D	ate:		Expiratio	n Date:		
E-mail Ad	dress: elgor	nzales@linnen	ergy.com	7		Conditions	of Approval:			Attach	ed 🗌	
Date: 0	5-26-2016	Phone: 50	05-504-80	02								

05-26-2016

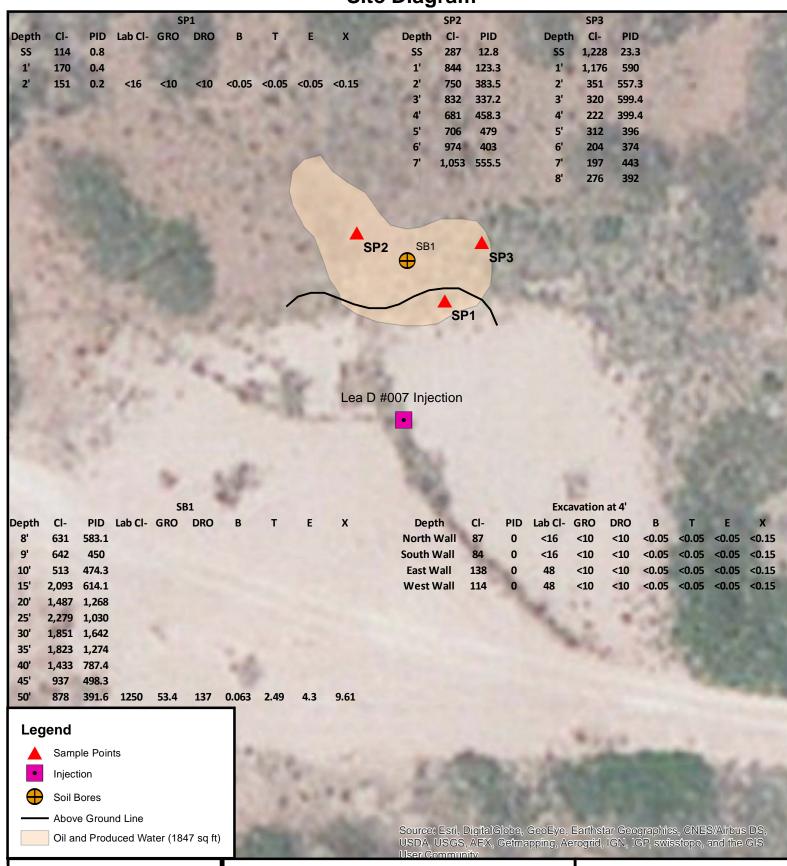
Date:

^{*} Attach Additional Sheets If Necessary

Appendix II

SITE MAP

Site Diagram





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

Ν

Appendix III

SOIL DELINEATION LABORATORY ANALYSIS



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/ga/lab accred certif.html.

Cardinal Laboratories is accreditated 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.

Celey D. Keine

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



LINN OPERATING-HOBBS **DENNIS POTTER** 2130 W. BENDER HOBBS NM, 88240

Fax To: (575) 738-1740

Received: 11/20/2015 Reported:

11/30/2015

LEA D #23 NONE GIVEN

Project Location: NOT GIVEN

Project Name:

Project Number:

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	Analyze	d 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 %	73.6-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyze	d 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	Analyze	d 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 9	6 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. Keine



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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Celeg D. Freene



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	75) 393-2326 FAX (575) 353-2476	_	_				T			B	ILI	TO							AN	IAL	YS	SF	REC	UE	ST	_	_	_	_
	Dennis Potter						I	2.0.	#:																				
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Lab I.D.	EASE NOTE: Liability and Damages. Cardinal's Rability and client's exclusive remedy for any claim arising whether based in calyses. All claims including those for negligence and any other cause whatsoever shall be deemed white durines made in writive. In no event shall Cardinal be liable for incidental or consequental damages, including whout limitation, business interrusces of services have considered by: Indicators of successors arising out of or related to the performance of services have under a will be able to incidental or consequental damages, including without limitation, business interrusces of services have under a will be able to incidental or consequental damages, including without limitation, business interrusces of services have under by Cardinal, regardless of whether successors arising out of or related to the performance of services have under by Cardinal, regardless of whether successors arising out of or related to the performance of services have under by Cardinal and Page 1/20/2015. Time: Received By:	SLUDGE	OTHER:	ACID/BASE	/ ICE / COOL	OTHER	DATE /26/2015	TIME 2:00pm	Olympho X	3	/ Brex	X																	
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[†] Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

Appendix IV

SOIL BORE INSTALLATION LABORATORY ANALYSIS



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/ga/lab accred certif.html.

Cardinal Laboratories is accreditated 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)

Celey D. Keine

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



LINN OPERATING-HOBBS DENNIS POTTER 2130 W. BENDER HOBBS NM, 88240

Fax To: (575) 738-1740

Received: 12/08/2015

2/14/2015

Sampling Date:

12/08/2015

Reported: 12/14/2015

Sampling Type: Sampling Condition: Soil

Project Name: LEA D #23
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

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

BTEX 8021B	mg/	kg	Analyze	d 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 BTEX	16.5	0.300	12/11/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	168 %	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d 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	Analyze	d 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	7						
Surrogate: 1-Chlorooctadecane	84.8 9	% 28-171							

Cardinal Laboratories *=Accredited Analyte

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Celey D. Keine



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

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Celey D. Keine



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name	Lian Overativa									B	LL TO					-	ANAI	YSIS	S RE	QUE	ST		
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[†] Cardinal cannot accept verbal changes. Please fax written changes to [

Appendix V

EXCAVATION SIDEWALLS LABORATORY ANALYSIS



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/ga/lab accred certif.html.

Cardinal Laboratories is accreditated 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.

Wite Sough

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

05/19/2016

Soil



Analytical Results For:

LINN OPERATING-HOBBS DENNIS POTTER 2130 W. BENDER HOBBS NM, 88240

Fax To: (575) 738-1740

Received: 05/19/2016 Sampling Date: Reported: 05/20/2016 Sampling Type:

Project Name: LEA D #023 Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

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

BTEX 8021B	mg/	kg	Analyze	d 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	98.8	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d 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	Analyze	d 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

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 whistoever 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mile Single



LINN OPERATING-HOBBS **DENNIS POTTER** 2130 W. BENDER HOBBS NM, 88240

Fax To: (575) 738-1740

Received: 05/19/2016 Reported:

05/20/2016 LEA D #023 NONE GIVEN Sampling Type:

05/19/2016

Sampling Date:

Soil

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

Project Location:

Project Name:

Project Number:

NOT GIVEN

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

BTEX 8021B	mg/	kg	Analyze	d 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 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d 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	Analyze	d 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 9	% 35-147	,						
Surrogate: 1-Chlorooctadecane	89.79	% 28-171							

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with Sigh



LINN OPERATING-HOBBS **DENNIS POTTER** 2130 W. BENDER HOBBS NM, 88240

Fax To: (575) 738-1740

Received: 05/19/2016

05/20/2016

98.6 %

28-171

Sampling Date: 05/19/2016 Soil

Reported: Project Name: LEA D #023 Sampling Type: Sampling Condition:

Sample Received By:

Cool & Intact Jodi Henson

Project Number: NONE GIVEN Project Location: **NOT GIVEN**

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

BTEX 8021B	mg/	kg	Analyze	d 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	99.2 %	% 73.6-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyze	d 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	Analyze	d 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 %	6 35-147	,						

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with Sigh

Surrogate: 1-Chlorooctadecane



LINN OPERATING-HOBBS DENNIS POTTER 2130 W. BENDER HOBBS NM, 88240

Fax To: (575) 738-1740

Received: 05/19/2016

Sampling Date: Sampling Type: 05/19/2016

Reported: Project Name: 05/20/2016 LEA D #023

Sampling Condition:

Soil Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

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

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
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					

Chloride, SM4500Cl-B	mg	/kg	Analyze	d 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	Analyze	d 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

Cardinal Laboratories *=Accredited Analyte

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Mile Sough



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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MMc Songh





CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 EAY (575) 302 2476

Company Name	Linn										BI	LL TO						AN	IALY	SIS	RF	OUE	ST			
Project Manage	or: Denn's Potter							P.	0. #						П	T		1	T	1		XOL.				
Address:	, ,							C	omp	any	:			1		1					- 1					
City:	State:	Zí	p:						ttn:	•				1					- 1		- 1					
Phone #:	Fax #:							A	ddre	ss:				1												
roject #:	Project Owne	r:						Ci	ty:					1												
roject Name:	LINN							St	ate:			Zip:		1												
roject Locatio	n: Lea D #023							PI	none	#:				1					-1		- 1					
ampler Name:	Chris Flores							Fa	x #:					1			1				- 1					
FOR LAB USE ONLY		Ι.	Г	F	N	ATR	IX		PR	ESE	RV.	SAMPL	ING	1												
Lab I.D.	Sample I.D.	(G)RAB OR (C)OM	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	Ohlanda	0 454	Val d	1614									
	4'Excavellon NorthWall 4'Excavellon South Wall 4'Excavellon East Well 4'Excavellon West Wall	6	1			V				V		5/19/2016	9:30 AW	X	×	X										
2	4 Exeavertion South Wall	6	1	L		V	1			V	4	13	11:4844		×	X										
- 2	4 travelton tayt well	G	1	H	-	V	+	\vdash	Н	V	1	(1:30 pm	X	X	X		4			_					
7	Y Exeque Non West Wall	16	1	H	H	V	+	+		1	-	,	3:10 pm	+	×	×	+	+	\perp	+	4			_		
				H	H	+	+	+	Н	-	+				-	\vdash	+	+	+	+	+		-	-	_	
					+		+	+		1	+						+	+	-	+	+		-	\rightarrow		_
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										1	1		1 0			1	+	+		+	+		-	\rightarrow	-	
	d Damages. Cardinal's liability and client's exclusive remedy for a										1						-		1	+	+	-	-	-	-	

Relinquished By:	Date: / Regei	ved By:	Phone Result:
Relinquished By:	Times 30 Date: Recent	Pai Henson	Fax Result: Ves No Add'I Fax #: REMARKS: EMAIL fo: [Flore) @diversified fsi.com
1	Time:		malves @
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	4.20	Sample Condition CHECKED BY: Cool Intact (Initials) Yes Yes No No	upatherson &

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

Appendix VI

SITE PHOTOS

Lea D #023

Unit Letter F, Section 25, T17S, R31E NMOCD Case #: 2R-3095

PHOTO PAGE



Site prior



Collecting samples by auger, facing southwest 11/20/2015



Site prior



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





Excavating site, facing southwest

5/19/2016

Appendix VII

SEEDING REPORT

DIVERSIFIED FIELD SERVICES, INC.

Project:_	Lea	D	# 23	
-----------	-----	---	------	--

Date Started:

Seed and lbs used: 7,000

Date Completed:_

Turtis 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

<u>Item</u>	Origin	Purity	Germ	Dormant	<u>Total</u> Germination	Test	Total PLS
Plains Bristlegrass VNS	Oklahoma	12,93%	84,00%	12.00%	96.00%	1 <u>Date</u>	Pounds
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	0,46
Sideoats Grama El Reno	Texas	0.74%	86.00%	7.00%	93.00%		0.28
Coreopsis Pleins	Colorado	0.25%	84.00%	6.00%	90.00%	09/15	0.55
Sand Dropseed VNS	Texas	2.50%	32,00%	65,00%		09/15	0.18
Four-Wing Saltbush	New Mexico	0.88%	18.00%	-	97.00%	05/16	0.09
VNS			10.0048	47.00%	65.00%	05/16	0.46
Other Crop: 50'	704						

5.97% 0.06% 17.07% There Are 1 Bags For This Mix This Bag Weighs 3.71 Bulk Pounds Use This Bag For 2,000 Sq. Ft. Weed Seed:

Total Bulk Pounds:

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, **Township:** 17S **Range:** 31E

26, 27, 34, 35,

36

Appendix IX

FINAL C-141

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

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

1220 S. St. Fran	icis Dr., Santa	1 Fe, NIVI 8/50.	,	Sa	anta Fe	, NM 875	05					
			Rele	ease Notific	cation	and Co	rrective A	Action	40			
	5.5.0			7-1-1-		OPERA'	FOR	[Initia	al Report	\boxtimes	Final Report
Name of Company: Linn Operating Inc.					Contact: E.	L. Gonzales		A 100				
Address: 2130 W Bender Blvd, Hobbs, NM 88240						No: 575-738-1						
Facility Na	me: Lea D	#023				Facility Typ	e: Oil Produce	er				
Surface Owner: Federal Mineral Owner:								API No	. 30-015-2	9703		
				LOCA	ATION	OF RE	LEASE					
Unit Letter Section Township Range Feet from the					North/South Line Feet from			East/West Line County				
F			1	North	West		Eddy					
				Latitude: 32.8		Longitud		92				
		roduced Wate	r			Volume of Release:3 bbls / 3 bbls Volume Recovered: 0 / 0					the state of the s	
Source of Re	elease: Flo	w Line Fuse							Hour of Discovery			
Was Immedi	ate Notice (liven?				07/03/15 If YES, To	Whom?		07/03/15	1:13 PM		
was immed	ate Proffee (Yes 🛭	No Not R	equired	11 1 23, 10	Wholit					
By Whom?						Date and I						
Was a Water	rcourse Read		Yes 🗵	No No		If YES, V	olume Impacting	g the Water	rcourse.			
If a Waterco	urse was Im	pacted, Descr	ribe Fully.	*							_	
to the Lea D roustabout g by 10 ft area Describe Ar On Novemb as well as B' and SP3, res confirmation was submitte approved on excavate to samples of t concentratio Contaminate vegetation. I hereby cert	#023 and sl ang to come ea Affected er 20, 2015, TEX. The E- pectively. And the Company of the C	and refuse the and Cleanup DFSI person TEX sample A clean field some special person and the second s	Action Ta nel on site s were per sample at S DFSI per at Cardina M and on P3. At the ned and su s. The ex- osed of at a	ast of Lea D #007 from making a bi e and also called ken. to obtain sample formed using a M SP1 was obtained sonnel returned to al Laboratories of February 18, 2016 base of the excav bmitted for analy cavation was back an NMOCD appro- e is true and com- nd/or file certain	s within a substitution of the local feation, a 2 sis at Carefulled without facilities of the local feation, a 2 sis at Carefulled without facilities of the local facilities	the leak area. Photoionizati mitted for lab ation to instal NM. A work OCD, with st 20-mil liner v rdinal Labora ith clean, imp lity. The pas	Three samples on Detector (Pll oratory analysis one soil bore. A plan was submipulations. Begives installed and tories of Hobbs orted soil to greature area of the	t from an o npacted are were obtai D). Auger at Cardina At 50' bgs, itted to NM inning May I properly s , NM, resul ound surface site was see	ined and f refusal war al Laborat refusal war al Control of the total MOCD and y 5, 2016, seated. As liting in lose and control of the total deeded with	at gave out. npacted area field sampled as encounter ories of Hob as encounter d BLM on Ja DFSI perso s per NMOC w chloride, toured to the a mixture o suant to NM	I called a was about the second of the secon	d the bout a 10 ft loride levels, and 9', SP2 for se 50' sample 21, 2016, and ere on site to sest, sidewall d BTEX anding area.
public health should their or the enviro	n or the envi operations I onment. In a	ronment. The nave failed to addition, NMo ws and/or reg	e acceptan adequatel OCD acce	ce of a C-141 rep y investigate and ptance of a C-141	ort by the remediat report d	e NMOCD ne contaminat	arked as "Final ion that pose a t	Report" do hreat to gro of responsib	oes not rel ound wate bility for o	ieve the ope r, surface w compliance v	erator of ater, hu with any	f liability man health
1						Approval Date: Expiration Date:						
Title: Produ	cuon auper	VISUI	W 1.5			Approval Da		1.6	Aphanon	Date.		
E-mail Address: elgonzales@linnenergy.com					Conditions of Approval:							
Date: 05	26-2016	Phone: 505	1-50A VOO	,						11		

^{*} Attach Additional Sheets If Necessary