



# Skelly Unit #301

## CLOSURE REPORT

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API No. 30-015-29496

Release Date: June 20, 2012

Unit Letter E, Section 28, Township 17 South, Range 31 East

NMOCD Case #: 2R-1214

BLM Event #: NU12154TG

### April XX, 2016

**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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# Linn Skelly Unit #301

## 1 INTRODUCTION

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

The site is located east of Loco Hills, NM, in Eddy County. The spill site resulted from a burst poly line. A total of approximately 3 bbls of oil was released with none recovered. The impacted area is located in the pasture. An initial C-141 was submitted to the NMOCD on July 2, 2012 and approved on July 12, 2012 (Appendix I).

## 2 SITE ACTIVITIES

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On April 11, 2014, DFSI personnel were on site to obtain samples within the leak area (Appendix II). Ten 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). All clean field samples under NMOCD and BLM regulatory guidelines were submitted for laboratory analysis at Cardinal Laboratories of Hobbs, NM to obtain confirmation (Appendix III).

A work plan was submitted to NMOCD and BLM on December 21, 2015, and approved by BLM on February 18, 2016, with stipulations, and NMOCD on February 4, 2016. Beginning March 9, 2016, DFSI personnel were on site to till and blend the soil within the release area, with the exception of the area surrounding SP3. Due to elevated chloride concentrations, SP3 was excavated to a depth of 4' bgs. At the base of the excavation, a river rock layer was installed to inhibit the downward migration of chlorides and TPH, as per BLM approval of the Work Plan. Prior to backfilling, wall samples were collected and submitted for laboratory analysis at Hall Environmental of Albuquerque, NM to obtain confirmation (Appendix IV). The excavation was backfilled with clean, imported topsoil to ground surface and contoured to the surrounding area (Appendix V). Contaminated soil was properly disposed of at an NMOCD approved facility. On March 28, 2016, the site was seeded with BLM Mix #2 (Appendix VI).

## 3 CONCLUSION

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According to the U.S. Geological Survey and the NM Office of the State Engineer, depth to groundwater in the area averages 236 ft. bgs. 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 VII) and respectfully requests the closure of this regulatory file.

# Appendix I

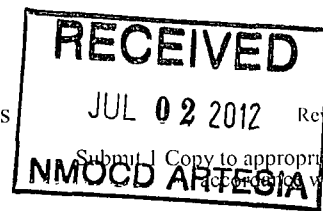
INITIAL C-141

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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

### Release Notification and Corrective Action

**nJMW 1219436244**

<b>OPERATOR</b>		<input checked="" type="checkbox"/> Initial Report	<input type="checkbox"/> Final Report
Name of Company: Linn Operating <b>269324</b>		Contact: Joe Hernandez	
Address: 2130 W. Bender Hobbs, NM 88240		Telephone No.: 575-738-1739	
Facility Name: Skelly Unit # 301		Facility Type: Injection	
Surface Owner: Federal		Mineral Owner: Federal	API No : 3001529496

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	28	17S	31E	1980	North	560	West	Eddy

Latitude: 32.8073765024948 Longitude: -103.88144231194

### NATURE OF RELEASE

Type of Release: Oil	Volume of Release: 3	Volume Recovered: 0
Source of Release: Polyline	Date and Hour of Occurrence: 06-20-2012 9am	Date and Hour of Discovery: 06-20-2012 9:30am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? M. Bratcher - NM OCD / Terry Gregston-BLM	
By Whom? Joe Hernandez	Date and Hour 06-22-2012 3pm	
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.\*: Fuse on polyline developed hole. Further remedial action pending...

Describe Area Affected and Cleanup Action Taken.\*: Sprayed oil and water on to open field nearest location skelly sat#4.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC D 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 NMOC D 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, NMOC D 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: Joe Hernandez		Approved by District Supervisor.	Signed By
Title: Production Foreman		Approval Date: <b>JUL 12 2012</b>	Expiration Date:
E-mail Address: jhernandez@linenergy.com		Conditions of Approval:	Attached <input type="checkbox"/>
Date: 07-02-2012 Phone: 575-942-9492			

\* Attach Additional Sheets If Necessary

Remediation per OCD Rules &  
Guidelines. **SUBMIT REMEDIATION  
PROPOSAL NOT LATER THAN:**

**8/12/12**

**2RP-1214**

# Appendix II

## SITE MAP & SAMPLE DATA

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# Site Diagram

Linn, Skelly 301 Poly Line  
UL/E, Sec. 28 T17S R31E  
Eddy County, NM  
Drafted By: Lance Crenshaw, 4-8-14











0 0.0050.01 0.02 Miles  
|-----|-----|-----|

Spill Area:  
14,646 sq. ft.

## Legend



### Misc\_points

#### Types


-  Electrical Box
-  Power Pole
-  Headers
-  Injection
-  Pumpjacks
-  Tanks
-  Valves
-  Other
-  sample\_pts
-  Source

### Pipeline





#### Type

-  Above Ground Line
-  Buried Line

### Spill

-  <all other values>

### Spill\_Media

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

Lance Crenshaw  
GIS Technician

Soil Remediation and Ground Water Remediation  
Environmental Assessments  
Regulatory Compliance



Environmental

**DFS**

Services

Office: 575-964-8394  
Fax: 575-964-8396

Cell: 575-441-2359  
Email: lcrenshaw@diversifiedfsi.com

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

SP1									
Depth	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X
SS	274	4.3							
1'	374	36.2							
2'	349	9.3	112	<10	422	<0.05	<0.05	<0.05	<0.15

SP2									
Depth	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X
SS	299	0.9							
1'	274	0.4							
2'	299	0.4	64	<10	<10	<0.05	<0.05	<0.05	<0.15

SP3									
Depth	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X
SS	349	0.4							
1'	949	1.8							
2'	624	1.6							
3'	974	0.5							
4'	949	0							
5'	524	1.4	448	<10	39.3	<0.05	<0.05	<0.05	<0.15

SP4									
Depth	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X
SS	224	0							
1'	249	0.1							
2'	324	0	192	<10	<10	<0.05	<0.05	<0.05	<0.15

SP5									
Depth	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X
SS	324	0							
1'	274	0							
2'	299	0	48	<10	193	<0.05	<0.05	<0.05	<0.15

SP6									
Depth	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X
SS	324	0.2							
1'	324	0.1							
2'	324	0.2	80	<10	<10	<0.05	<0.05	<0.05	<0.15

SP7									
Depth	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X
SS	349	0							
1'	324	0							
2'	349	0.2	<16	<10	18.2	<0.05	<0.05	<0.05	<0.15

SP8									
Depth	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X

SS	349	0							
1'	299	0							
2'	224	0	<16	<10	35.9	<0.05	<0.05	<0.05	<0.15

SP9

Depth	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X
SS	449	0.3							
1'	249	0.8							
2'	324	0.3	<16	<10	1850	<0.05	<0.05	<0.05	<0.15

SP10

Depth	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X
SS	449	0.1							
1'	349	0.2							
2'	374	0.2	<16	<10	<10	<0.05	<0.05	<0.05	<0.15

Wall Samples @ 4'

	Cl-	PID	Lab Cl-	GRO	DRO	B	T	E	X
North	109	0.4	ND	ND	26	ND	ND	ND	ND
South	115	0.5	ND	ND	ND	ND	ND	ND	ND
East	118	1.2	ND	ND	ND	ND	ND	ND	ND
West	114	1.3	42	ND	26	ND	ND	ND	ND

# Appendix III

## SOIL DELINEATION LABORATORY ANALYSIS

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

May 19, 2014

BRIAN WALL

LINN OPERATING-HOBBS

2130 W. BENDER

HOBBS, NM 88240

RE: SKELLY UNIT #301

Enclosed are the results of analyses for samples received by the laboratory on 05/12/14 16:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	05/12/2014	Sampling Date:	05/12/2014
Reported:	05/19/2014	Sampling Type:	Soil
Project Name:	SKELLY UNIT #301	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SP. 1 @ 2' (H401439-01)**

BTEX 8260B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/15/2014	ND	2.32	116	2.00	0.769	
Toluene*	<0.050	0.050	05/15/2014	ND	2.20	110	2.00	0.0923	
Ethylbenzene*	<0.050	0.050	05/15/2014	ND	2.05	103	2.00	0.259	
Total Xylenes*	<0.150	0.150	05/15/2014	ND	6.27	105	6.00	0.427	
Total BTEX	<0.300	0.300	05/15/2014	ND					

Surrogate: Dibromofluoromethane 97.0 % 61.3-142

Surrogate: Toluene-d8 100 % 71.3-129

Surrogate: 4-Bromofluorobenzene 113 % 65.7-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>112</b>	16.0	05/14/2014	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	05/15/2014	ND	201	100	200	1.88	
<b>DRO &gt;C10-C28</b>	<b>422</b>	10.0	05/15/2014	ND	212	106	200	1.74	

Surrogate: 1-Chlorooctane 140 % 65.2-140

Surrogate: 1-Chlorooctadecane 153 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 05/12/2014  
 Reported: 05/19/2014  
 Project Name: SKELLY UNIT #301  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 05/12/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP. 2 @ 2' (H401439-02)**

BTX 8260B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/15/2014	ND	2.32	116	2.00	0.769	
Toluene*	<0.050	0.050	05/15/2014	ND	2.20	110	2.00	0.0923	
Ethylbenzene*	<0.050	0.050	05/15/2014	ND	2.05	103	2.00	0.259	
Total Xylenes*	<0.150	0.150	05/15/2014	ND	6.27	105	6.00	0.427	
Total BTX	<0.300	0.300	05/15/2014	ND					

Surrogate: Dibromofluoromethane 96.1 % 61.3-142

Surrogate: Toluene-d8 103 % 71.3-129

Surrogate: 4-Bromofluorobenzene 103 % 65.7-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	05/14/2014	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	05/15/2014	ND	201	100	200	1.88	
DRO >C10-C28	<10.0	10.0	05/15/2014	ND	212	106	200	1.74	

Surrogate: 1-Chlorooctane 103 % 65.2-140

Surrogate: 1-Chlorooctadecane 104 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 05/12/2014  
 Reported: 05/19/2014  
 Project Name: SKELLY UNIT #301  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 05/12/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP. 3 @ 5' (H401439-03)**

BTX 8260B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/15/2014	ND	2.32	116	2.00	0.769	
Toluene*	<0.050	0.050	05/15/2014	ND	2.20	110	2.00	0.0923	
Ethylbenzene*	<0.050	0.050	05/15/2014	ND	2.05	103	2.00	0.259	
Total Xylenes*	<0.150	0.150	05/15/2014	ND	6.27	105	6.00	0.427	
Total BTX	<0.300	0.300	05/15/2014	ND					

Surrogate: Dibromofluoromethane 98.0 % 61.3-142  
 Surrogate: Toluene-d8 99.9 % 71.3-129  
 Surrogate: 4-Bromofluorobenzene 106 % 65.7-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	05/14/2014	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	05/15/2014	ND	201	100	200	1.88	
DRO >C10-C28	39.3	10.0	05/15/2014	ND	212	106	200	1.74	

Surrogate: 1-Chlorooctane 140 % 65.2-140  
 Surrogate: 1-Chlorooctadecane 140 % 63.6-154

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

Received: 05/12/2014  
 Reported: 05/19/2014  
 Project Name: SKELLY UNIT #301  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 05/12/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP. 4 @ 2' (H401439-04)**

BTX 8260B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/15/2014	ND	2.32	116	2.00	0.769	
Toluene*	<0.050	0.050	05/15/2014	ND	2.20	110	2.00	0.0923	
Ethylbenzene*	<0.050	0.050	05/15/2014	ND	2.05	103	2.00	0.259	
Total Xylenes*	<0.150	0.150	05/15/2014	ND	6.27	105	6.00	0.427	
Total BTX	<0.300	0.300	05/15/2014	ND					

*Surrogate: Dibromofluoromethane* 96.8 % 61.3-142  
*Surrogate: Toluene-d8* 99.0 % 71.3-129  
*Surrogate: 4-Bromofluorobenzene* 103 % 65.7-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	05/14/2014	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	05/15/2014	ND	201	100	200	1.88	
DRO >C10-C28	<10.0	10.0	05/15/2014	ND	212	106	200	1.74	

*Surrogate: 1-Chlorooctane* 130 % 65.2-140  
*Surrogate: 1-Chlorooctadecane* 134 % 63.6-154

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

Received: 05/12/2014  
 Reported: 05/19/2014  
 Project Name: SKELLY UNIT #301  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 05/12/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP. 5 @ 2' (H401439-05)**

BTEx 8260B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/15/2014	ND	1.85	92.4	2.00	5.18		
Toluene*	<0.050	0.050	05/15/2014	ND	1.73	86.5	2.00	7.75		
Ethylbenzene*	<0.050	0.050	05/15/2014	ND	1.61	80.7	2.00	8.03		
Total Xylenes*	<0.150	0.150	05/15/2014	ND	4.93	82.2	6.00	6.38		
Total BTEx	<0.300	0.300	05/15/2014	ND						

Surrogate: Dibromofluoromethane 95.5 % 61.3-142  
 Surrogate: Toluene-d8 103 % 71.3-129  
 Surrogate: 4-Bromofluorobenzene 105 % 65.7-141

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	05/14/2014	ND	400	100	400	14.8		

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	05/15/2014	ND	201	100	200	1.88	
DRO >C10-C28	193	50.0	05/15/2014	ND	212	106	200	1.74	

Surrogate: 1-Chlorooctane 108 % 65.2-140  
 Surrogate: 1-Chlorooctadecane 170 % 63.6-154

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 05/12/2014  
 Reported: 05/19/2014  
 Project Name: SKELLY UNIT #301  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 05/12/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP. 6 @ 2' (H401439-06)**

BTX 8260B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/15/2014	ND	1.85	92.4	2.00	5.18		
Toluene*	<0.050	0.050	05/15/2014	ND	1.73	86.5	2.00	7.75		
Ethylbenzene*	<0.050	0.050	05/15/2014	ND	1.61	80.7	2.00	8.03		
Total Xylenes*	<0.150	0.150	05/15/2014	ND	4.93	82.2	6.00	6.38		
Total BTX	<0.300	0.300	05/15/2014	ND						

Surrogate: Dibromofluoromethane 96.0 % 61.3-142  
 Surrogate: Toluene-d8 101 % 71.3-129  
 Surrogate: 4-Bromofluorobenzene 102 % 65.7-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	05/14/2014	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	05/15/2014	ND	201	100	200	1.88	
DRO >C10-C28	<10.0	10.0	05/15/2014	ND	212	106	200	1.74	

Surrogate: 1-Chlorooctane 127 % 65.2-140  
 Surrogate: 1-Chlorooctadecane 129 % 63.6-154

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 05/12/2014  
 Reported: 05/19/2014  
 Project Name: SKELLY UNIT #301  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 05/12/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP. 7 @ 2' (H401439-07)**

BTX 8260B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/15/2014	ND	1.85	92.4	2.00	5.18		
Toluene*	<0.050	0.050	05/15/2014	ND	1.73	86.5	2.00	7.75		
Ethylbenzene*	<0.050	0.050	05/15/2014	ND	1.61	80.7	2.00	8.03		
Total Xylenes*	<0.150	0.150	05/15/2014	ND	4.93	82.2	6.00	6.38		
Total BTX	<0.300	0.300	05/15/2014	ND						

Surrogate: Dibromofluoromethane 97.4 % 61.3-142  
 Surrogate: Toluene-d8 101 % 71.3-129  
 Surrogate: 4-Bromofluorobenzene 102 % 65.7-141

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	05/14/2014	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	05/15/2014	ND	201	100	200	1.88	
DRO >C10-C28	18.2	10.0	05/15/2014	ND	212	106	200	1.74	

Surrogate: 1-Chlorooctane 131 % 65.2-140  
 Surrogate: 1-Chlorooctadecane 137 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 05/12/2014  
 Reported: 05/19/2014  
 Project Name: SKELLY UNIT #301  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 05/12/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP. 8 @ 2' (H401439-08)**

BTX 8260B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/15/2014	ND	1.85	92.4	2.00	5.18		
Toluene*	<0.050	0.050	05/15/2014	ND	1.73	86.5	2.00	7.75		
Ethylbenzene*	<0.050	0.050	05/15/2014	ND	1.61	80.7	2.00	8.03		
Total Xylenes*	<0.150	0.150	05/15/2014	ND	4.93	82.2	6.00	6.38		
Total BTX	<0.300	0.300	05/15/2014	ND						

Surrogate: Dibromofluoromethane 97.9 % 61.3-142  
 Surrogate: Toluene-d8 101 % 71.3-129  
 Surrogate: 4-Bromofluorobenzene 104 % 65.7-141

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	05/14/2014	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	05/15/2014	ND	201	100	200	1.88	
DRO >C10-C28	35.9	10.0	05/15/2014	ND	212	106	200	1.74	

Surrogate: 1-Chlorooctane 136 % 65.2-140  
 Surrogate: 1-Chlorooctadecane 143 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 05/12/2014  
 Reported: 05/19/2014  
 Project Name: SKELLY UNIT #301  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 05/12/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP. 9 @ 2' (H401439-09)**

BTX 8260B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/15/2014	ND	1.85	92.4	2.00	5.18		
Toluene*	<0.050	0.050	05/15/2014	ND	1.73	86.5	2.00	7.75		
Ethylbenzene*	<0.050	0.050	05/15/2014	ND	1.61	80.7	2.00	8.03		
Total Xylenes*	<0.150	0.150	05/15/2014	ND	4.93	82.2	6.00	6.38		
Total BTX	<0.300	0.300	05/15/2014	ND						

Surrogate: Dibromofluoromethane 94.6 % 61.3-142  
 Surrogate: Toluene-d8 101 % 71.3-129  
 Surrogate: 4-Bromofluorobenzene 103 % 65.7-141

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	05/14/2014	ND	400	100	400	14.8		

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<100	100	05/15/2014	ND	201	100	200	1.88	
DRO >C10-C28	1850	100	05/15/2014	ND	212	106	200	1.74	

Surrogate: 1-Chlorooctane 76.5 % 65.2-140  
 Surrogate: 1-Chlorooctadecane 250 % 63.6-154

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**Analytical Results For:**

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

Received: 05/12/2014  
 Reported: 05/19/2014  
 Project Name: SKELLY UNIT #301  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

Sampling Date: 05/12/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP. 10 @ 2' (H401439-10)**

BTX 8260B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/15/2014	ND	1.85	92.4	2.00	5.18	
Toluene*	<0.050	0.050	05/15/2014	ND	1.73	86.5	2.00	7.75	
Ethylbenzene*	<0.050	0.050	05/15/2014	ND	1.61	80.7	2.00	8.03	
Total Xylenes*	<0.150	0.150	05/15/2014	ND	4.93	82.2	6.00	6.38	
Total BTX	<0.300	0.300	05/15/2014	ND					

Surrogate: Dibromofluoromethane 97.1 % 61.3-142  
 Surrogate: Toluene-d8 98.9 % 71.3-129  
 Surrogate: 4-Bromofluorobenzene 98.5 % 65.7-141

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	05/14/2014	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	05/16/2014	ND	203	102	200	0.0683	
DRO >C10-C28	<10.0	10.0	05/16/2014	ND	229	114	200	0.184	

Surrogate: 1-Chlorooctane 97.1 % 65.2-140  
 Surrogate: 1-Chlorooctadecane 106 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

### Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
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. Keene, Lab Director/Quality Manager

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>Linn Energy</u>				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																							
Project Manager: <u>Brian Wall</u>				P.O. #:																											
Address:				Company: <u>Linn Energy</u>																											
City:		State:		Zip:		Attn: <u>Brian Wall</u>																									
Phone #:		Fax #:		Address:																											
Project #:		Project Owner:		City:																											
Project Name:				State:														Zip:													
Project Location: <u>Skelly 301</u>				Phone #:																											
Sampler Name: <u>Michael Alueh</u>				Fax #:																											
FOR LAB USE ONLY																															
Lab I.D.		Sample I.D.		MATRIX		PRESERV.												SAMPLING													
				GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER:		ACID/BASE:		ICE / COOL		OTHER:											
				# CONTAINERS		DATE		TIME																							
H401439				8		1		X		X		X		X		X		X		X											
1 sp. 1 @ 2'				8		1		X		X		X		X		X		X		X											
2 sp. 2 @ 2'				8		1		X		X		X		X		X		X		X											
3 sp. 3 @ 5'				8		1		X		X		X		X		X		X		X											
4 sp. 4 @ 2'				8		1		X		X		X		X		X		X		X											
5 sp. 5 @ 2'				8		1		X		X		X		X		X		X		X											
6 sp. 6 @ 2'				8		1		X		X		X		X		X		X		X											
7 sp. 7 @ 2'				8		1		X		X		X		X		X		X		X											
8 sp. 8 @ 2'				8		1		X		X		X		X		X		X		X											
9 sp. 9 @ 2'				8		1		X		X		X		X		X		X		X											
10 sp. 10 @ 2'				8		1		X		X		X		X		X		X		X											

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Relinquished By: <u>MUA</u>		Date: <u>5/12/14</u>		Received By: <u>Jodi Jensen</u>		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:	
		Time: <u>4:05</u>				Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Fax #:	
Relinquished By:		Date:		Received By:		REMARKS:  E-mail Results To: Ngladden@diversifiedfsi.com Rpons@diversifiedfsi.com Tjennings@diversifiedfsi.com			
		Time:							
Delivered By: (Circle One)									
Sampler - UPS - Bus - Other:		<u>4.80</u>		Sample Condition					
				Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>		CHECKED BY: <u>JH</u>			
				Yes <input type="checkbox"/> No <input type="checkbox"/>		#54			

# Appendix IV

## WALL LABORATORY ANALYSIS

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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order: 1603C80

Date Reported:

**CLIENT:** Diversified Field Services, Inc  
**Project:** SKelly 301

**Lab Order:** 1603C80

**Lab ID:** 1603C80-001

**Collection Date:** 3/24/2016 11:00:00 AM

**Client Sample ID:** North Wall @ 4'

**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Batch ID	Date Analyzed
Comment: DUE BY 13:00 3/28/16							
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							
Analyst: JME							
Diesel Range Organics (DRO)	26	10		mg/Kg	1	24439	3/25/2016 2:12:03 PM
Surr: DNOP	20.8	70-130	S	%Rec	1	24439	3/25/2016 2:12:03 PM
Comment: DUE BY 13:00 3/28/16							
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							
Analyst: NSB							
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	24446	3/26/2016 12:30:33 PM
Surr: BFB	107	66.2-112		%Rec	1	24446	3/26/2016 12:30:33 PM
Comment: DUE BY 13:00 3/28/16							
<b>EPA METHOD 8021B: VOLATILES</b>							
Analyst: NSB							
Benzene	ND	0.024		mg/Kg	1	24446	3/26/2016 12:30:33 PM
Toluene	ND	0.048		mg/Kg	1	24446	3/26/2016 12:30:33 PM
Ethylbenzene	ND	0.048		mg/Kg	1	24446	3/26/2016 12:30:33 PM
Xylenes, Total	ND	0.097		mg/Kg	1	24446	3/26/2016 12:30:33 PM
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	24446	3/26/2016 12:30:33 PM
Comment: DUE BY 13:00 3/28/16							
<b>EPA METHOD 300.0: ANIONS</b>							
Analyst: SRM							
Chloride	ND	30		mg/Kg	20	24453	3/25/2016 10:53:17 PM

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
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order: 1603C80

Date Reported:

**CLIENT:** Diversified Field Services, Inc  
**Project:** SKelly 301

**Lab Order:** 1603C80

**Lab ID:** 1603C80-002

**Collection Date:** 3/24/2016 9:30:00 AM

**Client Sample ID:** South Wall @ 4'

**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Batch ID	Date Analyzed
Comment: DUE BY 13:00 3/28/16							
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							
							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	24439	3/25/2016 2:56:00 PM
Surr: DNOP	17.9	70-130	S	%Rec	1	24439	3/25/2016 2:56:00 PM
Comment: DUE BY 13:00 3/28/16							
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							
							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	24446	3/26/2016 1:41:10 PM
Surr: BFB	106	66.2-112		%Rec	1	24446	3/26/2016 1:41:10 PM
Comment: DUE BY 13:00 3/28/16							
<b>EPA METHOD 8021B: VOLATILES</b>							
							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	24446	3/26/2016 1:41:10 PM
Toluene	ND	0.048		mg/Kg	1	24446	3/26/2016 1:41:10 PM
Ethylbenzene	ND	0.048		mg/Kg	1	24446	3/26/2016 1:41:10 PM
Xylenes, Total	ND	0.095		mg/Kg	1	24446	3/26/2016 1:41:10 PM
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	1	24446	3/26/2016 1:41:10 PM
Comment: DUE BY 13:00 3/28/16							
<b>EPA METHOD 300.0: ANIONS</b>							
							Analyst: <b>SRM</b>
Chloride	ND	30		mg/Kg	20	24453	3/25/2016 11:05:42 PM

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
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order: 1603C80

Date Reported:

**CLIENT:** Diversified Field Services, Inc  
**Project:** SKelly 301

**Lab Order:** 1603C80

**Lab ID:** 1603C80-003

**Collection Date:** 3/24/2016 10:00:00 AM

**Client Sample ID:** East Wall @ 4'

**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Batch ID	Date Analyzed
Comment: DUE BY 13:00 3/28/16							
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							
Analyst: <b>JME</b>							
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	24439	3/25/2016 3:18:03 PM
Surr: DNOP	19.6	70-130	S	%Rec	1	24439	3/25/2016 3:18:03 PM
Comment: DUE BY 13:00 3/28/16							
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							
Analyst: <b>NSB</b>							
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	24446	3/26/2016 2:51:56 PM
Surr: BFB	105	66.2-112		%Rec	1	24446	3/26/2016 2:51:56 PM
Comment: DUE BY 13:00 3/28/16							
<b>EPA METHOD 8021B: VOLATILES</b>							
Analyst: <b>NSB</b>							
Benzene	ND	0.024		mg/Kg	1	24446	3/26/2016 2:51:56 PM
Toluene	ND	0.048		mg/Kg	1	24446	3/26/2016 2:51:56 PM
Ethylbenzene	ND	0.048		mg/Kg	1	24446	3/26/2016 2:51:56 PM
Xylenes, Total	ND	0.096		mg/Kg	1	24446	3/26/2016 2:51:56 PM
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	24446	3/26/2016 2:51:56 PM
Comment: DUE BY 13:00 3/28/16							
<b>EPA METHOD 300.0: ANIONS</b>							
Analyst: <b>SRM</b>							
Chloride	ND	30		mg/Kg	20	24453	3/25/2016 11:18:06 PM

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
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order: 1603C80

Date Reported:

**CLIENT:** Diversified Field Services, Inc  
**Project:** SKelly 301

**Lab Order:** 1603C80

**Lab ID:** 1603C80-004  
**Client Sample ID:** West Wall @ 4'

**Collection Date:** 3/24/2016 10:30:00 AM  
**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Batch ID	Date Analyzed
Comment: DUE BY 13:00 3/28/16							
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							
Analyst: JME							
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	24439	3/25/2016 3:39:56 PM
Surr: DNOP	24.3	70-130	S	%Rec	1	24439	3/25/2016 3:39:56 PM
Comment: DUE BY 13:00 3/28/16							
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							
Analyst: NSB							
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	24446	3/26/2016 3:15:33 PM
Surr: BFB	106	66.2-112		%Rec	1	24446	3/26/2016 3:15:33 PM
Comment: DUE BY 13:00 3/28/16							
<b>EPA METHOD 8021B: VOLATILES</b>							
Analyst: NSB							
Benzene	ND	0.023		mg/Kg	1	24446	3/26/2016 3:15:33 PM
Toluene	ND	0.046		mg/Kg	1	24446	3/26/2016 3:15:33 PM
Ethylbenzene	ND	0.046		mg/Kg	1	24446	3/26/2016 3:15:33 PM
Xylenes, Total	ND	0.093		mg/Kg	1	24446	3/26/2016 3:15:33 PM
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	24446	3/26/2016 3:15:33 PM
Comment: DUE BY 13:00 3/28/16							
<b>EPA METHOD 300.0: ANIONS</b>							
Analyst: SRM							
Chloride	42	30		mg/Kg	20	24453	3/25/2016 11:55:20 PM

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
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

# Appendix V

## SITE PHOTOS

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# Skelly Unit #301

## PHOTO PAGE

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Site prior

4/8/2014



Site prior

4/8/2014



Collecting soil samples

4/28/2014



Collecting soil samples

4/28/2014



Excavating SP3

3/25/2016



Excavating SP3

3/25/2016



Completed excavation

3/25/2016



Installing river rock at the base of the 4' deep excavation

3/26/2016



Backfilling excavation

3/26/2016



Site completed

3/28/2016

# Appendix VI

## SEEDING REPORT

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

# DIVERSIFIED FIELD SERVICES, INC.

Project: Stelly 301 - Linn

Date Started: 3/28/16

Seed and lbs. used: BLM #2

Date Completed: 3/28/16

**Curtis and Curtis, Inc.**  
4300 North Prince  
Clavis, NM 88130  
Phone: (575) 762-4759  
www.curtisseed.com

**Diversified Construction**  
5 Acre BLM #2 Mix  
5 - 1 Acre Bags @ 39.17 Bulk Pounds Each

**Stelly 301**

Item	Origin	Purity	Germin	Perman	Total Germination	Test Date	Total PLS Pounds
Sand Dropseed	Texas	11.10%	33.00%	55.00%	92.00%	03/15	20.00
VNS	Missouri	16.13%	91.00%	4.00%	95.00%	09/13	30.00
Little Bluestem	Colorado	11.34%	84.00%	6.00%	90.00%	09/13	20.00
Aldous	Oklahoma	26.30%	15.00%	81.00%	96.00%	03/15	50.00
Coropops	Texas	16.47%	86.00%	7.00%	93.00%	09/15	30.00
Plains							
Plains Bristlegrass							
VNS							
Sidewater Grama							
Ki Reno							
Other Crop		0.24%					
Weed Seed		0.07%					
Inert Matter		18.06%					

There Are 5 Bags For This Mix  
This Bag Weighs 39.17 Bulk Pounds  
Use This Bag For 1 Acre

Total Bulk Pounds: **196**

Supervisor: 

# Appendix VII

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: EL Gonzales	
Address: 2130 W Bender, Hobbs, NM 88240	Telephone No. 575-738-1739	
Facility Name: Skelly Unit #301	Facility Type: Injection	
Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-29496

**LOCATION OF RELEASE**

Unit Letter E	Section 28	Township 17S	Range 31E	Feet from the 1980	North/South Line North	Feet from 560	East/West Line West	County Eddy
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Latitude: 32.8073765024948 Longitude: -103.88144231194

**NATURE OF RELEASE**

Type of Release: Oil	Volume of Release: 3 bbls	Volume Recovered: 0
Source of Release: Polyline	Date and Hour of Occurrence 06/20/2012 9:00 am	Date and Hour of Discovery 06/20/2012 9:30 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Terry Gregston - BLM Mike Bratcher - NMOCD	
By Whom? Joe Hernandez	Date and Hour: 06/22/2012 3:00 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.\*

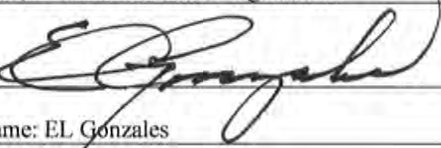
Describe Cause of Problem and Remedial Action Taken.\*

Fuse on polyline developed hole. Sprayed oil and water onto open field.

Describe Area Affected and Cleanup Action Taken.

On April 11, 2014, DFSI personnel were on site to obtain samples within the leak area. Ten 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). All clean field samples under NMOCD and BLM regulatory guidelines were submitted for laboratory analysis at Cardinal Laboratories of Hobbs, NM to obtain confirmation. A work plan was submitted to NMOCD and BLM on December 21, 2015, and approved by BLM on February 18, 2016, with stipulations, and NMOCD on February 4, 2016. Beginning March 9, 2016, DFSI personnel were on site to till and blend the soil within the release area, with the exception of the area surrounding SP3. Due to elevated chloride concentrations, SP3 was excavated to a depth of 4' bgs. At the base of the excavation, a river rock layer was installed to inhibit the downward migration of chlorides and TPH, as per BLM approval of the Work Plan. Prior to backfilling, four-wall composite samples were collected and submitted for laboratory analysis at Hall Environmental of Albuquerque, NM to obtain confirmation. The excavation was backfilled with clean, imported topsoil to ground surface and contoured to the surrounding area. Contaminated soil was properly disposed of at an NMOCD approved facility. On March 28, 2016, the site was seeded with BLM Mix #2.

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: EL Gonzales	Approved by Environmental Specialist:	
Title: Production Supervisor	Approval Date:	Expiration Date:
E-mail Address: elgonzaless@linenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 3/31/2016 Phone: 575-504-8002		

\* Attach Additional Sheets If Necessary