

**Bratcher, Mike, EMNRD**

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**From:** Lara Weinheimer <lweinheimer@rice-ecs.com>  
**Sent:** Thursday, March 07, 2013 1:02 PM  
**To:** Bratcher, Mike, EMNRD; 'Gregston, Terry G'  
**Cc:** 'Hack Conder'; 'Bruce Baker'  
**Subject:** Corrective Action Plan for Linn Energy's Skelly Unit #2 (2RP-1293)  
**Attachments:** Linn Energy Skelly Unit #2 (2RP-1293) Corrective Action Plan.pdf

Attached you will find the [Corrective Action Plan](#) for Linn Energy's Skelly Unit #2 (2RP-1293).

If you have any questions regarding this submission, don't hesitate to contact Bruce Baker at (1-575-631-5157).

Thank you,

Lara

Lara Weinheimer  
Project Scientist  
Rice Environmental Consulting & Safety  
122 W. Taylor  
Hobbs, NM 88240  
(575) 441-0431

# **LINN ENERGY**

2130 W. Bender Blvd.

Hobbs, NM 88241

Phone 575.738.1739

## **Skelly Unit #2 (2RP-1293)**

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### **Corrective Action Plan**

Release Date: August 31<sup>st</sup>, 2012

Unit Letter C, Section 22, Township 17S, Range 31E

## Rice Environmental Consulting & Safety

P.O. Box 5630 Hobbs, NM 88241

Phone 575.393.4411 Fax 575.393.0293

**March 7<sup>th</sup>, 2013**

### **Mike Bratcher**

New Mexico Energy, Minerals, & Natural Resources

Oil Conservation Division, Environmental Bureau – District 2

811 S. First St.

Artesia, NM 88210

**RE: Corrective Action Plan (CAP)**

**Linn Energy – Skelly Unit #2 AD**

**UL/C sec. 22 T17S R31E**

**API No. 30-015-05344**

**2RP-1293**

Mr. Bratcher:

Linn Energy has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the site referenced above.

### **Background and Previous Work**

On August 31<sup>st</sup>, 2012, an accidental discharge of produced water and oil from a ruptured 3 inch poly fusion weld released a total of 3 barrels of produced water and 2 barrels of oil. A vacuum truck was called to clean up the standing fluid and a total of 1 barrel of produced water and 1 barrel of oil was recovered. An initial C-141 was submitted by Linn Energy on September 7<sup>th</sup>, 2012 (Appendix A). The site is located 5.5 miles west of Maljamar in unit letter 'C', sec. 22, T17S R31E in Eddy County, New Mexico. Groundwater at this site is predicted to be at 188 ft bgs.

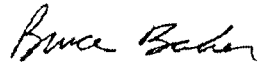
On August 31<sup>st</sup>, 2012, RECS personnel were on site to initialize work on the Skelly Unit #2. Soil samples were taken from the surface of the release and field tested for chlorides and hydrocarbons (Figure 1). The samples were then taken to a commercial laboratory for analysis of chlorides, GRO and DRO (Appendix B). Photo documentation of the release can be found in Appendix C.

### **Corrective Action Plan**

RECS recommends excavating the release area to a maximum depth of 4 ft bgs or to a laboratory chloride level of 1,000 mg/kg. Final chloride and hydrocarbon samples will be taken to a commercial laboratory for analysis. The site will then be backfilled with clean, imported soil.

RECS appreciates the opportunity to work with you on this project. Please call Bruce Baker at the number below if you have any questions or wish to discuss the site.

Sincerely,

A handwritten signature in cursive script that reads "Bruce Baker".

Bruce Baker  
Head Foreman  
RECS  
(575) 631-5157

cc. Terry Gregston, BLM

Attachments:

- Figure 1 – Initial Sampling Data
- Appendix A – Initial C-141
- Appendix B – Laboratory Analysis
- Appendix C – Photo Documentation



# Figures

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 5630 Hobbs, NM 88241  
Phone 575.393.4411 Fax 575.393.0293

# Initial Sampling Data

Initial Surface Sampling					
Sample Description	CI-	PID	Lab CI-	GRO	DRO
PT.1 SURFACE	23,452	334.2	17,200	3,480	68,300
PT.2 SURFACE	24,382	69.1	27,600	<10	50.9



Landowner = BLM

DGW = 188 ft

## Legend

▲ SAMPLE POINTS

× SOURCE

--- FLOW LINES

STAIN (267 sq ft)



## LINN ENERGY SKELLY UNIT

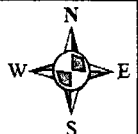
#2 AD

LEGALS: UL/C sec. 22

T-17-S R-31-E

EDDY COUNTY, NM

## Figure 1

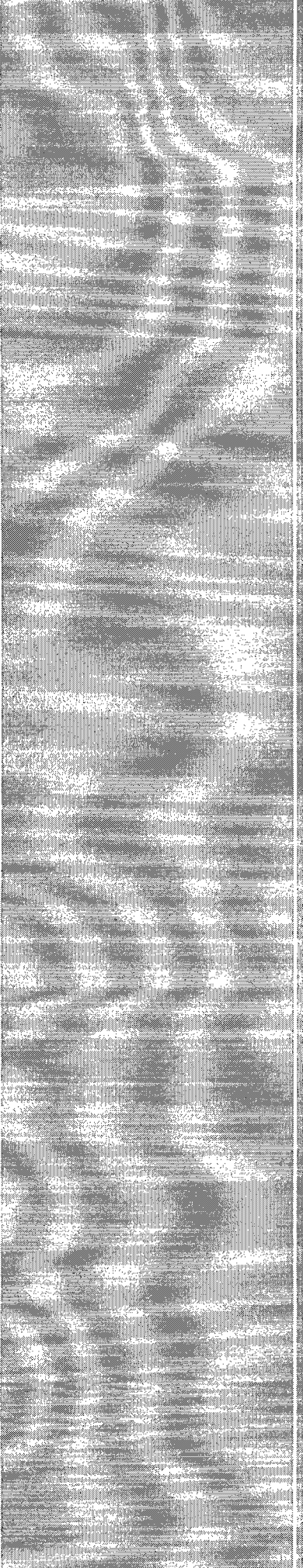


0 30 60  
Feet

GPS date: 8/31/12 DH

Drawing date: 9/4/12

Drafted by: L. Weinheimer



# Appendix A

Initial C-141

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 5630 Hobbs, NM 88241  
Phone 575.393.4411 Fax 575.393.0293

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

RECEIVED

SEP 07 2012

NMOCD ARTESIA

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC

Form C-141  
Revised October 10, 2003

### Release Notification and Corrective Action

*NTMW* 1225750374

#### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Linn Operating	268324	Contact: Joe Hernandez
Address: 2130 W. Bender Hobbs, NM 88240		Telephone No.: 575-738-1739
Facility Name: Skelly Unit # 2		Facility Type: Oil

Surface Owner: Federal	Mineral Owner: Federal	API No.: 3001505344
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#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	22	17S	31E	1980	N	660	West	Eddy

Latitude: 32.8218898807163 Longitude: -103.863963690097

#### NATURE OF RELEASE

Type of Release: Oil / Produced Water	Volume of Release: 3 / 2	Volume Recovered: 1 / 1
Source of Release: Poly Pipeline	Date and Hour of Occurrence: 08/31/2012 9:30am	Date and Hour of Discovery: 08/31/2012 10am
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 09/04/2012 7 35am	
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.\*: 3" polyline split on fusion weld

Describe Area Affected and Cleanup Action Taken.\*: area 15' x 15' picked up all fluid, gang fixed line, well back on. Assessment has been done Cleanup action pending.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>[Signature]</i>	OIL CONSERVATION DIVISION	
Printed Name: Joe Hernandez	Approved by District Supervisor: <i>[Signature]</i>	Signed By <i>[Signature]</i>
Title: Production Foreman	Approval Date: SEP 13 2012	Expiration Date:
E-mail Address: jhernandez@linenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 09/07/2012 Phone: 575-942-9492		

\* Attach Additional Sheets If Necessary

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

*October 13<sup>th</sup> 2012*

*2RP-1293*





# Appendix B

## Laboratory Analysis

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 5630 Hobbs, NM 88241  
Phone 575.393.4411 Fax 575.393.0293



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

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September 07, 2012

BRUCE BAKER

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

112 W. TAYLOR

HOBBS, NM 88240

RE: SKELLY UNIT #2 AD

Enclosed are the results of analyses for samples received by the laboratory on 09/05/12 8:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in cursive script, reading "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

 RICE ENVIRONMENTAL CONSULTING & SAFETY  
 BRUCE BAKER  
 112 W. TAYLOR  
 HOBBS NM, 88240  
 Fax To: (575) 397-1471

Received:	09/05/2012	Sampling Date:	08/31/2012
Reported:	09/07/2012	Sampling Type:	Soil
Project Name:	SKELLY UNIT #2 AD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 1 SURFACE (H202130-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	17200	16.0	09/07/2012	ND	416	104	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	3480	200	09/07/2012	ND	205	102	200	2.16		
DRO >C10-C28	68300	200	09/07/2012	ND	179	89.4	200	0.527		

Surrogate: 1-Chlorooctane 831 % 65.2-140

Surrogate: 1-Chlorooctadecane 2520 % 63.6-154

**Sample ID: PT. 2 SURFACE (H202130-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	27600	16.0	09/07/2012	ND	416	104	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	<10.0	10.0	09/07/2012	ND	205	102	200	2.16	
DRO >C10-C28	50.9	10.0	09/07/2012	ND	179	89.4	200	0.527	

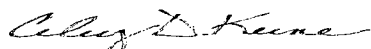
Surrogate: 1-Chlorooctane 82.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 100 % 63.6-154

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

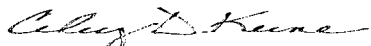
- S-06      The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- ND      Analyte NOT DETECTED at or above the reporting limit
- RPD      Relative Percent Difference
- \*\*      Samples not received at 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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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.



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Celey D. Keene, Lab Director/Quality Manager



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

**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 services. 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 interruption, loss of use, or loss of profits incurred by client, its subsidiaries or affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless if whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <i>[Signature]</i>		Date: 9-5-12	Received By: <i>[Signature]</i>	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
Time: 0830				Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Relinquished By: <i>[Signature]</i>		Date: 9-5-12	Received By: <i>[Signature]</i>	REMARKS:	
Time: 0840				email results	
Delivered By: (Circle One)		Sample Condition	CHECKED BY: (Initials)	Zconder@rice-ecs.com; Bbaker@rice-ecs.com;	
Sampler - UPS - Bus - Other:		Cool <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	hconder@rice-ecs.com; Lweinheimer@rice-ecs.com	

**† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476**

26



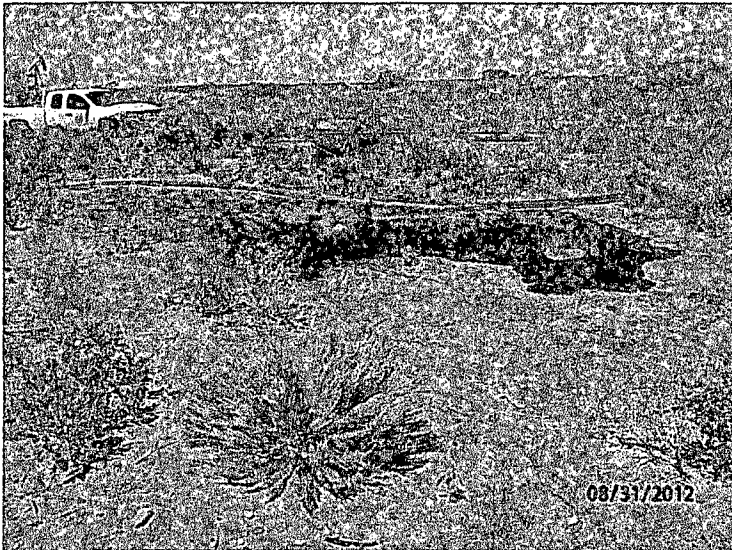
# Appendix C

Photo Documentation

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 5630 Hobbs, NM 88241  
Phone 575.393.4411 Fax 575.393.0293

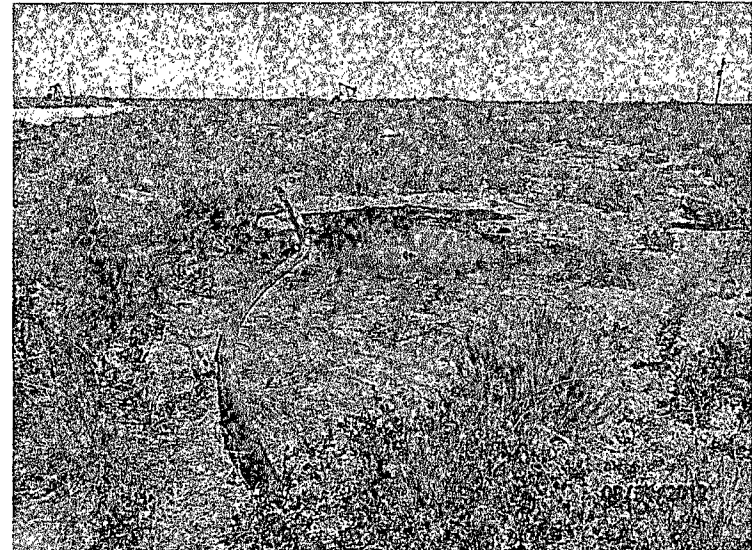
## Linn Skelly Unit #2

Unit C, Section 22, T17S, R31E



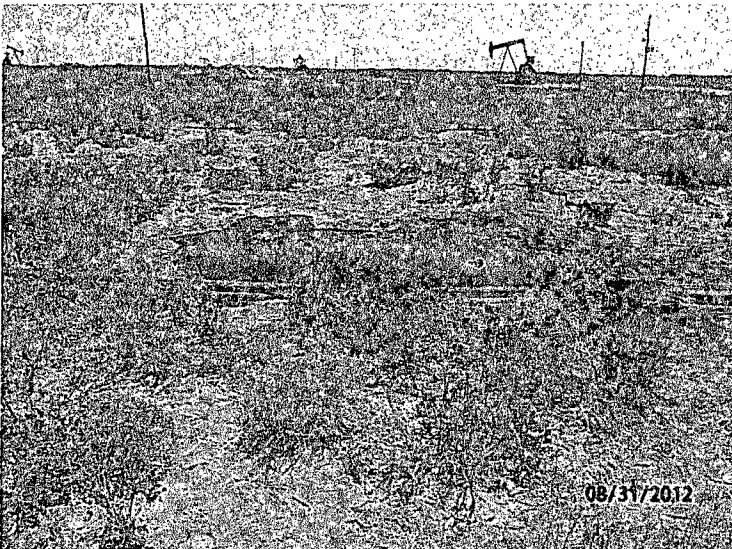
Initial release, facing east

8/31/2012



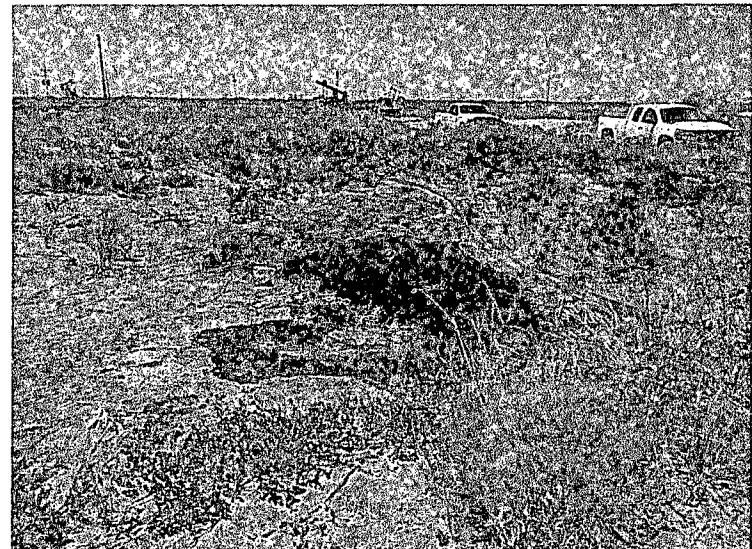
Initial release, facing south

8/31/2012



Initial release, facing west

8/31/2012



Initial release, facing north

8/31/2012

## Bratcher, Mike, EMNRD

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**From:** Bratcher, Mike, EMNRD  
**Sent:** Monday, June 03, 2013 7:46 AM  
**To:** 'Lara Weinheimer'; 'Burton, Michael'  
**Cc:** gawink@linnenergy.com; bbaker@rice-ecs.com; 'Hack Conder'  
**Subject:** RE: Linn Energy Skelly Unit #2 - Final Excavation Sample Points

Lara,

In regard to the analytical data identified as "Bottom Center @ 4' (feet)", is this material still in place, and has there been a delineation to see how far it goes?

Mike Bratcher  
NMOCD District 2  
811 S. First Street  
Artesia, NM 88210  
O: 575-748-1283 X108  
C: 575-626-0857  
F: 575-748-9720

---

**From:** Lara Weinheimer [<mailto:lweinheimer@rice-ecs.com>]  
**Sent:** Thursday, May 30, 2013 10:23 AM  
**To:** 'Burton, Michael'; Bratcher, Mike, EMNRD  
**Cc:** gawink@linnenergy.com; bbaker@rice-ecs.com; 'Hack Conder'  
**Subject:** Linn Energy Skelly Unit #2 - Final Excavation Sample Points

Gentlemen, attached is the final excavation sampling at the Linn Skelly Unit #2. We have fulfilled the Corrective Action Plan requirements as stated in the report sent March 7<sup>th</sup>, 2013 and approved May 3<sup>rd</sup>, 2013. If no other actions are required, we would like permission to backfill the site.

Thank you,

Lara

Lara Weinheimer  
Project Scientist  
Rice Environmental Consulting & Safety  
419 W. Cain  
Hobbs, NM 88240  
(575) 441-0431



**Bratcher, Mike, EMNRD**

---

**From:** Lara Weinheimer <lweinheimer@rice-ecs.com>  
**Sent:** Thursday, May 30, 2013 10:23 AM  
**To:** 'Burton, Michael'; Bratcher, Mike, EMNRD  
**Cc:** gawink@linnenergy.com; bbaker@rice-ecs.com; 'Hack Conder'  
**Subject:** Linn Energy Skelly Unit #2 - Final Excavation Sample Points  
**Attachments:** Linn Energy Skelly Unit #2 AD - Excavations.jpg

Gentlemen, attached is the final excavation sampling at the Linn Skelly Unit #2. We have fulfilled the Corrective Action Plan requirements as stated in the report sent March 7<sup>th</sup>, 2013 and approved May 3<sup>rd</sup>, 2013. If no other actions are required, we would like permission to backfill the site.

Thank you,

Lara

Lara Weinheimer  
Project Scientist  
Rice Environmental Consulting & Safety  
419 W. Cain  
Hobbs, NM 88240  
(575) 441-0431

# Excavation Lab Sampling

	Cl-	GRO	DRO	B	T	E	X	BTEX
North Wall Center	41	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
East Wall Center	0	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
South Wall Center	46	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
West Wall Center	128	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
Bottom Center @ 4'	17200	778	15200	0.152	3.43	10.3	26.6	40.5

Excavation  
28' x 31' x 4'



## Legend

- △ FINAL SAMPLE POINTS
- EXCAVATION
- - - POSSIBLE ROW CHEVRON
- - - SURFACE ELECTRICAL LINE
- SURFACE PIPELINE
- STAIN (267 sq ft)

Landowner = BLM  
DGW = 188 ft

bing



## LINN ENERGY SKELLY UNIT

#2 AD

LEGALS: UL/C sec. 22

T-17-S R-31-E

EDDY COUNTY, NM

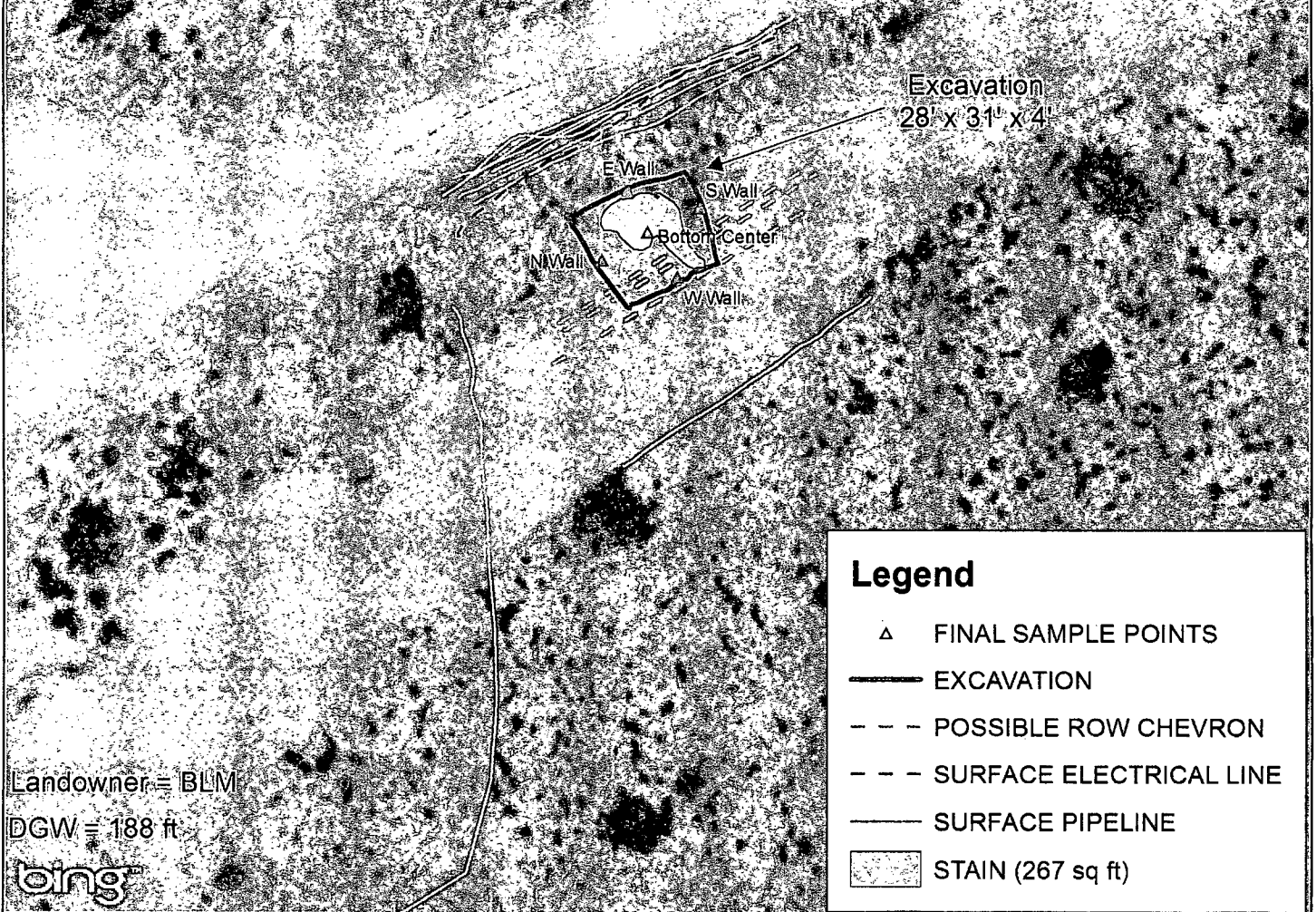


0 30 60  
Feet

GPS date: 5/16/13 DH  
Drawing date: 5/17/13  
Drafted by: L. Weinheimer

# Excavation Lab Sampling

	Cl	GRO	DRO	B	T	E	X	BT EX
North Wall Center		<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
East Wall Center		<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
South Wall Center	48	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
West Wall Center	128	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
Bottom Center @ 4'	17200	778	15200	0.152	3.43	10.3	26.4	40.5



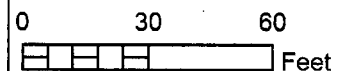
## LINN ENERGY SKELLY UNIT

### #2 AD

LEGALS: UL/C sec. 22

T-17-S R-31-E

EDDY COUNTY, NM



GPS date: 5/16/13 DH  
Drawing date: 5/17/13  
Drafted by: L. Weinheimer