



EXPLORING WHAT'S POSSIBLE

# APACHE CORPORATION

P.O.Box 1849  
Eunice, NM 88231  
Phone 575.394.3159

## EAU Emulsion Line (2RP-2828)

---

# Termination Request

API No. 30-015-40233

Release Date: February 7<sup>th</sup>, 2015

Unit Letter J, Section 34, Township 17S, Range 28E

**March 24<sup>th</sup>, 2015**

**Mike Bratcher**

New Mexico Energy, Minerals, & Natural Resources  
Oil Conservation Division, Environmental Bureau – District 2  
811 S. First St.  
Artesia, NM 88210

**RE: Termination Request  
Apache EAU Emulsion Line (2RP-2828)  
UL/J sec. 34 T17S R28E  
API No. 30-015-40233**

Mr. Bratcher:

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

**Background and Previous Work**

The site is located approximately 14.5 miles east of Artesia, New Mexico at UL/J sec. 34 T17S R28E. USGS records indicate that groundwater will likely be encountered at a depth of approximately 86 +/- feet.

On February 7<sup>th</sup>, 2015, Apache noticed that the 45 on the six inch fiberglass line failed, releasing 10 barrels of produced water and 5 barrels of oil over 11,445 square feet of pasture land and bar ditch. Vacuum trucks were called to the site and recovered 7 barrels of produced water and 3 barrels of oil. The fiberglass line was isolated and repaired. An initial C-141 was sent to NMOCD for approval, and NMOCD approved the initial C-141 on February 20<sup>th</sup>, 2015.

RECS personnel were on site beginning on February 10<sup>th</sup>, 2015. Five points and four verticals were installed within the release area (Figure 1). The 5 points were sampled at the surface, and three of the points were sampled at 6 inches bgs. The 6 inch samples from Point 1, Point 2 and Point 3 were taken to a commercial laboratory for analyses. The laboratory chloride readings for the 3 points returned values of less than 250 mg/kg. Gasoline Range Organics (GRO) readings and Diesel Range Organics (DRO) readings returned values of non-detect, except for the DRO value at Point 2, which returned a value of 17.9 mg/kg (Appendix B).

The 4 verticals were sampled every 6 inches as they were advanced, and the soil samples were field tested for chlorides and organic vapors. The bottom samples from Vertical 1, Vertical 3 and Vertical 4 were taken to a commercial laboratory for analyses. Vertical 1 returned a laboratory chloride reading of 160 mg/kg, Vertical 3 returned a laboratory chloride reading of 80 mg/kg and Vertical 4 returned a laboratory chloride reading of 352 mg/kg. GRO and DRO

readings for all three bottom samples returned readings of non-detect, except for the DRO reading in Vertical 1, which returned a reading of 91.6 mg/kg.

A Path Forward was submitted to NMOCD on March 2<sup>nd</sup>, 2015. NMOCD approved the Path Forward on March 4<sup>th</sup>, 2015. The Path Forward stated that due to safety concerns for personnel and equipment, the bar ditch would be scraped no deeper than 6 inches to remove the higher level contamination. The contaminated soil from the bar ditch would be immediately replaced with clean, imported soil.

Based on the laboratory data and the approval of the Path Forward from NMOCD, the release area was scraped down 6 inches throughout (Figure 2). The excavated soil was taken to a NMOCD approved facility for disposal. Clean top soil was imported to the site to backfill the scrape and to contour the backfilled scrape to the surrounding area.

Photo documentation of the field activities can be found in Appendix C.

Given that Apache removed the contaminated soil and replaced it with clean, imported caliche, Apache respectfully requests 'remediation termination' and site closure. A final C-141 can be found in Appendix D.

RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-2967 or me if you have any questions or wish to discuss the site.

Sincerely,

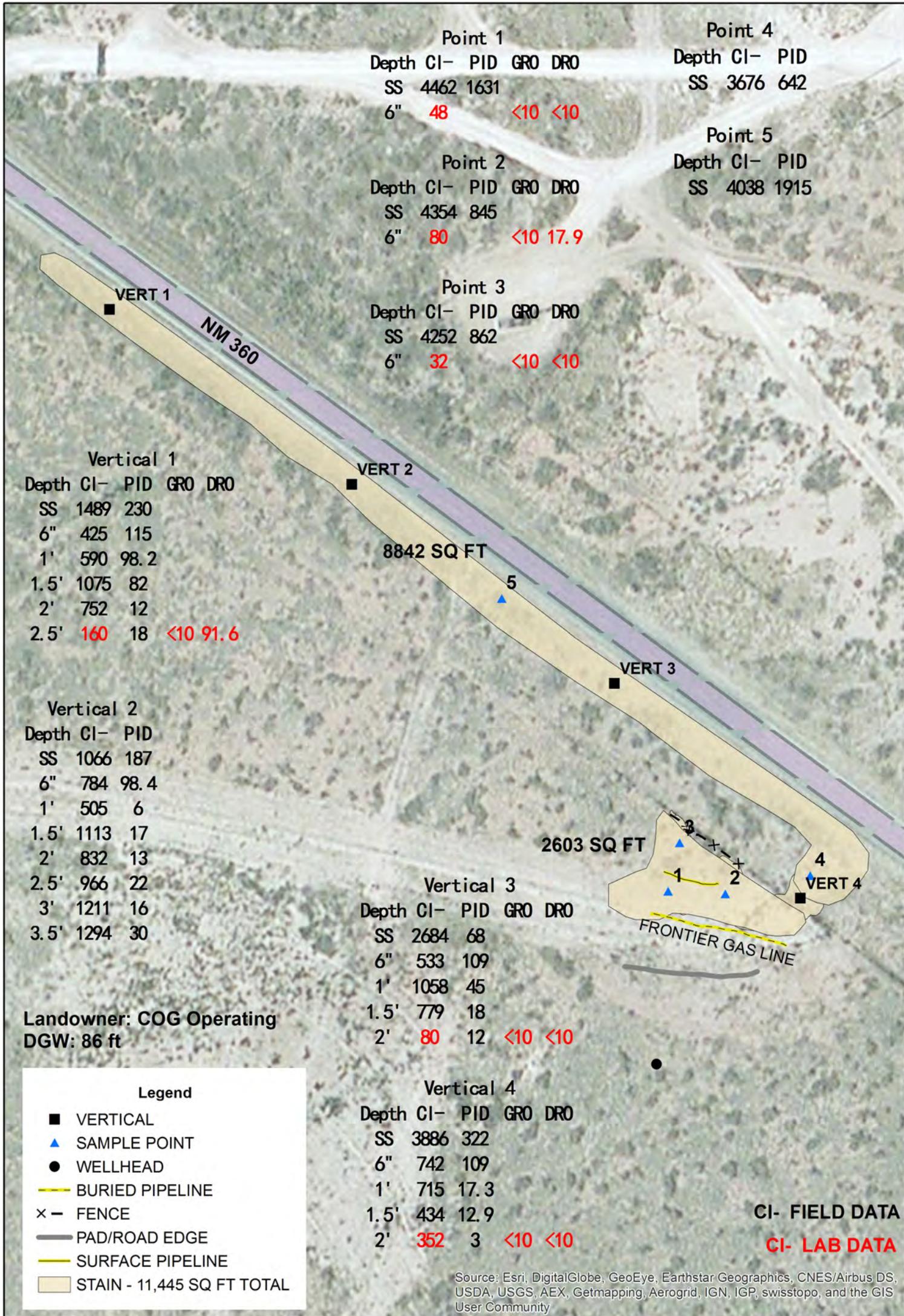


Lara Weinheimer  
Project Scientist  
RECS  
(575) 441-0431  
Attachments:

Figure 1 – Initial Sampling Data  
Figure 2 – Excavation Data  
Appendix A – Initial C-141  
Appendix B – Laboratory Analyses  
Appendix C – Photo Documentation  
Appendix D – Final C-141

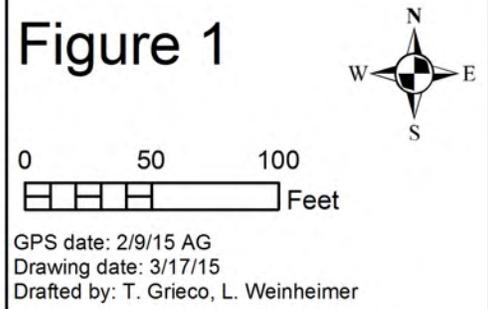
# Figures

# Initial Sampling Data

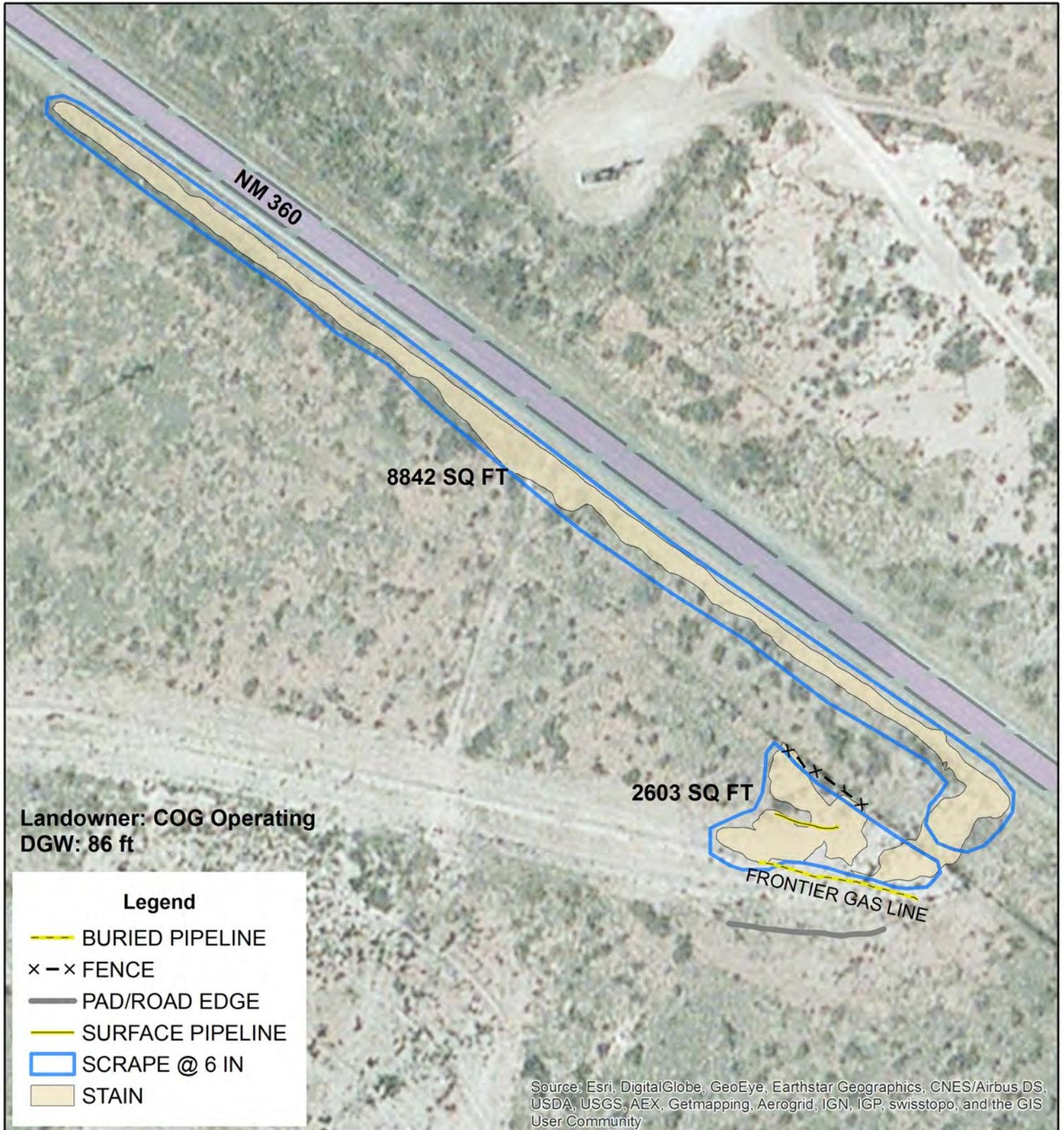


**APACHE EAU  
EMULSION LINE**

UL J SECTION 34  
T-17-S R-28-E  
EDDY COUNTY, NM



# Excavation Data



**APACHE EAU  
EMULSION LINE**

UL J SECTION 34  
T-17-S R-28-E  
EDDY COUNTY, NM

**Figure 2**

0 50 100 Feet

GPS date: 2/25/15 KH  
Drawing date: 2/26/15  
Drafted by: B. Cooper

# Appendix A

Initial C-141

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 2948 Hobbs, NM 88241  
Phone 575.393.2967

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

**NM OIL CONSERVATION**  
State of New Mexico  
Energy Minerals and Natural Resources  
ARTESIA DISTRICT  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011

**FEB 19 2015**

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

**RECEIVED**

**Release Notification and Corrective Action**

NAB1505131025 OPERATOR  Initial Report  Final Report

Name of Company: Apache Corporation <u>873</u>	Contact: Bruce Baker
Address: 2350 W Marland Blvd Hobbs, NM 88240	Telephone No. (432) 631-6982
Facility Name: EAU Emulsion Line (nearest well D State 88)	Facility Type: Oil Well
Surface Owner State	Mineral Owner
API No. 30-15-40233	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	34	17S	28E	1460'	FSL	1755'	FEL	Eddy

Latitude N32.788212 Longitude W104.161188

**NATURE OF RELEASE**

Type of Release: oil and produced water	Volume of Release: 10 barrels of water and 5 barrels of oil	Volume Recovered: 7 barrels of water and 3 barrels of oil
Source of Release: fiberglass line	Date and Hour of Occurrence: 2/7/2015	Date and Hour of Discovery: 2/7/2015
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* The 45 on six inch fiberglass line failed. The line was isolated and repaired. Vacuum truck was dispatched to pick-up standing fluid.		
Describe Area Affected and Cleanup Action Taken.* Approximately 11,000 square feet of pasture land and bar ditch along CR 360. The area was dusted with caliche.		

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: <u>Bruce Baker</u>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Bruce Baker	Approved by Environmental Specialist: <u>[Signature]</u>	
Title: Environmental Technician	Approval Date: <u>2/20/15</u>	Expiration Date: <u>N/A</u>
E-mail Address: <u>larry.baker@apachecorp.com</u>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 2/19/2015 Phone: (432) 631-6982	<b>Remediation per O.C.D. Rules &amp; Guidelines</b>	

**SUBMIT REMEDIATION PROPOSAL NO**

**LATER THAN: 3/20/15**

\* Attach Additional Sheets If Necessary

2RP-2828

# Appendix B

## Laboratory Analyses

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 2948 Hobbs, NM 88241  
Phone 575.393.2967



February 26, 2015

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: EAU EMULSION LINE

Enclosed are the results of analyses for samples received by the laboratory on 02/25/15 16:50.

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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, flowing "C" at the beginning.

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

 APACHE CORP - HOBBS  
 BRUCE BAKER  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received:	02/25/2015	Sampling Date:	02/25/2015
Reported:	02/26/2015	Sampling Type:	Soil
Project Name:	EAU EMULSION LINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: VERTICAL 1 @ 2.5' (H500551-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>160</b>	16.0	02/26/2015	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	02/26/2015	ND	201	101	200	2.35	
<b>DRO &gt;C10-C28</b>	<b>91.6</b>	10.0	02/26/2015	ND	179	89.3	200	9.82	

Surrogate: 1-Chlorooctane 83.2 % 47.2-157  
 Surrogate: 1-Chlorooctadecane 76.3 % 52.1-176

**Sample ID: VERTICAL 3 @ 2' (H500551-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>80.0</b>	16.0	02/26/2015	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	02/26/2015	ND	201	101	200	2.35	
DRO >C10-C28	<10.0	10.0	02/26/2015	ND	179	89.3	200	9.82	

Surrogate: 1-Chlorooctane 80.4 % 47.2-157  
 Surrogate: 1-Chlorooctadecane 71.3 % 52.1-176

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

**Analytical Results For:**

 APACHE CORP - HOBBS  
 BRUCE BAKER  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

 Received: 02/25/2015  
 Reported: 02/26/2015  
 Project Name: EAU EMULSION LINE  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 02/25/2015  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: VERTICAL 4 @ 2' (H500551-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>352</b>	16.0	02/26/2015	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	02/26/2015	ND	201	101	200	2.35	
DRO >C10-C28	<10.0	10.0	02/26/2015	ND	179	89.3	200	9.82	

Surrogate: 1-Chlorooctane 81.6 % 47.2-157

Surrogate: 1-Chlorooctadecane 75.9 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report



---

Celey D. Keene, Lab Director/Quality Manager





March 16, 2015

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: EAU EMULSION LINE

Enclosed are the results of analyses for samples received by the laboratory on 03/12/15 11:00.

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,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

 APACHE CORP - HOBBS  
 BRUCE BAKER  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

Received:	03/12/2015	Sampling Date:	03/10/2015
Reported:	03/16/2015	Sampling Type:	Soil
Project Name:	EAU EMULSION LINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 1 @ 6" (H500672-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>48.0</b>	16.0	03/16/2015	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/13/2015	ND	194	97.1	200	1.08	
DRO >C10-C28	<10.0	10.0	03/13/2015	ND	199	99.7	200	3.45	
<i>Surrogate: 1-Chlorooctane</i>	<i>99.0 %</i>	<i>47.2-157</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>102 %</i>	<i>52.1-176</i>							

**Sample ID: PT. 2 @ 6" (H500672-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>80.0</b>	16.0	03/16/2015	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/13/2015	ND	194	97.1	200	1.08	
<b>DRO &gt;C10-C28</b>	<b>17.9</b>	10.0	03/13/2015	ND	199	99.7	200	3.45	
<i>Surrogate: 1-Chlorooctane</i>	<i>91.8 %</i>	<i>47.2-157</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>101 %</i>	<i>52.1-176</i>							

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

**Analytical Results For:**

 APACHE CORP - HOBBS  
 BRUCE BAKER  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

 Received: 03/12/2015  
 Reported: 03/16/2015  
 Project Name: EAU EMULSION LINE  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 03/10/2015  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: PT. 3 @ 6" (H500672-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	03/16/2015	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/13/2015	ND	194	97.1	200	1.08	
DRO >C10-C28	<10.0	10.0	03/13/2015	ND	199	99.7	200	3.45	

Surrogate: 1-Chlorooctane 86.2 % 47.2-157

Surrogate: 1-Chlorooctadecane 96.2 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

### Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report



---

Celey D. Keene, Lab Director/Quality Manager



# CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603  
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <b>APECH</b>		<b>BILL TO</b>		ANALYSIS REQUEST														
Project Manager: <b>BRUNO BAKER</b>		P.O. #:		Chlorides TPH 8015 M BTEX Texas TPH Complete Cations/Anions TDS														
Address:		Company:																
City: Hobbs State: NM Zip: 88240		Attn:																
Phone #: Fax #:		Address:																
Project #: Project Owner:		City:																
Project Name:		State: Zip:																
Project Location: <b>EAU EMULSION LINE</b>		Phone #:																
Sampler Name:		Fax #:																
FOR LAB USE ONLY		MATRIX				PRESERV.		SAMPLING										
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME		
<b>H500672</b>																		
	1 P+ 2 @ 6IN.	6	1			✓					✓		2-10-15	8:00	✓	✓		
	2 P+ 2 @ 6IN.	6	1			✓					✓		3-10-15	8:05	✓	✓		
	3 P+ 3 @ 6IN.	6	1			✓					✓		3-10-15	8:10	✓	✓		

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <i>Morgan</i>	Date: <b>3-12-15</b>	Received By: <i>[Signature]</i>	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
	Time: <b>9:00</b>		Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Relinquished By: <i>[Signature]</i>	Date: <b>3-12-15</b>	Received By: <i>[Signature]</i>	REMARKS:	
	Time: <b>11:00</b>		email: hconder@riceswd.com; lflores@rice-ecs.com;	
Delivered By: (Circle One)		Sample Condition	jkamplain@rice-ecs.com; knorman@rice-ecs.com;	
Sampler - UPS - Bus - Other:		Cool Intact	cursanic@rice-ecs.com	
		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Environmental Tech: @rice-ecs.com	
		<input type="checkbox"/> No <input type="checkbox"/> No		
		CHECKED BY: <i>[Signature]</i>		

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

#51

# Appendix C

Photo Documenttion

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 2948 Hobbs, NM 88241  
Phone 575.393.2967

# Apache EAU Emulsion Line

Unit Letter J, Section 34, T17S, R28E



Initial release area, facing southeast

2/9/15



Initial release area, facing east

2/9/15



Initial release area, facing north

2/9/15



Initial release area, facing south

2/9/15



Scraping release area, facing north 2/13/15



Installing vertical in bar ditch, facing west 2/25/15



Scraping bar ditch, facing north 3/10/15



Exporting soil, facing southeast 3/10/15



Backfilling release with imported soil, facing east  
3/11/15



Site backfilled, facing west  
3/11/15



Site completed, facing west  
3/18/15



Site completed, facing west  
3/18/15

# Appendix D

Final C-141

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 2948 Hobbs, NM 88241  
Phone 575.393.2967

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	Apache Corporation	Contact	Bruce Baker
Address	2350 W. Marland Blvd, Hobbs, NM 88240	Telephone No.	(432) 631-6982
Facility Name	EAU Emulsion Line (nearest well D State 88)	Facility Type	Oil well
Surface Owner	State	Mineral Owner	
		API No.	30-015-40233

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	34	17S	28E	1460'	FSL	1755'	FEL	Eddy

Latitude N32.788212 Longitude W104.161188

**NATURE OF RELEASE**

Type of Release	oil and produced water	Volume of Release	10 barrels of water and 5 barrels of oil	Volume Recovered	7 barrels of water and 3 barrels of oil
Source of Release	fiberglass line	Date and Hour of Occurrence	2/7/2015	Date and Hour of Discovery	2/7/2015
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?		Date and Hour			
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* The 45 on six inch fiberglass line failed. The line was isolated and repaired. Vacuum truck was dispatched to pick up standing fluid.

Describe Area Affected and Cleanup Action Taken.\* RECS personnel were on site beginning on February 10<sup>th</sup>, 2015. Five points and four verticals were installed within the release area. The 5 points were sampled at the surface, and three of the points were sampled at 6 inches bgs. The 6 inch samples from Point 1, Point 2 and Point 3 were taken to a commercial laboratory for analyses. The laboratory chloride readings for the 3 points returned values of less than 250 mg/kg. GRO readings and DRO readings returned values of non-detect, except for the DRO value at Point 2, which returned a value of 17.9 mg/kg. The 4 verticals were sampled every 6 inches as they were advanced, and the soil samples were field tested for chlorides and organic vapors. The bottom samples from Vertical 1, Vertical 3 and Vertical 4 were taken to a commercial laboratory for analyses. Vertical 1 returned a laboratory chloride reading of 160 mg/kg, Vertical 3 returned a laboratory chloride reading of 80 mg/kg and Vertical 4 returned a laboratory chloride reading of 352 mg/kg. GRO and DRO readings for all three bottom samples returned readings of non-detect, except for the DRO reading in Vertical 1, which returned a reading of 91.6 mg/kg. A Path Forward was submitted to NMOCD on March 2<sup>nd</sup>, 2015. NMOCD approved the Path Forward on March 4<sup>th</sup>, 2015. Based on the laboratory data and the approval of the Path Forward from NMOCD, the release area was scraped down 6 inches throughout. The excavated soil was taken to a NMOCD approved facility for disposal. Clean top soil was imported to the site to backfill the scrape and to contour the backfilled scrape to the surrounding area.

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

Signature: <i>Bruce Baker</i>	<b>OIL CONSERVATION DIVISION</b>		
Printed Name: Bruce Baker	Approved by Environmental Specialist:		
Title: Environmental Technician	Approval Date:	Expiration Date:	
E-mail Address: larry.baker@apachecorp.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: <i>3/24/15</i>	Phone: (432) 631-6982		