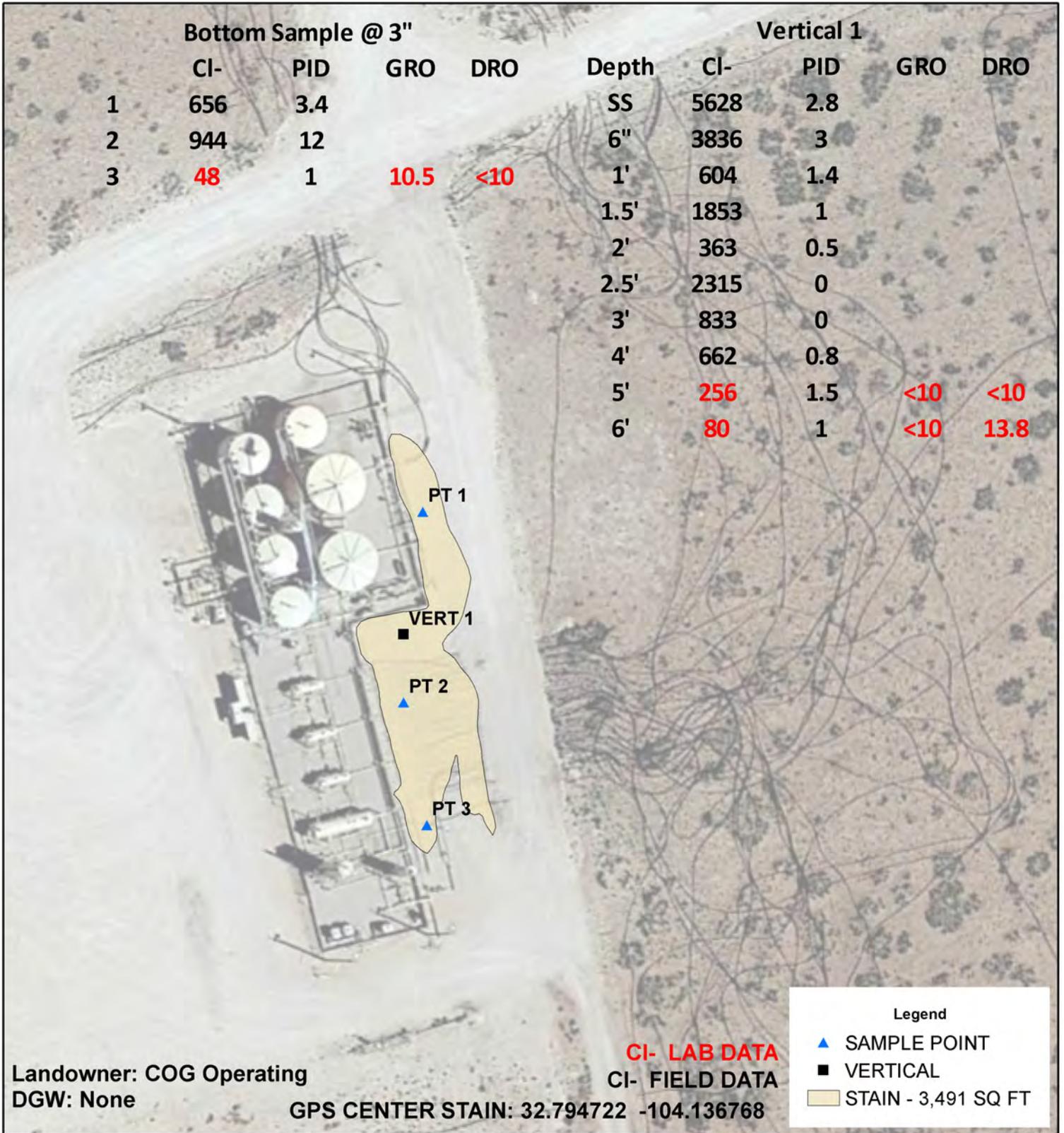


# Initial Sampling Data



Landowner: COG Operating  
 DGW: None

GPS CENTER STAIN: 32.794722 -104.136768

CI- LAB DATA  
 CI- FIELD DATA

**Legend**

- ▲ SAMPLE POINT
- VERTICAL
- STAIN - 3,491 SQ FT

**RECS**  
 RICE ENVIRONMENTAL  
 CONSULTING & SAFETY

**APACHE**  
**D STATE #49**

UL E SECTION 36  
 T-17-S R-28-E  
 EDDY COUNTY, NM

0 25 50  
 Feet

GPS date: 3/25/15 KH  
 Drawing date: 3/26/15  
 Drafted by: T. Grieco



April 27, 2015

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: D STATE #49 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 04/23/15 8:30.

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" and "K".

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:	04/23/2015	Sampling Date:	04/22/2015
Reported:	04/27/2015	Sampling Type:	Soil
Project Name:	D STATE #49 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT 3 @ 3" (H501048-01)**

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>48.0</b>	16.0	04/23/2015	ND	432	108	400	7.69	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>10.5</b>	10.0	04/23/2015	ND	208	104	200	0.0576	
DRO >C10-C28	<10.0	10.0	04/23/2015	ND	222	111	200	1.11	

Surrogate: 1-Chlorooctane 106 % 47.2-157  
 Surrogate: 1-Chlorooctadecane 100 % 52.1-176

**Sample ID: VERITCAL 1 @ 5' (H501048-02)**

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>256</b>	16.0	04/23/2015	ND	432	108	400	7.69	
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	04/23/2015	ND	208	104	200	0.0576	
DRO >C10-C28	<10.0	10.0	04/23/2015	ND	222	111	200	1.11	

Surrogate: 1-Chlorooctane 106 % 47.2-157  
 Surrogate: 1-Chlorooctadecane 104 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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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:	04/23/2015	Sampling Date:	04/22/2015
Reported:	04/27/2015	Sampling Type:	Soil
Project Name:	D STATE #49 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: VERTICAL 1 @ 6' (H501048-03)**

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>80.0</b>	16.0	04/23/2015	ND	416	104	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/23/2015	ND	208	104	200	0.0576	
<b>DRO &gt;C10-C28</b>	<b>13.8</b>	10.0	04/23/2015	ND	222	111	200	1.11	

Surrogate: 1-Chlorooctane 107 % 47.2-157

Surrogate: 1-Chlorooctadecane 100 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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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: <u>APCWP</u>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>																							
Project Manager: <u>BILCO BAKER</u>		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: <u>D-STATE #49 Battery</u>		Phone #:																									
Sampler Name:		Fax #:																									
FOR LAB USE ONLY																											
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							
<u>H5001048</u>																											
<u>1</u>	<u>Pt 3 @ 3 inches</u>	<u>6</u>	<u>1</u>			<u>/</u>				<u>/</u>			<u>4-22-15</u>	<u>10:00</u>	<u>✓</u>	<u>/</u>											
<u>2</u>	<u>Part 1 @ 5 ft.</u>	<u>6</u>	<u>1</u>			<u>/</u>				<u>/</u>			<u>4-22-15</u>	<u>3:30</u>	<u>✓</u>	<u>/</u>											
<u>3</u>	<u>Part 1 @ 6 ft.</u>	<u>6</u>	<u>1</u>			<u>/</u>				<u>/</u>			<u>4-22-15</u>	<u>3:35</u>	<u>-</u>	<u>/</u>											

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: <u>[Signature]</u>	Date: <u>4/23/15</u>	Received By: <u>Jodi Henson</u>	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Date:	Received By:	Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One)	Time: <u>8:30</u>	Sample Condition	REMARKS:	
Sampler - UPS - Bus - Other:	Time:	Cool Intact	email: hconder@riceswd.com; lflores@rice-ecs.com;	
<u>-2.00</u>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	lweinheimer@rice-ecs.com; knorman@rice-ecs.com;	
		<input type="checkbox"/> No <input type="checkbox"/> No	jkamplain@rice-ecs.com; sedwards@rice-ecs.com;	
			cursanic@rice-ecs.com	
			Environmental Tech: <u>K Humphrey</u> @rice-ecs.com	

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

#54

# Apache D State 49

Unit Letter E, Section 36, T17S, R28E



Initial release area, facing southwest 3/25/15



Initial release area, facing west 3/25/15



Initial release area, facing north 3/25/15



Shoveling release area, facing west 4/22/15

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

**NM OIL CONSERVATION**

ARTESIA DISTRICT

Form C-141  
Revised August 8, 2011

MAR 27 2015

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

RECEIVED

**Release Notification and Corrective Action**

*NAB1509038016*

**OPERATOR**

Initial Report  Final Report

Name of Company: Apache Corporation <i>873</i>	Contact Bruce Baker
Address: 2350 W Marland Blvd Hobbs, NM 88240	Telephone No. (432) 631-6982
Facility Name D State 49 Battery	Facility Type: Battery
Surface Owner COG	Mineral Owner State
API No. 30-015-38413	

**LOCATION OF RELEASE**

Unit Letter E	Section 36	Township 17S	Range 28E	Feet from the 1730'	North/South Line FNL	Feet from the 330'	East/West Line FWL	County Eddy
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Latitude N32.794722 Longitude W104.136778

**NATURE OF RELEASE**

Type of Release: produced water	Volume of Release 35 barrels of water	Volume Recovered 30 barrels of water
Source of Release: check valve	Date and Hour of Occurrence 3/24/2015	Date and Hour of Discovery 3/24/2015
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher	
By Whom? Bruce Baker	Date and Hour 3/25/2015	
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.\*

A 1/8 inch plug blew out of the side of a 2 inch check valve on discharge water pump. The transfer pump was shut down and check valve replaced. Vacuum trucks were dispatched to pick-up fluid.

Describe Area Affected and Cleanup Action Taken.\*

The entire release was contained on the lease pad. The area was mapped and initial field samples collected.

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: <i>[Signature]</i>	
Title: Environmental Technician	Approval Date: <i>3/31/15</i>	Expiration Date: <i>N/A</i>
E-mail Address: <i>farry.baker@apachecorp.com</i>	Conditions of Approval:	
Date: <i>3/27/2015</i>	Remediation per O.C.D. Rules & Guidelines <input type="checkbox"/> Attached <input type="checkbox"/>	
Phone: (432) 631-6982	<b>SUBMIT REMEDIATION PROPOSAL NO</b>	

\* Attach Additional Sheets If Necessary

**LATER THAN: 4/30/15**

*2RP-2924*

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised August 8, 2011

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

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

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company	Apache Corporation	Contact	Bruce Baker
Address	2350 W. Marland Blvd, Hobbs, NM 88240	Telephone No.	(432) 631-6982
Facility Name	D State 49 Battery	Facility Type	Battery

Surface Owner	COG	Mineral Owner	State	API No.	30-015-38413
---------------	-----	---------------	-------	---------	--------------

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	36	17E	28E	1730'	FNL	330'	FWL	Eddy

**Latitude** N32.794722 **Longitude** W104.136778

**NATURE OF RELEASE**

Type of Release	produced water	Volume of Release	35 barrels of water	Volume Recovered	30 barrels of water
Source of Release	check valve	Date and Hour of Occurrence	3/24/2015	Date and Hour of Discovery	3/24/2015
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Mike Bratcher		
By Whom?	Bruce Baker	Date and Hour	3/25/2015		
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.\*

A 1/8 inch plug blew out of the side of a 2 inch check valve on discharge water pump. The transfer pump was shut down and check valve was replaced. Vacuum trucks were dispatched to pick up fluid.

Describe Area Affected and Cleanup Action Taken.\* The release covered 3,491 square feet of lease pad. Apache hand shoveled the released to 3 inches bgs to remove the highly wet material. On March 25<sup>th</sup>, 2015, RECS personnel were on site to sample three points at the surface of the release. Of the three points, only Pt 3 showed field concentrations below regulatory standards. This sample was taken to a commercial laboratory for analysis and returned a chloride reading of 48 mg/kg. To fully delineate the release, a vertical was installed in the center of the stain. The vertical was installed to a depth of 6 ft, and samples were field tested for chlorides and organic vapors. The bottom two samples were taken to a commercial laboratory for analyses and returned chloride values of 256 mg/kg at 5 ft bgs and 80 mg/kg at 6 ft bgs. Given the number of lines and facility apparatus going through the release area, Apache will address the release during facility abandonment.

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: 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: 5/15/15	Phone: (432) 631-6982		

\* Attach Additional Sheets If Necessary