

Imagine the result

**Apache Corporation**

**CEDAR LAKE CA335  
Remediation  
Proposal  
2RP-3658  
OGRID 873**

Eddy County, New Mexico

May 31, 2017

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Environmental Project Scientist

**Cedar Lake CA 335**

Remediation  
Proposal

Prepared for:  
Apache  
Corporation  
Lea County, New Mexico

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**Remediation  
Proposal**

Apache  
Corporation  
Lea County, New Mexico

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**Remediation  
Proposal**

Apache  
Corporation  
Lea County, New Mexico

**1. INTRODUCTION**

The subject site is located on the facility pad at 32.858879 and -103.864418 in Section 3, T17S, R31E in Eddy County. The site is operated by Apache Corporation.

**2. SUMMARY OF SITE INVESTIGATION ACTIVITIES**

The New Mexico Oil Conservation Division (NMOCD), Heather Patterson, and the Bureau of Land Management (BLM), Shelly Tucker, were notified of a release that occurred on April 6, 2016 with 5 barrels (bbls.) oil and 2 bbls of water released and 2 bbls oil recovered at the site via form C-141, submitted on April 22, 2016 by Bruce Baker with Apache Corporation. The surface and minerals is federal for this area.

The release was reported that an analog gauge at well head broke. A vacuum truck was dispatched to pick-up the standing fluid. The gauge was replaced. The standing fluid was contained on well pad area. There is an area southwest of the well pad where a light mist sprayed into the pasture. This area is not visible and vegetation was not affected. (See photos in Appendix B)

Soil sampling results are shown in the Figure 1.

Remediation Proposal

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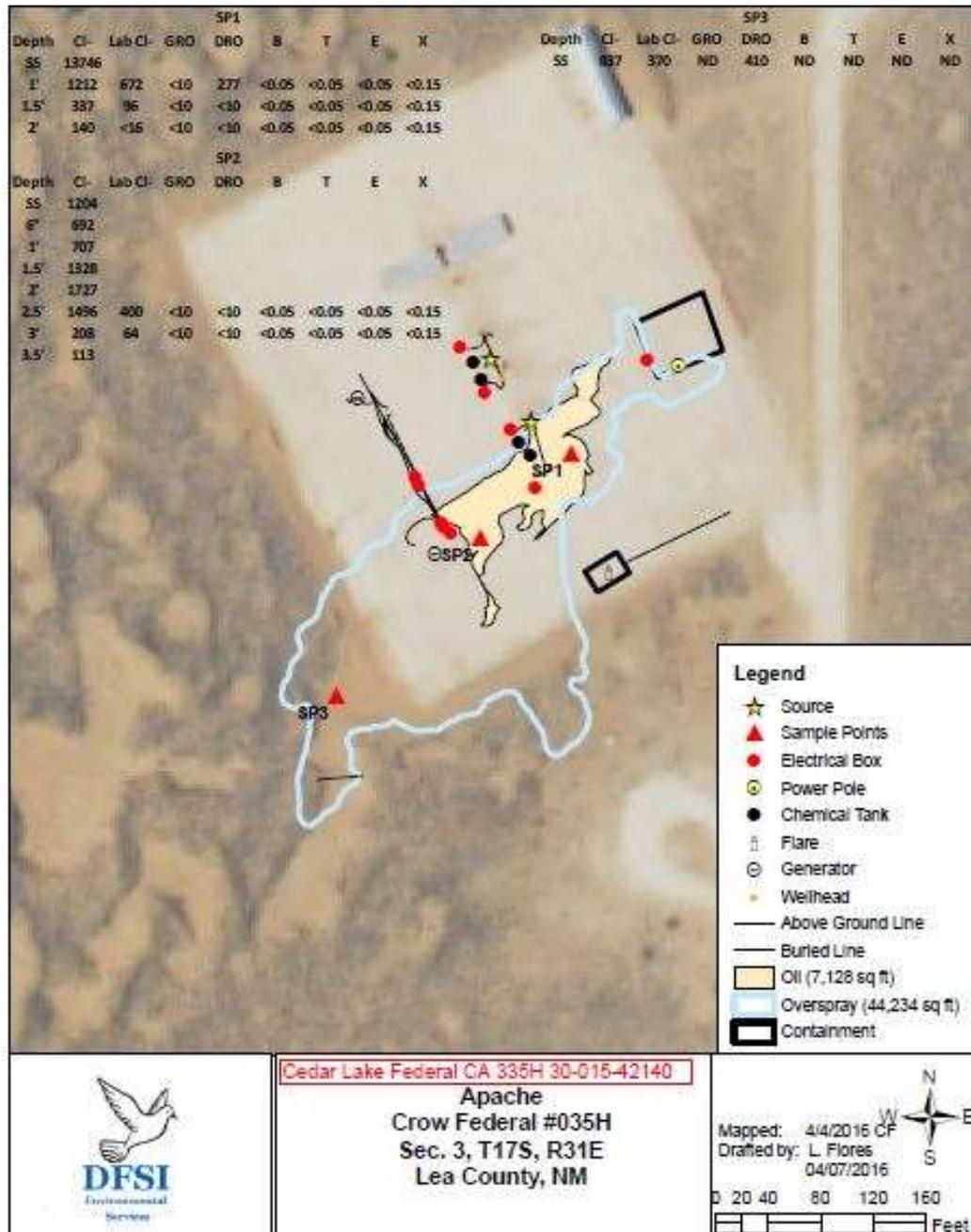


Figure 1: Sample Point Locations and Results

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**3. ENVIRONMENTAL ASSESSMENT**

**3.1 Hydrology**

Groundwater depths are not found in this area (Waters Map). There is no surface water near this release site or water wells within 1,000 ft.

The site ranking for this site is a 0 based on the following:

Depth to ground water >100' = 0  
Wellhead Protection Area >1000' = 0  
Distance to surface water body >1000' = 0

**4. REMEDIATION PLAN**

After review of various remedial options, we propose the following Remediation Plan for this release site is as follows:

**4.1 Soil Remediation Plan**

The release site and surrounding areas do not have any ground water. The pasture was below BLM and OCD guidelines for chlorides; therefore, no surface disturbing activities will be needed for corrective action. The well pad will have the surface material scraped with new material brought in and compacted. This well pad has multiple wells with buried electric and production lines and will not allow for any depth removal. The well pad will require to have all contaminants removed at time of plugging in order to establish revegetation requirements through the BLM. Apache requests permission to address contaminants at time of plugging.

The Figure 1 was from a March 12, 2016 aerial view on google and Figure 2 is from a February 1, 2017 updated aerial view on google. There are no changes to the vegetation except where previous excavation took place. The well pad is bermed on all sides, which will prevent any storm water runoff from the well pad.

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**Figure 2: Updated Images**

**4.2 Noxious Weed Plan**

Apache will treat noxious weeds if they become established within the areas of the remediation. Weed control will be maintained on the disturbed land where noxious weeds exist both prior to remediation and restoration. Apache will consult with the Authorized Officer for acceptable weed control methods. Apache, in coordination with the BLM, may develop a noxious weed plan to include recommendations and guidelines for noxious weed and invasive species management throughout the disturbed areas and to minimize the spread of weeds to adjacent areas.

**5. FOLLOW-UP SCHEDULE**

The site will be monitored for any further surface issues. Apache requests closure of this site.



## **Appendix A**

Attachments

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

APR 22 2016

Form C-141  
Revised August 8, 2011

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

**RECEIVED**

**Release Notification and Corrective Action**

*NAB1611653621*

**OPERATOR**

Initial Report  Final Report

Name of Company: Apache Corporation <i>87B</i>	Contact Bruce Baker
Address: 2350 W Marland Blvd Hobbs, NM 88240	Telephone No. (432) 631-6982
Facility Name Cedar Lake Federal CA 335H	Facility Type: Oil Well
Surface Owner Federal	Mineral Owner
API No. 30-15-42140	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	3	17S	31E	930'	FSL	557'	FWL	Eddy

*32.858879* Latitude *103.864418* Longitude

**NATURE OF RELEASE**

Type of Release: produced water and oil	Volume of Release 5 barrels of oil and 2 barrels of water	Volume Recovered 2 barrels of oil
Source of Release: Well Head	Date and Hour of Occurrence 4/6/2016	Date and Hour of Discovery 4/6/2016
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Shelly Tucker (BLM) via email	
By Whom? Bruce Baker	Date and Hour 4/7/2015 at	
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.* Analog gauge at well head broke resulting in the release. The release was isolated and repaired.		
Describe Area Affected and Cleanup Action Taken.* The majority of the standing fluid from the release was contained on the well pad. Approximately 1,000 square feet of light oil overspray affected the pasture north and northeast of the pad. The affected vegetation from the overspray will be washed with Dawn dishwashing soap.		

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>4/25/16</i>	Expiration Date: <i>N/A</i>
E-mail Address: larry.baker@apachecorp.com	Conditions of Approval: <b>Remediation per O.C.D. Rules &amp; Guidelines</b> <input type="checkbox"/>	
Date: 4/22/2016 Phone: (432) 631-6982	<b>SUBMIT REMEDIATION PROPOSAL NO</b>	

\* Attach Additional Sheets If Necessary

**LATER THAN: 5/26/16** *2RP-3658*



## **Appendix B**

Photos

# PHOTOGRAPH LOG

Apache Corporation

Cedar Lake Federal CA 334H – 337H



**Photograph: 1**

**Description:**  
Site vegetation

**Location:**  
Cedar Lake; Eddy  
County, NM

**Photograph taken by:**  
Jennifer Van Curen

**Date:** 6/22/2017



**Photograph: 2**

**Description:**  
Site vegetation

**Location:**  
Cedar Lake; Eddy  
County, NM

**Photograph taken by:**  
Jennifer Van Curen

**Date:** 6/22/2017

## PHOTOGRAPH LOG

Apache Corporation

Cedar Lake Federal CA 334H – 337H



**Photograph: 3**

**Description:**  
Site vegetation

**Location:**  
Cedar Lake; Eddy  
County, NM

**Photograph taken by:**  
Jennifer Van Curen

**Date:** 6/22/2017



**Photograph: 4**

**Description:**  
Site vegetation

**Location:**  
Cedar Lake; Eddy  
County, NM

**Photograph taken by:**  
Jennifer Van Curen

**Date:** 6/22/2017

## PHOTOGRAPH LOG

Apache Corporation

Cedar Lake Federal CA 334H – 337H



**Photograph: 5**

**Description:**  
Site vegetation

**Location:**  
Cedar Lake; Eddy  
County, NM

**Photograph taken by:**  
Jennifer Van Curen

**Date:** 6/22/2017



## **Appendix C**

Constraint Maps













