# APACHE CORPORATION

HD SCHENCK BATTERY
API 30-025-07242

# C141 CLOSURE SUMMARY

**NMOCD RP #1403** 

UL-A (NE¼ OF THE NE¼) OF SECTION 14 T13S R38E

LATITUDE: N 33° 11.858'

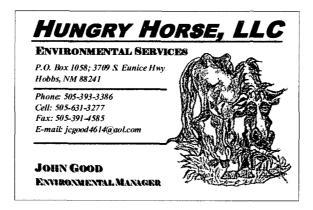
LONGITUDE: W 103° 03.712'

~15.3 MILES EAST - SOUTHEAST (BEARING 104.5°) OF TATUM

LEA COUNTY, NEW MEXICO

September 7, 2007

PREPARED FOR APACHE CORPORATION BY:





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# 1.0 Project Summary

Release Site Name:

H.D. Schenck Tank Battery (API: 30-025-07242)

Operating Company:

**Apache Corporation** 

Company Representative:

Guinn Burks, Permian Env Coordinator Phone: 432-556-9143

Address: PO Box 728, Crane, TX 79731

Email: guinn.burks@usa.apachecorp.com

Remediation Company:

Hungry Horse, LLC

Phone: 505-393-3386

#### SITE SPECIFIC DATA:

Legal Description:

Lea County, New Mexico

UL-A Section 14 T13S R38E

General Location:

15.3 miles ESE (104.5°) of Tatum, NM.

Latitude: N33° 11.858'

Longitude: W103° 03.712'

Elevation: 3,801-ft amsl

Land Ownership:

Private – Choya Young

Ground Water Elevation:

~90' bgs (based on Chevron/Texaco contour map)

Water Wells within 1000-ft: none

Surface Water within 1000-ft:

none

#### RELEASE SPECIFIC DATA:

Date and Time of Release(s): 6:00 AM - - 6/3/07

Material Released:

Crude Oil and Produced Water

Volume Released:

 $\sim$ 8-bbl

Volume Recovered: 6-bbl

Cause of Release:

Oil tank overflow due to water dump valve failure

Release Affected Area: ~3200-ft<sup>2</sup> in battery; ~3550-ft<sup>2</sup> in adjacent cotton field

Depth of Contamination:

< 2-ft bgs

#### NMOCD Site Ranking: 10 (ground water 50'to 100' below lowest contamination)

#### REMEDIATION:

The north and south impacted cotton field areas were blended in-place with deeper (~3-ft) clean soil beneath the impacted areas. Nine samples of the blended soil (3 from the south side and 6 from the north side) were collected from the 1-ft bgs level and submitted to Cardinal Laboratories, Hobbs, NM for certified analyses. All samples were transported under proper chain of custody protocol. Analytical results indicated that chloride concentrations had been reduced to <50-ppm and hydrocarbon concentrations did not exceed 500-ppm.

Mr. Choya Young, owner of the property surrounding the H.D. Schenck Battery will receive a copy of this report and a letter from Apache Corporation assuring him that in the event that his 2008 planting of cotton within the impacted areas does not show growth and plant quality equivalent to the non-impacted adjacent areas, Apache Corporation will remove and dispose of the impacted soil (to a depth of 3-ft), and replace it with clean top soil from a source agreeable to Mr. Young.

This remediation project was conducted by Hungry Horse, LLC and was completed on July 16, 2007.

# **Site Description**

#### 2.1 Geological Description

The United States Geological Survey (USGS) Ground-Water Report 6, "Geology and Ground-Water Conditions in Southern Lea County, New Mexico," A. Nicholson and A. Clebsch, 1961, describes the near surface geology of southern Lea County as "an intergrade of the Quaternary Alluvium (QA) sediments, i.e., fine to medium sand, with the mostly eroded Cenozoic Ogallala (CO) formation. Typically, the QA and CO formations in the area are capped by a thick interbed of caliche and generally overlain by sandy soil." The release site is located in northern Lea County, however, this area is a continuation of the High Plains (more commonly referred to as the Llano Estacado) physiographic subdivision, described by Nicholson & Clebsch as "a flat, gently sloping plain, treeless, and marred only by slight undulations and covered with short prairie grass."

### 2.2 Ecological Description

The area is typical of the Upper Chihuahuan Desert Biome consisting primarily of hummocky sand hills covered with Harvard Shin Oak (*Querqus harvardi*) interspersed with Honey Mesquite (*Prosopis glandulosa*) along with typical desert grasses, flowering annuals and flowering perennials. Mammals represented, include Orrd's and Merriam's Kangaroo Rat, Deer Mouse, White Throated Wood Rat, Cottontail Rabbit, Black Tailed Jackrabbit, Mule Deer, Bobcat, Red Fox and Coyote. Reptiles, Amphibians, and Birds are numerous and typical of the area. A survey of Listed, Threatened, or Endangered species was not conducted.

#### 2.3 Area Ground Water

Based on the most current available evidence (*Chevron-Texaco contour map*, *Plate 4 of Attachments*), depth to ground water is projected to be 90-ft below ground surface (bgs).

#### 2.4 Area Water Wells

There are no recorded or observed water wells within 1000 horizontal feet of the site.

# 2.5 Area Surface Water Features

No permanent surface water bodies exist within 1000 horizontal feet of the site.

#### 3.0 Contaminant and Size of Area

The primary Contaminants of Concern (COCs) are petroleum hydrocarbons and total chlorides. The contaminated areas are within the battery containment area (40' X 80') and two areas of cotton field north and south of the battery proper (20' X 90' and 50' X 35' respectively. The impacted areas in the cotton field showed a relatively shallow penetration of contaminant fluids (<2-ft bgs).

# 4.0 NMOCD Site Ranking

Contaminant delineation and site evaluation work done at this site indicate that the chemical parameters of the soil and the physical parameters of the ground water were characterized

consistent with the characterization and remediation/abatement goals and objectives set forth in the following New Mexico Oil Conservation Division (NMOCD) publications:

- ➤ Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993)
- > Unlined Surface Impoundment Closure Guidelines (February 1993)

Acceptable thresholds for contaminants/constituents of concern (CoCs), i.e., TPH<sup>8015m</sup>, Benzene, and the mass sum of Benzene, Toluene, Ethyl Benzene, and total Xylenes (BTEX<sup>8260</sup>), was determined based on the NMOCD Ranking Criteria as follows:

- Depth to Ground water, i.e., distance from the lower most acceptable concentration to the ground water.
- Wellhead Protection Area, i.e., distance from fresh water supply wells.
- Distance to Surface Water Body, i.e., horizontal distance to all down gradient surface water hodies.

Based on the proximity of the site to area water wells, surface water bodies, and depth to ground water from the lower most contamination, the NMOCD ranking score for the site is 10 points with the soil remedial goals highlighted in the Site Ranking Table.

#### SITE RANKING TABLE

| 1. GRO                             | UND WATER                               | 2. Wellhead Protection  | 3. DISTANCE TO SURFACE WATER  |  |
|------------------------------------|---|---|---|--|
| DEPTH TO GW <50 FEET:<br>20 POINTS |   | 20 POINTS <200' FROM PRIVATE DOMESTIC   |   |  |
|                                    | N 50 TO 99 FEET:<br>POINTS              | WATER SOURCE:<br>20 POINTS  | 200-1000 HORIZONTAL FEET:<br>10 POINTS  |  |
| DEPTH TO GW >100 FEET:<br>0 POINTS |   | IF >1000' FROM WATER SOURCE, OR;<br>>200' FROM PRIVATE DOMESTIC<br>WATER SOURCE: 0 POINTS | >1000 HORIZONTAL FEET:<br>0 POINTS  |  |
| GROUND WA                          | TER SCORE = 10                          | WELLHEAD PROTECTION SCORE= 0  | SURFACE WATER SCORE= 0  |  |
| <u></u>                            | ere ere ere ere ere ere ere er er er er | SITE RANK (1+2+3) = 10 + 0 + 0 = 10 POINTS  | чин метальзынун установичного почения в разования в почения почения в почения в почения в почения в почения в п |  |
|                                    | TOTAL SITE RANKII                       | NG SCORE AND ACCEPTABLE REMEDIAL GOAL   | CONCENTRATIONS  |  |
| PARAMETER                          | ##                                      | 10  | Ţ.  |  |
| BENZENE                            | 10 ppm                                  | 10 PPM  | 40 ppt  |  |
| BTEX                               | 5G PPM                                  | 50 PPM  | SO PPU  |  |
| TPH                                | 100 PPM                                 | 1000 PPM  | 5000 гри  |  |

### **5.0 Remediation Process**

A preliminary field evaluation (Hach strips) of the level of chloride contamination within the impacted areas of the cotton field indicated that chloride contamination was limited to the 0-1' topsoil layer. Two samples of soil on the north side that appeared to be heavily impacted with hydrocarbon were submitted for laboratory analyses. Results indicated TPH of 700-ppm at the 1-ft bgs level and no chloride contamination. Although NMOCD Remedial Guidelines were easily achievable at this site, it was necessary to reduce chloride contamination as much as possible to return the soil to a condition that would support healthy growth of cotton plants for the 2008

planting season. The north and south impacted cotton field areas were blended in-place with deeper (~3-ft) clean soil beneath the impacted areas. Nine samples of the blended soil (3 from the south side and 6 from the north side) were collected from the 1-ft bgs level and submitted to Cardinal Laboratories, Hobbs, NM for certified analyses. All samples were transported under proper chain of custody protocol. Analytical results indicated that chloride concentrations had been reduced to <50-ppm and hydrocarbon concentrations did not exceed 500-ppm.

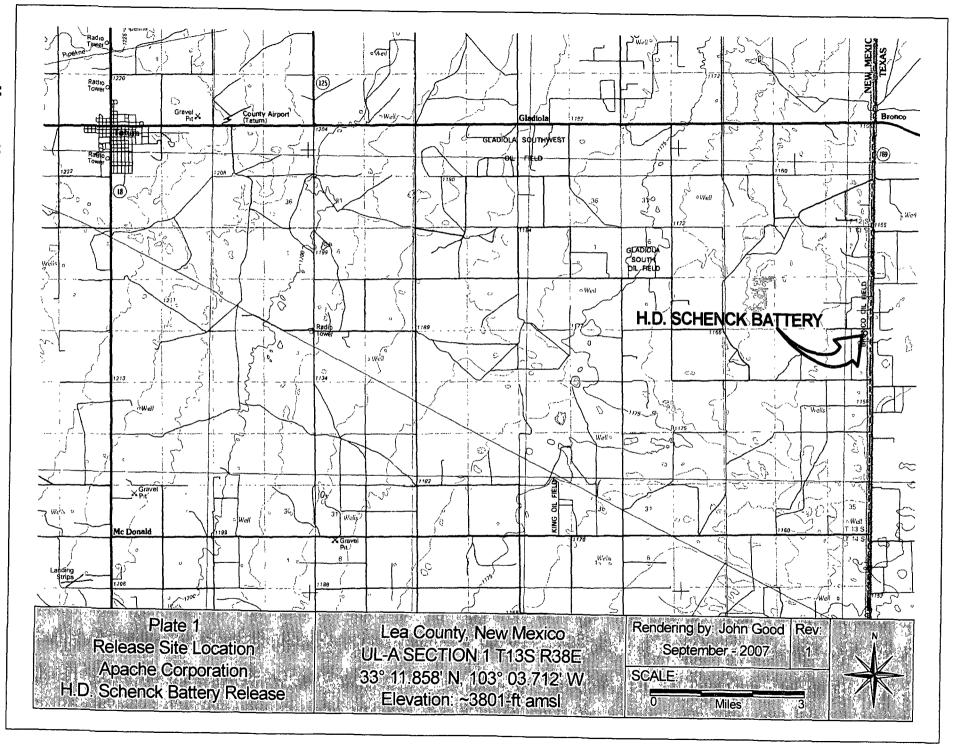
Mr. Choya Young, owner of the property surrounding the H.D. Schenck Battery, will receive a copy of this report and a letter from Apache Corporation assuring him that in the event that his 2008 planting of cotton within the impacted areas does not show growth and plant quality equivalent to the non-impacted adjacent areas, Apache Corporation will remove and dispose of the impacted soil (to a depth of 3-ft), and replace it with clean top soil from a source agreeable to Mr. Young. A copy of this letter shall be submitted to NMOCD as an addendum to this report.

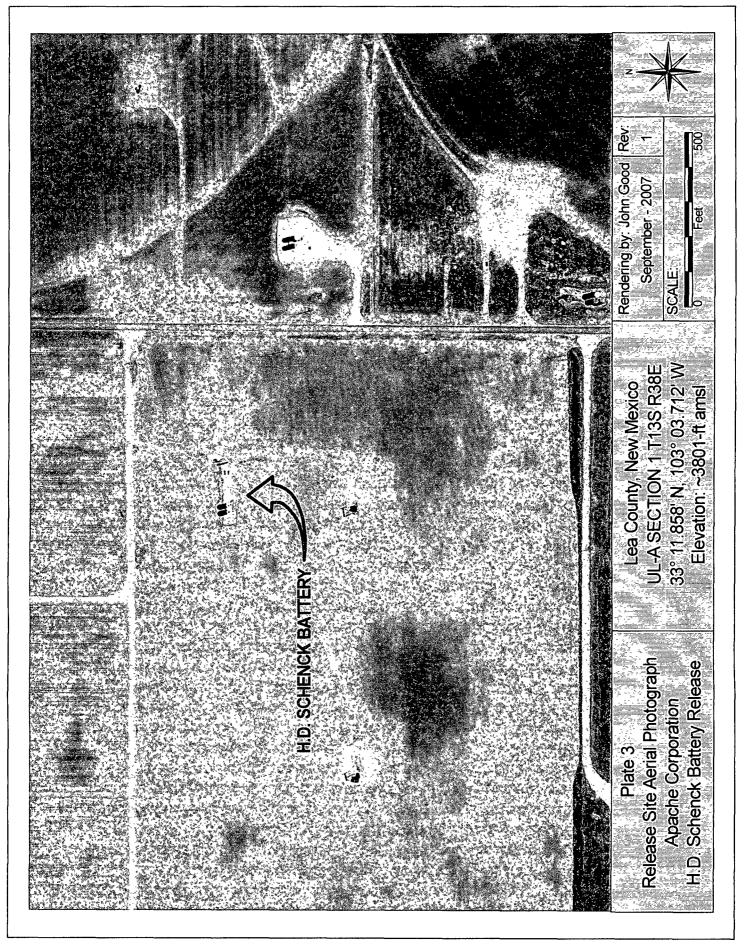
This remediation project was conducted by Hungry Horse, LLC and was completed on July 16, 2007. Based on the data submitted herein, Hungry Horse, LLC, on behalf of Apache Corporation requests that NMOCD require "no further action" at this site relative to the June 3, 2007 release.

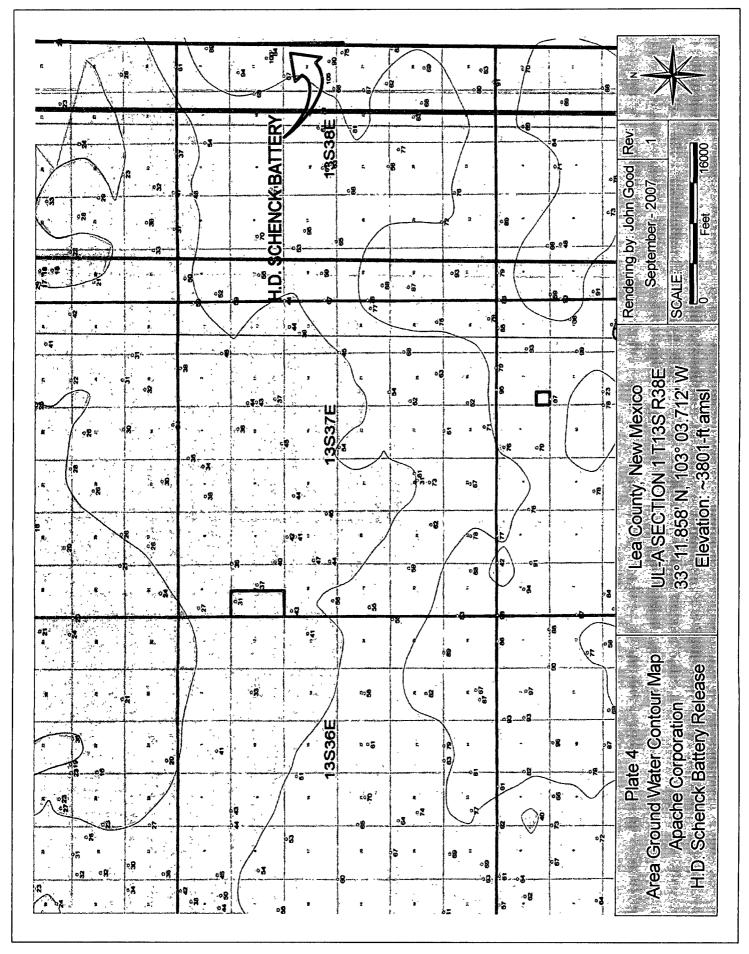
#### **ATTACHMENTS**

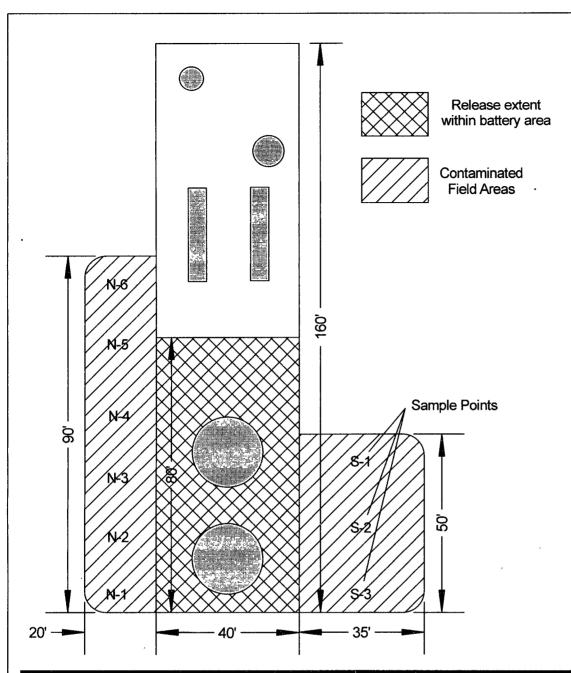
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| HYDROCARBON & CHLORIDE ANALYTICAL RESULTS |                    |                  |                  |       |           |  |  |  |
|---|--------------------|------------------|------------------|-------|-----------|--|--|--|
| Sample                                    | Sample             | GRO <sup>2</sup> | DRO <sup>3</sup> | TPH⁴  | Chlorides |  |  |  |
| Location                                  | Depth <sup>1</sup> | mg/Kg            | mg/Kg            | mg/Kg | mg/Kg     |  |  |  |
| S-1                                       | 1-ft               | 10               | 10               | 20    | 32        |  |  |  |
| S-2                                       | 1-ft               | 10               | 10               | 20    | 16        |  |  |  |
| S-3                                       | 1-ft               | 10               | 10               | 20    | 16        |  |  |  |
| N-1                                       | 1-ft               | 10               | 177              | 187   | 32        |  |  |  |
| N-2                                       | 1-ft               | 10               | 194              | 204   | 16        |  |  |  |
| N-3                                       | 1-ft               | 10               | 400              | 410   | 16        |  |  |  |
| N-4                                       | 1-ft               | 10               | 243              | 253   | 48        |  |  |  |
| N-5                                       | 1-ft               | 10               | 494              | 504   | 16        |  |  |  |
| N-6                                       | 1-ft               | 10               | 252              | 262   | 16        |  |  |  |

<sup>1</sup>bgs (below ground surface); <sup>2</sup>Gasoline Range Organics (detection limit = 10 mg/Kg); <sup>3</sup>Diesel Range Organics (detection limit = 10 mg/Kg); <sup>4</sup>TPH = sum of GRO-DRO. Note: Detection limits are considered "de minimus" values and are included in the TPH summations.

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PHONE (325) 673-7001 · 2111 BEECHWOOD · ABILENE, TX 79603

PHONE (505) 393-2326 + 101 E MARLAND + HOBBS, NM 88240

ANALYTICAL RESULTS FOR HUNGRY HORSE, LLC ATTN: JOHN GOOD P.O BOX 1058 HOBBS, NM 88241 FAX TO: (505) 391-4585

Receiving Date: 06/11/07 Reporting Date: 06/12/07

Project Owner: APACHE

Project Name: H.D. SCHENCK BATT. Project Location: LEA CTY., NM

Sampling Date: 06/11/07 Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: AB Analyzed By: BC/HM

|                      | GRO                                | DRO                                  |         |
|----------------------|------------------------------------|--------------------------------------|---------|
|                      | (C <sub>6</sub> -C <sub>10</sub> ) | (>C <sub>10</sub> -C <sub>28</sub> ) | CI*     |
| LAB NUMBER SAMPLE ID | (mg/Kg)                            | (mg/Kg)                              | (mg/Kg) |
|                      |                                    |                                      |         |

| ANALYSIS DATE               | 06/11/07 | . 06/11/07 | 06/11/07 |
|-----------------------------|----------|------------|----------|
| H12721-1 S-6 1' BGS         | <10.0    | 34.7       | <16      |
| H12721-2 S-7 1' BGS         | <10.0    | 633        | 16       |
| Quality Control             | 787      | 759        | 490      |
| True Value QC               | 800      | 800        | 500      |
| % Recovery                  | 98.3     | 94.9       | 98.0     |
| Relative Percent Difference | 0.7      | 6.0        | <0.1     |

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl<sup>-</sup> Std. Methods 4500-Cl<sup>-</sup>B \*Analyses performed on 1 4 w.v aqueous extracts.

Chemist Chemist

Date

H12721 HHE

PLEASE NOTE. Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or fort, shall be limited to the aniount paid by clients for analysis. 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 hippix claims service. In no event shall cardinal be liable for incidental or consequential damages, including, without fimitation, business interruptions, loss of use, or loss of profits incurred by claim, its subclaims arising out of or related to the performance of services nereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise

12

# ARDINAL LABORATORIES

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603

| Company Name   | : AHE                             |  | BILL TO  | ANALYSIS REQUEST   |
|--|-----------------------------------|--|--|--|
| Project Manage   | " John Good                       |  | P.O. #:  |  |
| Address:   | B 0x 1058                         |  | Company:   | ]  |
| City: 4  |                                   | WZip: 88240  | Attn:  |  |
| Phone #:   | 3-3386 Fax#:                      |  | Address:   |  |
| Project #:   | Project Own                       | er: Apecho.  | City:  |  |
| Project Name:  | HD Schenck                        |  | State: Zip:  |  |
| Project Location   |                                   |  | Phone #:   |  |
| Sampler Name:  | K. Begird                         |  | Fax #:   |  |
| FOR LAB USE ONLY   |                                   | MATRIX   | PRESERV SAMPLING   |  |
| Lab I.D.   | Sample I.D.  S-6 /1365  5・7 /1365 | X X (G)RAB OR (C)OMF  — # CONTAINERS  GROUNDWATER  WASTEWATER  SI LINGE  | OTHER ACTOR OF LONG OF | XX   |
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<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476



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**ANALYTICAL RESULTS FOR HUNGRY HORSE ENVIRONMENTAL** ATTN: JOHN GOOD P.O. BOX 1058 HOBBS, NM 88241 FAX TO. (505) 391-4585

Receiving Date: 07/16/07 Reporting Date: 07/18/07

Project Owner. APACHE

Project Name: HD SHENK BATT. Project Location. LEA CTY, NM

Sampling Date: 07/16/07 Sample Type: SOIL

Sample Condition COOL & INTACT

Sample Received By: AB Analyzed By: BC/HM

| LAB NUMBER            | SAMPLE ID     | GRO<br>(C <sub>e</sub> -C <sub>10</sub> )<br>(mg/Kg) | DRO<br>(>C <sub>10</sub> -C <sub>28</sub> )<br>(mg/Kg) | CI*<br>(mg/Kg) |
|-----------------------|---------------|--|--|----------------|
| ANALYSIS DA           | TE            | 07/17/07   | 07/17/07   | 07/17/07       |
| H12905-1              | S-1-BLEND     | <10.0  | <10.0  | 32             |
| H12905-2              | S-2 BLEND     | <100   | <10.0  | <16            |
| H12905-3              | S-3 BLEND     | <100   | <10.0  | <16            |
| H12905-4              | N-1 BLEND     | <10.0  | 177  | 32             |
| H12905-5              | N-2 BLEND     | <10.0  | 194  | <16            |
| H12905-6              | N-3 BLEND     | <10.0  | 400  | 16             |
| H12905-7              | N-4 BLEND     | <10.0  | 243  | 48             |
| H12905-8              | N-5 BLEND     | <10.0  | 494  | 16             |
| H12905-9              | N-6 BLEND     | <10.0  | 252  | 16             |
| <b>Quality Contro</b> |               | 758  | 751  | 480            |
| True Value QC         | ,             | 800  | 800  | 500            |
| % Recovery            |               | 94.7   | 93.9   | 96.0           |
| Relative Perce        | nt Difference | 6.1  | 6.4  | 6.2            |

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI': Std. Methods 4500-CI'B \*Analyses performed on 1:4 w.v aqueous extracts.

H12905A HHE

PLEASE NOTE: Liability and Demages: Cardinal's liability and client's exclusive remedy for any claim ansing, whether based in contract or fort, shall be limited to the amount paid by client for analyses.

All claims: including mose 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 lable for incidental or consequential damages: including, without limitation: business interruptions: loss of use, or loss of profits incurred by clent, its subsidiaries, attitudes or successors arising out of or related to the performance of services networker by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



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ANALYTICAL RESULTS FOR HUNGRY HORSE ENVIRONMENTAL ATTN. JOHN GOOD P.O. BOX 1058 HOBBS, NM 88241 FAX TO: (505) 391-4585

Receiving Date: 07/16/07

Reporting Date: 07/17/07 Project Owner: APACHE

Project Name: HD SHENK BATT.

Project Location: LEA CTY., NM

Sampling Date: 07/16/07

Sample Type. SOIL

Sample Condition: COOL & INTACT

Sample Received By: AB

Analyzed By: AB

| LAB NUMBER      | SAMPLE ID     | BENZENE<br>(mg/Kg) | TOLUENE<br>(mg/Kg) | ETHYL<br>8ENZENE<br>(mg/Kg) | TOTAL<br>XYLENES<br>(mg/Kg) |
|-----------------|---------------|--------------------|--------------------|-----------------------------|-----------------------------|
| ANALYSIS DAT    | ΓE            | 07/17/07           | 07/17/07           | 07/17/07                    | 07/17/07                    |
| H12905-1        | S-1-BLEND     | <0.002             | <0.002             | <0.002                      | <0.006                      |
| H12905-2        | S-2 BLEND     | <0.002             | <0.002             | <0.002                      | <0.006                      |
| H12905-3        | S-3 BLEND     | <0.002             | <0.002             | <0.002                      | <0.006                      |
| H12905-4        | N-1 BLEND     | <0.002             | <0.002             | <0.002                      | <0.006                      |
| H12905-5        | N-2 BLEND     | <0.002             | <0.002             | <0.002                      | <0.006                      |
| H12905-6        | N-3 BLEND     | <0 002             | <0.002             | < 0.002                     | <0.006                      |
| H12905-7        | N-4 BLEND     | <0.002             | <0.002             | < 0.002                     | <0.006                      |
| H12905-8        | N-5 BLEND     | <0.002             | <0 002             | <0 002                      | <0.006                      |
| H12905-9        | N-6 BLEND     | <0 002             | <0.002             | <0.002                      | <0.006                      |
| Quality Control |               | 0 116              | 0 108              | 0.108                       | 0 333                       |
| True Value QC   |               | 0.100              | 0 100              | 0.100                       | 0.300                       |
| % Recovery      |               | 116                | 108                | 108                         | 111                         |
| Relative Percer | nt Difference | 11.8               | 7.8                | 9.6                         | 9.1                         |

METHOD: EPA SW-846 8021 B

Chemist Chemist

Date

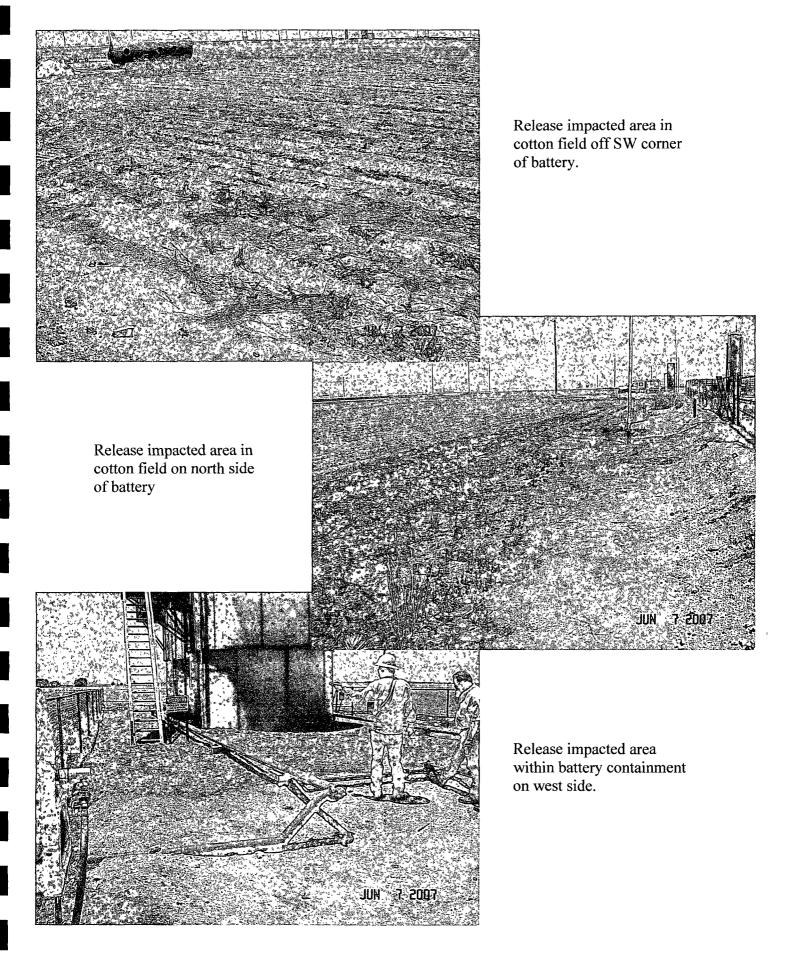
PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remody for any claim ansing, whether based in contract or toril, shall be limited to the amount paid by client for analyses all claims, including those for negligence and any other cause whatsoever shall be deamed waived unless made in writing and received by Cardinal within thiny (30) days after completion of the applicable served in Cardinal within the liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client is 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

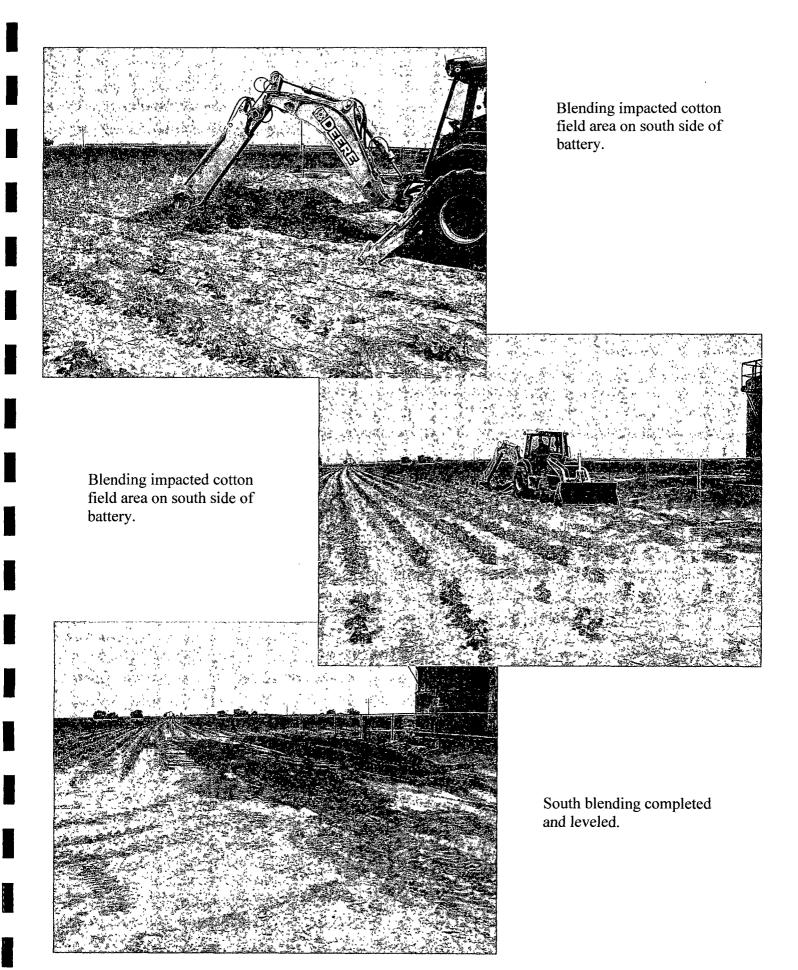
# ARDINAL LABORATORIES

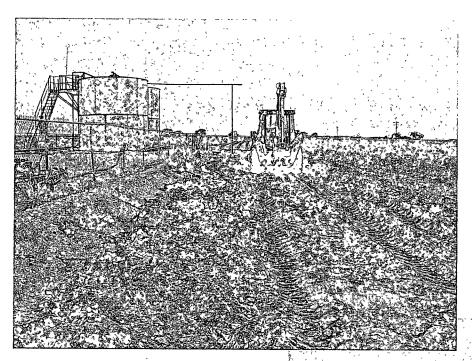
#### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

| Company Name   | 445  |   | BILL TO  | ANALYSIS REQUEST  |
|--|--|---|--|---|
| Project Manage   | " John Good  |   | P.O. #:  |   |
| Address:   | Box 1058   |   | Company:   |   |
| City:  | Holds State: NM  | zip: 88240  | Attn:  |   |
| Phone #: 7 - 338(0 Fax #:  |  |   | Address:   |   |
| Project #:   | Project Owne   | " Amche   | City:  |   |
| Project Name:  | HD Shenk Bet-  | t. /  | State: Zip:  |   |
| Project Location   | n: Lea Cty;  |   | Phone #:   |   |
| Sampler Name:  | K. Deaird  |   | Fax #:   |   |
| Lab I.D.   | Sample I.D.  |   |  | IME CI- & TAI   |
| 1716402:1  |  | <del>                                     </del>                                    | 7-16-67  | XXXX  |
|  | 5-2  | <del>╂┠┋╏╌╏╌┆╒</del> ┼╸┼  | <del>╎┠┤</del> ┆┠┈┵┼┈  | <del>, }}}}</del>   |
| d  | 1)= 1  | <b>                                     </b>  |  |   |
| - 4  | 42-7   | <b>1</b> \  |  | \   |
| ه -  | N-3  |   |  |   |
| -7   | N-4  |   |  |   |
| ~8   | N-5  ,   |   |  |   |
| -9   | N-6-Y  | M   |  | Y   |
| analyses All charms include<br>service in no event shall C<br>afficates or successory some | nd Damagee Cardinals stability and clearts exclusive remedy for a<br>no diseas for negligence and any other Caules whatscover shall be<br>activate be Rebid (b) unculental or confeculated damages, includin<br>1970aut of or related to the performation of services hereunded by | deemed waived unless made in writing<br>g without limitation, business interruption | and received by Cardinal within 30 days after compl<br>a, loss of use, or loss of profits incurred by client, is | istrion of the applicable subsidieries. subsidieries. subsidieries.             |
| Relinquished B   | 1: Paty: 16.07   | Received By:  | Pho  | ne Result: 🗆 Yes 🗇 No -   Add'l Phone #:<br>  Result: 🖂 Yes 🗇 No - Add'l Fax #: |
|  | time; :36)   |   |  | MARKS:  |
| Relinquished 5   |  | Received By:  |  |   |
|  | Time:  | -   | 3-1-1  |   |
| Delivered By   | (Circle One)   | Sample Cons   | ition CHEOSED BY:  |   |
| Sampler .UPS   | - Bus - Other:   | Cool Intact   | es Adriftiata)   |   |
| † Cardinal   | cannot accept verbal changes. Pleas  | e fax written/changes t   | o 505-393-2476   |   |

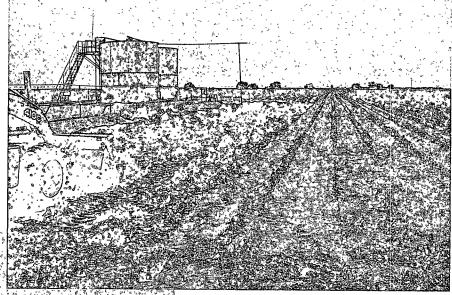






Blending impacted cotton field area on north side of battery.

Blending impacted cotton field area on north side of battery.



North side blending completed and leveled

#### District 1

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artiesa, NM 88210

District III

1000 Rio Brazos Road, Aztec, NM 87410

#### State of New Mexico

**Energy Minerals and Natural Resources** 

Form C-141 Revised October 10, 2003

> Submit 2 Copies to appropraite District Office in accordance

Oil Conservation Division

| District IV<br>1220 S. St. Fra                 | ncie Dr. Sont     | . Fe NM 875/      |                 |                   | outh St. Francis Dr.<br>ta Fe, NM 97505                 |                                       |                            | with Rule 116 on bac<br>side of form |
|--|-------------------|-------------------|-----------------|-------------------|---|---------------------------------------|----------------------------|--------------------------------------|
| 1220 3. 31. 116                                | IIICIS DI , SOIII | a 1 6, 1414 DT 51 |                 |                   | tion and Correc   | tive Action                           |                            | 300 01 101111                        |
|  |                   |                   | 110140          | oc Nourica        | OPERATOR  |                                       | Initial Report             | ☐ Final Repor                        |
| Name of Con                                    | npany             |                   | Apache Co       | rp.               | Contact   |                                       | Guinn Burk                 | ····                                 |
| Address  |                   |                   | ox 728, C       |                   | Telephone No.   |                                       | 432-556-914                |                                      |
| Facility Name                                  | ?                 |                   | HD Schen        | ck                | Facility Type   |                                       | Tank Batter                | у                                    |
| <u> </u>                                       |                   | Ch                | V               | 1.0               |   | - CL M                                | 1 450 #                    | 20 005 07242                         |
| Surface Own                                    | er                | Споуа             | Young           | Mineral Own       | <u> </u>  | BLM                                   | API#                       | 30-025-07242                         |
|  |                   |                   |                 | LOCAT             | ION OF RELEAS   | E                                     |                            |                                      |
| Unit Letter                                    | Section           | Township          | Range           | Feet from the     | North/South Line  | Feet from the                         | East/West Line             | e County                             |
| Α  | 14                | 138               | 38E             |                   |   |                                       |                            | Lea                                  |
| L  | <b></b>           |                   | <u> </u>        |                   | <u></u>   |                                       |                            |                                      |
|  |                   |                   | Latitude        |                   | Longitud  | <b></b>                               |                            |                                      |
|  |                   |                   |                 | NATUI             | RE OF RELEASE   | <u>.</u>                              |                            |                                      |
| Type of Releas                                 | se                | Oil               | /Wtr            | Volume of Rek     |   | 2 x 6                                 | Volume Recovered           | 6 bbls                               |
| Source of Rele                                 |                   | Ta                | ink             | Daste/Hour of     | Occurrence 6-   | 3-07 0600                             | Date /Hour of Discov       | ery 6/3/2007                         |
| Was immediat                                   | 40000             | n?                |                 | If Yes, To Who    | m <sup>9</sup>  |                                       |                            |                                      |
| Yes  |                   |                   | Not Required    |                   |   | Johson by ph                          |                            |                                      |
| By Whom? Gunn Burks Was a Watercourse Reached? |                   |                   | Date and Hour   |                   |   | 6-6-07 1600                           |                            |                                      |
| Was a Waterc                                   | _                 | <del></del> 1     | <b>31</b> -     | If YES, Volume    | e Impacting the Watercour                               | rse.                                  |                            |                                      |
| if a Watercour                                 | Yes               |                   | No.             | <u> </u>          |   | · · · · · · · · · · · · · · · · · · · |                            | ·                                    |
| ir a vvatercour                                | se was impac      | eu, uescribe r    | uny             |                   |   |                                       |                            |                                      |
|  |                   |                   |                 |                   |   |                                       |                            |                                      |
|  |                   |                   |                 |                   |   |                                       |                            |                                      |
| Describe Caus                                  | e of Problem      | and Remedial      | Action Taken    | •                 |   | 1.                                    |                            |                                      |
|  |                   |                   |                 |                   |   |                                       |                            |                                      |
|  | Wa                | ter dump va       | lve failed ca   | using all fluid   | is to go to the oil tank                                | causing the o                         | il tank to run over.       |                                      |
| Describe Area                                  | Affected and      | Cleanus Actio     | n Taken *       |                   |   |                                       |                            |                                      |
| 1  |                   | •                 |                 |                   |   |                                       |                            |                                      |
| Spill was                                      | s mostly ins      | ide berm are      | ea but a litti  |                   | 3 rows of cotton field                                  | d. All free fluic                     | l was picked up and        | I remianing was                      |
|  |                   |                   |                 | dusted            | in to prevent runoff.                                   |                                       |                            |                                      |
|  |                   |                   |                 |                   | e best of my knowledge a                                |                                       |                            |                                      |
| •  |                   | •                 |                 |                   | s and perform corrective a<br>as "Final Report" does no |                                       | •                          |                                      |
| failed to adequ                                | rately investiga  | ate and remed     | iate contamina  | ation that pose a | threat to ground water, so                              | urface water, hum                     | an health or the environ   | nment. In addition,                  |
| NMOCD acce                                     | otance of a C-    | 141 report doe    | s not relieve t | he operator of re | esponsibility for compliance                            | e with any other fo                   | ederal, state, or local la | ws and/or regulations                |
|  |                   |                   |                 |                   |   |                                       |                            |                                      |
| Г  |                   |                   | 1 .             | ·                 |   | Vil Concon                            | ration Division            |                                      |
| Sign at inst                                   | L                 | K                 | 1. 1. 2         |                   | 7   | ii Conserv                            | <u>ration Divisior</u>     | 1                                    |
| Signature:                                     | Alie              | " 19 / X          | 7.7.75          | <del></del>       | -{  |                                       |                            |                                      |
| Printed Name:                                  |                   | Guin              | n Burks         |                   | Approved by the District                                | ENVIRO ENGI                           | La.                        |                                      |
|  | ·                 |                   |                 |                   | proposition by the blanks                               |                                       | There                      | <u> </u>                             |
| Title:   | Per               | mian Basii        | Environn        | nental            | Approval Date 6.7                                       | (OL                                   | Expiration Date:           | 3.7.07                               |
| Email  |                   |                   |                 | -                 |   |                                       |                            |                                      |
| Address  | guin              | n.burks@us        | a.apacheco      | rp.com            | Conditions of Approval.                                 |                                       | Attached                   |                                      |
| Date:  | 6/7/2007          | Phone:            | 432-            | 556-9143          | PROVIDE CHEE  | a De mosses                           | 3                          |                                      |
| *Attach Additio                                | ····              |                   |                 |                   | OF OUTR SPIL  |                                       | <u></u>                    |                                      |
|  |                   | ,                 |                 |                   | OF 1051 1C 3711   |                                       | NOSTE R                    | P= (333)                             |
|  |                   |                   |                 |                   | FINAL REPORT  | BUTTION B                             | MAGE 17                    |                                      |

| SITE: H.D. Schenck Battery Apache Corporation Street Address: Mailing Address: P.O. Box 728 City, State, Zip: Crane, TX 79731 Representative: Guinn Burks Representative: Guinn Burks Representative: Guinn Burks Representative Telephone: Fluid Volume Released (bbl): 8   Volume Recovered (bbl): 6   Net Release: 2 25 bit Submit Form C-141 within 15 days, (Also applies to unauthorized release of >50 mort Natural Gas). Leak, Spill, or Pit (LSP) Name: H.D. Schenck Battery Source of Contamination: Oil Storage Tank Land Owner, i.e. BLM, ST, Fee, Other: Private - Choya Young LSP Dimensions: 80' X 40' Battery Area + 20' X 90 & 50' X 35' Field LSP Area - 6750 -ft² Location of Reference Point (RP): Location of Reference Point (RP): Location distance and direction from RP: Latitude: North 3 3 11.888 Longitude: West 103 3.701 Elevation above mean sea level (amst): 3801 feet 1159 meters Distance from North Section Line (feet): 470 Distance from East Section Line (feet): 470 Location - County Letter and 1/4 1/4: UL- A NE 1/4 of NE 1/4 Location - Range 38E Location - Range 38E Location - County Within 1000' radius of site: 0 Domestic water wells within 1000' radius of site: 0 Domestic water wells within 1000' radius of site: 0 Domestic water wells within 1000' radius of site: 0 Public water supply wells within 1000' radius of site: 0 Public water supply wells within 1000' radius of site: 0 Depth (feet) from land surface to Ground Water (DG): - 90 Depth (feet) followest contamination (DC): 1  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|
| Street Address:   P.O. Box 728   Mailing Address:   P.O. Box 728   City, State, Zip:   Crane, TX 79731   Representative:   Guinn Burks   Guinn B   |  |  |  |  |  |  |  |  |  |  |
| Mailing Address:   |  |  |  |  |  |  |  |  |  |  |
| City, Štate, Zip: Crane, TX 79731 Representative: Guinn Burks Representative: 432-556-9143 Telephone: 432-556-9143 Telephone: Fluid Volume Released (bbl): 8   Volume Recovered (bbl): 6   Net Release: 2  |  |  |  |  |  |  |  |  |  |  |
| Representative: Guinn Burks Representative Telephone: 432-556-9143 Telephone: Fluid Volume Released (bbl): ~ 8   Volume Recovered (bbl): 6   Net Release: ~ 2  |  |  |  |  |  |  |  |  |  |  |
| Representative: Guinn Burks Representative Telephone: 432-556-9143 Telephone: Fluid Volume Released (bbl): ~ 8   Volume Recovered (bbl): 6   Net Release: ~ 2  |  |  |  |  |  |  |  |  |  |  |
| Representative Telephone: 432-556-9143 Telephone: Pluid Volume Released (bbl): ~ 8   Volume Recovered (bbl): 6   Net Release: ~ 2  **25 bbl: Notify NMOCD verbally within 24 hours and submit C-141 within 15 days.**  **5-25 bbl: Submit Form C-141 within 15 days. (Also applies to unauthorized release of >50 mcf Natural Gas).** Leak, Spill, or Pit (LSP) Name: H.D. Schenck Battery  Source of Contamination: Oil Storage Tank Land Owner, i.e. BLM, ST, Fee, Other: Private - Choya Young LSP Dimensions: ~ 80' X 40' Battery Area + 20' X 90 & 50' X 35' Field  LSP Area ~ 6750 -ft²  Location of Reference Point (RP): Location distance and direction from RP: Latitude: North 33 11.888 Longitude: West 103 3.701  Elevation above mean sea level (amsl): 3801 feet 1159 meters  Distance from North Section Line (feet): 470  Distance from East Section Line (feet): 470  Location - Unit Letter and 1/4 1/4: UL- A NE 1/4 of NE 1/4  Location - Range 38E  Location - Range 38E  Location - Ronge 38E  Location - County Lease Surface water body within 1000' radius of site: 0  Domestic water wells within 1000' radius of site: 0  Domestic water wells within 1000' radius of site: 0  Agricultural water wells within 1000' radius of site: 0  Public water supply wells within 1000' radius of site: 0  Public water supply wells within 1000' radius of site: 0  Depth (feet) from land surface to Ground Water (DG): ~ 90  |  |  |  |  |  |  |  |  |  |  |
| Telephone: Fluid Volume Released (bbl):  |  |  |  |  |  |  |  |  |  |  |
| Fluid Volume Released (bbl): ~ 8   Volume Recovered (bbl): 6   Net Release: ~ 2   25 bbl: Notify NMOCD verbally within 24 hours and submit C-141 within 15 days.  S-25 bbl: Submit Form C-141 within 15 days. (Also applies to unauthorized release of >50 mcf Natural Gas).  Leak, Spill, or Pit (LSP) Name: H.D. Schenck Battery  Source of Contamination: Oil Storage Tank  Land Owner, i.e. BLM, ST, Fee, Other: Private - Choya Young  LSP Dimensions: ~ 80' X 40' Battery Area + 20' X 90 & 50' X 35' Field  LSP Area ~ 6750 -ft²  Location of Reference Point (RP):  Location distance and direction from RP:  Latitude: North 33 11.888  Longitude: West 103 3.701  Elevation above mean sea level (amsl): 3801 feet 1159 meters  Distance from North Section Line (feet): 470  Distance from East Section Line (feet): 470  Location - Unit Letter and 1/4 1/4: UL- A NE 1/4 of NE 1/4  Location - Section 14  Location - Township 13S  Location - Township 13S  Location - County Lea  Surface water body within 1000' radius of site: 0  Domestic water wells within 1000' radius of site: 0  Agricultural water wells within 1000' radius of site: 0  Public water supply wells within 1000' radius of site: 0  Public water supply wells within 1000' radius of site: 0  Depth (feet) from land surface to Ground Water (DG): 90  |  |  |  |  |  |  |  |  |  |  |
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| Leak, Spill, or Pit (LSP) Name:  Source of Contamination:  Land Owner, i.e. BLM, ST, Fee, Other:  Private - Choya Young LSP Dimensions:  |  |  |  |  |  |  |  |  |  |  |
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| Source of Contamination:  Land Owner, i.e. BLM, ST, Fee, Other:  Private - Choya Young  LSP Dimensions:  ~ 80' X 40' Battery Area + 20' X 90 & 50' X 35' Field  LSP Area  Location of Reference Point (RP):  Location distance and direction from RP:  Latitude: North  Lord Store S |  |  |  |  |  |  |  |  |  |  |
| Land Owner, i.e. BLM, ST, Fee, Other:  LSP Dimensions:   |  |  |  |  |  |  |  |  |  |  |
| LSP Dimensions:  |  |  |  |  |  |  |  |  |  |  |
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| Location distance and direction from RP:  Latitude: North  Longitude: West  Longitude: West  Longitude: West  Longitude: West  Elevation above mean sea level (amsl):  Distance from North Section Line (feet):  Location - Unit Letter and 1/4 1/4:  Location - Section  Location - Township  Location - Township  Location - Range  Location - County  Lea  Surface water body within 1000' radius of site:  Domestic water wells within 1000' radius of site:  Domestic water  |  |  |  |  |  |  |  |  |  |  |
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| Distance from East Section Line (feet):  Location - Unit Letter and 1/4 1/4:  UL- A NE 1/4 of NE 1/4  Location - Section  14  Location - Township  Location - Range  Location - County  Surface water body within 1000' radius of site:  Surface water body within 1000' radius of site:  O Domestic water wells within 1000' radius of site:  Domestic water wells within 1000' radius of site:  Domestic water wells within 1000' radius of site:  Agricultural water wells within 1000' radius of site:  O Agricultural water wells within 1000' radius of site:  O Public water supply wells within 1000' radius of site:  |  |  |  |  |  |  |  |  |  |  |
| Location - Unit Letter and 1/4 1/4:  Location - Section  Location - Township  Location - Range  Location - County  Location - County  Location - County  Surface water body within 1000' radius of site:  Surface water body within 1000' radius of site:  Domestic water wells within 1000' radius of site:  Domestic water wells within 1000' radius of site:  Domestic water wells within 1000' radius of site:  Agricultural water wells within 1000' radius of site:  Agricultural water wells within 1000' radius of site:  Public water supply wells within 1000' radius of site:  Domestic water supply wells within 1000' radius of site:  Depth (feet) from land surface to Ground Water (DG): ~ 90  |  |  |  |  |  |  |  |  |  |  |
| Location - Section 14  Location - Township 13S  Location - Range 38E  Location - County Lea  Surface water body within 1000' radius of site: 0  Surface water body within 1000' radius of site: 0  Domestic water wells within 1000' radius of site: 0  Domestic water wells within 1000' radius of site: 0  Agricultural water wells within 1000' radius of site: 0  Agricultural water wells within 1000' radius of site: 0  Public water supply wells within 1000' radius of site: 0  Public water supply wells within 1000' radius of site: 0  Depth (feet) from land surface to Ground Water (DG): ~ 90   |  |  |  |  |  |  |  |  |  |  |
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| Location - County  Surface water body within 1000' radius of site:  Surface water body within 1000' radius of site:  Domestic water wells within 1000' radius of site:  Domestic water wells within 1000' radius of site:  Domestic water wells within 1000' radius of site:  Agricultural water wells within 1000' radius of site:  Agricultural water wells within 1000' radius of site:  Public water supply wells within 1000' radius of site:  Depth (feet) from land surface to Ground Water (DG): ~ 90  |  |  |  |  |  |  |  |  |  |  |
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| Agricultural water wells within 1000' radius of site:  Output  Agricultural water wells within 1000' radius of site:  Public water supply wells within 1000' radius of site:  Public water supply wells within 1000' radius of site:  Depth (feet) from land surface to Ground Water (DG): ~ 90  |  |  |  |  |  |  |  |  |  |  |
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| Public water supply wells within 1000' radius of site:  Public water supply wells within 1000' radius of site:  Depth (feet) from land surface to Ground Water (DG): ~ 90  |  |  |  |  |  |  |  |  |  |  |
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| <u></u>  |  |  |  |  |  |  |  |  |  |  |
| Depth (feet) of lowest contamination (DC):   |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Depth (feet) to Ground Water (DG - DC = DtGW): ~ 89  |  |  |  |  |  |  |  |  |  |  |
| 1. Ground Water 2. Wellhead Protection Area 3. Distance to Surface Water   |  |  |  |  |  |  |  |  |  |  |
| If Depth to GW <50-feet: 20 points  If <1000' from water source, or, <200'   <200 horizontal feet: 20 points    If <1000' from water source   <200 horizontal feet: 20 points  |  |  |  |  |  |  |  |  |  |  |
| If Depth to GW 50 to 100-feet: 10 points  20 points 20 points 200-1000 horizontal feet: 10 points points   |  |  |  |  |  |  |  |  |  |  |
| If Depth to GW >100-feet: 0 points from private domestic water source: 0 points >1000 horizontal feet: 0 points  |  |  |  |  |  |  |  |  |  |  |
| Ground Water Score: 10 Wellhead Protection Score: 0 Surface Water Score: 0   |  |  |  |  |  |  |  |  |  |  |
| Site Ranking (1 + 2 + 3): 10   |  |  |  |  |  |  |  |  |  |  |
| Total Site Ranking Score and Acceptable Concentrations   |  |  |  |  |  |  |  |  |  |  |
| Parameter 20 or > 10 0   |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Benzene <sup>1</sup> 10-ppm         10-ppm   |  |  |  |  |  |  |  |  |  |  |
| BTEX <sup>1</sup> 50-ppm 50-ppm 50-ppm   |  |  |  |  |  |  |  |  |  |  |
| TPH 100-ppm 1000-ppm 5000-ppm  |  |  |  |  |  |  |  |  |  |  |

#### State of New Mexico Energy Minerals and Natural Resources

Form C-141

Revised June 10, 2003

District II

1301 W Grand Avenue, Artesia, NM 88210

1625 N French Dr, Hobbs, NM 88240

Distric III

1000 Rio Brazos Road, Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

| 1220 8: 81: 11411618  | BI, Bailta I C, IVIV  | 01505         |                   |          |                                    |   |              |                 |            |          |  |
|---|-----------------------|---------------|-------------------|----------|------------------------------------|---|--------------|-----------------|------------|----------|--|
| Release Notification and Corrective Action  OPERATOR  Initial Report Final Report   |                       |               |                   |          |                                    |   |              |                 |            |          |  |
| Name of Company Apache Corporation  |                       |               |                   |          |                                    | Contact Guinn Burks   |              |                 |            |          |  |
| Address   | P.O. Box              |               | Crane, TX 79731   |          |                                    |   |              | 432-556-9143    |            |          |  |
| Facility Name   |                       | H.D. Sche     | . Schenck Battery |          | Facility Type                      |   | Tank Battery |                 |            |          |  |
| Surface Owner   | Private               | •             | BLM               |          | I                                  | API No. 30  | -025-07242   |                 |            |          |  |
| LOCATION OF RELEASE   |                       |               |                   |          |                                    |   |              |                 |            |          |  |
| Unit Letter   | Section               | Township      | nship Range Feet  |          |                                    | Feet from   | Longitude-W  |                 | Latitude-N | County   |  |
| A   | 14 138                |               | 38E               | BE North |                                    | East Line 470   | 103.0617     |                 | 33.1981    | Lea      |  |
| NATURE OF RELEASE   |                       |               |                   |          |                                    |   |              |                 |            |          |  |
| Type of Releas  | e                     |               |                   | Volume   | Volume of Release Volume Recovered |   |              |                 |            |          |  |
| Crude Oil and Produced Water  |                       |               |                   |          |                                    | orox 8  | ldd          |                 | 6 bbl      |          |  |
| Source of Release   |                       |               |                   |          |                                    | Date and Hour of Occurrence Date and Hour of Discovery              |              |                 |            |          |  |
| Oil Storage Tank  |                       |               |                   |          |                                    | 6/3/07 6:00 AM 6/3/07 7:00 AM                                       |              |                 |            |          |  |
| Was Immediate Notice Given?   |                       |               |                   |          |                                    | If YES, To Whom?  |              |                 |            |          |  |
| Dy Whom?  | YES NO Not Required   |               |                   |          |                                    | NMOCD - Hobbs - Larry Johnson by phone Date and Hour 6/6/07 4:00 PM |              |                 |            |          |  |
| By Whom? Guinn Burks Was a Watercourse Reached?   |                       |               |                   |          |                                    | If YES, Volume Impacting the Watercourse                            |              |                 |            |          |  |
| Was a Watercourse Reactieu?  ☐ YES ☑ NO   |                       |               |                   |          |                                    | NA 23456789   |              |                 |            |          |  |
| By Whom? Guinn Burks  Date and Hour 6/6/07 4:00 PM  Was a Watercourse Reached?  If YES, Volume Impacting the Watercourse  NA  SEP 2007  Recaived  Describe Cause of Problem and Remedial Action Taken. *  |                       |               |                   |          |                                    |   |              |                 |            |          |  |
| Water dump valve failed causing all fluids to go to the oil storage tank causing resultant tank overflow. Mechanical repairs to water dump valve were facilitated and 6-bbl of released fluid was recovered by vacuum truck. Hungry Horse LLC contracted for site evaluation and remediation.   |                       |               |                   |          |                                    |   |              |                 |            |          |  |
| Describe Area Affected and Cleanup Action Taken. *  |                       |               |                   |          |                                    |   |              |                 |            |          |  |
| Approximately 3200-ft <sup>2</sup> (80' X 40') within the battery was affected. A 20-ft X 90-ft area of cotton field north of the battery was impacted as well as a 50-ft X 35-ft area of cotton field on the south side of the battery. The impacted cotton field areas were blended in place to achieve contaminant concentrations below the action levels for this site.   |                       |               |                   |          |                                    |   |              |                 |            |          |  |
| 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 hability 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:  | Signature: Suin Burko |               |                   |          |                                    | OIL CONSERVATION DIVISION   |              |                 |            |          |  |
| Printed Name: Guinn Burks   |                       |               |                   |          | Approved by District Supervisor:   |   |              |                 |            |          |  |
|   |                       |               |                   |          |                                    | al Date: 9.7  |              | <u>Expirati</u> |            |          |  |
| E-Mail Address  | s: <u>C</u>           | Guinn.Burks@a | apachecorp.cor    | <u>n</u> | Conditi                            | ons of Approva  | al:          | RP# 140         | )3         |          |  |
| Date:   | 9/7/2007              | Phone:        | 432-556-9143      | <br>}    |                                    |   |              |                 |            | Attached |  |