### Hester 12 Tank Battery

Located in Unit Letter N, SEC. 12, T20S, R38E of Lea Co., NM

GPS Reading of 32°-34'-54.8"-N & 103°-06'-18.9"-W

API # 30-025-36795

# Spill Remediation Report

Presented to:

Apache Corp.
612 S Yale, Suite 1500
Tulsa, OK 74136

C/O Pate Trucking P.O. Box 760 Denver City, Texas 79323 RECEIVED

9002 0 P. NUL

HORRSOCD

Approved 09/17/09 Shoffrey Laking

Environmental Engineer NMOCD-Hobbs

Prepared by:

### Phoenix Environmental, LLC.

P.O. Box 1856 Hobbs, New Mexico 88240



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#### **IMPORTANT NOTICE:**

Phoenix Environmental, LLC. with offices at 2113 French Drive, Hobbs, New Mexico 88241 (the Company), has prepared this project report for remediation of Hester 12 Tank Battery, to the best of its ability. No warranty, expressed or implied, is made or intended. The report was prepared for Apache Corp., with offices at 612 S Yale Suite 1500. Tulsa OK. 74136 and (the Client). All information disclosed in this plan is for internal purposes only and is considered confidential. By accepting this document, the recipient agrees to keep confidential the information contained herein. The recipient further agrees not to copy, reproduce or distribute to any third party this project plan in whole or in part, without express written permission from the Company or Client.





## SECTION I

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV

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

Oil Conservation Division 1220 South St. Francis Dr.

Form C-141 Revised October 10, 2003

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

| 1220 S St. Francis Dr., Santa Fe, NM 87505 Santa   | a Fe, NM 87505   | side of form       |  |  |  |  |  |
|--|--|--------------------|--|--|--|--|--|
| Release Notificat  | tion and Corrective Action   |                    |  |  |  |  |  |
|  | OPERATOR Initial Report  | Final Repor        |  |  |  |  |  |
| Name of Company Cocke Corp   | Contact Topy Changuit  |                    |  |  |  |  |  |
| Address 612 5 Lale Duke 1500   | Telephone No. 575-394-1503   |                    |  |  |  |  |  |
| Facility Name To Nastau 12   | Facility Type Tank Battery   |                    |  |  |  |  |  |
| Surface Owner Mineral Own  | ner Lease No.  |                    |  |  |  |  |  |
| LOCATI   | TION OF RELEASE  |                    |  |  |  |  |  |
| Unit Letter Section Township Range Feet from the No  | orth/South Line   Feet from the   East/West Line   County                |                    |  |  |  |  |  |
| N 12 209 38E   | lea  |                    |  |  |  |  |  |
| Latitude 3 2° 34 50  | 4.8 Dongitude03°-06'-18.9W elv. 3591                                     |                    |  |  |  |  |  |
|  |  | 0.5                |  |  |  |  |  |
| Type of Release Produce water  | Volume of Release 170 bbi Volume Recovered                               | 7:00 A-            |  |  |  |  |  |
| Source of Release Grand like water   | Date and Hour of Occurrence Date and Hour of Dis                         | 60 bbl 5           |  |  |  |  |  |
| Was Immediate Notice Given?  | If YES, To Whom?   |                    |  |  |  |  |  |
| aller Hodge Yes No Not Requir  | C80119   |                    |  |  |  |  |  |
| By Whom? Was a Watercourse Reached?  | Date and Hour 2/2/09 10:50 Am  |                    |  |  |  |  |  |
| ☐ Yes No   | If YES, Volume Impacting the Watercourse.                                |                    |  |  |  |  |  |
| If a Watercourse was Impacted, Describe Fully.*  |  |                    |  |  |  |  |  |
| •  | WATER 5 3  | 5 h                |  |  |  |  |  |
|  |  |                    |  |  |  |  |  |
| Describe Cause of Problem and Remedial Action Taken.*  |  |                    |  |  |  |  |  |
| Small live Malin O. 14apa-   | touch b doconered to   | 20 6613            |  |  |  |  |  |
| Sense and Supple say oper !  | - October Factor   |                    |  |  |  |  |  |
| Describe Cause of Problem and Remedial Action Taken.*  Closed Line Value Lift apen -   | 1,10,000 ,000.   |                    |  |  |  |  |  |
| S  |  |                    |  |  |  |  |  |
| Hura van across location a   | not down wood less and   | small              |  |  |  |  |  |
| ant 512 Paris Paties Dor   | Spot 5x30 Parinto Pasture Impacted soul was be executably to be proposed |                    |  |  |  |  |  |
| Spor Stat Rando Pasiane Con.   | taken off sito for the   | usposa             |  |  |  |  |  |
| Spot 51.30 Raning Pasture Impacted sou will let 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  | by the NMOCD marked as "Final Report" does not relieve the ope           | rator of liability |  |  |  |  |  |
| should their operations have failed to adequately investigate and reme   |  |                    |  |  |  |  |  |
| or the environment. In addition, NMOCD acceptance of a C-141 reported federal, state, or local laws and/or regulations.  | for does not relieve the operator of responsibility for compliance v     | with any other     |  |  |  |  |  |
|  | OIL CONSERVATION DIVISION  | ON                 |  |  |  |  |  |
| Signature: Tony Charlet  |  |                    |  |  |  |  |  |
| Approved by District Supervisor: $\Rightarrow \land \land \qquad ? \land \land$  |  |                    |  |  |  |  |  |
| Printed Name: 70ny Chenin It   |  |                    |  |  |  |  |  |
| Title: District Scalaction Mar.  | Approval Date: 02/03/09 Expiration Date: 04/0                            | 05/09              |  |  |  |  |  |
| E-mail Address: Youy chenault @ apacheof. com  | Conditions of Approval: DETINEATE TO Attached                            |                    |  |  |  |  |  |
| 431.666 1774   | CLEAN +1. FINAL 2.141 Attached   | ٠ اــا             |  |  |  |  |  |

Attach Additional Sheets If Necessary

2-02-09

Phone: 432-556 1774

FEB 0 3 2009

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**HOBBSOCD** IRP-09.01.2071 <u>District 1</u> 1625 N. French Dr., Hobbs, NM 88240 District II
1301 W. Grand Avenue, Artesia, NM 88210
District III 1000 Rio Brazos Road, Aztec, NM 87410

<u>District IV</u> 1220 S. St. Francis Dr , Santa Fe, NM 87505

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

Form C-141 Revised October 10, 2003 <sup>c</sup>ubmit 2 Copies to appropriate District Office in accordance

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

with Rule 116 on back side of form

| Release Notification and Corrective Action |   |               |             |                               |          |                 |                         |                |               |             |         |          |
|--|---|---------------|-------------|-------------------------------|----------|-----------------|-------------------------|----------------|---------------|-------------|---------|----------|
|  |   |               |             |                               |          |                 | Final Report            |                |               |             |         |          |
| Name of Company Cock Corp                  |   |               |             |                               |          | Contact 7       |                         | maul           |               |             |         |          |
| Address 612 3 Lale Swite 1500              |   |               |             |                               |          | Telephone N     |                         |                | -1503         |             |         |          |
| Facility Nar                               | Facility Name Bo Nester 12  |               |             |                               |          |                 | e Tank                  | Bath           | my            |             |         |          |
| Surface Ow                                 | Surface Owner Mineral Owner   |               |             |                               |          |                 |                         |                | Lease N       | lo.         |         |          |
|  |   |               |             | LOCA                          | ATIO     | N OF REI        |                         |                |               |             |         |          |
| Unit Letter                                | Section   | Township      | Range       | Feet from the                 | North    | South Line      | Feet from the           | East/\         | West Line     | County      |         |          |
| N  | 12  | 209           | 38€         |                               | <u> </u> |                 |                         |                |               | lea         | _       |          |
|  | Latitude 3 2° 34 548 "Longitude 03°-06'-18.90 Clus. 3591  |               |             |                               |          |                 |                         |                |               |             |         |          |
|  |   |               |             | NAT                           | URE      | OF RELI         |                         | 10             | 14019m        |             | •       | 7:00 A-  |
| Type of Rele                               | ase Prod  | ueu wat       | عد          |                               |          | Volume of       | Release 1701            | أطو            | Volume F      | Recovered   | LOO     | bbls     |
| Source of Re                               | lease Cooc  | ب ميعا با     | some        | 000                           |          | Date and H      | our of Occurre          | nce/209        | Date and      | Hour of Dis | cover   | y 2/2/09 |
| Was Immedia                                |   |               | Yes [       | No Not R                      | eauired  | Geof            |                         |                |               |             |         |          |
| By Whom?                                   | locique   |               |             |                               |          |                 | s Lekir                 |                | 150 0.        |             |         |          |
| Was a Water                                | course Reac   | hed?          |             |                               |          |                 | lume Impacting          |                | ercourse.     | <u> </u>    |         |          |
| Was a water                                | 000100 11000  |               | Yes 🖸       | No                            |          | 1. 125, 15      |                         | 5 **** * * *** |               |             |         | •        |
| If a Watercou                              | irse was Im   | pacted, Descr | ibe Fully.  | k                             |          |                 |                         |                |               |             |         |          |
|  |   |               |             |                               |          |                 |                         |                | WATE          | R X 3       | 5 V     |          |
|  |   |               |             |                               |          |                 | :                       |                |               |             |         |          |
| Describe Cau                               | se of Proble  | em and Reme   | dial Actio  | n Taken.*                     |          |                 | In 1 Pr                 | 1.0            | 1 ~ 101       | 000 (0      | 0 1     | علطه     |
| Noac                                       | lens lens   | , Can         | ب سفلا      | n Taken.*  Uf open  of th     | 1 - 1    | Dagan           | , mount                 | ي ع            |               | ى دىدو      |         |          |
|  |   |               |             | of th                         | ، ا<br>  | 10 bdi 2        | COD .                   |                |               |             |         | ġ        |
|  |   |               |             |                               |          |                 |                         |                |               |             |         |          |
| June                                       | e van   | - acre        | h cros      | Location                      | ano      | n Gon           | $\sim$ $\sim$           | be C           | ereo w        | 10.01       | رد<br>ب | · n      |
| Spot                                       | 5×3   | o Rani        | To B        | cen.*<br>Location<br>asture I | grap     | acted s         | ta ta                   | ken 4          | Misch         | o Hon &     | uof     | poor     |
|  |   |               |             |                               |          |                 |                         |                |               |             |         |          |
| 1 5  |   |               |             | nd/or file certain r          |          |                 |                         |                |               |             | -       |          |
| should their o                             | 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 |               |             |                               |          |                 |                         |                |               |             |         |          |
|  |   |               | •           | otance of a C-141             | report d | loes not reliev | e the operator of       | of respons     | ibility for c | ompliance v | vith ar | ny other |
| federal, state,                            | federal, state, or local laws and/or regulations.   |               |             |                               |          |                 |                         |                |               |             |         |          |
|  | OIL CONSERVATION DIVISION   |               |             |                               |          |                 |                         |                |               |             |         |          |
| Signature:                                 | Signature: Tony Charlet   |               |             |                               |          |                 |                         |                |               |             |         |          |
| Printed Name                               | : TORY  | Chene         | wilt        |                               |          | Approved by     | District Superv         | risor:         | well a        | y Jela      | WX      |          |
| Title: $D_{i3}$                            | tuct  | Poduc         | tich        | Mar.                          |          | Approval Dat    | e: 02/03/               | 09             | Expiration    | Date: 04 6  | 50      | <u> </u> |
| E-mail Addre                               | ess: Yeny   | chenau        | 1100        | orcheeoff. C                  | 10111    | Conditions of   | Approval: Des<br>FWAL C | ZINZAT         | ETO           | Attached    |         |          |
| Date: J-                                   | -01-0   | 9             | 9<br>Phone: | 32-556 177                    | 74       | DVE 041         | 05/09:                  |                |               | VED         | -       |          |
| * Attach Addi                              |   |               | OPT /       |                               |          | и               |                         |                | Come So liver | W too be    |         |          |

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**HOBBSOCD** IRP-09.01.2071



### SECTION II

#### Project Overview

Phoenix Environmental, LLC. (Phoenix) was contracted by Zane Mead with Pate Trucking to consult and oversee the clean up on the Hester 12 Tank Battery owned by Apache Corp. and is located at UL N, Sec 12, T20S, R38E of Lea County New Mexico with a GPS Reading: 32°-34'-54.8"N & 103°-06'-18.9"W with an elevation of 3591 above sea level. The land, in and around the site, is primarily used as pasture for cattle and the production of oil and gas.

The potential contaminates of concern were mid- to high-level concentrations of produce water containing elevated chlorides that were lost due to the load line valve being left open after Pate Trucking loaded a load of produce water.

The ground water depth data available from the State of New Mexico Engineers' office showed the vertical depth to the top of water to be about 30 feet below surface.

Pursuant to the NMOCD guidelines for clean up of unlined surface impoundments, the clean up level for this site will be at <100 ppm for TPH (Total Petroleum Hydrocarbons) and <50 ppm for BTEX (Benzene, Toluene, Ethylbenzene, and Xylene). The NMOCD has also asked for CL (Chlorides) be returned back as close to background levels as possible or <250 ppm.

#### Findings and Conclusion

The spill was due to the fact that a truck owned by Pate Trucking was loading truck from load line and forgot to close load line value after loading truck. The valve was left open over night which cause produce water to run out of load line onto ground. A total of 170 bbls of produce water was spilled onto ground and ran across location and down road 600'. A small 5x30 area was in the pasture. A total of 60 bbls was recovered.

It appeared that approximately 564 cubic yards of impacted soils would have to be removed to complete the excavation of the project. The impacted soils removed from the site would be hauled off-site for disposal at a NMOCD permitted commercial waste disposal facility (Sundance Service Permit # NM01-003.

The bottom of the excavation (approximately 3 feet) was tested for TPH, BTEX, & Chlorides to make certain that the target limits had been met prior to backfilling and compaction for closure. The site cleaned up very well, and did not impact groundwater.

The spill site should pose very little if any future environmental threat due to the fact that the impacted soils at the site were removed for off – site disposal and fresh clean backfill was brought in and placed in the excavation site.



#### **Chronology of Operations**

- 1. February 2, 2009 Allen Hodge with Phoenix Environmental LLC met with Zane Mead with Pate Trucking, Tony Chenault and Travis Carnes with Apache Corp. at the spill site. Allen took photos of the spill site and filed C141 with the OCD office. Phoenix then mobilized on-site, with the first order being a tailgate safety meeting to review any potential safety concerns of the site and to cover the clean up operations. (Please note that a daily safety meeting is the first order of the day before any work begins on site) New Mexico One Call was notified of the intent to clean up the site. A backhoe and Blade was mobilized to location. The Blade started blading up impacted areas to prevent further saturation of produce water into surface soils.
- 2. February 3, 2009 Crew began excavating impacted soils from the spill site and loaded the soils into trucks. Trucks hauled 80 cubic yards of impacted soils to an NMOCD approved disposal facility. Sundance Services Permit # NM 01-003 was the approved disposal facility. Allen excavated a test hole in front of treaters to 3' below ground surface. Allen also took samples just under the pad. (Refer to Soil Analysis Report on page 7 of this report).
- 3. February 4, 2009 Crew continued to excavate impacted soils from the spill site and loaded into trucks. Trucks hauled 100 cubic yards of impacted soil off site for disposal.
- 4. February 5, 2009— Crew continued to excavate impacted soils from spill site and loaded into trucks. Trucks hauled 80 cubic yards of impacted soil off site for disposal. Allen took samples of spill site to check levels.
- 5. February 6, 2009 Crew continued to excavate impacted soils from the spill site and loaded into trucks. Trucks hauled 240 cubic yards of impacted soils off site for disposal.
- 6. February 9, 2009 Crew continued to excavate impacted soils from the spill site at load line and loaded into trucks. Trucks hauled 52 cubic yards of impacted soils off site for disposal. Crew hauled in 72 cubic yards of caliche for backfill.
- 7. February 10, 2009 Crew Continued to haul caliche to location for backfill. Spill site excavation areas were cleaned and final samples were taken and sent to a third party laboratory for analysis Chlorides for final verification of the limits met. A total of 204 cubic yards was brought to location and spread over excavation areas. Truck hauled 12 cubic yards of impacted soils off site for disposal.



- 8. February 11, 2009 Pate Trucking hauled 260 bbls of fresh clean water to location and sprayed water onto location to help keep the new clean caliche in place. Trucks hauled 180 cubic yards of caliche to location. The caliche was used for backfill on the excavation areas.
- 9. February 12, 2009 Crew finished backfilling location. Pate Trucking watered down site with 130 bbls of fresh clean water. Final contouring and compactions was implemented to return the site back to grade. Contouring was completed with a crown to prevent rainwater ponding.



#### **Certification**

The following Phoenix Environmental personnel have reviewed this report and verified that to the best of their knowledge the contents are true and correct.

Allen Hodge, REM VP Operations

Phoenix Environmental, LLC.

Signature:

Registered Environmental Manager #7096 National Registry of Environmental Professionals





### SECTION III



#### SUMMARY SOIL ANALYSIS REPORT

Client: Apache Corp Supervisor: Allen Hodge

Sample Matrix: Soil

Facility: Hester 12 Tank Battery

Order No.: Tony Shenualt

Samples Received: Intact on site

Interim Project Screening

|        |        | ł     | 1         | PID | PID  |                        | Test      |
|--------|--------|-------|-----------|-----|------|------------------------|-----------|
| Sample | Date   | Depth | Chlorides | TPH | BTEX | Location               | Method    |
| #1     | 2/4/09 | 6"    | 4500      |     |      | Just Under Pad         | EPA 325.3 |
| #2     | 2/4/09 | 3′    | <50       |     |      | Test Hole Treater Area | EPA 325.3 |
| #3     | 2/4/09 | 2'    | 60        |     |      | Load Line Area         | EPA 325.3 |
| #4     | 2/4/09 | 2'    | <50       |     |      | Treater Area           | EPA 325.3 |
| #5     | 2/4/09 | 4′    | <50       |     |      | Area In Pasture        | EPA 325.3 |
| #6     | 2/4/09 | 2'    | 110       |     |      | Corner of Road         | EPA 325.3 |
| #7     | 2/4/09 | 2'    | 80        |     |      | Road & PA Location     | EPA 325.3 |
| #8     | 2/4/09 | 2'    | <50       |     |      | Ditch on Southside     | EPA 325.3 |
| #9     |        |       |           |     |      |                        |           |
| #10    |        |       |           |     |      |                        |           |
| #11    |        |       |           |     |      |                        |           |
| #12    |        |       |           |     |      |                        |           |
| #13    |        |       |           |     |      |                        |           |
| #14    |        |       |           |     |      |                        |           |
| #15    |        |       |           |     |      | :                      |           |

Samples reported in parts per million (ppm) and depth is in feet (') and inches (")

Final (Third Party Laboratory) Project Screening Verification

| Sample           | Date               | Depth    | Chlorides  | ТРН | BTEX | Location              | Test<br>Method |
|------------------|--------------------|----------|------------|-----|------|-----------------------|----------------|
| #1               | 2/25/09            | 2.5'     | 144        |     |      | See Attached Site Map | See Report     |
| #2               | 2/25/09            | 3'       | 144        |     |      | See Attached Site Map | See Report     |
| #3               | 2/25/09            | 2'       | 80         |     |      | See Attached Site Map | See Report     |
| #4               | 2/25/09            | 2'       | 176        |     |      | See Attached Site Map | See Report     |
| #5               | 2/25/09            | 4′       | 176        |     |      | See Attached Site Map | See Report     |
| #6<br>#7         | 2/25/09<br>2/25/09 | 2'<br>2' | 160<br>96  |     |      | See Attached Site Map | See Report     |
| # <u>8</u><br>#9 | 2/25/09<br>2/25/09 | 2′<br>2′ | <16<br><16 |     |      | See Attached Site Map | See Report     |

Samples reported in parts per million (ppm) and depth is in feet (') and inches (")



#### Phoenix Environmental, LLC. P.O. Box 1856 – 2113 French Drive Hobbs, New Mexico 88241

505.391.9685 - FAX: 505.391.9687

#### SOIL ANALYSIS REPORT

Date: 2/2/09 Client: Apache Corp. Supervisor: Allen Hodge Sample Matrix: Soil Facility: Hester 12 Tank Battery
Test Method: EPA 325.3
Order No.: Tony Chenault
Sample Received: Intact on site

| <u>Sample</u> | Cl (ppm) | Depth (feet) | <u>Location</u>             |
|---------------|----------|--------------|-----------------------------|
| #1            | 4500     | 6′           | Just Under Pad              |
| #2            | <50      | 3′           | Test Hole Treater Area      |
| #3            | 60       | 2′           | Load Line Area              |
| #4            | <50      | 2'           | Treater Area                |
| #5            | <50      | 4'           | Area in Pasture             |
| #6            | 110      | 2′           | Corner of Road              |
| #7            | 80       | 2′           | Road and PA Location        |
| #8            | <50      | 2'           | Ditch on south side of Road |

**COMMENTS:** Sample were to check the limits for NMOCD guidelines for clean up of leaks and spills.



ANALYTICAL RESULTS FOR PHOENIX ENVIRONMENTAL. LLC ATTN: ALLEN HODGE P.O. BOX 1856 HOBBS, NM 88241 FAX TO: (575) 391-9687

Receiving Date: 02/24/08 Reporting Date: 02/25/08

Project Number: APACHE
Project Name: HESTER 12 TANK BATTERY

Project Location: LEA CO., NM

Analysis Date: 02/25/08 Sampling Date: 02/17/08 Sample Type: SOIL Sample Condition: INTACT

Sample Received By: ML

Analyzed By: HM

LAB NUMBER SAMPLE ID

C[ (mg/kg)

| H16958-1      | 1-LOAD LINE @ 2.5'          | 144  |  |  |  |  |  |  |
|---------------|-----------------------------|------|--|--|--|--|--|--|
| H16958-2      | 2- @ 2                      | 144  |  |  |  |  |  |  |
| H16958-3      | 3- @ 2'                     | 80   |  |  |  |  |  |  |
| H16958-4      | 4- @ 2'                     | 176  |  |  |  |  |  |  |
| H16958-5      | 5-PASTURE @ 4'              | 176  |  |  |  |  |  |  |
| H16958-6      | 6- @ 2'                     | 160  |  |  |  |  |  |  |
| H16958-7      | 7- @ 2'                     | 96   |  |  |  |  |  |  |
| H16958-8      | 8-ROAD DITCH @ 2'           | < 16 |  |  |  |  |  |  |
| H16958-9      | 9-BACKGROUND @ 0'-6"        | < 18 |  |  |  |  |  |  |
| Quality Contr | ol                          | 500  |  |  |  |  |  |  |
| True Value C  | 500                         |      |  |  |  |  |  |  |
| % Recovery    | 100                         |      |  |  |  |  |  |  |
| Relative Pero | Relative Percent Difference |      |  |  |  |  |  |  |

METHOD: Standard Methods 4500-C/B

Note: Analyses performed on 1:4 w:v aqueous extracts.

Chemist

Date 02/25/09

#### H16958 PHOENIX

ELEASE NOTE: Liability and Damages. Cerdinal's liability and plant's exclusive remedy for any claim ensuing, whather bessed 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 the 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, affination or successors entend, out of or related to the performance of services hereunder by Cardinal, regardless of whather such claim is based upon any of the above-stated reasons or otherwise related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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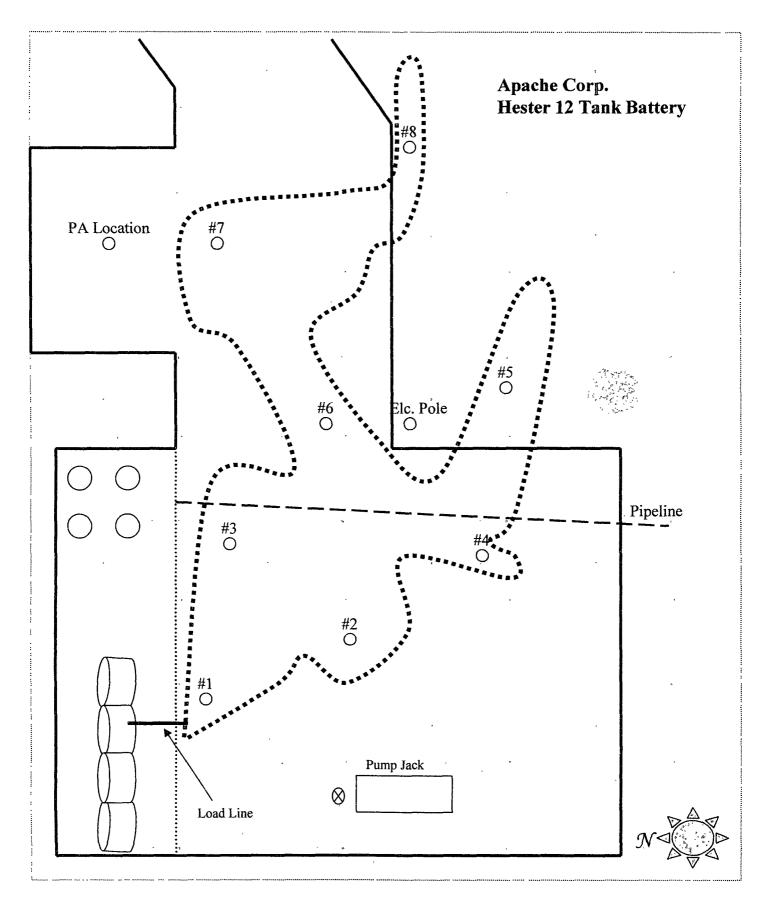
101 East Marland, Hobbs, NM 88240 (575) 393-2326 Fax (575) 393-2476

| Project Manager: ALLEN HOUSE   | ARL LLC   | BILL TO  | ANALYSIS REQUEST                    |
|--|---|--|-------------------------------------|
| Project Manager: ALLをい 上のや   |   | P.O. #:  |                                     |
| laddress: PD Box 1856  |   | Сотралу:   |                                     |
| City: Mobbs State: NM  | Zip: 88241  | Aftn:  |                                     |
| Phone #:575-3919685 Fax #:575-3  | 391-9687  | Address:   |                                     |
| Project #: Project Owner:  | Adachs  | City:  |                                     |
| Project Name. NESTER 12 TANK 8) Project Location: LEA CO. NM Sampler Name: PHEN HOOPS  | 477512×   | Sfate: Zip:  | 3                                   |
| Project Location: LEA CO. NM   |   | Phone #:   |                                     |
| Sampler Name: Allew Hoops  |   | Fax #:   |                                     |
| FOR LAB USE ONLY   | MATRIX  | PRESERV SAMPLING                                   |                                     |
|  | S ER S  |  |                                     |
| Lab I.D Sample 107 in Car  | NATER (C  | ii   |                                     |
| Ldv., V  | SE EW   | R SOO  |                                     |
|  | GIRAB OF (C)ON # CONTAINERS GRCUNDWATER WASTEWATER SOIL OIL | ACIDIBASE<br>ICE / COOL<br>OTHER:                  | TIME V                              |
| 4/1/258-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1  | <u>Σ</u> * Ο S Ω Ο Ω  | X 2-17-9   |                                     |
| HILAS8-11-10AD LIVE @ 2,5<br>-7 2-@ 2'   | 611   | 1 3 1 6 1 (  | 8:15 Y                              |
| -2 3-0 2'  | GIX   |  | 8!30 X                              |
| 44-621   | GIK   |  | 9:45 %                              |
| -3 3-@ 2'<br>-4 4-@ 2'<br>-5 5- PASTURE @ 4'   | 61 1  |  | 9:00 1                              |
| -6 6-62'<br>-7 7-62'   | 6   14  | X  | 9:15 X                              |
| -7 7-e2'   | 611   | T Y  | 4:36 X                              |
| -9 8-ROAD Direct @ 2'<br>-9 9-BACKGROUD @ 0'-6"  | 6 ( X   | ,            | 9:45 1                              |
| -7 4- BACKGROUDG O-6   | 61 7  | I Y V  | 10:00 +                             |
| PT/SAST WOTE: Lightly and Darrages, Cantinots biblily and clanks exclusive number for an   | y ctem aming whether based in contra                        | our lord, shall be limited to the instoud (said to | With obtain for the                 |
| andsens Altislatins including those for negligence and applicate accessible to be because whatsurers shall be a covered in the second shall Condition by table for including a corresponding samages, training | without Gentration, business interregions                   | lose of use, or less of profits mounted by alka    | lead, dis action theories,          |
| Affirms or successors aimby marks or restact to the featurement of sentimen her under by C.  Sampler Relinquistied: / Date:  | idini recentess of whitee such clear<br>. Received By:      |  | Phone Result:                       |
| Sampler Relindursted: Date:  |   |  | Fax Result: D No AddTFax#: REMARKS: |
| Time: 7 Time: 7 Time: 7 Date:  | Received By   | WW   |                                     |
|  | uscarsed p.f.   |  |                                     |
| Ţ Time:  | 1   |  |                                     |
| Delivered By: (Circle One)   | Temp. Sample Condi  | tion CHECKED BY: (Initials)                        |                                     |
| Sampler - UPS - Bus - Other:   | Yes LYY   | MEXB   |                                     |

<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.



### SECTION IV

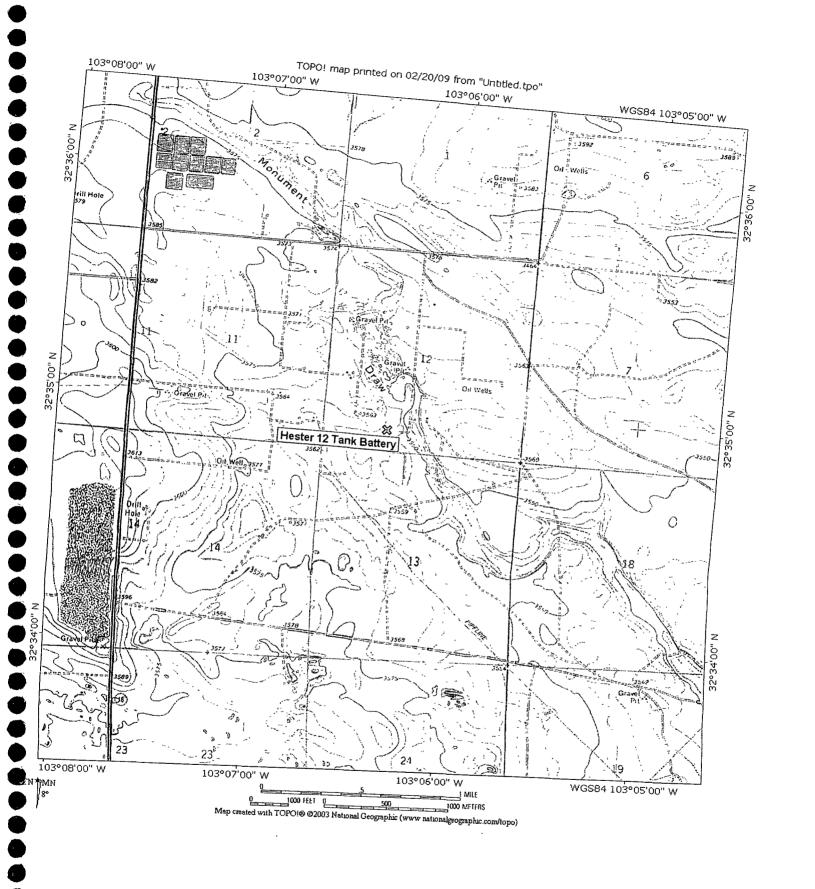


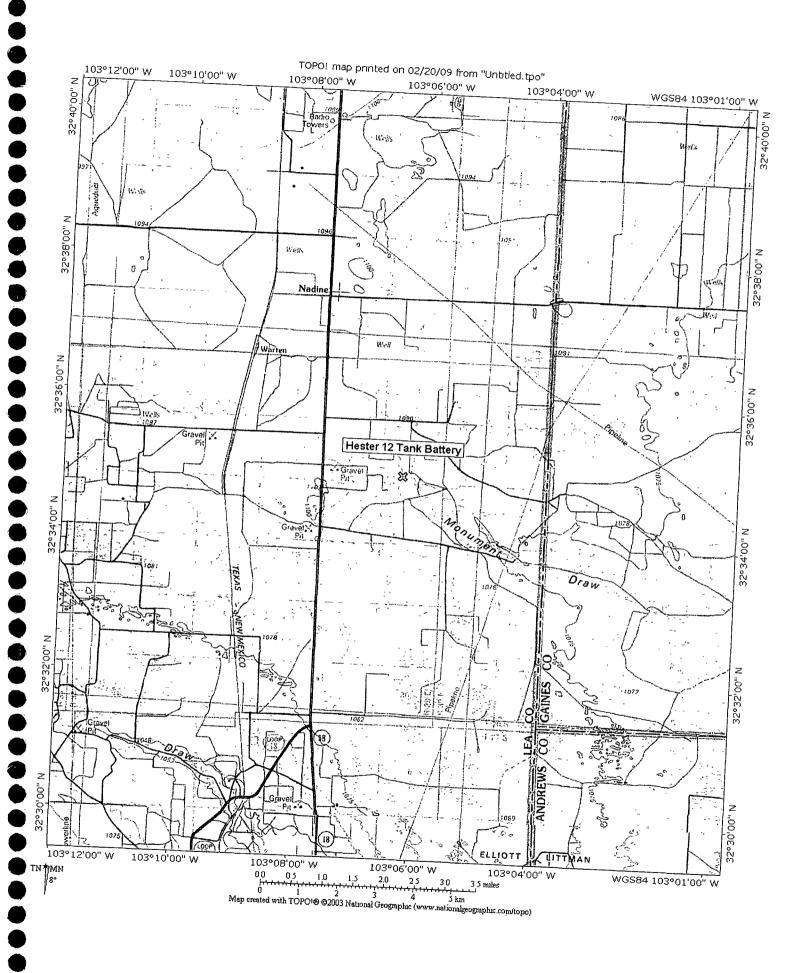


# Apache Corp. Hester 12 Tank Battery GPS Locations Of Final Lab Samples

- 1. N32°-34'-55.4" W103°-06'-19.5"
- 2. N32°-34'-54.9" W103°-06'-18.7"
- 3. N32°-34'-54.7" W103°-06'-17.9"
- 4. N32°-34'-54.3" W103°-06'-17.9"
- 5. N32°-34'-53.9" W103°-06'-17.5"
- 6. N32°-34'-54.4" W103°-06'-17.1"
- 7. N32°-34'-55.0" W103°-06'-15.4"
- 8. N32°-34'-54.4" W103°-06'-14.0"









### SECTION V

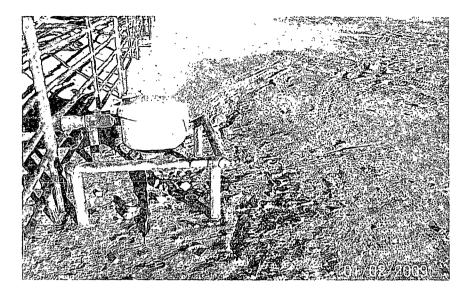


Photo #1 Beginning View of Spill Site



Photo #3 Beginning View of Spill Site

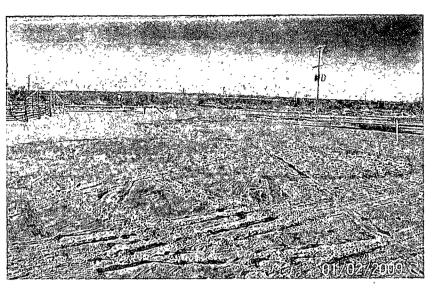


Photo #2 Beginning View of Spill Site

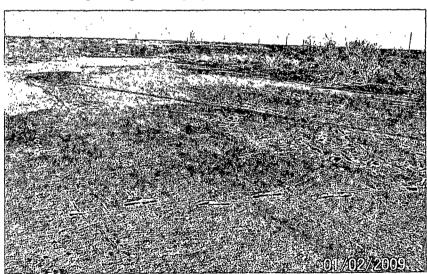


Photo #4 Beginning View of Spill Site



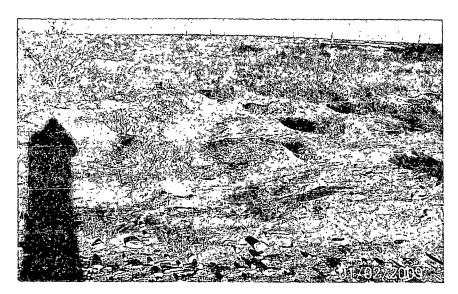


Photo # 5 Beginning View of Spill Site (Pasture)

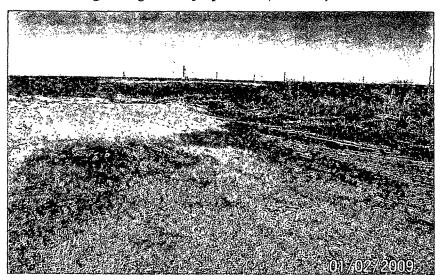


Photo #7 Beginning View of Spill Site (Location)



Photo #6 Beginning View of Spill Site (Road)

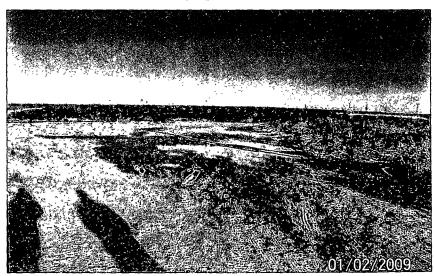


Photo #8 Beginning View of Spill Site (Location and Road)



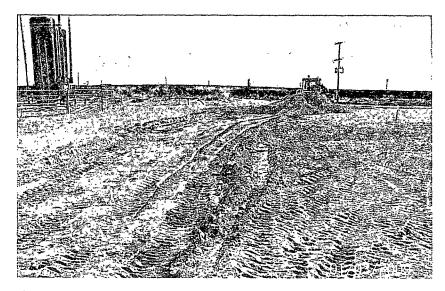


Photo #9 Excavation of Impacted Soils

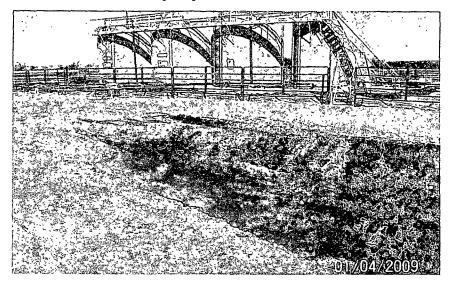


Photo #11 Excavation of Impacted Soils

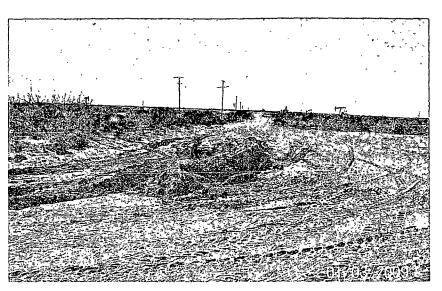


Photo # 10 Excavation of Impacted Soils

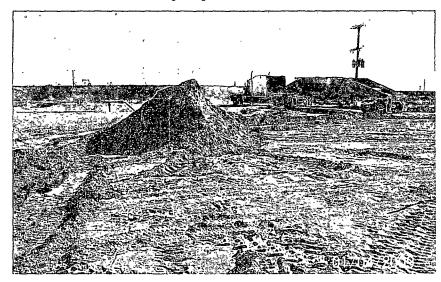


Photo #12 Excavation of Impacted Soils



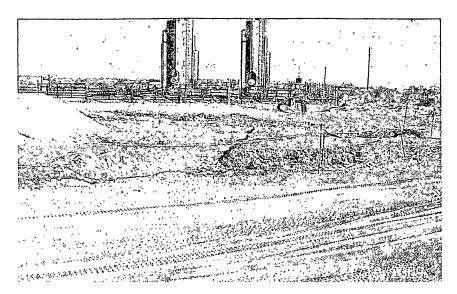


Photo #13 Cleaning Up Spill Areas

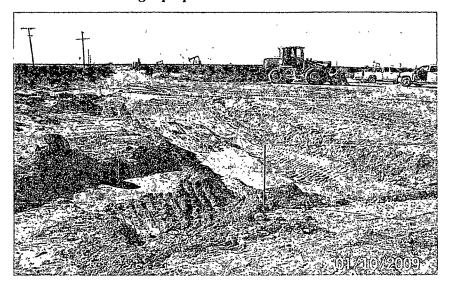


Photo #15 Cleaning Up Spill Areas

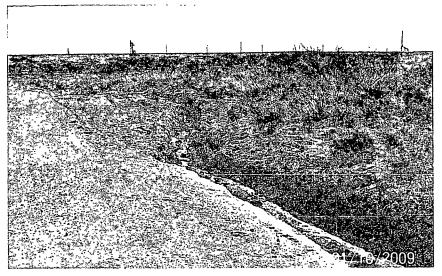


Photo #14 Cleaning Up Spill Areas

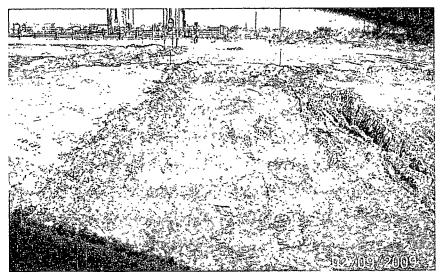


Photo #16 Cleaning Up Spill Areas



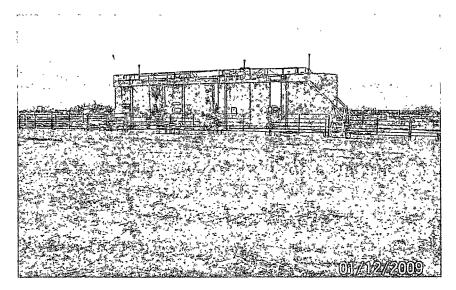


Photo #17 Final View of Spill Remediation

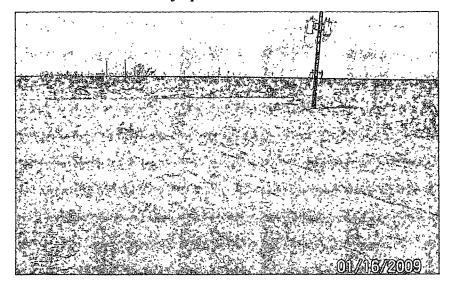


Photo #19 Final View of Spill Remediation

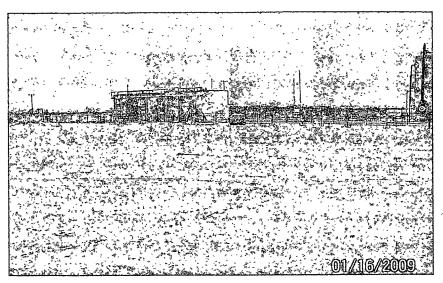


Photo #18 Final View of Spill Remediation

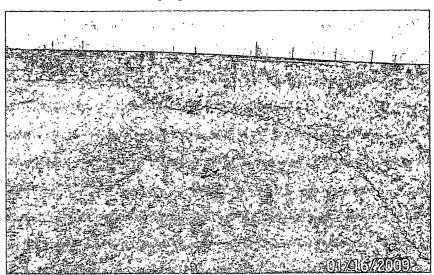


Photo #20 Final View of Spill Remediation



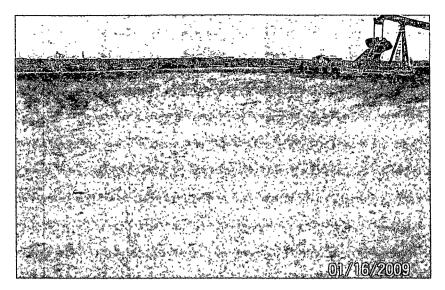


Photo #21 Final View of Spill Remediation

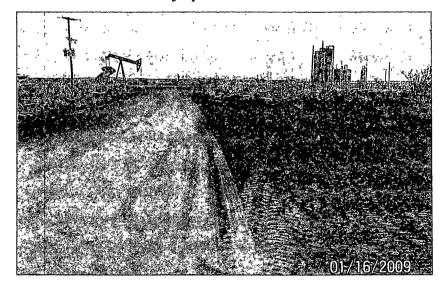


Photo #23 Final View of Spill Remediation

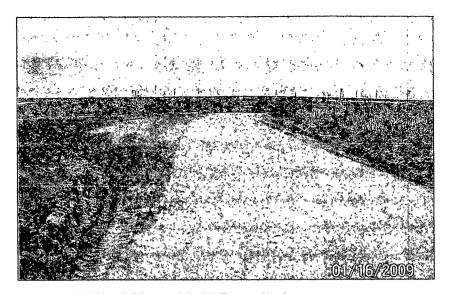


Photo #22 Final View of Spill Remediation

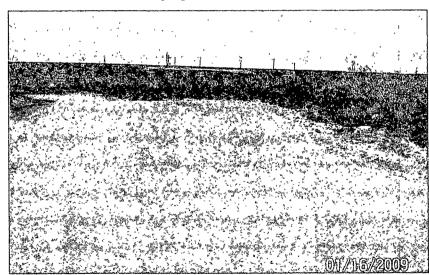


Photo #24 Final View of Spill Remediation

