Elke Environmental, Inc.
4817 Andrews Hwy. Pho. 432-366-0043 Mail: P. O. Box 14167
Odessa, Tx. 79762 Fax: 432-366-0884 Odessa, Tx. 79768



January 12, 2007

Mr. Larry Johnson
New Mexico Oil Conservation Division
1625 N. French Dr.
Hobbs, New Mexico 88240

SUBJECT: Closure Report for Apache Corporation State Land 15 #13 Reserve Pit
API no. 30-025-37482 U/L O Sec. 16 T21s R37e Lea County, NM

Dear Mr. Johnson,

Enclosed in this mailing is:

- a copy of the initial form C-144 closure **plan**
- the C-144 closure **report**
- a drawing of the site indicating the reserve pit location and sample points
- a table of field and laboratory sample results.
- a copy of the laboratory report
- photos of the site

As indicated in the C-144 closure report, approval was granted by Mr. Chris Williams 12-27-06 to remove contaminated pit material to a level of 4 ft. BGS, haul the material to an approved disposal site, then cover the remaining pit material with a 20 mil liner. Clean soil was used to backfill the remaining 4 ft. The pit area will be reseeded when seasonably practical.

Any questions or concerns may be addressed to Robert Spangler at 432-638-4220 or Logan Anderson at 432-664-1269.

Sincerely,

Hamp Kerby

Hamp Kerby – Elke Environmental, Inc.

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
[illegible]0 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-144
June 1, 2004

**For drilling and production facilities**, submit to appropriate NMOCD District Office.
**For downstream facilities**, submit to Santa Fe office

# Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No X
Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank X

Operator: Apache Corporation Telephone: 432-527-3311 e-mail address: harold.swain@usa.apachecorp.com
Address: P. O. Box 848 Wink, Tx. 79789
Facility or well name: State Land 15 Well #13 API #: 30-025-37482 U/L or Qtr/Qtr O Sec 16 T 21S R 37E
County: Lea Latitude _____ Longitude _____ NAD: 1927 ☐ 1983 ☐
Surface Owner: Federal ☐ State X ☐ Private ☐ Indian ☐

| **Pit** | **Below-grade tank** | |
|---|---|---|
| Type: Drilling X ☐ Production ☐ Disposal ☐<br>Workover ☐ Emergency ☐<br>Lined X ☐ Unlined ☐<br>Liner type: Synthetic ☐ Thickness ____mil Clay ☐<br>Pit Volume ____bbl | Volume: ____bbl Type of fluid: _____<br>Construction material: _____<br>Double-walled, with leak detection? Yes ☐ If not, explain why not. | |
| Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) **56.08 ft.** | Less than 50 feet<br>50 feet or more, but less than 100 feet<br>100 feet or more | (20 points) X<br>(10 points)<br>( 0 points) |
| Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.) | Yes<br>No | (20 points)<br>( 0 points) X |
| [illegible]tance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.) | Less than 200 feet<br>200 feet or more, but less than 1000 feet<br>1000 feet or more | (20 points)<br>(10 points)<br>( 0 points) X |
| | **Ranking Score (Total Points)** | 20 points |

**If this is a pit closure:** (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if your are burying in place) onsite ☐ offsite X If offsite, name of facility Sundance Disposal3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No X ☐ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results.
(5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: **Drilling Pit Closure Report**: Pit contents were excavated and hauled to an NMOCD approved disposal site. Grab samples were then drawn from 5 points on the bottom of the pit to assure that there was no contamination of the pit bottom. The samples were taken to a properly certified laboratory for analysis.
On 12-27-06 Mr. Robert Spangler (Elke Env.)and Chris Williams (NMOCD) agreed that Apache would be allowed to remove contaminated soil to a level of 4 ft. BGS, then backfill with clean soil. The impacted area will be reseeded when seasonally practical.

Start Date: 12-14-06 Finish Date 1-2-07

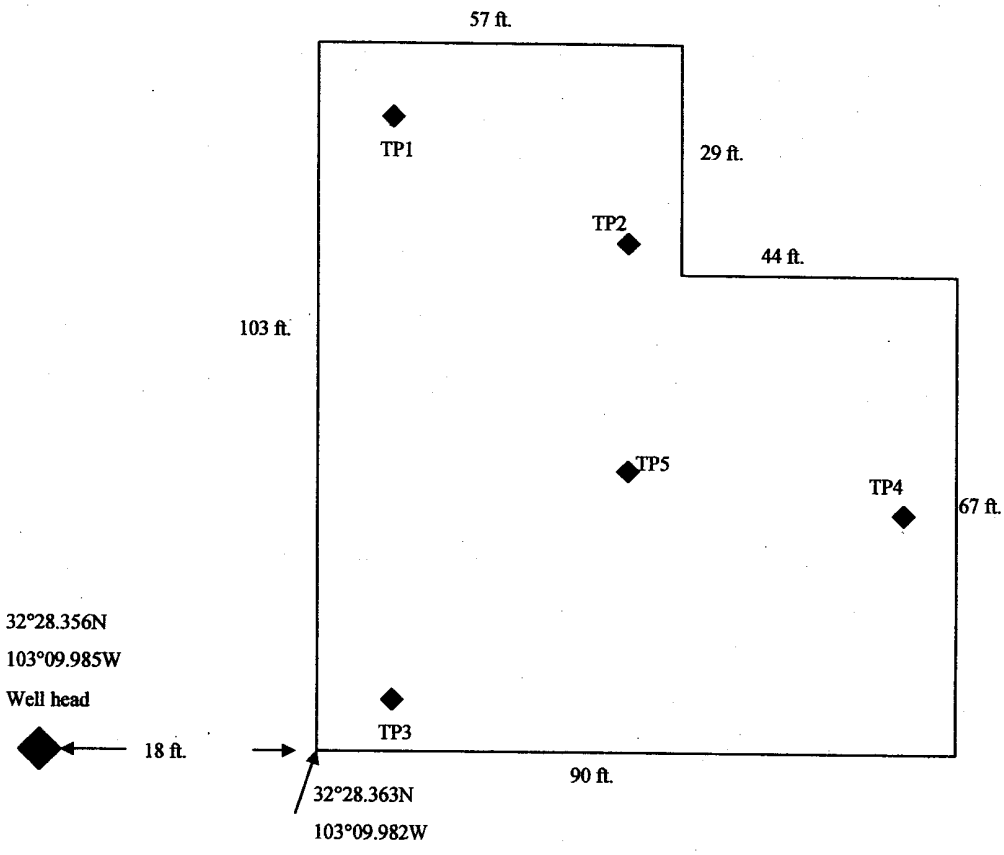
I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines X a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**
Date 1-12-07 elkeenv@yahoo.com 432-366-0043
Printed Name/Title C. H. Kerby/ Agent Signature C. H. Kerby - Elke Environmental
Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Printed Name/Title L JOHNSON - ENVIRO ENGR Signature [signature] Date: 2.19.07

# Apache Corp. State Land 15 #13 Reserve Pit

## Sample and Pit Location Data

## 12-27 -06



# Apache Corp. State Land 15 #12 Sample Chart

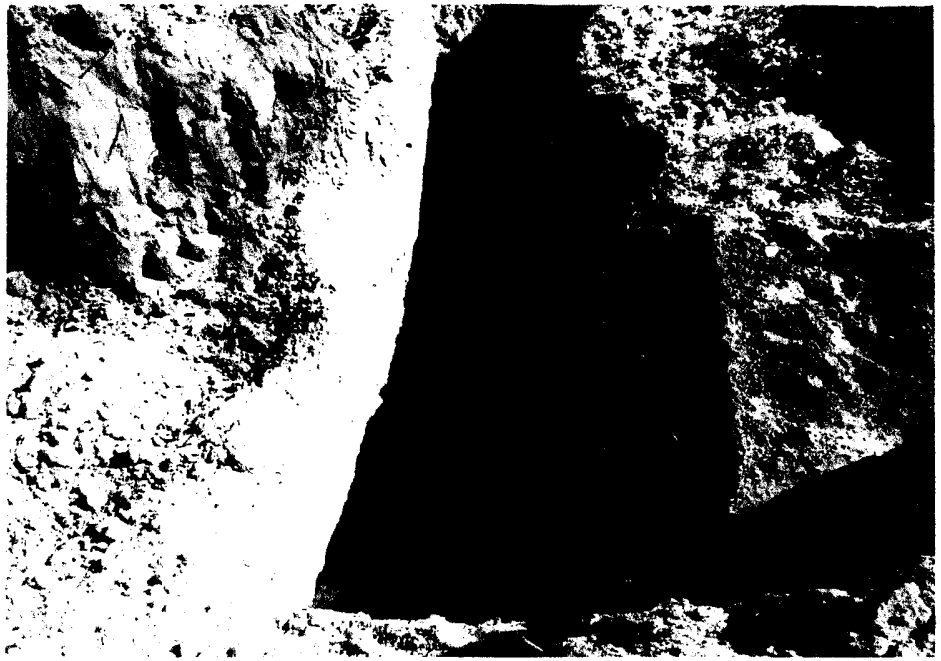
| Field Results | | | | | Lab Results | |
|---|---|---|---|---|---|---|
| Sample Location | Date | Depth | Chlorides (ppm) | GPS | Chlorides (ppm) | TPH 8015M (ppm) |
| TP1 | 12/27/06 | 6 ft. | 3,800 | 32°28.369N | | |
| | | 8 ft. | 3,170 | 103°09.990W | | |
| | | 10 ft. | 603 | | | |
| | | 12 ft. | 303 | | | |
| | | 14 ft. | 489 | | | |
| | | 16 ft. | 436 | | | |
| | | 20 ft. | 381 | | | |
| | | 22 ft. | 260 | | | |
| | | 24 ft. | 182 | | | |
| | | 26 ft. | 152 | | 266 | 55.8 |
| TP2 | 12/27/2006 | 6 ft. | 1,128 | 32°28.372N | | |
| | | 8 ft. | 422 | 103°09.982W | | |
| | | 10 ft. | 247 | | | |
| | | 12 ft. | 173 | | 308 | ND |
| TP3 | 12/27/2006 | 6 ft. | 4,158 | 32°28.357N | | |
| | | 8 ft. | 89 | 103°09.985W | | |
| | | 10 ft. | 516 | | | |
| | | 12 ft. | 65 | | 74.4 | ND |
| | | | | | | |
| TP4 | 12/27/2006 | 6 ft. | 60 | 32°28.366N | | |
| | | 8 ft. | 29 | 103°09.973W | ND | ND |
| TP5 | 12/27/2006 | 6 ft. | 1,128 | 32°28.363N | | |
| | | 8 ft. | 1,164 | 103°09.982W | | |
| | | 10 ft. | 1,006 | | | |
| | | 12 ft. | 1,447 | | | |
| | | 14 ft. | 1,384 | | | |
| | | 16 ft. | 1,162 | | | |
| | | 18 ft. | 956 | | | |
| | | 20 ft. | 485 | | | |
| | | 22 ft. | 144 | | | |
| | | 24 ft. | 119 | | 479 | ND |
| | | | | | | |

Reserve pit before mixing

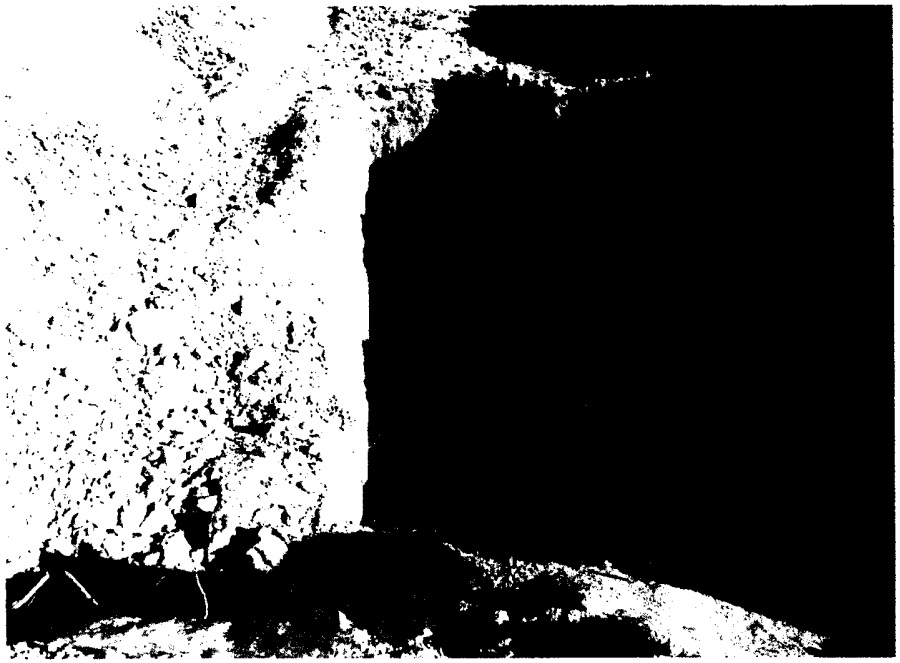

Mixing mud

Mud ready to be hauled

Loading mud



Test hole #1



Test hole #2

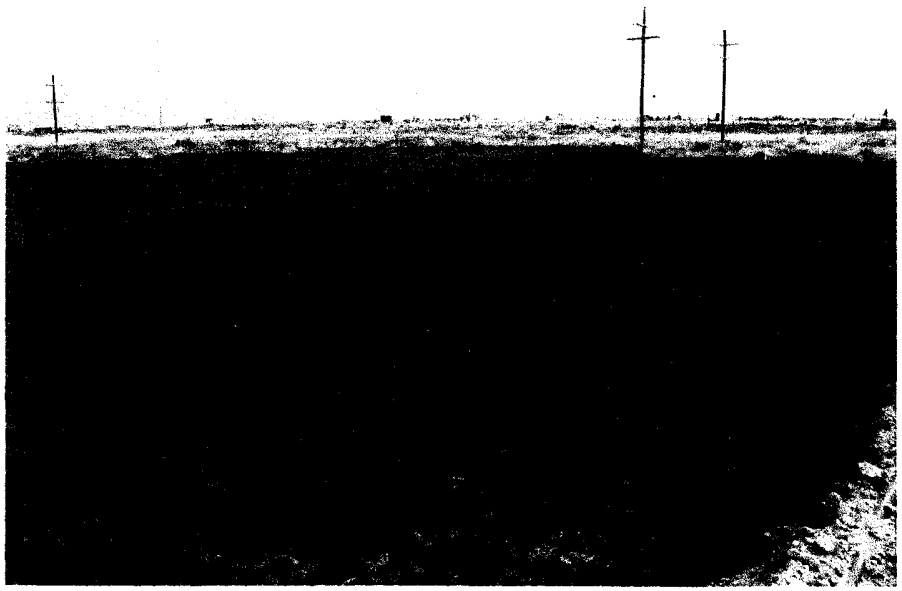
Test hole #3

Test hole #4

Test hole #5

20 mil liner capping reserve pit

Location after backfilling



Location after backfilling

ENVIRONMENTAL LAB OF

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# Analytical Report

**Prepared for:**

Robert Spangler

Elke Environmental

P.O. Box 14167

Odessa, TX 79768

Project: Apache

Project Number: State Land 15 #13

Location: None Given

Lab Order Number: 6L27005

Report Date: 12/31/06

Elke Environmental
P.O. Box 14167
Odessa TX, 79768

Project: Apache
Project Number: State Land 15 #13
Project Manager: Robert Spangler

Fax: (432) 366-0884

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| TP1 @ 26' | 6L27005-01 | Soil | 12/21/06 10:20 | 12-26-2006 14:26 |
| TP2 @ 12' | 6L27005-02 | Soil | 12/21/06 14:30 | 12-26-2006 14:26 |
| TP3 @ 12' | 6L27005-03 | Soil | 12/21/06 11:00 | 12-26-2006 14:26 |
| TP4 @ 8' | 6L27005-04 | Soil | 12/21/06 12:00 | 12-26-2006 14:26 |
| TP5 @ 24' | 6L27005-05 | Soil | 12/21/06 15:00 | 12-26-2006 14:26 |

| | | |
|---|---|---|
| Elke Environmental<br>P.O. Box 14167<br>Odessa TX, 79768 | Project: Apache<br>Project Number: State Land 15 #13<br>Project Manager: Robert Spangler | Fax: (432) 366-0884 |

## Organics by GC

## Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **TP1 @ 26' (6L27005-01) Soil** | | | | | | | | | |
| Carbon Ranges C6-C12 | ND | 10.0 | mg/kg dry | 1 | EL62709 | 12/27/06 | 12/28/06 | EPA 8015M | |
| **Carbon Ranges C12-C28** | **55.8** | 10.0 | " | " | " | " | " | " | |
| Carbon Ranges C28-C35 | ND | 10.0 | " | " | " | " | " | " | |
| **Total Hydrocarbons** | **55.8** | 10.0 | " | " | " | " | " | " | |
| *Surrogate: 1-Chlorooctane* | | *96.4 %* | *70-130* | | " | " | " | " | |
| *Surrogate: 1-Chlorooctadecane* | | *113 %* | *70-130* | | " | " | " | " | |
| **TP2 @ 12' (6L27005-02) Soil** | | | | | | | | | |
| Carbon Ranges C6-C12 | ND | 10.0 | mg/kg dry | 1 | EL62709 | 12/27/06 | 12/28/06 | EPA 8015M | |
| Carbon Ranges C12-C28 | ND | 10.0 | " | " | " | " | " | " | |
| Carbon Ranges C28-C35 | ND | 10.0 | " | " | " | " | " | " | |
| Total Hydrocarbons | ND | 10.0 | " | " | " | " | " | " | |
| *Surrogate: 1-Chlorooctane* | | *103 %* | *70-130* | | " | " | " | " | |
| *Surrogate: 1-Chlorooctadecane* | | *117 %* | *70-130* | | " | " | " | " | |
| **TP3 @ 12' (6L27005-03) Soil** | | | | | | | | | |
| Carbon Ranges C6-C12 | ND | 10.0 | mg/kg dry | 1 | EL62709 | 12/27/06 | 12/28/06 | EPA 8015M | |
| Carbon Ranges C12-C28 | ND | 10.0 | " | " | " | " | " | " | |
| Carbon Ranges C28-C35 | ND | 10.0 | " | " | " | " | " | " | |
| Total Hydrocarbons | ND | 10.0 | " | " | " | " | " | " | |
| *Surrogate: 1-Chlorooctane* | | *70.3 %* | *70-130* | | " | " | " | " | |
| *Surrogate: 1-Chlorooctadecane* | | *82.2 %* | *70-130* | | " | " | " | " | |
| **TP4 @ 8' (6L27005-04) Soil** | | | | | | | | | |
| Carbon Ranges C6-C12 | ND | 10.0 | mg/kg dry | 1 | EL62709 | 12/27/06 | 12/28/06 | EPA 8015M | |
| Carbon Ranges C12-C28 | ND | 10.0 | " | " | " | " | " | " | |
| Carbon Ranges C28-C35 | ND | 10.0 | " | " | " | " | " | " | |
| Total Hydrocarbons | ND | 10.0 | " | " | " | " | " | " | |
| *Surrogate: 1-Chlorooctane* | | *120 %* | *70-130* | | " | " | " | " | |
| *Surrogate: 1-Chlorooctadecane* | | *130 %* | *70-130* | | " | " | " | " | |







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| | | |
|---|---|---|
| Elke Environmental | Project: Apache | Fax: (432) 366-0884 |
| P.O. Box 14167 | Project Number: State Land 15 #13 | |
| Odessa TX, 79768 | Project Manager: Robert Spangler | |

## Organics by GC

## Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **TP5 @ 24' (6L27005-05) Soil** | | | | | | | | | |
| Carbon Ranges C6-C12 | ND | 10.0 | mg/kg dry | 1 | EL62709 | 12/27/06 | 12/28/06 | EPA 8015M | |
| Carbon Ranges C12-C28 | ND | 10.0 | " | " | " | " | " | " | |
| Carbon Ranges C28-C35 | ND | 10.0 | " | " | " | " | " | " | |
| Total Hydrocarbons | ND | 10.0 | " | " | " | " | " | " | |
| *Surrogate: 1-Chlorooctane* | | *113 %* | *70-130* | | " | " | " | " | |
| *Surrogate: 1-Chlorooctadecane* | | *129 %* | *70-130* | | " | " | " | " | |







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Elke Environmental
P.O. Box 14167
Odessa TX, 79768

Project: Apache
Project Number: State Land 15 #13
Project Manager: Robert Spangler

Fax: (432) 366-0884

## General Chemistry Parameters by EPA / Standard Methods

## Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **TP1 @ 26' (6L27005-01) Soil** | | | | | | | | | |
| **Chloride** | **266** | 20.0 | mg/kg Wet | 2 | EL62706 | 12/27/06 | 12/27/06 | SW 846 9253 | |
| **% Moisture** | **6.1** | 0.1 | % | 1 | EL62803 | 12/27/06 | 12/28/06 | % calculation | |
| **TP2 @ 12' (6L27005-02) Soil** | | | | | | | | | |
| **Chloride** | **308** | 20.0 | mg/kg Wet | 2 | EL62706 | 12/27/06 | 12/27/06 | SW 846 9253 | |
| **% Moisture** | **14.7** | 0.1 | % | 1 | EL62803 | 12/27/06 | 12/28/06 | % calculation | |
| **TP3 @ 12' (6L27005-03) Soil** | | | | | | | | | |
| **Chloride** | **74.4** | 20.0 | mg/kg Wet | 2 | EL62706 | 12/27/06 | 12/27/06 | SW 846 9253 | |
| **% Moisture** | **6.3** | 0.1 | % | 1 | EL62803 | 12/27/06 | 12/28/06 | % calculation | |
| **TP4 @ 8' (6L27005-04) Soil** | | | | | | | | | |
| **Chloride** | **ND** | 20.0 | mg/kg Wet | 2 | EL62706 | 12/27/06 | 12/27/06 | SW 846 9253 | |
| **% Moisture** | **7.5** | 0.1 | % | 1 | EL62803 | 12/27/06 | 12/28/06 | % calculation | |
| **TP5 @ 24' (6L27005-05) Soil** | | | | | | | | | |
| **Chloride** | **479** | 20.0 | mg/kg Wet | 2 | EL62706 | 12/27/06 | 12/27/06 | SW 846 9253 | |
| **% Moisture** | **12.8** | 0.1 | % | 1 | EL62803 | 12/27/06 | 12/28/06 | % calculation | |







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Project: Apache
Project Number: State Land 15 #13
Project Manager: Robert Spangler

Fax: (432) 366-0884

## Organics by GC - Quality Control
## Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch EL62709 - Solvent Extraction (GC)** | | | | | | | | | | |
| **Blank (EL62709-BLK1)** | | | | Prepared: 12/27/06 Analyzed: 12/28/06 | | | | | | |
| Carbon Ranges C6-C12 | ND | 10.0 | mg/kg wet | | | | | | | |
| Carbon Ranges C12-C28 | ND | 10.0 | " | | | | | | | |
| Carbon Ranges C28-C35 | ND | 10.0 | " | | | | | | | |
| Total Hydrocarbons | ND | 10.0 | " | | | | | | | |
| *Surrogate: 1-Chlorooctane* | *47.4* | | *mg/kg* | *50.0* | | *94.8* | *70-130* | | | |
| *Surrogate: 1-Chlorooctadecane* | *56.2* | | *"* | *50.0* | | *112* | *70-130* | | | |
| **LCS (EL62709-BS1)** | | | | Prepared: 12/27/06 Analyzed: 12/28/06 | | | | | | |
| Carbon Ranges C6-C12 | 548 | 10.0 | mg/kg wet | 500 | | 110 | 75-125 | | | |
| Carbon Ranges C12-C28 | 455 | 10.0 | " | 500 | | 91.0 | 75-125 | | | |
| Carbon Ranges C28-C35 | ND | 10.0 | " | 0.00 | | | 75-125 | | | |
| Total Hydrocarbons | 1000 | 10.0 | " | 1000 | | 100 | 75-125 | | | |
| *Surrogate: 1-Chlorooctane* | *53.7* | | *mg/kg* | *50.0* | | *107* | *70-130* | | | |
| *Surrogate: 1-Chlorooctadecane* | *60.3* | | *"* | *50.0* | | *121* | *70-130* | | | |
| **Calibration Check (EL62709-CCV1)** | | | | Prepared: 12/27/06 Analyzed: 12/28/06 | | | | | | |
| Carbon Ranges C6-C12 | 231 | | mg/kg | 250 | | 92.4 | 80-120 | | | |
| Carbon Ranges C12-C28 | 273 | | " | 250 | | 109 | 80-120 | | | |
| Total Hydrocarbons | 504 | | " | 500 | | 101 | 80-120 | | | |
| *Surrogate: 1-Chlorooctane* | *59.5* | | *"* | *50.0* | | *119* | *70-130* | | | |
| *Surrogate: 1-Chlorooctadecane* | *63.6* | | *"* | *50.0* | | *127* | *70-130* | | | |
| **Matrix Spike (EL62709-MS1)** | **Source: 6L27005-01** | | | Prepared: 12/27/06 Analyzed: 12/28/06 | | | | | | |
| Carbon Ranges C6-C12 | 567 | 10.0 | mg/kg dry | 532 | ND | 107 | 75-125 | | | |
| Carbon Ranges C12-C28 | 493 | 10.0 | " | 532 | 55.8 | 82.2 | 75-125 | | | |
| Carbon Ranges C28-C35 | ND | 10.0 | " | 0.00 | ND | | 75-125 | | | |
| Total Hydrocarbons | 1060 | 10.0 | " | 1060 | 55.8 | 94.7 | 75-125 | | | |
| *Surrogate: 1-Chlorooctane* | *55.2* | | *mg/kg* | *50.0* | | *110* | *70-130* | | | |
| *Surrogate: 1-Chlorooctadecane* | *47.5* | | *"* | *50.0* | | *95.0* | *70-130* | | | |

Elke Environmental
P.O. Box 14167
Odessa TX, 79768

Project: Apache
Project Number: State Land 15 #13
Project Manager: Robert Spangler

Fax: (432) 366-0884

## Organics by GC - Quality Control

## Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch EL62709 - Solvent Extraction (GC)** | | | | | | | | | | |
| **Matrix Spike Dup (EL62709-MSD1)** | **Source: 6L27005-01** | | | Prepared: 12/27/06 Analyzed: 12/28/06 | | | | | | |
| Carbon Ranges C6-C12 | 584 | 10.0 | mg/kg dry | 532 | ND | 110 | 75-125 | 2.76 | 20 | |
| Carbon Ranges C12-C28 | 488 | 10.0 | " | 532 | 55.8 | 81.2 | 75-125 | 1.22 | 20 | |
| Carbon Ranges C28-C35 | ND | 10.0 | " | 0.00 | ND | | 75-125 | | 20 | |
| Total Hydrocarbons | 1070 | 10.0 | " | 1060 | 55.8 | 95.7 | 75-125 | 1.05 | 20 | |
| *Surrogate: 1-Chlorooctane* | *56.0* | | *mg/kg* | *50.0* | | *112* | *70-130* | | | |
| *Surrogate: 1-Chlorooctadecane* | *48.2* | | *"* | *50.0* | | *96.4* | *70-130* | | | |

| | | |
|---|---|---|
| Elke Environmental | Project: Apache | Fax: (432) 366-0884 |
| P.O. Box 14167 | Project Number: State Land 15 #13 | |
| Odessa TX, 79768 | Project Manager: Robert Spangler | |

## General Chemistry Parameters by EPA / Standard Methods - Quality Control

## Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch EL62706 - EPA 1312/9253** | | | | | | | | | | |
| **Blank (EL62706-BLK1)** | | | | Prepared & Analyzed: 12/27/06 | | | | | | |
| Chloride | ND | 10.0 | mg/kg Wet | | | | | | | |
| **LCS (EL62706-BS1)** | | | | Prepared & Analyzed: 12/27/06 | | | | | | |
| Chloride | 93.6 | 5.00 | mg/kg Wet | 100 | | 93.6 | 80-120 | | | |
| **Matrix Spike (EL62706-MS1)** | | Source: 6L27005-03 | | Prepared & Analyzed: 12/27/06 | | | | | | |
| Chloride | 532 | 20.0 | mg/kg Wet | 500 | 74.4 | 91.5 | 80-120 | | | |
| **Matrix Spike Dup (EL62706-MSD1)** | | Source: 6L27005-03 | | Prepared & Analyzed: 12/27/06 | | | | | | |
| Chloride | 532 | 20.0 | mg/kg Wet | 500 | 74.4 | 91.5 | 80-120 | 0.00 | 20 | |
| **Reference (EL62706-SRM1)** | | | | Prepared & Analyzed: 12/27/06 | | | | | | |
| Chloride | 53.2 | | mg/kg | 50.0 | | 106 | 80-120 | | | |
| **Batch EL62803 - General Preparation (Prep)** | | | | | | | | | | |
| **Blank (EL62803-BLK1)** | | | | Prepared: 12/27/06 Analyzed: 12/28/06 | | | | | | |
| % Solids | 100 | | % | | | | | | | |
| **Duplicate (EL62803-DUP1)** | | Source: 6L27003-01 | | Prepared: 12/27/06 Analyzed: 12/28/06 | | | | | | |
| % Solids | 95.7 | | % | | 95.9 | | | 0.209 | 20 | |
| **Duplicate (EL62803-DUP2)** | | Source: 6L27010-01 | | Prepared: 12/27/06 Analyzed: 12/28/06 | | | | | | |
| % Solids | 87.0 | | % | | 87.1 | | | 0.115 | 20 | |
| **Duplicate (EL62803-DUP3)** | | Source: 6L27023-01 | | Prepared: 12/27/06 Analyzed: 12/28/06 | | | | | | |
| % Solids | 80.9 | | % | | 82.0 | | | 1.35 | 20 | |







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Elke Environmental
P.O. Box 14167
Odessa TX, 79768

Project: Apache
Project Number: State Land 15 #13
Project Manager: Robert Spangler

Fax: (432) 366-0884

## Notes and Definitions

| | |
|---|---|
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |
| LCS | Laboratory Control Spike |
| MS | Matrix Spike |
| Dup | Duplicate |

Report Approved By: Raland K Tuttle Date: 12/31/2006

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
LaTasha Cornish, Chemist
Sandra Sanchez, Lab Tech.









12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

# Environmental Lab of Texas

**CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST**

12800 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Robert Spangler
Company Name: Elke Environmental, Inc.
Company Address: 4817 Andrews Hwy
City/State/Zip: Odessa, TX 79762
Telephone No: 432-366-0843 Fax No: 432-366-0884
Sampler Signature: [signature]

Project Name: Apache
Project #: State Land 15 #13
Project Loc:
PO #:
Report Format: ☑ Standard ☐ TRRP ☐ NPDES
e-mail: elkeenv@yahoo.com

(lab use only)
ORDER #: 6L27005

| LAB # (lab use only) | FIELD CODE | Beginning Depth | Ending Depth | Date Sampled | Time Sampled | No. of Containers | Preservation & # of Containers: Ice | $HNO_3$ | HCl | $H_2SO_4$ | NaOH | $Na_2S_2O_3$ | None | Other (Specify) | Matrix: DW=Drinking Water SL=Sludge | GW = Groundwater S=Soil/Solid | NP=Non-Potable Specify Other | Analyze For: TCLP: TOTAL: TPH: 418.1 (8015) 1005 1006 | Cations (Ca, Mg, Na, K) | Anions (Cl, SO4, CO3, HCO3) | SAR / ESP / CEC | Metals: As Ag Ba Cd Cr Pb Hg Se | Volatiles | Semivolatiles | BTEX 8021B/5030 or BTEX 8260 | RCI | N.O.R.M. | RUSH TAT (Pre-Scheduled) 24, 48, 72 hrs | Standard TAT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -01 | TP1 @ 26' | | 26' | 12-21-06 | 10:20 AM | 1 | 1 | | | | | | | | S | | | 1 | | 1 | | | | | | | | | | 1 |
| -02 | TP2 @ 12' | | 12' | 12-21-06 | 2:30 PM | 1 | 1 | | | | | | | | S | | | 1 | | 1 | | | | | | | | | | 1 |
| -03 | TP3 @ 12' | | 12' | 12-21-06 | 11:00 AM | 1 | 1 | | | | | | | | S | | | 1 | | 1 | | | | | | | | | | 1 |
| -04 | TP4 @ 8' | | 8' | 12-21-06 | 12:00 PM | 1 | 1 | | | | | | | | S | | | 1 | | 1 | | | | | | | | | | 1 |
| -05 | TP5 @ 24' | | 24' | 12-21-06 | 3:00 PM | 1 | 1 | | | | | | | | S | | | 1 | | 1 | | | | | | | | | | 1 |

Special Instructions:
Please Email Results to ELKEENV@Yahoo.com

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| [signature] | 12-26-06 | 7:00A | [signature] | 12-26-06 | 7:00A |
| [signature] | 12-26-06 | 2:26P | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by ELOT: | Date | Time |
| | | | [signature] | 12-26-06 | 1426 |

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered Y N
by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 1.0 °C

# Environmental Lab of Texas

## Variance/ Corrective Action Report- Sample Log-In

Client: Elke Environmental

Date/ Time: 12-26-06 @ 1426

Lab ID #: 6L27005

Initials: JnM

### Sample Receipt Checklist

| | | | | | Client Initials |
|---|---|---|---|---|---|
| #1 | Temperature of container/ cooler? | (Yes) | No | I.D °C | |
| #2 | Shipping container in good condition? | (Yes) | No | | |
| #3 | Custody Seals intact on shipping container/ cooler? | (Yes) | No | Not Present | |
| #4 | Custody Seals intact on sample bottles/ container? | (Yes) | No | Not Present | |
| #5 | Chain of Custody present? | (Yes) | No | | |
| #6 | Sample instructions complete of Chain of Custody? | (Yes) | No | | |
| #7 | Chain of Custody signed when relinquished/ received? | (Yes) | No | | |
| #8 | Chain of Custody agrees with sample label(s)? | (Yes) | No | ID written on Cont./ Lid | |
| #9 | Container label(s) legible and intact? | (Yes) | No | Not Applicable | |
| #10 | Sample matrix/ properties agree with Chain of Custody? | (Yes) | No | | |
| #11 | Containers supplied by ELOT? | (Yes) | No | | |
| #12 | Samples in proper container/ bottle? | (Yes) | No | See Below | |
| #13 | Samples properly preserved? | (Yes) | No | See Below | |
| #14 | Sample bottles intact? | (Yes) | No | | |
| #15 | Preservations documented on Chain of Custody? | (Yes) | No | | |
| #16 | Containers documented on Chain of Custody? | (Yes) | No | | |
| #17 | Sufficient sample amount for indicated test(s)? | (Yes) | No | See Below | |
| #18 | All samples received within sufficient hold time? | (Yes) | No | See Below | |
| #19 | Subcontract of sample(s)? | Yes | No | (Not Applicable) | |
| #20 | VOC samples have zero headspace? | (Yes) | No | Not Applicable | |

### Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-144
June 1, 2004

**For drilling and production facilities**, submit to appropriate NMOCD District Office.
**For downstream facilities**, submit to Santa Fe office

# Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No X
Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank X

Operator: Apache Corporation Telephone: 432-527-3311 e-mail address: harold.swain@usa.apachecorp.com
Address: P. O. Box 848 Wink, Tx. 79789
Facility or well name: State Land 15 Well #13 API #: 30-025-37482 U/L or Qtr/Qtr O Sec 16 T 21S R 37E
County: Lea Latitude Longitude NAD: 1927 ☐ 1983 ☐
Surface Owner: Federal ☐ State X ☐ Private ☐ Indian ☐

| Pit | Below-grade tank | |
|---|---|---|
| Type: Drilling X ☐ Production ☐ Disposal ☐<br>Workover ☐ Emergency ☐<br>Lined X ☐ Unlined ☐<br>Liner type: Synthetic ☐ Thickness ____mil Clay ☐<br>Pit Volume ____bbl | Volume: ____bbl Type of fluid: ____<br>Construction material: ____<br>Double-walled, with leak detection? Yes ☐ If not, explain why not. ____ | |
| Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) 56.08 ft. | Less than 50 feet<br>50 feet or more, but less than 100 feet<br>100 feet or more | (20 points)<br>(10 points)<br>( 0 points) |
| Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.) | Yes<br>No | (20 points)<br>( 0 points) X |
| Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.) | Less than 200 feet<br>200 feet or more, but less than 1000 feet<br>1000 feet or more | (20 points)<br>(10 points)<br>( 0 points) X |
| | Ranking Score (Total Points) | 20 points |

DEC 2006 Received Hobbs OCD

**If this is a pit closure:** (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if your are burying in place) onsite ☐ offsite X If offsite, name of facility Sundance Disposal3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No X ☐ Yes ☐ If yes, show depth below ground surface ____ ft. and attach sample results.
(5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: **Drilling Pit Closure Plan:** Pit contents will be excavated and hauled to an NMOCD approved disposal site. Samples will then be drawn from 5 points on the bottom of the pit to assure that there is no contamination of the pit bottom. The samples will be taken to a properly certified laboratory for analysis.

1. SAMPLES TO BE 'GRAB'
2. VEGETATION TO BE RE-ESTABLISHED WITHIN ONE YEAR.

Expected Start Date: OCD will be notified 48 hours before start of work or any sampling activities Finish Date Unk.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines X a general permit ☐, or an (attached) alternative OCD-approved plan ☐.
Date 11-29-06 elkeenv@yahoo.com 432-366-0043
Printed Name/Title C. H. Kerby/ Agent Signature C. H. Kerby - Elke Environmental

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Printed Name/Title L. JOHNSON - ENV. ENGR Signature Date: 12-4-06