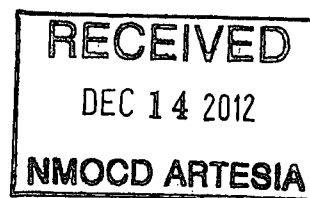




EXPLORING WHAT'S POSSIBLE



# APACHE CORPORATION

P.O.Box 1849  
Eunice, NM 88231  
Phone 575.394.3159

## Loco Federal #007

---

# Closure Report

2RP-1130

API 30-015-36638

Release Date: November 17, 2011

Unit Letter B, Section 21, Township 17S, Range 30E

## Rice Environmental Consulting & Safety

P.O. Box 5630 Hobbs, NM 88241

Phone 575.393.4411 Fax 575.393.0293

**May 25, 2012**

Mike Bratcher

New Mexico Energy, Minerals, & Natural Resources

Oil Conservation Division, Environmental Bureau – District 2

811 S. First St.

Artesia, NM 88210

**RE: TERMINATION REQUEST**

**Apache – Loco Federal #7 AD**

**UL/B sec. 21 T17S R30E**

**API No. 30-015-36638**

**2RP-1130**

Mr. Bratcher:

Apache Corporation has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the site referenced above.

### **Background and Previous Work**

The site is an accidental discharge of produced water associated with the Loco Federal #7. During a workover procedure, the well flowed back and released fluids onto the caliche pad surrounding the wellhead, southeast into a section of pasture, and along a high pressure gas pipeline right-of-way. NMOCD was notified immediately, and an initial form C-141 was submitted by Apache Corporation on November 17, 2011 (Appendix A). The site is located approximately 15 miles east of Carlsbad, in unit letter 'B' of section 21, T17S, R30E in Eddy County, New Mexico.

On November 17, 2011, RECS personnel initiated work at the Loco Federal #7 (Figure 1). Surface soil samples were collected from the site field tested for chloride. Headspace measurements were also taken in the field using a Photo Ionization Detector (PID). The samples were submitted to a commercial laboratory for chloride and TPH (GRO/DRO) analyses (Appendix C). Chloride ranged from 7,600 ppm (parts per million or mg/kg) to 23,600 ppm. TPH (C6-C28) ranged from 21.9 ppm to 3,870 ppm.

The leak area on the well pad was excavated 1.5 ft. to 2 ft. below ground surface (bgs) (Figure 2). On December 12, 2011, RECS personnel collected and field tested representative grab samples from the bottom of the well pad excavation. The samples were submitted to a laboratory for analyses, and yielded a maximum of 192 ppm chloride and <10.0 ppm TPH (Appendix C).

The leak area in the pasture and near the right-of-way was excavated 1 ft. to 4.5 ft. bgs. Excavation of impacted soils in this area remained at a safe working distance from the high pressure gas pipeline located south of the site (Figure 3). On December 16 and 19, 2011, RECS personnel collected and field tested representative grab samples from the walls and bottom of the excavation. The samples were submitted to a laboratory for analyses, and yielded a maximum of 240 ppm chloride and <10.0 ppm TPH (Appendix C).

Impacted soils were removed to a NMOCD approved disposal facility. The excavation on the well pad was backfilled with clean caliche and leveled. The excavation in the pasture was backfilled with clean topsoil and contoured to the surrounding area. See Appendix B for photographs of field activities.

### **Conclusion**

Due to the complete removal of impacted soils while maintaining a safe working distance from the high pressure gas line, Apache submits the final C-141 (Appendix D) and respectfully requests the closure of the regulatory file for this site.

Apache Corporation appreciates the opportunity to work with you on this project. Please call Natalie Gladden (575) 390-4186 if you have any questions or comments.

Sincerely,



Bruce Baker  
Head Foreman  
RECS  
(575) 631-5157

### **Attachments:**

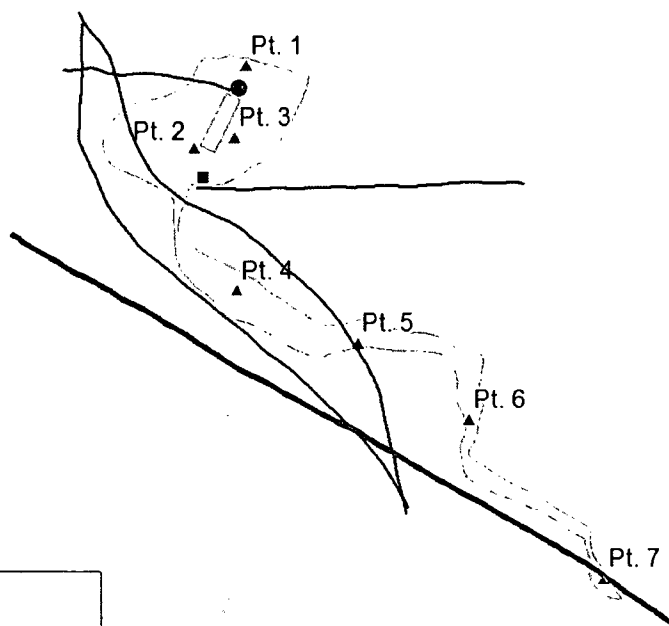
- Figure 1: Site Plat with Initial Sampling Lab Data
- Figure 2: Site Plat with Well Pad Excavation Lab Data
- Figure 3: Site Plat with Pasture Excavation Lab Data
- Appendix A: Initial Form C-141
- Appendix B: Site Photographs
- Appendix C: Laboratory Results
- Appendix D: Final Form C-141



# Figures

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 5630 Hobbs, NM 88241  
Phone 575.393.4411 Fax 575.393.0293

# Site Plat



## Legend

- WELLHEAD
- ▲ SAMPLE POINTS
- ELECTRICAL BOX
- ELECTRICAL LINE
- - - FLOW LINE
- HIGH PRESSURE GAS PIPELINE
- STAIN
- PUMP JACK

## INITIAL SAMPLING LAB DATA

| Sample Description | Cl-    | GRO C6-C10 | DRO C10-C28 | DRO C28-C35 | TPH   |
|--------------------|--------|------------|-------------|-------------|-------|
| PT.1               | 13,200 | 438        | 3,430       | 767         | 3,870 |
| PT.2               | 11,700 | 72.8       | 933         | 241         | 1,010 |
| PT.3               | 16,400 | 208        | 1,680       | 370         | 1,890 |
| PT.4               | 7,600  | 159        | 1,070       | 234         | 1,230 |
| PT.5               | 11,300 | 29         | 670         | 180         | 699   |
| PT.6               | 11,700 | 421        | 3,430       | 788         | 3,860 |
| PT.7               | 23,600 | <10        | 21.9        | 51.4        | 21.9  |



## APACHE LOCO FEDERAL #007

LEGALS: UL/B sec. 21  
T-17-S R-30-E  
EDDY COUNTY, NM

Figure 1



0 30 60 120  
Feet

GPS date: 12/14/11 RP  
Drawing date: 12/20/11  
Drafted by: L. Weinheimer

# Site Plat

## WELL PAD EXCAVATION BOTTOM LAB DATA

| Sample Description    | Cl- | GRO | DRO |
|-----------------------|-----|-----|-----|
| NE Corner Bttm @ 2.5' | 48  | <10 | <10 |
| NW Corner @ 1.5'      | 96  | <10 | <10 |
| SE Corner @ 2.5'      | 192 | <10 | <10 |
| SW Corner @ 2'        | 80  | <10 | <10 |
| Center Bttm @ 2.5'    | 80  | <10 | <10 |

### Legend

- WELLHEAD
- ELECTRICAL LINE
- FLOW LINE
- HIGH PRESSURE GAS PIPELINE
- EXTANT PAD
- STAIN
- PUMP JACK



## APACHE LOCO FEDERAL #007

LEGALS: UL/B sec. 21  
T-17-S R-30-E  
EDDY COUNTY, NM

### Figure 2



0 30 60 120  
Feet

GPS date: 12/14/11 RP  
Drawing date: 12/20/11  
Drafted by: L. Weinheimer

# Site Plat

## PASTURE EXCAVATION WALL LAB DATA

| Sample Description | Cl- | GRO | DRO |
|--------------------|-----|-----|-----|
| N Wall             | 80  | <10 | <10 |
| NW Wall            | <16 | <10 | <10 |
| NE Wall            | 48  | <10 | <10 |
| S Wall             | 16  | <10 | <10 |
| SE Wall            | <16 | <10 | <10 |
| SW Wall            | 144 | <10 | <10 |
| E Wall             | <16 | <10 | <10 |
| W Wall             | <16 | <10 | <10 |

Excavation  
24' x 222' x 1' - 4.5'

## Legend

- WELLHEAD
- ELECTRICAL LINE
- FLOW LINE
- HIGH PRESSURE GAS PIPELINE
- ▭ PASTURE EXCAVATION
- EXTANT PAD
- ▭ STAIN
- ▭ PUMP JACK

## PASTURE EXCAVATION BOTTOM LAB DATA

| Sample Description | Cl- | GRO | DRO |
|--------------------|-----|-----|-----|
| Pt 1 Bottom        | 240 | <10 | <10 |
| Pt 2 Bottom        | 80  | <10 | <10 |
| Pt 3 Bottom        | 32  | <10 | <10 |
| Pt 4 Bottom        | 48  | <10 | <10 |
| Pt 5 Bottom        | 64  | <10 | <10 |



**APACHE LOCO  
FEDERAL #007**

LEGALS: UL/B sec. 21  
T-17-S R-30-E  
EDDY COUNTY, NM

Figure 3



0 30 60 120  
Feet

GPS date: 12/14/11 RP  
Drawing date: 12/20/11  
Drafted by: L. Weinheimer

# Appendix A

Initial Form C-141

**RICE Environmental Consulting and Safety (RECS)**

P.O. Box 5630 Hobbs, NM 88241  
Phone 575.393.4411 Fax 575.393.0293



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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised August 8, 2011

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

**Release Notification and Corrective Action**

**OPERATOR**

☒ Initial Report ☐ Final Report

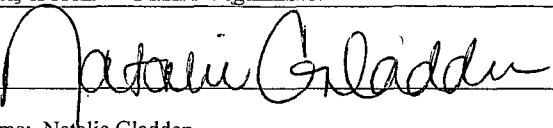
|                                      |                               |                      |
|--------------------------------------|-------------------------------|----------------------|
| Name of Company Apache Corporation   | Contact Natalie Gladden       |                      |
| Address PO Box 1849, Eunice NM 88231 | Telephone No. 575-390-4186    |                      |
| Facility Name Loco Federal #7        | Facility Type Production Well |                      |
| Surface Owner Unknown                | Mineral Owner BLM             | API No. 30-015-36638 |

**LOCATION OF RELEASE**

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| B           | 21      | 17S      | 30E   | 900'          | FNL              | 1650'         | FEL            | Eddy   |

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

**NATURE OF RELEASE**

|  |   |                                     |
|--|---|-------------------------------------|
| Type of Release Brine Water  | Volume of Release 30                      | Volume Recovered 0                  |
| Source of Release Workover/flowback  | Date and Hour of Occurrence 11/17/11      | Date and Hour of Discovery 11/17/11 |
| Was Immediate Notice Given?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required   | If YES, To Whom? Mike Bratcher            |                                     |
| By Whom? Natalie Gladden   | Date and Hour 11/17/11 858am              |                                     |
| Was a Watercourse Reached?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  | If YES, Volume Impacting the Watercourse. |                                     |
| If a Watercourse was Impacted, Describe Fully.*  |   |                                     |
| Describe Cause of Problem and Remedial Action Taken.*<br>While doing a workover procedure to fish out stuck rods and tubing the well flowed back.  |   |                                     |
| Describe Area Affected and Cleanup Action Taken.*<br>Contamination will be excavated and will meet the NMOCD Guidelines to closure.  |   |                                     |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. |   |                                     |
| Signature:    | <b>OIL CONSERVATION DIVISION</b>          |                                     |
| Printed Name: Natalie Gladden  | Approved by Environmental Specialist:     |                                     |
| Title: EHS Environmental Tech  | Approval Date:                            | Expiration Date:                    |
| E-mail Address: natalie.gladden@apachecorp.com   | Conditions of Approval:                   | Attached <input type="checkbox"/>   |
| Date: 11/17/11 Phone: 575-390-4186   |   |                                     |

\* Attach Additional Sheets If Necessary

# Appendix B

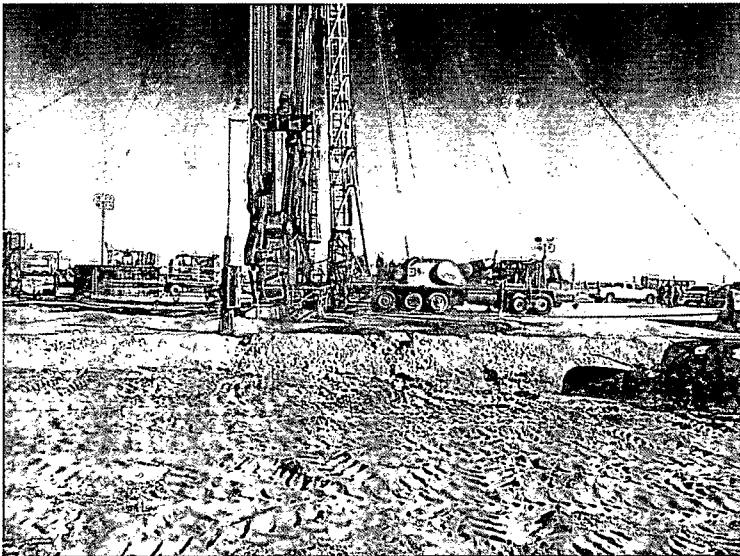
## Site Photographs

**RICE Environmental Consulting and Safety (RECS)**

P.O. Box 5630 Hobbs, NM 88241  
Phone 575.393.4411 Fax 575.393.0293

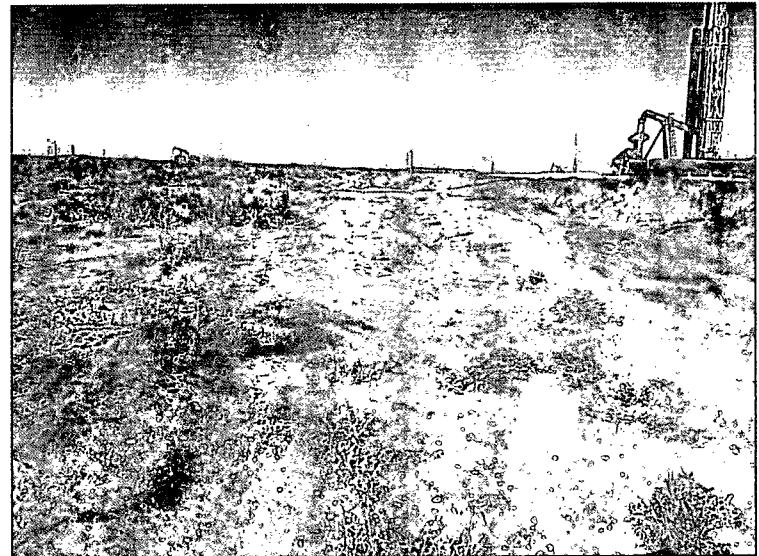
# Apache Loco Federal #007

Unit B, Section 21, T17S, R30E



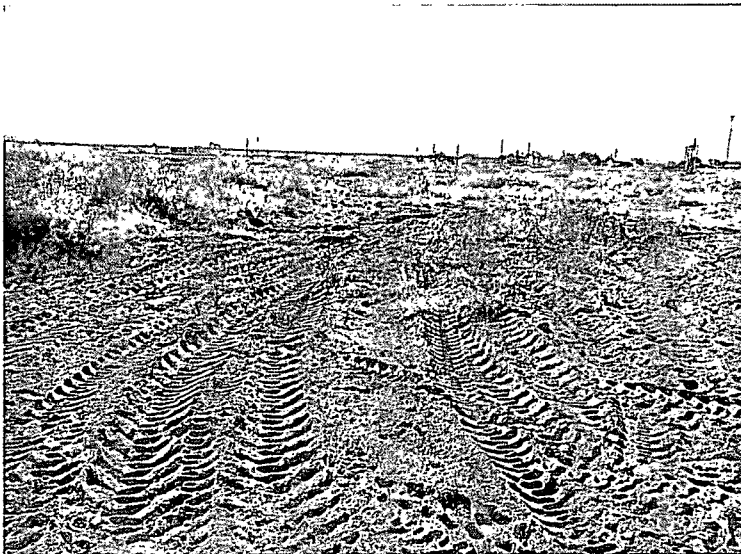
Initial release, facing north

11/17/2011



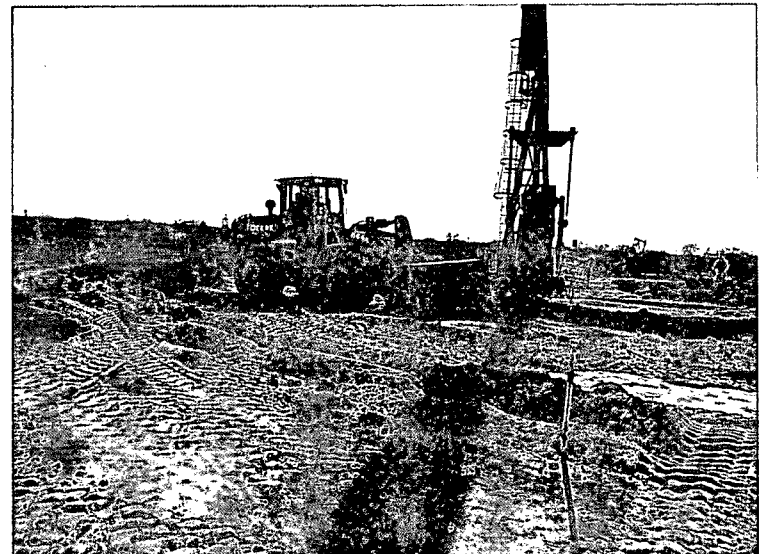
Initial release, facing west

11/17/2011



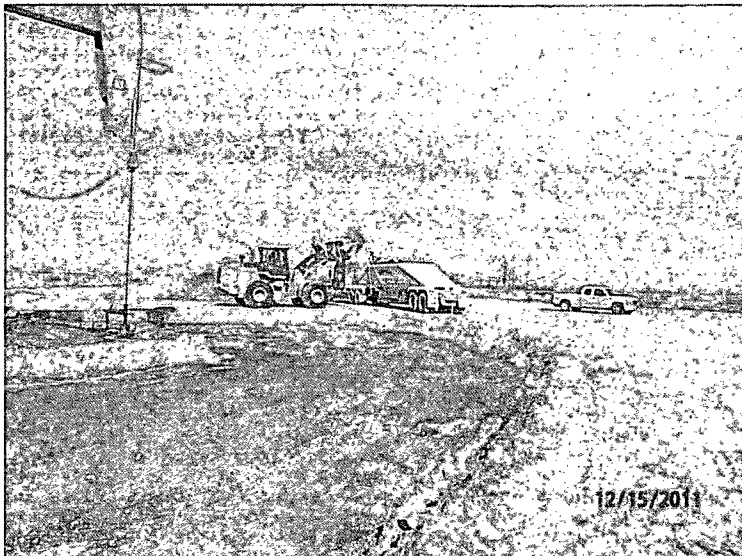
Initial release, facing southeast

11/17/2011



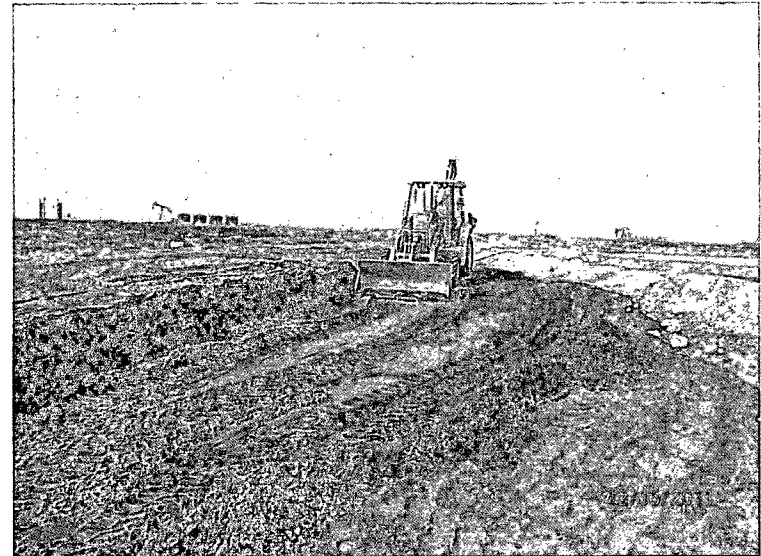
Scraping pad, facing southeast

12/9/2011



Exporting soil, facing northwest

12/15/2011



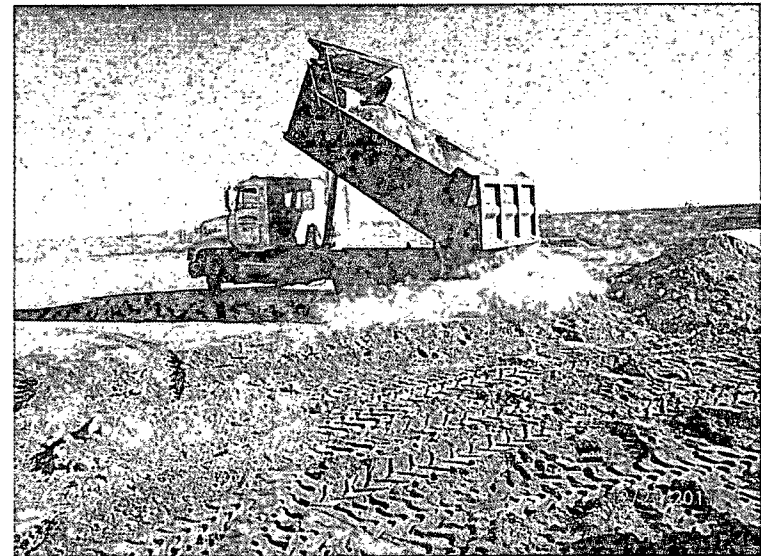
Scraping off pad, facing south

12/16/2011



Excavating off pad, facing east

12/19/2011



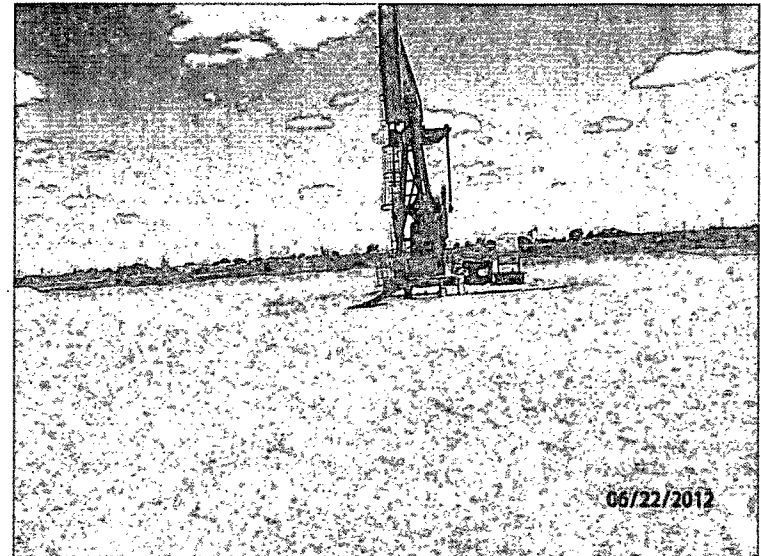
Importing clean caliche, facing south

12/21/2011



Backfilling in pasture, facing west

12/21/2011



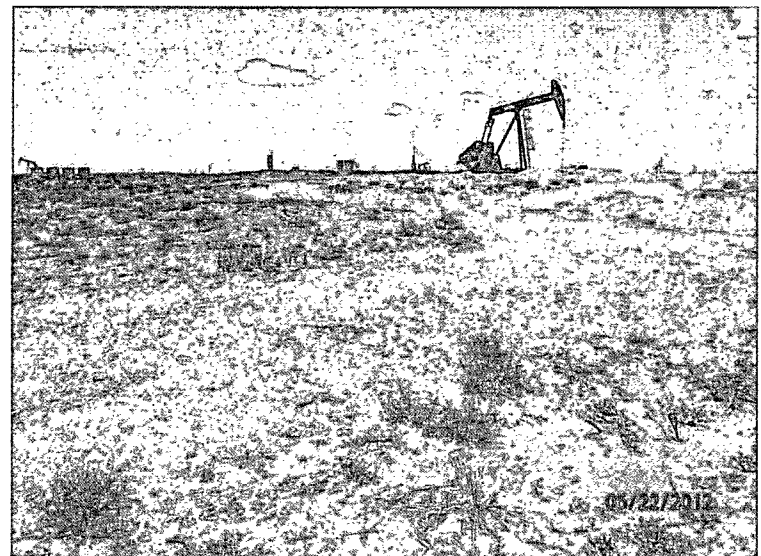
Site complete, facing southeast

6/22/2012



Site complete in pasture, facing east

6/22/2012



Site complete, facing west

6/22/2012





# Appendix C

## Laboratory Results

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 5630 Hobbs, NM 88241  
Phone 575.393.4411 Fax 575.393.0293

**Analytical Results For:**

 APACHE - EUNICE  
 NATALIE GLADDEN  
 P. O. BOX 1849  
 EUNICE NM, 88231  
 Fax To: 394-2425

 Received: 11/17/2011  
 Reported: 11/23/2011  
 Project Name: LOCO FEDERAL #7  
 Project Number: NONE GIVEN  
 Project Location: LOCO HILLS

 Sampling Date: 11/17/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

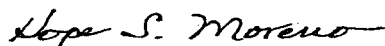
**Sample ID: PT. 1 (H102508-01)**

| Chloride, SM4500Cl-B          |        |                 | mg/kg Analyzed By: AP |              |     |            |               |      |           |  |
|-------------------------------|--------|-----------------|-----------------------|--------------|-----|------------|---------------|------|-----------|--|
| Analyte                       | Result | Reporting Limit | Analyzed              | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride                      | 13200  | 16.0            | 11/21/2011            | ND           | 432 | 108        | 400           | 0.00 |           |  |
| TPH 8015M                     |        |                 | mg/kg Analyzed By: MS |              |     |            |               |      |           |  |
| Analyte                       | Result | Reporting Limit | Analyzed              | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10                    | 438    | 10.0            | 11/19/2011            | ND           | 217 | 108        | 200           | 6.01 |           |  |
| DRO >C10-C28                  | 3430   | 10.0            | 11/19/2011            | ND           | 188 | 94.2       | 200           | 8.91 |           |  |
| EXT DRO >C28-C35              | 767    | 10.0            | 11/19/2011            | ND           |     |            |               |      |           |  |
| Total TPH C6-C28              | 3870   | 10.0            | 11/19/2011            | 10.6         | 405 | 101        | 400           | 7.35 |           |  |
|                               |        |                 |                       |              |     |            |               |      |           |  |
| Surrogate: 1-Chlorooctane     | 135 %  | 55.5-154        |                       |              |     |            |               |      |           |  |
| Surrogate: 1-Chlorooctadecane | 103 %  | 57.6-158        |                       |              |     |            |               |      |           |  |

Cardinal Laboratories

\*=Accredited Analyte

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Hope Moreno, Inorganic Technical Director

**Analytical Results For:**

APACHE - EUNICE  
NATALIE GLADDEN  
P. O. BOX 1849  
EUNICE NM, 88231  
Fax To: 394-2425

Received: 11/17/2011  
Reported: 11/23/2011  
Project Name: LOCO FEDERAL #7  
Project Number: NONE GIVEN  
Project Location: LOCO HILLS

Sampling Date: 11/17/2011  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

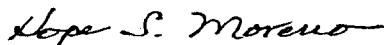
**Sample ID: PT. 2 (H102508-02)**

| Chloride, SM4500Cl-B          |        |                 | mg/kg      |              | Analyzed By: AP |            |               |      |           |
|-------------------------------|--------|-----------------|------------|--------------|-----------------|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 11700  | 16.0            | 11/21/2011 | ND           | 432             | 108        | 400           | 0.00 |           |
| TPH 8015M                     |        |                 | mg/kg      |              | Analyzed By: MS |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | 72.8   | 10.0            | 11/19/2011 | ND           | 217             | 108        | 200           | 6.01 |           |
| DRO >C10-C28                  | 933    | 10.0            | 11/19/2011 | ND           | 188             | 94.2       | 200           | 8.91 |           |
| EXT DRO >C28-C35              | 241    | 10.0            | 11/19/2011 | ND           |                 |            |               |      |           |
| Total TPH C6-C28              | 1010   | 10.0            | 11/19/2011 | 10.6         | 405             | 101        | 400           | 7.35 |           |
| Surrogate: 1-Chlorooctane     |        |                 |            |              |                 |            |               |      |           |
|                               | 87.3 % | 55.5-154        |            |              |                 |            |               |      |           |
| Surrogate: 1-Chlorooctadecane |        |                 |            |              |                 |            |               |      |           |
|                               | 121 %  | 57.6-158        |            |              |                 |            |               |      |           |

Cardinal Laboratories

\*=Accredited Analyte

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Hope Moreno, Inorganic Technical Director



**Analytical Results For:**APACHE - EUNICE  
NATALIE GLADDEN  
P. O. BOX 1849  
EUNICE NM, 88231  
Fax To: 394-2425Received: 11/17/2011  
Reported: 11/23/2011  
Project Name: LOCO FEDERAL #7  
Project Number: NONE GIVEN  
Project Location: LOCO HILLSSampling Date: 11/17/2011  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson**Sample ID: PT. 3 (H102508-03)**

| Chloride, SM4500Cl-B          |              |                 | mg/kg      |              | Analyzed By: AP |            |               |      |           |
|-------------------------------|--------------|-----------------|------------|--------------|-----------------|------------|---------------|------|-----------|
| Analyte                       | Result       | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| <b>Chloride</b>               | <b>16400</b> | 16.0            | 11/21/2011 | ND           | 432             | 108        | 400           | 0.00 |           |
| TPH 8015M                     |              |                 | mg/kg      |              | Analyzed By: MS |            |               |      |           |
| Analyte                       | Result       | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| <b>GRO C6-C10</b>             | <b>208</b>   | 10.0            | 11/19/2011 | ND           | 217             | 108        | 200           | 6.01 |           |
| <b>DRO &gt;C10-C28</b>        | <b>1680</b>  | 10.0            | 11/19/2011 | ND           | 188             | 94.2       | 200           | 8.91 |           |
| <b>EXT DRO &gt;C28-C35</b>    | <b>370</b>   | 10.0            | 11/19/2011 | ND           |                 |            |               |      |           |
| <b>Total TPH C6-C28</b>       | <b>1890</b>  | 10.0            | 11/19/2011 | 10.6         | 405             | 101        | 400           | 7.35 |           |
| <hr/>                         |              |                 |            |              |                 |            |               |      |           |
| Surrogate: 1-Chlorooctane     | 108 %        | 55.5-154        |            |              |                 |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 143 %        | 57.6-158        |            |              |                 |            |               |      |           |

Cardinal Laboratories

\* = Accredited Analyte

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Hope Moreno, Inorganic Technical Director

**Analytical Results For:**

 APACHE - EUNICE  
 NATALIE GLADDEN  
 P. O. BOX 1849  
 EUNICE NM, 88231  
 Fax To: 394-2425

 Received: 11/17/2011  
 Reported: 11/23/2011  
 Project Name: LOCO FEDERAL #7  
 Project Number: NONE GIVEN  
 Project Location: LOCO HILLS

 Sampling Date: 11/17/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

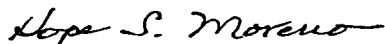
**Sample ID: PT. 4 (H102508-04)**

| Chloride, SM4500Cl-B          |             | mg/kg           | Analyzed By: AP |              |     |            |               |      |           |
|-------------------------------|-------------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result      | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| <b>Chloride</b>               | <b>7600</b> | 16.0            | 11/22/2011      | ND           | 432 | 108        | 400           | 3.64 |           |
| TPH 8015M                     |             | mg/kg           | Analyzed By: MS |              |     |            |               |      |           |
| Analyte                       | Result      | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| <b>GRO C6-C10</b>             | <b>159</b>  | 10.0            | 11/19/2011      | ND           | 217 | 108        | 200           | 6.01 |           |
| <b>DRO &gt;C10-C28</b>        | <b>1070</b> | 10.0            | 11/19/2011      | ND           | 188 | 94.2       | 200           | 8.91 |           |
| <b>EXT DRO &gt;C28-C35</b>    | <b>234</b>  | 10.0            | 11/19/2011      | ND           |     |            |               |      |           |
| <b>Total TPH C6-C28</b>       | <b>1230</b> | 10.0            | 11/19/2011      | 10.6         | 405 | 101        | 400           | 7.35 |           |
| <hr/>                         |             |                 |                 |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctane     | 101 %       | 55.5-154        |                 |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 123 %       | 57.6-158        |                 |              |     |            |               |      |           |

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\*=Accredited Analyte

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Hope Moreno, Inorganic Technical Director

**Analytical Results For:**

APACHE - EUNICE  
NATALIE GLADDEN  
P. O. BOX 1849  
EUNICE NM, 88231  
Fax To: 394-2425

Received: 11/17/2011  
Reported: 11/23/2011  
Project Name: LOCO FEDERAL #7  
Project Number: NONE GIVEN  
Project Location: LOCO HILLS

Sampling Date: 11/17/2011  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: PT. 5 (H102508-05)**

| Chloride, SM4500Cl-B          |              |                 | mg/kg      |              |     |            |               |      |           | Analyzed By: AP |
|-------------------------------|--------------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|-----------------|
| Analyte                       | Result       | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |                 |
| <b>Chloride</b>               | <b>11300</b> | 16.0            | 11/22/2011 | ND           | 432 | 108        | 400           | 3.64 |           |                 |
| TPH 8015M                     |              |                 | mg/kg      |              |     |            |               |      |           | Analyzed By: MS |
| Analyte                       | Result       | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |                 |
| <b>GRO C6-C10</b>             | <b>29.0</b>  | 10.0            | 11/19/2011 | ND           | 217 | 108        | 200           | 6.01 |           |                 |
| <b>DRO &gt;C10-C28</b>        | <b>670</b>   | 10.0            | 11/19/2011 | ND           | 188 | 94.2       | 200           | 8.91 |           |                 |
| <b>EXT DRO &gt;C28-C35</b>    | <b>180</b>   | 10.0            | 11/19/2011 | ND           |     |            |               |      |           |                 |
| <b>Total TPH C6-C28</b>       | <b>699</b>   | 10.0            | 11/19/2011 | 10.6         | 405 | 101        | 400           | 7.35 |           |                 |
| <hr/>                         |              |                 |            |              |     |            |               |      |           |                 |
| Surrogate: 1-Chlorooctane     | 85.4 %       | 55.5-154        |            |              |     |            |               |      |           |                 |
| Surrogate: 1-Chlorooctadecane | 117 %        | 57.6-158        |            |              |     |            |               |      |           |                 |

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Hope Moreno, Inorganic Technical Director


**Analytical Results For:**APACHE - EUNICE  
NATALIE GLADDEN  
P. O. BOX 1849  
EUNICE NM, 88231  
Fax To: 394-2425Received: 11/17/2011  
Reported: 11/23/2011  
Project Name: LOCO FEDERAL #7  
Project Number: NONE GIVEN  
Project Location: LOCO HILLSSampling Date: 11/17/2011  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson**Sample ID: PT. 6 (H102508-06)**

| Chloride, SM4500Cl-B          |              |                 | mg/kg      |              | Analyzed By: AP |            |               |      |           |
|-------------------------------|--------------|-----------------|------------|--------------|-----------------|------------|---------------|------|-----------|
| Analyte                       | Result       | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| <b>Chloride</b>               | <b>11700</b> | 16.0            | 11/22/2011 | ND           | 432             | 108        | 400           | 3.64 |           |
| TPH 8015M                     |              |                 | mg/kg      |              | Analyzed By: MS |            |               |      |           |
| Analyte                       | Result       | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| <b>GRO C6-C10</b>             | <b>421</b>   | 10.0            | 11/19/2011 | ND           | 217             | 108        | 200           | 6.01 |           |
| <b>DRO &gt;C10-C28</b>        | <b>3430</b>  | 10.0            | 11/19/2011 | ND           | 188             | 94.2       | 200           | 8.91 |           |
| <b>EXT DRO &gt;C28-C35</b>    | <b>788</b>   | 10.0            | 11/19/2011 | ND           |                 |            |               |      |           |
| <b>Total TPH C6-C28</b>       | <b>3860</b>  | 10.0            | 11/19/2011 | 10.6         | 405             | 101        | 400           | 7.35 |           |
| <hr/>                         |              |                 |            |              |                 |            |               |      |           |
| Surrogate: 1-Chlorooctane     | 101 %        | 55.5-154        |            |              |                 |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 107 %        | 57.6-158        |            |              |                 |            |               |      |           |

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Hope Moreno, Inorganic Technical Director

**Analytical Results For:**

APACHE - EUNICE  
NATALIE GLADDEN  
P. O. BOX 1849  
EUNICE NM, 88231  
Fax To: 394-2425

Received: 11/17/2011  
Reported: 11/23/2011  
Project Name: LOCO FEDERAL #7  
Project Number: NONE GIVEN  
Project Location: LOCO HILLS

Sampling Date: 11/17/2011  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: PT. 7 (H102508-07)**

| Chloride, SM4500Cl-B          |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |  |
|-------------------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride                      | 23600  | 16.0            | 11/22/2011 | ND              | 432 | 108        | 400           | 3.64 |           |  |
| TPH 8015M                     |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |  |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10                    | <10.0  | 10.0            | 11/19/2011 | ND              | 217 | 108        | 200           | 6.01 |           |  |
| DRO >C10-C28                  | 21.9   | 10.0            | 11/19/2011 | ND              | 188 | 94.2       | 200           | 8.91 |           |  |
| EXT DRO >C28-C35              | 51.4   | 10.0            | 11/19/2011 | ND              |     |            |               |      |           |  |
| Total TPH C6-C28              | 21.9   | 10.0            | 11/19/2011 | 10.6            | 405 | 101        | 400           | 7.35 |           |  |
|                               |        |                 |            |                 |     |            |               |      |           |  |
| Surrogate: 1-Chlorooctane     | 80.7 % | 55.5-154        |            |                 |     |            |               |      |           |  |
| Surrogate: 1-Chlorooctadecane | 104 %  | 57.6-158        |            |                 |     |            |               |      |           |  |

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Hope Moreno, Inorganic Technical Director



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

**Analytical Results For:**

APACHE - EUNICE  
NATALIE GLADDEN  
P. O. BOX 1849  
EUNICE NM, 88231  
Fax To: 394-2425

Received: 12/16/2011  
Reported: 12/21/2011  
Project Name: LOCO FEDERAL #7  
Project Number: NONE GIVEN  
Project Location: LOCO HILLS

Sampling Date: 12/16/2011  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

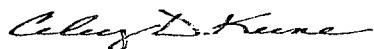
**Sample ID: 5 PT BOTTOM COMP (H102723-01)**

| Chloride, SM4500Cl-B          |        |                 | mg/kg      |              | Analyzed By: AP |            |               |      |           |
|-------------------------------|--------|-----------------|------------|--------------|-----------------|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 512    | 16.0            | 12/20/2011 | ND           | 416             | 104        | 400           | 3.77 |           |
| TPH 8015M                     |        |                 | mg/kg      |              | Analyzed By: MS |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0            | 12/18/2011 | ND           | 206             | 103        | 200           | 2.85 |           |
| DRO >C10-C28                  | 105    | 10.0            | 12/18/2011 | ND           | 181             | 90.3       | 200           | 5.56 |           |
| Surrogate: 1-Chlorooctane     | 84.4 % | 55.5-154        |            |              |                 |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 118 %  | 57.6-158        |            |              |                 |            |               |      |           |

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Celey D. Keene, Lab Director/Quality Manager



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(505) 393-2326 FAX (505) 393-2476

[illegible]

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|  |  |  |  |  |  |
|--|--|--|--|--|--|
| Relinquished By: <i>Robert Barner</i><br>Date: <i>12-1-01</i><br>Time: <i>4:35</i> |  | Received By: <i>Jodi Benson</i><br>Date: _____<br>Time: _____  |  | Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: _____<br>Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #: _____<br>REMARKS: <i>Please Email; Bbaker@rice-ec.com<br/>         zander@rice-ecs.com; Lwinheimer@rice-ec.com<br/>         Harder@rice-slut.com; AlGibben@apachecorp.com</i> |  |
| Relinquished By: _____<br>Date: _____<br>Time: _____                               |  | Received By: _____<br>Date: _____<br>Time: _____   |  | _____<br>_____<br>_____  |  |
| Delivered By: (Circle One)<br><u>Sampler</u> - UPS - Bus - Other:                  |  | Sample Condition<br>Cool Intact<br><i>1.50</i><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No |  | CHECKED BY: <i>[Signature]</i><br>(Initials)   |  |



**Analytical Results For:**

 APACHE - EUNICE  
 NATALIE GLADDEN  
 P. O. BOX 1849  
 EUNICE NM, 88231  
 Fax To: 394-2425

|                   |                 |                     |               |
|-------------------|-----------------|---------------------|---------------|
| Received:         | 12/20/2011      | Sampling Date:      | 12/16/2011    |
| Reported:         | 12/22/2011      | Sampling Type:      | Soil          |
| Project Name:     | LOCO FEDERAL #7 | Sampling Condition: | Cool & Intact |
| Project Number:   | NONE GIVEN      | Sample Received By: | Jodi Henson   |
| Project Location: | LOCO HILLS      |                     |               |

**Sample ID: PT. 1 BOTTOM (H102739-01)**

| Chloride, SM4500Cl-B          |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |
|-------------------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 240    | 16.0            | 12/21/2011 | ND              | 448 | 112        | 400           | 0.00 |           |
| TPH 8015M                     |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0            | 12/21/2011 | ND              | 215 | 107        | 200           | 8.32 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 12/21/2011 | ND              | 208 | 104        | 200           | 11.7 |           |
|                               |        |                 |            |                 |     |            |               |      |           |
| Surrogate: 1-Chlorooctane     | 103 %  | 55.5-154        |            |                 |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 113 %  | 57.6-158        |            |                 |     |            |               |      |           |

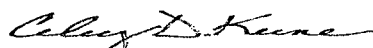
**Sample ID: PT. 2 BOTTOM (H102739-02)**

| Chloride, SM4500Cl-B          |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |
|-------------------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 80.0   | 16.0            | 12/21/2011 | ND              | 448 | 112        | 400           | 0.00 |           |
| TPH 8015M                     |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0            | 12/21/2011 | ND              | 215 | 107        | 200           | 8.32 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 12/21/2011 | ND              | 208 | 104        | 200           | 11.7 |           |
|                               |        |                 |            |                 |     |            |               |      |           |
| Surrogate: 1-Chlorooctane     | 86.1 % | 55.5-154        |            |                 |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 87.8 % | 57.6-158        |            |                 |     |            |               |      |           |

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 APACHE - EUNICE  
 NATALIE GLADDEN  
 P. O. BOX 1849  
 EUNICE NM, 88231  
 Fax To: 394-2425

 Received: 12/20/2011  
 Reported: 12/22/2011  
 Project Name: LOCO FEDERAL #7  
 Project Number: NONE GIVEN  
 Project Location: LOCO HILLS

 Sampling Date: 12/16/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: PT. 3 BOTTOM (H102739-03)**

| Chloride, SM4500Cl-B          |             | mg/kg           | Analyzed By: AP |              |     |            |               |      |           |
|-------------------------------|-------------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result      | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| <b>Chloride</b>               | <b>32.0</b> | 16.0            | 12/21/2011      | ND           | 448 | 112        | 400           | 0.00 |           |
| TPH 8015M                     |             | mg/kg           | Analyzed By: MS |              |     |            |               |      |           |
| Analyte                       | Result      | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0       | 10.0            | 12/21/2011      | ND           | 215 | 107        | 200           | 8.32 |           |
| DRO >C10-C28                  | <10.0       | 10.0            | 12/21/2011      | ND           | 208 | 104        | 200           | 11.7 |           |
| Surrogate: 1-Chlorooctane     |             | 98.4 %          | 55.5-154        |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane |             | 106 %           | 57.6-158        |              |     |            |               |      |           |

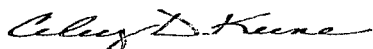
**Sample ID: PT. 4 BOTTOM (H102739-04)**

| Chloride, SM4500Cl-B          |             | mg/kg           | Analyzed By: AP |              |     |            |               |      |           |
|-------------------------------|-------------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result      | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| <b>Chloride</b>               | <b>48.0</b> | 16.0            | 12/21/2011      | ND           | 448 | 112        | 400           | 0.00 |           |
| TPH 8015M                     |             | mg/kg           | Analyzed By: MS |              |     |            |               |      |           |
| Analyte                       | Result      | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0       | 10.0            | 12/21/2011      | ND           | 215 | 107        | 200           | 8.32 |           |
| DRO >C10-C28                  | <10.0       | 10.0            | 12/21/2011      | ND           | 208 | 104        | 200           | 11.7 |           |
| Surrogate: 1-Chlorooctane     |             | 101 %           | 55.5-154        |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane |             | 110 %           | 57.6-158        |              |     |            |               |      |           |

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 APACHE - EUNICE  
 NATALIE GLADDEN  
 P. O. BOX 1849  
 EUNICE NM, 88231  
 Fax To: 394-2425

 Received: 12/20/2011  
 Reported: 12/22/2011  
 Project Name: LOCO FEDERAL #7  
 Project Number: NONE GIVEN  
 Project Location: LOCO HILLS

 Sampling Date: 12/16/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: PT. 5 BOTTOM (H102739-05)**

| Chloride, SM4500Cl-B          |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |
|-------------------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 64.0   | 16.0            | 12/21/2011 | ND              | 448 | 112        | 400           | 0.00 |           |
| TPH 8015M                     |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0            | 12/21/2011 | ND              | 215 | 107        | 200           | 8.32 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 12/21/2011 | ND              | 208 | 104        | 200           | 11.7 |           |
| Surrogate: 1-Chlorooctane     |        | 86.8 %          | 55.5-154   |                 |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane |        | 91.8 %          | 57.6-158   |                 |     |            |               |      |           |

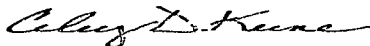
**Sample ID: N WALL (H102739-06)**

| Chloride, SM4500Cl-B          |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |
|-------------------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 80.0   | 16.0            | 12/21/2011 | ND              | 448 | 112        | 400           | 0.00 |           |
| TPH 8015M                     |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0            | 12/21/2011 | ND              | 215 | 107        | 200           | 8.32 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 12/21/2011 | ND              | 208 | 104        | 200           | 11.7 |           |
| Surrogate: 1-Chlorooctane     |        | 111 %           | 55.5-154   |                 |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane |        | 124 %           | 57.6-158   |                 |     |            |               |      |           |

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 APACHE - EUNICE  
 NATALIE GLADDEN  
 P. O. BOX 1849  
 EUNICE NM, 88231  
 Fax To: 394-2425

 Received: 12/20/2011  
 Reported: 12/22/2011  
 Project Name: LOCO FEDERAL #7  
 Project Number: NONE GIVEN  
 Project Location: LOCO HILLS

 Sampling Date: 12/16/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: NW WALL (H102739-07)**

| Chloride, SM4500CI-B          |        |                 | mg/kg      |              | Analyzed By: AP |            |               |      |           |
|-------------------------------|--------|-----------------|------------|--------------|-----------------|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | <16.0  | 16.0            | 12/21/2011 | ND           | 448             | 112        | 400           | 0.00 |           |
| TPH 8015M                     |        |                 | mg/kg      |              | Analyzed By: MS |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0            | 12/21/2011 | ND           | 215             | 107        | 200           | 8.32 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 12/21/2011 | ND           | 208             | 104        | 200           | 11.7 |           |
| Surrogate: 1-Chlorooctane     |        |                 | 101 %      | 55.5-154     |                 |            |               |      |           |
| Surrogate: 1-Chlorooctadecane |        |                 | 111 %      | 57.6-158     |                 |            |               |      |           |

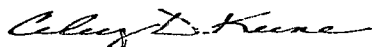
**Sample ID: NE WALL (H102739-08)**

| Chloride, SM4500CI-B          |        |                 | mg/kg      |              | Analyzed By: AP |            |               |      |           |
|-------------------------------|--------|-----------------|------------|--------------|-----------------|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 48.0   | 16.0            | 12/21/2011 | ND           | 448             | 112        | 400           | 0.00 |           |
| TPH 8015M                     |        |                 | mg/kg      |              | Analyzed By: MS |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0            | 12/21/2011 | ND           | 215             | 107        | 200           | 8.32 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 12/21/2011 | ND           | 208             | 104        | 200           | 11.7 |           |
| Surrogate: 1-Chlorooctane     |        |                 | 90.0 %     | 55.5-154     |                 |            |               |      |           |
| Surrogate: 1-Chlorooctadecane |        |                 | 99.2 %     | 57.6-158     |                 |            |               |      |           |

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 APACHE - EUNICE  
 NATALIE GLADDEN  
 P. O. BOX 1849  
 EUNICE NM, 88231  
 Fax To: 394-2425

 Received: 12/20/2011  
 Reported: 12/22/2011  
 Project Name: LOCO FEDERAL #7  
 Project Number: NONE GIVEN  
 Project Location: LOCO HILLS

 Sampling Date: 12/16/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SOUTH WALL (H102739-09)**

| Chloride, SM4500Cl-B          |        |                 | mg/kg      |              | Analyzed By: AP |            |               |      |           |
|-------------------------------|--------|-----------------|------------|--------------|-----------------|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 16.0   | 16.0            | 12/21/2011 | ND           | 448             | 112        | 400           | 0.00 |           |
| TPH 8015M                     |        |                 | mg/kg      |              | Analyzed By: MS |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0            | 12/21/2011 | ND           | 215             | 107        | 200           | 8.32 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 12/21/2011 | ND           | 208             | 104        | 200           | 11.7 |           |
|                               |        |                 |            |              |                 |            |               |      |           |
| Surrogate: 1-Chlorooctane     |        | 100 %           | 55.5-154   |              |                 |            |               |      |           |
| Surrogate: 1-Chlorooctadecane |        | 108 %           | 57.6-158   |              |                 |            |               |      |           |

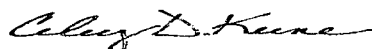
**Sample ID: SE WALL (H102739-10)**

| Chloride, SM4500Cl-B          |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |
|-------------------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | <16.0  | 16.0            | 12/21/2011 | ND              | 448 | 112        | 400           | 0.00 |           |
| TPH 8015M                     |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0            | 12/21/2011 | ND              | 215 | 107        | 200           | 8.32 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 12/21/2011 | ND              | 208 | 104        | 200           | 11.7 |           |
| Surrogate: 1-Chlorooctane     |        | 110 %           | 55.5-154   |                 |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane |        | 125 %           | 57.6-158   |                 |     |            |               |      |           |

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 APACHE - EUNICE  
 NATALIE GLADDEN  
 P. O. BOX 1849  
 EUNICE NM, 88231  
 Fax To: 394-2425

 Received: 12/20/2011  
 Reported: 12/22/2011  
 Project Name: LOCO FEDERAL #7  
 Project Number: NONE GIVEN  
 Project Location: LOCO HILLS

 Sampling Date: 12/16/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SW WALL (H102739-11)**

| Chloride, SM4500Cl-B          |        |                 | mg/kg      |              | Analyzed By: AP |            |               |      |           |  |
|-------------------------------|--------|-----------------|------------|--------------|-----------------|------------|---------------|------|-----------|--|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride                      | 144    | 16.0            | 12/21/2011 | ND           | 448             | 112        | 400           | 0.00 |           |  |
| TPH 8015M                     |        |                 | mg/kg      |              | Analyzed By: MS |            |               |      |           |  |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10                    | <10.0  | 10.0            | 12/21/2011 | ND           | 215             | 107        | 200           | 8.32 |           |  |
| DRO >C10-C28                  | <10.0  | 10.0            | 12/21/2011 | ND           | 208             | 104        | 200           | 11.7 |           |  |
| Surrogate: 1-Chlorooctane     |        |                 | 105 %      | 55.5-154     |                 |            |               |      |           |  |
| Surrogate: 1-Chlorooctadecane |        |                 | 115 %      | 57.6-158     |                 |            |               |      |           |  |

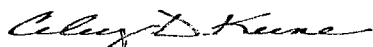
**Sample ID: E WALL (H102739-12)**

| Chloride, SM4500Cl-B          |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |
|-------------------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | <16.0  | 16.0            | 12/21/2011 | ND              | 448 | 112        | 400           | 0.00 |           |
| TPH 8015M                     |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0            | 12/21/2011 | ND              | 215 | 107        | 200           | 8.32 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 12/21/2011 | ND              | 208 | 104        | 200           | 11.7 |           |
| Surrogate: 1-Chlorooctane     |        | 87.0 %          | 55.5-154   |                 |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane |        | 94.0 %          | 57.6-158   |                 |     |            |               |      |           |

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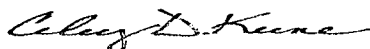
**Analytical Results For:**APACHE - EUNICE  
NATALIE GLADDEN  
P. O. BOX 1849  
EUNICE NM, 88231  
Fax To: 394-2425Received: 12/20/2011  
Reported: 12/22/2011  
Project Name: LOCO FEDERAL #7  
Project Number: NONE GIVEN  
Project Location: LOCO HILLSSampling Date: 12/19/2011  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson**Sample ID: W WALL (H102739-13)**

| Chloride, SM4500Cl-B          |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |
|-------------------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | <16.0  | 16.0            | 12/21/2011 | ND              | 448 | 112        | 400           | 0.00 |           |
| TPH 8015M                     |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0            | 12/22/2011 | ND              | 228 | 114        | 200           | 3.85 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 12/22/2011 | ND              | 234 | 117        | 200           | 4.15 |           |
|                               |        |                 |            |                 |     |            |               |      |           |
| Surrogate: 1-Chlorooctane     |        | 111 %           | 55.5-154   |                 |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane |        | 131 %           | 57.6-158   |                 |     |            |               |      |           |

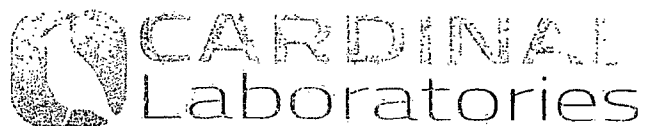
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Celey D. Keene, Lab Director/Quality Manager



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(505) 393-2326 FAX (505) 393-2476

[illegible]





|  |  |             |  |                   |  |              |  |  |  |  |  |                                    |  |                |  |     |  |  |  |  |  |  |  |  |  |  |  |
|--|--|-------------|--|-------------------|--|--------------|--|--|--|--|--|------------------------------------|--|----------------|--|-----|--|--|--|--|--|--|--|--|--|--|--|
| Company Name: <u>Apco</u>              |  |             |  | BILL TO           |  |              |  | ANALYSIS REQUEST   |  |  |  |                                    |  |                |  |     |  |  |  |  |  |  |  |  |  |  |  |
| Project Manager: <u>Nathan Gladden</u> |  |             |  | P.O. #:           |  |              |  | <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);"> <u>Chlorides</u><br/><u>TPH</u><br/><u>SO<sub>4</sub></u> </div> <div></div> </div> |  |  |  |                                    |  |                |  |     |  |  |  |  |  |  |  |  |  |  |  |
| Address:                               |  |             |  | Company:          |  |              |  |  |  |  |  |                                    |  |                |  |     |  |  |  |  |  |  |  |  |  |  |  |
| City: State: <u>PA</u> Zip:            |  |             |  | Attn:             |  |              |  |  |  |  |  |                                    |  |                |  |     |  |  |  |  |  |  |  |  |  |  |  |
| Phone #: Fax #:                        |  |             |  | Address:          |  |              |  |  |  |  |  |                                    |  |                |  |     |  |  |  |  |  |  |  |  |  |  |  |
| Project #: Project Owner:              |  |             |  | City:             |  |              |  |  |  |  |  |                                    |  |                |  |     |  |  |  |  |  |  |  |  |  |  |  |
| Project Name: <u>Lois Federal #7</u>   |  |             |  | State: Zip:       |  |              |  |  |  |  |  |                                    |  |                |  |     |  |  |  |  |  |  |  |  |  |  |  |
| Project Location: <u>1000 Hills</u>    |  |             |  | Phone #:          |  |              |  |  |  |  |  |                                    |  |                |  |     |  |  |  |  |  |  |  |  |  |  |  |
| Sampler Name: <u>Robert Parva</u>      |  |             |  | Fax #:            |  |              |  |  |  |  |  |                                    |  |                |  |     |  |  |  |  |  |  |  |  |  |  |  |
| FOR LAB USE ONLY                       |  |             |  |                   |  |              |  |  |  |  |  |                                    |  |                |  |     |  |  |  |  |  |  |  |  |  |  |  |
| Lab I.D.                               |  | Sample I.D. |  | (G)RAB OR (C)OMP. |  | # CONTAINERS |  | MATRIX   |  |  |  | PRESERV.                           |  | SAMPLING       |  |     |  |  |  |  |  |  |  |  |  |  |  |
|  |  |             |  |                   |  |              |  | GROUNDWATER<br>WASTEWATER<br>SOIL<br>OIL<br>SLUDGE<br>OTHER:   |  |  |  | ACID/BASE:<br>ICE / COOL<br>OTHER: |  | DATE<br>TIME   |  |     |  |  |  |  |  |  |  |  |  |  |  |
| H102739                                |  |             |  | G                 |  | ✓            |  |  |  |  |  |                                    |  | 12-16-11 12:00 |  | ✓ ✓ |  |  |  |  |  |  |  |  |  |  |  |
| 11 S.W. wall                           |  |             |  | G                 |  | ✓            |  |  |  |  |  |                                    |  | 12-16-11 12:05 |  | ✓ ✓ |  |  |  |  |  |  |  |  |  |  |  |
| 12 E. wall                             |  |             |  | G                 |  | ✓            |  |  |  |  |  |                                    |  | 12-19-11 14:30 |  | ✓ ✓ |  |  |  |  |  |  |  |  |  |  |  |
| 13 W. wall                             |  |             |  | G                 |  | ✓            |  |  |  |  |  |                                    |  |                |  |     |  |  |  |  |  |  |  |  |  |  |  |

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|   |  |                       |   |  |                |
|---|--|-----------------------|---|--|----------------|
| Relinquished By: <i>Roberto Parra</i>                             |  | Date: <i>12-20-11</i> | Received By: <i>John Benson</i>   | Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No   | Add'l Phone #: |
| Relinquished By:  |  | Time: <i>7:59</i>     | Received By:  | Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No   | Add'l Fax #:   |
| Delivered By: (Circle One)<br><i>Sampler - UPS - Bus - Other:</i> |  | Time:                 | Sample Condition<br>Cool <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br>Intact <input type="checkbox"/> Yes <input type="checkbox"/> No | REMARKS: Email results to: <i>Shaker@rice-ecs.com; 2.wander@rice-ecs.com</i><br><i>4.wander@rice-sud.com; L.wainheimer@rice-ecs.com</i><br><i>M.G.balden@apacis corp.com</i> |                |
| CHECKED BY: (Initials)<br><i>JB</i>                               |  |                       |   |  |                |

**Analytical Results For:**

 APACHE - EUNICE  
 NATALIE GLADDEN  
 P. O. BOX 1849  
 EUNICE NM, 88231  
 Fax To: 394-2425

 Received: 12/19/2011  
 Reported: 12/22/2011  
 Project Name: LOCO FEDERAL #7  
 Project Number: NONE GIVEN  
 Project Location: LOCO HILLS

 Sampling Date: 12/12/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: NE CORNER BTM @ 2.5' (H102728-01)**

| Chloride, SM4500CI-B |             |                 | mg/kg      |              | Analyzed By: AP |            |               |      |           |
|----------------------|-------------|-----------------|------------|--------------|-----------------|------------|---------------|------|-----------|
| Analyte              | Result      | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| <b>Chloride</b>      | <b>48.0</b> | 16.0            | 12/21/2011 | ND           | 448             | 112        | 400           | 0.00 |           |
| TPH 8015M            |             |                 | mg/kg      |              | Analyzed By: MS |            |               |      |           |
| Analyte              | Result      | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10           | <10.0       | 10.0            | 12/21/2011 | ND           | 216             | 108        | 200           | 1.74 |           |
| DRO >C10-C28         | <10.0       | 10.0            | 12/21/2011 | ND           | 197             | 98.7       | 200           | 12.2 |           |

Surrogate: 1-Chlorooctane 123 % 55.5-154

Surrogate: 1-Chlorooctadecane 129 % 57.6-158

**Sample ID: NW CORNER @ 1.5' (H102728-02)**

| Chloride, SM4500CI-B |             |                 | mg/kg      |              | Analyzed By: AP |            |               |      |           |
|----------------------|-------------|-----------------|------------|--------------|-----------------|------------|---------------|------|-----------|
| Analyte              | Result      | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| <b>Chloride</b>      | <b>96.0</b> | 16.0            | 12/21/2011 | ND           | 448             | 112        | 400           | 0.00 |           |
| TPH 8015M            |             |                 | mg/kg      |              | Analyzed By: MS |            |               |      |           |
| Analyte              | Result      | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10           | <10.0       | 10.0            | 12/21/2011 | ND           | 216             | 108        | 200           | 1.74 |           |
| DRO >C10-C28         | <10.0       | 10.0            | 12/21/2011 | ND           | 197             | 98.7       | 200           | 12.2 |           |

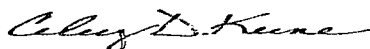
Surrogate: 1-Chlorooctane 134 % 55.5-154

Surrogate: 1-Chlorooctadecane 145 % 57.6-158

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 APACHE - EUNICE  
 NATALIE GLADDEN  
 P. O. BOX 1849  
 EUNICE NM, 88231  
 Fax To: 394-2425

 Received: 12/19/2011  
 Reported: 12/22/2011  
 Project Name: LOCO FEDERAL #7  
 Project Number: NONE GIVEN  
 Project Location: LOCO HILLS

 Sampling Date: 12/12/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SE CORNER @ 2.5' (H102728-03)**

| Chloride, SM4500Cl-B          |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |
|-------------------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 192    | 16.0            | 12/21/2011 | ND              | 448 | 112        | 400           | 0.00 |           |
| TPH 8015M                     |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0            | 12/21/2011 | ND              | 216 | 108        | 200           | 1.74 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 12/21/2011 | ND              | 197 | 98.7       | 200           | 12.2 |           |
|                               |        |                 |            |                 |     |            |               |      |           |
| Surrogate: 1-Chlorooctane     | 114 %  | 55.5-154        |            |                 |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 124 %  | 57.6-158        |            |                 |     |            |               |      |           |


**Sample ID: SW CORNER @ 2.' (H102728-04)**

| Chloride, SM4500Cl-B          |        |                 | mg/kg      |              | Analyzed By: AP |            |               |      |           |  |
|-------------------------------|--------|-----------------|------------|--------------|-----------------|------------|---------------|------|-----------|--|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride                      | 80.0   | 16.0            | 12/21/2011 | ND           | 448             | 112        | 400           | 0.00 |           |  |
| TPH 8015M                     |        |                 | mg/kg      |              | Analyzed By: MS |            |               |      |           |  |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS              | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10                    | <10.0  | 10.0            | 12/21/2011 | ND           | 216             | 108        | 200           | 1.74 |           |  |
| DRO >C10-C28                  | <10.0  | 10.0            | 12/21/2011 | ND           | 197             | 98.7       | 200           | 12.2 |           |  |
|                               |        |                 |            |              |                 |            |               |      |           |  |
| Surrogate: 1-Chlorooctane     | 119 %  | 55.5-154        |            |              |                 |            |               |      |           |  |
| Surrogate: 1-Chlorooctadecane | 120 %  | 57.6-158        |            |              |                 |            |               |      |           |  |

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 APACHE - EUNICE  
 NATALIE GLADDEN  
 P. O. BOX 1849  
 EUNICE NM, 88231  
 Fax To: 394-2425

 Received: 12/19/2011  
 Reported: 12/22/2011  
 Project Name: LOCO FEDERAL #7  
 Project Number: NONE GIVEN  
 Project Location: LOCO HILLS

 Sampling Date: 12/12/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson


**Sample ID: CENTER BTM @ 2.5' (H102728-05)**

| Chloride, SM4500Cl-B          |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |
|-------------------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 80.0   | 16.0            | 12/21/2011 | ND              | 448 | 112        | 400           | 0.00 |           |
| TPH 8015M                     |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0            | 12/21/2011 | ND              | 216 | 108        | 200           | 1.74 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 12/21/2011 | ND              | 197 | 98.7       | 200           | 12.2 |           |
| <hr/>                         |        |                 |            |                 |     |            |               |      |           |
| Surrogate: 1-Chlorooctane     | 114 %  | 55.5-154        |            |                 |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 117 %  | 57.6-158        |            |                 |     |            |               |      |           |

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Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603  
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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|   |  |  |  |  |  |
|---|--|--|--|--|--|
| Relinquished By: <i>[Signature]</i><br>Date: <u>12-14-11</u><br>Time: <u>3:00</u> |  | Received By: <i>[Signature]</i><br>Date: <u>12-19-11</u><br>Time: <u>1310</u>  |  | Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #:<br>Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Fax #:<br>REMARKS: |  |
| Relinquished By: <i>[Signature]</i><br>Date: <u>12-19-11</u><br>Time: <u>1310</u> |  | Received By: <i>[Signature]</i><br>Date: <u>12-19-11</u><br>Time: <u>1310</u>  |  | email results<br>Natalie.Gladden@usa.apachecorp.com;<br>Zconder@rice-ecs.com; Bbaker@rice-ecs.com;<br>hconder@rice-ecs.com; Lweinheimer@rice-ecs.com   |  |
| Delivered By: (Circle One)<br>Sampler - UPS - Bus - Other:                        |  | Sample Condition<br>Cool Intact<br>-4.50 <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |  | CHECKED BY:<br>(Initials) <i>[Initials]</i>  |  |

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

**Analytical Results For:**

APACHE - EUNICE  
NATALIE GLADDEN  
P. O. BOX 1849  
EUNICE NM, 88231  
Fax To: 394-2425

Received: 12/22/2011  
Reported: 12/27/2011  
Project Name: LOCO FEDERAL #7  
Project Number: NONE GIVEN  
Project Location: LOCO HILLS

Sampling Date: 12/12/2011  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

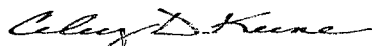
**Sample ID: PT. 7 @ 1' (H102764-01)**

| Chloride, SM4500Cl-B | mg/kg  | Analyzed By: HM |            |              |     |            |               |      |           |
|----------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 352    | 16.0            | 12/22/2011 | ND           | 432 | 108        | 400           | 3.64 |           |

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\*=Accredited Analyte

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# Appendix D

Final Form C-141

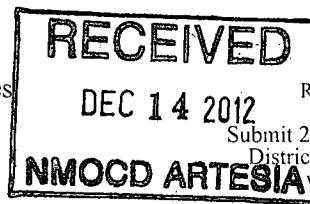
**RICE Environmental Consulting and Safety (RECS)**

P.O. Box 5630 Hobbs, NM 88241  
Phone 575.393.4411 Fax 575.393.0293



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-141  
Revised October 10, 2003  
Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

### Release Notification and Corrective Action

#### OPERATOR

☐ Initial Report ☒ Final Report

|                 |                                  |               |                 |
|-----------------|----------------------------------|---------------|-----------------|
| Name of Company | Apache Corp.                     | Contact       | Natalie Gladden |
| Address         | P.O. Box 1849, Eunice, NM, 88231 | Telephone No. | (575) 390-4186  |
| Facility Name   | Loco Federal #7                  | Facility Type | Production Well |

|               |         |               |     |         |              |
|---------------|---------|---------------|-----|---------|--------------|
| Surface Owner | Unknown | Mineral Owner | BLM | API No. | 30-015-36638 |
|---------------|---------|---------------|-----|---------|--------------|

#### LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| B           | 21      | 17S      | 30E   | 900           | FNL              | 1650          | FEL            | Eddy   |

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

#### NATURE OF RELEASE

|                             |   |   |               |                            |          |
|-----------------------------|---|---|---------------|----------------------------|----------|
| Type of Release             | Brine Water   | Volume of Release                         | 30 bbls       | Volume Recovered           | 0 bbls   |
| Source of Release           | Workover/flowback   | Date and Hour of Occurrence               | 11/17/11      | Date and Hour of Discovery | 11/17/11 |
| Was Immediate Notice Given? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom?                          | Mike Bratcher |                            |          |
| By Whom?                    | Natalie Gladden   | Date and Hour                             | 11/17/11      | 858 am                     |          |
| Was a Watercourse Reached?  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                       | If YES, Volume Impacting the Watercourse. |               |                            |          |

If a Watercourse was Impacted, Describe Fully.\*

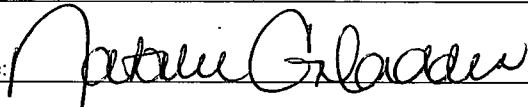
Describe Cause of Problem and Remedial Action Taken.\*

While doing a workover procedure to fish out stuck rods and tubing the well flowed back.

Describe Area Affected and Cleanup Action Taken.\*

The leak affected the caliche pad surrounding the well head and an area of pasture land including a right-of-way for a high pressure gas pipeline. Impacted soils were removed to a NMOCD approved disposal facility. Soil samples were collected from the excavations and sent to a commercial laboratory for confirmation of chloride and TPH. The excavations were backfilled with clean caliche and topsoil and contoured to the surrounding area.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

|  |                                  |                  |                                   |
|--|----------------------------------|------------------|-----------------------------------|
| Signature:  | <u>OIL CONSERVATION DIVISION</u> |                  |                                   |
| Printed Name: Natalie Gladden  | Approved by District Supervisor: |                  |                                   |
| Title: EH&S Environmental Tech   | Approval Date:                   | Expiration Date: |                                   |
| E-mail Address: Natalie.gladden@apachecorp.com   | Conditions of Approval:          |                  | Attached <input type="checkbox"/> |
| Date: 11/19/12   | Phone: (575) 390-4186            |                  |                                   |

\* Attach Additional Sheets If Necessary