

## **APACHE CORPORATION**

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

## WBDU #75 (1RP-3388)

# **Termination Request**

API No. 30-025-06615

Release Date: October 16<sup>th</sup>, 2014

Unit Letter L, Section 16, Township 21S, Range 37E



**January 16<sup>th</sup>, 2015** 

**Dr. Tomáš Oberding, PhD** Environmental Specialist – New Mexico Oil Conservation Division Energy, Minerals and Natural Resources Department 1625 N. French Dr. Hobbs, NM 88240

> RE: Termination Request Apache WBDU #75 (1RP-3388) UL/L sec. 16 T21S R37E API No. 30-025-06615

Dr. Oberding:

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

#### **Background and Previous Work**

The site is located approximately 2.8 miles north of Eunice, New Mexico at UL/L sec. 16 T21S R37E. NM OSE, USGS, and RECS monitor well records indicate that groundwater will likely be encountered at a depth of approximately 75 +/- feet.

On October 16<sup>th</sup>, 2014, a fiberglass injection line ruptured while installing a flange, releasing 125 barrels of produced water in 1,712 square feet of ditch line. The upstream valve was closed, and a vacuum truck was dispatched to the site. The vacuum truck recovered 120 barrels of produced water. NMOCD was notified of the release on October 17<sup>th</sup>, 2014, and an initial C-141 was sent to NMOCD for their approval. NMOCD approved the initial C-141 on October 20<sup>th</sup>, 2014 (Appendix A).

RECS personnel were on site beginning on October 16<sup>th</sup>, 2014, to assess the release. The site was photographed and GPS mapped. A track-hoe was utilized to remove the wet soil in the easily accessible areas, and a shovel crew was utilized to remove the wet soil from beneath the pipelines. All excavated soil was taken to a NMOCD approved facility for disposal.

Once the wet soil was removed, RECS personnel sampled the walls and bottom of the site for chlorides and organic vapors (Figure 1). The samples were then taken to a commercial laboratory for analysis (Appendix B). All wall and bottom samples returned laboratory chloride readings below 250 mg/kg with Gasoline Range Organics (GRO) and Diesel Range Organics (DRO) readings of non-detect. Based on these laboratory readings, Apache backfilled the site with clean, imported soil.

Photo documentation of field activities can be found in Appendix C.

Given that Apache removed the contaminated soil and replaced it with clean, imported soil, Apache respectfully requests 'remediation termination' and site closure. A final C-141 can be found in Appendix D.

RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-2967 or me if you have any questions or wish to discuss the site.

Sincerely,

JC.W.

Lara Weinheimer Project Scientist RECS (575) 441-0431

Attachments:

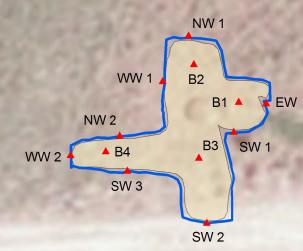
Figure 1 – Excavation Map Appendix A – Initial C-141 Appendix B – Laboratory Analyses Appendix C – Photo Documentation Appendix D – Final C-141

# Figures

RICE Environmental Consulting and Safety (RECS) P.O. Box 2948, Hobbs, NM 88241 Phone 575.393.2967

### **Excavation Map**

| WALL SAMPLES   | Cl-   | PID  | GRO   | DRO   |
|----------------|-------|------|-------|-------|
| North Wall 1   | <16.0 | 3.8  | <10.0 | <10.0 |
| South Wall 1   | <16.0 | 5.7  | <10.0 | <10.0 |
| East Wall      | 32    | 5.6  | <10.0 | <10.0 |
| South Wall 2   | <16.0 | 22.7 | <10.0 | <10.0 |
| West Wall 1    | <16.0 | 12.5 | <10.0 | <10.0 |
| North Wall 2   | 48    | 1    | <10.0 | <10.0 |
| South Wall 3   | 96    | 4.4  | <10.0 | <10.0 |
| West Wall 2    | <16.0 | 2.4  | <10.0 | <10.0 |
|                |       |      |       |       |
| BOTTOM SAMPLES | CI-   | PID  | GRO   | DRO   |
| Bottom 1       | 80    | 1.1  | <10.0 | <10.0 |
| Bottom 2       | 48    | 7.4  | <10.0 | <10.0 |
| Bottom 3       | 32    | 2.5  | <10.0 | <10.0 |
| Bottom 4       | 64    | 2.5  | <10.0 | <10.0 |



Landowner: State DGW: 75 FT



Source: Esri, DigitalGlobe, Geo CNES/Airbus DS, USDA, USG swisstopo, and the GIS User Co



UL L SECTION 16 T-21-S R-37-E LEA COUNTY, NM 

 0
 30
 60

 0
 30
 60

 GPS date: 10/20/14 KH
 W - E

Legend

**FINAL SAMPLE POINTS** 

GPS date: 10/20/14 KH Drawing date: 12/18/14 Drafted by: L. Weinheimer

## Appendix A Initial C-141

RICE Environmental Consulting and Safety (RECS) P.O. Box 2948 Hobbs, NM 88241 Phone 575.393.2967

| Data Lineary 1998       State of New Mexico       Form C-141         Diff Sill res, states, NM 8230       State of New Mexico       State of New Mexico         Diff Sill res, states, NM 8230       State of New Mexico       State of New Mexico         Diff Sill res, states, NM 8230       State of New Mexico       State of New Mexico         Diff Sill res, states, NM 8230       State of New Mexico       State of New Mexico         Diff Sill res, states, NM 8230       State of New Mexico       State of New Mexico         Diff Sill res, states, NM 8230       State of New Mexico       State of New Mexico         Diff Sill resk       State of New Mexico       State of New Mexico         Diff Sill resk       State of New Mexico       State of New Mexico         Diff Sill resk       State of New Mexico       State of New Mexico         Diff Sill resk       State of New Mexico       State of New Mexico         Diff Sill resk       State of New Mexico       State of New Sill resk       State of New Sill resk         State of New Mexico       Conservet Sill resk       Institu Report       Final Report         State of New Mexico       Teperity Type Of Weil       Apr No. 30.425.041.692       Final Report         State of New Mexico       Teperity New Mexico       Form New Sill resk       Conset teperity New Lesk  |   |   |   |   | HOBBS   | OCD   |
|--|---|---|---|---|---|---|
| Release Notification and Corrective Action         OPERATOR       Initial Report       Final Report         Address 2350 W Machand BWJ Hobbs, MM 88240       Telephone No. 432 (31-6982       Facility Name WBDU # 75         Sturface Owner State       Mitural Owner       API No. 30-025-06615         Unit Letter       Socian       Township       Range       Feel from the feet feet from the feet from the feet feet from the feet feet from the feet feet feet feet feet from the feet feet feet feet feet feet feet  | 1625 N. French Dr., Hobbs, NM 88240<br><u>District II</u><br>811 S. First St., Artesia, NM 88210<br><u>District III</u><br>1000 Rio Brazos Road, Aztec, NM 87410<br>District IV                                 | Energy Minerals<br>Oil Conse<br>1220 Sout   | s and Natural F<br>ervation Divis<br>h St. Francis                              | tesources<br>ion <sup>S</sup><br>Dr.  | Submit I Conv   | 2014 Revised August 8, 2011   |
| OPERATOR       ☑ Initial Report       ☐ Final Report         Name of Company Apache Corporation       Contact Frace Baker         Address 2330 W Marland BHV Hobbs, NM 88240       Telephone No. 326 23-16-092         Facility Name WBDU #75       Facility Type: Oil Well         Surface Owner: State       Immend Owner         16       Township       Range         976       Pecific ON OF RELEASE         Unit Lette       Section       Township         16       215       Page         776       Prove The Page       County         16       215       Page         16       Type of Release Produced Water       North/South Line         Source of Release Injection line       Date and Hour of Occurrence       Date and Hour of Discovery         Was Immediate Notice Given?       Yes       No       Not Required       If YES, To Non?         By Whon?       Proce Baker       Date and Hour of Occurrence       Date and Hour 107/2014 at 11:37 a.m.         Was Immediate Notice Given?       Yes S No       No       Not Required         If Watercourse was Impacted, Describe Fully.*       Describe Cause of Problem and Remedial Action Taken.*       Date and Hour 107/2014 at 11:37 a.m.         Describe Area Affected and Camp Action Taken.*       Date and Hour 107/2014 at 11:3   | Rele  |   |   |   | on  | y na  |
| Name of Company Appuche Corporation       Contract Brace Baker         Address 2350 W Machand Rivit Hobbs, NM 88240       Telephone No. 432.631.6982         Facility Name       WB1         Surface Owner State       Mineral Owner         Loc ACTION OF RELEASE       API No. 30-025-06615         Unit Letter       Section       Township       Range         16       215       37E       Feet from the<br>1980'       North/South Line       Feet from the<br>Feet from the Park West Line       County         Latitude       Loc ACTION OF RELEASE       Volume Recovered       120 Barrels of<br>produced water       Date and Four of Occurrence       Telephone No.432       Telephone No.432         Was Inneedide Notice Given?       ⊠ Yes       No       Net Required       Telephone       Telephone       Telephone       Telephone       Date and Four 0707/2014 at 11:37 a.m.         Was a Watercourse Rescied?       ☐ Yes ☺ No       If YES, Volume Impacting the Matercourse.       The valve outpact watercourse.       Telephone No.432 at 10.432 at 10.4  |   |   |   |   |   | 1 Report 🔲 Final Report   |
| Facility Name. WBDU # 75       Facility Type. Oil Well         Surface Owner       Miteral Owner       API No. 30-025-06615         Unit Letter       Scriba       Township       Range       Fee from the Fact. Loc ATION OF RELEASE         Unit Letter       Scriba       Township       Range       Fee from the Fact. Loc ATION OF RELEASE         Unit Letter       16       Township       Range       Fee from the Fact. Loc ATION OF RELEASE         Type of Release Produced Water       Longitude       NATURE OF RELEASE       Polume Recovered 120 Barrels of produced water         Secure of Release Injection line       Date and Hour of Occurrence       Date and Hour of Occurrence       Date and Hour of Observery         10/16/2014       IYES, To Whong?       Yes       No       Nor Required       Dr. Tomas Oberding (NMOCD)         By Whens?       Once Baker       Date and Hour 10/17/2014 at 11:37 a.m.       IYES, Volume Reached?       Yes Sin Weill         Was a Watercourse Reached?       Yes Sin No       Nor Required       Dr. Tomas Oberding in the fiber glass line to break. The valve upstream was closed and a vacuum truck was dispatched to pick-up fluid.         Describe Cause of Problem and Remedial Action Taken.*       During the installation of a flange on injection line nearest well WBDU 75 the line was in a bind resulting in the fiber glass line to break. The valve upstream was closed and a vacuum truck was dispatched to pick-up   | Name of Company Apache Corporation  |   |   |   |   |   |
| Surface Owner       State       Mineral Owner       API No. 30-025-06615         Unit Letter       Section       Township       Range       Feet from the       North/South Line       Feet from the       Feet from the<  | Address 2350 W Marland Blvd Hobbs, NM   | 1 88240   |   |   | · · · ·   |   |
| LOCATION OF RELEASE         Unit Letter       Section       Township       Range       Feet from the<br>1980'       North/South Line       Feet from the<br>660'       EsstWest Line       County         L       L       16       21S       37E       Feet from the<br>1980'       North/South Line       Feet from the<br>660'       EsstWest Line       County         Lat(tude       Longitude       NortURE OF RELEASE       Volume Recovered 120 Barrels of<br>ofpednecd water       Produced water         Source of Release injection line       Date and Hour of Occurrence       Date and Hour of Disovery       If VES, To Wion?         Was Immediate Notice Given?       Ø       Not Required       Date and Hour of Disovery       Date and Hour of Disovery         By Whow?       Brance Baker       Date and Hour of Disovery       Date and Hour of Disovery       Date and Hour of Disovery         Was a Watercourse Reached?       Ves 🖄 No       If YES, Yolume Impacting the Watercourse.       If YES, Yolume Impacting the Watercourse.       If YES, Yolume Impacting the Watercourse.         Describe Cause of Problem and Remedial Action Taken.*       The ontire release was contained inside the ditch line. After the standing fluid was picked up a track-hoe was utilized to start removing contaninated soil inside ditch line. A hand shoveling rerew was utilized to remove contanination near and under the pipelines. The release arene was mapiped and samples collected and samples collec   | Facility Name WBDU # 75   |   | Facility Type   | Oil Well  |   | ·   |
| Unit Letter       Section       Township       Range       Feet from the<br>1980'       Feet from the<br>FSL       Feet from the<br>660'       Ens/t/Vest Line       County<br>Let         L       16       21S       37E       1980'       North/South Line<br>FSL       Feet from the<br>660'       Ens/t/Vest Line       County<br>Lea         L       Latitude       Longitude   | Surface Owner State   | Mineral Owner   |   |   | API No.   | . 30-025-06615  |
| Unit Letter       Section       Township       Range       Feet from the<br>1980'       Feet from the<br>FSL       Feet from the<br>660'       Ens/t/Vest Line       County<br>Let         L       16       21S       37E       1980'       North/South Line<br>FSL       Feet from the<br>660'       Ens/t/Vest Line       County<br>Lea         L       Latitude       Longitude   |   | LOCATIO   | N OF RELE   | ASE   |   |   |
| NATURE OF RELEASE         Type of Release Produced Water       Volume of Release 125 Barrels<br>of produced water       Volume Recovered 120 Barrels of<br>produced water         Source of Release injection line       Date and Hour of Occurrence       Date and Hour of Discovery<br>10/6/2014       Date and Hour of Discovery<br>10/6/2014         Was Immediate Notice Given?       If YES, To Whom?       Date and Hour of Discovery<br>10/6/2014       Date and Hour of Discovery<br>10/6/2014         Was a Watercourse Reached?       Date and Hour of Zould at 11:37 a.m.         Was a Watercourse was Impacted, Describe Fully.*         Describe Cause of Problem and Remedial Action Taken.*         During the installation of a flange on injection line nearest well WBDU 75 the line was in a bind resulting in the fiber glass line to break. The valve<br>upstream was closed and a vacuum track was dispatched to pick-up fluid.         Describe Area Affected and Cleanup Action Taken.* The entire release was contained inside the ditch line. After the standing fluid was picked up a track-<br>hoe was utilized to start removing contaminated soil inside ditch line. A hand shoveling crew was utilized to remove contamination near and under the<br>pipelines. The release area was mapped and samples collected and sen to a commercial laboratory for analysis.         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<br>regulations after biol addecadely investigate and reneediate contamination that pose an threat to ground water, suffice water, suffice water, suffice water, numan health<br>or the environment. The acceptance of a C-  |   | Feet from the Nort  | h/South Line F  | eet from the Ea   | 1   | •   |
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| 10/16/2014       10/16/2014         Was Immediate Notice Given?       IVES, To Whom?         By Whom?       Bruce Baker         Was a Watercourse Reached?       Date and Hour 10/17/2014 at 11:37 a.m.         If YES, To Whom?       If YES, To Whom?         Describe Cause of Problem and Remedial Action Taken.*       If YES, Volume Impacting in the fiber glass line to break. The valve upstream was closed and a vacuum truck was dispatched to pick-up fluid.         Describe Area Affected and Cleanup Action Taken.*       The entire release was contained inside the ditch line. After the standing fluid was picked up a track-hoe was utilized to remove contamination near and under the pipelines. The release area was mapped and samples collected and sent to a commercial laboratory for analysis.         Thereby 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 endager 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 responsibility for compliance with any other federal, state, or local laws and/or regulations.         Signature:       Muse Muse         Printed Name: Bruce Baker       Approved by Environmental Technician         Title: Environmental Technician       Approved by Environmental Secure Action of the certain clease and regulations of Approval Laws of Approval         Signature:       Muse  | Source of Release injection line  |   |   |   |   |   |
| By Whon?       Bruce Baker       Date and Hour 10/17/2014 at 11:37 a.m.         Was a Watercourse Reached?       Yes S No       If YES, Volume Impacting the Watercourse.         If a Watercourse was Impacted, Describe Fully.*       If YES, Volume Impacting the Watercourse.         Describe Cause of Problem and Remedial Action Taken.*       During the installation of a flange on injection line nearest well WBDU 75 the line was in a bind resulting in the fiber glass line to break. The valve upstream was closed and a vacuum truck was dispatched to pick-up fluid.         Describe Area Affected and Cleanup Action Taken.* The entire release was contained inside the ditch line. After the standing fluid was picked up a track-hoe was utilized to start removing contaminated soil inside ditch line. A hand shoveling crew was utilized to remove contamination near and under the pipelines. The release area was mapped and samples collected and sent to a commercial laboratory for analysis.         Thereby 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 noiffications and perform corrective actions for teleases which may endanger public health or the environment. The 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:       Mark       Approved by Environmental Specialist:         Tritte: Environmental Technician       Approved by Environmental Specialist:         Trite: Environmental Technician       Approved by Environme  |   |   | 10/16/2014  |   |   |   |
| By Whon?       Bruce Baker       Date and Hour 10/17/2014 at 11:37 a.m.         Was a Watercourse Reached?       If YES, Volume Impacting the Watercourse.         If a Watercourse was Impacted, Describe Fully.*         Describe Cause of Problem and Remedial Action Taken.*         During the installation of a flange on injection line nearest well WBDU 75 the line was in a bind resulting in the fiber glass line to break. The valve upstream was closed and a vacuum truck was dispatched to pick-up fluid.         Describe Area Affected and Cleamup Action Taken.*         The release area was mapped and samples collected and sent to a commercial laboratory for analysis.         Thereby 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 when NMOCD marked as "Final Repord" desen or felieve the operator of fesponsibility for  |   | No 🗍 Not Required   |   |   |   |   |
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| hoe was utilized to start removing contaminated soil inside ditch line. A hand shoveling crew was utilized to remove contamination near and under the pipelines. The release area was mapped and samples collected and sent to a commercial laboratory for analysis.         Thereby 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 haws and/or regulations.         Signature:       Muce Baker         Title:       Environmental Technician         Approved by Environmental Specialist:         Title:       Environmental Technician         Permit Address:       lary, baker@apachecorp.com         Conditions of Approval:       site South         Attached       Image: 10/20/2014  | During the installation of a flange on injection lin  | ne nearest well WBDU 7  |   | a bind resulting in   | the fiber glass   | line to break. The valve  |
| 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:       Mure Baker         Printed Name: Bruce Baker       Approved by Environmental Specialist:         Title:       Environmental Technician         Approval Date:       10°-20 - 14°       Expiration Date:         Date:       10/20/2014       Phone: (432) 631-6982       Auge on the Struct Structure   | hoe was utilized to start removing contaminated   | soil inside ditch line. A   | hand shoveling ci   | ew was utilized to  | remove contain  | ng fluid was picked up a track-<br>nination near and under the  |
| Signature:       Bure Baker         Printed Name:       Bruce Baker         Title:       Environmental Technician         E-mail Address:       Iarry.baker@apachecorp.com         Conditions of Approval:       Sile Supla         Attached       Image: Action of Approval:         Date:       10/20/2014   | regulations all operators are required to report an<br>public health or the environment. The acceptanc<br>should their operations have failed to adequately<br>or the environment. In addition, NMOCD acception | d/or file certain release t<br>e of a C-141 report by th<br>investigate and remedia | notifications and p<br>te NMOCD mark<br>te contamination<br>does not relieve th | perform corrective<br>ed as "Final Repor<br>that pose a threat to<br>be operator of respo | actions for rele<br>t" does not relia<br>o ground water,<br>onsibility for co | ases which may endanger<br>eve the operator of liability<br>, surface water, human health<br>ompliance with any other |
| Printed Name: Bruce Baker       Approved by Environmental Specialist:         Title: Environmental Technician       Approval Date: 10-20-14       Expiration Date: 12-204/9         E-mail Address: larry.baker@apachecorp.com       Conditions of Approval: \$ic Supla       Attached []         Date: 10/20/2014       Phone: (432) 631-6982       Augure on multical Structure on multic  |   |   |   | OIL CONSE   | WATION-   | ÐIVISION  |
| Printed Name: Bruce Baker       Approval Date: 10-20-14       Expiration Date: 12-20-19         Title: Environmental Technician       Approval Date: 10-20-14       Expiration Date: 12-20-19         E-mail Address: larry.baker@apachecorp.com       Conditions of Approval: Sile Suple       Attached []         Date: 10/20/2014       Phone: (432) 631-6982       August Address Arablet and IRP-3388   | Signature: Bruce Baher  |   |   | 77  |   |   |
| Title: Environmental Technician       Approval Date: 10-20-14       Expiration Date: 12-20214         E-mail Address: larry.baker@apachecorp.com       Conditions of Approval: \$ic Supla       Attached         Date: 10/20/2014       Phone: (432) 631-6982       August. Belinite & rubbit on 1RP-3388  | Printed Name: Bruce Baker   |   | Approved by En  | vironmental Specia  | list:   |   |
| E-mail Address: larry.baker@apachecorp.com Date: 10/20/2014 Phone: (432) 631-6982 Conditions of Approval: Site Suple Attached IRP-3388 Ormed 823   |   |   | Approval Date:  | 10-20-14  | Expiration I  | Date: 12-20-14  |
| Date: 10/20/2014 Phone: (432) 631-6982 and a provide & march grade. 1RP-3388   | E-mail Address: larry.baker@apachccorp.com  |   | Conditions of Ap  | proval: site s  | nola  | Attached  |
|  | Date: 10/20/2014 Phone  | : (432) 631-6982  | are a pr  | NMOCA g   |   | 1RP-3388<br>Ogna 823  |

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OCT 27 2014 pro 1429 35 7089

### Appendix B Laboratory Analyses

RICE Environmental Consulting and Safety (RECS) P.O. Box 2948 Hobbs, NM 88241 Phone 575.393.2967



October 20, 2014

BRUCE BAKER APACHE CORP - HOBBS 2350 W. MARLAND BLVD. HOBBS, NM 88240

RE: WBDU #75

Enclosed are the results of analyses for samples received by the laboratory on 10/17/14 15:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

| Method EPA 552.2 | Haloacetic Acids (HAA-5)     |
|------------------|------------------------------|
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3)  |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240 Fax To: (575) 393-2432

| Received:         | 10/17/2014 | Sampling Date:      | 10/17/2014    |
|-------------------|------------|---------------------|---------------|
| Reported:         | 10/20/2014 | Sampling Type:      | Soil          |
| Project Name:     | WBDU #75   | Sampling Condition: | Cool & Intact |
| Project Number:   | NONE GIVEN | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN  |                     |               |

#### Sample ID: BOTTOM 1 (H403210-01)

| Chloride, SM4500Cl-B          | mg/kg  |                 | Analyze         | d By: AP     |     |            |               |      |           |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 80.0   | 16.0            | 10/20/2014      | ND           | 416 | 104        | 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            | 10/20/2014      | ND           | 177 | 88.3       | 200           | 1.44 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 10/20/2014      | ND           | 199 | 99.7       | 200           | 2.58 |           |
| Surrogate: 1-Chlorooctane     | 80.5   | % 47.2-15       | 7               |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 82.7   | % 52.1-17       | 6               |              |     |            |               |      |           |

#### Sample ID: BOTTOM 2 (H403210-02)

| Chloride, SM4500Cl-B          | mg/kg  |                 | Analyze         | d By: AP     |     |            |               |      |           |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 48.0   | 16.0            | 10/20/2014      | ND           | 416 | 104        | 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            | 10/20/2014      | ND           | 177 | 88.3       | 200           | 1.44 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 10/20/2014      | ND           | 199 | 99.7       | 200           | 2.58 |           |
| Surrogate: 1-Chlorooctane     | 79.1   | % 47.2-15       | 7               |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 83.4   | % 52.1-17       | 6               |              |     |            |               |      |           |

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240 Fax To: (575) 393-2432

| Received:         | 10/17/2014 | Sampling Date:      | 10/17/2014    |
|-------------------|------------|---------------------|---------------|
| Reported:         | 10/20/2014 | Sampling Type:      | Soil          |
| Project Name:     | WBDU #75   | Sampling Condition: | Cool & Intact |
| Project Number:   | NONE GIVEN | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN  |                     |               |

#### Sample ID: BOTTOM 3 (H403210-03)

| Chloride, SM4500Cl-B          | mg/kg  |                 | Analyze         | d By: AP     |     |            |               |      |           |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 32.0   | 16.0            | 10/20/2014      | ND           | 416 | 104        | 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            | 10/20/2014      | ND           | 177 | 88.3       | 200           | 1.44 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 10/20/2014      | ND           | 199 | 99.7       | 200           | 2.58 |           |
| Surrogate: 1-Chlorooctane     | 85.2   | % 47.2-15       | 7               |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 91.4   | % 52.1-17       | 6               |              |     |            |               |      |           |

#### Sample ID: NORTH WALL 1 (H403210-04)

| Chloride, SM4500Cl-B          | mg,    | mg/kg           |                 | d By: AP     |     |            |               |      |           |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | <16.0  | 16.0            | 10/20/2014      | ND           | 416 | 104        | 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            | 10/20/2014      | ND           | 177 | 88.3       | 200           | 1.44 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 10/20/2014      | ND           | 199 | 99.7       | 200           | 2.58 |           |
| Surrogate: 1-Chlorooctane     | 94.8   | % 47.2-15       | 7               |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 97.8   | % 52.1-17       | 6               |              |     |            |               |      |           |

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#### \*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240 Fax To: (575) 393-2432

| Received:         | 10/17/2014 | Sampling Date:      | 10/17/2014    |
|-------------------|------------|---------------------|---------------|
| Reported:         | 10/20/2014 | Sampling Type:      | Soil          |
| Project Name:     | WBDU #75   | Sampling Condition: | Cool & Intact |
| Project Number:   | NONE GIVEN | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN  |                     |               |

#### Sample ID: SOUTH WALL 1 (H403210-05)

| Chloride, SM4500Cl-B          | mg/kg  |                 | Analyze         | d By: AP     |     |            |               |      |           |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | <16.0  | 16.0            | 10/20/2014      | ND           | 416 | 104        | 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            | 10/20/2014      | ND           | 177 | 88.3       | 200           | 1.44 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 10/20/2014      | ND           | 199 | 99.7       | 200           | 2.58 |           |
| Surrogate: 1-Chlorooctane     | 91.1   | % 47.2-15       | 7               |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 113    | % 52.1-17       | 6               |              |     |            |               |      |           |

#### Sample ID: SOUTH WALL 2 (H403210-06)

| Chloride, SM4500Cl-B          | mg/kg  |                 | Analyze         | d By: AP     |     |            |               |      |           |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | <16.0  | 16.0            | 10/20/2014      | ND           | 416 | 104        | 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            | 10/20/2014      | ND           | 177 | 88.3       | 200           | 1.44 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 10/20/2014      | ND           | 199 | 99.7       | 200           | 2.58 |           |
| Surrogate: 1-Chlorooctane     | 81.9   | % 47.2-15       | 7               |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 80.2   | % 52.1-17       | 76              |              |     |            |               |      |           |

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240 Fax To: (575) 393-2432

| Received:         | 10/17/2014 | Sampling Date:      | 10/17/2014    |
|-------------------|------------|---------------------|---------------|
| Reported:         | 10/20/2014 | Sampling Type:      | Soil          |
| Project Name:     | WBDU #75   | Sampling Condition: | Cool & Intact |
| Project Number:   | NONE GIVEN | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN  |                     |               |

#### Sample ID: WEST WALL 1 (H403210-07)

| Chloride, SM4500Cl-B          | mg/kg Analyze |                 | d By: AP   |              |     |            |               |      |           |
|-------------------------------|---------------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result        | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | <16.0         | 16.0            | 10/20/2014 | ND           | 416 | 104        | 400           | 0.00 |           |
| TPH 8015M                     | mg            | /kg             | Analyze    | d By: ms     |     |            |               |      |           |
| Analyte                       | Result        | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0         | 10.0            | 10/20/2014 | ND           | 177 | 88.3       | 200           | 1.44 |           |
| DRO >C10-C28                  | <10.0         | 10.0            | 10/20/2014 | ND           | 199 | 99.7       | 200           | 2.58 |           |
| Surrogate: 1-Chlorooctane     | 70.5          | % 47.2-15       | 7          |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 81.4          | % 52.1-17       | 6          |              |     |            |               |      |           |

#### Sample ID: EAST WALL 1 (H403210-08)

| Chloride, SM4500Cl-B          | mg,    | /kg             | Analyze    | d By: AP     |     |            |               |      |           |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 32.0   | 16.0            | 10/20/2014 | ND           | 416 | 104        | 400           | 0.00 |           |
| TPH 8015M                     | mg     | /kg             | Analyze    | d By: ms     |     |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0            | 10/20/2014 | ND           | 177 | 88.3       | 200           | 1.44 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 10/20/2014 | ND           | 199 | 99.7       | 200           | 2.58 |           |
| Surrogate: 1-Chlorooctane     | 86.5   | % 47.2-15       | 7          |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 78.2   | % 52.1-17       | 6          |              |     |            |               |      |           |

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#### \*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **Notes and Definitions**

- ND
   Analyte NOT DETECTED at or above the reporting limit

   RPD
   Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

#### Cardinal Laboratories

#### \*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 6 of 7

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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ARDINAL LABORATORIES

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 ANALYSIS REQUEST BILL TO Pacht Company Name: P.O. #: Kakor SUCP. Project Manager: Cations/Anions Company: Address: Attn: State: NM Zip: 88240 City: Hobbs Address: Fax #:  $\geq$ HdT Phone #: City: Chlorides Project Owner: PH 8015 Project #: BTEX Zip: State: S Project Name: Texas Õ Phone #: WBDU F Project Location: Fax #: complete Sampler Name: Kyle Humphrey SAMPLING PRESERV MATRIX FOR LAB USE ONLY 1 (G)RAB OR (C)OMP GROUNDWA'TER # CONTAINERS WASTEWATER ACID/BASE COOL Sample I.D. Õ Lab I.D. SLUDGE OTHER : OTHER CE/ SOIL TIME H4032 S DATE 2,01 1-17-H Pottom 200 20 V 0% 2 2 12; 25 2:3 173 Cal PLEASE NOTE: Liability and Damages. Cardinal's liability and clent's exclusive remedy for any claim adding whether based in contract or tort, shall be limited to the amount paid by the clent for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable analyses. As cauthat including those or negregance and any other cause vinaisociver and be detened warred using insurance in mang and record or Central whom an our and particles. In no event shall Cardinal be liable for incidential damages, including without imitation, business interruptions, loss of use, or loss of profits incidential be subsidiarios, allitudes or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Add'l Phone # C Yes No No Phone Result Received By 12 No Add'LFax #: □ Yes Relinquished By: Fax Result: REMARKS: email results Received By: Date Knorman@rice-ecs.com Relinguished By Kjones@riceswd.com; jkamplain@rice-ecs.com hconder@rice-ecs.com; Time: Lweinheimer@rice-ecs.com CHECKED BY: Sample Condition Delivered By: (Circle One) Khumphrey@rice-ecs.com Intact nitial Cool sedwards@rice-ecs.com,Iflores@rice-ecs.com PYes PYes Sampler - UPS - Bus - Other: No No 🗍 † Cardinal cannot accept verbal changes. Please fax written changes to 505-393 3476

q Page 7



October 21, 2014

BRUCE BAKER APACHE CORP - HOBBS 2350 W. MARLAND BLVD. HOBBS, NM 88240

RE: WBDU #75

Enclosed are the results of analyses for samples received by the laboratory on 10/20/14 14:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

| Method EPA 552.2 | Haloacetic Acids (HAA-5)     |
|------------------|------------------------------|
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3)  |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240 Fax To: (575) 393-2432

| Received:         | 10/20/2014 | Sampling Date:      | 10/20/2014    |
|-------------------|------------|---------------------|---------------|
| Reported:         | 10/21/2014 | Sampling Type:      | Soil          |
| Project Name:     | WBDU #75   | Sampling Condition: | Cool & Intact |
| Project Number:   | NONE GIVEN | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN  |                     |               |

#### Sample ID: BOTTOM 4 (H403218-01)

| Chloride, SM4500Cl-B          | mg,    | /kg             | Analyze    | d By: AP     |     |            |               |      |           |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 64.0   | 16.0            | 10/21/2014 | ND           | 400 | 100        | 400           | 3.92 |           |
| TPH 8015M                     | mg,    | /kg             | Analyze    | d By: ms     |     |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0            | 10/20/2014 | ND           | 177 | 88.3       | 200           | 1.44 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 10/20/2014 | ND           | 199 | 99.7       | 200           | 2.58 |           |
| Surrogate: 1-Chlorooctane     | 86.0   | % 47.2-15       | 7          |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 93.4   | % 52.1-17       | 6          |              |     |            |               |      |           |

#### Sample ID: NORTH WALL 2 (H403218-02)

| Chloride, SM4500Cl-B          | mg,    | mg/kg Analyzed By: AP |            | Analyzed By: AP |     |            |               |      |           |
|-------------------------------|--------|-----------------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit       | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 48.0   | 16.0                  | 10/21/2014 | ND              | 400 | 100        | 400           | 3.92 |           |
| TPH 8015M                     | mg     | /kg                   | Analyze    | d By: ms        |     |            |               |      |           |
| Analyte                       | Result | Reporting Limit       | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0                  | 10/20/2014 | ND              | 177 | 88.3       | 200           | 1.44 |           |
| DRO >C10-C28                  | <10.0  | 10.0                  | 10/20/2014 | ND              | 199 | 99.7       | 200           | 2.58 |           |
| Surrogate: 1-Chlorooctane     | 84.9   | % 47.2-15             | 7          |                 |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 84.7   | % 52.1-17             | 6          |                 |     |            |               |      |           |

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240 Fax To: (575) 393-2432

| Received:         | 10/20/2014 | Sampling Date:      | 10/20/2014    |
|-------------------|------------|---------------------|---------------|
| Reported:         | 10/21/2014 | Sampling Type:      | Soil          |
| Project Name:     | WBDU #75   | Sampling Condition: | Cool & Intact |
| Project Number:   | NONE GIVEN | Sample Received By: | Jodi Henson   |
| Project Location: | NOT GIVEN  |                     |               |

#### Sample ID: SOUTH WALL 3 (H403218-03)

| Chloride, SM4500Cl-B          | mg     | /kg             | Analyze    | d By: AP     |     |            |               |      |           |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 96.0   | 16.0            | 10/21/2014 | ND           | 400 | 100        | 400           | 3.92 |           |
| TPH 8015M                     | mg     | /kg             | Analyze    | d By: ms     |     |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0            | 10/20/2014 | ND           | 177 | 88.3       | 200           | 1.44 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 10/20/2014 | ND           | 199 | 99.7       | 200           | 2.58 |           |
| Surrogate: 1-Chlorooctane     | 93.8   | % 47.2-15       | 7          |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 119    | % 52.1-17       | 6          |              |     |            |               |      |           |

#### Sample ID: WEST WALL 2 (H403218-04)

| Chloride, SM4500CI-B          | mg,    | /kg             | Analyze    | d By: AP     |     |            |               |      |           |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | <16.0  | 16.0            | 10/21/2014 | ND           | 400 | 100        | 400           | 3.92 |           |
| TPH 8015M                     | mg,    | /kg             | Analyze    | d By: ms     |     |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | <10.0  | 10.0            | 10/20/2014 | ND           | 177 | 88.3       | 200           | 1.44 |           |
| DRO >C10-C28                  | <10.0  | 10.0            | 10/20/2014 | ND           | 199 | 99.7       | 200           | 2.58 |           |
| Surrogate: 1-Chlorooctane     | 99.3   | % 47.2-15       | 7          |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 94.9   | % 52.1-17       | 6          |              |     |            |               |      |           |

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **Notes and Definitions**

- ND
   Analyte NOT DETECTED at or above the reporting limit

   RPD
   Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

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RDINAL LABORATORIES

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

| Company Name: A PachP<br>Project Manager: BrvCe Paky  | 5144 70   | ANALYSIS REQUEST  |
|---|---|---|
| Project Manager: BrvCe Daky   | P.O. #:   |   |
| Address:  | Company:  | 0   |
| City: Hobbs State: NM Zip: 88240  | Attn:   |   |
| Phone #: Fax #:   | Address:  |   |
| Project #: Project Owner:   | City:   |   |
| Project Name:   | State: Zip:   | Chlorides<br>PH 8015 N<br>BTEX<br>exas TPH<br>e Cations/<br>TDS   |
| Project Location: 4BDV #75  | Phone #:  | Horide<br>BTEX<br>BTEX<br>Cation<br>TDS   |
| Sampler Name: Kyle Humphrey   | Fax #:  |   |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $  | PRESERV. SAMPLING<br>   | Chlorides<br>TPH 8015 M<br>BTEX<br>TPH 8015 M<br>BTEX<br>Texas TPH<br>Complete Cations/Anions<br>TDS      |
| PLEASE NOTE: Liability and Damages. Cardinal's liability and clenit's exclusive remedy for any claim arising whether based in contra analyses. All claims including those for negligence and any other cause whatsoever namedy for any claim arising whether based in contra services. In no event shall Cardinal the liability and clenit's exclusive remedy for any claim arising whether based in contra services. In no event shall Cardinal the liability and clenit's exclusive remedy for any claim arising whether based in contra services. In no event shall Cardinal the liability and clenit's exclusive remedy for any claim arising whether based in contra services in event shall Cardinal the liability and consequential damages, including without limitation, business interruptions attituates or successors arising out of or related to the performance of services hereindary by Cardinal, regardless of whether such claim attituates or successors arising out of or related to the performance of services hereindary by Cardinal, regardless of whether such claim attituates or successors arising out of or related to the performance of services hereindary by Cardinal, regardless of whether such claim attituates or successors arising out of or related to the performance of services hereindary by Cardinal, regardless of whether such claim attituates or successors arising out of or related to the performance of services hereindary by Cardinal, regardless of whether such claim attituates or successors arising out of or related to the performance of services hereindary by Cardinal, regardless of whether such claim attitudes or successors arising out of or related to the performance of services hereindary by Cardinal, regardless of whether such claim attitudes or successors arising out of or related to the performance of services hereindary by Cardinal, regardless of whether such claim attitudes or successors arising out of or related to the performance of services hereindary by Cardinal, regardless of the perfo | tion CHECKEDBY:<br>tion CHECKEDBY:<br>to be when the time of time of the time of time of the time of time of time of the time of time | Ine application<br>axios,<br>asu<br>Isult: I Yes I No Add'I Phone #:<br>It: I Yes I No Add'I Fax #:<br>S: |

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KUSH ..

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### Appendix C Photo Documentation

RICE Environmental Consulting and Safety (RECS) P.O. Box 2948 Hobbs, NM 88241 Phone 575.393.2967

# Apache WBDU #75 Unit Letter L, Section 16, T21S, R37E



Initial site photo, facing north

10/16/14



Scraping out wet material, facing northeast 10/16/14



Initial site photo, facing west

10/16/14



Continued excavation, facing south

10/17/14



Exporting soil, facing east

10/20/14



Site backfilled, facing southeast

12/1/14



Site backfilled, facing east

12/1/14



Site backfilled, facing south

12/1/14

## Appendix D Final C-141

RICE Environmental Consulting and Safety (RECS) P.O. Box 2948 Hobbs, NM 88241 Phone 575.393.2967

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

Form C-141 Revised August 8, 2011

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

**Oil Conservation Division** 1220 South St. Francis Dr.

| 1220 S. St. Fran  | icis Dr., Sant   | a Fe, NM 8750.   | 5  | Sa  | anta Fe  | , NM 875  | 505  |  |  |   |   |   |
|---|--|--|--|---|--|---|--|--|--|---|---|---|
|   |  |  | Rele   | ease Notific  | cation   | and Co  | orrective A  | ction  |  |   |   |   |
|   |  |  |  |   |  | OPERATOR  |  |  | 🗌 Initial Report 🛛 Final Report                              |   |   |   |
| Name of Co  | ompany A   | Apache Corp  | 1  | Contact Bruce Baker   |  |   |  |  |  |   |   |   |
| and the second |  | land Street,   |  | Telephone No. (432) 631-6982  |  |   |  |  |  |   |   |   |
| Facility Nat  | me WBD   | U #75  |  |   | - ]  | Facility Typ                                    | be Oil Well  |  |  |   |   |   |
| Surface Ow  | mer State  | ~  | Dwner  | API No. 30-025-06615  |  |   |  |  |  |   |   |   |
|   |  |  |  |   |  | OF RE   | LEASE  |  |  |   | 00015                                       |   |
| Unit Letter   | Section  | Township   | Range  | Feet from the   |  | /South Line Feet from the East/West Line County |  |  |  |   |   |   |
| L   | 16   | 21S  | 37E  | 1980'   |  | FSL   | 660'   | FWL  |  | Lea   |   |   |
|   |  |  | La   | titude  |  | Longitud  | le   |  |  |   |   |   |
|   |  |  |  | · · · · ·   | URE  | OF REL  |  |  |  |   |   |   |
| Type of Release Produced Water  |  |  |  |   |  | Volume of of produce                            | Release 125 Ba   | rrels  | Volume R<br>produced   | Recovered 120 barrels of                                    |   |   |
| Source of Re  | lease injec  | ction line   | Date and H   | Hour of Occurrence  |  |   |  | 1 Hour of Discovery 10/16/2014                 |  |   |   |   |
| Was Immedia   | ate Notice (   | Given?   | 10/16/2014<br>If YES, To Whom?   |   |  |   |  |  |  |   |   |   |
|   |  | $\boxtimes$  | Yes 🗌  | No 🗌 Not R  | equired  |   | Oberding (NMO  | CD)  |  |   |   |   |
| By Whom?  |  |  |  | Date and Hour 10/17/2014 at 11:37 a.m.  |  |   |  |  |  |   |   |   |
| Was a Water   | course Read  | ched?  | If YES, Volume Impacting the Watercourse.                              |   |  |   |  |  |  |   |   |   |
| If a Watercou   | ırse was Im  | pacted, Descr  | ibe Fully.*  | k .   |  | 1   |  |  |  |   |   |   |
|   |  |  |  |   |  |   |  |  |  |   |   |   |
| During the in   | stallation of  | em and Reme<br>f a flange on i<br>l a vacuum tru                                     | njection li  |   | /BDU 75<br>1p fluid.                             | the line was                                    | in a bind resultin   | g in the                                       | fiber glass  | line to brea  | k. The                                      | valve                                   |
| photographed<br>the wet soil fi<br>personnel san<br>All wall and I  | ffected 1,71<br>I and GPS r<br>rom beneatl<br>npled the w<br>bottom sam  | 2 square feet<br>napped. A tra<br>n the pipelines<br>alls and botto<br>ples returned | of ditch lin<br>ack-hoe wa<br>s. All exca<br>m of the si<br>laboratory | ne. RECS person<br>as utilized to remo<br>avated soil was ta<br>ite for chlorides a | ove the w<br>ken to a l<br>nd organ<br>s below 2 | et soil in the<br>NMOCD app<br>ic vapors. T     | nning on October<br>easily accessible<br>proved facility for<br>he samples were t<br>ith GRO and DR(   | areas, a<br>disposa                            | nd a shovel<br>al. Once the                                  | crew was u<br>wet soil wa<br>mercial labo                   | tilized<br>as remo                          | to remove<br>oved, RECS<br>for analysis |
| regulations al<br>public health<br>should their of<br>or the enviror  | or the environment of the enviro | are required to<br>ronment. The<br>ave failed to a                                   | o report an<br>acceptance<br>adequately<br>OCD accep                   | id/or file certain r<br>ce of a C-141 repo<br>investigate and r                     | elease no<br>ort by the<br>emediate              | otifications and<br>NMOCD m<br>contaminati      | knowledge and u<br>nd perform correc<br>arked as "Final R<br>on that pose a thr<br>e the operator of n | tive acti<br>eport" d<br>eat to gr<br>responsi | ions for rele<br>oes not reli<br>ound water<br>bility for co | eases which<br>eve the open<br>s, surface wa<br>ompliance w | may en<br>rator of<br>iter, hui<br>vith any | danger<br>liability<br>man health       |
| Signature:  | Bru  | e Ba   | her  |   |  |   | OIL CON  | SERV   | ATION  | DIVISIC   | DN  |   |

Approved by Environmental Specialist: Printed Name: Bruce Baker Title: Environmental Technician Approval Date: Expiration Date: E-mail Address: larry.baker@apachecorp.com Conditions of Approval: Attached 1-16-15 Date: Phone: (432) 631-6982

\* Attach Additional Sheets If Necessary