

ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
- Engineering Bureau -  
1220 South St. Francis Drive, Santa Fe, NM 87505



**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Application Acronyms:**

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]  
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]  
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]  
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]  
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]  
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication  
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement  
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
☒ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify \_\_\_\_\_

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or ☐ Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☒ Application is One Which Requires Published Legal Notice

[D] ☒ Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or, \_\_\_\_\_

[F] ☐ Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

**Note:** Statement must be completed by an individual with managerial and/or supervisory capacity.

David Catanach  
Print or Type Name

Signature

Date

Agent-Apache Corporation  
Title

drcatanach@netscape.com  
E-Mail Address

- WFX  
- Apache Corporation  
873

2014 NOV 12 P 3:21  
RECEIVED OGD

W & I  
- NM GSA unit #10  
30-025-05729  
- NM GSA unit #11  
30-025-05749  
- NM GSA #10  
30-025-05753  
- NM GSA #509  
30-025-26214  
- NM GSA #516  
30-025-30332

- NM GSA #354  
30-025-38148

EUNICE Monument  
Grayburg-SAN  
Andres  
23000

*David Catanach*

11/12/14

November 12, 2014

Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Attention: Ms. Jami Bailey  
Division Director

**HAND DELIVERED**

Re: Form C-108 (Application for Authorization to Inject)  
Apache Corporation  
North Monument G/SA Unit  
Wells No. 11-10, 10-11, 10-10, 5-16, 5-9 & 354  
Sections 19, 29 & 30, Township 19 South, Range 37 East, NMPM,  
Eunice Monument Grayburg-San Andres Pool (23000)  
Lea County, New Mexico

Dear Ms. Bailey,

Enclosed please find a Division Form C-108 (Application for Authorization to Inject) to expand the North Monument G/SA Unit Waterflood Project. Division Order No. R-9494 dated May 1, 1991 approved the statutory unitization of the North Monument G/SA Unit Area ("Unit Area") and Division Order No. R-9596, as amended, dated October 15, 1991 approved secondary recovery operations within the Unit Area. Apache Corporation proposes to convert the North Monument G/SA Unit Wells No. 11-10, 10-11, 10-10, 5-16, 5-9 and 354 from producing wells to injection wells in order to complete an efficient production/injection pattern within the Unit Area. These wells are located in Sections 19, 29 and 30, Township 19 South, Range 37 East, NMPM, Lea County, New Mexico.

All the required information is enclosed. If additional information is needed, please contact me at (505) 690-9453.

Sincerely,



David Catanach  
Agent for Apache Corporation  
303 Veterans Airpark Lane, Suite 3000  
Midland, Texas 79705

Xc: OCD-Hobbs



**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage  
Application qualifies for administrative approval? ☒ Yes ☐ No
- II. OPERATOR: Apache Corporation (OGRID-873)  
ADDRESS: 303 Veterans Airpark Lane, Suite 3000 Midland, Texas 79705  
CONTACT PARTY: David Catanach-Agent PHONE: (505) 690-9453
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.  
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? ☒ Yes ☐ No  
If yes, give the Division order number authorizing the project: Order No. R-9596, as amended, entered in Case No. 10252 on October 15, 1991. (Also See Orders No. WFX-716-A (9/6/07), WFX-833 (3/10/08) and WFX-844 (11/18/08))
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- \*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: David Catanach TITLE: Agent-Apache Corporation  
SIGNATURE: David Catanach DATE: 11/12/14  
E-MAIL ADDRESS: drcatanach@netscape.com
- \* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: Case No. 10252 (9/19/91), WFX-716A, WFX-833, WFX-844
- DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

### III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

### XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.



C-108 Application  
Apache Corporation  
North Monument G/SA Unit Wells No. 11-10, 10-11, 10-10, 5-16, 5-9 & 354  
Sections 19, 29 & 30, T-19S, R-37E, NMPM  
Lea County, New Mexico

- I. The purpose of the application is to request approval to convert six (6) producing wells to water injection wells within the North Monument G/SA Unit Waterflood Project, Eunice Monument Grayburg-San Andres Pool, Lea County, New Mexico, in order to complete an efficient production/injection pattern within the North Monument G/SA Unit Area ("Unit Area").
- II. Apache Corporation ("Apache")  
303 Veterans Airpark Lane, Suite 3000  
Midland, Texas 79705  
Contact Party: Mr. David Catanach (505) 690-9453
- III. Well schematic diagrams showing the current and proposed wellbore configurations for each of the six injection wells are attached. Also attached is a procedure detailing how these wells will be converted from producing wells to injection wells. **Please note that Apache proposes to initially complete the injection wells within the perforated or open-hole intervals shown on the attached well schematics, however Apache seeks approval to expand the injection interval as needed to include the entire "Unitized Formation" as defined by Order No. R-9494 ("the Grayburg and San Andres formations as found from a depth of 3,642 feet to a depth of 5,050 feet on the Gamma Ray Formation Compensated Density Log run on the Amerada Hess Corporation Monument Abo Unit Well No. 1 located in the NE/4 NW/4 of Section 2, Township 20 South, Range 36 East, NMPM, Lea County, New Mexico")**
- IV. This is an expansion of the North Monument G/SA Unit Waterflood Project. Division Order No. R-9494 dated May 1, 1991 approved the statutory unitization of the Unit Area, and Order No. R-9596 dated October 15, 1991 approved secondary recovery operations within the Unit Area.
- V. Enclosed are maps that identify all wells/leases within a 2-mile radius of the proposed injection wells and a map that identifies the ½ mile "Area of Review" ("AOR").
- VI. Attached is an updated listing of wells within the AOR. AOR well data that was previously submitted to the Division in Case No. 10252 on September 19, 1991 and in the WFX applications that resulted in Orders No WFX-716-A dated September 6, 2007, WFX-833 dated March 10, 2008 and WFX-844 dated November 18, 2008 has not been re-submitted with this application. However, these wells were reviewed to make sure that their status has not changed since the earlier submittal. The AOR well data presented in this application only shows those wells whose well data was not previously submitted to the Division. An examination of the updated AOR well data indicates that all wells are constructed and/or plugged and abandoned in such a manner so as to confine the injected fluid to the proposed injection interval.

- VII. 1. The average water injection rate is 300 BWPD per well, and the maximum injection rate is 600 BWPD per well. If the average or maximum rates increase in the future, the Division will be notified.
2. This will be a closed system.
3. The proposed average surface injection pressure will be in compliance with the Division's assigned gradient of 0.2 psi/ft of depth to the top injection perforation and/or open hole interval in each well (approximately 737 psi). If an injection pressure higher than 737 psi is necessary, Apache will conduct step rate injection tests to determine the fracture pressure of the injection interval.
4. Produced water from the Eunice Monument Grayburg-San Andres Pool originating from wells within the Unit Area will be re-injected into the subject injection wells.
5. Injection is to occur into a formation that is oil productive.
- VIII. The formations being targeted for water injection are the Grayburg and/or San Andres intervals from 3,642 feet to 5,050 feet. These formations are Guadalupian in age and are a sequence of shallow marine carbonates, which have for the most part been dolomatized. A six percent porosity cut off is used to determine "pay" as porosity less than this is considered non-productive at the existing and proposed reservoir pressures and reservoir fluid regimes. The vertical extent of the reservoir is limited top and bottom by impermeable shales and carbonates. Data obtained from the New Mexico State Engineer indicates that there are several Ogallala fresh water wells in this area whose depths range from 28 feet to 150 feet.
- IX. A stimulation treatment will be performed on the injection wells with 3000 gallons of 15% NE-FE HCL w/additives.
- X. Logs were filed subsequent to the completion of drilling operations.
- XI. Attached is a water analysis from three fresh water wells within the Unit Area. These water analysis were previously presented in Case No. 10252.
- XII. Affirmative statement is enclosed.
- XIII. XIII. Proof of Notice is enclosed



GL=3607'  
KB=3618'  
Spud: 5/15/36

## Apache Corporation – NMGSAU #1110

### Wellbore Diagram – Current Status

Date : 6/2/14

API: 30-025-05729

#### Surface Location

R. Taylor



1980' FSL & 1980' FEL, Unit J  
Sec 29, T19S, R37E, Lea County, NM

#### **Surface Casing**

10-3/4" 32.75# @ 189' w/ 200 sx to surface

#### **Intermediate Casing**

7-5/8" 26# @ 1378' w/ 300 sx to surface

6/54: Hole in csg @ 658-689; 1071-1102. Perf @ 1390' w/ 2 jspf. SQZ'd w/ 175 sxs and SQZ bradenhead w/ 50 sxs.

4/92: CSG leak @ 1723-1850. SQZ'd w/ 250 sxs cmt

Hole Size  
=13-3/4"

Hole Size  
=9-7/8"

CTI in 02'  
CTP in 05'

TAC @ 3697'  
SN @ 3854'

#### **Production Casing**

5-1/2" 17# @ 3751' w/ 300 sxs

Hole Size  
=6-3/4"

Hole Size  
=4-3/4"

PBTD = 3900'  
TD = 3935'

6/36: OH from 3751-3935. Acidized w/ 4000 gal acid.  
7/57: PB to 3889 w/ Calseal and Hydromite. Frac OH 3793-3889 w/ 20k gal refined oil w/ 20k# sand in two stages.  
10/64: Dump 500 gal 15% NEFE w/ 40 bbls lease oil.  
4/68: Cleaned out to 3900'. Dump 750 gal 15% NEFE w/ 40 bbls lease oil.  
7/70: Frac OH from 3571-3900 w/ 20.5k gal gelled water w/ 30.7k# 20/40 sand w/ 1000 gal acid in two stages.  
8/77: Perf 3774-84; 3787-92; 3811-16; 3822-27; 3836-50; 3865-70 w/ 4 jspf (136 holes). Acidized w/ 3000 gal 15% NEFE.  
2/97: C/O to 3900'. Acidized w/ 4000 gal 15% NEFE w/ sonic hammer  
3/02: Acidized OH w/ 3000 gal 15% HCL. CTI  
3/05: Acidized OH w/ 3000 gal 15% NEFE. Convert to producer.

GL=3607'  
KB=3618'  
Spud: 5/15/36

## Apache Corporation – NMGSAU #1110

### Wellbore Diagram – Proposed Status

Date : 6/2/14

API: 30-025-05729

#### Surface Location

R. Taylor



1980' FSL & 1980' FEL, Unit J  
Sec 29, T19S, R37E, Lea County, NM

#### **Surface Casing**

10-3/4" 32.75# @ 189' w/ 200 sx to surface

#### **Intermediate Casing**

7-5/8" 26# @ 1378' w/ 300 sx to surface

6/54: Hole in csg @ 658-689; 1071-1102. Perf @ 1390' w/ 2 jspf. SQZ'd w/ 175 sxs and SQZ bradenhead w/ 50 sxs.

4/92: CSG leak @ 1723-1850. SQZ'd w/ 250 sxs cmt

Hole Size  
=13-3/4"

Hole Size  
=9-7/8"

CTI in 02'  
CTP in 05'

2 3/8" IPC Tubing  
Set in an Arrow 1-X Plastic-  
Coated Packer @ 3,651'

PKR @ TBD

#### **Production Casing**

5-1/2" 17# @ 3751' w/ 300 sxs

Hole Size  
=6-3/4"

Hole Size  
=4-3/4"

PBTD = 3900'  
TD = 3935'

6/36: OH from 3751-3935. Acidized w/ 4000 gal acid.  
7/57: PB to 3889 w/ Calseal and Hydromite. Frac OH 3793-3889 w/ 20k gal refined oil w/ 20k# sand in two stages.  
10/64: Dump 500 gal 15% NEFE w/ 40 bbls lease oil.  
4/68: Cleaned out to 3900'. Dump 750 gal 15% NEFE w/ 40 bbls lease oil.  
7/70: Frac OH from 3571-3900 w/ 20.5k gal gelled water w/ 30.7k# 20/40 sand w/ 1000 gal acid in two stages.  
8/77: Perf 3774-84; 3787-92; 3811-16; 3822-27; 3836-50; 3865-70 w/ 4 jspf (136 holes). Acidized w/ 3000 gal 15% NEFE.  
2/97: C/O to 3900'. Acidized w/ 4000 gal 15% NEFE w/ sonic hammer  
3/02: Acidized OH w/ 3000 gal 15% HCL. CTI  
3/05: Acidized OH w/ 3000 gal 15% NEFE. Convert to producer.  
TBD: Acidize OH w/ 3000 gal 15% NEFE. Convert to injector



NMGSAU #1110  
API # 30-025-05729  
Sec 29, T19S, R37E  
Elevation: 3618' KB, 3607' GL  
TD: 3,935'  
PBTD: 3,900'  
Casing Record: 10-3/4" 32.75# @ 189' w/ 200 sxs  
7-5/8" 26# @ 1378' w/ 300 sxs  
5-1/2" 17# @ 3,751' w/ 300 sxs

Perfs: Grayburg: Open-hole from 3751-3900

Objective: Convert to Injection Well

AFE: 11-14-xxxx

1. MIRU unit. Kill well as necessary. Unseat pump. POOH laying down rods and pump.
2. ND WH. NU BOP. Release TAC. POOH w/ tubing and TAC.
3. PU and RIH w/ bit, bit sub, and drill collars on 2-7/8" production tubing and tag PBTD @ 3,900. Clean-out if necessary.
4. PU and RIH w/ sonic hammer on 2-7/8" production tubing to PBTD @ 3,900'.
5. MIRU acid services. Acidize down 2-7/8" J-55 tubing w/ 3000 gals of 15% NEFE HCL w/ additives through the sonic hammer moving across the interval from 3,751'-3,900'. Drop ball and shear tool.
6. RU swab equipment and recover load. RD swab equipment.
7. Kill well if necessary. TOH w/ sonic hammer and 2-7/8" tubing.
8. POOH and LD tubing.
9. Change wellhead to injection wellhead.
10. PU and RIH w/ injection packer on 2-3/8" Nylon coated J-55 tubing. Set PKR within 100' of the top perforations.
11. Release off on-off tool. Circulate hole w/ inhibited fresh water to be used as PKR fluid.
12. Latch onto PKR and run MIT test to 600 psi for 30 minutes.
13. RDMO PU. Install and ditch fiberglass injection line. Tie onto wellhead. Test line to 2000 psi for 24 hours. Install automation and put well on injection.

GL=3621'  
KB=3635'  
Spud: 2/7/36

## Apache Corporation – NMGSAU #1011

### Wellbore Diagram – Current Status

Date : 6/2/14

API: 30-025-05749

#### Surface Location

R. Taylor



1980' FSL & 1980' FWL, Unit K  
Sec 30, T19S, R37E, Lea County, NM

#### **Surface Casing**

12-1/2" 50# @ 200' w/ 200 sx to surface

#### **Intermediate Casing**

9-5/8" 40# @ 2499' w/ 450 sx to surface

5/93: 7" casing had severe pitting and holes. CSG cut @ 2469' and replaced w/ 7" 23# K-55 w/ casing patch @ 2471. Perf 2475. SQZ w/ 276 sxs cmt to surface.

TAC @ 3777'

SN @ 3895'

#### **Production Casing**

7" 24# @ 3814' w/ 250 sxs

4/36: OH from 3814-3970. Acidized w/ 1000 gal acid  
6/95: OH plugged back to 3924 w/ 35 sxs cmt  
6/95: Acidize OH w/ sonic hammer from 3814-3924 w/ 5040 gal 15% HCL

Hole Size  
=15"

Hole Size  
=12"

Hole Size  
=8-3/4"

Hole Size  
=6-1/4"

PBTD = 3924'  
TD = 3970'



GL=3621'  
KB=3635'  
Spud: 2/7/36

## Apache Corporation – NMGSAU #1011

### Wellbore Diagram – Proposed Status

Date : 6/2/14

API: 30-025-05749

#### Surface Location

R. Taylor



1980' FSL & 1980' FWL, Unit K  
Sec 30, T19S, R37E, Lea County, NM

#### Surface Casing

12-1/2" 50# @ 200' w/ 200 sx to surface

#### Intermediate Casing

9-5/8" 40# @ 2499' w/ 450 sx to surface

#### 2 3/8" IPC Tubing

Set in an Arrow 1-X Plastic-Coated Packer @ 3,714'

5/93: 7" casing had severe pitting and holes. CSG cut @ 2469' and replaced w/ 7" 23# K-55 w/ casing patch @ 2471. Perf 2475. SQZ w/ 276 sxs cmt to surface.

PKR @ TBD

#### Production Casing

7" 24# @ 3814' w/ 250 sxs

TBD: Acidize 3814-3970 w/ 3000 gal 15% NEFE w/ sonic hammer. Convert to Injection

4/36: OH from 3814-3970. Acidized w/ 1000 gal acid

6/95: OH plugged back to 3924 w/ 35 sxs cmt

6/95: Acidize OH w/ sonic hammer from 3814-3924 w/ 5040 gal 15% HCL

Hole Size  
=15"

Hole Size  
=12"

Hole Size  
=8-3/4"

Hole Size  
=6-1/4"

PBTD = 3924'  
TD = 3970'

NMGSAU #1011  
API # 30-025-05749  
Sec 30, T19S, R37E  
Elevation: 3635' KB, 3621' GL  
TD: 3,970'  
PBTD: 3,924'

Casing Record:      12-1/2" 50# @ 200' w/ 200 sxs  
                         9-5/8" 40# @ 2499' w/ 450 sxs  
                         7" 24# @ 3,814' w/ 250 sxs

Perfs: Grayburg: Open-hole from 3814-3924

Objective: Convert to Injection Well

AFE: 11-14-xxxx

1. MIRU unit. Kill well as necessary. Unseat pump. POOH laying down rods and pump.
2. ND WH. NU BOP. Release TAC. POOH w/ tubing and TAC.
3. PU and RIH w/ bit, bit sub, and drill collars on 2-7/8" production tubing and tag PBTD @ 3,924. Clean-out if necessary.
4. PU and RIH w/ sonic hammer on 2-7/8" production tubing to PBTD @ 3,924'.
5. MIRU acid services. Acidize down 2-7/8" J-55 tubing w/ 3000 gals of 15% NEFE HCL w/ additives through the sonic hammer moving across the interval from 3,814'-3,924'. Drop ball and shear tool.
6. RU swab equipment and recover load. RD swab equipment.
7. Kill well if necessary. TOH w/ sonic hammer and 2-7/8" tubing.
8. POOH and LD tubing.
9. Change wellhead to injection wellhead.
10. PU and RIH w/ injection packer on 2-3/8" Nylon coated J-55 tubing. Set PKR within 100' of the top perforations.
11. Release off on-off tool. Circulate hole w/ inhibited fresh water to be used as PKR fluid.
12. Latch onto PKR and run MIT test to 600 psi for 30 minutes.
13. RDMO PU. Install and ditch fiberglass injection line. Tie onto wellhead. Test line to 2000 psi for 24 hours. Install automation and put well on injection.



GL=3621'  
KB=3635'  
Spud: 2/7/36

## Apache Corporation – NMGSAU #1010

### Wellbore Diagram – Current Status

Date : 6/2/14

API: 30-025-05753

#### Surface Location

R. Taylor



1980' FSL & 1980' FEL, Unit J  
Sec 30, T19S, R37E, Lea County, NM

#### Surface Casing

13" 50# @ 115' w/ 100 sx to surface

#### Intermediate Casing

9-5/8" 40# @ 2420' w/ 450 sx to surface

Hole Size  
=15"

Hole Size  
=12"

4/92: Perf SQZ holes @ 3315. SQZ'd w/ 450 sxs cmt.

TAC @ ????'  
SN @ 3809'

Hole Size  
=8-3/4"

#### Production Casing

7" 24# @ 3787' w/ 60 sxs

6/78: Perf OH from 3820-26, 3834-42 w/ 4 jspf. Acidized w/ 1000 gal acid

3/82: Perf OH from 3820-26; 3834-42 w/ 2 jspf. Acidized w/ 3500 gal NEFE

12/77: Plug back OH from 3937 to 3863 w/ hydromite plug.

4/36: OH from 3787-3945 no original stimulation

8/71: OH 3784-3937 acidized w/ 3000 gal 15% HCL

Hole Size  
=6-1/4"

PBTD = 3863'  
TD = 3945'

GL=3621'  
KB=3635'  
Spud: 2/7/36

# Apache Corporation – NMGSAU #1010

## Wellbore Diagram – Proposed Status

Date : 6/2/14

API: 30-025-05753

### Surface Location

R. Taylor



1980' FSL & 1980' FEL, Unit J  
Sec 30, T19S, R37E, Lea County, NM

### Surface Casing

13" 50# @ 115' w/ 100 sx to surface

### Intermediate Casing

9-5/8" 40# @ 2420' w/ 450 sx to surface

Hole Size  
=15"

Hole Size  
=12"

2 3/8" IPC Tubing

Set in an Arrow 1-X Plastic-Coated Packer @ 3,687'

4/92: Perf SQZ holes @ 3315. SQZ'd w/ 450 sxs cmt.

TAC @ ????'

SN @ 3809'

PKR @ TBD

### Production Casing

7" 24# @ 3787' w/ 60 sxs

Hole Size  
=8-3/4"

TBD: Acidize 3820-3863 w/ 3000 gal 15% NEFE w/ sonic hammer. Convert to Injection

6/78: Perf OH from 3820-26, 3834-42 w/ 4 jspf. Acidized w/ 1000 gal acid

3/82: Perf OH from 3820-26; 3834-42 w/ 2 jspf. Acidized w/ 3500 gal NEFE

12/77: Plug back OH from 3937 to 3863 w/ hydromite plug.

4/36: OH from 3787-3945 no original stimulation

8/71: OH 3784-3937 acidized w/ 3000 gal 15% HCL

Hole Size  
=6-1/4"

PBTD = 3863'  
TD = 3945'



NMGSAU #1010  
API # 30-025-05753  
Sec 30, T19S, R37E  
Elevation: 3635' KB, 3621' GL  
TD: 3,945'  
PBTD: 3,863'  
Casing Record: 13" 50# @ 115' w/ 100 sxs  
9-5/8" 40# @ 2420' w/ 450 sxs  
7" 24# @ 3,787' w/ 60 sxs

Perfs: Grayburg: Open-hole from 3787-3863

Objective: Convert to Injection Well

AFE: 11-14-xxxx

1. MIRU unit. Kill well as necessary. Unseat pump. POOH laying down rods and pump.
2. ND WH. NU BOP. Release TAC. POOH w/ tubing and TAC.
3. PU and RIH w/ bit, bit sub, and drill collars on 2-7/8" production tubing and tag PBTD @ 3,863. Clean-out if necessary.
4. PU and RIH w/ sonic hammer on 2-7/8" production tubing to PBTD @ 3,863'.
5. MIRU acid services. Acidize down 2-7/8" J-55 tubing w/ 3000 gals of 15% NEFE HCL w/ additives through the sonic hammer moving across the interval from 3,787'-3,863'. Drop ball and shear tool.
6. RU swab equipment and recover load. RD swab equipment.
7. Kill well if necessary. TOH w/ sonic hammer and 2-7/8" tubing.
8. POOH and LD tubing.
9. Change wellhead to injection wellhead.
10. PU and RIH w/ injection packer on 2-3/8" Nylon coated J-55 tubing. Set PKR within 100' of the top perforations.
11. Release off on-off tool. Circulate hole w/ inhibited fresh water to be used as PKR fluid.
12. Latch onto PKR and run MIT test to 600 psi for 30 minutes.
13. RDMO PU. Install and ditch fiberglass injection line. Tie onto wellhead. Test line to 2000 psi for 24 hours. Install automation and put well on injection.

GL=3647'  
KB=3660'  
Spud: 5/3/88

## Apache Corporation – NMGSAU #516

### Wellbore Diagram – Current Status

Date : 5/21/2014

API: 30-025-30332

#### Surface Location

R. Taylor



610' FSL & 760' FEL,  
Sec 19, T19S, R37E, Lea County, NM

#### Surface Casing

8-5/8" 24# K-55 @ 1330' w/ 850 sx to surface

Hole Size  
=12-1/4"

SN @ 3634'

7/90: Perf Grayburg @ 3686-3736; 3780-89 w/ 2 jspf (66 holes). Acidized w/ 1600 gal 15% NEFE acid

7/90: CIBP set @ 3770 w/ 10' cmt on top'

7/90: CIBP set @ 3800'

1/90: Acidized 3816-3920 w/ 3200 gal gelled 15% NEFE

6/88: Perf Grayburg @ 3816-20; 3844-48; 3858-62; 3866-76 w/ 2 jspf (44 holes). Acidized w/ 1600 gal 15% NEFE acid

1/90: Perf Grayburg @ 3893-3910; 3916-20 w/ 2 jspf (44 holes). Acidized w/ 378 gal 15% NEFE acid- communicated

#### Production Casing

5-1/2" 17# K-55 @ 3978' w/ 663 sxs to surface

Hole Size  
=7-7/8"

PBTD = 3955' MD  
TD = 3975' MD



GL=3647'  
KB=3660'  
Spud: 5/3/88

## Apache Corporation – NMGSAU #516

### Wellbore Diagram – Proposed Status

Date : 5/21/2014

API: 30-025-30332

#### Surface Location

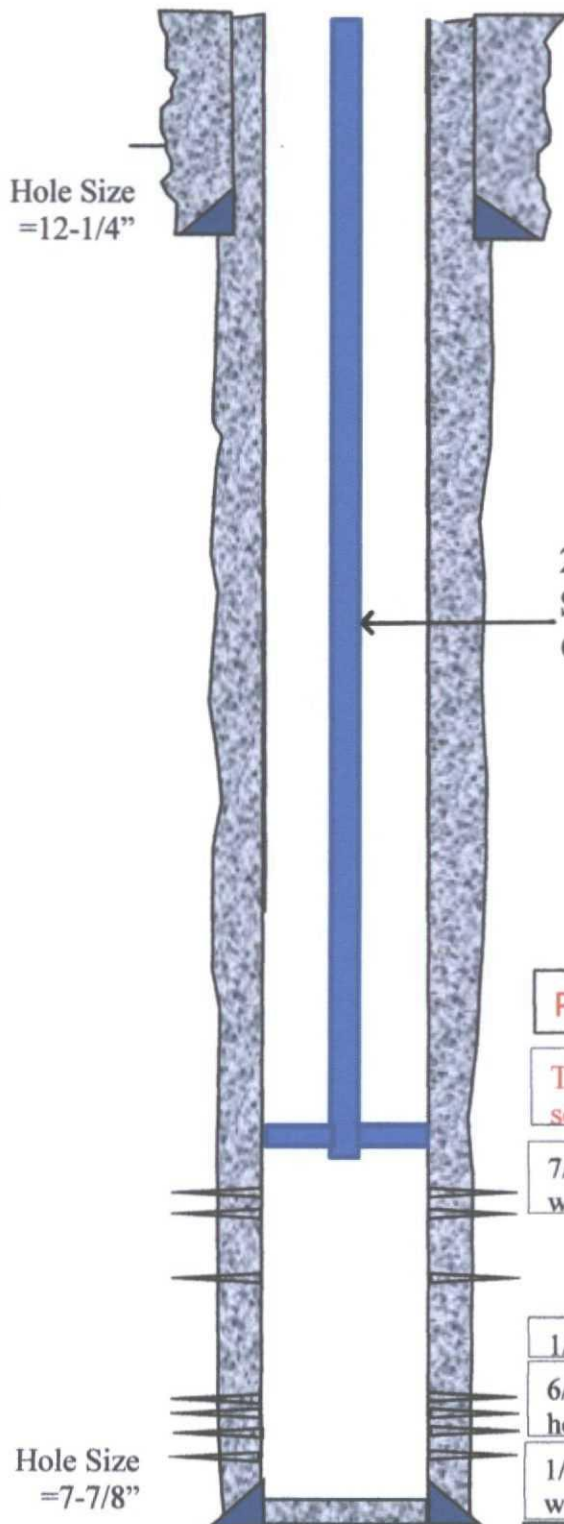
R. Taylor



610' FSL & 760' FEL,  
Sec 19, T19S, R37E, Lea County, NM

#### Surface Casing

8-5/8" 24# K-55 @ 1330' w/ 850 sx to surface



PKR @ TBD

TBD: KO CIBP's and acidize 3686-3920 w/ 3000 gal 15% NEFE w/ sonic hammer. Convert to Injection

7/90: Perf Grayburg @ 3686-3736; 3780-89 w/ 2 jspf (66 holes). Acidized w/ 1600 gal 15% NEFE acid

1/90: Acidized 3816-3920 w/ 3200 gal gelled 15% NEFE

6/88: Perf Grayburg @ 3816-20; 3844-48; 3858-62; 3866-76 w/ 2 jspf (44 holes). Acidized w/ 1600 gal 15% NEFE acid

1/90: Perf Grayburg @ 3893-3910; 3916-20 w/ 2 jspf (44 holes). Acidized w/ 378 gal 15% NEFE acid- communicated

#### Production Casing

5-1/2" 17# K-55 @ 3978' w/ 663 sxs to surface

PBTD = 3955' MD  
TD = 3975' MD

NMGSAU #516

API # 30-025-30332

Sec 19, T19S, R37E

Elevation: 3660' KB, 3647' GL

TD: 3,975'

PBTD: 3,955'

Casing Record: 8-5/8" 24# @ 1330' w/ 850 sxs  
5-1/2" 17# @ 3,978' w/ 663 sxs

Perfs: Grayburg: 3686-3736; 3780-89 (66 holes)  
CIBP @ 3770 w/ 10' cmt  
CIBP @ 3800'  
3816-20; 3844-48; 3858-62; 3866-73; 3893-3910; 3916-20 (88 holes)

Objective: Convert to Injection Well

AFE: 11-14-xxxx

1. MIRU unit. Kill well as necessary. Unseat pump. POOH laying down rods and pump.
2. ND WH. NU BOP. Release TAC. POOH w/ tubing and TAC.
3. PU and RIH w/ bit, bit sub, and drill collars on 2-7/8" production tubing and tag CIBP @ 3,760.
4. RU swivel. Break circulation and drill out CIBP @ 3770 and CIBP @ 3800. Continue to PBTD at 3955. Circulate clean. RD swivel and POOH w/ bit and tubing.
5. PU and RIH w/ sonic hammer on 2-7/8" production tubing to bottom perf @ 3,920'.
6. MIRU acid services. Acidize down 2-7/8" J-55 tubing w/ 3000 gals of 15% NEFE HCL w/ additives through the sonic hammer moving across the interval from 3,686'-3,920'. Drop ball and shear tool.
7. RU swab equipment and recover load. RD swab equipment.
8. Kill well if necessary. TOH w/ sonic hammer and 2-7/8" tubing.
9. POOH and LD tubing.
10. Change wellhead to injection wellhead.
11. PU and RIH w/ injection packer on 2-3/8" Nylon coated J-55 tubing. Set PKR within 100' of the top perforations.
12. Release off on-off tool. Circulate hole w/ inhibited fresh water to be used as PKR fluid.
13. Latch onto PKR and run MIT test to 600 psi for 30 minutes.
14. RDMO PU. Install and ditch fiberglass injection line. Tie onto wellhead. Test line to 2000 psi for 24 hours. Install automation and put well on injection.



GL=3653'  
KB=3655'  
Spud: 10/24/96

## Apache Corporation – NMGSAU #509

### Wellbore Diagram – Current Status

Date : 3/24/14

API: 30-025-26214



#### Surface Location

R. Taylor

2307' FSL & 990' FEL, Unit I  
Sec 19, T19S, R37E, Lea County, NM

Hole Size  
=12-1/4"

**Surface Casing**  
95/8" 32.3# @ 403' w/ 225 sx to surface

TAC @ 3718'  
SN @ 3902'

10/81: Perf @ 3745-50; 3777-78; 3783-85; 3821-24; 3840-42; 3845-47; 3857-59;  
3870-82; 3892-94; 3898-3904 (92 holes). Acidized w/ 4600 gal 15%  
10/85: Acidized w/ 3600 gal 15%

10/79: Perf @ 3874-3904 (3 holes). Acidized w/ 500 gal 15%

10/79: Perf @ 3928-52 (11 holes). Acidized w/ 500 gal 15% NEFE  
10/79: Acidize 3928-30 w/ 1440 gal 15%.  
10/79: SQZ 3928-30 w/ 100 sxs.

10/79: CICR @ 3969. SQZ'd w/ 150 sxs

10/79: Perf @ 3974-79. SQZ'd w/ 150 sxs cmt

Hole Size  
=8-3/4"

PBTD = 3,922'  
TD = 4,010'

**Production Casing**  
7" 20# @ 4010' w/ 300 sxs

GL=3653'  
KB=3655'  
Spud: 10/24/96

## Apache Corporation – NMGSAU #509

### Wellbore Diagram – Proposed Status

Date : 3/24/14

API: 30-025-26214



#### Surface Location

R. Taylor

2307' FSL & 990' FEL, Unit I  
Sec 19, T19S, R37E, Lea County, NM

**Surface Casing**  
9-5/8" 32.3# @ 403' w/ 225 sx to surface

**2 3/8" IPC Tubing**  
Set in an Arrow 1-X Plastic-Coated Packer @ 3,645'

**PKR @ TBD**

**TBD: Acidize 3745-3904 w/ 3000 gal 15% NEFE w/ sonic hammer.  
Convert to Injection**

10/81: Perf @ 3745-50; 3777-78; 3783-85; 3821-24; 3840-42; 3845-47; 3857-59;  
3870-82; 3892-94; 3898-3904 (92 holes). Acidized w/ 4600 gal 15%

10/85: Acidized w/ 3600 gal 15%

10/79: Perf @ 3874-3904 (3 holes). Acidized w/ 500 gal 15%

10/79: Perf @ 3928-52 (11 holes). Acidized w/ 500 gal 15% NEFE

10/79: Acidize 3928-30 w/ 1440 gal 15%.

10/79: SQZ 3928-30 w/ 100 sxs.

10/79: CICR @ 3969. SQZ'd w/ 150 sxs

10/79: Perf @ 3974-79. SQZ'd w/ 150 sxs cmt

**Production Casing**  
7" 20# @ 4010' w/ 300 sxs

PBTD = 3,922'  
TD = 4,010'

Hole Size  
=12-1/4"

Hole Size  
=8-3/4"



NMGSAU #509

API # 30-025-26214

Sec 19, T19S, R37E

Elevation: 3655' KB, 3653' GL

TD: 4,010'

PBTD: 3,922'

Casing Record: 9-5/8" 32.3# @ 403' w/ 225 sxs  
7" 20# @ 4,010' w/ 300 sxs

Perfs: Grayburg: 3745-50; 3777-78; 3783-85; 3821-24; 3840-42; 3845-47; 3857-59; 3870-82; 3892-94; 3874-3904; 3898-3904 (95 holes)

Objective: Convert to Injection Well

AFE: 11-14-xxxx

1. MIRU unit. Kill well as necessary. Unseat pump. POOH laying down rods and pump.
2. ND WH. NU BOP. Release TAC. POOH w/ tubing and TAC.
3. PU and RIH w/ bit, bit sub, and drill collars on 2-7/8" production tubing and tag PBTD @ 3,922. Clean-out if necessary.
4. PU and RIH w/ sonic hammer on 2-7/8" production tubing to bottom perf @ 3,904'.
5. MIRU acid services. Acidize down 2-7/8" J-55 tubing w/ 3000 gals of 15% NEFE HCL w/ additives through the sonic hammer moving across the interval from 3,745'-3,904'. Drop ball and shear tool.
6. RU swab equipment and recover load. RD swab equipment.
7. Kill well if necessary. TOH w/ sonic hammer and 2-7/8" tubing.
8. POOH and LD tubing.
9. Change wellhead to injection wellhead.
10. PU and RIH w/ injection packer on 2-3/8" Nylon coated J-55 tubing. Set PKR within 100' of the top perforations.
11. Release off on-off tool. Circulate hole w/ inhibited fresh water to be used as PKR fluid.
12. Latch onto PKR and run MIT test to 600 psi for 30 minutes.
13. RDMO PU. Install and ditch fiberglass injection line. Tie onto wellhead. Test line to 2000 psi for 24 hours. Install automation and put well on injection.

GL=3647'  
KB=3717'  
Spud: 11/20/06

## Apache Corporation – NMGSAU #354

### Wellbore Diagram – Current Status

Date : 10/1/2013

API: 30-025-38148

#### Surface Location

R. Taylor



160' FNL & 200' FWL,  
Sec 19, T19S, R37E, Lea County, NM

#### Surface Casing

8-5/8" 24# J-55 @ 396' w/ 300 sx to surface

TOC @ 224'

TAC @ 3878'

SN @ 4073'

MKR JT  
@ 3544

5/07: Perf Grayburg @ 3799-3812 w/ 2 jspf (26 holes). Acidized w/ 1000 gal 15% HCL @ 4 bpm @ 0 psi.

5/07: Set CIBP @ 3905' w/ 2sxs cmt on top.  
3/10: KO CIBP.

12/06: Perf Grayburg @ 3940-48; 3958-66; 3972-76; 3987-4004; 4020-50 w/ 1 jspf (67 holes). Acidized w/ 3000 gal 15% NEFE acid @ 3.5 bpm @ 0-500 psi.

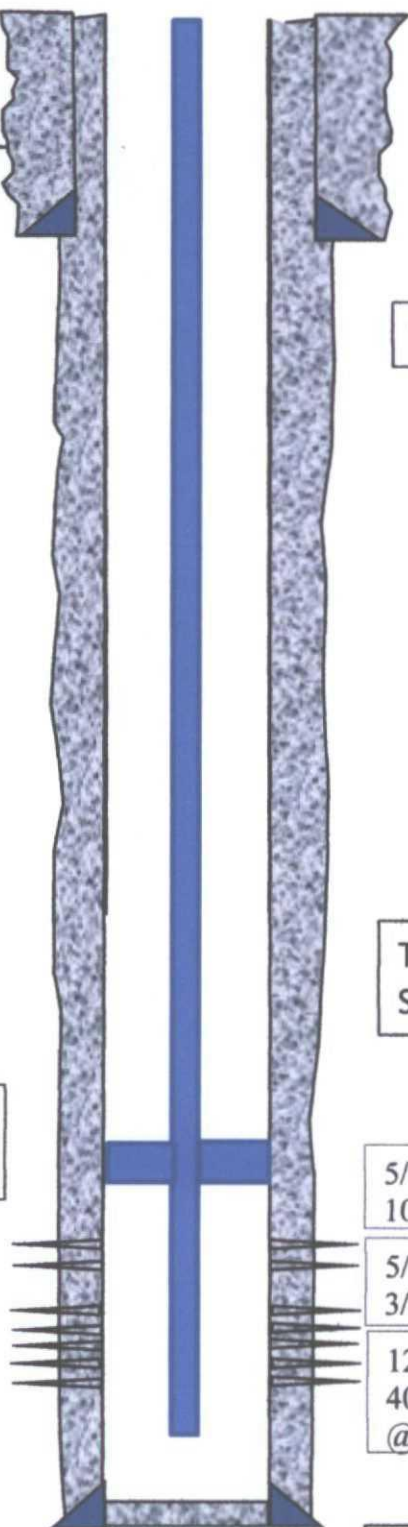
#### Production Casing

5-1/2" 17# J-55 @ 4112' w/ 800 sxs to surface

PBTD = 4089' MD  
TD = 4112' MD

Hole Size  
=7-7/8"

Hole Size  
=11"



GL=3647'  
KB=3717'  
Spud: 11/20/06

## Apache Corporation – NMGSAU #354

### Wellbore Diagram – Proposed Status

Date : 10/1/2013

API: 30-025-38148

#### Surface Location

R. Taylor



160' FNL & 200' FWL,  
Sec 19, T19S, R37E, Lea County, NM

#### Surface Casing

8-5/8" 24# J-55 @ 396' w/ 300 sx to surface

TOC @ 224'

2 3/8" IPC Tubing  
Set in an Arrow 1-X Plastic-  
Coated Packer @ 3,699'

PKR @ TBD

TBD: Acidize 3799-4050 w/ 3000 gal 15% NEFE w/ sonic hammer.  
Convert to Injection

5/07: Perf Grayburg @ 3799-3812 w/ 2 jspf (26 holes). Acidized w/  
1000 gal 15% HCL @ 4 bpm @ 0 psi.

5/07: Set CIBP @ 3905' w/ 2sxs cmt on top.  
3/10: KO CIBP.

12/06: Perf Grayburg @ 3940-48; 3958-66; 3972-76; 3987-4004;  
4020-50 w/ 1 jspf (67 holes). Acidized w/ 3000 gal 15% NEFE acid  
@ 3.5 bpm @ 0-500 psi.

#### Production Casing

5-1/2" 17# J-55 @ 4112' w/ 800 sxs to surface

Hole Size  
=11"

MKR JT  
@ 3544

Hole Size  
=7-7/8"

PBTD = 4089' MD  
TD = 4112' MD



NMGSAU #354  
API # 30-025-38148  
Sec 19, T19S, R37E  
Elevation: 3717' KB, 3647' GL  
TD: 4,112'  
PBTD: 4,089'  
Casing Record: 8-5/8" 24# @ 369' w/ 300 sxs  
5-1/2" 17# J-55 @ 4,112' w/ 800 sxs

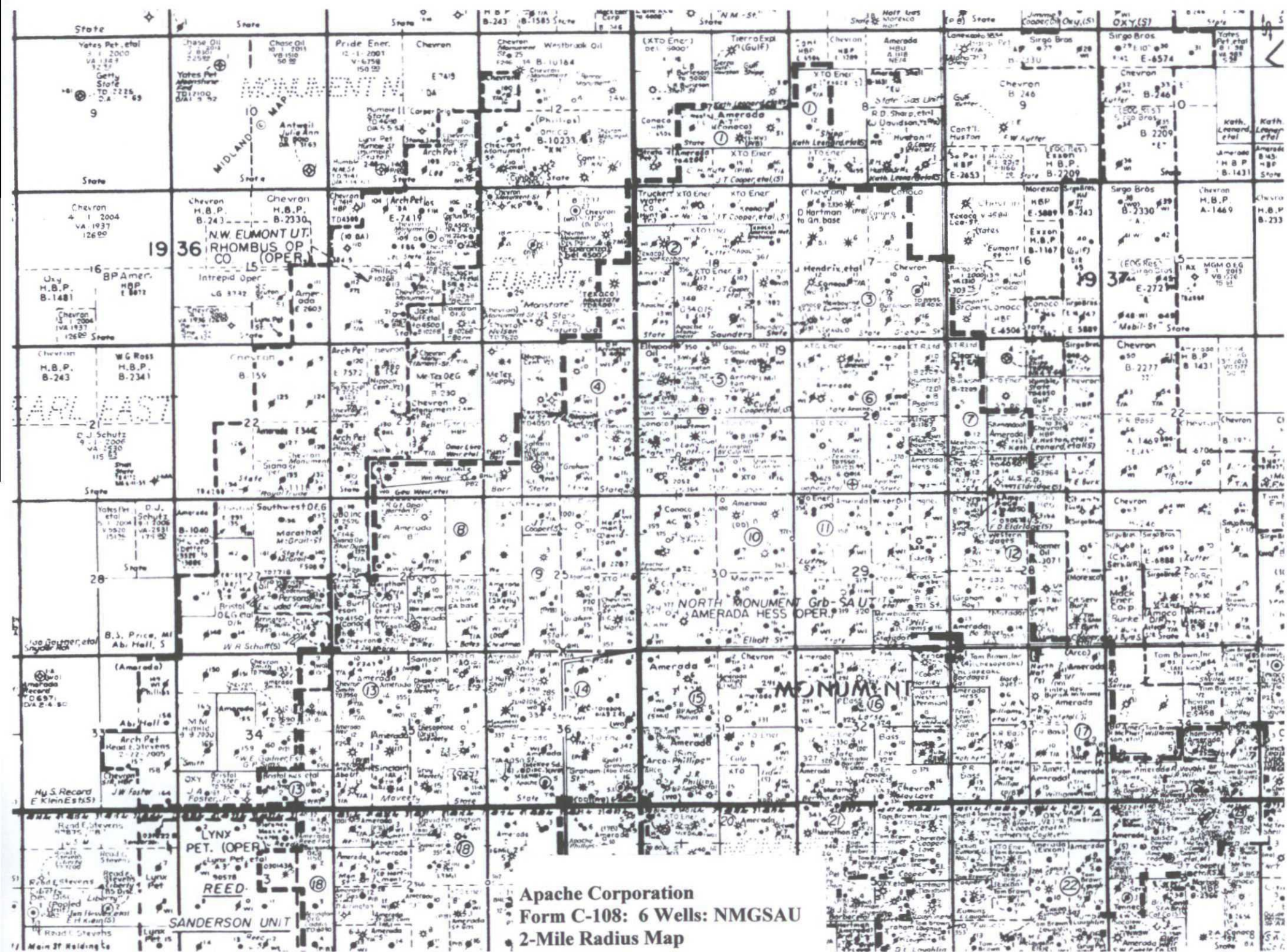
Perfs: Grayburg: 3799-3812, 3940-48, 3958-66, 3972-76, 3987-4004, 4020-50 (93 holes)

Objective: Convert to Injection Well

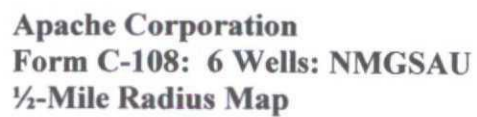
AFE: 11-14-xxxx

1. MIRU unit. Kill well as necessary. Unseat pump. POOH laying down rods and pump.
2. ND WH. NU BOP. Release TAC. POOH w/ tubing and TAC.
3. PU and RIH w/ bit, bit sub, and drill collars on 2-7/8" production tubing and tag PBTD. Clean-out if necessary.
4. PU and RIH w/ sonic hammer on 2-7/8" production tubing to bottom perf @ 4,050'.
5. MIRU acid services. Acidize down 2-7/8" J-55 tubing w/ 3000 gals of 15% NEFE HCL w/ additives through the sonic hammer moving across the interval from 3,799'-4,050'. Drop ball and shear tool.
6. RU swab equipment and recover load. RD swab equipment.
7. Kill well if necessary. TOH w/ sonic hammer and 2-7/8" tubing.
8. POOH and LD tubing.
9. Change wellhead to injection wellhead.
10. PU and RIH w/ injection packer on 2-3/8" Nylon coated J-55 tubing. Set PKR within 100' of the top perforations.
11. Release off on-off tool. Circulate hole w/ inhibited fresh water to be used as PKR fluid.
12. Latch onto PKR and run MIT test to 600 psi for 30 minutes.
13. RDMO PU. Install and ditch fiberglass injection line. Tie onto wellhead. Test line to 2000 psi for 24 hours. Install automation and put well on injection.











**APACHE CORPORATION**

**FORM C-108: NORTH MONUMENT G/SA UNIT WELLS NO. 11-10, 10-11, 10-10, 5-16, 5-9 & 354**

**AREA OF REVIEW WELL LIST (PAGE 1)**

**(NOTE: CONSTRUCTION DATA FOR THESE WELLS WAS PREVIOUSLY SUBMITTED IN PRIOR APPLICATIONS)**

API NUMBER	OPERATOR	LEASE NAME	WELL NO.	WELL TYPE	STATUS	FTG. N/S	N/S	FTG. E/W	E/W	UNIT	SEC.	TSHP.	RNG.
30-025-03999	Apache Corp.	NMGSAU	4	P	Active	660'	S	660'	E	P	13	19S	36E
30-025-04000	XTO Energy, Inc.	Monstate	2	P	Active	1980'	S	660'	E	I	13	19S	36E
30-025-04044	Apache Corp.	NMGSAU	2	P	Active	660'	N	1980'	E	B	24	19S	36E
30-025-04045	Apache Corp.	NMGSAU	8	P	Active	2310'	N	330'	E	H	24	19S	36E
30-025-12730	Cimarex Energy Co.	State C	1	P	Active	660'	N	660'	E	A	24	19S	36E
30-025-12773	Cimarex Energy Co.	State C	2	P	Active	1980'	N	660'	E	H	24	19S	36E
30-025-26771	XTO Energy, Inc.	Graham St. NCT-C	10	P	Active	990'	N	1980'	E	B	24	19S	36E
30-025-04062	Apache Corp.	NMGSAU	9	I	Active	1980'	S	660'	E	I	25	19S	36E
30-025-37935	Apache Corp.	NMGSAU	341	P	Active	2559'	S	259'	E	I	25	19S	36E
30-025-05623	Apache Corp.	NMGSAU	13	I	Active	660'	S	660'	W	M	18	19S	37E
30-025-05624	Apache Corp.	State G	2	P	Active	1980'	S	660'	W	L	18	19S	37E
30-025-05632	Apache Corp.	NMGSAU	14	P	Active	660'	S	1980'	W	N	18	19S	37E
30-025-30245	Pre-Ongard	Pre-Ongard	5	P	C/APD	190'	S	2263'	W	N	18	19S	37E
30-025-05640	Chevron U.S.A., Inc.	B V Culp NCT-A	8	P	PA	2310'	N	2239'	W	F	19	19S	37E
30-025-05641	Apache Corp.	NMGSAU	3	I	Active	660'	N	1980'	W	C	19	19S	37E
30-025-05642	Apache Corp.	NMGSAU	5	I	Active	1980'	N	660'	W	E	19	19S	37E
30-025-05643	Apache Corp.	NMGSAU	6	P	Active	1980'	N	1980'	W	F	19	19S	37E
30-025-05644	Apache Corp.	NMGSAU	7	I	Active	1980'	N	1980'	E	G	19	19S	37E
30-025-05645	Apache Corp.	NMGSAU	8	P	Active	1980'	N	660'	E	H	19	19S	37E
30-025-05646	Apache Corp.	NMGSAU	2	P	Active	660'	N	1980'	E	B	19	19S	37E
30-025-05647	Apache Corp.	NMGSAU	1	I	Active	660'	N	660'	E	A	19	19S	37E
30-025-05648	Apache Corp.	NMGSAU	15	I	Active	660'	S	1980'	E	O	19	19S	37E
30-025-05649	Pre-Ongard	Pre-Ongard	2	P	PA	660'	S	660'	E	P	19	19S	37E
30-025-05650	Apache Corp.	NMGSAU	11	I	Active	1980'	S	1980'	W	K	19	19S	37E
30-025-05651	Apache Corp.	NMGSAU	4	P	Active	660'	N	660'	W	D	19	19S	37E
30-025-05652	Apache Corp.	NMGSAU	14	P	Active	660'	S	1980'	W	N	19	19S	37E
30-025-09882	Apache Corp.	NMGSAU	10	P	Active	1980'	S	1980'	E	J	19	19S	37E
30-025-09883	Occidental Permian Ltd.	State D	2	P	PA	1980'	S	660'	E	I	19	19S	37E
30-025-26663	David H. Arrington O & G	B V Culp NCT-A Com	9	P	Active	2040'	S	1980'	E	J	19	19S	37E
30-025-31002	David H. Arrington O & G	B V Culp NCT-A Com	10	P	Active	840'	N	990'	E	A	19	19S	37E
30-025-31313	David H. Arrington O & G	B V Culp NCT-A Com	11	P	Active	660'	N	2310'	W	C	19	19S	37E
30-025-31585	Apache Corp.	NMGSAU	22	P	Active	2605'	N	2630'	W	F	19	19S	37E
30-025-32961	David H. Arrington O & G	BV Culp NCT-A Com	14	P	Active	2000'	N	1500'	E	G	19	19S	37E
30-025-32977	David H. Arrington O & G	BV Culp NCT-A Com	12	P	Active	1322'	N	990'	W	E	19	19S	37E
30-025-37915	Apache Corp.	NMGSAU	339	P	Active	1430'	N	1455'	W	F	19	19S	37E
30-025-38141	Apache Corp.	NMGSAU	350	P	Active	190'	N	1350'	W	C	19	19S	37E

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32 ACTIVE



**APACHE CORPORATION**

**FORM C-108: NORTH MONUMENT G/SA UNIT WELLS NO. 11-10, 10-11, 10-10, 5-16, 5-9 & 354**

**AREA OF REVIEW WELL LIST (PAGE 2)**

**(NOTE: CONSTRUCTION DATA FOR THESE WELLS WAS PREVIOUSLY SUBMITTED IN PRIOR APPLICATIONS)**

API NUMBER	OPERATOR	LEASE NAME	WELL NO.	WELL TYPE	STATUS	FTG. N/S	N/S	FTG. E/W	E/W	UNIT	SEC.	TSHP.	RNG.
30-025-38311	Apache Corp.	NMGSAU	352	P	Active	1220'	N	2490'	W	C	19	19S	37E
30-025-38459	Apache Corp.	NMGSAU	368	P	Active	1060'	S	2420'	E	O	19	19S	37E
30-025-38552	David H. Arrington O & G	B V Culp NCT-A Corn	1	P	C/APD	1154'	S	1968'	E	O	19	19S	37E
30-025-39646	Apache Corp.	NMGSAU	381	P	C/APD	1100'	S	150'	E	P	19	19S	37E
30-025-05739	Apache Corp.	NMGSAU	2	P	Active	660'	N	1980'	E	B	30	19S	37E
30-025-05740	Apache Corp.	NMGSAU	7	I	Active	1980'	N	1980'	E	G	30	19S	37E
30-025-05741	Apache Corp.	NMGSAU	8	P	Active	1980'	N	660'	E	H	30	19S	37E
30-025-05742	Hess Corporation	State O	4	P	PA	660'	N	660'	E	A	30	19S	37E
30-025-05743	Oxy USA WTP Ltd. Part.	State E	5	P	Active	1020'	S	1504'	W	N	30	19S	37E
30-025-05744	Apache Corp.	NMGSAU	3	I	Active	660'	N	1980'	W	C	30	19S	37E
30-025-05746	Apache Corp.	NMGSAU	6	P	Active	1980'	N	1980'	W	F	30	19S	37E
30-025-05747	Apache Corp.	NMGSAU	5	I	Active	1980'	N	660'	W	E	30	19S	37E
30-025-05748	ConocoPhillips Company	State AC Corn	4	P	Active	990'	N	1650'	W	C	30	19S	37E
30-025-05750	Apache Corp.	NMGSAU	14	P	Active	330'	S	2310'	W	N	30	19S	37E
30-025-05751	Apache Corp.	NMGSAU	12	P	Active	1980'	S	660'	W	L	30	19S	37E
30-025-05752	Apache Corp.	NMGSAU	13	I	Active	330'	S	330'	W	M	30	19S	37E
30-025-05754	Apache Corp.	NMGSAU	9	I	Active	1980'	S	660'	E	I	30	19S	37E
30-025-05755	Apache Corp.	NMGSAU	15	I	Active	330'	S	2310'	E	O	30	19S	37E
30-025-05757	Apache Corp.	NMGSAU	16	P	Active	790'	S	990'	E	P	30	19S	37E
30-025-26170	Apache Corp.	Apache State O	5	P	Active	1980'	N	990'	E	H	30	19S	37E
30-025-31589	Apache Corp.	NMGSAU	22	P	Active	2567'	N	1330'	W	F	30	19S	37E
30-025-32698	ConocoPhillips Company	State A 19	7	P	Active	1980'	N	860'	W	E	30	19S	37E
30-025-32722	Oxy USA WTP Ltd. Part.	State E	6	P	PA	2145'	S	495'	W	L	30	19S	37E
30-025-05773	Apache Corp.	NMGSAU	3	I	Active	330'	N	2310'	W	C	31	19S	37E
30-025-05654	Apache Corp.	NMGSAU	5	I	Active	1980'	N	660'	W	E	20	19S	37E
30-025-05665	Apache Corp.	NMGSAU	13	P	Active	660'	S	660'	W	M	20	19S	37E
30-025-09885	XTO Energy, Inc.	H T Mattern	5	P	Active	1649'	S	990'	W	L	20	19S	37E
30-025-26535	Apache Corp.	State L Gas Corn	3	P	Active	1980'	N	960'	W	E	20	19S	37E
30-025-05721	Apache Corp.	NMGSAU	6	I	Active	1980'	N	1980'	W	F	29	19S	37E
30-025-05723	Apache Corp.	NMGSAU	12	P	Active	1980'	S	660'	W	L	29	19S	37E
30-025-05725	Apache Corp.	NMGSAU	11	I	Active	1980'	S	1980'	W	K	29	19S	37E
30-025-05726	Apache Corp.	NMGSAU	14	I	Active	660'	S	1980'	W	N	29	19S	37E
30-025-05728	XTO Energy, Inc.	Fred Luthy Corn	2	P	Active	660'	N	660'	W	D	29	19S	37E
30-025-05730	Apache Corp.	NMGSAU	15	I	Active	660'	S	1980'	E	O	29	19S	37E
30-025-05731	Pre-Ongard	Pre-Ongard	3	P	PA	660'	S	660'	E	P	29	19S	37E
30-025-05732	Apache Corp.	NMGSAU	7	I	Active	1980'	N	1980'	E	G	29	19S	37E

34  
3 PA  
31 Active

**APACHE CORPORATION**

**FORM C-108: NORTH MONUMENT G/SA UNIT WELLS NO. 11-10, 10-11, 10-10, 5-16, 5-9 & 354**

**AREA OF REVIEW WELL LIST (PAGE 3)**

**(NOTE: CONSTRUCTION DATA FOR THESE WELLS WAS PREVIOUSLY SUBMITTED IN PRIOR APPLICATIONS)**

API NUMBER	OPERATOR	LEASE NAME	WELL NO.	WELL TYPE	STATUS	FTG. N/S	N/S	FTG. E/W	E/W	UNIT	SEC.	TSHP.	RNG.
30-025-05733	Apache Corp.	NMGSAU	2	P	Active	660'	N	1980'	E	B	29	19S	37E
30-025-05734	Mewbourne Oil Co.	State F Com	1	P	PA	1980'	S	660'	E	I	29	19S	37E
30-025-05735	Apache Corp.	NMGSAU	9Y	I	Active	2280'	S	990'	E	I	29	19S	37E
30-025-05736	Wagner Oil Co.	Mexico X Com	1	P	Active	1650'	N	990'	E	H	29	19S	37E
30-025-05737	Apache Corp.	NMGSAU	8	P	Active	1980'	N	660'	E	H	29	19S	37E
30-025-25396	Apache Corp.	State P Gas Com	3	P	Active	1980'	S	1650'	W	K	29	19S	37E
30-025-05710	Apache Corp.	NMGSAU	12	P	Active	1980'	S	660'	W	L	28	19S	37E
30-025-05718	Apache Corporation	NMGSAU	13	P	Active	990'	S	330'	W	M	28	19S	37E
30-025-05783	Apache Corporation	NMGSAU	2	I	Active	660'	N	1980'	E	B	32	19S	37E

9 PA  
8 Active



**APACHE CORPORATION**  
**FORM C-108: NORTH MONUMENT G/SA UNIT WELLS NO. 11-10, 10-11, 10-10, 5-16, 5-9 & 354**  
**AREA OF REVIEW WELL LIST-**  
**WELL DATA NOT PREVIOUSLY SUBMITTED (PAGE 1)**

API NUMBER	OPERATOR	LEASE NAME	WELL NO.	WELL TYPE	STATUS	FTG. N/S	N/S	FTG. E/W	E/W	UNIT	SEC.	TSHP.	RNG.	DATE DRILLED	TOTAL DEPTH	HOLE SIZE	CSG. SIZE	SET AT	SX. CMT.	CMT. TOP	MTD.	HOLE SIZE	CSG. SIZE	SET AT	SX. CMT.	CMT. TOP	MTD.	COMPLETION	REMARKS	
30-025-09318	Apache Corp.	North Monument G/SA Ut.	1	I	Active	990'	N	330'	E	A	24	19S	36E	Apr-55	4,000'	11"	8 5/8"	302'	300	Surface	Circ.	7 7/8"	5 1/2"	4,000'	844	Surface	Circ.	3,869'-3,996' Perf.		
30-025-31511	Hess Corporation	Monument G/SA Ut.	25	P	C/APD	2524'	S	235'	E	I	25	19S	36E	Well Never Drilled. APD Cancelled 4/27/1992																
30-025-39069	Apache Corp.	North Monument G/SA Ut.	376	P	Active	1300'	S	1300'	E	P	25	19S	36E	Sep-09	4,070'	12 1/4"	8 5/8"	1167'	546	Surface	Circ.	7 7/8"	5 1/2"	4,070'	980	Surface	Circ.	3,750'-3,986' Perf.		
30-025-32392	Apache Corp.	North Monument G/SA Ut.	12	P	Active	1996'	S	757'	W	L	18	19S	37E	Feb-94	4,200'	12 1/4"	9 5/8"	432'	225	Surface	Calc.	8 3/4"	7"	3,900'	900	Surface	Calc.	3,877'-4,067' Perf. & O.H.		
30-025-38142	Apache Corp.	North Monument G/SA Ut.	348	P	Active	1310'	S	1460'	W	N	18	19S	37E	Oct-06	4,220'	11"	8 5/8"	392'	300	Surface	Circ.	7 7/8"	5 1/2"	4,220'	775	310'	CBL	3,826'-4,044' Perf.		
30-025-31507	Hess Corporation	Monument G/SA Ut.	30	P	C/APD	1134'	S	2630'	W	N	19	19S	37E	Well Never Drilled. APD Cancelled 4/27/1992																
30-025-38452	Apache Corp.	North Monument G/SA Ut.	347	P	TA	170'	N	2370'	W	C	19	19S	37E	Dec-07	4,110'	11"	8 5/8"	1,254'	700	Surface	Circ.	7 7/8"	5 1/2"	4,110'	900	1,150'	CBL	3,890'-3,898' Perf.	TA'd w/CIBP @ 3,850' + 30' cmt. on top	
30-025-39647	Apache Corp.	North Monument G/SA Ut.	382	P	Active	1255'	N	1310'	E	A	19	19S	37E	Mar-10	4,122'	12 1/4"	8 5/8"	1,307'	650	Surface	Circ.	7 7/8"	5 1/2"	4,122'	715	Surface	Circ.	3,742'-3,966' Perf.	PBTD: 4,005'. CIBP @ 4,005'	
30-025-41037	Apache Corp.	North Monument G/SA Ut.	385	P	Active	1330'	S	1130'	E	I	19	19S	37E	May-13	4,116'	11"	8 5/8"	1,310'	445	Surface	Circ.	7 7/8"	5 1/2"	4,114'	735	Surface	Circ.	3,849'-3,940' Perf.		
					BHL	1281'	S	1329'	E	O	19	19S	37E																	
30-025-41039	Apache Corp.	North Monument G/SA Ut.	387	P	Active	10'	S	1330'	E	O	19	19S	37E	Apr-13	4,100'	11"	8 5/8"	1,335'	475	Surface	Circ.	7 7/8"	5 1/2"	4,100'	650	Surface	Circ.	3,795'-3,868' Perf.	PBTD: 3,878'. CIBP @ 3,878'	
30-025-05756	Marathon Oil Co.	Elliot State	4	P	PA	660'	S	660'	E	P	30	19S	37E	May-36	3,933'	15"	13"	150'	150	Surface	Circ.	11"	9 5/8"	1,271'	940	Surface	Circ.	2,585'-3,563' Perf.	PA'd 2/2006. Schematic Attached	
																8 3/4"	7"	3,779'	880	1,270'	File	7 7/8"	5"	3,929'	350	2,283'	CBL			
30-025-32381	Apache Corp.	Elliot State	6	P	Active	1740'	S	1980'	E	J	30	19S	37E	Jan-94	3,700'	12 1/4"	8 5/8"	1,176'	580	Surface	Circ.	7 7/8"	5 1/2"	3,700'	955	Surface	Circ.	3,401'-3,549' Perf.		
30-025-32708	Apache Corp.	Elliot State	7	P	Active	660'	S	1980'	E	O	30	19S	37E	Dec-94	3,760'	8 3/4"	7"	1,202'	325	Surface	Circ.	6 1/8"	4 1/2"	3,754'	500	Surface	Circ.	3,434'-3,570' Perf.		
30-025-38317	Apache Corp.	North Monument G/SA Ut.	363	P	Active	2630'	S	130'	E	I	30	19S	37E	May-07	4,060'	11"	8 5/8"	395'	400	Surface	Circ.	7 7/8"	5 1/2"	4,060'	1050	60'	CBL	3,826'-3,852' Perf.	PBTD: 3,860'. CIBP @ 3,860'	
30-025-39054	Apache Corp.	North Monument G/SA Ut.	371	P	Active	1445'	N	61'	E	H	30	19S	37E	Mar-10	4,040'	12 1/4"	8 5/8"	1,304'	650	Surface	Circ.	7 7/8"	5 1/2"	4,040'	715	Surface	Circ.	3,660'-3,944' Perf.		
30-025-39055	Apache Corp.	North Monument G/SA Ut.	377	P	Active	1330'	S	955'	W	L	30	19S	37E	Sep-09	4,040'	12 1/4"	8 5/8"	1,224'	551	Surface	Circ.	7 7/8"	5 1/2"	4,015'	937	Surface	Circ.	3,730'-3,964' Perf.		
30-025-39068	Apache Corp.	North Monument G/SA Ut.	375	P	Active	1527'	N	997'	W	E	30	19S	37E	Sep-09	4,089'	12 1/4"	8 5/8"	1,282'	546	Surface	Circ.	7 7/8"	5 1/2"	4,089'	937	Surface	Circ.	3,710'-3,998' Perf.		
					BHL	1343'	N	1309'	W	E	30	19S	37E																	
30-025-39072	Apache Corp.	North Monument G/SA Ut.	380	P	Active	189'	N	2443'	E	B	30	19S	37E	Jan-10	4,125'	12 1/4"	8 5/8"	1,278'	665	Surface	Circ.	7 7/8"	5 1/2"	4,125'	815	Surface	Circ.	3,690'-4,015' Perf.		
					BHL	39'	N	2655'	E	C	30	19S	37E																	
30-025-41042	Apache Corp.	North Monument G/SA Ut.	389	P	Active	1180'	N	2475'	W	C	30	19S	37E	Jun-13	4,067'	11"	8 5/8"	1,325'	470	Surface	Circ.	7 7/8"	5 1/2"	4,067'	850	Surface	Circ.	3,733'-3,906' Perf.		
					BHL	1349'	N	2601'	E	G	30	19S	37E																	
30-025-41043	Apache Corp.	North Monument G/SA Ut.	390	P	Active	2587'	S	2578'	W	K	30	19S	37E	May-13	4,037'	11"	8 5/8"	1,269'	435	Surface	Circ.	7 7/8"	5 1/2"	4,037'	705	Surface	Circ.	3,624'-3,894' Perf.		
30-025-41045	Apache Corp.	North Monument G/SA Ut.	392	P	Active	1190'	S	2420'	E	O	30	19S	37E	May-13	4,031'	11"	8 5/8"	1,248'	420	Surface	Circ.	7 7/8"	5 1/2"	4,031'	800	Surface	Circ.	3,792'-3,895' Perf.		
					BHL	1309'	S	2593'	E	O	30	19S	37E																	
30-025-41046	Apache Corp.	North Monument G/SA Ut.	393	P	Active	1234'	S	1470'	E	O	30	19S	37E	May-13	4,030'	11"	8 5/8"	1,287'	460	Surface	Circ.	7 7/8"	5 1/2"	4,030'	790	Surface	Circ.	3,639'-3,901' Perf.		
30-025-41705	Apache Corp.	North Monument G/SA Ut.	434	P	NYD	1310'	N	1310'	E	B	30	19S	37E	N/A	4,200'	11"	8 5/8"	1,300'	450	Surface	Circ.	7 7/8"	5 1/2"	4,000'	650	Surface	Circ.	N/A	Not Yet Drilled. Proposed Well Construction	
30-025-41726	Apache Corp.	North Monument G/SA Ut.	436	P	NYD	1625'	S	132'	E	I	30	19S	37E	N/A	4,150'	11"	8 5/8"	1,300'	450	Surface	Circ.	7 7/8"	5 1/2"	3,950'	750	Surface	Circ.	N/A	Not Yet Drilled. Proposed Well Construction	
					BHL	1310'	S	10'	E	P	30	19S	37E																	
30-025-32531	Apache Corp.	J R Phillips A Com	2	P	PA	660'	N	1980'	E	B	31	19S	37E	Jun-94	3,580'	11"	8 5/8"	1,229'	400	Surface	File	7 7/8"	5 1/2"	3,580'	1000	Surface	Circ.	3,404'-3,564' Perf.	PA'd 7/2014. Schematic Attached	
30-025-41799	Apache Corp.	North Monument G/SA Ut.	437	P	NYD	218'	N	1021'	E	A	31	19S	37E	N/A	3,950'	11"	8 5/8"	1,300'	450	Surface	Circ.	7 7/8"	5 1/2"	3,950'	750	Surface	Circ.	N/A	Not Yet Drilled. Proposed Well Construction	
						10'	S	1310'	E	P	30	19S	37E																	
30-025-05664	Apache Corp.	North Monument G/SA Ut.	12	P	Active	1980'	S	660'	W	L	20	19S	37E	Nov-35	3,968'	13"	9 5/8"	1,376'	800	Surface	Calc.	8 3/4"	7"	3,826'	400	1,369'	Calc.	3,811'-3,968' Perf. & O.H.	Assumed Hole Sizes	
30-025-30916	XTO Energy, Inc.	H T Mattern	6	P	Active	660'	S	1800'	W	N	20	19S	37E	Sep-94	3,725'	11"	8 5/8"	1,335'	700	Surface	Circ.	7 7/8"	5 1/2"	3,725'	600	Surface	Circ.	3,551'-3,571' Perf.		
30-025-33943	Apache Corp.	North Monument G/SA Ut.	629	I	Active	530'	S	730'	W	M	20	19S	37E	Sep-97	3,915'	12 1/4"	9 5/8"	480'	330	Surface	Circ.	8 3/4"	7"	3,915'	1050	Surface	Circ.	3,746'-3,898' Perf.		
30-025-41036	Apache Corp.	North Monument G/SA Ut.	384	P	Active	2630'	N	1330'	W	F	20	19S	37E	May-13	4,100'	11"	8 5/8"	1,348'	500	Surface	Circ.	7 7/8"	5 1/2"	4,100'	790	Surface	Circ.	3,723'-3,960' Perf.		
30-025-41038	Apache Corp.	North Monument G/SA Ut.	386	P	Active	1615'	S	1575'	W	K	20	19S	37E	Jun-13	4,080'	11"	8 5/8"	1,333'	500	Surface	Circ.	7 7/8"	5 1/2"	4,080'	810	Surface	Circ.	3,733'-3,960' Perf.		
					BHL	1352'	S	1286'	W	L	20	19S	37E																	
30-025-41040	Apache Corp.	North Monument G/SA Ut.	388	P	Active	10'	S	1360'	W	N	20	19S	37E	Jun-13	4,068'	11"	8 5/8"	1,361'	520	Surface	Circ.	7 7/8"	5 1/2"	4,068'	820	Surface	Circ.	3,724'-3,898' Perf.		
30-025-31505	Apache Corp.	North Monument G/SA Ut.	18	W	Active	1260'	N	1500'	E	B	29	19S	37E	Jun-92	5,150'	26"	20"	1,357'	2300	Surface	Circ.	17 1/2"	13 3/8"	2,650'	875	1,108'	File	4,390'-5,070' Perf.	Water Supply Well	
																12 1/4"	9 5/8"	3,637'	900	Surface	Circ.	8 3/4"	7"	3,467'-5,147'	380	Liner Top	Calc.			

- 31  
 2 PA  
 29 ACTIVE



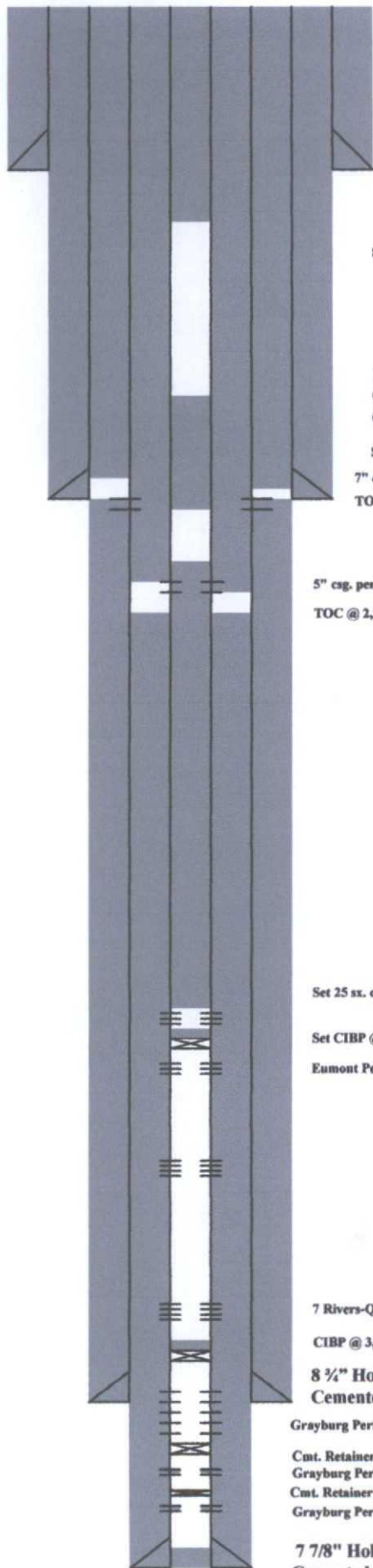
**APACHE CORPORATION**  
**FORM C-108: NORTH MONUMENT G/SA UNIT WELLS NO. 11-10, 10-11, 10-10, 5-16, 5-9 & 354**  
**AREA OF REVIEW WELL LIST**  
**WELL DATA NOT PREVIOUSLY SUBMITTED (PAGE 2)**

API NUMBER	OPERATOR	LEASE NAME	WELL NO.	WELL TYPE	STATUS	FTG. N/S	N/S	FTG. E/W	E/W	UNIT	SEC.	TSHP.	RNG.	DATE DRILLED	TOTAL DEPTH	HOLE SIZE	CSG. SIZE	SET AT	SX. CMT.	CMT. TOP	MTD.	HOLE SIZE	CSG. SIZE	SET AT	SX. CMT.	CMT. TOP	MTD.	COMPLETION	REMARKS					
30-025-33226	Mewbourne Oil Co.	State F Com	2	P	Active	860'	S	1800'	E	O	29	19S	37E	Jan-96	3,808'	12 1/4"	8 5/8"	405'	350	Surface	Circ.	7 7/8"	5 1/2"	3,808'	750	Surface	Circ.	3,480'-3,620' Perf.						
30-025-33425	Texaco Exp. & Prod., Inc.	Mexico X Com	2	P	C/APD	758'	N	1779'	E	B	29	19S	37E	Well Never Drilled. APD Cancelled 5/10/2000																				
30-025-33958	Apache Corp.	North Monument G/SA Ut.	290	P	Active	513'	N	639'	W	D	29	19S	37E	May-97	4,050'	12 1/4"	9 5/8"	1,323'	575	Surface	Circ.	8 3/4"	7"	3,911'	725	Surface	Circ.	3,754'-3,895' Perf.						
30-025-35601	Apache Corp.	North Monument G/SA Ut.	318	P	Active	2490'	S	1330'	E	J	29	19S	37E	Sep-01	3,960'	11"	8 5/8"	1,329'	450	Surface	Circ.	7 7/8"	5 1/2"	3,960'	950	Surface	Calc.	3,751'-3,944' Perf.						
30-025-35602	Apache Corp.	North Monument G/SA Ut.	319	P	Active	1310'	S	1310'	W	M	29	19S	37E	Jul-01	3,939'	11"	8 5/8"	1,320'	475	Surface	Circ.	7 7/8"	5 1/2"	3,939'	820	Surface	Circ.	3,742'-3,930' Perf.						
30-025-35603	Hess Corporation	North Monument G/SA Ut.	322	P	C/APD	180'	S	1173'	E	P	29	19S	37E	Well Never Drilled, APD Cancelled 12/30/2002																				
30-025-35617	Apache Corp.	North Monument G/SA Ut.	317	P	Active	2490'	S	2600'	W	K	29	19S	37E	Aug-01	3,960'	11"	8 5/8"	1,324'	550	Surface	Circ.	7 7/8"	5 1/2"	3,960'	910	Surface	Circ.	3,751'-3,931' Perf.						
30-025-35618	Apache Corp.	North Monument G/SA Ut.	320	P	Active	1450'	S	2595'	W	K	29	19S	37E	Jul-01	3,943'	11"	8 5/8"	1,320'	450	Surface	Circ.	7 7/8"	5 1/2"	3,943'	1050	Surface	Circ.	3,736'-3,920' Perf.						
30-025-35619	Apache Corp.	North Monument G/SA Ut.	321	P	Active	1450'	S	1310'	E	I	29	19S	37E	Sep-01	3,937'	11"	8 5/8"	1,328'	450	Surface	Circ.	7 7/8"	5 1/2"	3,936'	950	Surface	Calc.	3,754'-3,925' Perf.						
30-025-35695	Hess Corporation	North Monument G/SA Ut.	330	P	C/APD	2530'	S	1390'	W	K	29	19S	37E	Well Never Drilled. APD Cancelled 12/30/2002																				
30-025-38147	Apache Corp.	North Monument G/SA Ut.	345	P	Active	1360'	N	2510'	W	F	29	19S	37E	Nov-06	3,990'	11"	8 5/8"	395'	300	Surface	Circ.	7 7/8"	5 1/2"	3,990'	750	125'	CBL	3,688'-3,860' Perf.						
30-025-41044	Apache Corp.	North Monument G/SA Ut.	391	P	Active	2520'	S	1380'	W	K	29	19S	37E	May-13	4,020'	11"	8 5/8"	1,269'	445	Surface	Calc.	7 7/8"	5 1/2"	4,020'	695	Surface	Circ.	3,665'-3,877' Perf.						
30-025-41751	Apache Corp.	North Monument G/SA Ut.	435	P	NYD	2498'	S	180'	E	I	29	19S	37E	N/A	4,150'	11"	8 5/8"	1,300'	450	Surface	Circ.	7 7/8"	5 1/2"	3,950'	650	Surface	Circ.	N/A	Not Yet Drilled. Proposed Well Construction					
30-025-35128	Apache Corporation	North Monument G/SA Ut.	294	P	Active	112'	N	2622'	W	C	32	19S	37E	Sep-00	3,930'	11"	8 5/8"	1,207'	475	Surface	Circ.	7 7/8"	5 1/2"	3,930'	1000	Surface	Circ.	3,683'-3,914' Perf.						
30-025-41728	Apache Corporation	North Monument G/SA Ut.	439	P	NYD	160'	N	1775'	E	B	32	19S	37E	N/A	4,150'	11"	8 5/8"	1,300'	450	Surface	Circ.	7 7/8"	5 1/2"	3,950'	750	Surface	Circ.	N/A	Not Yet Drilled. Proposed Well Construction					

C/APD      Cancelled APD  
NYD        Note Yet Drilled

12  
— 0 — P/A  
12 ACTIVE

**Marathon Oil Company**  
**Elliot State No. 4**  
**API No. 30-025-05756**  
**660' FSL & 660' FEL (Unit P)**  
**Section 30, T-19 South, R-37 East, NMPM**



15" Hole; Set 13" csg @ 150'  
 Cemented w/150 Sx.  
 Cement circulated to surface

Set 20 sx. cmt. plug 211'-surface

11" Hole; Set 9 5/8" csg @ 1,271'  
 Cemented w/940 sx.  
 Cement circulated to surface

Set 25 sx. cmt. plug 1,048'-1,329'  
 7" csg. perforated @ 1,300' & squeezed to surface w/160 sx. cmt.  
 TOC @ 1,270 (Well File)

5" csg. perforated @ 1,817'-1,820' & squeezed to surface w/585 sx. cmt.  
 TOC @ 2,283' by CBL

Set 25 sx. cmt. plug 1,752'-2,538'

Set CIBP @ 3,052'. Set 25 sx. cmt. plug 2,720'-3,052'

Eumont Perfs: 2,585'-3,068'

7 Rivers-Queen Perfs: 3,110'-3,563'

CIBP @ 3,620' w/20' cmt. on top

8 3/4" Hole; Set 7" csg. @ 3,779'  
 Cemented w/880 Sx. TOC @ 1,270' (Well File)

Grayburg Perfs: 3,772'-3,812'

Cmt. Retainer @ 3,812'  
 Grayburg Perfs: 3,818'-3,842'. Squeezed  
 Cmt. Retainer @ 3,843'  
 Grayburg Perfs: 3,850'-51'. Squeezed

7 7/8" Hole; Set 5" csg. @ 3,929'  
 Cemented w/350 sx. TOC @ 2,283' by CBL  
 PBTD: 3,880' (Well File)

T.D. 3,933'

**Drilled: 5/1936**  
**Plugged: 2/2006**

**Apache Corporation**  
**Form C-108: 6 Wells: NMGSAU**  
**PA Schematic: Elliot State No. 4**



Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM  
87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
May 27, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO. <b>30-025-05756</b>
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name <b>Elliot State</b>
8. Well Number <b>4</b>
9. OGRID Number <b>014021</b>
10. Pool name or Wildcat <b>Eumont Yates Seven Rivers Queen</b>

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
**3,606' GL 3,615' KB**

Pit or Below-grade Tank Application ☐ or Closure ☒

Pit type STEEL Depth to Groundwater 20' Distance from nearest fresh water well < 1/4 mile Distance from nearest surface water < 1/4 mile

Pit Liner Thickness: STEEL mil Below-Grade Tank: Volume 180 bbls; Construction Material STEEL

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☒ Other ☐

2. Name of Operator  
**Marathon Oil Company ATTN: Donna Spears**

3. Address of Operator  
**P.O. Box 3487 Houston, TX 77253-3487**

4. Well Location  
Unit Letter P : 660 feet from the South line and 660 feet from the East line  
Section 30 Township 19-S Range 37-E NMPM Lea County

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input checked="" type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL. <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

02/27/06 Notified NMOC. MIRU Triple N rig #26 and plugging equipment, set steel pit. ND wellhead, SI BOP. Well flowing back. POOH w/ 110 jts 2 3/4" tubing & packer. Set CIBP @ 3,052'. Circulated hole w/ mud, pumped 25 sx C cmt 3,052' - 720'. PUH w/ tubing to 2,538'. Pumped 25 sx C cmt 2,538' - 2,206'. PUH w/ tubing, SDFN.

02/28/06 Tagged cmt @ 1,752', POOH w/ tbg to 1,329'. SI BOP and pressure-tested casing to 800 psi, held. Pumped 25 sx C cmt 1,329' - 996'. POOH w/ tbg and WOC. Tagged cmt at 1,048'. RIH w/ tbg to 211' and pumped 20 sx C cmt 211' to surface. POOH w/ tbg, ND BOP, RDMO.

RDMO. Cut off wellhead & anchors, install dryhole marker, backfill cellar.

Approved as to plugging of the Well Bore.  
Liability under bond is retained until  
surface restoration is completed.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOC guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE James F. Newman TITLE engineer, Triple N Services, Inc. DATE 03/04/06

Type or print name James F. Newman, P.E.

E-mail address: jim@triplenservices.com Telephone No. 432.687.1994

For State Use Only

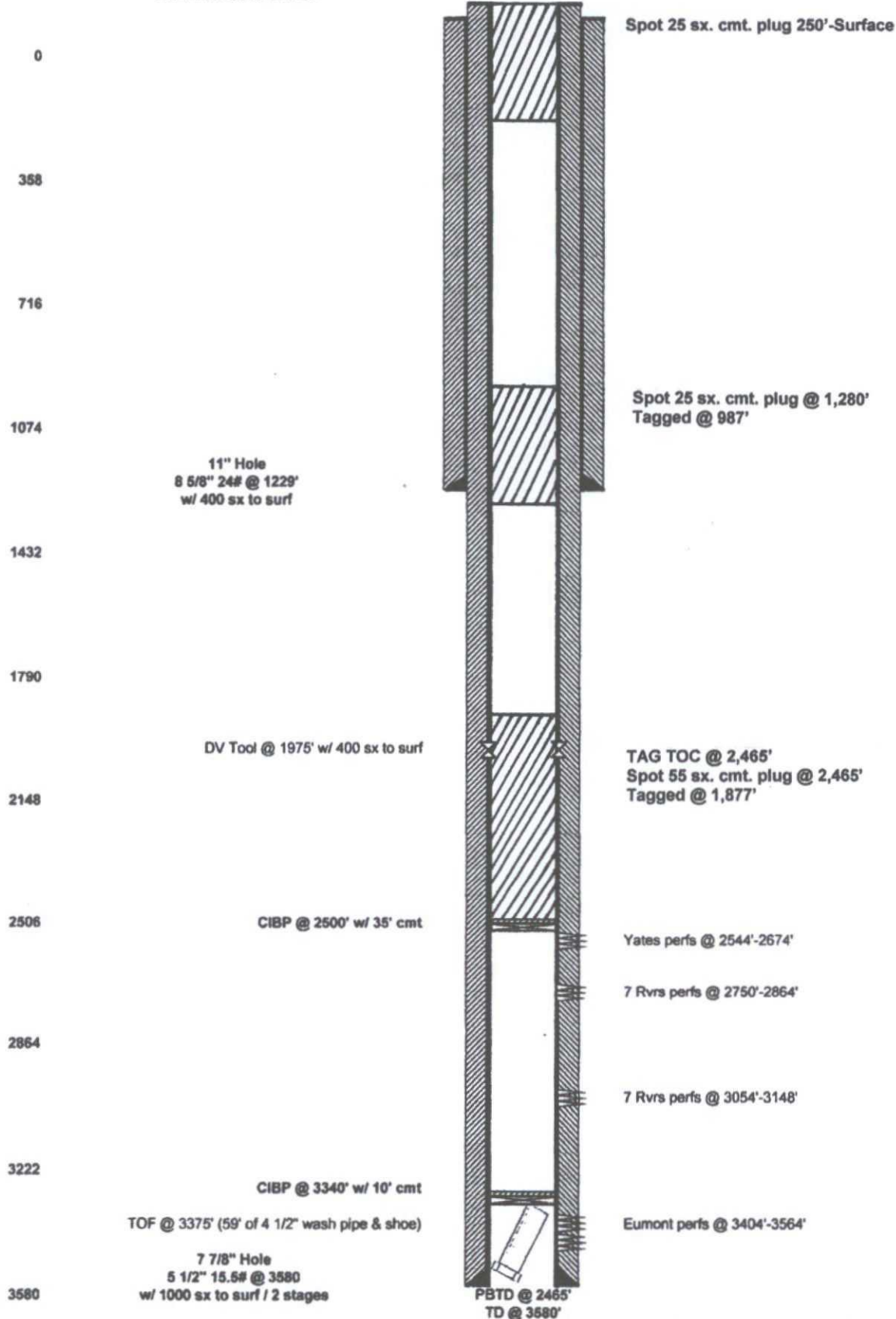
APPROVED BY: Lucy W. Wink TITLE OG FIELD REPRESENTATIVE / STAFF MANAGER DATE MAR 09 2006

Conditions of Approval (if any):



**WELL BORE INFO.**

LEASE NAME	J. R. Phillips "A" Gas Com
WELL #	2
API #	30-025-32531
COUNTY	LEA



Apache Corporation  
Form C-108: 6 Wells: NMGSAU  
PA Schematic:  
JR Phillips "A" Gas Com No. 2



Submit 1 Copy To Appropriate District Office  
District I - (575) 393-6161  
1625 N. French Dr., Hobbs, NM 88240  
District II - (575) 748-1283  
811 S. First St., Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV - (505) 476-3460  
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-103  
Revised August 1, 2011

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR PROPOSALS.)		WELL API NO. 30-025-32531 ✓
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
2. Name of Operator Apache Corporation		6. State Oil & Gas Lease No.
3. Address of Operator 303 Veterans Airpark Lane, Ste 3000, Midland, TX 79705		7. Lease Name or Unit Agreement Name J. R. Phillips "A" Gas Com ✓
4. Well Location Unit Letter B : 660 feet from the N line and 1980 feet from the E line Section 31 Township 19S Range 37E NMPM County Lea		8. Well Number 2 ✓
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3582' GL		9. OGRID Number 873
		10. Pool name or Wildcat Eumont Yates/7 Rvrs

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

<b>PERMITTING</b> P&A NR <u>P.M.</u> P&A R <input type="checkbox"/> JN <input type="checkbox"/> TEMPO INT to P&A <input type="checkbox"/> PULL O CSNG <input type="checkbox"/> CHG Loc <input type="checkbox"/> DOWN TA <input type="checkbox"/> OTHER: <input type="checkbox"/>		<b>SUBSEQUENT REPORT OF:</b> REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> COMMENCE DRILLING OPNS. <input type="checkbox"/> P AND A <input checked="" type="checkbox"/> CASING/CEMENT JOB <input type="checkbox"/> OTHER: <input type="checkbox"/>
---	--	--

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

7/14/14 Notify OCD of MIRU. RIH w/2 3/8 tbg tag TOC @ 2465'.

7/15/14 Load well pressure test casing to 1000 psi ok. Circ well w/60 bbls MLF. Spot 55 x class "c" cmt @ 2465' WOC 4 hrs. RIH tag TOC @ 1877' POH to 1280' spot 25 x class "c" cmt.

7/16/14 RIH tag TOC @ 987' POH to 250' spot 25 x class "c" cmt to surf. Rig down all P&A equip. Cutoff wellhead, anchors, and clean location. Install dry hole marker. P&A completed.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Jimmy Bagley TITLE Agent DATE 7/16/14

Type or print name Jimmy Bagley E-mail address: sunsetwellservice@yahoo.com PHONE: 432-561-8600

For State Use Only

APPROVED BY: Mary Brown TITLE Dist. Supervisor DATE 7/25/2014

Conditions of Approval (if any):

Lucian Baults - Apache Corporation, Sr Reclamation Foreman

JUL 28 2014





# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water





(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD		Q Q Q							X	Y	Depth Well	Depth Water	Water Column
	Sub-Code	basin	County	64	16	4	Sec	Tws	Rng					
<a href="#">L 01251</a>	L	LE	4	1	1	29	19S	37E	661434	3612218*		51	38	13
<a href="#">L 01252</a>	L	LE	1	3	4	29	19S	37E	662058	3611223*		43		
<a href="#">L 01259</a>	L	LE	1	2	1	19	19S	37E	660005	3614020*		85	44	41
<a href="#">L 01273</a>	L	LE	3	4	4	19	19S	37E	660827	3612617*		62	45	17
<a href="#">L 02596</a>	L	LE			3	29	19S	37E	661556	3611315*		50	20	30
<a href="#">L 03905</a>	L	LE	4	4	30	19S	37E	660953	3611109*		35	20	15	
<a href="#">L 03906</a>	L	LE	4	4	30	19S	37E	660953	3611109*		35	20	15	
<a href="#">L 03922</a>	L	LE				29	19S	37E	661958	3611717*		42	22	20
<a href="#">L 03949</a>	L	LE				29	19S	37E	661958	3611717*		36	18	18
<a href="#">L 03954</a>	L	LE	4	4	30	19S	37E	660953	3611109*		35	20	15	
<a href="#">L 03956</a>	L	LE				29	19S	37E	661958	3611717*		40	20	20
<a href="#">L 03995</a>	L	LE	4	4	30	19S	37E	660953	3611109*		35	20	15	
<a href="#">L 04313</a>	L	LE	1	1	19	19S	37E	659718	3613919*		116	52	64	
<a href="#">L 04799</a>	L	LE				29	19S	37E	661958	3611717*		150		
<a href="#">L 05314</a>	L	LE	1	3	4	29	19S	37E	662058	3611223*		34	14	20
<a href="#">L 05433</a>	L	LE	4	1	19	19S	37E	660112	3613518*		5790	1072	4718	
<a href="#">L 05500</a>	L	LE	2	4	4	29	19S	37E	662661	3611229*		55		
<a href="#">L 05611</a> <span>POD3</span>	L	LE	2	2	3	29	19S	37E	661850	3611620*		80	28	52
<a href="#">L 05995</a>	L	LE	4	4	30	19S	37E	660953	3611109*		40	23	17	
<a href="#">L 06496</a>	L	LE	3	4	3	29	19S	37E	661656	3611018*		50	27	23
<a href="#">L 09631</a>	L	LE	1	4	29	19S	37E	662153	3611526*		35			
<a href="#">L 09632</a>	L	LE	1	4	29	19S	37E	662153	3611526*		35			
<a href="#">L 09633</a>	L	LE	1	4	29	19S	37E	662153	3611526*		35			
<a href="#">L 10277</a>	L	LE	2	2	4	19	19S	37E	661020	3613219*		70	40	30
<a href="#">L 10498</a>	L	LE				29	19S	37E	661958	3611717*		60		
<a href="#">L 13522</a> <span>POD1</span>	L	LE	3	3	3	30	19S	37E	659988	3611366		28	21	7

\*UTM location was derived from PLSS - see Help

11/12/14 9:14 AM

Apache Corporation  
Form C-108: 6 Wells: NMGSAU  
State Engineer Fresh Water Data

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

(A CLW##### in the  
 POD suffix indicates the  
 POD has been replaced  
 & no longer serves a  
 water right file.)

(R=POD has  
 been replaced,  
 O=orphaned,  
 C=the file is  
 closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub- Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
<a href="#">L 13522 POD2</a>	L	LE		3	3	3	30	19S	37E	660018	3611255	30	21	9
<a href="#">L 13525 POD1</a>	L	LE		4	3	4	19	19S	37E	660096	3612717	30	21	9

Average Depth to Water: **76 feet**

Minimum Depth: **14 feet**

Maximum Depth: **1072 feet**

**Record Count: 28**

**PLSS Search:**

**Section(s):** 19, 29, 30

**Township:** 19S

**Range:** 37E

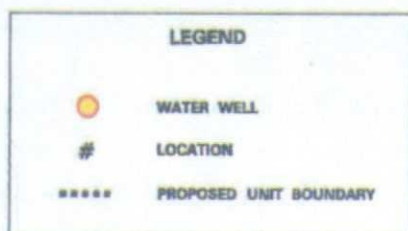
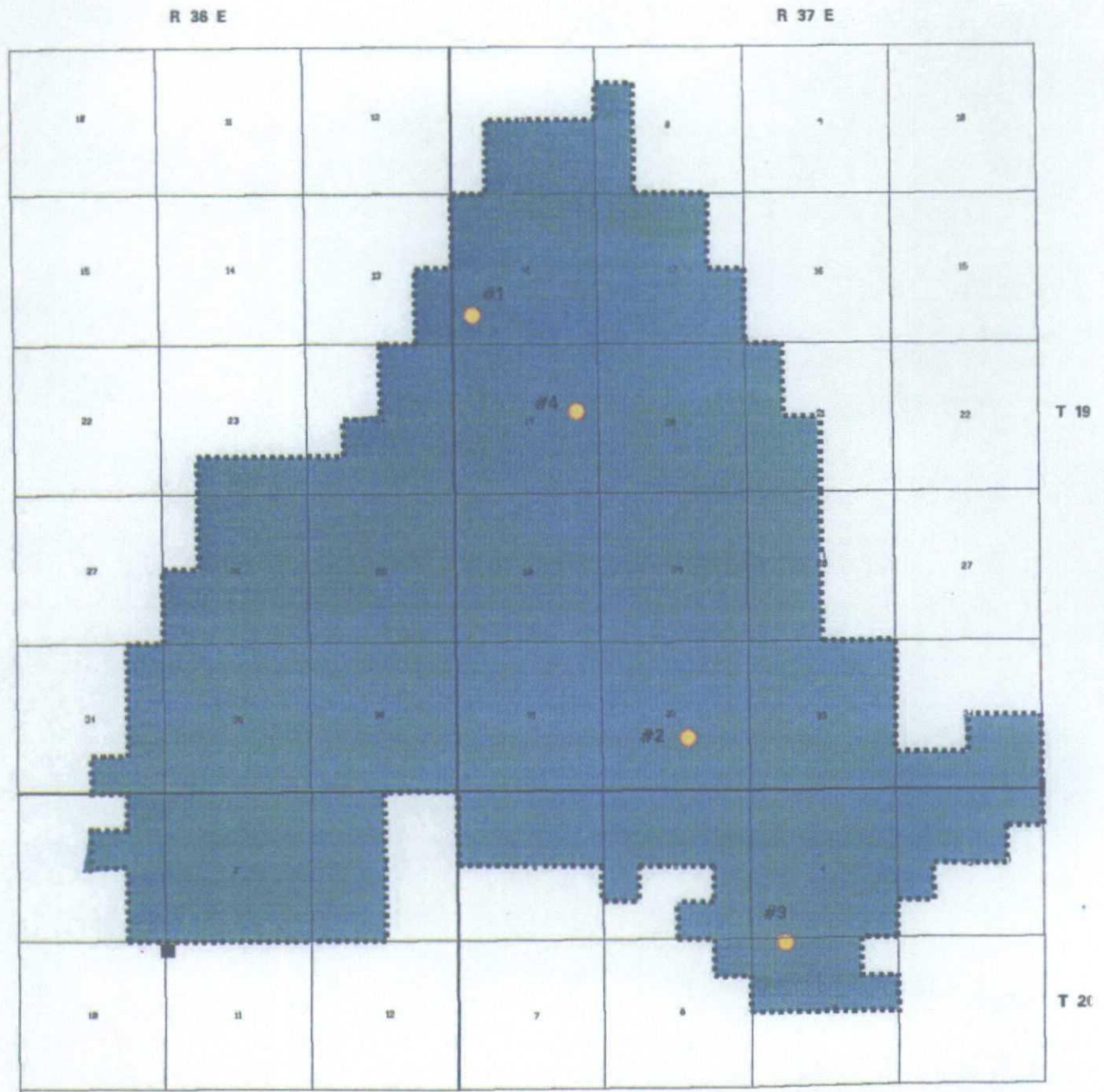
The data is furnished by the NMOSE/ISC and is expressed or implied, concerning the accuracy, c

11/12/14 9:14 AM

**Apache Corporation**  
**Form C-108: 6 Wells: NMGSAU**  
**State Engineer Fresh Water Data**

and that the OSE/ISC make no warranties, y particular purpose of the data.

**WATER COLUMN/ AVERAGE  
 DEPTH TO WATER**



AMERADA HESS CORPORATION

**FRESH WATER SAMPLING POINTS**

NORTH MONUMENT GRAYBURG/  
SAN ANDRES UNIT

Lea County, New Mexico



Apache Corporation  
Form C-108: 6 Wells: NMGSAU  
Case No. 10252  
Fresh Water Sampling Points

DATE: 3/29/97





## Fresh Water Well Analysis



P O BOX 1488  
MONAHANS, TEXAS 79758  
PH 942-3234 OR 563-1040

Martin Water Laboratories, Inc.

709 W INDIA  
MIDLAND TEXAS 79701  
PHONE 683-4521

RESULT OF WATER ANALYSES

TO: Mr. Eric Haas LABORATORY NO. 990229  
P. O. Drawer "D", Monument, NM 88265 SAMPLE RECEIVED 9-27-90  
RESULTS REPORTED 10-1-90

COMPANY Amerada Hess Corporation LEASE \_\_\_\_\_

FIELD OR POOL \_\_\_\_\_  
SECTION 9 BLOCK \_\_\_\_\_ SURVEY T-20S & R-37E COUNTY \_\_\_\_\_ Lea STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Raw water - taken from Windmill #3.

NO. 2 \_\_\_\_\_

NO. 3 \_\_\_\_\_

NO. 4 \_\_\_\_\_

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0022			
pH When Sampled				
pH When Received	7.38			
Bicarbonate as HCO <sub>3</sub>	393			
Supersaturation as CaCO <sub>3</sub>				
Undersaturation as CaCO <sub>3</sub>				
Total Hardness as CaCO <sub>3</sub>	398			
Calcium as Ca	121			
Magnesium as Mg	23			
Sodium and/or Potassium	170			
Sulfate as SO <sub>4</sub>	150			
Chloride as Cl	206			
Iron as Fe	0.32			
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	1,063			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen.				
Hydrogen Sulfide	0.0			
Resistivity, ohm/cm at 77° F.	7.05			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				
Nitrate, as N	0.7			

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

Form No. 3

By Ronnie D. Tucker  
Ronnie D. Tucker, B.S.

Apache Corporation  
Form C-108: 6 Wells: NMGSAU  
Case No. 10252  
Fresh Water Well Analysis

Form C-108  
Affirmative Statement  
Apache Corporation  
North Monument G/SA Unit Wells No. 11-10, 10-11, 10-10, 5-16, 5-9 & 354  
Section 19, 29 & 30, T-19 South, R-37 East, NMPM,  
Lea County, New Mexico

Available geologic and engineering data has been examined and no evidence of open faults or hydrological connection between the injection zone and any underground sources of drinking water has been found.



David Catanach  
Agent for Apache Corporation



Date



November 12, 2014

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

TO: OFFSET OPERATORS/LEASEHOLD OWNERS/SURFACE OWNERS  
(See Attached List)

Re: Apache Corporation  
Form C-108 (Application for Authorization to Inject)  
North Monument G/SA Unit  
Wells No. 11-10, 10-11, 10-10, 5-16, 5-9 and 354  
Sections 19, 29 & 30, T-19S, R-37E, NMPM,  
Lea County, New Mexico

Ladies & Gentlemen:

Enclosed please find a copy of Oil Conservation Division Form C-108 (Application for Authorization to Inject) for the Apache Corporation North Monument G/SA Unit Wells No. 11-10, 10-11, 10-10, 5-16, 5-9 and 354. You are being provided a copy of the application as an offset operator, leasehold owner or the surface owner of the land on which one or more of the injection wells are located. Apache Corporation proposes to convert these wells from producing wells to injection wells within the existing North Monument G/SA Unit Waterflood Project in order to complete an efficient production/injection pattern within the North Monument G/SA Unit Area ("Unit Area"). The Unit Area and the waterflood project were previously approved by Division Orders No. R-9494 dated May 1, 1991 and R-9596 dated October 15, 1991. Injection within each of these wells will occur into the "Unitized Formation" which comprises the Grayburg and San Andres formations as found from a depth of 3,642 feet to 5,050 feet on the Gamma Ray Formation Compensated Density Log run on the Amerada Hess Corporation Monument Abo Unit Well No. 1 located in Unit C of Section 2, Township 20 South, Range 36 East, NMPM, Lea County, New Mexico.

Objections must be filed with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, within 15 days.

If you should have any questions, please contact me at (505) 690-9453.

Sincerely,



David Catanach-Agent  
Apache Corporation  
303 Veterans Airpark Lane, Suite 3000  
Midland, Texas 79705  
Enclosure

**Apache Corporation**  
**Form C-108: North Monument G/SA Unit**  
**Wells No. 11-10, 10-11, 10-10, 5-16, 5-9 and 354**  
**Sections 19, 29 & 30, T-19 South, R-37 East, NMPM**  
**Lea County, New Mexico**

**Offset Operator/Leasehold Owner/Surface Owner Notification List**

All acreage within the ½ mile notice area for the North Monument G/SA Unit Wells No. 11-10, 10-11, 10-10, 5-9, 5-16 and 354, **with the exception of the W/2 SE/4 of Section 13, Township 19 South, Range 36 East, NMPM**, is located within Apache's North Monument G/SA Unit ("Unit Area") (See **attached ½ mile radius map and Unit Area map**). The W/2 SE/4 of Section 13 is leased in the Grayburg-San Andres interval by XTO Energy, Inc. In accordance with Division rules, notice of this application is being provided to XTO Energy, Inc, and to the surface owners at each wellsite, described as follows:

**Leasehold Owner: W/2 SE/4 of Section 13-19S-36E**

XTO Energy, Inc.  
810 Houston, Street  
Fort Worth, Texas 76102

**Surface Owner: North Monument G/SA Unit Wells No. 10-11, 10-10, 5-16 & 5-9**

Commissioner of Public Lands  
P.O. Box 1148  
Santa Fe, New Mexico 87504-1148

**Surface Owner: North Monument G/SA Unit Wells No. 11-10 & 354**

Mr. Jimmie Cooper  
P.O. Box 36  
Monument, New Mexico 88265

**Additional Notice**

OCD-Hobbs District Office



# Affidavit of Publication

STATE OF NEW MEXICO  
COUNTY OF LEA

I, t, Editor of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

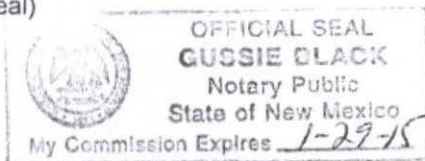
Beginning with the issue dated  
November 14, 2014  
and ending with the issue dated  
November 14, 2014.

Editor

Sworn and subscribed to before me this  
14th day of November 2014.

Business Manager

My commission expires  
January 29, 2015  
(Seal)



This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

## LEGAL NOTICE November 14, 2014

Apache Corporation, 303 Veterans Airpark Lane, Suite 3000, Midland Texas 79705 has filed a Form C-108 (Application for Authorization to Inject) with the Oil Conservation Division seeking administrative approval to convert the following-described wells from producing wells to water injection wells within the North Monument GSA Unit Waterflood Project, Eunice Monument Grayburg-San Andres Pool, Lea County, New Mexico:

NMGSAU No. 11-10	API No. (30-025-05729) 1960' FSL & 1980' FEL (Unit J) Section 29, T-19S, R-37E Injection Interval: Approximately 3,751'-3,900' (Open-Hole)
NMGSAU No. 10-11	API No. (30-025-05749) 1980' FSL & 1980' FWL (Unit K) Section 30, T-19S, R-37E Injection Interval: Approximately 3,814'-3,924' (Open-Hole)
NMGSAU No. 10-10	API No. (30-025-05753) 1980' FSL & 1980' FEL (Unit J) Section 30, T-19S, R-37E Injection Interval: Approximately 3,787'-3,863' (Open-Hole)
NMGSAU No. 5-16	API No. (30-025-30332) 610' FSL & 760' FEL (Unit P) Section 19, T-19S, R-37E Injection Interval: Approximately 3,686'-3,920' (Perforated)
NMGSAU No. 5-9	API No. (30-025-26214) 2307' FSL & 990' FEL (Unit I) Section 19, T-19S, R-37E Injection Interval: Approximately 3,745'-3,904' (Perforated)
NMGSAU No. 354	API No. (30-025-38148) 160' FNL & 200' FWL (Unit D) Section 19, T-19S, R-37E Injection Interval: Approximately 3,799'-4,050' (Perforated)

Produced water from the Eunice Monument Grayburg-San Andres Pool will be injected into the wells at average and maximum rates of 300 BWP/D and 600 BWP/D, respectively. The initial surface injection pressure is anticipated to be in compliance with the Division's limit of 0.2 psi/ft to the top perforation or open-hole injection interval in each well (approximately 737 psi), and the maximum surface injection pressure will be determined by step rate injection tests.

Interested parties must file objections with the New Mexico Oil Conservation Division, 1220 S. St Francis Drive, Santa Fe, New Mexico 87505, within 15 days of the date of this publication. Additional information can be obtained by contacting Mr. David Catanach, Agent for Apache Corporation at (505) 690-9453.  
#29570

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DAVID CATANACH  
REGULATORY CONSULTANT  
1142 VUELTA DE LAS ACEQUIAS  
SANTA FE, NM 87507

**Form C-108  
Apache Corporation  
North Monument G/SA Unit  
Wells No. 11-10, 10-11, 10-10, 5-16, 5-9 & 354  
Sections 19, 29 & 30, T-19 South, R-37 East, NMPM  
Lea County, New Mexico**

**The following-described legal notice will be published in the:**

**Hobbs Daily News Sun  
P.O. Box 936  
Hobbs, New Mexico 88241**

**The Affidavit of Publication will be forwarded to the Division upon receipt by Apache Corporation**

**Apache Corporation, 303 Veterans Airpark Lane, Suite 3000, Midland Texas 79705 has filed a Form C-108 (Application for Authorization to Inject) with the Oil Conservation Division seeking administrative approval to convert the following-described wells from producing wells to water injection wells within the North Monument G/SA Unit Waterflood Project, Eunice Monument Grayburg-San Andres Pool, Lea County, New Mexico:**

<b>NMGSAU No. 11-10</b>	<b>API No. (30-025-05729) 1980' FSL &amp; 1980' FEL (Unit J) Section 29, T-19S, R-37E, Injection Interval: Approximately 3,751'-3,900' (Open-Hole)</b>
<b>NMGSAU No. 10-11</b>	<b>API No. (30-025-05749) 1980' FSL &amp; 1980' FWL (Unit K) Section 30, T-19S, R-37E Injection Interval: Approximately 3,814'-3,924' (Open-Hole)</b>
<b>NMGSAU No. 10-10</b>	<b>API No. (30-025-05753) 1980' FSL &amp; 1980' FEL (Unit J) Section 30, T-19S, R-37E Injection Interval: Approximately 3,787'-3,863' (Open-Hole)</b>
<b>NMGSAU No. 5-16</b>	<b>API No. (30-025-30332) 610' FSL &amp; 760' FEL (Unit P) Section 19, T-19S, R-37E, Injection Interval: Approximately 3,686'-3,920' (Perforated)</b>
<b>NMGSAU No. 5-9</b>	<b>API No. (30-025-26214) 2307' FSL &amp; 990' FEL (Unit I) Section 19, T-19S, R-37E Injection Interval: Approximately 3,745'-3,904' (Perforated)</b>
<b>NMGSAU No. 354</b>	<b>API No. (30-025-38148) 160' FNL &amp; 200' FWL (Unit D) Section 19, T-19S, R-37E, Injection Interval: Approximately 3,799'-4,050' (Perforated)</b>

**Produced water from the Eunice Monument Grayburg-San Andres Pool will be injected into the wells at average and maximum rates of 300 BWPD and 600 BWPD, respectively. The initial surface injection pressure is anticipated to be in compliance with the Division's limit of 0.2 psi/ft to the top perforation or open-hole injection interval in each well (approximately 737 psi), and the maximum surface injection pressure will be determined by step rate injection tests.**

**Interested parties must file objections with the New Mexico Oil Conservation Division, 1220 S. St Francis Drive, Santa Fe, New Mexico 87505, within 15 days of the date of this publication. Additional information can be obtained by contacting Mr. David Catanach, Agent for Apache Corporation at (505) 690-9453.**



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MONUMENT NM 88265

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11/12/2014

Sent To  
 Mr. Jimmie Cooper  
 P.O. Box 36  
 Monument, New Mexico 88265

PS Form 3800, April 2008 (Rev. 11-12-2014) Instructions

## Jones, William V, EMNRD

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**From:** Jones, William V, EMNRD  
**Sent:** Tuesday, December 23, 2014 3:14 PM  
**To:** 'Reesa.Fisher@apachecorp.com'  
**Cc:** McMillan, Michael, EMNRD; Goetze, Phillip, EMNRD; Gallegos, Denise, EMNRD; Sanchez, Daniel J., EMNRD; 'drcatanach@netscape.com'  
**Subject:** Bond Needed

Hello Reesa,

I have a permit for additional injection wells on the North Monument Grayburg San Andres Unit ready for release, but can't until Apache posts one single well bond.

You are the person we know, so pass on to the responsible person if you need to?

Please let me know when this happens and I will release the WFX permit.

Many Happy Holiday Wishes!

*Will*

EMNRD/OCD District IV Supervisor William V. Jones PE  
505.476.3477 Work (505.476.3462 Fax)  
505.419.1995 Cell

(Alt. Leonard Lowe 505.476.3492W 505.930.6717Cell)

[WilliamV.Jones@state.nm.us](mailto:WilliamV.Jones@state.nm.us) <http://www.emnrd.state.nm.us/OCD/about.html>





C-108 Review Checklist: Received \_\_\_\_\_ Add. Request: \_\_\_\_\_ Reply Date: \_\_\_\_\_ Suspended: \_\_\_\_\_ [Ver 14]

PERMIT TYPE: WFX / PMX / SWD Number: 942 Permit Date: 12/23/14 Legacy Permits/Orders: \_\_\_\_\_Well No. \_\_\_\_\_ Well Name(s): 6 wellsAPI: 30-0 \_\_\_\_\_ Spud Date: \_\_\_\_\_ New or Old: (UIC Class II Primacy 03/07/1982)Footages See APPL Lot \_\_\_\_\_ or Unit \_\_\_\_\_ Sec \_\_\_\_\_ Tsp \_\_\_\_\_ Rge \_\_\_\_\_ County LeaGeneral Location: NM GSA UNIT Pool: \_\_\_\_\_ Pool No.: \_\_\_\_\_BLM 100K Map: \_\_\_\_\_ Operator: APACHE Coy OGRID: 873 Contact: D.R. ColaninCOMPLIANCE RULE 5.9: Total Wells: 2998 Inactive: 6 Fincl Assur: NO Compl. Order? \_\_\_\_\_ IS 5.9 OK? NO Date: 12-23-14WELL FILE REVIEWED ☒ Current Status: \_\_\_\_\_WELL DIAGRAMS: NEW: Proposed ☒ or RE-ENTER: Before Conv. ☒ After Conv. ☒ Logs in Imaging: \_\_\_\_\_Planned Rehab Work to Well: Convert

Well Construction Details		Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned ___ or Existing ___ Surface			Stage Tool		
Planned ___ or Existing ___ Interm/Prod					
Planned ___ or Existing ___ Interm/Prod					
Planned ___ or Existing ___ Prod/Liner					
Planned ___ or Existing ___ Liner					
Planned ___ or Existing ___ OH / PERF			Inj Length		
Injection Lithostratigraphic Units:			Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.					
Confining Unit: Litho. Struc. Por.					
Proposed Inj Interval TOP:					
Proposed Inj Interval BOTTOM:					
Confining Unit: Litho. Struc. Por.					
Adjacent Unit: Litho. Struc. Por.					
Completion/Operation Details:					
Drilled TD _____ PBTD _____					
NEW TD _____ NEW PBTD _____					
NEW Open Hole <input type="radio"/> or NEW Perfs <input type="radio"/>					
Tubing Size _____ in. Inter Coated? _____					
Proposed Packer Depth _____ ft					
Min. Packer Depth _____ (100-ft limit)					
Proposed Max. Surface Press. _____ psi					
Admin. Inj. Press. _____ (0.2 psi per ft)					
AOR: Hydrologic and Geologic Information					
POTASH: R-111-P <input type="radio"/> Noticed? _____ BLM Sec Ord <input type="radio"/> WIPP <input type="radio"/> Noticed? _____ SALT/SALADO T: _____ B: _____ CLIFF HOUSE _____					
FRESH WATER: Aquifer _____ Max Depth _____ HYDRO AFFIRM STATEMENT By Qualified Person <input checked="" type="checkbox"/>					
NMOSE Basin: _____ CAPITAN REEF: thru <input type="radio"/> adj <input type="radio"/> NA <input type="radio"/> No. Wells within 1-Mile Radius? _____ FW Analysis <input checked="" type="checkbox"/>					
Disposal Fluid: Formation Source(s) _____ Analysis? _____ On Lease <input type="radio"/> Operator Only <input type="radio"/> or Commercial <input type="radio"/>					
Disposal Int: Inject Rate (Avg/Max BWPD): _____ Protectable Waters? _____ Source: _____ System: Closed <input type="radio"/> or Open <input type="radio"/>					
HC Potential: Producing Interval? _____ Formerly Producing? _____ Method: Logs/DST/P&A/Other _____ 2-Mile Radius Pool Map <input type="radio"/>					
AOR Wells: 1/2-M Radius Map? <input checked="" type="checkbox"/> Well List? <input checked="" type="checkbox"/> Total No. Wells Penetrating Interval: <u>122</u> Horizontals? _____					
Penetrating Wells: No. Active Wells <u>112</u> Num Repairs? <u>0</u> on which well(s)? _____ Diagrams? <input checked="" type="checkbox"/>					
Penetrating Wells: No. P&A Wells <u>10</u> Num Repairs? <u>0</u> on which well(s)? _____ Diagrams? <input checked="" type="checkbox"/>					
NOTICE: Newspaper Date <u>11/14/14</u> Mineral Owner <u>SLO</u> Surface Owner <u>SLO</u> N. Date <u>11/24/14</u>					
RULE 26.7(A): Identified Tracts? <input checked="" type="checkbox"/> Affected Persons: <u>See APPL.</u> N. Date _____					

Permit Conditions: Issues: \_\_\_\_\_

Add Permit Cond: \_\_\_\_\_