

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  
**HOBBS OGD**  
**JAN 24 2014**  
**RECEIVED**  
 OIL CONSERVATION DIVISION  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

Form C-103  
 Revised July 18, 2013

WELL API NO. 30-025-39900
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No. N/A
7. Lease Name or Unit Agreement Name T Anderson (302373)
8. Well Number 005
9. OGRID Number 873
10. Pool name or Wildcat Monument; Abo, Southeast (96764)
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3544' GR

**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  
Apache Corporation

3. Address of Operator  
303 Veterans Airpark Lane, Suite 3000 Midland, TX-79705

4. Well Location  
 Unit Letter N : 895 feet from the South line and 1835 feet from the West line  
 Section 08 Township 20S Range 37E NMPM County Lea

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

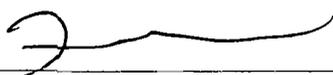
<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>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

Apache would like to perforate & acid frac the Abo per the attached procedure.

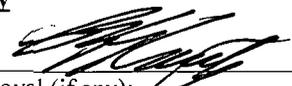
Spud Date:  Rig Release Date:

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

SIGNATURE  TITLE Regulatory Tech II DATE 01/23/2014

Type or print name Fatima Vasquez E-mail address: Fatima.Vasquez@apachecorp.com PHONE: (432) 818-1015

**For State Use Only**

APPROVED BY:  TITLE Petroleum Engineer DATE JAN 28 2014

Conditions of Approval (if any):

**JAN 28 2014**



**T Anderson # 5**  
API: 30-025-39900  
Monument Field  
Lea, New Mexico

**AFE Number:** 11-14-0254  
KB: 3556' GL: 3544' (*KB 12' above GL*)  
8-5/8" 48 lb/ft casing set @ 1209'  
5-1/2" 17 lb/ft J-55 casing set @ 7704'  
TD: 7,704' PBTD: 7,445' (CIBP)

**SINGLE STAGE ACID FRAC COMPLETION PROCEDURE**

**Casing:** 5-1/2", 17 lb/ft, J-55  
ID: 4.892"  
Drift= 4.767"  
Capacity= 0.0232 BBL/ft  
Burst= 5320 psi; 80%= 4256 psi  
5-1/2" x 3-1/2" Annular capacity 0.0113 BBL/ft

**Tubing:** 3-1/2", 9.3 lb/ft, N-80  
Capacity= 0.00870 bbl/ft  
Burst= 10,160 psi; 80%= 8128 psi  
Collapse 10,530 psi; 80%= 8424 psi  
Yield 159,090 lbs; 80%= 127,272 lbs

- **Anticipate one day for stimulations. Prepare service co. and other associated contractors to be present during job.**

1. Prep location. Spot the necessary 500 BBL lined acid tanks, 500 BBL water tanks, and BOP onto location. Set a flow back tank before stimulation. Have Service Co test water for quality.
2. MIRU unit. Kill well as necessary. Unseat pump. POOH w/ rods and pump.
3. ND WH. NU BOP. Release TAC. POOH w/ tubing and TAC.
4. PU and RIH w/ 4-3/4" bit, bit sub, drill collars on 2-7/8" WS to PBTD @7,445'. Clean out if necessary. POOH.
5. PU and RIH with packer and RBP assembly. Locate casing leak. Set RBP 50' below casing leak and dump 3 sxs sand on top of RBP. POOH w/ PKR and WS.
6. PU and RIH w/ CICR on WS and set ~ 50' above top of casing leak. Sting into CICR.
7. MIRU cement Service Company. Establish injection rate into perforations. Pump cement as dictated by injection rate. Hesitate squeeze casing leak per Monument office recommendations. Displace to CICR with flush.
8. Sting out of CICR and POOH w/ WS. WOC.

- 
9. PU and RIH w/ 4-3/4" bit, bit sub and drill collars on WS. Tag CICR. RU reverse unit and break circulation. Drill out CICR and cement to RBP. Test casing squeeze to 1000 psi. *If squeeze does not test, repeat squeeze process.* POOH.
  10. PU retrieving tool and RIH to RBP. Wash sand off RBP. Latch and release RBP and POOH.
  11. MIRU WL. RIH w/ perforator and perforate the Abo at 6996'-7015'; 7158'-69'; 7191'-7200'; 7241'-65'; 7283'-87' w/ 2 jspf 120° phasing (134 holes). TOH w/ perf guns.  
**Correlate to Weatherford Compensated Neutron Gamma Ray CCL log dated 1/12/2011.** RDMO WL.
  12. PU and RIH w/ SN and PKR on 3-1/2" 9.3# N-80 to be used as frac string. Spot 400 gallons of 15% NEFE acid across perforations. POOH and set PKR just above Abo perforations at ± 6,900'. *Note open perforations above.* Monitor backside during frac job.
  13. NU 10K psi frac valve. MIRU frac services. NU and test surface lines to 9,000 psi. Max pressure to be 8,000 psi at surface, set pressure alarms and pop-offs accordingly.
  14. Load hole and establish rate and pressure. Acid frac the Abo down tubing per recommendations as provided by Service Company. Flush to top perf w/ 62 bbls. SD. Shut-in well. RDMO frac service.  

Target Rate: 20 BPM            Max Pressure: **8,000 psi**
  15. Flow back or surge well to flow back tank until well dies. RU swab equipment and recover load and swab test for fluid entry and oil cut. Report results to Midland. RD swab equipment.
  16. ND frac valve and tree. Kill well as necessary. Release PKR and TIH to 7,300' to knock balls off perforations. TOH w/ PKR-RBP assembly and WS. LD work string.
  17. Run 2-7/8" production tubing and rods as per the Monument office specifications.
  18. RDMOPU. Place well into production and on test for 2 weeks. Have chemical rep test fluids and put well on the appropriate chemical maintenance program.

GL=3544'  
KB=3556'  
Spud:11/28/10

# Apache Corporation – T. Anderson #5

## Wellbore Diagram – Current

Date : 12/16/2013

API: 30-025-39900

### Surface Location

R. Taylor



895' FSL & 1835' FWL,  
Lot N Sec 8, T20S, R37E, Lea County, NM

### Surface Casing

13-3/8" 48# H-40 @ 1209' w/ 1010 sxs to surface

### Intermediate Casing

8-5/8" 32# J-55 @ 4825' w/ 2100 sxs to surface

3/12: CSG leak between 5249-5439. SQZ'd w/ 429 sxs cmt. TOC @ 2580'

TOC @ 5860'

TAC @ 6697'  
SN @ 7132'

8/11: Perf Tubb @ 6391; 94; 99; 6412; 14; 16; 18; 33; 35; 46; 48; 61; 68; 70; 78; 83; 85; 6502; 04; 08; 10; 12; 14; 16; 26; 32; 34; 38; 44; 70; 88; 92; 6604; 06; 08; 10 w/ 1 jspf 120° phasing (36 holes). Acidized w/ 3000 gal 15% NEFE. Frac'd w/ 42k gal Spectrafrac 3000 w/ 89k# 20/40 white @ 29 BPM @ 6650#.

8/11: Perf Drinkard @ 6758-62; 6770-74; 6782-88; 6794-98; 6808-14; 6832-36 w/ 1 jspf 120° phasing (43 holes). Acidized w/ 3000 gal 15% NEFE. Frac w/ 25k gal Spectrafrac 3000 w/ 29.5k# 20/40 white @ 26 BPM @ 6872#. Screen out.

3/11: Perf Abo stage II @ 6946-70 w/ 2 jspf (50 holes). Acidized w/ 3000 gal 15% NEFE

3/11: Perf Abo stage I @ 7058-7130 w/ 2 jspf (146 holes). Acidized w/ 9000 gal 15% NEFE

8/11: Push CIBP to 7445'

### Production Casing

5-1/2" 17# J-55 @ 7704' w/ 1200 sxs

Hole Size  
=17.5"

Hole Size  
=12-1/4"

Hole Size  
=7-7/8"

PBTD = 7,445'  
MD = 7,704'

GL=3544'  
 KB=3556'  
 Spud:11/28/10

# Apache Corporation – T. Anderson #5

## Wellbore Diagram – Proposed

Date : 12/16/2013

API: 30-025-39900

### Surface Location

R. Taylor



895' FSL & 1835' FWL,  
 Lot N Sec 8, T20S, R37E, Lea County, NM

### Surface Casing

13-3/8" 48# H-40 @ 1209' w/ 1010 sxs to surface

### Intermediate Casing

8-5/8" 32# J-55 @ 4825' w/ 2100 sxs to surface

Hole Size  
 =17.5"

Hole Size  
 =12-1/4"

3/12: CSG leak between 5249-5439. SQZ'd w/ 429 sxs cmt. TOC @ 2580'

TBD: Locate and SQZ casing leak.

TOC @ 5860'

TAC @ TBD'

8/11: Perf Tubb @ 6391; 94; 99; 6412; 14; 16; 18; 33; 35; 46; 48; 61; 68; 70; 78; 83; 85; 6502; 04; 08; 10; 12; 14; 16; 26; 32; 34; 38; 44; 70; 88; 92; 6604; 06; 08; 10 w/ 1 jspf 120° phasing (36 holes). Acidized w/ 3000 gal 15% NEFE. Frac'd w/ 42k gal Spectrafrac 3000 w/ 89k# 20/40 white @ 29 BPM @ 6650#.

8/11: Perf Drinkard @ 6758-62; 6770-74; 6782-88; 6794-98; 6808-14; 6832-36 w/ 1 jspf 120° phasing (43 holes). Acidized w/ 3000 gal 15% NEFE. Frac w/ 25k gal Spectrafrac 3000 w/ 29.5k# 20/40 white @ 26 BPM @ 6872#. Screen out.

Acid frac Abo 6946-7287 w/ 30k gal 15% NEFE HCL & 50k gal 15% Ultragel HCL @ 20 BPM.

3/11: Perf Abo stage II @ 6946-70 w/ 2 jspf (50 holes). Acidized w/ 3000 gal 15% NEFE

3/11: Perf Abo stage I @ 7058-7130 w/ 2 jspf (146 holes). Acidized w/ 9000 gal 15% NEFE

TBD: Perf Abo @ 6996-7015; 7158-69; 7191-7200; 7241-65; 7283-87 w/ 2 jspf 120° phasing (134 holes).

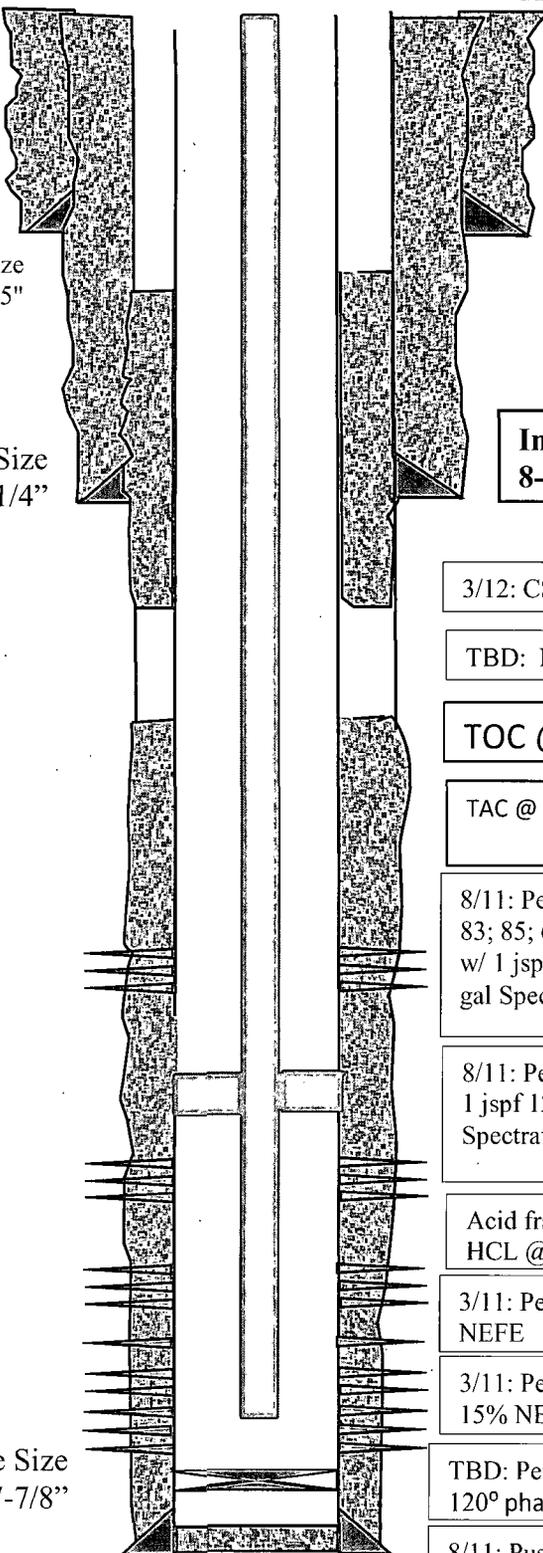
8/11: Push CIBP to 7445'

### Production Casing

5-1/2" 17# J-55 @ 7704' w/ 1200 sxs

Hole Size  
 =7-7/8"

PBTD = 7,445'  
 MD = 7,704'



State of New Mexico

DISTRICT I  
1625 N. FRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

Form C-102

DISTRICT II  
1301 W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION  
1220 SOUTH ST. FRANCIS DR.  
Santa Fe, New Mexico 87505

Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number <b>30-025-39900</b>	Pool Code <b>96764</b>	Pool Name <b>Monument; Abo, Southeast</b>
Property Code <b>302373</b>	Property Name <b>T. ANDERSON</b>	Well Number <b>005</b>
OGRID No. <b>873</b>	Operator Name <b>APACHE CORPORATION</b>	Elevation <b>3544'</b>

Surface Location

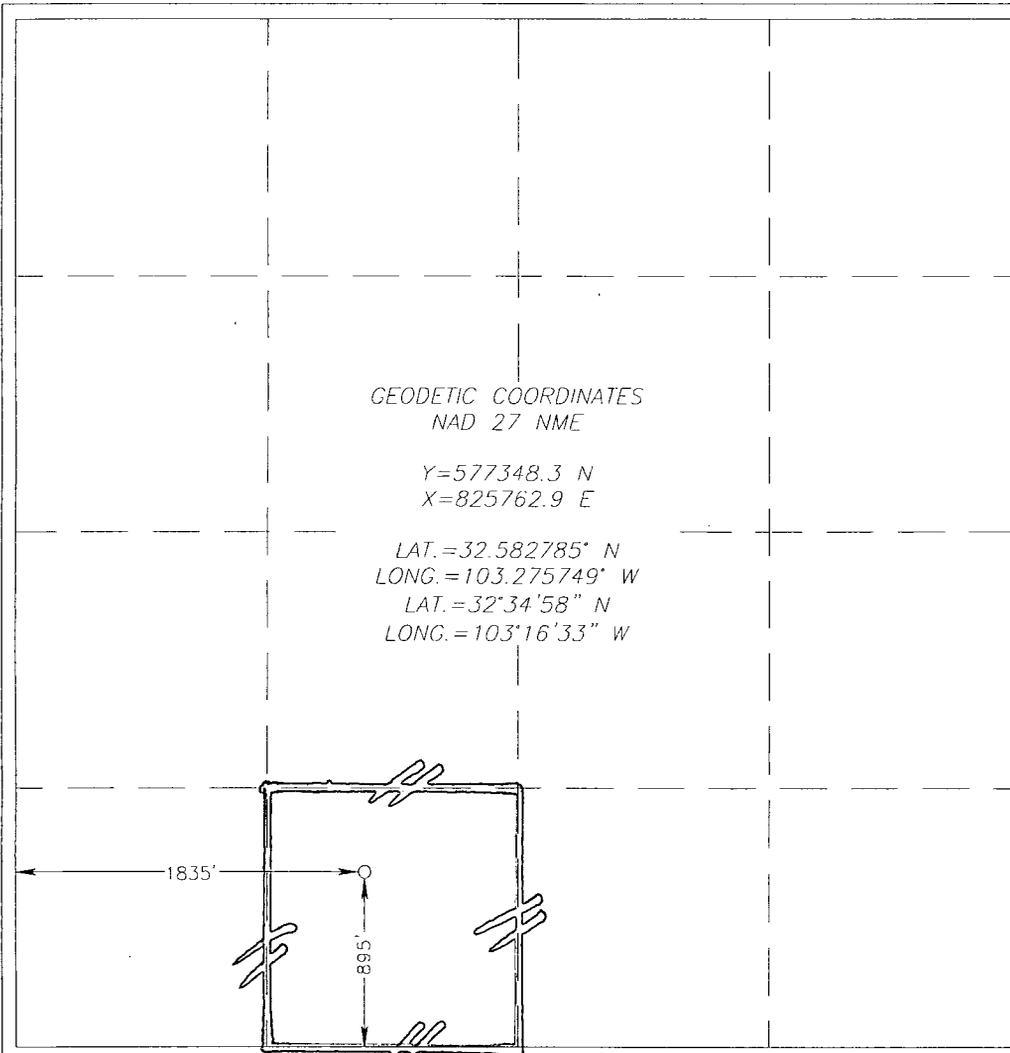
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	8	20-S	37-E		895	SOUTH	1835	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres <b>40</b>	Joint or Infill	Consolidation Code	Order No. <b>DHC-4455-0</b>
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



**OPERATOR CERTIFICATION**

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: *[Signature]* Date: **01/23/2014**

Printed Name: **Fatima Vasquez**

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**SURVEYOR CERTIFICATION**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date Surveyed: **JULY 16 2010** LA

Signature & Seal of Professional Surveyor: *[Signature]* **3239**

Certificate No. **RONALD EIDSON 3239**