

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

Form C-103  
June 19, 2008

WELL API NO. 30-025-34163	
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>	
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name J H Williams	
8. Well Number 002	
9. OGRID Number 873	
10. Pool name or Wildcat Tubb (47090) / Drinkard (96768)	
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: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> 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 P : 470 feet from the South line and 990 feet from the East line Section 34 Township 19S Range 37E NMPM County Lea	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3569' GR	

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☒ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐  
DOWNHOLE COMMINGLE ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS ☐ P AND A ☐  
CASING/CEMENT JOB ☐

OTHER: ☐

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.

Apache intends to frac the Tubb and Drinkard per the attached.

Spud Date:

10/26/1997

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

DATE 07/09/2012

Type or print name Fatima Vasquez

E-mail address: Fatima Vasquez@apachecorp.com

PHONE: (432) 818-1015

For State Use Only

APPROVED BY:

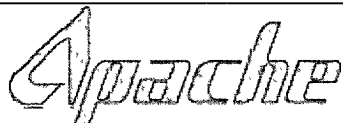
TITLE

PETROLEUM ENGINEER

DATE

JUL 13 2012

Conditions of Approval (if any):



**J.H. Williams # 2**

API: 30-025-34163

Skaggs Field

Lea, New Mexico

**AFE Number: PA-12-4034**

KB: 3579' GL: 3569' (KB 10' above GL)

9-5/8" 36 lb/ft casing set @ 1241'

7" 23 lb/ft J-55 casing set @ 4030'

4-1/2" 10.5 lb/ft casing set @ 7000'

TD: 7,000' PBTD: 6,950'

**SINGLE STAGE ACID FRAC and MATRIX ACID COMPLETION PROCEDURE**

**Casing:** 4-1/2", 10.5lb/ft, J-55

ID: 4.052"

Drift= 3.927"

Capacity= 0.01595 BBL/ft

Burst= 4790 psi; 80%= 3832 psi

4-1/2" x 2-7/8" Annular capacity 0.0079 BBL/ft

**Tubing:** 2-7/8", 6.5 lb/ft, J-55

Capacity= 0.0058 bbl/ft

Burst= 7260 psi; 80%= 5808

Collapse 7680 psi; 80%= 6144 psi

Yield 99,660 lbs; 80%= 79,728 lbs

- **Anticipate two days 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 PU. Kill well as necessary. Unseat pump. POOH w/ rods and pump.
- 3. ND wellhead. NU BOP. Release TAC. POOH w/ tubing and TAC. PU & TIH w/ 3-7/8" bit and scrapper for 4-1/2", 10.5 lb/ft, J-55 casing on 2-7/8" J-55 tubing to be used as WS. CO to 7,000'. Circulate hole clean. POOH and stand back tbg. LD DC and bit.

**STAGE I- Drinkard**

- 4. RIH w/ SN and PKR-RBP straddle assembly w/ ball catcher on WS. Set RBP w/ ball catcher at  $\pm$  6950'. TIH and set PKR just above perforations at  $\pm$  6,750'. **Note open perforations from 6,418-6,614.**
- 5. ND BOP. NU 10K psi frac valve. MIRU frac services. NU and test surface lines to 7,000 psi. Max pressure to be **6,000 psi** at surface, set pressure alarms and pop-offs accordingly.

- 
6. Load hole and establish rate and pressure. Acid frac the Drinkard down tubing per recommendations as provided by Service Company. Flush to top perf w/ 40 bbls. SD. Shut-in well.

Target Rate: 20 BPM

Max Pressure: **6,000 psi**

7. If necessary, kill well. Release PKR and TIH to RBP. Latch and release RBP. TOH w/ PRK-RBP. Set RBP w/ ball catcher at  $\pm 6,665'$ . TOH and set PKR above perforations at  $\pm 6,370'$ . Test backside to 1000 psi.

## **STAGE II- Tubb**

8. Load hole and break down Tubb perfs. Establish rate and pressure. Max pressure to be 6,000 psi at surface, set pressure alarms and pop-offs accordingly and monitor throughout job. Acidize down csg w/ 2500 gals of 15% NEFE HCL w/ additives using 120 ball sealers to divert evenly spaced through the job as a max rate but do not exceed **6,000 psi** surface treating pressure. Displace to bottom perf with 41 BBLs of flush. Surge balls. RDMO Service Company.
9. Unset PKR and TIH w/ to knock balls off. Reset PKR at  $\pm 6,370'$ . RU swab equipment to recover load and swab test perfs for fluid entry and oil cut. Report to Midland office.
10. Unset PKR and TIH to latch and release RBP and ball catcher. TOH w/ PKR-RBP and WS.
11. ND frac valve and tree. NU BOP's. Kill well as necessary. RU reverse unit and swivel.
12. RIH w/ 2-7/8" bit subs, DC on 2-7/8" tbg and clean well out to PBTD. Circulate bottoms up once. POOH with WS.
13. Run production tubing and rods as per the Hobbs office specifications.
14. 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.