

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

5. Lease Serial No. NMNM0557371

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well Oil Well Gas Well Other: INJECTION

8. Well Name and No. AAO FEDERAL SWD 1

2. Name of Operator APACHE CORPORATION Contact: EMILY FOLLIS E-Mail: Emily.Follis@apachecorp.com

9. API Well No. 30-015-42549-00-X1

3a. Address 303 VETERANS AIRPARK LANE SUITE 3000 MIDLAND, TX 79705

3b. Phone No. (include area code) Ph: 432-818-1801

10. Field and Pool, or Exploratory CISCO UNKNOWN

4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 1 T18S R27E SWNE 2470FNL 2380FEL 32.776548 N Lat, 104.231257 W Lon

11. County or Parish, and State EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

Table with columns TYPE OF SUBMISSION and TYPE OF ACTION. Includes checkboxes for Notice of Intent, Subsequent Report, Final Abandonment Notice, and various actions like Acidize, Deepen, Fracture Treat, etc.

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Apache is submitting this after the fact NOI in order to comply with APD COA's that completion/production were unaware of at the time of completing the well. Below is the Completion Procedure:

- 1.Run logs from 6248' to surface GR-CBL-CNL
2.Trip in hole with 6 1/8" bit and drill collars on 2 7/8" tubing to CIBP @ 7000'. Displace hole with new 14 PPG mud. Drill out CIBP and push 100' below 7" casing shoe (7" 26# L-80 set at 7434?).
3.Check for flow & lay tubing down. RU up lubricator and run 7" nickel plated Lok-set packer on wire line (Packer accessories ? on-off tool with profile nipple. Below packer run a pump out plug 6000 psi pin on a 2 7/8" x 6" extension below the packer).
Note: Run a profile nipple to accommodate the largest blanking plug that is designed for running and setting inside 2 7/8" tubing not 4" tubing.

NM OIL CONSERVATION ARTESIA DISTRICT DEC 14 2015 RECEIVED

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #323086 verified by the BLM Well Information System For APACHE CORPORATION, sent to the Carlsbad

Committed to AFMSS for processing by JENNIFER SANCHEZ on 11/13/2015 (16JAS1143SE)

Name (Printed/Typed) EMILY FOLLIS

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 11/10/2015

ACCEPTED FOR RECORD

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional data for EC transaction #323086 that would not fit on the form

32. Additional remarks, continued

4. Set Packer 100' from 7" casing shoe
5. Trip in hole with 2 7/8" tubing open ended and gently tag on off tool. Displace hole with 10ppg brine packer fluid. Lay down tubing.
6. Run 4 1/2" Duo lined tubing with on-off tool. Space out and Latch on-off tool with 4 1/2" tubing in 15,000 to 20,000# compression. Land tubing. Test annulus. Rig up lubricator.
7. Retrieve blanking plug. Pressure 4 1/2" tubing to 6000 psi and pump out plug. If unable to pump out plug chemically cut off 6" extension.
8. Flow back mud until all mud is recovered.
9. Run 4 Point injectivity test at 1, 2, 3 & 4 BPM pumping 25 barrels 10PPG brine at each flow rate.
10. File injection report and place on injection as soon as approval is received.

Conditions of Approval

Apache Corporation
AAO Federal SWD - 01, API 3001542549
T18S-R27E, Sec 01, 2470FNL & 2380FEL
December 07, 2014

1. Operator shall submit an evaluation of existing logs **to include the mud logs and shall perform production tests** to verify that the disposal injection formations cannot produce paying quantities. That evaluation is to be reviewed by BLM prior to initiating injection.
2. Subject to like approval by the New Mexico Oil Conservation Division.
3. Notify BLM 575-200-7902 Eddy Co. as work begins. Some procedures are to be witnessed. If there is no response, call 575-361-2822, leave a voice mail with the API#, workover purpose, and a call back phone number. Note the contact, time, & date in your subsequent report.
4. Before casing or a liner is added, replaced, or repaired prior BLM approval of the design is required. Use notice of intent Form 3160-5.
5. **Provide BLM with an electronic copy (Adobe Acrobat, .pdf, or .tiff) cement bond log record from 7400 taken with Opsig casing pressure. (CBL of 03/23/2015 was taken with 1,000psig) The CBL may be attached to a pswartz@blm.gov email. The CFO BLM on call engineer may be reached at 575-706-2779.**
6. Surface disturbance beyond the existing pad shall have prior approval.
7. A closed loop system is required. The operator shall properly dispose of drilling/circulating contents at an authorized disposal site. Tanks are required for all operations, no excavated pits.
8. Functional H₂S monitoring equipment shall be on location.
9. 3000 (3M) Blow Out Prevention Equipment to be used. All BOPE and workover procedures shall establish fail safe well control. Blind ram(s) and pipe ram(s) designed to close on all workstring diameters used is required equipment. A manual BOP closure system (hand wheels) shall be available for use regardless of BOP design. Function test the installed BOPE to 500psig when well conditions allow. Related equipment, (choke manifolds, kill trucks, gas vent or flare lines, etc.) shall be employed when needed for reasonable well control requirements.
10. All waste (i.e. trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.
11. File intermediate **subsequent sundry** Form 3160-5 within 30 days of any interrupted workover procedures and a complete workover subsequent sundry. Submit the BLM Form

3160-4 **Recompletion Report** within 30 days of the date all BLM approved procedures are complete.

12. Workover approval is good for 90 days (completion to be within 90 days of approval). A legitimate request is necessary for extension of that date.
13. Approval is granted for disposal of water produced from the lease, communitization, or unit agreement of this well only. Disposal fluid from another operator, lease, communitization, or unit agreement require BLM surface right-of-way agreement **approvals** and if applicable, authorization from the surface owner.
14. Disposal of water from another operator requires that the well be designated as a commercial well and BLM surface right-of-way agreement **approvals**.
15. If the well is to receive off-lease water or commercial disposal, the operator shall provide proof of surface right-of-way approval prior to injection.

Well with a Packer - Operations

- 1) Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established.
- 2) The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with a minimum 200 psig differential between tubing and casing pressure (at test time) but no more than 70% of casing burst pressure as described by Onshore Order 2.III.B.1.h. (The tubing or reservoir pressure may need to be reduced). Verify all annular casing vents are plumbed to surface and those valves open to the surface during this pressure test. An alternate method for a BLM approved MIT is to have the fluid filled system open to atmospheric pressure and have a loss of less than five barrels in 30 days witnessed by a BLM authorized officer.
- 3) Document the pressure test on a one hour full rotation calibrated (within 6 months) recorder chart registering within 25 to 85 per cent of its full range. Greater than 10% pressure leakoff will be viewed as a failed MIT. Less than 10% pressure leakoff will be evaluated site specifically and may restrict injection approval.
- 4) Make arrangements 24 hours before the test for BLM to witness. In Eddy County email Paul R. Swartz pswartz@blm.gov or phone 575-200-7902, if there is no response, 575-361-2822. If no answer, leave a voice mail or email with the API#, workover purpose, and a call back phone number.
- 5) Submit a subsequent Sundry Form 3160-5 relating the MIT activity. Include a copy of the recorded MIT pressure chart. List the name of the BLM witness, or the notified person and date of notification. NMOCD is to retain the original recorded MIT chart.
- 6) Use of tubing internal protection, tubing on/off equipment just above the packer, a profile nipple, and an in line tubing check valve below the packer or between the on/off tool and

packer is a "Best Management Practice". The setting depths and descriptions of each are to be included in the subsequent sundry.

- 7) **Submit the original subsequent sundry with three copies to BLM Carlsbad.**
- 8) Compliance with a NMOCD Administrative Order is required, submit documentation of that authorization.
 - a) Approved injection pressure compliance is required.
 - b) If injection pressure exceeds the approved pressure you are required to reduce that pressure and notify the BLM within 24 hours.
 - c) When injection pressure is within 50 psig of the maximum pressure, install automation equipment that will prevent exceeding that maximum. Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment within 30 days.
- 9) Class II (production water disposal) wells will not be permitted Stimulation Pressures or "Injectivity Tests" that exceed the NMOCD/BLM generic frac pressure which is: .2 x ft depth to the topmost injection or 50psig below the frac point as clearly indicated by a BLM accepted "Step Rate Test".
- 10) A request for increased wellhead pressures is to be accompanied by a "Step Rate Test:" that is to clearly indicate any requested wellhead pressure is +50psig below frac pressure for the wellbore's disposal formation. PRIOR to a Step Rate Test BLM – CFO is requiring a Notice of Intent.
- 11) Unexplained significant variations of rate or pressure to be reported within 5 days of notice.
- 12) The casing/tubing annulus is required to be monitored for communication with injection fluid or loss of casing integrity. A BLM inspector may request verification of a full annular fluid level at any time.
- 13) A "Best Management Practice" is to maintain the annulus full of packer fluid at atmospheric pressure. Equipment that will display on site, continuous open to the air fluid level above the casing vent is necessary to achieve this goal.
- 14) A suggested format for monthly records documenting that the casing annulus is fluid filled is available from the BLM Carlsbad Field Office.
- 15) Excessive (+5 bbls/month) gain or loss of annular fluid volume requires notification within 24 hours. Cease injection and maintain a production casing pressure of 0psia. Notify the BLM's authorized officer ("Paul R. Swartz" <pswartz@blm.gov>, cell phone 575-200-7902). If there is no response phone 575-361-2822.
- 16) Submit a (Sundry Form 3160-5) subsequent report (daily reports) describing all wellbore activity and Mechanical Integrity Test as per item 1) above. Include the date(s) of the well work, and the setting depths of installed equipment: internally corrosive protected tubing, tubing on/off equipment just above the packer, and an in line tubing check valve below the packer or between the on/off tool and packer. The setting depths and descriptions of each are to be included in the subsequent sundry

Access information for use of Form 3160-5 "Sundry Notices and Reports on Wells"

NM Fed Regs & Forms - http://www.blm.gov/nm/st/en/prog/energy/oil_and_gas.html

§ 43 CFR 3162.3-2 Subsequent Well Operations.

§ 43 CFR 3160.0-9 (c)(1) Information collection.

§ 3162.4-1 (c) Well records and reports.