Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED Budger Bureau No. 1004-0135 Expires: March 31, 1993

5. Losse Designation and Serial No.

SUNDRY NOTICES Do not use this form for proposals to dr Use "APPLICATION FO	Cont #151 6. If Indian, Allottee or Tribe Name Jicarilla Apache	
SUBMIT IN TRIPLICATE		7. If Unit or CA, Agreement Designation
4 Location of Well (Footage, Sec., T., R., M., or Survey D 990' FSL & 1027' FWL Sec. 3, T-26N, R-5W	ouston, TX 77252-2197 (281) escription) s) TO INDICATE NATURE OF NOTICE, REPORT	8. Well Name and No. AXI Apache K #4 9. API Well No. 30-039-82254 10. Field and Pool, or Exploratory Area 72319-Mesaverde 11. County or Parish, State Rio Arriba RT, OR OTHER DATA
Notice of Intent Subsequent Report Final Abandonment Notice	Abandonment Recompletion Plugging Back Casing Repair Altering Casing Other	Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
conoco, Inc. also intends	Il pertinent details, and give pertinent dates, including estimated date of starting all depths for all markers and zones pertinent to this work.)* Install a cement liner to repair casing to circulate cement past the perforation stimulate the Mesaverde to restore the control of the control	g any proposed work. If well is directionally drilled, g leaks. Lons in the PC abandoning eduction.

4. I hereby certify that the foregoing is true and correct Signed Handa Pare?	Title	Regulatory Analyst	Date 02/11/00	=
(This space for Federal or State office dss) Approved by Conditions of approval, if any:	Title	Pertolar Egren	Date > /11/60	_

Install Liner and Stimulate AXI Apache K-4 3M 26N 5W

Objective:

Install flush joint liner to cover PC and bad casing (1859-3293),

then stimulate the Mesa Verde to restore production.

Well Information:

Casing:

4.5" 10.5 lb/ft set at 5310'

Capacity - .01594 bbl/ft or .6698 gals/ft

Fill last tagged at 5993'

4.5" 11.6 lb/ft set from 5310' to 6150'

Tubing:

2 3/8" to 5486'

Capacity - .00387 bbls/ft or .1626 gals/ft Total Volume – 21.2 bbls or 892 gals

2 1/16" Capacity .002979 bbls/ft or .1251 gals/ft

Pictured Cliffs Perforations:

3772'-3830'

Mesa Verde Perforations:

Cliff House 5436'-44', 5463'-68', 5472'-76', 5490'-

5510' 1SPF

Point Lookout 6002'-08', 6010'-6020' 2SPF

- 1. Move in and rig up pulling unit.
- 2. Pull packer (3904') and lay down 2 3/8" tubing. Wash over packer if stuck from fill falling in from above.
- 3. If after pulling packer it appears that it is required, run bit and scraper to below 4000'.
- 4. Run composite bridge plug and set at approximately 4000'.
- 5. Dump 5' of sand on top of bridge plug.
- 6. Run in the hole with tubing to below the PC and circulate a bentonite pill to try to establish circulation. Note: If we are unable to establish circulation with water, the chances of getting cement to surface are slim, so we should be prepared to run a post cement job temperature survey and will need to be prepared to hang off and pack off the 3 ½" flush joint liner.
- 7. Install wellhead components to hang and packoff 3 ½" liner.
- 8. Run one joint of 3.5" 9.3 lb flush joint liner with FL4S threads, a float collar and 3950' of 3.5" 9.3 lb flush joint liner with FL4S

- threads (lifting plugs and slip type elevators will be necessary). A stabbing guide shall be used while making all connections. Thread lock the bottom two joints of liner. Hang off 3 $\frac{1}{2}$ " liner in wellhead.
- 9. Cement liner as per BJ cementing recommendation using 100% excess. Attempt to reciprocate the liner while cementing. A wiper plug will be used. If the plug does not bump when the liner volume has been pumped (approx. 34.4 barrels), stop pumping (do not over displace).
- 10. If cement returns to the surface are not achieved. Rig up wireline unit and run temperature survey to insure cement top is above Fruitland coal. If not contact engineering for recommendation.
- 11. After cement cures if cement returns to surface were achieved, cut off liner at the top of the 4 ½" so the existing wellhead equipment can be used. If cement returns were not achieved, the liner will need to be hung off and packed off.
- 12. Pick up a bit and 2 1/16" IJ tubing. Drill out any cement in the liner, the float equipment, and composite bridge plug. Note: Air equipment or nitrogen will be required once the bridge plug is drilled. Continue in the hole with bit and clean out to below 6020'. Note: PBTD is 6150'.
- 13. Pull out of hole with bit.
- 14. Rig up jet washing tool on tubing and run in to below the bottom perforation (6020'). A flow control valve should be installed in the tubing string at least 700' below the surface when the jet washing tool is below the bottom perf. Jet wash the perforations with nitrogen foam making several passes through each set of perforations, rotating the tool between passes. Wash from the bottom up to minimize the amount of material passing clean perforations.
- 15. If the well is not unloading gas, spot acid across from Mesa Verde perforations and acidize with 1000 gallons of 15% HCl as per BJ acidizing procedure followed by 20 barrels of flush. Jetting tool may be used to pump into perforations once acid is below the surface. Swab back spent acid then POOH.
- 16. Run 2 1/16" IJ tubing to 5500' with seating nipple for plunger operations.
- 17. Nipple up wellhead for plunger operation and connect to sales. Note: wellhead valve must be 1.75" I.D.
- 18. Swab in well if necessary.

Acid Detail:

1000 gallons 15% HCL containing:

100 gallons EGMBE (US-40) 1 gallons of NE-940 surfactant

8 gallons of Ferrotrol-300L iron control agent
4 gallons of CI-22 corrosion inhibitor
(Note: acid additive emulsion tests should be run prior to pumping)

Flush Detail:

20 barrels of 1% KCl water

Prepared by: Pat Bergman February 1, 2000