Texaco Producing Inc. Attachment to C-103 11/15/89

WEST JAL 'B' DEEP WELL NO. 1 WORKOVER PROCEDURE

1980' FNL & 660' FEL, Sec. 17, T-25S, R-36-E 1. MIRU pulling unit. Kill well. Install 5000# BOP.

- Unseat 7-3/4" Otis pkr and circulate 10# brine to assure well is killed. POH w/tbg and pkr.
- 3. TIH w/7-3/4" cmt retainer on tbg. Set retainer at 11,375'. Squeeze Wolfcamp perfs 11,416'-11,425' w/100 sxs class H cmt w/.4% Halad-9 fluid loss additive. Reverse out excess cmt. Pull tbg. WOC 12-24 hrs.
- 4. TIH w/6-3/8" bit, drill collars, and tbg. Drill out cmt and cmt retainer. Tag PBTD at 12,630'.
- 5. POH w/tbg, drill collars, and bit.
- 6. Load 13-3/8" X 10-3/4" csg annulus w/inhibited water. Test 10-3/4" csg, 7-3/4" liner and squeezed Wolfcamp perfs to 3000 psi at the surface.
- 7. TIH w/tbg and 10-3/4" pkr. Set pkr at 5,200'. Pressure up backside to 5000 psi and tbg to 1000 psi.
- 8. POH w/tbg and pkr.
- 9. TIH w/2-3/8" N-80 production tbg and 7-3/4" pkr (see downhole equipment schematic). Test tbg to 7500 psi.
- 10.Spot 600 gallons 10% acetic acid across perforation interval 11,708'-11,995'.
- 11.Set pkr at 11,600'. Release out of On-Off tool. Circulate pkr fluid (approx. 850 bbls). Set back into On-Off tool.
- 12.Nipple down BOP. Install Xmas tree. Test pkr to 1500#. Test tree to 7500#.
- 13.Install csg pressure relief system.
- 14.Swab tbg to 2000'.
- 15.Rig up wireline and test 10,000# lubricator to 7500 psi. Run GR-CCL correlation log. Perforate the Strawn formation w/2 JSPF @ 11,708'-11,726', 11,926'-11,936', 11,938'-11,944', 11,990'-11,995' w/a 1-9/16" 0 deg phasing decentralized thru tbg perforating gun.
- 16.Acidize perforations 11,708'-11,995' w/6000 gallons 20% NEFE mixed w/300 bbls CO2 and 100% excess ball sealers at a max rate of 6 BPM not to exceed a surface pressure of 3800 psi.

17.Rig down wireline. Test.