

Procedure:

- 1) MI&RU service rig and install BOP,
- 2) Release Halliburton Model "R-4" Packer set @ 1930' and reset @ 1700'. Pressure up to 500# on 4½" x 2-3/8" casing annulus,
- 3) Rig up Dowell and squeeze perforations down 2-3/8" tubing from 1960' to 2909' to 1500# w/210 sx Class "C" cement containing 1/3% Flac and 2% Calcium Chloride. After cement has cleared the tubing, use hesitation squeeze technique. Release packer and reverse out excess cement. Reset packer @ 1500' and hold 1500# pressure. WOC 24 hours,
- 4) Pull 2-3/8" tubing and Halliburton "R-4" Packer,
- 5) Rig up reverse unit. Run 3-3/4" bit, scraper, 4 drill collars and 2-3/8" tubing. Drill and clean out cement. Pressure test to 1500#,
- 6) If perforations will not test to 1500#, resqueeze w/50 sx Class "C" containing 1/3% Flac and 2% Calcium Chloride. WOC 24 hours. Drill out and retest to 1500#,
- 7) Run Welex MSG Cement Bond Log from 3000' to 1500' to assure good cement bond exists between zones. Spot 6 barrels Acetic Acid across zones to perforated,
- 8) Perforate with Welex 3-1/8" SSB w/one jet shot per foot, hole diameter 0.34" and 15.4" penetration at the following intervals: 2656' to 2676', 2836' to 2846' and 2900' to 2924',
- 9) Stimulate well as follows (treatment to be adjusted to number of feet of productive interval):
 - A) Zone 2900' to 2924'
 - 1) Set RBP @ 2930' and packer @ 2890',
 - 2) Acidize w/1000 gallons 7½% acid-mix. Pump 4 barrels acid then drop one ball every 1/2 barrel acid. Attempt to ball out,
 - 3) Flow back and clean up acid. Swab test to determine if zone is productive,
 - 4) If the zone looks productive, frac zone w/24,700 gallons foam containing 20,500# sand,
 - 5) Leave well shut in one hour,
 - 6) Flow back and clean up frac job.
 - B) Zone 2836' to 2846'
 - 1) Reset RBP @ 2855' and packer @ 2825',
 - 2) Acidize w/500 gallons 7½% acid-mix. Pump 2 barrels acid then drop one ball every 1/2 barrel acid. Attempt to ball out,
 - 3) Flow back and clean up acid. Swab test to determine if zone is productive,
 - 4) If zone looks productive, frac zone w/12,700 gallons foam containing 9000# sand,