

Attached to and made a part of that Form C-105 covering the Yates State #1 filed 12-4-90

23. Cementing Record for 5-1/2" casing:

Cemented with 500 sx Halliburton Lite & 3/10% Halad 9 + 1/4# CF, followed by 550 sx 50/50 Poz Mix with 5#/sk salt + 4/10% Halad 22A

26. & 27.

Perf lower Strawn zone 10,354-70' - 16' - 2 spf, 33 holes.

Pump 500 gallons 15% acid.

Set pkr @ 10,305'.

SITP 700 PSI. Open well, flowed 3 BO & died. TIH with swab. FL 4600' FS.

Swab average 11 BFPH. Last hour FL 3900' FS. Oil cut vary 10-20% all day.

Perf 10,288-96' - 8' - 17 holes.

Acidized perms w/1000 gallons 15% NE/FE Acid + 25 balls. Avg rate 1.6 BPM @ 5200 PSI.

Swab down in 2 hrs; recover 7-1/2 bbl formation water. Wait one hr. FL 9400' scattered to SN. No recovery.

Re-Perf 10,288-96' - 8' w/4 spf - 32 holes.

Reacidized w/1500 gallons 20% NE/FE.

Swab 110 BW & 2 BO in 7 hrs. Level holding @ 5,000' FS.

Mix 75 sacks Class H + 4% Halad 9. Squeeze formation.

Tst squeeze to 1400 PSI.

Perf Strawn 10,168-78' - 10' w/13 holes. Acidize w/1500 gallons 20% NE/FE acid + 20 balls.

Swabbed 80 BF/9 hrs (8.9 bbl/hr). Last swab run FL 8100' FS, scattered to seating nipple. Recovered 5 BF - 30% oil cut.

Set CIBP (Elite-Quick Drill) on wire line @ 10,150'. Perf Penn 9910-18' - 8' - 17 holes and 9924-30' - 6' - 13 holes.

Rig up and acidize w/3000 gal 20% NE/FE + 44 balls.

Flowed 154 BO/28 hrs, 400 MCFPD on 16/64" choke. No water test. This a.m. FTP 20#. GOR = 2597.

Perf Bough "C" 9924-33' - 9' - 19 holes.

Pumped 2000 gal 15% NEFE + 30 balls. Average rate 3.25 BPM.

Swab 20 BF w/FL 6500' FS. Trace oil.

Mix 75 sks Class H w/0.6% Halad 9 + 50 sks Class H Neat. Pumped cement. Pressure increased to 2000 PSI.

Perforate Bough "B" from 9190-98' - 8' - 17 holes.

Spot 600 gallons of 15% NE/FE acid. Zone broke while spotting acid.

Pumped 2.5 BPM @ 1800 PSI for 8 bbl. Vacuum in 45 sec.

Swab well. Recovered 4 BF/hr w/FL scattered to SN. 75% oil cut.

Acidize w/1500 gallons of 15% NE/FE acid + 30 balls.

PU 1 jt bull plug mud anchor 9179', seating shoe, 8' gas anchor 9144',

2 jts tubing anchor 9082', 289 jts 9079', total 292 jts.

Pumped 108 BO/24 hrs. No water gauge. Good gas.

m/2