FRANCES FEDERAL #1

CHRONOLOGICAL HISTORY

Gyp removal and inhibitor treatment Cost \$1465.

1-13-66 Dumped 750 gals Kerosene and 4 gals Hyflo and circulated for 14 hrs with well pump.

1-14-66 Turned to battery.

- 1-15-66 Dumped 500 gals FE acid and circulated 6¹/₂ hours. Turned to battery for 21 hours.
- 1-16-66 Dumped 1500 gals gyp converter solution (Howco) and circulated for 48 hours.
- 1-18-66 Turned to battery.
- 1-22-66 Commenced workover to open additional pay and bream down with acid.

1-26-66 Mixed 30 gals Howco HLX-53 with 72 BW and flushed with 110 BW,

reached maximum pressure of 200 psi.

CHRONOLOGICAL HISTOFY

- 5-17-66 Pigged up double derrick. Pulled rods and tubing, ran FERC on 3" frac string to 3700'.
- 5-18-66 Set FBRC at 3800'. Tested casing to 1500 psi. Placed 1000 psi on backside and fraced with 15,000 gallons gelled water: 30,000# 20-40 sand and 450# P-3 polyphosphate in three equal stages separated by ball sealers. 110 balls were dropped after first stage and built pressure 200 psi....80 balls were dropped after second stage and pressure suddenly built to 5800 psi at 7 BPM.....Broke down to 4500 psi and fraced at 5300 psi (1100 psi ball action). Average Rate: 19.9 BPM at 4500 psi. ISIP: 3600 psi 10 Minute: 3100 psi 4 Hour Shut-In: 2600 psi - Shut in for the night.
- 5-19-66 TP 600 psi bled off and pulled frac string. Tagged fill at 3900' (138') and sand pumped to 3945' recovering sand and balls.
- 5-20-66 Sand pumped slowly to 3965. Getting very little recovery. Balls were probably bridging the pump.
- 5-21-66 Rigged up kill truck. Ran tubing with sawtooth collar to 3965'. Reversed out sand and balls to TD 4038'. Pulled 7 joints tubing and landed at 3839'. Ran pump and hit paraffin. Pulled pump.
- 5-22-66 Cut paraffin and ran pump. Rigged down unit and moved out. Placed well on production.

5-23-66 Well did not pump up - lowered pump and reseated.

P 44 EO and 127 BW in 19 hrs. 5-24-66 P 115 BO and 119 BW in 24 hours. 5-25-66 P 107 BO and 104 BW in 24 hours. 5-26-66 p 84 BO and 110 BW in 24 hours. 5-27-66 P 90 BO and 80 BW in 24 hours. 5-28-66 p 98 B0 and 65 BW in 24 hours. 5-29-66 p 94 BO and 59 BW in 24 hours. 5-30-66 p 84 BO and 54 BW in 24 hours. 5-31-66