POGO PRODUCING COMPANY FEDERAL 23 WELL NO. 1 660' FSL AND 660' FEL OF SECTION 23, T-22-S, R-31-E EDDY COUNTY, NEW MEXICO

7/19/90: NU BOP's. GIH w/4-3/4" bit, DC & 2-7/8" tbg to cmt @ 6190, drill cmt & stage tool 6190-6203. Test collar 2000 psi (ok). FIH to cmt @ 8360'.

7/20/90: Circ hole w/9.8# per gal prod. s.w., POOH w/tbg, run CBL 8355-6200', TOC 3750'.

7/21/90: Perf 5-1/2" csg (Lower Brushy Canyon) w/4" csg gun as follows: 8090-8129', 8142-8157', 8161-8198' (185 holes) 90° phase, .44" holes, GIH w/5-1/2" pkr testing tbg 8000 psi

7/22/90: Spot 300 gals 7-1/2% HCL 8250-7950', set pkr 7949', NU tree, acidize perfs w/2000 gals 7-1/2% HCL & additives. AIR 5.3 BPM @ 1640#, Max TP 1780, Min 1570, ISIP 600, 15 min 520, total load 143. Blow and swab 85, 58 BLWTR.

7/23/90: Sand frac perfs 102,000# 16/30 Super DC sd w/38,890 gals YF 130 gel 2-8#/g concentrations, 96,000# sd out perfs, Max Press 4554, Final 4362, Avg 2500#, ISIP 1264, 15 Min 114, 908 BLW, open well on 8/64" choke, press drop to 0, tbg plugged w/sd

7/24/90: ND tree, NU BOP's. POOH, GIH w/bailer, top of sd 8130', work 8140'. POOH.

7/25/90: GIH w/bailer, sd top @ 8095', work to 8140', bailer failed, POOH, GIH w/bit & DC to 7600'.

7/26/90: FIH w/bit, wash and ream sd 8110 to 8360', circ clean, POOH, short 1108 BLW.

7/27/90: Ran after frac log, GIH w/TAC, ND BOP, NU well head flg, swab 93 BLW, short 1015 BLW.

7/28/90: Swab 205 BLW, short 810, trace oil

7/29/90: Swab 206 BLW, short 604 BLW

7/30/90: SI

7/31/90: Run $2\frac{1}{2}$ " x $1\frac{1}{2}$ " x 26' rod pump w/rods

8/01/90: Install Lufkin 640-305-120 pumping unit

8/02/90: Start pumping unit, pump failed

8/03/90: POOH w/DH pump

8/04/90: Circ well @ 8350', reset Anchor, run DH pump, short 604 BLW, pumped 18 hrs - rec 9 BO, 214 BLW, short 390 BLW

8/05/90

8/13/90: Testing well

8/14/90

8/18/90: Install tank battery

8/19/90: Production turned into tank battery

8/20/90

8/25/90: Testing well

8/26/90: State Potential - 24 hr test 55 BO. 138 RW 66 MCF