

P.O. Box 552 Midland, Texas 79702 Telephone 915/682-1626

McGRAIL STATE #8 990' FNL & 580' FEL SEC. 27, T-19-S, R-36-E LEA COUNTY, NEW MEXICO

9/18/96 - MIRU PETERSON #5, SPUD 17 ½ "HOLE @ 0700 HRS 9/18/96. DRILLED TO 510'. RAN 11 JTS 13 3/8", H-40, STC NEW CSG TO 510'. FS @ 508, FC @ 466'. HOWCO MIXED & PUMPED 525 SX "C" W/1/4 PPS FLOCELE & 2% CACL2 WT - 14.8, YIELD 1.34. CIRC'D 139 SX TO PIT. PLUG DN @ 2300 HRS 9/18/96. WOC 4 HRS. CUT 13 3/8" CSG. INSTALLED 13 5/8" 3M X 13 3/8" 3M SOW CSG HEAD. NU 11' 5M DUAL RAM BOP'S. TESTED BLIND & PIPE RAMS, CHOKE & KILL LINES, MANIFOLD, FLOOR VALVES AND MUD LINES TO 1000 PSI. TIH W/11" BIT, TAGGED CEMENT @ 464'. TOTAL WOC 15 HRS. TESTED CSG TO 1000 PSI. DRILLED CEMENT & FC TO 485', TESTED CSG TO 1000 PSI. DRILLED SHOE & FORMATION TO 2890'.

RAN 67 JTS, 8 5/8" 24# & 32# TO 2887'. HOWCO MIXED & PUMPED 760 SX HOWCO LITE PREM PLUS W/.3% CFR-3, 2% ECONOLITE, WT-12.4, YIELD - 1.98. TAILED IN W/200 SX PREM PLUS W/2% CACL2, WT - 14.8, YIELD 1.32. BUMPED PLUG, CIRC'D 266 SX TO SURFACE. CEMENT IN PLACE 2 0130 HRS 9/22/96. SET SLIPS W/75K. CUT 8 5/8" CSG, NU 13 3/8" X 11" 3M SPOOL. NU 11" 5M DUAL RAM BOP. TESTED BLIND AND PIPE RAMS, CHOKE & KILL LINES, MANIFOLD, FLOOR VALVES & MUD LINES TO 300/3000 PSI. TESTED ANNULAR TO 1500 PSI. TIH W/7 7/8" BIT TO 2458'. TOTAL WOC TIME - 20.5 HRS. DRILLED CEMENT & FC TO 2870'. TESTED CSG TO 1000 PSI. DRILLED SHOE, RESUMED DRLG FORMATION TO 7300'. CORED 7300' - 7330', DRILLED TO 7489'. CORED 7489' - 7549'. DRILLED TO 8200' (TD 1300 HRS 10/9/96)

LOGGED WELL AS FOLLOWS: CNL/DIL/ML/GR/CAL 8198' - 2885' CNL/GR/SONIC TO SURFACE. FMI 8198' - 5000'.

RU CSG CREW. RAN 34 JTS 17#, 155 JTS 15.5# 5 1/2" K-55 NEW CSG TO 8198'. FLOAT SHOE @ 8198', FLOAT COLLAR @ 8115', DV @ 5507'. CEMENTED PRODUCTION CSG: 1ST STAGE LEAD - 590 SX 50:50 POZ W/.6% HALAD 9, 2% GEL, 3 PPS KCL, 1/4 PPS FLOCELE, WT - 14.2, YIELD 1.34. DROPPED BOMB, OPENED TOOL, CIRC'D WRIG DUMPS 4 HRS. CIRC'D 55 SX TO SURFACE. 2ND STAGE LEAD: 760 SX CLASS "A" W/1/4 PPS FLOCELE, WT 12.4, YIELD 1.97. TAIL - 225 SX CLASS "H" W/1/4 PPS FLOCELE. WT - 16.0, YIELD 1.11. CLOSED DV TOOL. CIRC'D 91 SX TO PIT. ND BOP. SET SLIPS. INSTALLED 11" 3M X 7 1/16" 3M TBG HEAD. RIG RELEASED @ 2100 HRS 10/12/96.