

DST'S & SPECIAL TESTS

10-04-82 - DST #1: Permo-Penn formation; interval 10,040' - 10,215'. T-Pkr. 10,035' & B-Pkr. 10,040'. 30" pre-flow, 1' SIP, 1' FF & 2' FSIP. Opened with weak blow increasing to fair blow @ end of pre-flow. 1' ISIP. 1' FF, opened with weak blow, increasing to fair blow at end of final flow. 2' FSIP. No gas to surface during test. Recovered 300' slightly oil cut mud. Chart pressures: T-chart; IHH 4,760 psi; 30" IF 186 - 209 psi; 1' ISIP 1,113 psi; 1' FF 210 - 232 psi; 2' FSIP 2,127 psi; FHH 4,783 psi & BHT 140° F.

10-06-82 - DST #2: Permo-Penn formation; interval 10,388 - 10,425' (37'). T-Pkr 10,382' & B-Pkr 10,387'. Opened tool for 30" preflow w/strong blow, 4" - 110 psi on 1/4" choke, 140 psi - 10", 165 psi - 13", gas to surface in 13", 200 psi - 18", 230 psi - 23", 240 psi - 30" - still on 1/4" choke. Shut in for 60". Opened for 54" second flow w/80 psi, 100 psi - 8", 110 psi - 17", 120 psi - 22", opened from 1/4" choke to 3/8" choke, 100 psi - 28", 60 psi - 32" - oil to surface, 100 psi - 42" - flowing oil & gas, 120 psi - 47" oil & gas, 140 psi - 54". FSIP 180". Opened @ end of test, had 80 psi - bled pressure off. During test, well was flowing est. 140 BPD oil & 300 MCF. Circulated 140 BO out of drill pipe. Chart pressures: T-chart; IHH 4,885 psi. IF 722 - 1245 psi; ISIP 2,325 psi; FF 1180 - 1677 psi; FSIP 2,606 psi; FHH 4,842 psi. B-Chart; IHH 4,822 psi; IF 716 - 1235 psi; 1' SIP 2,331 psi; FF 1148 - 1686 psi; FSIP 2,610 psi; FHH 4,822 psi. BHT 195° F. Est. 41.5° Gvty. Oil - corrected.

11/12/82 - 11/16/82: DST #3: Test Interval - Morrow Zone 12,963' - 12,984' in 7 7/8" open hole. Opened test tool for 30 min. preflow w/gas to surface in 20 min. At end of preflow had 42 psi flowing pressure on 1/4" choke. Shut tool in for 2 hrs. ISIP. Tried to reopen tool for final flow without success. Pulled test tool - recovered 496' of water. Pressure readings: T-Chart pressure recorder malfunction; bottom chart; IHH 6,549 psi; 30 min. IF 491 psi - FF 491 psi; 2' ISIP 6,495 psi; FHH 6,549 psi, BHT 183° F. Found shale in test tool. Changed out Pkr., setting tool & reran.

DST #4: Set pkr. @ 12,829'. Opened tool for 15" preflow - had gas to surface in 14 min., started losing fluid in annulus - refilled annulus. Unseated packer - moved pkr & test tool up & down hole - reset packer. Reopened tool on 1/4" choke w/42 psi, increased choke size to 3/8", at end of 1 hr. second flow, had 45 psi on 3/8" choke. Shut well in 3 hrs., attempted to reopen tool without success. Shut well in for 19 hrs, pulled test tool. Recovered 1/2 bbl. condensate and 9 bbls. water. BHT 180° F. Pressures: T-Chart (12,821'): IHH 6,378 psi; 15 min. IF 474 - 474 psi, reset tool & reopened, 60 min. 2nd flow 579 - 526 psi; FSIP - 19 hrs. 6,378 - 6,324 psi; FHH 6,448 psi. B-Chart (12,855'): IHH 6,378 psi, 15" IF 491 - 491 psi; reset tool & reopened, 60 min. 2nd flow 600 - 545 psi; FSIP - 19 hrs. 6,360 - 6,306 psi; FHH 6,498 psi. Gas flow rate 200 MCF/day. Water sample: Chlorides 165,000 PPM.

11/24/82 - 11/30/82: Strawn - Perforated 12,078' - 80' & 12,088' - 89' (3' - 6 holes w/2 SPF). Acidized w/5,000 gals. 15% N.E. inhibited acid.