Drill Stem Test No. 9: Failed

Ran Halliburton DST tools for DST #9 with 3000' water blanket. Worked with tool 2-1/2 hours; tool would not open. Pulled out of hole.

Drill Stem Test No. 10: 15,245-15,500' (Fusselman)

Ran 3000' water blanket and two Halliburton packers set at 15,238' and 15,245'. 3/4" THC and 3/4" BHC. Opened tool at 9:50 a.m. MST July 18, 1972 for 10-min. preflow. Had instant fair to good blow. Shut in for one hour. Opened one hour for final flow; had strong to good blow at end of hour. Shut in 2 hours. Pulled DST tools. Recovered 3000' water blanket (20 bbls.) and 8400' of free water (66 bbls.). Pressures: 10-minute IFP 1839-2689#; 1-hour ISIP 6570#; FFP 2820-5115#; 2-hour FSIP 6570#; IH & FH 6885#. Bottom hole sampler contained 190# pressure, 1.6 CF gas, no water. BHT 200°.

Drill Stem Test No. 11: 15,235-15,500' (Devonian) - Failed

Set two Howco packers at 15,228' and 15,235'. Opened tool at 8:35 p.m. 7-20-72. After 4 minutes, packer failed. Pulled out of hole with DST tools.

Drill Stem Test No. 12: 15,152-15,500' (Fusselman) - Failed

Opened tool at 9:35 a.m. 7-21-72; had weak to fair blow; packers failed after 20 minutes. Pulled DST tools; recovered 5400' drilling fluid.

Drill Stem Test No. 13: 14,698-15,500' (Devonian, Silurian and Fusselman)

THC 1/4"; BHC 3/4". Opened tool at 10:22 p.m. 7-21-72; had fair blow immediately; went from fair to good blow in one hour, then died in 4 hours. Had gas to surface in 3 hours, 10 minutes. Tool open total of 6 hours. Pulled DST #13; recovered 14,110' drilling fluid and formation water (estimated 75 bbls. formation water and 75 bbls. drilling fluid). Bottom hole sampler contained 2450 cc's formation water, 4# pressure, gas too small to measure. Pressure IH & FH 6360#; Flowing pressures, start 460# and after 6 hours 6295#.