

DRILL STEM TESTS

L.W.Ward #1

- DST No.1 - From 9425' to 9640', no test. Opened tool at 9:12 P.M. Packers failed to hold. Re-set tool 3 times and packers failed to hold. Came out of hole with test tool and found circulating sub broken. Left 1/3 of upper rubber and pieces of lower packer in hole. Recovered 465' of drilling mud below circulating sub.
- DST No.2 - From 9417' to 9640', 5 Hr. and 24 Min. Test, 4-1/2" drill pipe, 5/8" bottom and 1" top choke, used 501' water blanket. Opened tool at 3:36 P.M. with fair blow of air. Gas to surface in 20 Min. Gas Vol. at 5:00 P.M. 60,300 cu.ft. per day, at 6:00 P.M. 38,400 cu. ft. per day., at 7:00 P.M. 21,900 cu. ft. per day. Estimated 21,900 cu. ft. per day through out test. Fluid to surface in 3 Hr. & 46 Min. Unloaded water and blanket and mud to pits for 38 Min. Turned to tanks at 8:00 P.M. Flowed 52.52 Bbls. Oil, 3.05 Bbls. BS & Mud, No water in one hour. Flowing pressure 105#, Gravity 41.2 Corrected. Reversed out 64.19 Bbls. Oil cut 10.8% BS, 7% Mud and 6% water. Recovered 30' oil cut 2.5% BS & Mud and 5% water from above tool. Closed tool at 9:00 P.M.
- DST No.3 - From 9640' to 9724', 1 Hr. and 37 Min. test, 4-1/2" drill pipe, 5-8" Bottom and 1" top choke. Used 585' water blanket. Opened tool at 3:10 A.M. with good blow of air which gradually diminished and died at 3:47 A.M. Closed tool at 4:47 A.M. Recovered 8893' dry pipe, 313' water blanket cut 1% oil 219' drilling mud cut with slight trace oil. Est. 1% oil, gas and water cut, Est. 30% water. Water will turn coin.
- DST No.4 - From 10,821' to 10,950', 4-1/2" drill pipe, 5/8" bottom and 1" top choke. Used 1815' water blanket. Opened tool at 7:43 A.M. with weak blow of air which died at 8:35 A.M. Closed tool at 9:35 A.M. Recovered 8765' dry pipe, 62' mud cut with Est. 3% Oil 177% water blanket cut with gas, 218' mud cut with Est. 1% Oil and Gas.
- DST No.5 - From 11,828' to 11,890', 4 Hr. test, 4-1/2" drill pipe 5-8" bottom and 1" top chokes, used 2759' water blanket. Opened tool at 3:16 P.M. with weak blow of air, increasing to fair blow at 4:00 P.M. Closed tool at 7:16 P.M. Rec. 6882' dry pipe, 3069' oil cut 35% water blanket, 930' water blanket with 20% mud trace of oil, Est. 1% Oil, and 935' water blanket.