

DRILL STEM TESTS:

- DST # 1: Lower Wolfcamp from 10,100' to 10,240', 1" x 5/8" chokes, tool open 3 hours, weak air blow immediately decreased to very weak blow at end of test. Recovered 175' of gas in drill pipe, 10' heavily oil and gas cut mud and 60' slightly oil and gas cut mud, no water. 30 minute initial shut in pressure 60#, flowing pressure 90#, final 100#. 1 hour final shut in pressure 145#, hydrostatic pressure 4675# to 4690#. Bottom hole temperature 144 deg.
- DST # 2: Strawn Sand from 10,550' to 10,645', no water blanket, 5/8" x 5/8" chokes, tool open 3 hours 50 minutes, no air blow when tool was opened, after 30 minutes closed and reopened tool, had fair air blow after 20 minutes and continued throughout test. Recovered 390' of slightly oil and gas cut mud, 5' of free oil, no water. Failed to record 30 minute shut in pressure. Flowing pressure initial 285#, final 285#, 1 hour final shut in pressure 285#, hydrostatic pressure 5555#. Bottom hole temperature 144 deg.
- DST # 3: Devonian from 11,660' to 11,734', 5/8" x 1" chokes, no water blanket, tool open 3 hours, good blow to surface when tool opened, gas to surface in 34 minutes, mud to pits in 60 minutes, flowed drilling mud 34 minutes, oil and gas cut mud 21 minutes, estimated 35 barrels mud to pits, 5 minutes to pit to clean up, 1% mud. Flowed 60 minutes on 1" choke to test tank, 74 barrels oil, gravity 47.5 deg. at 60 deg., shake-out 2/10% mud, surface flowing pressure 125#, gas-oil ratio 104.9 CF/B, unseated packer, lost 24 barrels mud. Reversed out 65 barrels oil to tank and estimated 55 barrels oil to pit, recovered 360' of heavily oil and gas cut drilling mud, and 60' of free oil below circulating sub, no water. 30 minute initial shut in pressure 4850#, flowing pressure initial 1260#, final 4235#, hydrostatic pressure 6160# to 6130#. Bottom hole temperature 170 deg.
- DST # 4: From 11,953' to 12,027', Hookwall packer set in 7" OD Casing at 12,927', 5/8" x 1" chokes, no water blanket, tool open 3 hours, had weak air blow immediately, decreased to very weak blow at end of test. Recovered 519' of slightly salty gas cut drilling mud, no free water, no oil. 30 minute initial shut in pressure 4775#, still building. Flowing pressure initial 160#, final 285#, 1 hour final shut in pressure 4965#, hydrostatic pressure 5890#.
- DST # 5: Silro-Devonian from 12,040' to 12,247', 1" x 5/8" chokes, no water blanket, tool open 3 hours, had good air blow when tool opened, decreased to no blow in 1 hour 50 minutes. Recovered 970' of muddy, salty sulphur water and 10,457' of clear salty, sulphur water, no oil or gas. 30 minute initial shut in pressure 5085#, flowing pressure initial 530#, final 5120#, 1 hour shut in pressure 5120#, hydrostatic pressure 6080# to 6005#, bottom hole temperature 184 deg.
- DST # 6: Silurian from 12,963' to 13,094', 1" x 5/8" chokes, no water blanket, tool open 3 hours, had strong air blow and 2 hours and decreased to weak blow at end of test. Recovered 810' of drilling mud and 11,054' of salty sulphur water, no oil or gas. 30 minute initial shut in pressure 5380#, flowing pressure initial 175#, final 5220#, 1 hour final shut in pressure 5380#, hydrostatic pressure 6400#, bottom hole temperature 188 deg.
- DST # 7: McKee from 13,605' to 13,710', 1/2" x 5/8" chokes, tool open 3 hours 45 minutes, gas to surface in 4 minutes, condensate to surface in 9 minutes, 3 hours 36 minutes flowed to tank, 5 barrels condensate. Separator would not handle, condensate going out vent line. Gravity 58 deg. at 60 deg. Gas volume on 1/2" choke, 2120 MCF/D, declined steadily to 424 MCF/D. Recovered 110' condensate, no water. 30 minute initial shut in pressure 5565#, flowing pressure initial 1324#, final 1120#, 2 hour shut in pressure 3994#, still increasing. Hydrostatic pressure 6218#, bottom hole temperature 200 deg.
- DST # 8: From 13,713' to 13,808', 5/8" x 1/2" chokes, no water blanket, tool open 3 hours, had weak air blow immediately, decreased to no blow in 25 minutes. Recovered 110' of drilling mud, no oil, gas or water. 30 minute initial shut in pressure 185#, flowing pressure initial 95#, final 125#, 1 hour final shut in pressure 675#, hydrostatic pressure 6200# to 6025#, bottom hole temperature 188 deg.
- DST # 9: From 13,838' to 13,919', 1/2" x 5/8" chokes, no water blanket, tool open 3 hours, good air blow throughout test. Recovered 90' of air cut mud, no oil, gas or water. 30 minute initial shut in pressure 495#, flowing pressure initial 160#, final 160#, 1 hour final shut in pressure 825#.