

DRILL STEM TESTS

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- D.S.T. #1 - from 2228' to 2445' (Pictured Cliff) 2-1/2 hour Test. 4 1/2" Drill Pipe. Packer set at 2228'. Perforations from 2228' to 2243' and from 2435' to 2445'. 5/8" bottom & 1" top chokes. Tool open at 12:30 PM - Gas to surface in 40 minutes - Gas Vol. 110,000 cu ft per day. Closed tool @ 3 PM. Recovered 185' Gas Cut Drlg. Mud. Amerada Chart Hyd in 1155, out 1130, IFP 25, FFP 115, 1/4 hour BUP 740.
- D.S.T. #2 from 3166' to 3215' (Pictured Cliff) 1 hour Test. 4 1/2" Drill Pipe. 5/8" bottom and 1" top chokes. Opened tool at 12:30 AM with weak blow for 3 minutes and died. Closed tool @ 1:30 AM for 1/4 hour BUP. Recovered 40' Mud. No show of oil, gas or water. Amerada Chart Hyd in 1610, out 1585, IFP 0, FFP 0, 1/4 hour BUP 0.
- D.S.T. #3 - from 3793' to 3840' (Cliffhouse Sandstone) 2 hour Test. 4 1/2" Drill Pipe. 5/8" bottom & 1" top Chokes. Perforations from 3793' to 3798', and from 3832' to 3840'. Opened tool @ 11:30 PM w/good blow which decreased to weak blow. Closed tool @ 1:30 AM for 1/2 hour BP. Recovered 90' Mud cut slightly with salt water, and 1935' Salt Water. Amerada Hyd in 1880#, out 1860, IFP 70, FFP 855, 1/2 hour BUP 1315.
- D.S.T. #4 - from 3844' to 3924' (Cliffhouse Sandstone) 2 hour test. 4 1/2" drill pipe. 5/8" bottom & 1" top chokes. Opened tool @ 2:20 AM with fair to weak blow. Closed tool @ 4:20 AM for 1/2 hour BUP. Recovered 540' fresh muddy water. Amerada Hyd in 1885, out 1860, IFP 45, FFP 230, 1/2 hour BUP 1295.
- D.S.T. #5 - from 3930' to 4090' (Menefee) 2 hour Test. 4 1/2" Drill Pipe. 5/8" Bottom and 1" top chokes. Opened tool @ 3:20 PM with weak blow throughout test. Closed tool @ 5:20 PM for 1/4 hour BUP. Recovered 160' Drlg. Mud. Amerada Chart Hyd in 1975, out 1860, IFP 70, FFP 95, 1/4 hour BUP 905.
- D.S.T. #6 - from 4089' to 4299' (Menefee) 2 hour Test. 4 1/2" drill pipe. 5/8" bottom and 1" top chokes. Perforations from 4089' to 4099'. Opened tool at 5:20 AM with fair blow which decreased to weak blow. Closed tool at 7:20 AM. Recovered 630' mud and fresh water. Amerada Chart Hyd in, 2330, out 2240, IFP 320, FFP 320, 1/2 hour BUP 1520.
- D.S.T. #7 - from 4303' to 4440'. (Point Lookout) 2 hour Test. 4 1/2" drill Pipe. Perf. from 4303' to 4313' and from 4430' to 4440'. 5/8" bottom & 1" top chokes. Opened tool at 11 AM - Gas to surface in 3 minutes. No fluid to surface. Closed tool at 1 PM. Gas Vol. 759,000 cu ft per day. Recovered 270' gas cut Drlg. Mud. Amerada Hyd in 2250, out 2205, IFP 165, FFP 205, 1/2 hour BUP 1635.
- D.S.T. #8 - from 4452' to 4671' (Point Lookout) 2 hour Test. 4 1/2" Drill Pipe. 5/8" bottom and 1" top chokes. Opened tool @ 2:15 AM - Gas to surface in 50 minutes. Gas Vol. 7,270, cu ft p/d No Fluid to surface. Closed tool @ 4:15 AM for 1/2 hour BUP. Recovered 480' gas cut drlg mud. Amerada Hyd in 2275, out 2250, IFP 25, FFP 205, 1/2 hour BUP 1385.
- D.S.T. #9 - From 5516' to 5655' - No Test - Packers failed -

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- D.S.T. #10 - from 5526' to 5655' (Tocito Sandstone) 2 hour Test. 4½" drill pipe. 5/8" bottom & 1" top chokes. Opened tool @ 5 AM with fair to weak blow thru- out test. Closed tool @ 7 AM for 1/2 hour BUP. Recovered 450' Mud very slightly gas cut. Amerada Hyd in 2865#, out 2856#, IFP 210#, FFP 210#, 1/2 hour BUP 1150#. (BUP on Halliburton Chart - Amerada failed.)
- D.S.T. #11 - from 5807' to 5925' (Tocito Sandstone) 2 hour Test. 4½" Drill Pipe. 5/8" bottom & 1" top Chokes On trip in with Test Tool, hit bridge at 900' - tool opened momentarily. Opened tool @ 1:15 AM with fair to weak blow which continued thruout test. Closed tool at 3:15 Am. Recovered 720' gas cut drlg mud. Amerada Hyd in 3145, out 3145, IFP 120, FFP 245, No BUP Pulled Pkrs Loose.
- D.S.T. #12 - from 6721' to 6785' (Dakota Sand) 5½ hour Test. 4½" drill pipe. 3/4" bottom & 1" top chokes. Opened tool at 4:55 AM with good blow of air. Gas to surface in 12 minutes. No fluid to surface. Closed tool at 10:30 AM for 1/2 hour BUP. Gas Vol. 142,000 cu ft p/d Recovered 250' gas & distillate cut Drlg. Mud, and 1 gallon free blue distillate. Amerada Hyd in 3700, out 3625, IFP 125, FFP 125, 1/2 hour BUP 2825.
- D.S.T. #13 - from 6776' to 6838' (Dakota Sand) 2 hour & 50 minute Test. 4½" drill pipe. 5/8" bottom & 1" top chokes. Opened tool at 12:10 PM with weak blow of air for 20 minutes and died. Closed tool at 1:30 AM and re-opened at 2 AM with weak blow for 30 minutes and died. Closed tool for 1/2 hour BUP. Recovered 450' Mud. No show of oil, gas or water. Amerada Hyd in 3520, out 3440, IFP 30, FFP 30, 1/2 hour BUP 60.
- D.S.T. #14 - from 6838' to 6876' (Dakota Sand) 1 hour & 35 minute Test. 4½" drill pipe. 5/8" bottom & 1" top chokes. Tool open at 1:35 PM with weak blow for 35 minutes and died. Closed tool @ 3:00 PM for 1/2 hour BUP. Recovered 120' drlg. mud. Amerada Hyd in 3485, out 3435, IFP 45, FFP 95, 1/2 hour BUP 95.
- D.S.T. #15 - from 6876' to 6946' (Dakota Sand) 2 hour Test. 4½" drill pipe. 5/8" bottom & 1" top chokes. Opened tool at 3:20 PM with good to weak blow throughout test. No fluid to surface. Closed tool at 5:20 PM. Recovered 6400' fresh water. Amerada Hyd in 3455, out 3435, IFP 1725, FFP 2755, BUP failed. (Tool failed to close)