

OPERATOR: Union Oil Company of California
LEASE: Northern Natural State
WELL NO.: 1
LOCATION: Section 28, Unit Letter O,
Township 22 South, Range 35 East,
Lea County, New Mexico

DRILL STEM TESTS

- D.S.T. No. 1 - Bone Springs - 8,568' to 8,690' - Opened tool for 15 minute pre-flow with weak blow, closed tool for ISIP. Opened tool for 60 minutes, weak blow, decreasing to very weak blow at end of test. Closed tool for FSIP. Pulled tool, recovered 120' of drilling water, no gas or oil. ISIP 959#, IFP 68#, FFP 68#, IHP 3713#-3735#, BH temperature 124 deg. F.
- D.S.T. No. 2 - Lower Bone Springs Lime - 10,905' to 11,007' - Opened tool for 15 minute pre-flow with fair blow, closed tool for ISIP. Opened tool for 60 minutes, gas to surface in 43 minutes, flowed at rate of 42 MCF/D on 1/4" choke, pressure decreased. Attempted to close tool for FSIP, could not close tool. Pulled tool, recovered 1236' of gas cut drilling fluid. ISIP 1271#, IFP 424#-457#, FFP 457#-555#, FSIP 784#, IHP and FHP 4781#, BH temperature 146 deg. F. Sample Chamber: 1950 cc water with 1/10 cubic foot of gas.
- D.S.T. No. 3 - Wolfcamp - 11,460' to 11,521' - Opened tool for 15 minute pre-flow, 1/4" choke, gas to surface in 5 minutes at rate of 222 MCF/D, closed tool for ISIP. Opened tool for 90 minutes, gas at rate of 318 MCF/D for 1 hour, 270 MCF/D for 30 minutes. Closed tool, oil surfaced 20 minutes after closing tool, gravity 45.7 at 60 deg., flowed spray of oil for 1 hour. Reversed out 52 barrels of oil, gas and 3 barrels of gas cut drilling mud. ISIP 4683#, IFP 348#-618#, FFP 618#-1671#, FSIP 3603#, IHP and FHP 6007#. BH temperature 158 deg. F. Sample Chamber: 950 cc of 47.7 deg. oil, 5 cubic feet gas @ 1200 psi.
- D.S.T. No. 4 - Middle Morrow- 13,376' to 13,483' - Opened tool for 15 minute pre-flow, weak to fair blow, closed tool for ISIP. Opened tool for 60 minutes, very weak blow. Closed tool, pulled test tools, recovered 470' heavy mud, 556' gas cut drilling mud. ISIP 1231#, IFP 616#, FFP 616#, FSIP 896#, IHP 6927#, FHP 6816#, BH temperature 176 deg. F. Sample Chamber: 700 cc drilling mud, 25 cubic feet gas.
- D.S.T. No. 5 - Silurian - 15,320' to 15,377' - Opened tool for 15 minute pre-flow, packers leaking, pulled test tools. Recovered 1000' sulphur water, 5000' drilling fluid, sample chamber empty. IFP 2064#-2900# (after 3 minutes packers started leaking), IHP 7102#, FHP 6963#.