

- RECORD OF DRILL STEM TESTS -

- 11-16-48 3100' TD, Ran Drill Stem Test w/ Packer set @ 2945', Perf.-2946'-47, 3064'-97', 5/8" bottom & 1" top choke, opened tool @ 3:10PM, Gas to top in 3 minutes, after 3rd. hr. made slug of 2 bbls. mud & oil, Gas Vol. 860M per day, tried to close tool @ 7:10PM, pulled packer loose, and tried for 30 mins to reset packer & open tool but packer seat would not hold, recovered 180' highly oil & gas cut mud, Hydro 2310#, Flow 360#, no build uppressure.
- 11-18-48 3200' TD, Ran Drill Stem Tests with Packer set @ 3100', Perf.-3101'-02', 3186'-97', 5/8" bottom & 1" top choke, opened tools @ 10:44AM, gas in 8 mins., Vol.-35M per day and decreased to 5M per day at end of test, tool open 4 hrs, closed tool @ 2:44PM, recovered 1598' Oil, approx. 10% mud cut, no water. Gty. 37.5 corrected, Unloaded drill pipe after 17 stands pulled, Howco Chart Hydro in 1800#, out 1775#, Min. flow 80#, Max. 525#, 15 mins. build up 1300#, Amerada Bomb: hydro in 1785#, out-1785#, Min. flow 85#, Max. 525#, 15 min. build up 1295#.
- 11-19-48 3240' TD, Ran Drill Stem Test with Packer set @ 3198', Perf.-3199-3200', 3231-3233', 5/8" bottom and 1" top chokes. Tool open @ 2:05PM Weak blow of air, Gas in 1 hr. w/ very weak blow remainder of test. Closed tool @ 6:05PM for 4 hr build up. Recovered 150' very high oil & gas cut drlg. mud. Howco Chart, Hydro in 1700#, out-1650#, Min. flow 80# Max. 100#, 15 min. build up 600#, Amerada Hydro in 1735#, out-1735#, Min. Flow 35#-70#, 15 min. buildup 675#.
- 11-21-48 3320' TD, Ran Drill Stem Tests w/ Packer set @ 3264', Perf.-3265'-66', 3296'-3317' 5/8" bottom & 1" top choke, tool open @ 10:30AM Gas to surface in 2 mins, mud to surface in 2 hrs. & 5 minutes. Made 1.27bbls drlg. mud, tool open 4 hrs, closed @ 2:30PM for 15 min. build up, 1,452,000 cu.ft. gas per day, recovered 180' Drlg. mud, cut 1% oil, Strong sulphur odor, no water. Hydro: 1875#, flow press. 500-550#, 15 min build up 175#, Amerada: Hydro. 1845#, flowing pressure 295# to 425#, build up-1200#.
- 11-23-48 3414' TD, Ran Drill Stem Test w/ Packer set @ 3320', Perf.-3321-22', 3380-3405', tool opened 10:42PM. Gas to surface in 45 minutes, very weak blow for remainder of test. Tool open 4 hrs. Closed @ 2:42PM, 15 min. build up. Recovered 220' heavy gas cut mud in 4 1/2" drill pipe. Howco: hydro in 1700# out-1775#, flowing pressure 300#, decreased to 250#, 15 min. build up 400#. Amerada: Hydro in 1890#, Hydro out 1850#, Min. flowing 30#, Final flow-80#, 15 min. build up 565#.
- 11-27-48 3598' TD, Ran Drill Stem Test w/ packer set @ 3427', Perf.-3428-29', 3577'-92', 5/8" bottom and 1" top choke. Opened tool @ 2:45PM. Gas to surface in 40 mins. Est. 5,000M cu.ft. per day. Closed tool @ 6:45PM for 15 min. build up, recovered 270' drlg. mud, gas cut & slightly oil cut. Amerada: Hydro in 2210#, out-2115#, Flow 0#-50#, 15 min. build up pressure failed to record. Howco: Hydro in 2000#, out-1975#, Flow 0#, 15 min build up failed to record.
- 11-29-48 3643' TD, Ran Drill Stem Test w/ Packer set @ 3598', Perf.-3599'-3600', 3631'-36', 5/8" bottom & 1" top choke. Tool opened @ 10:15AM w/ very very weak blow of air, few bubbles and stopped. Tool opened 1-1/2 hrs, closed @ 11:45AM for 15 min build up, recovered 50' drlg mud & 12' oil & gas cut drlg. mud. No gas to surface. Amerada Bomb:Hydro in 2070#, out-2070#, flow: 20-60#, 15 min build up pressure 360#, no free water on test, going back in hole this AM with bit.
- 11-30-48 3670' TD, Ran Drill Stem Test with Packer set @ 3617', Perf.- 3618'-19', 3650'-63', opened tool @ 7:00AM, 5/8" bottom & 1" topchoke. Opened tool @ 7:00AM, very weak blow for 1 hr. and died. Tool was opened 2 hrs. Closed tool 9:00AM for 15 min build up pressa. Recovered 60' slightly gas cut drlg. mud, no water and no oil, Howco Chart: Flow press.-0#, Hydro in 2050#, Hydro out 2125#, 15 min build up 0#. Amerada Chart: Flow 0#, Hydro in 2500#, Hydro out 2310#, 15 min build up pressure 210#.

