

Shumble Oil & Refining Company
North Lindrith Gas Unit, Well No. 1

HISTORY OF OIL OR GAS WELL

Spudded 12-4-57. Set 10-3/4" casing at 327' w/375 sacks regular neat cement. Cement circulated.

Core No. 1 3710' - 3736', cut 26', rec. 25': 7' black sandy carbonaceous shale, MS; 6' lt gray fn gr hard shaley SS, MS; 5' dark gray shale w/few lt gray fine gr SS & thin coal stks, MS; 6' dark gray & black very coaly shale, MS; 1' dark gray shale, MS.

Core No. 2 3736' - 3758', cut 22', rec. 17': 1' black shale, MS; 8' gray, fine gr SS w/thin black shale & coal stks, MS; 8' black shale w/scattered gray, fn gr SS, SS stks.

Core No. 3 3758' - 3809' cut & rec. 51': light gray, fine to med gr SS w/few thin dark gray sand stks, possible porosity 3770' - 82' w/v ry slight odor of gas. Possible porosity 3786' - 3798' w/very rich gas odor. Looks tight 3798' - 3809'.

Core No. 4 3809' - 3861', cut & rec. 52' ~~shale~~ w/fair gas odor & trace porosity from 3808' - 3861' 3835'.

Set 7-5/8" casing at ~~3861'~~ 4007' w/400 sacks 8% gel and 125 sacks neat w/1/4# Floccs/sack. Temperature survey found top of cement at 2162'.

Core No. 5 5505' - 5555', cut 50', rec. 12' of ground up sand, MS.

Core No. 6 5885' - 5910', cut 25', rec. 18': 8' lt gr fine gr SS, looks tight, numerous gray shale streaks; 10' lt gr fine to med gr SS, trace porosity; 7' no recovery.

Core No. 7 5910' - 5960', cut & rec. 50': light gray, fine to med. gr sandstone w/few dark thin gray shale streaks, possible trace of porosity in sandstone.

Ran electric logs.

Set 4-1/2" liner from 3961' - 6150' w/200 sacks 4% gel w/1/4# Floccs/sack. Temperature survey found top of cement at 5630'. Perf. liner w/2-1/2" shots at 5594'. Set Baker retainer at 5550'. 3q. 175 sacks 4% gel w/1/4# Floccs thru perf at 5594'. Pumped 2 bbls. cement on top of retainer. Temp. survey showed top of cement at 4637'. Set Baker retainer at 3893' & squeezed top of 4-1/2" liner at 3961' w/75 mx neat. Drilled cement out of liner to 6110'. Blew hole dry.

Perf. 4-1/2" liner w/2 shots/ft from 5898-5920, 5988-5996, 6000-6043, 6049-6058, 6064-6072, 6076-6086. Total 100'. Waterfraced w/58,700 gals. & 40,000# sand using 165 rubber balls, over 200 perf. Treated at 39.8 BPM at 1500#. Swabbed well in and killed well w/water.

Perf. liner from 5496-5514, 5564-5606, 5610-5624, 5635-5675 w/2 bullet shots/ft. Set bridge plug at 5767. Waterfraced w/43,050 gals. water and 40,000# sand, using 250 rubber balls. Ave. inj. rate 34 BPM.

Swabbed well in and killed well w/water.

Perf. 3776-3806, 3828-3842, w/4 bullet shots/ft. Set bridge plug w/tbg at 3970'. Aquafraced w/43,848 gals. water & 40,000# sand. Ave. gals inj. rate 44.8 BPM. Used 135 rubber balls. Swabbed well in.

Washed out sand from 3900-3970. Set 2" tubing w/seal nipple at 5431'. Ran & set 2nd. string of tubing at 3769'. Installed dual Xmas tree.

Shut in both zones for test.

Completed as flowing gas well from Pictured Cliffs & Mesa Verde zones. Pictured Cliffs flowed at calculated rate of 1024 MCF/day w/some fresh water. Mesa Verde zone flowed at calculated rate of 2687 MCF/day.

Well shut in - no pipe line connection.