Geological & DST Report Exxon Federal Com. Well #1 Eddy County, New Mexico

Brown to dark brown, fine crystalline, fossiliferous limestone was described in the Lower Strawn.

ATOKA

The Atoka came in at 10,650' by samples and at 10,644' by electric log. Dark gray-brown, very fine crystalline, shaly siliceous limestone; gray-brown, crystalline, mottled, shaly limestone, and dark gray-brown chert confirmed the Atoka facies.

The Lower Atoka was picked at 10,850' by samples and drilling time and at 10,856' by electric log. A drilling break occurred from 10,914' to 10,926' in the same stratigraphic position as the 10,366-372' producing interval of the Gulf No. 2 A. D. Estill well to the south. The well was circulated out at 10,930' and samples contained up to 30% slightly porous limestone. Since this was a potentially productive gas zone, a decision was made to drill-stem test at 10,952'.

> DST No. 1 10,890-952'. Open 50", 1500' WB, 15" pre-flow, very weak blow. Shutin 70". Reopened tool for 35" second flow - no blow. R/WB + 100' drilling fluid. 15" pre-flow IFP 718#, FFP 722#, 70" ISIP 4194#, 35" flow period - IFP 753#, FFP 744#, 90" FSIP 2921#, BHT 178° F, IHP 5770#, FHP 5722#. Sample chamber R/2500 cc drilling fluid - no pressure.

Drilling resumed in brown to dark gray-brown fine crystalline, mottled, siliceous, shaly limestone and this facies along with some dark brown cherts extended down to the Morrow top picked at 11,130' by drilling time and 11,132' by electric log.