

Champlin Petroleum Company

12,000' Morrow Test

Sec. 27, Twp. 21S., Rng. 27E.

Eddy County, New Mexico

Suggested Drilling Fluid and Casing Program:

Surface Casing - 13-3/8" in 17 1/2" hole set at 480' or into Capitan Reef.

0' - 480': Spud mud consisting of AQUAGEL flocculated with Lime. Use HYSEAL for seepage loss of fluid. If severe loss occurs, treat with Cottonseed Hulls and FIBERTEX.

480' - 3,300': Drill out with fresh water and circulate the reserve pit. Use HYSEAL for seepage loss of fluid. Possible loss in the reef section from 900' to 1,000' if porosity is developed. Use Cottonseed Hulls and FIBERTEX in Viscous AQUAGEL pills to sweep hole prior to trips. If severe loss does not occur, lower the fluid loss to 10-20 cc and increase the viscosity to 32-33 Sec/1000 cc prior to setting casing.

Intermediate Casing - 9-5/8" in 12 1/2" hole at 3,300'.

3,300' - 8,900': Drill out of intermediate casing with fresh water, circulate the reserve pit. If necessary to hold influx of fluid from the Delaware from 3,300'-3,450', increase fluid weight with brine water to 9.3 to 9.4 #/gallon. Use HYSEAL for seepage loss of fluid. Use C2215, amine corrosion inhibitor, for drill pipe and casing protection. Use BENEX to flocculate solids.