

After drilling out the 20" shoe and 5 ft of new hole, the hole was displaced with mud. A FCCT was performed to a 12.5 ppg mud weight equivalent.

Drilling continued through claystones and shales. Due to lengthy periods of waiting on weather, the mud properties were adjusted to give maximum hole stability i.e. an M.B.T. of 25 ppb, a filtrate of 15-10 cc/30 min and a pH of greater than 11.0.

At 3358 ft, highly dispersive clays were drilled, necessitating heavy dilution to control mud weight and viscosity. No major hole problems developed other than some hole fill after periods of waiting on weather.

The hole was logged after making a wiper trip. After logging, further wiper trips were made and high viscosity pills were pumped around to assist hole cleaning due to 17 ft of fill. Prior to running casing, 350 bbl of 10.5 ppg mud was spotted on the bottom, and 13-3/8" casing was run and cemented at 5748 ft with no problems.

#### Solids Control Equipment

The available solids control equipment on the drillship R. F. Bauer consisted of 2 Brandt double deck shakers, a 2 x 12" cone desander, 2 Brandt 10 x 4" desilters/mud cleaners and a 24" x 38" Baroid high volume centrifuge.

While drilling, maximum use was made of all the available solids control equipment. The Baroid high volume centrifuge was run at 1800 rpm, processing 100 gpm of mud.

Below 5100 ft, the mud became badly aerated, consequently the use of the desander and desilter had to be discontinued temporarily as their operating pressures fell to only 12 psi instead of the 40-50 psi as required for efficient operation. Defoamers did not solve the aeration problem which was due to a CO<sub>2</sub> influx.

The mud alkalinities were closely monitored for bicarbonate contamination and the pH raised to 11.0 to ensure the CO<sub>2</sub> influx was kept in a carbonate form.

The high circulating rates of 20-23 bbl/min necessary to ensure good hole cleaning only allowed use of 40 over 60 Mesh shaker screens for most of this section. One shale shaker however, was fitted with a 60 over 80 set of screens below 5100 ft.

#### Mud Properties

Mud properties were run in accordance with Amoco's requirements as a Lightly Dispersed/Seawater/Bentonite/Starch mud.