

AMOCO AUSTRALIA PETROLEUM COMPANY
PELICAN NO. 5

DISCUSSION BY INTERVAL

17¹/₂" HOLE INTERVAL (Cont'd)

General (Cont'd)

Once again, the casing became stuck at 2649 ft (807.4 m), but was able to be rotated free. Due to the probability of the casing being differentially stuck, the mud weight was reduced from 10.0 ppg to 9.3 ppg by adding premixed freshwater/starch mud. Casing was then run 10 joints at a time while lowering the mud weight. Casing was landed at 5754 ft (1753.7 m) While displacing cement, 85 bbls of mud was lost to the formation.

Solids Control Equipment

The solids control equipment on the Diamond M "Epoch" consisted of 2 Swaco shale shakers (40/20 mesh screens being run), a 5 x 10" cone desander, a 15 x 4" cone desilter, 2 Sweco mud cleaners (which were run as desilters), a Sweco SC-4 High Volume Centrifuge and a 24" x 38" Baroid High Volume Centrifuge. This equipment was run as a closed loop system. The solids control equipment generally ran efficiently with the exception of the Swaco shale shakers which are of an antiquated design and prone to repeated mechanical failures. The replacement of the shakers with a modern "Double Deck" shaker is highly recommended, and would allow much finer screens to be run.

The mud properties were run in accordance with Amoco's requirements as a lightly dispersed Seawater-Bentonite system.

Below 3000 ft (914.4 m), highly dispersive formations were drilled. Heavy mud dilution and treatment with thinners were needed to maintain desired properties despite continuous use of solids control equipment.

Slight carbonate alkalinity was inferred from Pf/Mf values and gel strengths below 4,000 ft (1219.1 m). At casing point, Lime was added to neutralise the problem.