

AMOCO AUSTRALIA PETROLEUM COMPANY  
PELICAN NO. 5

DISCUSSION BY INTERVAL

8<sup>1</sup>/<sub>2</sub>" HOLE INTERVAL (Cont'd)

Mud Properties (Cont'd)

Through this section, the mud weight was progressively raised from 10.2 ppg at the commencement of drilling this phase, to 15.0 ppg at casing point. Mud weight increases were dictated by the presence of up to 2500 units of background gas at times before a weight increase, and the presence of increasing amounts of connection gas. RFT data suggests a formation pore pressure of 14.7 ppg at casing point for this section.

While logging, and after periods without circulation during the lower part of the hole, the mud viscosity became unmeasurable and the pH of the mud would drop from 12.0 to 10.1. High levels of carbonate contamination are suggested. This along with the high BHT of 323<sup>0</sup>F necessitated the use of a Lignite and increasing amounts of thinner for the next 6" hole section.

A comparison of recommended mud properties versus actual mud properties is given below

<u>Mud Properties</u>	<u>Programmed</u>	<u>Actual</u>
Density (ppg)	8.9 - 17.0	10.2 - 15.0
Funnel Viscosity (sec/qt)	40 - 50	44 - 53
Yield Point (lbs/100 sq. ft)	10 - 25	13 - 17
10 Sec Gel ( " " " )	4 - 15	3 - 6
10 Min Gel ( " " " )	8 - 30	9 - 15
API Fluid Loss (ml/30 min)	< 10	5.4 - 6.4
HP-HT Fluid Loss ( " " )	20 - 22	19 - 20
MBT (ppb)	20 - 30	21 - 22
pH	11.0 - 12.0	11.0 - 12.3