

the core analysis data are representative of the better developed sandstone sections.

Analysis of RFT results provided calculated permeabilities from 0.3 to 3.7 md (average 1.4 md) which the BMR found to support the conventional core analysis. The one RFT pressure build up analysis which was considered reliable, took place in the 'F' reservoir unit and resulted in a calculated permeability of 0.16 md.

The BMR recognised the limitations of the RFT analysis which is greatly affected by skin damage, variations in vertical permeability and relative permeability effects. In the thick homogenous sandstone reservoirs of the Gippsland Basin the RFT has proven performance and provides an efficient method to evaluate the reservoir performance. However, in the Cooper Basin, where the sedimentary environment is similar to the Bass Basin, the tool has proved unreliable. Under a fluvio-deltaic sedimentary environment, the average reservoir permeability cannot be determined from the results of one RFT which examines one half inch of the pay interval.

The BMR Report based their total Pelican Field analysis on the limited results of Pelican 4 well. In earlier wells higher permeabilities were reported in the 400 md range and an average of tens of millidarcies (Glenday et al 1984).

It is concluded that the BMR assessment of the deliverability of the Field could be pessimistic:-

- conventional core permeability results from thin,