

on final results. It is apparent that significant generation of hydrocarbons only occurs, within the constraints of these models, once the sediments have spent considerable time at temperatures in excess of 110°C.

- (c) The remainder of the temperature history input has been simplified. It is assumed that the post break up (97.5 MMYBP) temperature gradient fell linearly to the present values.

Although a rapid drop in temperature gradient normally occurs within 5 MMY of break-up, the Bass Basin differs sufficiently from other Australian southern margin basins to warrant this simplification.

Sufficient palynological control is available to allow post Lower Cretaceous burial history to be plotted with a reasonable level of confidence.

- (d) To assess the heating effect that may result from intrusive activity a thermal pulse, modelled as a post intrusive maintenance of higher thermal gradient, was incorporated into the Cormorant 1 model (see Figure 5.9).

5.4.3 Details of Lopatin Time Temperature Maturation Plots

- (a) Pelican 1 (Figure 5.7)

The plot indicates that for the upper Otway Group peak hydrocarbon generation took place during the Paleocene. As