Heat Flow (Fig. 9)

The heat flow distribution was determined by calculating the thermal conductivity from the average bed porosity for intervals over which the temperature gradient can be measured from well-log data.

The heat flow distribution is characterised by two north-westerly trending highs near the basin margins separated by a relatively low heat flow trend about the central basin axis. The heat flow high trends overlie the L. balmei and Lower M. diversus depositional axes. This is highly significant as the areas of highest sand percentage and highest heat flow are essentially coincident which indicates that these areas can develop maturation more shallow where porosity is preserved.

Regional Cross-sections and Geochemistry (Figs. 10 & 11).

Regional cross-sections in the NW-SE and SW-NE directions have been constructed for the Paleocene-Eocene periods by datuming the well logs on the Top Eastern View event. The palaeontological information have been included and the N. asperus, P.asperopolus, M.diversus, L.balmei, T.longus and T.lilliei zones are defined. The known hydrocarbon occurrences have been indicated and can be summarised as follows:-

In Pelican 1 and 2 condensate was recovered during formation interval testing (F.I.T.) of thin sandstones at various levels within the Early Eocene sections. In Pelican -1, a maximum recovery of 3.9m^3 of gas and 600 cm^3 of condensate