

223061

## SUBSIDENCE AND MATURATION HISTORY

The subsidence and thermal maturation history ('geohistory') of such a new Bass Basin play have been synthesized using the seismic stratigraphy, well data from Bass-1 and an anomalous paleo-heatflow predicted by a lithospheric extension model developed by Garry Karner (now at Durham University, U.K.)

The computer generated thermal geohistory shown, was prepared for BMR by Ian Deighton (Paltech Pty. Ltd., Sydney). The analysis indicates that the entire Paleocene/Cretaceous section falls precisely within the oil window ( $R_o = 0.6$  to  $1.3\%$ ). This is consistent with observed Eocene to Recent maturation levels in adjacent wells. Late Cretaceous and Paleocene source rocks are predicted to have commenced generation in the Miocene, after structural development of the trap. The presence of D.H.I.'s at a depth of 2 kms and above the top of the present oil window implies migration and is consistent with shows of oil observed at similar levels in Cormorant-1.

STUDIES CONTINUE

This represents just the preliminary results from BMR's Bass