

6.0 GENERATION AND MIGRATION

6.1 Introduction

Although the results of the Lopatin Time-Temperature Maturation plots are approximate (refer section 5.4), the plots can be used as a guide to the timing of onset of maturity, peak generation and preservation phases for each stratigraphic level. These factors are indicated in Tables 6.1 & 6.2.

The Cormorant and Narimba depocentre areas were developed in asymmetric basins controlled by extensional normal tilted fault-blocks. The data available suggests these areas have higher maturity. Spore colouration indicates that Tarook 1 and Poonboon 1 also encountered mature section in the EVCM, and maturity/generation/expulsion windows may therefore be similar to the Cormorant and Narimba area examples.

The eastern basin area near Poonboon 1 and Tarook 1 has not been examined further because of interpreted poor trap conditions.

6.2 Interpretation of Generative History and Migration

6.2.1 EVCM Below the Upper L. balmei Zone

- a) In depocentres with similar maturation history to the Cormorant and Narimba areas the late Cretaceous (T. longus zone) and lower Paleocene (lower L. balmei zone) reached peak