

- (B) The lower Tertiary - predominantly clastic sediments with sporadic foraminiferal assemblages of Paleocene to middle Eocene age.

The time connection of such a division is vague as the base of Unit A is diachronous within 6 planktonic foraminiferal zones extending from basal upper Eocene (Zonule N) to late Oligocene (Zonule I-1). This diachronism is due to either a hiatus in some sections or to later arrival of marine conditions in other sections. Thus the division is in reality a megafacies one.

PART A - THE UPPER-TERTIARY FORAMINIFERAL SEQUENCE

The biostratigraphic terminology is that of Taylor (1966) who proposed a scheme for the Gippsland Basin extending from the uppermost Eocene (Zonule K) to the upper Miocene/lower Pliocene (Zonule A). A similar sequence has been described for the three Esso wells in the Bass Basin. In the case of the Otway Basin, the calcareous sediments commenced at the base of the upper Eocene in the Brown's Creek outcrop section and in some of the sub-surface section in the Port Campbell embayment. For this reason Taylor (unpubl.) has extended the scheme adding three zonules (L, M & N). In the Gambier Embayment (South Australia) Ludbrook (1967) has distinguished a planktonic assemblage which precedes Zonule N and which could be designated Zonule O, but has not been recognised in Victorian sections either on-shore or in off-shore wells drilled by Shell Development.

The upper Tertiary foraminiferal sequence in Prawn A-1 is summarised on fig. 1. The calcareous section commences in the upper Eocene (Zonule L) and continues up to at least the middle Miocene. The first drilled sample was a side wall core at 955 feet which contained a Zonule D planktonic fauna.

MIOCENE - ? - 2310.

The basis of the biostratigraphic subdivision is the dis-