

the generic determination is correct.

Therefore the base of this unnamed unit (- base of core 11) is definitely EOCENE, and the whole unit is probably of UPPER EOCENE age.

The foraminiferal sequence in Bass No. 1 Well does not appear to extend below 5905 feet. The time range of the sequence is from UPPER EOCENE to at least UPPER MIOCENE (at 860 feet). Apart from the volcanic activity, the foraminiferal sequence is continuous.

AGE AND AFFINITIES OF THE VOLCANICS.

The volcanic activity, represented by the rocks from 2530 feet to 3090 feet, is shown to have been active at the top of the LOWER MIOCENE. At least all of the Batesfordian Stage (sensu Carter, 1964) appears absent, and the activity could have commenced in the underlying Longfordian Stage. In Victoria, the Tertiary volcanic rocks are classified as "older" (Eocene age) and "newer" (plio-Pleistocene age). The Bass No. 1 volcanic rocks, thus fall into an intermediate category.

Bowler (1963, pp. 83 & 162) describes and discusses the stratigraphic relationships of the Maude Basalt in the Geelong area, central coastal Victoria. The Maude Basalt is disconformable on the Janjukian (Oligocene) Lower Maude Limestone and the Batesfordian (upper lower Miocene) Upper Maude Limestone is disconformable upon the basalt. Thus the Maude Basalt is of lower Miocene age, but does not extend to the top of the lower Miocene, as do the Bass No. 1 volcanics. The initiation of volcanic activity in the Bass No. 1 section may have been at the same time as the extrusion of the thinner Maude Basalt (maximum estimated thickness = 100 feet).

In the Westernport area (east of Port Phillip and on northern margin of Bass Basin), the Flinders Basalt reaches a drilled thickness of +1280 feet and the relationships of this basalt is discussed by Jenkin (1962, pp. 10-13). At Flinders, the basalt is in unconformable contact with the overlying Batesfordian limestone. This basalt is regarded as an "older" basalt, but could well be the equivalent of the Maude Basalt.

Banks (1962) discusses the age of certain basalts in north west Tasmania. These rest on Oligocene (and lowermost Miocene on work by Quilty, 1965) marine sediments, but are not regarded as "newer" basalts because of physiographic reasons. These could conceivably