

DISCUSSION

The biostratigraphic scheme of Stover & Partridge (1973) has been applied to the assemblages from this well. Table 1 summarises the palynological analyses and the distribution of species is included as an appendix.

Nothofagidites asperus Zone - side wall cores from 5525 to 7113 feet. Apart from the uppermost samples, the preservation is generally fair. The highest sample examined at 5525 feet yield^d uncommon marine dinoflagellate cysts indicating at least a marginal marine environment. Other samples below this level appear to be non-marine.

The presence of *T. magnificus* at 6275 feet would indicate a middle *N. asperus* or younger age but this species is unreliable without *Proteacidites rectomarginis* which only occurs in the uppermost sample. *T. magnificus* ranges sporadically down into Lower *N. asperus* elsewhere in southern Australia.

Further subdivisions of this zone are not justified on these assemblages.

Proteacidites asperopolus Zone - 7394 to 7635 feet. The top of this zone is provisionally placed at 7394 feet because of the paucity of *Nothofagidites* spp. The assemblage is very small and does not include anything else of stratigraphic value. The lower sample contains very common *P. pachypolus* with a low percentage of *Nothofagidites* spp.

There are no marine elements in the assemblage.

Malvacipollis diversus Zone - side wall cores between 7747 and 8250 feet. The top of this zone is provisionally placed at 7747 feet but again the assemblage is not diverse. It does however have very common marine dinoflagellate cysts. These include ?*Kenleyia* sp. and *Cyclonephelium* sp. which do not range up into the next zone. There is not^{the} diversity in the assemblages to permit