The lower boundary of this unit is determined by the first appearance of *Malvacipollis diversus*. It is associated with *Cyathidites gigantis* and *Proteacidites incurvatus*. Other species which make an apparent entry later include *Sapataceoidaepollenites rotundus* and *Periporopollenites demarctus*. Again the assemblages are so poorly preserved that no finer subdivisions are possible.

A low divernity but nevertheless characteristic suite of microplankton is present in the sidewall core at 8520 feet. The presence of *Diphyes colligerum*, *Wetzeliella homomorpha*, *?Deflandrea pachyceros*, *Operailodinium* sp. *Spiniferites* sp. and *Cordosphaeridium* sp. is strongly reminiscent of assemblage from this zone in the upper Dilwyn Formation of the Otway Basin.

Lygistepollenites balmei Zone — sidewall cores from 8990 to 10,294 feet.

The recognition of this zone is based on the consistent occurrence of *Gambierina edwardsii* and *G. rudata* and the presence of *L. balmei* in most samples. Other significant species include *Cyathidites gigantis Australopollis obscurus* and *Verrucosisporites kopukuensis*. The occurrence of *C.gigantis* and *V.kopukueusis* in the assemblage at 9080 feet would suggest that this is upper *L. balmei* but because of poor preservation and yields the boundary between upper and lower *L. balmei* cannot be resolved with any confidence. *Proteacidites incurvatus* occurs in the next sidewall core at 8990 feet. The first appearance of *C. gigantis* at 9528 feet is an alternative base to the upper *L. balmei* Zone.

Microplankton occur sporadically in most samples. At 8990 feet the assemblage of dinoflagellate cysts is characterised by *?Kenleyia fimbriata*, *Cyclonephelium* sp. and *Wetzeliella homomorpha*.

Reworked palynomorphs - Both Permian and Cretaceous spores and pollen are present throughout the section examined but it was not possible to determine the extent, if any, of any reworking of early Tertiary elements.