

Gambierina rudata
Latrobosporites amplus
Phyllocladidites reticulosaccatus
Polycolpites langstonii

Because *Lygistepollenites florinii*, *Malvacipoelis diversus*, *Nothofagidites brachyspinulosus*, *N. flemingii*, *Proteacidites grandis* and *Rugulatisporites mallatus* occur in conjunction with the species listed above, the interval is assigned to the Upper rather than the Lower *L. balmei* zone. Rare microplankton are present throughout the Upper *L. balmei* zone.

Lower *Lygistepollenites balmei* Zone - The section represented by sidewall cores 6 through 1 (7420 to 7935 feet) is assigned to this zone. No microplankton was recovered from the Lower *L. balmei* zone and although the samples are commonly fossiliferous, spore-pollen preservation is poor and species diversity is low. The Lower *L. balmei* zone determination is based on the continued and frequent occurrence of *L. balmei*, *Gambierina edwardsii* and *G. rudata* plus the absence of such forms as *Nothofagidites flemingii* and *Proteacidites grandis*. *Polycolpites langstonii* occurs down to a depth of 7547 feet (SWC 5); specimens of *G. rudata* are common at 7705 feet (SWC 3) and those of *Cyathidites splendens* are prevalent at 7935 feet (SWC 1).

Recycled Palynomorphs - Reworked Permian spore-pollen occur in the samples from the Middle *M. diversus* and the Upper *L. balmei* zones (5825 - 6075 feet and 7000 - 7060 feet, respectively). The most frequently encountered forms are *Aratrisporites* sp., *Striatites* sp. and *Krauselisporites* sp. Recycled Early Cretaceous spores were found sporadically in samples between 5852 and 7705 feet.

CONCLUSIONS

Except for the absence of the Upper *M. diversus*, all of the Bass Basin spore-pollen zones from Upper *N. asperus* to the Lower *L. balmei* zone were identified in the Yurongi-1 well at the following intervals.

Upper <i>N. asperus</i>	4145'
Middle <i>N. asperus</i>	4400' - 4600'
Lower <i>N. asperus</i>	5037' - 5195'
<i>P. asperopolus</i>	5415' - 5610'
Upper <i>M. diversus</i>	probably absent
Middle <i>M. diversus</i>	5825' - 6075'
Lower <i>M. diversus</i>	6130' - 6400'
Upper <i>L. balmei</i>	6620' - 7096'
Lower <i>L. balmei</i>	7420' - 7935'

INTERPRETATIVE