

Recycled palynomorphs are uncommon in Kon Kon-1 with Jurassic - Early Cretaceous forms found most frequently in the Middle *Nothofagidites asperus* zone where a few Permian types were also observed but only in the samples from 3595 feet. Redeposited *Lygistepollenites balmei* zone fossils were identified in the *N. asperus* zones as well as in the Upper *Malvacipollis diversus* zone. Within the *L. balmei* interval, only the sample at 4650 feet contained reworked Jurassic - Early Cretaceous forms, possibly some Permian types, and one Devonian spore.

An abrupt change in the composition of the palynomorph assemblages occurs between the shallowest *L. balmei* sample (4500 feet) and the deepest Lower *M. diversus* sample (4480 feet). The latter sample as well as the one at 4460 feet contains rare and very poorly preserved *L. balmei* fossils in association with definitive Lower *M. diversus* forms, which suggests that a disconformity is probably present at the top of the Upper *L. balmei* zone.

#### CONCLUSIONS

The sequence of assemblages and the distribution of palynomorph species as ascertained by the examination of samples from Kon Kon-1 strongly substantiates the recently revised and up-dated spore-pollen zonation (Partridge, 1973) for the Bass Basin.

In comparison with other Bass Basin wells, the section in Kon Kon-1 appears most similar to that in Bass-3. Palynomorph preservation is excellent in the Middle *Nothofagidites asperus* interval and good to fair below that zone with a general tendency for preservation to deteriorate with increasing depth. This tendency holds true for shales and siltstones, but does not apply to coals in which the preservation is decidedly better than that in overlying or underlying clastics. In terms of species diversity, palynomorphs from Kon Kon-1 samples are similar to other samples from Bass Basin wells except that dinoflagellates appear to be represented by more species in this well, especially in the Middle and Lower *Malvacipollis diversus* zones.

The Paleocene section represented by the *Tricolpites longus* and the Lower and Upper *L. balmei* zones is approximately 500 feet thick in Kon Kon-1. Similarly, the Early Eocene represented by the three *M. diversus* and the *Proteacidites asperopolus* zones is in the order of 550 to 650 feet thick, whereas the Middle and Late Eocene section is about 900 feet thick. Thus, the Paleocene-Eocene section of about 2000 feet is comparatively thin when compared to equivalent age strata in Cormorant-1 (6000+ feet), Tarook-1 (3300+ feet) and Bass-3 (3000+ feet).