

TELEPHONE
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TELEGRAMS
UNI MELB PARKVILLE

PE990075



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University of Melbourne

SCHOOL OF BOTANY

Parkville N.2, Victoria

WOODSIDE (LAKE E) OIL COMPANY

SUNDAY ISLAND NO.1 BORE

- Core 1 (625-645 ft.) - The residue from this sample consists almost entirely of cuticular and woody fragments.
Age ?
- Core 3 (1370-1385 ft.) - Two samples examined (a) powdery, black and peat-like, (b) a brownish solid core. The spore and pollen content of these two samples is roughly similar, both agreeing in the rich occurrence of pollen of *Nothofagus* (Southern Beech). Judging by the absence of certain well-characterized Paleocene and Eocene types and the high percentage of pollen similar to that of the species of *Nothofagus* now restricted to New Guinea and New Caledonia, the age of both samples appears to be somewhere between pre-Pliocene and post-Eocene. Unfortunately, the upper limit of this "Brassi" type of *Nothofagus* in Australia has not yet been determined.
- Core 5 (1965-1967 ft.) - Sample taken at 1965 ft. The pollen and spore content is low and the individual specimens present poorly preserved. Woody and cuticular fragments are abundant. The following spore types have been observed :
- Cicatricosisporites australiensis*, *C. cf. ludbrookii*
 - Stereisporites cf. antiqua* spores
 - Osmundacidites wellmanni*
 - Lycopodium austroclavatidites*
 - Pilosporites notensis* (one example only)
 - Cyatheidites australis*
 - Neoraistrichia truncatus*; *cf. Cyclosporites hughesi*;
cf. Velosporites triquetrus.

2.

Sunday Island - 1.

2/2

Unfortunately all these types have a fairly wide vertical distribution in the Upper Mesozoic of S.E. Australia. This preliminary study suggests that the age of the deposit approaches Aptian-Albian.

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