

The residue from this sample is commonly fossiliferous, and consists mainly of spore-pollen that are generally well preserved. Species diversity is moderate. Assemblage is dominated by specimens of *Nothofagidites* spp., and proteaceous pollen are sparse. Dinoflagellates are rare and poorly preserved, forms present are:

Nematosphaeropsis sp.
Leptodinium sp.
Areoligera sp. (fragments only)

Core 1 at 5089 - 5113 feet.

Zone: Lower *N. asperus*
 Age: Middle Eocene
 C.R.: 1
 K.R.: 1+, slightly altered

Sample is commonly to abundantly fossiliferous with an almost exclusively spore-pollen assemblage in which specimens of *Nothofagidites* spp. are common. There is, however, an increase in the relative abundance of *Haloragacidites harrisii* and proteaceous pollen are more frequent and more diverse than in SWC 29. The only dinoflagellate identified in the assemblage is *Teneridinium* sp., a supposedly freshwater form.

SWC 27, 26 and 24 at 5263, 5330 and 5461 feet, respectively.

Zone: Indeterminate, probably Lower *N. asperus*
 Age: Certainly Eocene, probably Middle Eocene
 C.R.: 2
 K.R.: 1+, slightly altered

Each of these samples is poorly fossiliferous and apparently yielded very small amounts of organic residue. Rare specimens of the acritarch *Epiccephalopyxis indentata* occur in SWC 27 which also has fragments of dinoflagellates. No microplankton was observed in SWC 26 and SWC 24. Specimens of *Nothofagidites* spp. are more numerous than those of *H. harrisii*, but too few specimens of both forms were recovered to make this quantitative observation statistically reliable.

SWC 22, 21 and 20 at 5657, 5854 and 5957 feet, respectively.

Zone: *P. asperopolus*
 Age: Early Eocene
 C.R.: 1
 K.R.: 1+, slightly altered

Samples from this interval are sparsely to commonly fossiliferous and consist almost exclusively of moderately well preserved spore-pollen. Assemblages are also moderately diverse. In addition to the spore-pollen SWC 22 and SWC 21 contain considerable amounts of plant debris consisting mainly of cuticular (herbaceous) tissue and very little woody or "coaly" pieces. The following dinoflagellates were found within this interval; all are very rare.