

FLATHEAD-1

INTRODUCTION

As part of a regional study of microplankton from the Nothofagidites asperus Zone in the Gippsland Basin, dinoflagellate bearing samples from Flathead -1 at 1495 and 1516 feet were studied. Evans & Mulholland, 1969 (Palynology Report 1969/8) provisionally assigned an Oligocene age to both samples.

SUMMARY

<u>Sample</u>	<u>Drill Depth</u>	<u>Age</u>	<u>Dinoflagellate Zone</u>
swc	1495 feet	Oligocene or younger	Unnamed
swc	1516 feet	M/L Eocene	<u>D. extensa</u>

COMMENTS

Spores, pollen and dinoflagellates are sparse in the sample from 1495 feet. Except for Epicephalopyxis indentata and Operculodinium centrocarpum - both long ranging forms - no definitive Late Eocene dinoflagellates were observed. Specimens of Nothofagidites dominate the spore-pollen fraction.

A considerably more diverse palynomorph assemblage was recovered from the sample at 1516 feet. The spores and pollen suggest that the sample is from the older part of the N. asperus Zone and this contention is supported by the dinoflagellates. The sample contains Peridinium eocenicum and Leptodinium reticulodotum, both of which begin in Taylors late Middle Eocene N zonule in the Browns Creek section. The sample also contains Diphyes colligerum which has also been identified in Tuna -3 at 4500 feet and in Bream -3 at 6447 feet.

L. E. STOVER.

JUNE 1970.

PALYNOLOGY REPORT
1970/24.