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**INTERPRETATIVE**

PALYNOLOGY REPORT

ON

DOLPHIN -1

BY

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Palynology Report 1970/14

June 1970.

#### INTRODUCTION

As part of a regional study of dinoflagellates from the Nothofagidites asperus Zone in the Gippsland Basin, samples from Dolphin -1 between 3950 and 4075 feet were examined to determine the type of dinoflagellates. Previously, Dettmann (24 April, 1968) had reported rare microplankton at 4028 feet and the associated spore-pollen assemblage indicates that this sample can be assigned confidently to the N. asperus Zone.

#### SUMMARY

<u>Sample</u>	<u>Drill Depth</u>	<u>Age</u>	<u>Dinoflagellate Zone</u>
swc 15,14 & 12	3950/96 feet (composite residue)	Eocene	<u>D. extensa</u>
Core 2	4040 feet		No dinoflagellates
Core 3	4068-72 feet		Indeterminate
Core 3	4074-75 feet	Eocene	<u>D. extensa</u>

#### COMMENT

A reasonably diverse but poorly preserved dinoflagellate assemblage was identified in the residues from sidewall cores 15, 14 and 12 between 3950 and 3996 feet. The index fossil, Deflandrea extensa, occurs with three other species (Cordosphaeridium capricornum, Eisenackia ornata, Peridinium eocenicum). The combined occurrence of these species suggests that the assemblage is from near the top of the D. extensa Zone. Deflandrea extensa was the only dinoflagellate identified in the sample from core 3 at 4074-75 feet. The intervening samples contained no dinoflagellates or non-diagnostic forms.

Other occurrences of Deflandrea extensa from the Gippsland Basin are from Barracouta -3 at 3604 feet (sidewall core 18) and from the onshore well Glencoe -4 at 180 feet.

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