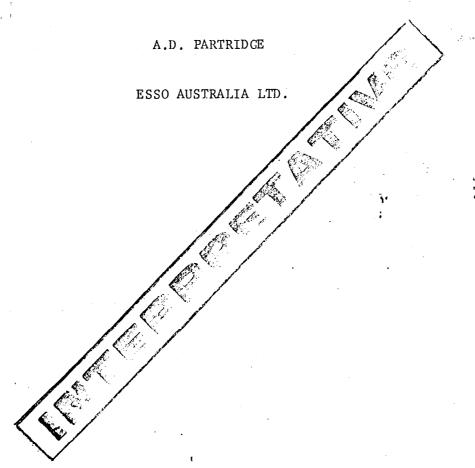


PALYNOLOGY OF

MACKEREL-3

GIPPSLAND BASIN

bу



## INTRODUCTION

Samples from Mackerel-3 were received for palynological analysis during April, 1972. No samples of suitable lithology for palynology were present in the first 100 feet of the Latrobe Group. Deeper samples from 7903 feet to 8587 fee contained good spore-pollen and dinofagellate assemblages referrable to the upper part of the Paleocene <u>L. balmei</u> Zone

	<u>S</u> 1	UMMARY	
Sample Sample	Depth (in feet)	Zone	A <u>se</u>
SWC 24	7798	P. tubercylatus	Oligocene
SWC 23	7801	Sample barren	-
SWC 20	7807	" / ", "	-
SWC 19	7826		_
SWC 18	7835		•
Core	7844	/ H <sub>2</sub> / H <sub>3</sub>	
Core	7903	L. balmei	Paleocene
Core	7914½	- N	11
SWC 13	7915	"	, H
SWC 12	7975	11	ti
SWC 11	8052		11
SWC 5	8383		11
SWC 4	8449	11	н
SWC 3	84/82	11	-11
SWC 2	8519	11	11
SWC 1	8587	m ·	11

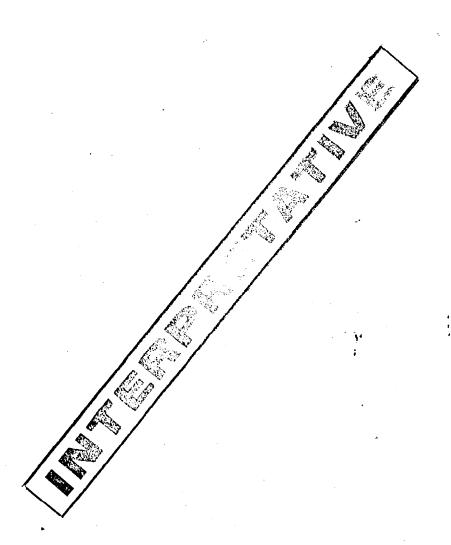
## COMMENTS

All fossiliferous samples from the Latrobe Group contain dinoflagellates as well as spores and pollen.

The SWC at 7798 feet contain spores, pollen and dinoflagellates indicative of the  $\underline{P}$ . tuberculatus Zone, which is in agreement with the possible J1 or I1 age as determined from the planktonic foraminiferal data.

The samples assigned to the <u>L. balmei</u> Zone contain well preserved spore-pollen assemblages although the species diversity is not high, particularly in the samples 7903 feet to 7915 feet.

The assemblages from Mackerel-3 show good agreement in spore, pollen and dinoflagellate species content with the  $\underline{L}$ .  $\underline{balmei}$  Zone samples from Mackerel-2.



		HI	JHE ST	DATA			LOW	EST I	DATA		
AGE	PALYNOLOGIC ZONES	Preferred Depth	Rtg.	Alternate Depth	Rtg.	2 way time	Preferred Depth	Rtg.	Alternate Depth	Rtg.	2 way
1.IG-	P. tuberculatus	7798	0	·			7798	0			
1,1G-	U. N. asperus	7700					7758				
	o. n. asperas										
	M. N. asperus										
	L. <u>N</u> . asperus										
NE	P. asperopolus	·									
EOCENE	U. M. diversus										
	M. <u>M</u> . <u>diversus</u>										
	L. M. diversus	-								,	
NE	U. <u>L</u> . <u>balmei</u>	7903	0				8052	,			
PALEOCENE	L. L. balmei	<i>83</i> 83	/				8587	0			
PAI	T. longus		,								
	T. <u>lilliei</u>			`							
CREIEOUS	N. senectus										
. L	C. trip./T.pach	•									
CRE	C. distocarin.										
	T. pannosus										
EA	RLY CRETACEOUS			,							
PRE-CRETACEOUS		<u>ب</u>									

CO	MMEN	TS	:	

Oinoflagellate Zones:	
Wetzeliella homomorpha 7903(1) - 7915(1)	
Eisenackia crassitabulata 8449 (1) - 8587 (1)	

RATINGS: 0; SWC or CORE, EXCELLENT CONFIDENCE, assemblage with zone species of spores, pollen and microplankton.

1; SWC or CORE, GOOD CONFIDENCE, assemblage with zone species of spores and pollen or microplankton.

2; SWC or CORE, POOR CONFIDENCE, assemblage with non-diagnostic spores, pollen and/or microplankton.

3; CUTTINGS, FAIR CONFIDENCE, assemblage with zone species of either spore and pollen or microplankton, or both.

4; CUTTINGS, NO CONFIDENCE, assemblage with non-diagnostic spores, pollen and/or microplankton.

NOTE: If a sample cannot be assigned to one particular zone, then no entry should be made. Also, if an entry is given a 3 or 4 confidence rating, an alternate depth with a better confidence rating should be entered, if possible.

DATA RECORDED BY: A.D.P.	DATE May 1972.
DATA REVISED BY: ADP	DATE Jan. 1975,