

## PALAEOLOGICAL REPORT

GROPER-2

D.J. Taylor.

Table I of this Appendix summarizes the samples examined from Groper-2. Distribution of Planktonic fauna is shown in the top left hand section. Horizontal lines indicate diagnostic species.

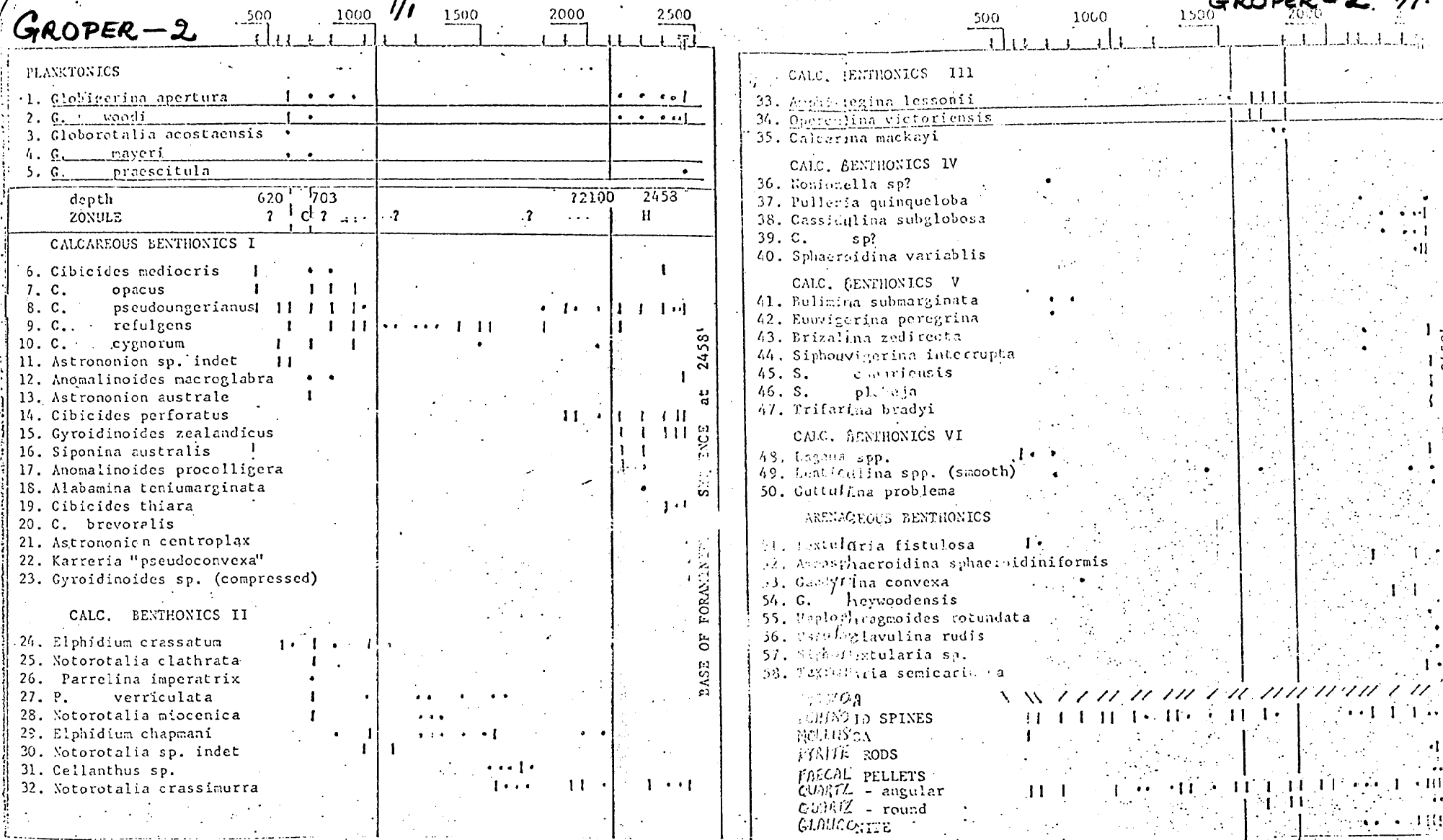
It will be noted that only 5 planktonic species were isolated and only 2 of these are really diagnostic (i.e. Globorotalia mayeri & G. praescitula), thus zonation is virtually impossible. The base of the foraminiferal sequence is no older than lower Miocene.\* In GROPER-1 the base of the sequence is of lower Oligocene age. Thus the transgression in this marginal area was diachronous. Distribution of benthonic forms is shown on the rest of the sheet, with horizontal lines showing diagnostic species. Benthonic species are also sparse with few species or specimens between 1000' and 2100'. In this almost barren interval the fauna, including bryozoa, are both worn and fragmented with a frosted appearance. No deeper water species were recorded and the whole sequence is placed within the inner part (above 150') of the inner shelf. Wave and current activity is extreme in the almost barren interval but calmer conditions are apparent above 1000'. The presence of Amphistegina lessonii, between 1550' & 1820', suggests that this interval was on the seaward edge of a shallow marine embayment. Water depth was 100' and water temperature between 20°C & 22°C. Like the transgressive assemblage, this Amphistegina assemblage is diachronous.

\* Refer to Page 7 for discussion of age used in the Well Completion Log and Cross-section (Plate 1d).

GROPER-2

BIOTIC FAUNAL DISTRIBUTION

GROPER-2 //



LEGEND

Side wall cores at : - 450 787 1820  
 550 955 1920 2180  
 620 1030 2130 2270  
 703 1210 2250

Core No. 1 with samples at : - 2441' & 2458'  
 Other samples are rotary cuttings with  
 entire contents plotted.

• = 1 - 20 specimens  
 | = over 20 specimens  
 \ = fresh bryozoal fragments

BASE OF FORAMINIFERAL SEQUENCE at 2458'

BASIN GIPPSLAND BASINBY DAVID TAYLORWELL NAME GROPER -2DATE 12 April 1971 ELEV. +31'

## Foram Zonules

		Highest Data	Quality	2 Way Time	Lowest Data	Quality	2 Way Time
MIOCENE	A	Alternate					
	B	Alternate					
	C	620	1		620	1	
	C	Alternate					
	D <sub>1</sub>	Alternate					
	D <sub>2</sub>	Alternate					
	E	Alternate					
	F	Alternate					
	G	Alternate					
	G	2180	1		2458	1	
	G	Alternate					
OLIGOCENE	I <sub>1</sub>	Alternate					
	I <sub>2</sub>	Alternate					
	J <sub>1</sub>	Alternate					
	J <sub>2</sub>	Alternate					
EOC.	K	Alternate					
	Pre K						

## COMMENTS:

Note: If highest or lowest data is a 3 or 4, then an alternate 0, 1, 2 highest or lowest data will be filled in if control is available.

If a sample cannot be interpreted to be one zonule, as apart from the other, no entry should be made.

- 0 SWC or Core - Complete assemblage (very high confidence).
- 1 SWC or Core - Almost complete assemblage (high confidence).
- 2 SWC or Core - Close to zonule change but able to interpret (low confidence).
- 3 Cuttings - Complete assemblage (low confidence).
- 4 Cuttings - Incomplete assemblage, next to uninterpretable or SWC with depth suspicion (very low confidence).