FORAMINIFORIAL ANALYSIS OF BARRACOUTA-5, GIPPSLAND BASIN

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BIOSTRATIGRAPHIC SUMMARY OF BARRACOUTA-5

DEPTH (mKB vert)	LITHOLOGY *1	UNIT	ZONE	AGE
1150-0-1154.9	calcilutite		I2	Early Oligocene
1159.9-1164.9	calcilutite		J1	Early Oligocene
1170.0	glauconitic marl	Early "Oligocene Wedge"	J1	Early Oligocene
1174.9-1181.0	pyritic & glauconitic marl		Indeterm.	-
1182.0	pyritic & glauconitic marl		J2	Early Oligocene
	log break at 1182m			
1183.0-1187.0	greensand	"Gurnard Formation"	Indeterm.	*2 Late Eocene
	-		-	-
	log break of 1204 m			
		Latrobe Group (coarse clastics)	-	-
			T.D. 1770m	

*1 lithology based on washed residue and nature of clay-sized residue
*2 age based on Macphail (Palaeontological Report No. 1985/20.

COMMENTS

1. Sidewall core samples examined from the top of the "Gurnard Formation" in Barracouta-5 consist of greensand. The greensand contains abundant dark green pelletal glauconite and rare fish teeth but is barren of calcareous benthonic foraminifera and planktonic foraminifera. The top of the "Gurnard Formation" has been assigned to the uppermost Middle N. asperus spore/pollen Zone (Late Eocene) by Macphail (Palaeontological report 1985/20. The "Gurnard Formation" at 1187 m and above represents a condensed sequence deposited in a neritic environment during a maximum rise in relative sea-level (transgressive phase).

2. The "Gurnard Formation" is conformably (?) overlain by Early Oligocene marls and calcilutite ("Oligocene Wedge") of the Seaspray Group. The basal 8m of the Seaspray Group consists of interbeds of pyritic marl and glauconitic marl. The pyritic beds are expressed as sonic/density spikes. The marls grade into cleaner carbonate (calcilutite) above 1170m. Fish teeth remains were noted in sidewall core samples as high as 1159.9m. The Early "Oligocene Wedge" in Barracouta-5 is at least 32m thick and is interpreted to represent a condensed sequence deposited in a

shelfal environment during a transgressive phase (high relative sea-level). A slow rate of deposition for the interval spanning Zones J2-J1 (approximately 5my) is confirmed by the presence of pelletal glauconite and fish teeth, particularly in the basal portion of the wedge.

3. The "Oligocene Wedge" is thicker in Barracouta-5 (32m +) than Barracouta-4 (approximately 21m). The thickness of the "Gurnard Formation" in both wells is comparable (Barracouta-4: 26.5m, Barracouta-5: 23m).

REFERENCE

MACPHAIL, M.K., 1985, Palynological analysis of Barracouta-5, Gippsland Basin. ESSO AUSTRALIA LTD. PALAEONTOLOGY REPORT 1985/20