

(b) Upper Cretaceous - 2788-4272'

Basal Conglomerate - 2788-3133'

820 -  
820 - 925 (105)

A 345 foot section of conglomerate was encountered at 2788'. A core was cut in this formation between 2846 and 2849 feet which recovered 2' of unconsolidated well rounded, pebble to cobble sized grains of very hard quartzite and cherty quartzite. Similar material of Tertiary age is known in northern and northwestern Tasmania. Also from its high amplitude, low frequency character on seismic records it appears to correlate with basal Tertiary deposits of the Otway Basin. Palynological evidence (see Appendix-1 by P.R. Evans) based on sidewall cores immediately above the conglomerate, however, give strong evidence of uppermost Upper Cretaceous age. A possible explanation for this could be the reworking of older material in the conglomerate but, as similar time and rock correlations occur in the Esso Prawn-1 well, this is unlikely. At the same time, it is most improbable that this conglomerate would underly a large regional unconformity such as is recognised between the Upper Cretaceous and Lower Tertiary in the western and central Otway Basins. Thus it is suggested that the conglomerate immediately overlies this same regional unconformity, but that the Upper Cretaceous - Tertiary hiatus of the Otway Basin proper transgresses time to the east such that at Clam-1 it occurs within the Upper Cretaceous. Moreover, it is reasonable to assume, as is substantiated by dipmeter data, that the source area for this conglomerate was from the east (i.e. northwestern Tasmania). The basal Tertiary beds of the Otway Basin were sourced from the North.

Sherbrook Group - 3133-4272'

No distinction is observed between the deposition of Sherbrook Group beds in the King Island Sub-basin and that of the Otway Basin proper.

Curdies - Paaratte Undiff.- 3133-4110'

925 - 1233 (308)

Typical Upper Cretaceous sandstones of the Curdies-Paaratte formations, as recognised in the main Otway Basin, were encountered between 3133' and 4110'. This section is composed mainly of relatively loose, porous, fine to medium quartz grains with varying amounts of silt matrix. A core cut in this interval between 3157' and 3167' recovered 9½ feet of silty, fine to coarse grained, slightly porous to porous sandstone, interbedded with non-calcareous, medium hard siltstone.

Palynological investigations (see Appendix 1) have placed this interval in the N. senectus/T. lilliei zonule thus establishing equal age with that of the Curdies and Paaratte formations in the Otway Basin proper.

Belfast - 4110-4200'

1233 - 1264 1250 17

The 90 foot section of Belfast underlying the Curdies-Paaratte sandstone and composed of light grey and medium grey-brown calcareous and non calcareous mudstone, is also correlated lithologically and palynologically with the same formation in the main Otway Basin. Based on spore-pollen occurrences (see Appendix 1) the Belfast is of Turonian age.

Waarre - 4200-4272'

1250 1264 - 1272 22

Below the Belfast mudstone, 72 feet of sandy siltstone and silty sandstone of very low porosity were encountered. By inference, mainly on electric log character, this formation is thought to be Waarre equivalent. It is highly probable that this relatively thin occurrence represents the gradual silting and pinching out extremity of the Waarre formation.

(c) Devonian - Carboniferous (?)

"Red beds" - 4272-4896'

1272 - 1462