

Base of Tertiary (Plates III, VI and VIII) 1/100,000 - Sheets 5, part of 7 and 8 and 11, is referenced to well control throughout the Otway Basin and is one of the most readily identified stratigraphic markers. This unit may overly different aged rocks depending on basin position. Although Upper Cretaceous usually exists below the basal Tertiary, along the basin margins there may be Tertiary immediately overlying Lower Cretaceous or older rocks.

Paaratte Formation (Plate V) 1/100,000 - part of Sheets 7 and 8, illustrates the Structural configuration of a sand-shale sequence above the Belfast Shale that may be prospective. The map shows many faults and only small areas of structural closure.

Belfast Shale (Plate IV) (Upper Cretaceous) 1,100,000 - part of Sheets 7 and 8 is the oldest stratigraphic unit mappable in the area basinward from Voluta-1. It is interpreted to be representative of the structural configuration of the Waarre sandstone which underlies it.

Waarre Sandstone (Upper Cretaceous) (Plate VII) 1/100,000 - Sheet 11 is identified from ties with Pecten-1 and Mussel-1 and is the most representative map for deeper structure in this area.

Contour interval and style may vary from area to area because of the individual interpretative techniques of different geophysicists.

No new maps were made for the interval above the base of the tertiary (Eocene or Lower Miocene) because any changes to the existing maps would be minor and of little importance to our exploration programme.

D. REPRESENTATIVE SEISMIC SECTIONS:

Two interpreted VDF seismic section from different areas are included with this report.

Seismic Section 069B-5 (Figure 4a) illustrates the reflection character of the Pretty Hill sandstone and the Base of Tertiary. A faulted structure is observed between shot points 1850 and 1880. The discontinuous reflection energy on the southwest portion of the line is interpreted to be caused by numerous faults down thrown to the southwest.

Seismic Section 069B-17 (Figure 4b) shows a marked thickening in Eocene sediments to the southwest from shot point 190. An Oligocene channel is seen over the area from S.P. 140 to 180. An interpretation of Upper Cretaceous structure is complicated by discontinuous reflections due to faulting.

E. SIGNIFICANT ANOMALIES:

The 069B Seismic Survey was designed to furnish additional control so that specific areas of interest based on interpretations of previous seismic data could be evaluated. Significant anomalies resulting from this additional control are limited, and listed below in order of relative importance.

1. The Crayfish Platform south and southwest of Crayfish-1 exhibits a zone of northwest - southeast trending down to the south faults. The principal anomaly is a faulted anticline near the intersection of lines 069B-4 and 069B-5. A comparable faulted high is shown centered on S.P. 2350 of line 069B-4.