

2. Cambrian to Devonian Cont.

coast of Tasmania. This granite is significant in that it may be a source for the Cretaceous sandstones encountered both in the Otway Basin west of King Island and the King Island Sub-basin.

Deposits were penetrated in Clam-1 which are believed to be of Upper Devonian or Lower Carboniferous age although conclusive age determination has not been possible.

Carboniferous to Tertiary

Sedimentation after the Tabberabberan Orogeny continued on Tasmania until the Permian glaciation period. Deposition evidently did not extend into the northwestern extremity of Tasmania. By late Triassic or Lower Jurassic times, sedimentation virtually ceased on Tasmania. Dominating the geological history of this span of time were the tremendous extrusions of dolerite which spread over the entire eastern half of the island.

Tertiary

Non marine Tertiary beds are known in the Tamar Graben located in the Launceston-Devonport area. These deposits consist of clays, silts, grey-wackes agglomerates of Paleocene-Eocene in age and most probably extend westward into the northwest most tip of Tasmania.

Marine Tertiary beds (pink limestones) occur in the Smithton area and are equivalent to limestones present on King Island. These are probably Oligocene (Jan Juc) in age. Apparently marine transgression took place in the northwest during Oligocene times withdrawing after the Middle Miocene, as no younger marine tertiary beds are known in this area.

Tasmania during the Cenozoic underwent major tensional stresses which resulted in the formation of large graben and horst blocks. Accompanying these movements was widespread outpouring of basalt. Lava fields are particularly extensive along the northwest coast where extrusions are seen to have occurred as early as Middle Oligocene and lasting probably into the Pliocene.

3. Stratigraphic Table

The stratigraphy of the Clam-1 well corresponds to that recognised on shore Tasmania from the Pre-Cambrian basement to the Upper Cretaceous beds. From the beginning of the Upper Cretaceous through the Miocene the stratigraphy correlates with that of the Port Campbell area in the Otway Basin proper.

(Depths relative to Kelly bushing - subtract 99 feet from M.S.L.)

<u>Tertiary</u>	<u>Interval</u>	<u>Thickness</u>
Water	99' ASL-433	(334')
<u>Miocene-Oligocene</u>		
Port Campbell Limestone Equivalent	433*-1060'	(627')
* Note: first samples recovered at 1050'		
Jan Juc (Gellibrand Equivalent)	1060-1368'	(308')
<u>Eocene</u>		
Brown's Creek Group Equivalent	1368-1783'	(415')
<u>Paleocene</u>		
<u>Wangerrip Group</u>		
Rivernook Fm	1783-2070'	(287')
Dilwyn Fm.	2070-2788'	(718')
<u>Upper Cretaceous</u>		
Basal conglomerate	2788-3133'	(345')
<u>Sherbrook Group</u>		
Curdies-Paaratte Fms. undifferentiated	3133-4110'	(997')