

A2.1.3 Stratigraphy.

Upper Jurassic(?) - Lower Cretaceous. Referred to as the Otway Group these sediments have been intersected only in Durroon No.1 located on the southeastern margin of the basin. In Durroon No.1 the sediments consisted of lithic sandstones and slightly carbonaceous siltstones interbedded with minor conglomerates and thin coals. An altered olivine basalt of uncertain age occurs at the top of this sequence.

Upper Cretaceous to Eocene. This sequence of sediments is known collectively as the Eastern View Group and usually unconformably overlies the Otway Group. In some instances they directly overlie the Palaeozoic basement, such as in Bass No. 3. The Eastern View Group can be traced across the King Island/Mornington Peninsula Ridge from the Torquay Basin to the northwest and reach a maximum thickness, interpreted from seismic, of 7.5km. It consists of a non-marine sequence of sandstones, claystones, siltstones and coals. The lower, pre-Maastrichtian component of this sequence was seen in Durroon No. 1 to be mainly carbonaceous shales overlain by coarse grained sandstones interbedded with thin shales. The Maastrichtian and Paleocene part of the Eastern View Group consist mainly of silty claystones with thin sandstones and rare coals, these typically pass upwards into a coal rich sequence which is generally overlain by a sandier sequence of Mid to Late Eocene age. The Eastern View Group is overlain by a more or less extensive, restricted marine shale, the Demons Bluff Equivalent, heralding the marine transgression of the Late Eocene and Oligocene to Pliocene.

Oligocene - Pliocene. Essentially the Torquay Group plus overlying undifferentiated Recent Sediments, this section consists of marine carbonate sediments, mainly mudstones, marls and calcarenites in the Early Miocene and Oligocene parts, and of bioclastic limestones in the Miocene and younger sediments.