

continental slope and shelf. The prospect is thought to be near the southern margin of the Otway Basin and probably crosses the eastern basin margin delineated by a basement ridge trending south from King Island. East of this ridge Bass Basin sediments may exist or another sedimentary trough may be found paralleling the Tasmanian coast.

The western continental shelf of Tasmania is located in the southern part of the Paleozoic Tasman Geosyncline. Deposits in this ancient feature may exceed 25,000 feet in thickness and are composed of a complex of folded and faulted metamorphosed and unmetamorphosed sediments with associated intrusive and extrusive igneous rocks. This Paleozoic sequence is considered economic basement in the area and is not prospective for hydrocarbons.

Sedimentation started in the Otway Basin in Late Jurassic or Early Cretaceous time and continued throughout the remainder of the Mesozoic and much of the Tertiary. The depositional trends were transverse to the earlier northerly aligned depositional trends in the Paleozoic Tasman Geosyncline.

The northern margin of the Otway Basin is known onshore in southwestern Victoria and southeastern South Australia and has been established by outcrop and well control. The eastern margin is formed by the Selwyn Fault - King Island structural trend which is also the western margin of the Bass Basin. The southern margin is not defined. A BMR record (1966/170, "A Preliminary Review of the Otway Basin", page 9) states that available seismic data indicate a continuous section - mostly Cretaceous - extends well south of the 100 fathom line on the continental shelf. Further, the morphology of the slope development suggests pinch-out of offshore sedimentation rather than structural basinal limits.