

formity". This is interpreted here to correspond with the hiatus observed between Early and Late Cretaceous sedimentation. Late Cretaceous to Late Eocene sediments of the EVCM were subsequently deposited in this extensional basin.

After continental break-up, interpreted to be between 110 and 90 mmybp, (Cande & Mutter, 1982), tensional forces between Tasmania and Australia diminished with time and faulting became associated with reactivation of pre-existing basement faults and igneous activity.

### 1.1 Exploration History

An aeromagnetic survey was flown in 1961 and the first seismic survey was shot in 1962-63. A total of 19 wells (Figure 1.1 and Table 1.1) have been drilled to date and approximately 12000 kilometres of seismic has been shot. Three thousand one hundred kilometres of seismic was interpreted for the present study.

Drilling commenced in 1965 with Bass 1 and continued until 1982 when Pipipa 1 was drilled. Of the nineteen wells drilled, five encountered significant hydrocarbons. Gas and condensate were recovered in Bass 3, Pelican 1, 2, and 4, and Cormorant 1. At Cormorant 1, 22 litres of oil was also recovered on a Formation Interval Test (FIT). Pelican 1,2, and 4 define the sub-economic Pelican gas/condensate field which contains an estimated 1.5 TCF of gas-in-place (reserves based on the present study). In addition, encouraging oil and/or gas shows have been encountered