

it. At Pelican 1, two pay sands were encountered (termed "G" and "H" Sands) below Unit F at a stratigraphic level not penetrated in either of the other two wells.

2.3 Pelican Field Structure

The Pelican Field is located on a northwest-southeast trending anticline situated within a graben feature (Fig. 2.3). Faulting is dominantly northwest-southeast but minor cross-cutting faults can be interpreted as dividing the field into three separate structures with different gas/water contacts. Each structure has been penetrated by a well and has been mapped separately (Fig. 2.4).

Doming within the graben is considered to be related to Miocene faulting which was possibly initiated by a compressional event. Further tilting of fault blocks during this period resulted in compression in the centre of the graben and overpressuring of the deep section. This late movement has resulted in many smaller faults within the field, increasing the complexity of the reservoir. Two interpreted seismic sections are shown in Figures 2.5 and 2.6 to illustrate this structural analysis.

2.4 Reservoir Parameters

As mentioned previously, the Paleocene section of the EVCM was divided into six zones, Units A through F. These six zones contain a total of seven pay sands. Two additional pay sands were mapped in Pelican 1 below Unit F for a total of nine pay