

## 1 INTRODUCTION

The 1996 Hummock Marine Seismic Survey consists of two separate grids in the Bass Basin, offshore Tasmania: one in T/18P (BHB96) and the other in T/25P (BHA96), as shown in Figure 1.

The T/18P portion of the survey comprised 568.27 kilometres of data in 28 lines, and in T/25P there were 665.13 kilometres of data acquired over 36 lines (figure 2). These data fulfil the third and fifth year work commitments of 500 kilometres of seismic acquisition in both the T/18P and T/25P exploration permits respectively.

The objectives of the survey in T/18P were to detail the Ibis and Trefoil prospects and bring them up to drillable status. Infill data were also acquired over the Chappell and Aroo East leads to aid further in their evaluation.

In T/25P the Hummock data were designed to detail the Veridian prospect in the north-eastern corner of the permit, along with several fault closed prospects along the flanks of the Pelican Trough, namely Tourville on the eastern side and the Grindstone/Eddystone complex to the west (figure 2).

The current permit interest holders for each permit are tabled below:

### T/18P

Boral Energy Resources Limited	85% (Operator)
Santos Limited	15%

### T/25P

Boral Energy Resources Limited	100% (Operator)
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## 2 INTERPRETATION

### 2.1 Tectonic Evolution

The intracratonic Bass Basin is one of a series of basins formed along the southern margin of Australia during the Early Cretaceous - early tertiary rifting between Australia and Antarctica. The Bass Basin is a failed rift basin as breakup and the formation of oceanic crust did not occur after initial rifting.

The basic basin architecture is characterised by northwesterly trending normal faults, initiated by northeast-southwest extension during the Early Cretaceous. These major fault systems separate three trough areas that have dominated sediment accumulation until the mid-late Eocene (see figure 3).

The predominant structural mechanism since initial rifting has been simple drape and compaction, associated with general basin subsidence, and with faults exhibiting growth throughout the deposition of the Eastern View Coal Measures (EVCM) sequence, but dying out by the early Eocene.

A structurally quiet period commenced at this time and continued through the deposition of the Demons Bluff Formation, a widespread marine shale sequence, and the early part of the Torquay Group limestones, until the time of the