

### 3.3 Near Top Palaeocene (Top Upper *L. balmei*)

The northwesterly trending fault systems continue to dominate at this level (Enclosures 5, 6). The amount of igneous intrusive activity is less obvious or disruptive of the seismic data. The three major troughs are clearly separated structurally, with the Cormorant Trough being the most distinct.

The Chappell, Trefoil and Ibis structures are well developed. The Chappell structure is a tilted horst block culminating at the intersection of two prominent faults. Vertical relief is approximately 120 milliseconds. Trefoil is a large and gently dipping rollover with 20 milliseconds of relief. Ibis is a large fault closed structure (figure 7) with approximately 50 milliseconds of vertical relief structurally above the Bass 3 well.

The Aroo East structure, while distinct at the Middle *M. diversus* level, lies within an area of complex and intersecting faults at the Palaeocene level. Further work needs to be done in this area to fully understand the structural geometry of this feature.

In T/25P the fault closed structures on the flanks of the Pelican Trough have developed. The Tourville prospect extends over a large faulted terrace downdip of the Pelican 3 well. The Eddystone and Grindstone prospects are smaller in size, but not as complexly faulted as Tourville. The Veridian prospect is a broad, shallow relief (approx 25 milliseconds) structure that is heavily dissected by small faults that appear to occur randomly in this area.

## 4 CONCLUSIONS

The 1996 Hummock Marine Seismic Survey was generally excellent quality data and allowed a more thorough understanding of the deeper structure which is particularly poorly imaged on most of the earlier vintages of seismic data.

The survey was successful in that it provided detailed and infill data over 8 key leads and prospects, and for the most part bringing them all to a mature drillable status in terms of structural definition.

Additional seismic may be required over the Chappell and Aroo East prospects prior to drilling.