

The isochron map of the middle *M.diversus* shows the Pelican Trough as being much less prominent, whereas the Yolla Trough is still obvious as a major depocentre. In addition the Southwest Ramp, Poonboon Platform and the ridge area bounding the northern Pelican Trough are distinctly thinned. Evidence from the basin margin suggests that uplift and erosion occurred in the southern basin at the end of middle *M.diversus* time. The reduced relief of the isochron interval map probably reflects a regional unconformity has resulted in mild peneplanation of this area and a low angle subcrop has developed. This unconformity is not readily identifiable on seismic and is inferred from the basin margin observation mentioned above.

### 6.5 Upper *M.diversus*

Figure 6.8 (Enclosure 8) "Top Upper *M.diversus*, Time Structure Map (ms TWT)"

Figure 6.9 (Enclosure 9) "Ischron of Upper *M.diversus* (approximately)"

Figure 11.3 "Top Upper *M.diversus* Leads and Prospects"

Few faults persist through to top upper *M.diversus* time so consequently few trapping geometries exist at this level. The structure map shows that the imprint of later basin sag, with its longitudinal axis centred through Poonboon 1, has eclipsed the structurally immature upper *M.diversus* topography at the present day. Also the Miocene enhancement of the Pelican 3 to Tourville area is obvious. The upper *M.diversus* occurs over a time range of 1300ms to 2000ms in the mapped area. As the top upper *M.diversus* is situated above the coaly section the reliability of this marker is much higher than the deeper events.

The isochron map of the upper *M.diversus* shows that a broad depositional basin had developed in the southern Pelican Trough. The Poonboon Platform has prominent thins developed on it showing this region to be structurally high at this time, but some thinning no doubt also occurs through erosion following upper *M.diversus* deposition as discussed in "Regional Geology". The Clarke area was structurally high at upper *M.diversus* time. Further north of this area near Bass 3 the upper *M.diversus* is subcropped, being interpreted as absent over this Early Cretaceous high. This subcrop means that the upper *M.diversus* map does not cover as much area as the one from the middle *M.diversus*.