

early Tertiary time. These events resulted in the generation of two distinct structural styles in the Gippsland Basin:

- (a) NW-SE trending normal faults, caused by tensional stress during the early stages of continental breakup (early Cretaceous to early Eocene).
- (b) E-W wrench faults, with associated NE-SW en echelon anticlines, initiated at the end of Eocene time and rejuvenated in the Miocene.

The Central Basin acquired a large part of its present shape and character by subsidence and faulting in late Cretaceous to Eocene time. The continental margin in T13P was also established at this time, and exhibits features typical of a rifted 'Atlantic-type' margin. These include normal down-to-the-sea step fault blocks, a major 'breakup' unconformity at the top of the supposed Strzelecki Group, seaward thickening of the post-breakup sequence, and possible dip reversals on the continental slope. Anticlinal structure characteristics of the Central Gippsland Basin are not recognised in T13P.

In the Central Basin, an enormous thickness of non-marine and shallow marine sediments, the Latrobe Group, accumulated in a fluvial and delta plain environment. This Group comprises a repetitive sequence of sands, silts, minor shales and coals, and contains large quantities of land-derived organic matter. The sands, laid down by a system of braided streams flowing from the northwest, have excellent reservoir characteristics. Beyond the steep-sloped delta front, which remained close to or west of the present shelf edge, deposition of marine sediments appears to have been minimal.

As the typical alluvial and delta plain facies of the Latrobe Group are known only in the area northwest of Permit T13P, the nature of