

GEOSEISMIC CROSS SECTIONS

Regional seismic mapping by Exploration Associates International indicate that a portion of permit T-19-P is occupied by a central graben area bounded to the northeast and to the southwest by half grabens area. To the west is the Mornington - King Island Rise. The remainder of the permit area is mostly occupied by a condensed stratigraphic section.

These major structural elements as well as the prospective lead areas are shown on Map 1. So are the location of the geoseismic cross-sections AA', BB', CC', Figures 1, 2, 3, and the location of the representative seismic lines, Figures 4 to 14. Prospective leads are associated with each of the major structural elements.

The geoseismic cross-sections are based on several seismic lines. The Eastern View Coal Measures and Lower M. diversus reflector horizons are shown. The stratigraphic section below the Lower M. diversus seismic horizons is considered the most prospective.

Geoseismic cross-section AA', Figure 1. trends northeast - southwest. To the left, or southwest, is the Mornington - Kind Island Rise which is bounded to the east by a major basin forming growth fault. The Manatee prospective area occupies the western portion of the central graben. The Mornington-King Island right-lateral, down-to-the east, transverse fault is a late, essentially north-south trending feature which cuts across the countryside regardless of pre-existing structures and relief. To the northeast is the central graben boundary fault. Further northeast, and upthrown, is a half graben and the prospective Seal area. On the basis of reconstruction, the central graben was originally strongly dipping to