

T/2P and T/10P). The method used (sparker profiling and marine magnetics) involved a departure from the usual aeromagnetic survey at this stage of exploration. Using the sparker profiler for section depth and structural leads backed up by marine magnetics for spot determinations of magnetic basement depth was thought to have higher delineation potential than the aeromagnetic method. In particular, information on section thickness, basin configuration and possible structural trap leads was sought.

For the East Gippsland Area, where exploration has progressed past the detailed seismic survey stage, further information concerning the eastern and southern Gippsland Basin margins was desired. The availability of digital instrumentation, an air-gun source and a 24-group streamer on the survey ship permitted detailed surveying of a structural anomaly in T/1P. Five lines were surveyed using this approach in defining this feature. In addition a single multi-coverage seismic line (M60T) was programmed for the south central part of T/1P where previous work was too widely spaced for detecting structural leads.

The objective of the reprocessing work was to clarify the mapped structure (Feature VII) in T/1P by subjecting the field data to the most detailed processing sequence available. A contractor, other than the one who processed the data previously, was used to have a second evaluation of the anomalous area.

F. HYDROCARBON POTENTIAL

1. South Sydney Basin

Very little is known of the hydrocarbon potential of the southern part of the Sydney Basin which seems to extend into the northern part of Magellan's N.S.W. permit. In general, exploration onshore has resulted in small gas