

SECTION ISUMMARY AND CONCLUSIONSA. South Sydney Basin Area

A total of 697 miles of single-fold sparker profiling and 58 miles of air-gun multi-coverage data (with marine magnetics) were obtained and interpreted to establish sedimentary thickness, probable stratigraphy and structural leads. Definition of the Permian section in the northern part of the permit was unsuccessful; only the wedge-like Tertiary section was defined with maximum thickness of about 3,500 feet at the continental slope and thinning east and west.

A domal anticline was delineated near the Victorian-N.S.W. border which appears to be a basement high covering 20 to 25 square miles with 900 feet of relief. The feature is covered by less than 1,000 feet of Tertiary (?) sediments on the crest and flanked by about 2,500 feet of such deposits which indicate little growth during sedimentation.

B. East Gippsland Basin and East Tasmania Areas

Reprocessing of digital data from a 1969 survey and the shooting of 228 miles of sparker reconnaissance and 82 miles of CDP data were carried out to detail Feature VII in T/1P, extend basin configuration of the Gippsland Basin and establish section thickness and structural leads in the East Tasmania Area. Feature VII was subsequently interpreted as an elongate anticline having about 11 square miles of closure and 270 feet of relief. This structure is probably associated with a large basement high, which extends into the west-adjointing permit. Apparently several individual culminations occur on the basement feature, and it is flanked