

northern coast at Port Dalrymple. Certainly, the regional geology shows that the entire shield is basement as far as hydrocarbon exploration is concerned except for the possibility that some of the Permian section may be free of intrusives and metamorphism. The other potential on land would involve apparently thin and very localized Tertiary cover which is particularly present in the Port Dalrymple salient and within the western limb of the arcuate geosynclinal band of lower Paleozoics.

Structure during the Tertiary is pertinent to this discussion. Tectonism during this period resulted in horst and graben structures across most of the Island. These structures, which trend approximately N/S, may persist onto the continental shelf and slope.

Petroleum prospects are possible in Ordovician to Tertiary rocks but the widespread occurrence of Jurassic dolerite intrusions diminishes the prospects in Pre-Tertiary rocks.

VI PREVIOUS GEOPHYSICAL SURVEYS

There has been no previous geophysical activity in the offshore portions of EL'S 17/65, 18/65, 19/65.

VII RESULTS

The results are presented on observed Total Magnetic Intensity Maps compiled by Aero Service Limited and the Magnetic Basement Maps prepared by G.A.P.L. Both are submitted with this report on four sheets at scale of 1 : 250,000.