

I INTRODUCTION:

This report discusses the interpretation of 300 km of new seismic data that were recorded in the Bark Sub-basin of the Tasmanian exploration permit T/15P (Fig 1). Included in the report are detailed reports from the companies involved with data acquisition and processing. All aspects of the survey are discussed in the relative appendices attached hereto.

II REGIONAL SETTING:

The stratigraphy of the Bark Sub-basin is expected to be similar to the stratigraphy of Durroon-1 (Fig 2). The Bark Sub-basin is the westernmost of three sub-basins that comprise the Durroon Basin (Fig 1) as described by Baillie and Pickering (1991). This basin underwent deposition of the Otway Group in Late Cretaceous times, extension during the rifting of Australia from the Antarctic plate, uplift and erosion of the Lower Cretaceous Otway Group during the period 100 Ma to 80 Ma, possible marine incursion (Fig 3) in the early stages of rifting between the Lord Howe Rise and the Australian craton. The area experienced minor

compression, uplift and erosion (post 80 Ma) as the Tasman Sea widened. The area of interest is located in approximately 75 m of water some 35 to 40 km from the north coast of Tasmania. As interpreted the Bark Sub-basin covers an area of approximately 700 km² and includes three unique structural features; the Batman, Strathroy and Ross Blocks.

III GEOLOGICAL SETTING:

Williamson et al (1987) provides a comprehensive geological description of the Bass Basin. It is felt that further discussion of the subject is unnecessary considering the requirements of this report. Baillie and Pickering (1991) complements Williamson et al (1987) by providing a description of the Durroon Basin. The scope of this report does not include a detailed geological description but rather more direct comments regarding the geo-tectonic history of the sequences that relate directly to the stated targets of the Bridge Bass 1990 Seismic Survey.

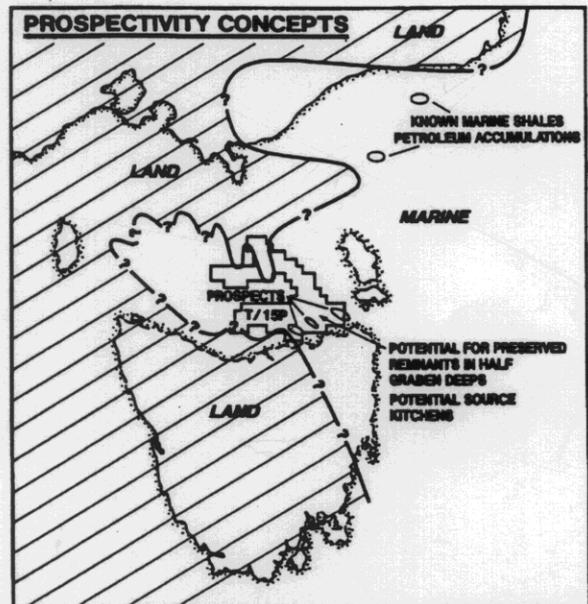


Fig 3. Distribution of the Otway Group