

ABSTRACT

Esso Exploration and Production Australia Inc. carried out the Offshore Otway Basin Marine Seismic Survey in South Australian, Victorian and Tasmanian waters west of the Bass Straits between November 7, 1966 and May 5, 1967. A total of 2,364 miles of six-fold CDP reflection information was recorded. These data, together with 2,618 miles of previous three-fold and single-fold information were used to map the major sedimentary units in the offshore portion of the basin.

Prominent angular unconformities are present on all seismic sections. One of the most widespread marks the base of Tertiary deposition. For the most part there is little structural deformation on this horizon and there is even less in the overlying Tertiary rocks. An exception is found in southern South Australia and north western Victoria where several large gentle Tertiary closures are mapped. Stratigraphic accumulations may also be found in the Tertiary.

The Mesozoic rocks under the pre-Tertiary unconformity are widely folded, faulted and truncated. The hydrocarbon potential of these rocks as well as those of the Tertiary section will be determined by offshore drilling.