

INTRODUCTION

The Eastern Bass Strait Marine Seismic Survey was carried out for Esso Exploration and Production Australia Inc. by Geophysical Service International. The survey commenced on February 14, 1966 and finished on October 14, 1966. The survey consisted of two independent sets of program, one in the Gippsland Basin in PEP's 38 and 39 and EL 1/60 and the other in the Bass Basin parts of EL 1/60 and PEP 40 (frontispiece). Since these are separate geological provinces they can be regarded as two independent surveys and they will be treated as such throughout the interpretive portion of this report.

All the program in the Bass Basin was subsidized.

In the Gippsland Basin, the area within a twenty mile radius of Barracouta A-1 and B-1 wells, was not eligible for subsidy when the original survey application was made and results from the shooting within these circles are not included in this report.

OBJECT OF SURVEY

A) Gippsland Basin

The seismic program in the Gippsland Basin had three main objects:

- i. To further detail the prominent structural features discovered by previous seismic surveys within the Paleocene to Oligocene section.
- ii. To obtain as much valid data as possible from the pre-Paleocene section, especially across the known shallower structural features.
- iii. To obtain reconnaissance seismic information in areas where no previous work had been done, with the object of developing possible structural leads and to better outline the geological framework of the basin.

B) Bass Basin

The seismic program in the Bass Basin had two main objects:

- i. To detail several structural leads found by previous reconnaissance seismic surveys.
- ii. To add to and extend the previous reconnaissance grid around the flanks of the basin, with an object of exploring the possible stratigraphic trap potential of the basin and uncovering additional structural leads.

DATA QUALITY AND RELIABILITY

A) Gippsland Basin

Seismic Data - The interpretation that follows incorporates all the available geological and geophysical information in the area. However its validity is largely influenced by the quality of the seismic data.

Three seismic surveys are incorporated in this interpretation. The previous Haematite Gippsland Marine Seismic Survey and the Esso Gippsland Shelf Marine Seismic Survey have been discussed in earlier subsidy reports.