

## INTRODUCTION:

The Bass basin is situated in the Strait north of Tasmania, in the partial enclosure formed by King Island, the coast of Victoria and Flinders Island. It occupies an area of about 160 x 80 miles (12,800 square miles) elongated northwest-southeast and contains a maximum of 13,000 feet of Tertiary sediments. Water depths of this area range from 150 to 250 feet.

Results of eight months intense study have clarified considerably the geophysical and geological aspects of the basin, revealing several attractive prospects.

The sequence leading to the present detailed study of the Bass basin began in March/April, 1961, when Lewis G. Weeks concluded from regional considerations that a major sedimentary basin could exist in Bass Strait north of Tasmania, between Flinders Island and King Island. Prior to this no one had recognized the potentialities of the area.

In order to verify Mr. Weeks' conclusion, an airborne magnetometer survey was completed by Aero Service Limited in December, 1961. This confirmed the existence of a large basin filled with as much as 12,000 feet of sediments.

The magnetic survey was followed by a reconnaissance seismic survey completed by Western Geophysical Company in May, 1963. (Final Report of August 1963.) The sedimentary thickness indicated by the magnetic data was verified and the general features of stratigraphy and structure were outlined. However, it became apparent that in order to fully evaluate the oil possibilities of the Bass basin a much more detailed study would be necessary.