

I SUMMARY

(a) Drilling

Esso Bass-1 was spudded on July 21, 1965 in Tasmanian waters of the offshore Bass Basin, and after drilling to a total depth of 7717 feet was plugged and abandoned on September 14, 1965.

(b) Geological

The well was drilled on a seismic "build up" anomaly, originally postulated to be a Tertiary carbonate reef complex, but later found to be a volcanic section of pyroclastics. No structural closure was anticipated or encountered. To 6380 feet, the sedimentary section penetrated by Esso Bass-1 consisted essentially of Tertiary marine shales, sandstones, and siltstones, containing probable source and reservoir rock. Upper Cretaceous sands and shales were present from 6380 feet to T.D. at 7717 feet. No commercial hydrocarbons were logged, and the well was abandoned at 7717 feet.

II INTRODUCTION

The Bass Basin, lying entirely offshore Victoria and Tasmania, covers an area of some 25,000 square miles. From magnetic data, it was inferred to contain a thick sedimentary section, which prior to the completion of Esso Bass-1 was almost entirely unknown geologically. From seismic data and extrapolated regional geology, the sedimentary section was thought to include Tertiary sediments favourable for petroleum generation and accumulation. Moreover the initial seismic survey of the basin carried out by Haematite Explorations indicated the presence of a number of abrupt seismic "build ups" within the Tertiary section, possibly equivalent to the Miocene Gippsland limestone. These seismic anomalies were originally interpreted as being reefs. The most basinward of these anomalies was selected by Esso Exploration for detailed shooting, and ultimately provided the location for Esso Bass-1.

The well was thus designed to gain stratigraphic information on the Tertiary and upper part of the Mesozoic sedimentary section in the north central Bass Basin, and, in particular to test the petroleum potential of a postulated reef-type anomaly in the Miocene section.

III WELL HISTORY

(1) General Data

- (a) Well name and number - Esso Bass-1.
- (b) Name & Address of Operator - Esso Exploration Australia, Inc.
G.P.O. Box 4249,
SYDNEY, N.S.W.
- (c) Name & Address of
Tenement Holder - Haematite Explorations Pty. Ltd.
500 Bourke Street,
MELBOURNE, C.I. VIC.
- (d) Details of Petroleum Tenement - E.L. 1/60 issued by the State of Tasmania covering an area of 25,134 square miles. Farmed-in by Esso Exploration Australia, Inc. from Haematite Explorations Pty. Ltd.
- (e) District - Bass Strait 88 miles east of King Island, Tasmania.
- (f) Location - Latitude 39° 46' 18" South
Longitude 145° 44' 3" East