

With almost continued subsidence of the basin and transgressive seas the entire lower and mid Tertiary section is interpreted to pinch out shelfward around the basin. The reconnaissance grid of 100% coverage has delineated the zero edge of the Eocene and Pliocene units and proven the ability of the seismograph to map this wedge.

Interbedded impervious and porous beds where combined with interval thinning and structural configuration as demonstrated in Bass create large potential mechanical stratigraphic traps. Plate II, the Structure Map of the Top of the Eocene, illustrates clearly the ideal structure relationship. The -2000 foot contour on the east side of the basin is cut at both ends by the zero edge of the unit mapped. Therefore, all of the Eocene higher than -2000 feet (that to the east of the contour) is structurally isolated. If the relationship is such that impervious beds are in contact with basement at their onlap edge the seal will be provided for underlying porous beds and potential traps formed.

Two local areas in the western part of the basin may with additional seismic control develop into potential mechanical stratigraphic traps. Magnetics suggest an embayment or trough projecting southward between King Island and Tasmania. The second area is in the northwest part of the basin where fault geometry creates a wedge shaped trough pointing towards the Anglesea area to the north.

#### CONCLUSIONS

The delineation of the regional and local geology has been noticeably improved by this survey. The quality of the data is generally good and reliable interpretations have been made. The objectives of the survey have been met.

Good control in the Gippsland Basin is now established for eleven prospects and four new structural leads have been developed. Extra control needed for six established prospects was obtained, three new prospects were developed from existing leads and two completely new prospects were detected and detailed.

The Bass Basin portion of the survey further defined the stratigraphic possibilities of hydrocarbon entrapment while establishing that the several structural leads detailed were not prospective. Bass has two untested structural prospects, one of which is being tested by Esso Bass-3.