

mapped around line NEF 1 and 2 where the C Horizon was fair to good on all sections. Several changes were made to the previous Horizon C interpretation principally in the area of the previous Basement high.

Generally little difficulty was experienced in tying horizons around the area and the results obtained are considered reliable.

Velocity Studies and Depth Calculations

The average velocity versus two way time scattergrams generated during processing were interpreted and average velocities from water bottom to Horizons A and B were calculated. These results were incorporated with those previously determined for the East Gippsland Basin Area survey and maps of average velocity from water bottom to respective horizon produced. (Plates 4 and 5). Depths to horizons A and B were then calculated by the following formula -

$$d_A = \left(\frac{t_A}{2} - \frac{dw}{V_w} \right) V_A + dw$$

where

- d_A = depth to Horizon A
- t_A = two way reflection time Horizon A
- dw = depth water
- V_w = water velocity (4,850 ft.per second)*
- V_A = average velocity water bottom to Horizon A.

* This was the water velocity used in previous surveys and was