In the case of probe NEF R1 the water bottom was taken from the fathometer chart and Horizons A, B and C plotted from, and interval velocities calculated from the reflection data. Knowing the Basement dip and the observed refractor velocity an estimate was made of the true refractor velocity. Using this refractor velocity (6100 m/s) and the other velocities and depths as above the calculated total travel time from initial buoy position to end of probe was within 40 milliseconds of that observed and the recalculated down dip velocity within 20 m/s of that observed.

Final Reflection Interpretation

Reflection times for the three horizons were converted to depth by the method described in Velocity Studies and Depth Determinations above and three horizons and two isopach maps produced (Plates 6 to 10).

The configuration of all three mapped horizons is one of general east dip. The two deeper horizons B and C show the same general structural configuration. The nose to the north in the region of NEF 1 is separated from the central nose by a low in the area of the junction of Lines M10B and M29B. The central nose divides around a low area in the region of Line NEF 9 and is bounded on its southern side by a massive low in the area of Lines M16T and M18T. Further east plunging nosing is evident south of the latter low. Faulting in the north is generally north-south while in the central and southern area it is northwest - south-east; the main Basement faults pierce the Latrobe Complex horizon. Much of the structure seen on the two deeper Horizons