Finally a vector diagram of the three calculated apparent drifts was made and when analysed showed that the true drift was approximately 18.5 meters per minute almost due south. (Plate 1).

After correction profiles NEF R3 and NEF R3R were interpreted using the Slotnick method (Geophysics vol. 15 pp 163-180, 1950) and the approximate position of the high velocity refractor established. This refractor had a velocity of 5,200 meters per second (17,000ft/s) which is higher than Latrobe Complex and post-Latrobe Complex velocities. Two way reflection times to this refractor were calculated at points where the probe crossed reflection traverses and it was found that these times were close to a continuous reflection occurring below the strong reflection previously mapped as Basement in the area of the probe.

Initial Reflection Interpretation

It had been noted on the playback sections that what appeared to be valid events were occurring below the main Top Latrobe Complex reflection. (Plate 2). However, it was also thought possible that these events may be water bottom multiples of the Latrobe Complex reflection. A portion of Line NEF 11 was chosen where a rapid change in water bottom depth was present and the data played out at varying velocities (Plate 3). It was found that the events noted stacked at a velocity of