

Results showed the high velocities detected by the three useful refraction probes were considerably higher than velocities encountered in either Latrobe Complex or post-Latrobe Complex rocks and that the interface producing these velocities was below the top Latrobe Complex reflection event. The conclusion is that these velocities originate from Basement.

Models constructed from a combination of shallow refraction events and reflection results produced calculated travel times via reflection Basement which agreed very closely with those observed for the high velocity refractors showing that the Basement reflection event chosen had its origin at that unit. Further, the Basement refractor velocity recorded at NEF R1 was considerably higher than at the other two probes and this is consistent with the higher quality of the Basement reflection in the area of that probe.

Despite the favourable distribution of velocities no significant structural closure was found at the top Latrobe Complex level. Two small closures against faults were located, the one against F_1 being approximately 2.0 square miles in area and the one against F_2 being approximately 3.0 square miles. In the case of the latter Oligocene caprock may well be absent. It is therefore concluded that no significant structural traps are present within the area surveyed. Since Latrobe Complex rocks are present over all the area no stratigraphic traps of the total pinchout type were located.