

method. Horizons B and C were added from the reflection results. Average velocity for the interval T to B was calculated at each intersection of the probe with reflection lines by the following formula -

$$\bar{V} = \frac{(d_B - d_T)}{T_B - T_T}$$

where

\bar{V} = average interval velocity Horizon T to B

d_B = depth Horizon B

d_T = depth Horizon T

T_B = one way reflection time Horizon B

T_T = calculated reflection time Horizon T

It was found that within the area of each probe this interval velocity was constant.

The interval velocity Horizons B-C was taken as before at 12,000 feet per second (3,650 m/s).

Using the velocities and depths arrived at above the total travel time between the two initial buoy positions was calculated using a refractor velocity of 5200 m/s (1700 ft/s). For the probe NEF R3 and R3R the calculated time was within 5 milliseconds of the observed time and for the probe NEF R5 and R5R within 20 milliseconds of the observed time. To test the validity of the choice of 5200 m/s for the refractor velocity for NEF R5 the apparent down dip velocity for the Basement configuration used was calculated and was 10 m/s smaller than the observed velocity.