

southern (T/3P) area, the mapping is not reliable, as the structures tend to be smaller than the survey grid. However, there are a number of structural leads, the best being those described below.

- A. Three miles west of Mussel No. 1 is a structure of about 8 square miles, with about 0.070 seconds (approximately 350 feet) of closure.
- B. A nose along Line H03-52 shows up to about 0.050 seconds reversal at its southern end, and at the intersection of this line with H03-60 is a high which shows as a terrace on the .100 second contour interval used.
- C. A high with about 0.050 seconds closure and an area of about 8 square miles is located at the intersection of H03-12 and H03-67 with H03-60.
- D. The area near Prawn No. 1 appears to have at least one high, but the survey grid is too open to adequately map this complex area.
- E. A high at the intersection of H03-28 and H03-42 is mapped with .200 seconds of closure over 16 square miles, although closure to the north is not definitely proved.

In the trough, the unconformity is much less easily picked on the records and the upper and lower Cretaceous may be conformable, with continuous deposition. Because of this, the red horizon is probably not at the top Otway, and it is thought more likely to be picked too shallow than too deep.

The time map shows a NW trending trough approximately along the west end of Line H0-22 which separates a major high trend from the Platform area. This high trend has a closed high of about 15 square miles. In time at least the remainder of the trough shows fairly uniform offshore dip. None of the trough area has close control, and further structures may exist, particularly in the deep water area.

#### Refraction

The sonobuoy refraction profile on Line H03-20 was quite successful, with arrivals at about 15,000 ft/sec being recorded over an offset of approximately 15,000-50,000 feet, although the closest 8,000 feet of this is second arrival data, and may not be the same event.

The interpretation, whose details are given below and in Figures 1 & 2, gave a refractor velocity of 16,910 ft/sec, using the dip from the reflection records to correct the assumed 15,000 ft/sec velocity, which is compatible with the velocity for the Otway Group measured in wells. This refractor is correlated with the Red reflection horizon.