Lithology is suggested by appropriate symbols. Significant features of each section are mentioned in the following paragraphs:

1. Section A-A', Plate I

This section crosses the northwest end of the Otway Basin at a point where the Jurassic (?) rocks are preserved under the pre-Cretaceous unconformity. Truncation traps are possible in the Jurassic, Lower and Upper Cretaceous rocks where these are terminated by erosional contacts. In addition, structural movement in Cretaceous times has produced closed domes in the beds of Lower Cretaceous age and to a lesser extent in the Upper Cretaceous. The dip of the Jurassic bedding is so steep that structural closure is probably not present in this area.

Several uncertainties are present on Section A-A'. The identification of Jurassic age rocks under the Cretaceous is interpretative. The presence of an east-west trough from this section through the Casterton well where Jurassic rocks were found is suggested by gravity data. Calculations of interval velocities in the first 2,000 feet of material under the pre-Cretaceous unconformity gave velocities of around 13,000 ft/sec. This suggests that these rocks are not metamorphosed.

The presence of Upper Cretaceous rocks is also interpretative and is based on a difficult correlation carried from the Geltwood Beach well. No strong angular unconformity is recognized between the Upper and Lower Cretaceous rocks and bedding dips are discontinuous.

A test well is planned on the anticline that lies under the Crayfish location on this section. There was probably some topographic expression at this point on the erosional surface that preceded Lower Cretaceous deposition, however the greater part of the structural relief was developed in Cretaceous times.

2. Section B-B', Plate II

This section shows typical structural development in the north central portion of the offshore Otway Basin. Truncation traps are possible in both the Lower and Upper Cretaceous rocks where these were levelled during the pre-Tertiary erosional period. Local uplift occurred in Oligocene or Miocene times and produced anticlinal closures in the Lower Eocene-Paleocene rocks and to a lesser extent (because of north tilting at the end of Cretaceous times) in the Cretaceous rocks. Horizon identification is considered reliable in this area.

3. Section C-C', Plate III

This section crosses the central portion of the Otway Basin. A strong angular unconformity is present between the Upper and Lower Cretaceous rocks in the offshore portion. Unfortunately poor data quality does not permit this unconformity to be correlated with confidence in much of the area. Truncation traps of Lower Cretaceous beds are possible. The bedding in the Upper Cretaceous is not easily mapped, but truncation traps may also exist in these beds under the pre-Tertiary unconformity. Closed anticlines may have been formed in Lower Cretaceous and older rocks during the deformation that preceded Upper Cretaceous deposition.