

Individual Structures - Herring - This is purely a structural lead. There are indications of structural reversal in the Strezlecki Group, though no closure is evident. This is associated with a basement high. A small amount of closure is also present on the Latrobe topographic surface (Plate IX).

Flounder - This prospect is a basal Latrobe delta structure, best illustrated on the horizon near the top of the Cretaceous (Plate X). Its structural development was arrested during late delta deposition and no closure occurs on the Latrobe topographic surface (Plate IX).

Tuna - This prospect has structural closure throughout all the Latrobe delta section and even a small amount of closure at the top of the Lakes Entrance. Closure on the Latrobe topographic surface is a combination of erosion and structural movement (Plate IX). On the top of Cretaceous horizon it is more complex and is a faulted anticline with two culminations.

Marlin - This structure has closure throughout the Latrobe delta section and a small amount on the top of the Lakes Entrance. The structure within the Latrobe becomes complicated by faulting at depth. At the Latrobe topographic surface the closure is a combination of erosion and structural movement. This condition persists until the base of the major erosion canyon is reached. Below this level closure independent of erosion is still present (Plate X). The structural syncline, as distinct from the erosional syncline, between Tuna and Marlin exists east of the canyon.

Halibut - This structure is similar to Marlin in that it is dependent on the canyon for closure throughout the Latrobe. However below the base of the canyon there is no structural closure.

Mackerel - This structure is essentially an erosional remnant on the Latrobe topographic surface. The deep structural lead on the top of Cretaceous horizon is poorly controlled.

Kingfish - This prospect is a large feature on which the most pronounced movement occurred in the Miocene, though some late Eocene and Oligocene movement also occurred. Thinning of the lower Miocene sediments across the structure is very obvious on the seismic sections. It is also a prominent structure on the Cretaceous horizon and some form of structural feature may have been present in upper Cretaceous time.

Gurnard - This prospect is a separate culmination on the Kingfish-Bream trend and exhibits all the characteristics, on a smaller scale, as the Kingfish feature.

Bream - This prospect is also of the same type as Kingfish and Gurnard except for the presence of a small N-S trending graben which is of Miocene or younger age. This graben bisects the E-W trending axis of the structure.

Dolphin - This is virtually a Latrobe topographic feature only, with no deep prospects. It was formed by a north-south trending stream channel cutting across a later Eocene eastward plunging nose. The erosion surface caused by the channel provides west closure.

Flathead - This lead appears to be an east-west trending faulted anticline that developed during Miocene time.

Sole - This lead, only portion of which is in PEP-38, appears to be a small east-west trending anticline with primary movement occurring during Miocene time.

B) Bass Basin

Generalized Geologic History - The good quality of the seismic data and excellent correlation between reflections and geologic markers in Esso Bass-1 and Esso Bass-2 make possible a reliable interpretation of the