

Reworking by wave action is suggested in the sediment above 2000' (Zonule 6 - top of Middle Miocene). Foraminifera are infrequent and poorly preserved, glauconite is absent and worn, byrozoal fragments make up 90% of the prepared sample. As for the other Bass wells, shallowing of the late middle Miocene and upper Miocene seas is deduced. By the upper Miocene, foraminifera are extremely rare, becoming absent above 1290'. The prepared samples are composed entirely of worn byrozoal fragments. Heavy wave action and even exposure is suggested.

Note on "pyritic tubes": As mentioned in connection with the "barred basin" facies "pyritic tubes" are common in the upper Eocene sediment. Fragments of these tubes are up to 10mm long, with an average diameter of 1mm. The tubes are composed of fine grained pyrite with an irregular internal core of an opaque white, soft waxy substance. When placed in xylol the substance disseminates into fine grains which slowly dissolve. The shape of the tubes could suggest burrows or coprolites of mud-browsing animals. The tubes are always associated with foraminifera including the morphologically simple, non-septate, tube-like Bathysiphon angleseanensis which has finely arenaceous wall structure. This species tends to be transversely flattened apparently due to wall collapse through lack of cement cohesion. If initially the B. angleseanensis tubes were transversely circular, then the average diameter would have approximated that of the "pyritic tubes". These observations are consistent in all 3 Bass wells.

G E O L O G I C A L S E T T I N G

The important conclusion regarding the geological setting of Bass-3 within the Bass Basin, is that the section was in close proximity to edge of the basin, when compared with Bass-1 & 2. This statement is based on the following facts:

- (1) Marine influence is evident earlier in the Bass-3 sequence.
- (2) Upper Eocene marine break-throughs are more widespread in the Bass-3 sequence.