

and benthonic species, but an intervening side wall core was barren. The presence of Cerobertina kakahoica was anticipated at 4700' but this upper Eocene species was not found, although it characterizes the equivalent level in Bass-1 & 2.

UPPER EOCENE facies fauna: 4794' to 5175' - An arenaceous Haplophragmoides fauna was present sporadically in both side wall cores and core-5 (5009' to 5039'). This equates with the "unnamed unit" in the previous Bass sections. The upper Eocene age for this interval is inferred as it is within the same lithological unit (ie. the Demons Bluff Formation) as the side wall core at 4794' which contains a diagnostic upper Eocene fauna.

BASE of FORAMINIFERAL SEQUENCE: The deepest level containing determinable foraminifera is at 5175'. Glauconitic moulds in the sandstone of core-6 (5315' to 5336') have globigerinid form, but this preservation precludes positive identification and thus comment regarding age. No trace of fauna was found in core below 5336' and the side wall cores were not examined because of the risk of wasting poor recoveries. No new fauna was isolated from cutting samples below 4800'.

#### DEPOSITIONAL HISTORY

The Bass-3 sequence will be compared with the Bass-1 sequence of 4 broad biofacies discussed by Taylor (1965).

In Bass-3, the earliest record of marine influence is the glauconite and glauconitic moulds in core 6 (5315' to 5336': rec.100%). This could indicate a marine embayment or tongue into the broadly non-marine environments encountered at equivalent levels in the other Bass sequences.

"Barred basin" conditions are evident between 5175' and 4794' from the dominance of the arenaceous Haplophragmoides assemblages.