

Micropaleontological report on Oudit 2
bore (6 miles S of Cressy)

Percussion samples between 10 and 700 feet in Oudit 2 bore were examined micropaleontologically by the writer in May, 1970, at the request of B.R. Thompson. Selected samples (listed in brackets below) were prepared for detailed investigation.

Depth

10' -70' (10', 20', 30', 40', 50', 60', 70')

The sediments consist largely of light olive grey, somewhat calcareous, sandy clay and less common clayey sand. Gastropod fragments are present. The foraminiferal fauna is unusual and consists almost entirely of Elphidium sp. (especially abundant in the 40' sample). Other forams are very rare; apart from a few other nondescript specimens, a specimen apparently representing a juvenile Globoquadrina dehiscens was observed in the 60' sample. A few ostracods are also present in the microfauna.

80' moderate yellowish brown clayey sand with rounded "buckshot".

90' greyish orange sandy clay with rounded "buckshot" and soft white fragments.

(80', 90') Rare Elphidium sp. present.

100'-700' (100', 110', 120', 130', 250', 300', 390', 490', 600', 700')

The strata comprise pale to dark yellowish brown clayey silt to very fine sand, commonly calcareous. Foraminiferal faunas are fairly rich and diversified, except in the 110' sample in which only a few planktonics and Elphidium sp. were observed. In respect to stratigraphically significant planktonics, the lowest sample (700') contains Globigerinoides trilobus and Globoquadrina dehiscens; higher in the sequence Globigerinoides bisphericus appears (some approaching G. glomeratus in the 120' samples).

Comments

The strata between 700' and 100' represent Gellibrand Marl (= Fyansford Formation in the Geelong area) and are mid-Longfordian, (Garter's Faunal Unit 7) to upper Longfordian, probably Batesfordian (FU 8 to 9) in age (in the absence of Lepidocyclina, a Batesfordian age of the upper strata cannot be decisively established).

Lithological evidence suggests that the beds represented by the 80' and 90' samples are non-marine in origin. The rare forams appear to be contaminants.

Sediments between 10' and 70' were deposited in a restricted, near-shore marine environment. Elphidium sp. has not been specifically identified at the present; it is not one of the commonly recognized Tertiary species. The age of these beds has not been reliably determined. The presence of what appears to be G. dehiscens suggests that, at least in the lower part, these strata are no younger than late Miocene to very early Pliocene (Cheltenhamian).



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