(datum = + 102')









Scale = 1" : 100'

N.B. Based on detailed examination of 150 samples. Complete faunal distribution chart available, with outcrop faunas also shown.

COMMENTS:

This bore section is a vital one in the understanding of the western Victorian basal Tertiary section, as it intersects the full coastal section of Baker. In parts the coastal section poorly exposed or completely covered.

(I) This would include most of the "covered interval" of Baker. It is fairly conclusive that Upper Eccene sediments are present although the richly fossiliferous marls = the upper part of the Browns Ck. Clays, do not appear to be represented as they would cause extreme "mud contamination". It is therefore postulated that part of the upper Eccene was either not deposited or was removed before the deposition of the Janjukian. Core recovery from 199 to 230' is 100% and this interval contains no definite upper Eccene fauna, although upper Eccene forms appear in cores and mud contamination below this.

Paleocene foraminiferal sequence can be divided into four units. The status of these units are at present dubious, so have been designatedlas. I "faunas" with a prefixes relating them to similar faunas from outcrop samples in the coastal section. These faunas can be used for correlation between the bore and the coastal section and have some lateral significance, especially in the case of the "Rivernook Fauna" which has short ranging planktonic species. These faunas are obviously facies controlled as is clearly shown the plots of the foraminiferal counts; see sheet 3.

(II) PRINCETOWN FAUNA - The culmination of Paleocene marine sedimentation. The fauna is sparse and bares little similarity to the Pebble Point and Rivernook faunas.

(III) TROCHOCYATHUS FAUNA - marked by a 30 foot thick internal rich in foraminifera, but contain species common to all faunas in section. Indicates marine ingression. The rest of the interval has few foraminifera.

(IV) RIVERNOOK FAUNA - Distinct from Pebble Point fauna and rich in planktonics. Mainly species retricted to this interval. Base is marked by green clay containing 80% planktonics - similar to outcrop. (V) PEBBLE POINT FAUNA - In outcrop this fauna can only be obtained from 15' shelly band, but from bore section it evidently extends higher. The incoming of the Rivernook Fauna replaces many species. McGowran (1962) regards the Pebble Point fauna as being middle Paleocene.

N.B. This work has been based on studies by Dr. B. McGowran on Australian Paleocene foraminifera including the Pebble Point & Rivernook faunas from outcrop samples.



Latrobe. Sheet 3.

Frequency distribution of Paleocene Foraminifera in Latrobe No.1 Bore. Plots B to G af species groups are cumulative percentages in terms of the entire foraminiferal population. 200 gms. each sample prepared - sample spacing at 5' intervals where possible. N.B. Visual correspondence (reversal) between plots and resistivity curve on E-log.

> David J Taylor. 1-7-64