



PE990110

PRELIMINARY PALYNOLOGICAL EXAMINATION, SHERBROOK NO. 1 BORE

Bore core from the Sherbrook No. 1 bore was treated by the hydrofluoric acid - Schulzes solution method, and the acid insoluble residue examined for microfossils.

Results of examination are tabulated.

<u>Core No.</u>	<u>Depth (feet)</u>	<u>Characteristic Microfossils</u>	<u>Sedimentation Environment</u>
3	1305-29	<u>Wetzeliella homomorpha</u>	Marine
5	2280-93	<u>Proteacidites</u> , <u>Nothofagus</u> etc. sporomorphs. Much cellular debris.	Terrestrial
6	2902-21	Few microfossils isolated.	?Marine
8	3281-3501	Few microfossils isolated.	?Marine
9	3365-78	<u>Odontochitina</u> <u>cribropoda</u> .	Marine
10	3596-3602	<u>Odontochitina</u> <u>cribropoda</u> .	Marine
11	?	None isolated.	?
12	4042-49	(Upper Mesozoic micro- (spores and unidentified	?Marine
13	4049-64	(fragile dinoflagellate?	
14	4064-66	None isolated.	?Marine
17	4316-21	None isolated.	?Non Marine
18	4325-7	None isolated.	?Non Marine

Remarks:

Wetzeliella homomorpha, the characteristic form in Core 3 (1305-29 feet) was originally described from the Princetown member of the Dilwyn Clay regarded by Deflandre and Cockson (1955. Aust. Jour. Mar. & F. Wat. Res.), as Lower Eocene in age.

In core 9, the microplankton assemblage with O. cribropoda characteristic, indicates Upper Cretaceous sedimentation. The base of the Upper Cretaceous is more obscure, but pre Upper Cretaceous non marine sediments would appear to have been penetrated in Cores 18 (4325-7 feet), and 17 (4316-21 feet). Comparison of microfloras with those present in Fergusons Hill No. 1 well will be made on receipt of preparations.

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