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PALYNOLOGICAL EXAMINATION OF

PETER BOROUGH BORE CORE SAMPLES.

B1B22589

MAX 1. 44

Palynological Examination of Peterborough Bore Core Samples.

Sample Description:

| Locality: | Parish of Narrawaturk |
|------------|-----------------------------|
| Bore No: | 2 |
| Depth: | 4494 - 4500 feet |
| Rock Type: | Banded brown and grey sandy |
| | mudstone. |
| Date: | 20.9.61. |

Preparation Method:

Hydrofluoric acid - Schulze's Solution, with acid insoluble residue mounted in safranin stained glycerine jelly.

Remarks:

An extensive microplankton assemblage included the following Dinoflagellata.

> Deflandrea sp, indet. Nelsoniella cf. N.aceras Gonyaulax cf. G.muderongensis and in addition Epicephalopyxis indentata and Odontochitina cribropoda taxonomic position uncertain.

Hystrichospheres including Hystrichosphaeridium pulcherrimum and another type belonging to the Hystrichosphaeridium complex group, but with shorter and less expanded processes than previously described Victorian forms, were also isolated.

-Dicotyledonous (pollens including Triorites edwardsi, Proteacidites sp., Nothofagus sp., Myrtaceidites sp. were also present.

These latter, and the Epicephalopygis species above are typically Lower Tertiary species but are found to some extent in Upper Cretaceous sediments in the Western District, especially in basal sediments of the lithological sequence known as the Paaratte Group.

Although some of the microplankton listed above have a range through the Cretaceous, I consider that the complete acid insoluble microfossil assemblage indicates an Upper Cretaceous age.

As - Geologist.

<u>21st September, 1961.</u> 0_0