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DEPARTMENT OF NATIONAL DEVELOPMENT BUREAU OF MINERAL RESOURCES GEOLOGY AND GEOPHYSICS

RECORDS

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MICROPALAEONTOLOGICAL EXAMINATION OF ROCK SAMPLES
FROM MARGARET BAY, NORTHERN TERRITORY

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The samples from Margaret Bay were collected by H. B. Owen during a recent visit to the northern coast of Australia. The collection was made with the hope that microfossils may be found in the rocks which were collected from a twenty foot section exposed at Margaret Bay. Mr. Owen indicated the following sequence of samples.

The top of the cliff consisted of approximately 10 feet of massive ferruginous rock. The first sample MB.12 was taken from the "mottled zone" near the base of the laterite, and it consisted of lateritic particles.

This bed is underlain by a silty clay from the "pallid zone" which is represented by sample MB.18. The only microfossil present was a well preserved valve of an ostracod which is identified as Cythereis cf. triplicata (Roemer), a species found in the Cretaceous beds of England. A fragment of a gasteropod shell was also present. This silty clay is characteristic of some of the Lower Cretaceous deposits in Northern Australia.

The silty clay bed is underlain by a ferruginous sandstone with clay bands, which is represented by MB.17. The washings consisted entirely of angular to subangular quartz grains, many of which are stained red and brown.

The base of the section consisted of sandstone and the sample MB.19 was taken 5 feet below MB.17. The sandstone consisted of angular to rounded grains of clear quartz with a yellowish tinge. Although no microfossils were present in MB.17 and MB.19, it is suggested that they are probably of Mesozoic age.