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FOSSILIFEROUS ROCKS FROM THE OK TI RIVER,  
WESTERN PAPUA

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by

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FOSSILIFEROUS ROCKS FROM THE OK TI RIVER,  
WESTERN PAPUA.

Report No.1943/48.

The collection of fossiliferous rocks from the Ok Ti River, Western Papua, was made by Mr. L. Austin in 1922 and is housed in the Commonwealth Palaeontological Collection. It consists of shelly and foraminiferal mudstones and grits of Pliocene age and of foraminiferal limestones of Miocene age. One limestone of Lower Miocene was described by me in Palaeontological Bulletin No.3 in 1938.

The present examination of the remainder of the collection is being undertaken at the request of the Australasian Petroleum Company Melbourne.

The specimens referable to the Pliocene and the Lower Miocene limestone of Pal.Bull.No.3 were found in situ while the limestones herein described were collected as pebbles from the stream.

A detailed examination of the specimens is given below and the locality descriptions are as quoted by Austin.

1. "Right Bank, Ok Ti River".

- (a) Metula boettgeri Martin.  
cf. Meretrix.
- (b) Chama cf. simplex Martin.
- (c) Voluta cf. grooti Martin.
- (d) Glycymeris sp.
- (e) Turritella bacillum Keiner.
- (f) Dentalium junghuhni Martin.  
Mactra sp.
- (g) Toredo sp.
- (h) Hard, fossiliferous, gritty mudstone with quartz pebbles, fragments of corals and Tellina sp.

Washed matrix from fossils (a) to (g) contained grains of glauconite (with glauconitic replacement of foraminifera), magnetite, small broken crystals of transparent green and black minerals, foraminifera, mollusca and ostracoda.

FORAMINIFERA - Quinqueloculina seminulum, Bolivina hantkeniana, Gypsina globulus, Streblus beccarii, Elphidium craticulatum, E. advenum.

GASTEROPODA - Natica marochiensis.

CIRRIPIEDIA - Balanus sp.

DECAPODA - Crab claws.

OSTRACODA - Bairdia subdeltoidea, Cythere lepralioides, C. quadriaculeata, C. sp., Loxoconcha australis, Xestoleberis variegata.

The fossil assemblage in this sample is similar to that found in "g" to "h" stage rocks in the area.

II. "Lower Slopes of Mountain immediately North of Suspension Bridge on the Ok Ti River".

Hard, fawnish, foraminiferal mudstone with foraminifera (Textularia sp., Bolivina sp., Siphogenerina striata, Globigerina bulloides, G. inflata, Globigerinoides trilobus, Orbulina universa, Globorotalia menardii, Planorbulinella larvata, Planorbulina mediterraneensis, Rotalia schroeteriana, Eponides praecinctus), cidaroid spines and ostracoda (Cythere sp.) present in thin section.

This rock is most probably referable to "g" stage.

III. "From Creek Leading to the Northernmost Point above Suspension Bridge on Ok Ti River".

(a) Pebble, consisting of hard, greyish, crystalline limestone, with Lithothamnium ramosissimum and Neoalveolina cf. pygmaea in thin section.

(b) Pebble, consisting of hard, fawnish-grey, foraminiferal limestone with numerous Miliolines including Austrotrillina howchini also Neoalveolina cf. pygmaea (common) and Sorites cf. martini in thin section.

Both of these limestones belong either to the top of stage "e" or basal stage "f". Neoalveolina was recorded as rare in the limestone described in Pal. Bull. No. 3 which was referred to stage "e", but in the present sample it is common. Austrotrillina howchini occurs in rocks in the area chiefly at the top of stage "e" and in stage "f".

A limestone similar to (a) is recorded from the Palmer River but there is none directly comparable in the Commonwealth Palaeontological Collection with (b).

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