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MICROPALAEONTOLOGICAL EXAMINATION OF ROCK SAMPLES FROM
PIDINGA, SOUTH AUSTRALIA

BY

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**Micropalaeontological Examination of Rock
Samples from Pidinga, South Australia.**

**Report No. 1949/93.
Pal. Ser. 17.**

- No. 16. Unfossiliferous, silicified limestone.
No. 17. Quartzite.
No. 18. Ochreous sandstone with bands of limonitic material.
No. 19. Hard foraminiferal limestone.

Plantae: Lithothamnium ramosissimum

Foraminifera: Marginopora vertebralis
Quinqueloculina sp.
Triloculina tricarinata
Valvulina cf. fusca
Small miliolidae indeterminate

- No. 115. Hard foraminiferal limestone.

Foraminifera: Austrotrillina hochini
Bolivina cf. folia
Cibicides refulgens
Elphidium cf. adelaidsensis
Marginopora vertebralis
Planorbulina mediteranensis
Rotalia cf. calcar
Triloculina tricarinata
Small miliolidae
Small rotalines

- No. 116a. Pinkish to reddish sandy clay with fine angular, quartz grains and a little gypsum.
No. 135. Coarse, shelly sandstone with broken tests of foraminifera.

Foraminifera : Marginopora vertebralis

- No. 136. Whitish sandy clay, with fine angular quartz grains.
No. 137. Fine, sandy clay with fine angular quartz grains.
No. 138. Dark brownish sandstone.
No. 146. Angular to rounded quartz grains in dense silty matrix. The section is too thick to determine definitely the shadows of rounded bodies as radiolaria.

NOTES ON THE SAMPLES.

Only three of the rock samples, Nos. 19, 115 and 135 from Pidinga contain definite microfossils and these are characteristic of the Tertiary rocks west of Adelaide.

No. 135 is a shelly sandstone containing Marginopora vertebralis. The rock is regarded as Lower Pliocene in age and as an equivalent of the fossiliferous beds of Hallett Cove, South of Adelaide, and of the "Adelaidean" deposits which underlie the Adelaide Plains.

Nos. 19 and 115 represent the Middle Miocene limestone which is typical of many outcrops west of Adelaide especially on the Nullabor Plains. Austrotrillina howchini is common in slide No. 115 where it is associated with Marginopora vertebralis. Although Austrotrillina howchini is not present in the two small sections of No. 19 sent for examination, the lithology and mode of preservation of the foraminifera suggests if further sections were available this form would be found. Occurrences of this type of rock west of Adelaide were given in a recent paper by the writer in the Transactions of the Royal Society of South Australia, vol. 72, 1948.

There is no fossil evidence to suggest the age of samples Nos. 16, 17, 18, 116a, 136, 137, 138 and 146. No. 17 most probably represents the Pleistocene quartzites which cover much of the area in the vicinity of Pidinga. The lithology of Nos. 18 and 146 suggests that they belong to the porcellanite horizon which occurs at the top of the Lower Cretaceous over a wide area of Northern South Australia and Northern Territory.

No suggestion as to age is available in Samples Nos. 16, 116a, 136, 137 and 138.


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