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COMMONWEALTH OF AUSTRALIA

DEPARTMENT OF NATIONAL DEVELOPMENT
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GEOLOGY AND GEOPHYSICS

RECORDS

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REPORT OF MICROPALAEONTOLOGICAL EXAMINATION OF
SAMPLES FROM THE 16 MILE GOVERNMENT BORE
WEST OF ALICE SPRINGS, NORTHERN TERRITORY

by

I. Crespin.

REPORT OF MICROPALAEONTOLOGICAL EXAMINATION OF
SAMPLES FROM THE 16 MILE GOVERNMENT BORE,
WEST OF ALICE SPRINGS, NORTHERN TERRITORY.

Record No. 1950/48

Seven samples were received from the above bore, 16 miles west of Alice Springs and were forwarded for examination by Mr. H.A. Harvey of Zinc Corporation Ltd. These samples came from a bore in which lignite was encountered between the depths of 400 and 500 feet. Only three of them were marked with definite depths; the others were collected from dumps. The majority of the samples contained no microfossils.

A detailed description of the samples is as follows :

A. Specimens labelled with depths.

580-590 feet. Bright green, glauconitic siltstone with fragments of fine grained dolomite containing some clay and a few grains of clear, angular quartz. No microfossils.

600 feet. Fine to coarse angular quartz grains. No microfossils.

640 feet. Fine siltstone with angular quartz grains and carbonaceous fragments. No microfossil.

B. Miscellaneous samples.

1. Lignite.

2. "Chips of strata from various depths, accumulated by driller on top of 44 gallon drum at bore".

Fragments of gypsum, dark grey siltstone and numerous ophorical bodies referred to radiolaria, fragments of molluscan shells and an ostracod.

3. "Odd pieces of puggy conglomerate found amongst lumps of lignite sludge. Depth unknown".

Sample, when washed, similar to 580-590 feet.

Note on the Samples

It is suggested that the samples are most probably of Lower Cretaceous age. The glauconitic material is similar to that found in the lower part of the Lower Cretaceous in the Great Artesian Basin.

The only sample which can be correlated with material previously examined from the area is No. 2. It contains numerous ophorical bodies which are referred to radiolaria and is similar to the sample examined from the depth of 200-250 feet in a bore on Bond Springs Station, 16 miles west of the 16 mile Government Bore, reported upon for Zinc Corporation Ltd. on 8th September, 1948.

Radiolaria are common in the Lower Cretaceous deposits in the Great Artesian Basin and in the North-West Basin, Western Australia.

J. Crespin

(J. Crespin)

Commonwealth Palaeontologist.