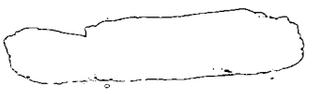
COMMONWEALTH OF AUSTRALIA.



DEPARTMENT OF NATIONAL DEVELOPMENT.

BUREAU OF MINERAL RESOURCES
GEOLOGY AND GEOPHYSICS.

RECORDS.

1958/62

OUTCROP SAMPLES FROM WESTERN QUEENSLAND

by

Irene Crespin

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The specimens examined were forwarded by Mr. J. N. Casey from outcrop localities on the Mt. Whelan and Springvale 4-mile sheets. One outcrop sample W32 does not appear on the list received from Mr. Casey and no further information was available on the label in the bag.

Lower Cretaceous foraminifera were common in sample labelled W.32, W.40 and Peanungra Well. Radiolaria were also present in W.32.

S.25 from the Springvale 4-mile sheet contained freshwater ostracoda, most probably of Tertiary age.

Because of the absence of calcareous forms in the Lower Cretaceous foraminiferal assemblages given below, it is probable that the samples containing these rich assemblages of arenaceous forms can be referred to the topmost zone of the Lower Cretaceous section in the Great Artesian Basin as suggested by Crespin (1956) after an exhaustive examination of the assemblages in many water bores in northern New South Wales.

Detailed Examination of Samples

1. Peanungra Well, Mt. Whelan 4-mile Sheet

Bluish grey sandstone with some glauconite and arenaceous foraminifera in washings.

Foraminifera: *Ammobaculites fisheri* Crespin
A. cf. *subcretaceus* Cushman and Alexander
Ammodiscus cretaceus (Reuss)
Haplophragmoides chapmani Crespin
Proteonina sp.
Reophax deckeri Tappan
Spiroplectammina sp.
Textularia sp.
Trochammina sp.

It was unexpected to find such a rich assemblage of Lower Cretaceous arenaceous foraminifera in this coarse sandstone. Many of the tests were well-preserved.

2. W.40. Mt. Whelan. Mt. Whelan 4-mile sheet

(1) Whitish and purplish siltstone containing poorly preserved arenaceous foraminifera and radiolaria (*Dictymitra*?).

(2) Bluish green claystone containing abundant glauconite grains and numerous arenaceous foraminifera.

Foraminifera: Ammobaculites fisheri Crespin
A. minimum Crespin
A. australe (Howchin)
A. cf. subcretaceus Cushman and Alexander
Ammodiscus cretaceus (Reuss)
cf. Dorothia filiformis (Berthelin)
Flabellammina sp.
Haplophragmoides chapmani Crespin
cf. Proteonina
Reophax deckeri Tappan
R. minuta Tappan
Spiroplectammina edgelli Crespin
S. sp. nov.
Trochammina raggatti Crespin
Verneuilina howchini Crespin
V. sp. nov.

The tests of many species were unusually large and well-preserved. Such preservation has not been met with previously in any Lower Cretaceous material examined.

W.32. Location not listed.

Siltstone containing abundant gypsum, glauconite, arenaceous foraminifera and iron-stained tests of radiolaria.

Foraminifera: Ammobaculites minimum Crespin
Ammodiscus cretaceous (Reuss)
Haplophragmoides chapmani Crespin
H. cf. concava Chapman
H. dickensoni Crespin
H. sp.
Hyperammina sp.
Spiroplectammina edgelli Crespin
Siphotextularia sp.
Verneilina howchini Crespin

Radiolaria: Dictyomitra sp.

The replacement of the siliceous tests of radiolaria with ?hematite has not been met with previously in any radiolarian assemblage. The above assemblage is typically Lower Cretaceous, and is similar to that found in the Windalia Radiolarite in the Carnarvon Basin, Western Australia.

W.34a. Mt. Whelan 4-mile sheet

No fossiliferous evidence was available for the age of this sample.

S.25. Springvale 4-mile sheet.

a. Chert with abundant ostracoda.

These ostracoda were examined by P. J. Jones who said that they were probably related to the family Cyprinidae. This family is well represented in freshwater deposits. The age of the rock is most probably Tertiary.

d. Fine white to cream sandstone. No fossils.

REFERENCE

Crespin, Irene, 1956 - Distribution of Lower Cretaceous Foraminifera in Bores in the Great Artesian Basin, Northern New South Wales. J. roy. Soc. N.S.W., 89, 78-84.