
DEPARTMENT OF NATIONAL DEVELOPMENT
BUREAU OF MINERAL RESOURCES
GEOLOGY AND GEOPHYSICS

RECORDS:

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REPORT ON THE MICROPALAEONTOLOGICAL EXAMINATION OF SAMPLES OF SCOUT HOLES
D.W. 1 and D.W. 1B (Wiso Basin)

by

G.R.J. Terpstra

The information contained in this report has been obtained by the Department of National Development, as part of the policy of the Commonwealth Government, to assist in the exploration and development of mineral resources. It may not be published in any form or used in a company prospectus without the permission in writing of the Director, Bureau of Mineral Resources, Geology and Geophysics.

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SUMMARY

Core samples from the Scout Holes D.W.1 and D.W.1-B, Northern Territory contained faunas of Lower Cretaceous (probably Aptian) age.

INTRODUCTION

Core samples have been submitted by M.A. Randal for micropalaeontological examination from the Scout Holes D.W.1 and D.W. 1-B located in the Northern Territory. The samples contain arenaceous foraminifera indicative of the existence of marine beds of Lower Cretaceous age.

OBSERVATIONS

Scout Hole D.W.1 18½ miles W.N.W. of Hidden Valley Homestead,
Northern Territory. 1:250.000 Sheet SE/53-1
Latitude 16°24' S, Longitude 132°41'E

Core No. 1 17' - 17'2"
(15 - 24'6")
Trochammina depressa Lozo 1944
Trochammina raggatti Crespin 1944
Inoceramus prisms
± 24'
Trochammina depressa Lozo 1944
Verneuilinoides kansasensis Loeblich & Tappan 1950
Inoceramus prisms

Core No. 2 90'5" - 90'7"
(90' - 95')
Ammobaculites erectus Crespin 1963
Haplophragmoides cf. gigas Cushman 1927
Trochammina depressa Lozo 1944
Verneuilinoides kansasensis Loeblich & Tappan 1950
92'5" - 92'9"
Ammobaculites erectus Crespin 1963
Trochammina depressa Lozo 1944
Trochammina sp.
Verneuilinoides kansasensis Loeblich & Tappan 1950
Verneuilina sp.
94'11" - 95'
No Foraminifera
94'2½" - 94'5½"
Haplophragmoides sp.
Reophax sp.
Verneuilina sp.

Core No. 3 210'7" - 210'9"
(210 - 219'6") Ammobaculites sp.
Haplophragmoides cf. gigas Cushman 1927
Trochammina sp.
215' - 215'7"
Ammobaculites subcretaceous Cushman & Alexander 1930
Ammobaculites cf. succinctus 1963 Crespin
Dorothia sp.
Textularia cf. anacooraensis Crespin 1953
218'4" - 218'7"
Haplophragmoides sp.

Scout Hole D.W. 1 B 18½ miles W.N.W. of Hidden Valley Homestead,
Northern Territory. 1:250,000 Sheet SE/53-1
50 yards east of D.W. 1
Latitude 16° 24' S, Longitude 132° 41' E

Core No. 1 258'5" - 258'6"
(258' - 266') Verneuillina howchini Crespin 1953
260' 10" - 261'3"
Miliammina sproulei Nauss var. gigantea Mellon & Wall 1956
Textularia sp.
Verneuillina howchini Crespin 1953
263'1" - 264'
Verneuillina howchini Crespin 1953
264'4" - 264'6"
Haplophragmoides sp.

Cuttings 268' - 270'
Miliammina sproulei Nauss. var. gigantea Mellon & Wall 1956
Textularia sp.

Cuttings 270' - 280'
No Foraminifera

BIOSTRATIGRAPHY

The identifications, as given above, are based on comparing the material with the types in the B.M.R. collections described by Dr. I. Crespin. The stratigraphical information on these species (Bull. 66) is as follows:

A. erectus Crespin 1963, Lower Wilgunya

A. subcretaceous Cushman and Alexander, 1930

A. succinctus Crespin 1963, Lower Cretaceous

H. gigas Cushman 1927, Upper Longsight sandstone and Lower Wilgunya

M. sproulei Nauss var. gigantea Mellon & Wall 1956, Lower Cretaceous

Textularia anacooraensis Crespin 1953, Lower Wilgunya

Trochammina depressa Lozo, 1944, Lower Wilgunya, Tambo

Trochammina raggatti Crespin 1944, Upper Longsight Sandstone

Verneuilina howchini Crespin 1953 Lower Wilgunya

Verneulinoides kansasensis Loeblich and Tappan, 1950

Upper and Lower Wilgunya.

In a recent publication on material of the Great Artesian Basin in South Australia Dr. Ludbrook (1967) renamed some of these species and gave the following biostratigraphical information:

A. erectus Crespin 1963, Aptian-Albian

Miliammina sproulei Nauss var. gigantea Crespin/non Mellon & Wall

renamed: Miliammina inferior Ludbrook sp. nov. Lower Aptian

Haplophragmoides gigas Crespin (non Cushman)

renamed: Haplophragmoides audax Ludbrook sp. nov. Aptian to base Albian

Textularia anacooraensis Crespin 1953, Lower Aptian

Trochammina raggatti Crespin 1944, Lower Aptian

Verneuilina howchini Crespin 1953 Aptian-Albian

Verneulinoides kansaensis Crespin/non Loeblich and Tappan

renamed: Verneulinoides crespinae Ludbrook sp. nov. 1967, Aptian-Albian

From this combined stratigraphical information it may be concluded that these faunas, although present in small quantities only, indicate strata of fairly low-Lower Cretaceous (presumably Aptian) age.

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