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FORAMINIFERA FROM A.A.O. WESTGROVE NO. 1 WELL,

QUEENSLAND.

by
A.R. Lloyd



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Ъу

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CONTENTS

	Page
SUMMARY	1
INTRODUCTION	1
OBSERVATIONS	1
REFERENCES	7

PLATE 1: DISTRIBUTION OF SELECTED FORAMINIFERA IN A.A.O. WESTGROVE NO. 1.

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SUMMARY

Ninety two selected samples of cores and cuttings from A.A.O. Westgrove No.1, Surat/Bowen Basin, Queensland, have been examined for Foraminifera. No Foraminifera were found in the Jurassic, but the Permian species have been graphically logged for future use in correlation.

INTRODUCTION

Ninety two selected samples of cores and cuttings from A.A.O. Westgrove No.1 Well, Surat/Bowen Basin, Queensland, were examined for Foraminifera. Other microfossils found are also listed. The examination was carried out to find the distribution of Foraminifera. The samples were selected at 30 feet intervals where possible.

The information in this report is taken from Appendix 2 of the A.A.O. Westgrove No.1 Well completion report and is being reproduced here as a basis for future biostratigraphical correlations.

OBSERVATIONS

Each sample of cuttings from 120 - 250 feet inclusive, from the Jurassic section, was examined to check of the marine horizon containing Foraminifera and Hystrichospherids in Moonie No.1 Well (Evans, 1962) was present at Westgrove, but all samples were found to be barren.

The following summarised results were obtained from the Permian section. The specimens of Foraminifera were rare, and with a few exceptions were broken or poorly preserved.

Plate I illustrates the distribution of the more important Foraminifera in the well.

Core 1: 1631-1632 and 1639-1640 feet.
Barren.

<u>Core 2</u>: 2120-2122 feet. Barren.

<u>Core 3</u>: 2125-2126 feet. Barren.

Cuttings 2300 feet.

Abundant Productid fragments; ?Gastropod fragment.

Cuttings 2330 and 2360 feet.

Abundant Productid fragments.

Cuttings 2390 feet.

Abundant Productid fragments.

Foraminifera:

Nodosaria sp.cf. N.crassula Crespin 1958.

Cuttings 2420 and 2450 feet.

Productid fragments.

Cuttings 2480 feet.

Productid fragments; Bryozoa; Echinoid spine fragment .

Foraminifera:

Nodosaria raggatti Crespin 1958.

Cuttings 2510 feet.

Productid fragments.

Foraminifera:

Geinitzina triangularis Chapman & Howchin 1905.

Cuttings 2540 feet.

Productid fragments; Ostracod; ?Hydrozoan.

Foraminifera:

?Rectoglandulina sp.

Cuttings 2600 feet.

Productid fragments; Gastropod.

Foraminifera:

Rectoglandulina sp.aff. R.serocoldensis (Crespin) 1945.

Cuttings 2630 feet.

Productid fragments.

Foraminifera:

Bathysiphon sp.

Ammodiscus sp.cf. A.erugatus Crespin 1958.

Core 4: 2666 feet.

Foraminifera:

Ammodiscus sp.cf. A.erugatus Crespin 1958.

Core 4: 2674 feet.

Productid fragments.

Foraminifera:

Geinitzina triangularis Chapman & Howchin 1905.

?Haplophragmoides sp.

?Ammobaculites sp.

Cuttings 2690 feet.

Foraminifera:

Ammodiscus sp.cf. A.erugatus Crespin 1958. Dentalina sp.

<u>Cuttings</u> 2720 - 2810 feet.

Productid fragments.

Cuttings 2840 feet.

Productid fragments.

Foraminifera:

Ammodiscus sp.cf. A.erugatus Crespin 1958.

A. sp.cf. A.multicinctus Crespin & Parr 1941
Bathysiphon sp.

Cuttings 2870 feet.

Productid fragments.

Foraminifera:

<u>Frondicularia aulax</u> Crespin 1958 <u>F. sp.aff. F.impolita</u> Crespin 1958. <u>Nodosaria raggatti</u> Crespin 1958.

Cuttings 2900 feet.

Barren.

Cuttings 2930 and 2960 feet.

Productid fragments.

Cuttings 2990 feet.

Productid fragments.

Foraminifera:

Rectoglandulina sp.aff. R.serocoldensis (Crespin) 1945. Eathysiphon sp.

Cuttings 3010 feet.

Productid fragments.

Foraminifera:

?Nodosaria raggatti Crespin 1958. Bathysiphon sp.

Cuttings 3040 feet.

Productid fragments; Ostracods.

Foraminifera:

Geinitzina triangularis Chapman & Howchin 1905.

Core 5: 3062 feet.

Productid fragments.

Foraminifera:

Ammodiscus sp.cf. A.multicinctus Crespin & Parr 1941. ?Nodosaria raggatti Crespin 1958. ?Ammobaculites sp.

Core 5: 3064 feet.

Productid fragments.

Core 5: 3066 feet.

Productid fragments; ?Gastropod fragment.

Core 5: 3068 feet.

Productid fragments; Gastropod; Ostracod.

Foraminifera:

Geinitzina triangularis Chapman & Howchin 1905.

Cuttings 3080 and 3110 feet.

Productid fragments.

Cuttings 3140 feet.

Productid fragments; ?Ostracod.

Cuttings 3168 feet.

Productid fragments; Bryozoa.

Foraminifera:

Frondicularia woodwardi Howchin.

Cuttings 3200 feet.

Productid fragments.

Cuttings 3230 feet.

Productid fragments.

Foraminifera:

Bathysiphon sp.

Rectoglandulina sp.aff. R.serocoldensia (Crespin) 1945.

Cuttings 3260 feet.

Productid fragments.

Foraminifera:

Rectoglandulina sp.aff. R.serocoldensis (Crespin) 1945. R.sp.

Cuttings 3290 feet.

Barren.

Cuttings 3317 feet.

Productid fragments.

Cuttings 3350 feet.

Productid fragments.

Foraminifera:

Ammodiscus sp.cf. A.multicinctus Crespin & Parr 1941.

Cuttings 3380 feet.

Productid fragments; Ostracod.

Cuttings 3410 feet.

Productid fragments; Ostracod.

Foraminifera:

Rectoglandulina sp.aff.R.serocoldensis (Crespin) 1945.

Cuttings 3450 feet.

Productid fragments; Ostracod.

Cuttings 3470 and 3500 feet.

Productid fragments.

Foraminifera:

Bathysiphon sp.

Core 6: 3554 feet.

Barren.

<u>Cuttings</u> 3570 - 3630 feet.

Barren.

<u>Cuttings</u> 3660 - 3780 feet.

Productid fragments.

Core 7: 3810 and 3818 feet.

Barren.

Cuttings 3830 feet.

Productid fragments.

Foraminifera:

Bathysiphon sp.

Cuttings 3890 feet.

Barren.

Cuttings 3920 and 3950 feet.

Productid fragments.

Cuttings 3980 feet.

Productid fragments.

Foraminifera:

Ammodiscus sp.cf. A. multicinctus Crespin & Parr 1941.

Cuttings 4010 feet.

Productid fragments.

Cuttings 4070 feet.

Productid fragments.

Foraminifera:

Dentalina sp.

Cuttings 4100 feet.

Productid fragments.

Cuttings 4130 feet.

Productid fragments.

Foraminifera:

Ammodiscus sp.cf. A.erugatus Crespin 1958.

Core 9: 4393 feet.

Barren.

Core 10: 4604 feet.

Barren.

Core 11: 4940 feet.

Barren.

Core 12: 5252 feet.

Barren.

Core 13: 5650 feet.

Barren.

Core 15: 6228 feet.

Barren.

Because of the poor faunas obtained from the Permian sections penetrated in O.S.L. No.2 (Hutton Creek) (Crespin, 1945a), O.S.L. No.3 (Arcadia) (Crespin, 1945b), and Cabawin No.1 (Crespin, 1961), it is not possible to correlate these wells with Westgrove No.1 on their foraminifera content. Of the species found in Westgrove No.1 Well, Frondicularia aulax Crespin was recorded from 10360-10400 feet and 11110-11140 feet in Cabawin No.1, and Ammodiscus multicinctus Crespin & Parr was recorded from 1785 to 2390 feet in O.S.L. No.3 (Arcadia).

The following species to which specimens from Westgrove No.1 are referable or closely comparable have been recorded (Crespin, 1958) from outcrop material in the Bowen Basin, Queensland.

Frondicularia aulax Crespin - Mantuan Productus Bed, Cattle Creek Formation.

Frondicularia woodwardi Howchin - Mantuan Productus Bed, Ingelara Formation, Cattle Creek Formation.

Geinitzina triangularis Chapman & Howchin - Mantuan Productus Bed, Ingelara Formation, Cattle Creek Formation.

Ammodiscus multicinctus Crespin & Parr - Ingelara Formation, Cattle Creek Formation.

Rectoglandulina serocoldensis (Crespin) - Cattle Creek Formation,

Correlation with the surface sections is not possible with Foraminifera, which give only a general Permian age.

Future detailed examination of samples from other wells and systematically collected outcrop material should give further evidence of the stratigraphical ranges of the Foraminifera for correlation purposes.

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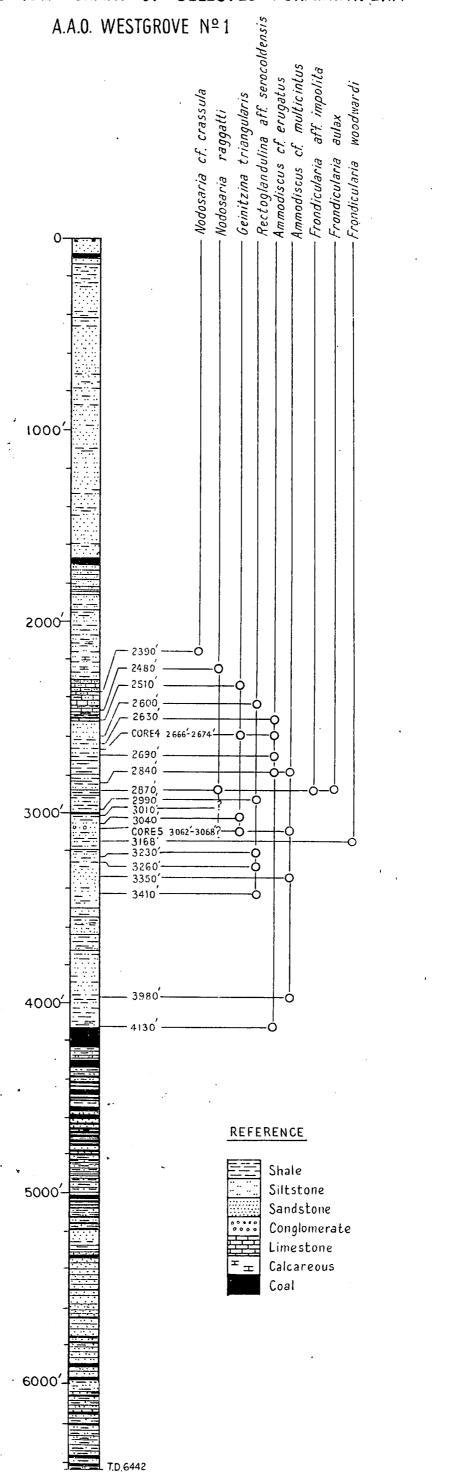
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DISTRIBUTION CHART OF SELECTED FORAMINIFERA



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