

COMMONWEALTH OF AUSTRALIA.

DEPARTMENT OF NATIONAL DEVELOPMENT.
BUREAU OF MINERAL RESOURCES
GEOLOGY AND GEOPHYSICS.

RECORDS.

1958/74

MICROPALAEONTOLOGY OF SAMPLES FROM THE SURAT AREA.

QUEENSLAND

by

D.J. Belford



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Samples from seismic shot-holes, water bores and outcrop were forwarded for examination by Dr. T.B.H. Jenkins, of Australian Oil and Gas Corporation Limited. The seismic shot holes were drilled by a Bureau of Mineral Resources geophysical party; samples were also received from the Bureau party, but those collected by Dr. Jenkins were used as they were taken at closer intervals.

Results of the examination made by Miss Crespín and the writer were disappointing, as foraminifera were found in very few samples.

SHOT HOLE SAMPLES

TRAVERSE A

Shot-point 2

- | | |
|-----------|--|
| 40' - 50' | Reddish sandstone. No microfossils found. |
| 50' - 60' | Brownish siltstone. No microfossils found. |
| 60' - 70' | Grey, slightly glauconitic silty sandstone. No microfossils found. |
| 70' - 80' | Grey glauconitic silty sandstone, with carbonaceous material. No microfossils found. |

Shot-point 4

- 40' - 50' Grey sandy siltstone. Very rare arenaceous foraminifera and fragments of ostracods.
- ?Spiroplectammina sp.
Indeterminate ostracod fragments.
- 50' - 60' Grey sandy siltstone. Ostracod fragment.

Shot-point 5

- | | |
|-----------|---|
| 40' - 50' | White sandstone. No microfossils found. |
| 50' - 60' | Grey glauconitic silty sandstone. One broken indeterminate arenaceous foraminifera. |
| 60' - 75' | Grey glauconitic silty sandstone with carbonaceous material. No microfossils found. |

Shot-point 7

- 40' - 50' and 50' - 63'. Grey glauconitic silty sandstone, with carbonaceous material. No microfossils found.

Shot-point 8

- 50' - 60' Grey sandy siltstone. No microfossils found.
60' - 70' and 70' - 80'. Grey glauconitic silty sandstone. No microfossils found.
80' - 90' Grey siltstone. Very rare indeterminate fragments of arenaceous foraminifera and ostracods.

TRAVERSE AA

Shot-point 57

40' - 50' White to reddish sandstone. No microfossils found.
50' - 60' Reddish silty sandstone. No microfossils found.
60' - 75' Reddish glauconitic sandstone. No microfossils found.

Shot-point 59

30' - 40' Brownish siltstone and sandstone. No microfossils found.
40' - 50' and 50' - 60'. Grey sandstone. No microfossils found.

Shot-point 60

70' - 80' Mixture of reddish quartz sand and grey slightly glauconitic siltstone. No microfossils found.
80' - 90' Grey glauconitic siltstone with carbonaceous material. No microfossils found.

Shot-point 62

40' - 50' Grey sandstone. No microfossils found.
50' - 60' Brownish siltstone. No microfossils found.
60' - 75' Brownish silty sandstone. No microfossils found.

Shot-point 72

20' - 30' and 30' - 40'. Reddish quartz sand. No microfossils found.
40' - 50' Reddish quartz sand and grey glauconitic silty sandstone. No microfossils found.
50' - 60' Grey slightly glauconitic siltstone. No microfossils found.
60' - 75' Grey siltstone. No microfossils found.

Shot-point 75

0' - 30' Grey and reddish glauconitic silty sandstone. No microfossils found.
30' - 40' Grey sandy siltstone. Frequent arenaceous foraminifera.
Trochammina sp.
Arenaceous indeterminate foraminifera.
40' - 50' Grey glauconitic silty sandstone. Rare arenaceous foraminifera.
Haplophragmoides sp.
Indeterminate arenaceous foraminifera.
50' - 60' Grey glauconitic silty sandstone. No microfossils found.
60' - 75' Grey slightly glauconitic siltstone. No microfossils found.

Shot-point 77

45' - 50' Grey glauconitic silty sandstone. No microfossils found.
50' - 60' Grey siltstone. Rare arenaceous foraminifera.
Trochammina raggatti
Haplophragmoides cf. dickinsoni
Marginulina cf. suboretacea.
60' - 75' Grey siltstone. Rare foraminifera.
Lenticulina sp.
Indeterminate arenaceous foraminifera.

TRAVERSE B

Shot-point 9

- 0' - 10' Reddish glauconitic sandstone, heavily iron-stained. No microfossils found.
- 40' - 60' Grey glauconitic silty sandstone. Frequent arenaceous foraminifera and rare Lagenidae.
- Textularia anacooraensis
Trochamnina sp.
Arenaceous indeterminate
foraminifera
Lenticulina sp.
- 60' - 70' Grey siltstone. No microfossils found.
- 70' - 80' Grey siltstone and grey glauconitic silty sandstone. No microfossils found.

Shot-point 10

- 30' - 40' and 40' - 50'. Grey and reddish glauconitic silty sandstone. No microfossils found.
- 50' - 60' Grey glauconitic silty sandstone. No microfossils found.
- 60' - 70' Grey glauconitic silty sandstone with carbonaceous material. No microfossils found.
- 70' - 80' Grey glauconitic silty sandstone. No microfossils found.

Shot-point 11

- 40' - 50' Reddish glauconitic silty sandstone. No microfossils found.
- 50' - 60' Grey glauconitic silty sandstone with carbonaceous material. No microfossils found.
- 60' - 70' Grey glauconitic silty sandstone. No microfossils found.

Shot-point 12

- 0' - 10' Reddish sandy siltstone. No microfossils found.
- 40' - 50' Grey glauconitic silty sandstone, rare pyrite, some carbonaceous material. No microfossils found.
- 50' - 60' Grey glauconitic silty sandstone with carbonaceous material. No microfossils found.
- 60' - 70' Grey glauconitic silty sandstone with carbonaceous material. No microfossils found.
- 70' - 84' Grey glauconitic silty sandstone. No microfossils found.

Shot-point 13

- 30' - 40' Grey glauconitic silty sandstone. No microfossils found.
- 40' - 50', 50' - 60' and 70' - 84'. Grey glauconitic silty sandstone, with carbonaceous material. No microfossils found.

Shot-point 14

- 20' - 30' Reddish glauconitic sandstone. No microfossils found.
- 30' - 40', 40' - 50', 50' - 60' and 60' - 85'. Grey glauconitic silty sandstone, with carbonaceous material. No microfossils found.

Shot-point 15

- 10' - 30' and 30' - 40'. Reddish sandy siltstone. No microfossils found.
60' - 70' Grey glauconitic silty sandstone. No microfossils found.
70' - 84' Grey glauconitic silty sandstone, with carbonaceous material. No microfossils found.

Shot-point 16

- 0' - 30' Reddish glauconitic sandstone. No microfossils found.
30' - 40', 50' - 60', 60' - 70', 70' - 80', 80' - 90' and 90'-105'. Grey glauconitic silty sandstone. No microfossils found.

Shot-point 17

- 50' - 85' Grey glauconitic silty sandstone. No microfossils found.

Shot-point 24

- 40' - 50' Grey glauconitic silty sandstone. No microfossils found.
60' - 70' Grey glauconitic siltstone. No microfossils found.

Shot-point 25

- 20' - 40' Reddish glauconitic sandstone. No microfossils found.
40' - 60' and 60' - 70'. Grey glauconitic silty sandstone. No microfossils found.

Shot-point 26

- 30' - 40' Grey slightly glauconitic silty sandstone with carbonaceous material. No microfossils found.
50' - 60' Grey glauconitic silty sandstone with very rare pyrite and some carbonaceous material. No microfossils found.
60' - 70' Grey glauconitic silty sandstone. No microfossils found.
70' - 84' Grey glauconitic silty sandstone. One arenaceous foraminifera.
?Trochammina sp.

Shot-point 27

- 0' - 10' Reddish slightly glauconitic silty sandstone. No microfossils found.
20' - 30', 30' - 40', 40' - 50', 50' - 60', 60' - 70' and 70' - 84'. Grey glauconitic silty sandstone with carbonaceous material. No microfossils found.

Shot-point 28

- 10' - 20' Reddish slightly glauconitic silty sandstone. No microfossils found.
20' - 30' and 30' - 40'. Grey glauconitic silty sandstone. No microfossils found.

- 40' - 50' Grey glauconitic silty sandstone with very rare pyrite and some carbonaceous material. No microfossils found.
- 50' - 60' Grey glauconitic silty sandstone with carbonaceous material. No microfossils found.
- 60' - 70' Grey glauconitic silty sandstone with carbonaceous material. One ostracod.

? Eucythere sp.

- 70' - 84' Grey glauconitic silty sandstone with carbonaceous material. No microfossils found.

Shot-point 30

- 0' - 10' Reddish sandstone. No microfossils found.
- 10' - 20' Grey carbonaceous sandy siltstone. No microfossils found.
- 20' - 30', 30' - 40' and 40' - 50'. Grey glauconitic sandstone. No microfossils found.
- 50' - 60' Grey carbonaceous sandstone. No microfossils found.

Shot-point 31

- 20' - 30' Yellowish siltstone. No microfossils found.
- 30' - 40' and 40' - 50'. Grey glauconitic sandstone. No microfossils found.
- 50' - 60' Grey carbonaceous sandstone. No microfossils found.

Shot-point 32

- 10' - 20' Reddish glauconitic sandstone. No microfossils found.
- 20' - 30' Grey to reddish sandstone. No microfossils found.
- 30' - 40' Reddish silty sandstone. No microfossils found.
- 40' - 50' and 50' - 60'. Grey carbonaceous silty sandstone. No microfossils found.
- 60' - 70' Grey glauconitic silty sandstone. No microfossils found.

TRAVERSE BB

Shot-point 78

- 60' - 70' Reddish siltstone. No microfossils found.
- 70' - 80' Grey sandy siltstone. No microfossils found.
- 80' - 95' Grey and reddish glauconitic silty sandstone. No microfossils found.

Shot-point 78A

- 80' - 95' Reddish silty sandstone. No microfossils found.

Shot-point 79

70' - 80' Grey and reddish silty sandstone. No microfossils found.

80' - 95' Reddish silty sandstone. No microfossils found.

Shot-point 96

50' - 60' Grey glauconitic silty sandstone. No microfossils found.

60' - 70' Grey glauconitic silty sandstone, with carbonaceous material. No microfossils found.

70' - 80' Grey siltstone. No microfossils found.

80' - 95' Grey glauconitic silty sandstone. No microfossils found.

TRAVERSE C

Shot-point 37

0' - 10' Reddish sandstone and whitish siltstone. No microfossils found.

10' - 20' Whitish and reddish siltstone. No microfossils found.
and
20' - 30'

30' - 40' Reddish silty sandstone. No microfossils found.

40' - 50' White to reddish silty sandstone. No microfossils found.

50' - 60' White silty sandstone. No microfossils found.

Shot-point 39

60' - 70' Reddish silty sandstone. No microfossils found.

Shot-point 40

60' - 75' Reddish silty sandstone. No microfossils found.

Shot-point 41

40' - 60' Reddish silty sandstone. No microfossils found.

60' - 70' Grey silty sandstone with carbonaceous material. No microfossils found.

Shot-point 42

60' - 75' Grey silty sandstone with carbonaceous material. No microfossils found.

TRAVERSE D

Shot-point 104

85' - 95' White and reddish silty sandstone. No microfossils found.

95' - 106' Reddish glauconitic silty sandstone. No microfossils found.

- 106' - 116' Grey glauconitic silty sandstone and reddish siltstone. No microfossils found.
- 116' - 127' Grey siltstone. No microfossils found.
- 127' - 138' Grey siltstone with ?siderite. No microfossils found.

Shot-point 127

- 60' - 70' Grey silty sandstone. No microfossils found.
- 70' - 80' Grey siltstone. Very rare ostracod fragments, no foraminifera found.
- 80' - 95' Grey siltstone. No microfossils found.

BORE SAMPLES

Canmaroo Bore

Mixed Sludge. Grey siltstone with carbonaceous material. Rare arenaceous foraminifera.

Hyperammina sp.
Arenaceous indeterminate foraminifera.

Waroon Bore

- 450' - 452' Grey siltstone with abundant ?haematite. No microfossils found.
- 452' - 455' Grey sandy siltstone with abundant ?haematite. No microfossils found.
- 455' - 460' Grey siltstone with some carbonaceous material. No microfossils found.

Yanco Bore

Mixed Sludge. Grey siltstone, grey glauconitic silty sandstone and reddish silicified sandstone. Very rare arenaceous foraminifera and Lagenidae.

Trochammina raggatti
Haplophragmoides cf. dickinsoni
Anomalina mawsoni
Lenticulina sp.

SURFACE SAMPLES

Cogoon

- Dg. 1. Reddish glauconitic silty sandstone. No microfossils found.

Surat

- Dd. 1 Reddish silty sandstone. No microfossils found.
- Dd. 2 Reddish silty sandstone. No microfossils found.
- Dd. 3 Brownish silty sandstone. No microfossils found.
- Dh. 11 Reddish silty sandstone. No microfossils found.

Weribone

Dg. 1	Brownish silty sandstone. No microfossils found.
Dg. 2	Reddish silty sandstone. No microfossils found.
Dg. 5	Reddish silty sandstone. No microfossils found.
Dh. 4	White silty sandstone. No microfossils found.

The few microfossils found in this investigation indicate a general Lower Cretaceous age; it is not possible to be more definite than this.