

**S  
T  
A  
R  
T**

U.R. 1963/18

18

Plant remains, O.D.N.L. Anglesea No. 1. Well.

Plant remains were present in a number of cores obtained from the Mesozoic section of Oil Development N.L. Anglesea No. 1. well. Most were extremely fragmentary, and it was difficult to distinguish the plant remains preserved as carbonaceous impressions from the hard black host sediments. Certain cores were treated with hydrofluoric acid/Schulzes solution in an endeavour to obtain cuticular remains, but no workable cuticle was discovered.

Core 19 (\_\_\_\_\_ feet). Stems or rhizomes were plentiful here, apparently from a single species. Preservation was too poor to enable identification.

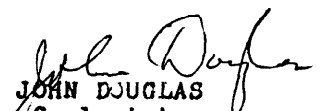
Core 26 (7265 feet). Small fertile pinnae with marginal sori were present. Fertile pinnae are rare in Western District deep bores, although sterile branches have been recorded from a number of bores including the Belfast No. 4. and Wangoom No. 6. As fertile pinnae from the Victorian Mesozoic have not been described, specific designation is unknown, but the pinna in question appears to have originated in conjunction with sterile pinnae of the form genus Sphenopteris.

Core 27 (7544-7550 feet). Long narrow leaves were prominent. These have a midrib with taeniopterid secondary veins, and possibly can be classified under Taeniopteris spatulata, Oldham and Morris. The leaves are much narrower than "typical" T. spatulata, and may represent specific variation. Sphenopteris fronds with elongated, fine pinnae were also fossilized in this core, of very similar form to Sphenopteris sp. from the Wangoom (3314-3320 feet) and Belfast (5353 feet) bores mentioned above.

A small unidentified seed was also obtained from this locality.

Core 31 (9156-9176 feet). Core samples lent by the Bureau of Mineral Resources contained relatively well preserved T. spatulata leaves.

Core 32 (9641-9656 feet). Another core sample lent by the Bureau of Mineral Resources contained poorly preserved remains, one specimen of which possibly represents a group of appressed leaves. Preparations from the counterpart, held in the Geological Survey collection, to isolate cuticle for identification met with no success however.

  
JOHN DOUGLAS  
Geologist

Field Notes

... obtained from the ...  
... was difficult to ...  
... certain cores were ...  
... solution in an ...  
... worked out ...

Core 26 (1954-1955)  
... here, apparently ...  
... poor to sample ...

Core 25 (1954-1955)  
... were present ...  
... force, although ...  
... number of ...  
... as ...  
... described, ...  
... question ...  
... of the ...

Core 24 (1954-1955)  
... These have a ...  
... possibly can be ...  
... and ...  
... T. ...  
... fronds with ...  
... core, of very ...  
... (1954-1955) ...  
... A small ...

Core 23 (1954-1955)  
... locality.  
... Mineral ...  
... leaves.

Core 22 (1954-1955)  
... Bureau of Mineral ...  
... one specimen of which ...  
... leaves. ...  
... Geological Survey ...  
... met with no ...

The Sphenopteris and T. spatulata remains identified have not been found in sediments younger than Lower Cretaceous in Victoria, where they occur in many floras. Although similar forms are found elsewhere in older sediments, it seems likely that all the cores sampled above are from Lower Cretaceous sediments.

JOHN DOUGLAS  
Geologist