



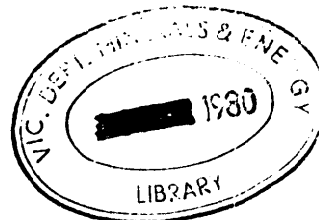
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# Geological Survey of Victoria

PALYNOLOGICAL DETERMINATION OF SAMPLES FROM  
FRENCH ISLAND 46, FRENCH ISLAND 47, 48 AND YALLOCK 2  
BORES, WESTERN PORT BAY, VICTORIA

By V ARCHER

UNPUBLISHED REPORT 1980/3



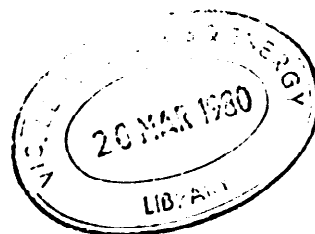
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V. Archer

PALYNOLOGICAL DETERMINATION OF SAMPLES FROM  
FRENCH ISLAND 46, FRENCH ISLAND 47, 48 AND YALLOCK 9  
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PALYNOLOGICAL DETERMINATION OF SAMPLES FROM FRENCH ISLAND 46,  
FRENCH ISLAND 47, 48 AND YALLOCK 9 BORES, WESTERN PORT BAY, VICTORIA

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This project was undertaken at the request of C Laing of the Groundwater Section and includes samples examined in 1978 and additional samples examined 1979-80. Spore-pollen zonation used in this report follows the scheme established by Partridge 1973, 1975 for the Gippsland Basin.

FRENCH ISLAND 46

a)

Depth: 13.1 - 16.2 m (43-53'), S1321  
Lithology: Carbonaceous clay  
Strat Unit: Baxter Formation - TB3  
Age: Triporopollenites bellus Zone (Middle-Late Miocene)  
Remarks: Species include Haloragacidites haloragoides and Tubulifloridites antipodica, both of which range from the T. bellus Zone.

b)

Depth: 22.3 - 25.3 m (73-83'), S1553  
Lithology: Black pyritic silt  
Strat Unit: Baxter Formation - TB2  
Age: As above  
Remarks: Sample contains Haloragacidites haloragoides.

c)

Depth: 90.1 - 96.9 m (298-318'), S1554  
Lithology: White, woody clay  
Strat Unit: Sherwood Formation - Tm  
Age: Indeterminate  
Remarks: Sample yielded sparse microflora lacking in diagnostic species.

d)

Depth: 103.9 - 106.6 m (341-350'), S1555  
 Lithology: Brown-grey siltstone  
 Strat Unit: Childers Formation  
 Age: Proteacidites asperopolus Zone (Early-middle Eocene)  
 Remarks: Present in the sample are the following species which by their initial occurrence mark the base of the P. asperopolus Zone: Liliacidites bainii, Proteacidites crassus and Sapotaceoidaepollenites rotundus. Species present whose ranges terminate at the top of the zone are Intratriporopollenites notabilis, Malvacipollis diversus, Proteacidites grandis and P. ornatus. Both P. asperopolus and P. pachypolus are present in some abundance which further characterize this zone.

FRENCH ISLAND 47, 48

e)

Depth: 77 - 79 m (251-260'), S1320  
 Lithology: Carbonaceous clay  
 Strat Unit: Baxter Formation - Tb1  
 Age: Lower Proteacidites tuberculatus Zone (Early Oligocene - early Miocene)  
 Remarks: Species present in the sample include Beaupreaidites verrucosus and Proteacidites pseudomoides which range to the lower P. tuberculatus Zone, and Cyatheacidites annulatus whose presence marks the base of this zone. The common occurrences of Proteacidites rectomarginus, P. truncatus and Dictyophyllidites spp. also characterize this zone.

## YALLOCK 9

f)

Depth: 27.4 - 30.5 m (90-100'), S1322  
 Lithology: Sandy carbonaceous clay  
 Strat Unit: Baxter Formation TB3 and TB1  
 Age: T. bellus Zone (Middle-late Miocene)  
 Remarks: This sample gave a poor microfloral yield but species include Haloragacidites haloragoides and Symplocoipollenites austellus which range from the T. bellus Zone.

g)

Depth: 67.1 - 70.1 m (220-230'), S1323  
 Lithology: Carbonaceous clay  
 Strat Unit: Baxter Formation - TB3 and TB1  
 Age: Middle-Upper P. tuberculatus Zone (Early Oligocene - early Miocene)  
 Remarks: The sample contains common Proteacidites tuberculatus, which helps characterize the P. tuberculatus Zone. Also present are Beaupreaidites verrucosus which ranges to the top of the zone and Cyathidites subtilis which ranges from the middle of the zone.

h)

Depth: 86.9 - 87.8 m (285-288'), S1324  
 Lithology: Carbonaceous clay  
 Strat Unit: Baxter Formation, TB3 and TB1  
 Age: As above  
 Remarks: The spore pollen assemblage includes C. subtilis, Proteacidites truncatus and P. tuberculatus.

h)

Depth: 117.3 - 121.0 m (385-397'), S1325  
 Lithology: Grey siltstone  
 Strat Unit: Baxter Formation - TB3 and TB1  
 Age: As above  
 Remarks: Species include Cyathidites subtilis, Foveotriletes crater which ranges from the base of the P. tuberculatus Zone and Proteacidites pseudomoides whose range terminates within this Zone.

i)

Depth: 207.3 - 208.5 m (680-684'), S1326  
 Lithology: Carbonaceous clay  
 Strat Unit: Childers Formation  
 Age: Lower P. tuberculatus Zone (Early Oligocene-Early Miocene)  
 Remarks: Species of rare occurrence in the sample include Cyathacidites annulatus and Foveotriletes crater which range from the base of the P. tuberculatus Zone and Granodiporites nebulosus whose range terminates within the lower part of the zone. The common appearance of Proteacidites rectomarginus in the sample is a further indicator of this zone.

j)

Depth: 269.0 - 262.1 m (850-860'), S1327  
 Lithology: Grey siltstone  
 Age: Middle Nothofagidites asperus Zone (Upper Eocene)  
 Remarks: The spore pollen assemblage includes Triorites magnificus which characterizes the Middle N. asperus Zone.

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 PALYNOLOGIST

6/2/80

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