

PALYNOLOGICAL EXAMINATION OF DUNAWALLA 9 AND 10 AND GEELENGLA 10,  
 TWAY BASIN, VICTORIA

Core samples from Dunawalla 9, 10 and Geelengla 10 were examined for  
 palynological dating by V. Archer. The zonation scheme used is that  
 of Stover and Partridge 1973.

RESULTS

Dunawalla 9  
 Depth: 90.5-91.5 m  
 Spore-pollen Zone: M.diversus Zone

Age: Early Eocene

Comments: The presence of I. notabilis, N. heterus, L.lanceolatus and

a low proportion of Nothofagidites spp. suggest the M.diversus zone.

A few species are present which may be the result of reworking of  
 Palaeocene sediments and these are A.obscurus, L.balmei and

A.dilwynensis.

Dunawalla 10  
 Depth: 47-50 m  
 Spore-pollen Zone: Indeterminate

Comments: The spore-pollen yield was extremely low and consists almost  
 entirely of fungal or algal spores which are a dark brown colour indicating  
 thermal alteration.

Geelengla 10  
 Depth: 71.0-71.5 m  
 Spore-pollen Zone: P.tuberculatus Zone

Age: Early Oligocene-Early Miocene

Comments: Sample contains a low yield of poorly preserved spores  
 and pollen which are thermally altered to a brownish-yellow colour .  
 Fern spores and algal or fungal spores are common and one  
 occurrence of dinoflagellates is recorded (S. ramosus).The

assemblage suggests a wet possibly brackish environment.  
 The reworked Early Cretaceous species Classopollis sp. is also  
 present. The zone is indicated by the presence of C.annulatus and  
P.micus which suggest the upper P.tuberculatus zone.