

Spore colours of yellow/brown indicate marginal maturity for oil, but immaturity for gas/condensate.

D. 1972.5 (swc)-2032m (cutts) : upper M. diversus Zone

Assignment to the upper Malvacipollis diversus Zone is indicated at the top by the absence of younger indicators, and at the base by the oldest occurrence of Proteacidites pachypolus. The oldest occurrences of Proteacidites obesolabrus (2023-32m cutts), Myrataceidites tenuis (1996-2004m cutts) and Santalumidites cainozoicus (1972.5m swc) confirm the assignment. Significant spore pollen caving from above has occurred in these samples.

Age diagnostic dinoflagellates include Homotriblium tasmaniense, confirming the assignment.

Environments are marginally marine, with rare low diversity dinoflagellates seen in every sample.

Spore colours of yellow-brown indicate marginal maturity for oil, and immaturity for gas/condensate.

E. 2059-68m (cutts) : middle M. diversus Zone

Assignment to the middle Malvacipollis diversus Zone is indicated at the top by the youngest occurrence of Tricolpites gillii, and the absence of younger indicators. The zone base is defined by the oldest occurrences of Proteacidites leightonii and P. ornatum considered to be in place.

The very rare dinoflagellates seen are not age diagnostic.

Environments are marginally marine, as shown by the presence of rare low diversity dinoflagellates amongst the dominant spores and pollen.

Spore colours cover a wide range. The majority of specimens are in the very dark brown to brown-black range, and indicate full maturity to post maturity for oil, and full maturity for gas/condensate. A smaller number of specimens show lighter colours, right back to yellow/brown, but are considered caved.

F. 2077 (cutts)-2083m (swc) : post-mature

These two samples are totally barren with the residues consisting only of inertinite, with very rare obviously caved light coloured fossils. The samples are therefore indeterminate and post-mature.

G. 2160 (swc)-2205m (cutts) : lower M. diversus Zone