

Age significant dinoflagellates include Phthanoperidinium comatum at 1165m, confirming a lower N. asperus or younger assignment.

Environments are marginally marine with only very scarce low diversity dinoflagellates seen amongst the diverse spores and pollen and common cuticle fragments.

Light brown spore colours at 1145 and 1165m indicate marginal maturity for oil generation, but immaturity for gas/condensate generation. Spore colours of very dark brown to black at 1206.5m indicate post maturity for oil, and full maturity for gas/condensate. Some lighter coloured grains in this sample are interpreted as caved through mud contamination.

E. 1218m (cutts)-1302m (cutts) (1254.0m swc) : P. asperopolus Zone

Assignment to the Proteacidites asperopolus Zone is indicated at the top by the top of Haloragacidites harrisii dominated microfloras, supported by the youngest occurrences of Intratriporopollenites notabilis, consistent Proteacidites obesolabrus (1254.0m swc) and Myrtaceidites tenuis (1302m cutts). The zone base is defined by the oldest occurrence of P. asperopolus at 1302m (cutts) which could be slightly caved from its position in sidewall cores at 1354.0m.

Age significant dinoflagellates include Homotriblium tasmaniense which indicates assignment to the upper Malvacipollis diversus or P. asperopolus Zones.

Very marginally marine environments are indicated by the very scarce very low diversity dinoflagellates, dominant and diverse spores and pollen, and abundant leaf fragments.