

marginal maturity for oil, but immaturity for gas/condensate.

D. 2233 (swc)-2322m (cutts) : P. asperopolus Zone

This interval is assigned to the Proteacidites asperopolus Zone at the top on youngest Myrtaceidites tenuis, supported by the youngest H. harrisii dominated assemblages and youngest P. grandis (2233m, swc) and P. ornatus (2268-77m, cutts). At the base, assignment is indicated by the oldest P. asperopolus, but this pick could be slightly too low, as it is an oldest occurrence from cuttings.

No age diagnostic dinoflagellates were seen.

Non-marine to slightly brackish environments are indicated by the dominance of cuticle and diverse spore-pollen, and the absence of dinoflagellates from 2268-77m and 2313-22m (both cutts) and the single dinoflagellate specimen at 2233m (swc).

Yellow/brown to light brown spore colours indicate marginal maturity for oil, and immaturity for gas/condensate.

E. 2367m (cutts)-2520m (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 oldest Proteacidites pachypolus. This base may be picked too low, as it is an oldest occurrence in cuttings. The oldest occurrence in sidewall cores is much higher, at 2394.5m.

Age diagnostic dinoflagellates include Homotriblium tasmaniense and Muratodinium fimbriatum at 2511-20m (cutts), confirming assignment to the upper M. diversus Spore-Pollen Zone.

Dinoflagellates were not seen between 2367m (swc) and 2457-66m