

thus considered to be post mature with some fully mature mud contamination.

Considering the very high maturity of this sample doubt must be expressed concerning the "in situ" nature of any of the material observed in the overlying cuttings sample (1464m), just 2m above. It may be, however, that the material in that cuttings sample has not caved far.

J. 1614m (swc and cutts) : upper L. balmei Zone

Assignment to the upper Lygistepollenites balmei Zone is indicated by the youngest occurrences of Gambierina rudata and Lygistepollenites balmei, and by the oldest occurrences of Proteacidites incurvatus (swc) and P. grandis (cutts).

No age diagnostic dinoflagellates were seen in the sidewall core. In the cuttings sample, dinoflagellates included Apectodinium homomorphum (indicating an upper L. balmei or younger assignment) and Homotriblium tasmaniense (indicating an upper M. diversus to P. asperopolus assignment). All dinoflagellates were very black however, and so are considered caved by comparison with the mid brown sidewall core material, and consequently ignored.

Environments are probably non-marine, as all the observed dinoflagellates (except the lacustrine Morkallacysta pyramidalis) are considered caved.

The sidewall core material has mid brown spore colours indicating full maturity for oil and early maturity for gas/condensate. The cuttings sample shows a broad range of spore colour and so is ignored in favour of the sidewall core information.