

III PALYNOSTRATIGRAPHY

A. 1000m (cutts) : P. tuberculatus Zone

Assignment to the Proteacidites tuberculatus Zone is indicated by the presence and oldest occurrence of Cyatheacidites annulatus. The assemblage is sparse, of low diversity, and spore dominated. The presence of Cyathidites subtilis supports the assignment.

Marine environments are indicated by the presence of dinoflagellates, but their scarcity and the spore dominated nature of the assemblages suggests a nearshore to very nearshore environment.

Spore colours of light yellow indicate immaturity for hydrocarbons, although thicker walled spores may be considerably darker in colour.

B. 1050-1140m (both cutts) : upper N. asperus Zone

Assignment to the upper Nothofagidites asperus Zone is indicated by the oldest occurrence of Foveotriletes crater at 1140m, the absence of Cyatheacidites annulatus above and of Proteacidites pachypolus and other species below. The presence of Proteacidites tuberculatus at 1140m supports the assignment.

Dinoflagellates include Systematophora placacantha, Deflandrea phosphoritica and Kisselovia coleothrypta, all of which indicate a general mid Eocene or younger age.

Nearshore marine environments are indicated by the dominance of spores and pollen (despite their low diversity), and presence of only minor dinoflagellates of low to moderate diversity. These