## Upper *Malvacipollis diversus* Zone

Samples assigned to this zone are sidewall cores 13, 11 and 10 at 7830, 8120 and 8210 feet, respectively. Because of the rarity of spore-pollen from SWC 13, the placement of this sample in the Upper *M. diversus* zone is uncertain. Although it has species which indicate it is no older than Upper *M. diversus*, it could be younger. The other sidewall cores which contain moderately diverse assemblages are placed confidently in the Upper *M. diversus* zone.

A seemingly major palynological change occurs in Narimba-1 between SWC 10 at 8210 feet and SWC 9 at 8335 feet. Evidence for this is that several species occur in the Upper *M. diversus* and younger zones but not in the underlying section. These species include:

*Ephedripites notensis*
*Myrtaceidites tenuis*
*Proteacidites kopiensis*
*P. obesolabrus*
*P. pachypolus*
*Santalumidites cainozoicus*
*Tricolporites adelaidensis*

## Middle *Malvacipollis diversus* Zone

Although spore-pollen assemblages from sidewall cores 9 through 1 (8335 to 8785 feet) and sidewall cores 59 through 45 (8860 to 9170 feet) are interpreted as representing the Middle *M. diversus* zone, moderately abundant assemblages were recovered only from samples at and below 8682 feet. Species and specimens are sparse in the assemblages from 8335 to 8590 feet. The Middle *M. diversus* zone assignment is based on the continued occurrence of *Kuylisporites waterbolkii* and *Proteacidites tuberculiformis* down to 8745 feet and of *P. ornatus* down to 9170 feet. Within this zone specimens of *Proteacidites leightonii* become increasingly rarer down section and the species is replaced gradually by *P. grandis* as the dominant, conspicuous Proteaceous pollen. Microplankton are sparse to rare and poorly preserved in samples above 9000 feet while abundant to common dinoflagellates occur at 9020 and 9170 feet, respectively. Recycled Permian forms were found at 8335, 8375 and 8682 feet and a specimen of *Classopollis* was seen at 8682 feet. Specimens of *Crassoretitriletes vanraadshoovenii*, *Cupanieidites orthoteichus*, *Ilexpollenites anguloclavatus*, *Nothofagidites asperus* and *Proteacidites reticuloscabratus* were not found below the Middle *M. diversus* zone in Narimba-1.