Lower *Malvacipollis diversus* Zone

Sidewall cores 43 to 11 (9246 to 10,770 feet) and samples from conventional cores 1, 2, and 3 are assigned to the Lower *M. diversus* zone. Assemblages from this zone are generally poorly preserved and contain relatively few species even though specimens are abundant in some samples. Microplankton occur almost consistently from 9246 to 10,038 feet; rare specimens were seen at 10,556 feet. Recycled Permian forms occur at 9558, 9900, 10,294, 10,556 and 10,770 feet.

Spore-pollen assemblages are montonously uniform throughout the zone with the some 12 to 15 species occurring repeatedly. These include:

Cyathidites splendens
Dilwynites granulatus
Haloragacidites harrisii
Malvacipollis diversus
Nothofagidites brachyspinulosus
N. emarcidus/heterus
N. flemingii
Phyllocladidites mawsonii
Proteacidites adenanthoides
P. grandis
P. incurvatus
P. pseudomoides
Rugulatisporites mallatus
Stereisporites punctatus
Tricolpites gillii

Specimen of *Intratriporopollenites notabilis* and *Nothofagidites goniatus* were not found below core 3 at 9752 feet. No indigenous species indicative of the Paleocene *Lygistepollenites balmei* zone were found in Narimba-1.

The residues from sidewall cores 7 (10,860 feet), 3 (10,970 feet) and 1 (10,978 feet) lacked identifiable palynomorphs and consist almost exclusively of carbonized debris and altered plant tissue. Sidewall core 9 at 10,844 feet has a few long ranging forms (no zone diagnostic species) and very rare microplankton. Zone determinations were not possible for these samples.

CONCLUSIONS

The spore-pollen sequence in Narimba-1 consists of Early to Middle Eocene zones, and no major palynological break was found in the succession between 5850 and 10,770 feet. Although dinoflagellates are most common in the Middle *M. diversus* zone below 9000 feet and in the Lower *M. diversus*