

range is old and scanty.

For dinoflagellates identified, see Table 1.

1. 1400 - 1855 m. ?

*Operculodinium centrocarpum* and *Spiniferites ramosus* are the most common species here. Both are long ranging. Precise time ranges for any of the other species identified are not known but all are consistent with the zone determined from spores and pollen.

2. 1930 - 1960 m. *C. incompositum* Zone, Late Eocene.

*Areosphaeridium capricornum* and *Vozzhennikovia extensa* are both restricted to this zone which coincides with the Mid *N. asperus* Zone. *D. heterophycta* is more abundant in the zone below but its range extends into the *C. incompositum* Zone. The rest of the assemblage is consistent with this zone determination.

3. 1975 - 2050 m. ?

A few dinoflagellates are found here. All of the species identified are found higher up the well, so they could be the result of cavings or carry down.

4. 2530 - 2780 ?

*Achomosphaera septata*, *Apectodinium homomorphum* and *Glaphyrocysta retiintexta* are all found in the Early Eocene and are consistent with the spore pollen *M. diversus* Zone. Their ranges are not restricted to a single dinoflagellate Zone (see Fig. 2).

#### TASMANIAN DEVIL

Preservation is much better here and there is an abundance of spores, pollen and dinoflagellates. Otherwise, all the introductory remarks and the methods of zonation apply here as well as to Squid

#### SPORE POLLEN ZONATION

600 - 750 m. *P. Tuberculatus* Zone, Early Oligocene - Early Miocene.

None of the diagnostic species which first appear at the base of the *P. tuberculatus* Zone are present but they are not common and are frequently lacking. None of the distinctive species whose ranges terminate at the