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OLIGOCENE TO PLEISTOCENE FORAMINIFERAL RECORD, CAPE ROBERTS DRILLHOLES, VICTORIA LAND BASIN, ANTARCTICA

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Foraminifera occur persistently, albeit sporadically, in the upper 1100 metres of the some 1600 m of Oligocene and Lower Miocene glacial marine strata cored in the three Cape Roberts Project drillholes (CRP-1, -2/2A, -3), including a few tens of metres of overlying Plio-Pleistocene strata recovered. Good preservation is typical, but abundance is very low in the Oligocene-Lower Miocene section. Maximum abundance in CRP-3 was 6 specimens per gram of sediment, while 2 or fewer specimens per gram were more typical, with similar abundances noted in CRP-1 and -2/2A. Calcareous benthics dominate all assemblages, agglutinated foraminifers are rare, and planktics are absent. Age-diagnostic species were not recovered - ages below are from other fossil groups.

CRP-1 (TD—Total Depth 148 mbsf—metres below sea-floor) yielded a rich (73+ species) Pleistocene fauna with uncommon, recycled Pliocene elements. *Melonis, Cribroelphidium,* and *Nonionella* are typical elements of the Early Miocene foraminiferal assemblages.

CRP-2/2A (TD 624 mbsf) yielded *in situ* Pliocene foraminifers, while 42 foraminiferal species, comprising 4 distinctive foraminiferal units were identified from the Oligocene and Lower Miocene section.

CRP-3 (TD 939 mbsf, base Cenozoic 823 mbsf). Fifty-three foraminif-eral species, all assigned to a single biofacies with common *Cassidu-linoides* and *Stainforthia* occurred down to 340 mbsf; underlying sands are barren.

Ongoing work at millennial resolution has related foraminiferal assem-blages to glacial and sea level cycles, and has shown that sea level rise/glacial retreat coincide with incursions of progressively more stenopic foraminifers from offshore refugia in the Ross Sea.

Significant Pleistocene and Pliocene faunas were also serendipitously recovered from sediments overlying the Ross Sea Unconformity.