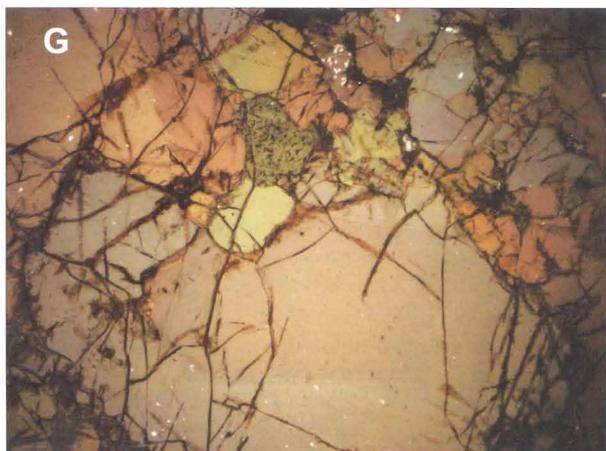
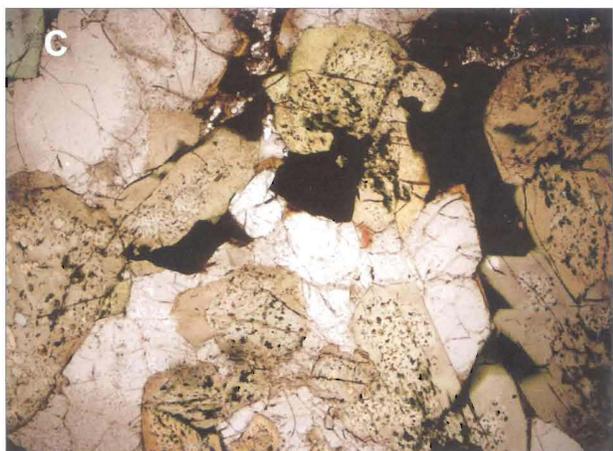
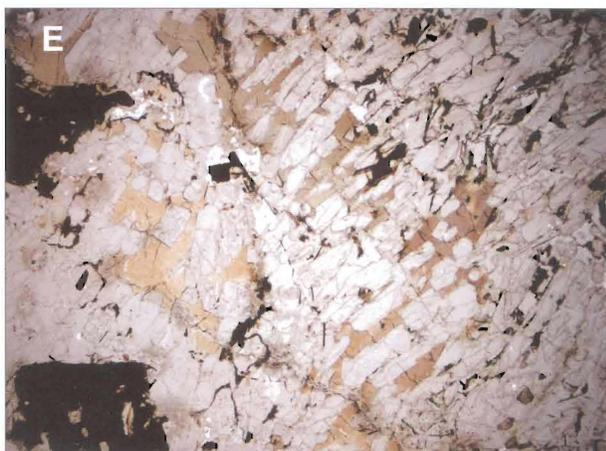


PLATE 1

*Photomicrograph of olivine clinopyroxenite (bottom left) and surrounding sodalite-ijolite (right) and ijolite (top left) crystallisations in host olivine nephelinite (centre). Field of view 23 mm wide X 22 mm high. R.E. Pogson photograph.*



---

PLATE 2 (opposite page)

Photomicrographs of selected pegmatoid and xenolith textures within the Round Lagoon nephelinite. Field of view for each image, 5 mm wide X 3.5 mm high. A. Wehrlite (RL8), with olivine (large grains), Cr-rich augite (long crystals, centre and bottom left) and Cr-bearing spinel (opaque grain, centre top). B. Olivine-nepheline-clinopyroxenite (RL 19) with diopside (large grains) riddled with olivine (small crystals, light and dark altered grains) and nepheline (light coloured crystals). C. Sodalite ijolite (RL3) with nepheline and sodalite (light crystals), diopside (spongy included cores), Ti-rich diopside (rims), aegirine-augite (dark overgrowths, bottom right) and ulvospinel (opaque interstitial crystals, top). D. Ijolite (RL2A), with nepheline and anorthoclase (light crystals), strongly zoned Ti-rich diopside (dark crystals). E. Nepheline syenite (RL6), with nepheline (light aligned crystals), sanidine (light coloured enclosure, centre left), diopside (intergrown darker area) and ulvospinel (large crystals, bottom left). F. Alkali syenite (RL15) with sanidine (light aligned crystals), diopside (small crystals top centre) and aegirine-augite and aegirine (dark intergrowth). G. Spinel meta-lherzolite (RL9) with olivine (large crystal, centre bottom), diopside (crystal centre top) and orthopyroxene (centre right and top left). H. Altered meta-wehrlite (RL6A) with olivine (crystals top right and bottom left), diopside (crystals bottom right), Cr-bearing spinel (black irregular grains) and extensive fine grained recrystallised zones. All images taken in plane polarised light. R.E. Pogson photographer.