

035

exposed south of Renison Bell. The eastern complex, which outcrops at the far eastern end of the grid, has been named the Colebrook Hill Serpentinite (3). A small (500m x 50m) faulted off serpentinite dyke has been mapped in the Dundas Group sediments between lines 2000N and 2400N. This indicates that the emplacement of the serpentinites post dates the Middle Cambrian Dundas Group.

The Serpentine Hill Complex

The portion of the Serpentine Hill Complex in GAP is comprised of layered pyroxenite and harzburgite partially replaced by serpentinite. Good outcrop occurs only in the Ring River, in the GAK costeans, on the Ring River access road and at Grid 4.

The olivine rich rocks are mainly harzburgite (5) with minor diorite. In most cases the layering and cumulate textures have been obliterated since the rocks have largely been altered to serpentinite, talc and tremolite. The rocks are either granular or poikilitic, and characteristically are altered to dark green, almost black, serpentinite composed of lizardite, talc, platy bastite, chromite and magnetite. Finely disseminated magnetite gives the dark colour to the rocks and accounts for the high magnetic susceptibilities. Localised shearing along joints and faults has led to the development of chrysolite, talc and tremolite, as well as sweated out slickensided magnetite.

The pyroxenite rocks are mainly orthopyroxenite with minor olivine pyroxenite and plagioclase pyroxenite. There is every gradation from pyroxenites with slight alteration to talc and tremolite along grain boundaries and cracks, to pyroxenites entirely replaced by serpentinite, talc and tremolite. Characteristically, the serpentinitised pyroxenites are apple green in colour and have a vitreous, waxy lustre. They range from highly sheared to massive varieties, and contain abundant relict pods of primary layered pyroxenite, often surrounded by sheared green serpentinite with cross fibre asbestos. The green serpentinites are composed of lizardite chrysolite mixtures with little or no magnetite. Magnetite