

white mica, anthophyllite?, tremolite, chlorite, prehnite. The orthopyroxene where present is typically pseudomorphed by fibrous amphibole, whilst the presence of minor serpentine in T8629 may reflect the former presence of olivine.

Basalt/dolerite Complex : These rocks form a massive monotonous exposure in the south and SE portions of GAP west. The rock is typically dark green and finely crystalline with thin fibrous amphibole (actinolite) present in hand specimen. Minor pyrite and secondary? quartz has been noted in some examples. The only textural variation observed was at L2000N 3710W where the rocks display a microporphyritic texture with small crystals of euhedral feldspar. The mafic body as a whole trends NE/SW.

Its western contact with the Serpentine Hill Complex, although obscured, probably is represented by a fault. The eastern contact is apparently paraconformable with overlying unsorted breccias. This contact, which occurs on the Ring River road at 2160m, is steep and probably strikes to the NE.

In thin section (T8632, GAP west 2100N 90E; T8633 2300N 160E) the rock varies from doleritic (subophitic?) to quench textured spherulitic lava containing plumose clinopyroxene. Primary minerals recognised include clinopyroxene, plagioclase, opaque oxides and pyrite? These mafic rocks have now been subjected to alteration and these secondary minerals involve actinolite, secondary quartz, sphene, epidote, and retrograde vein prehnite.

The presence of altered glass and quench textures suggests that these mafic rocks were cooled rapidly, possibly in extrusive submarine flows. Evidence in the field for pillow lavas was not observed. The presence of mineral layering within the Serpentine Hill Complex, roughly orthogonal to the ultramafic-basalt contact, is tenuous evidence that there may not be an immediate genetic relationship between the two rock types.

Sediments : Overlying the mafic lavas in the south and SE corner of the grid is a succession of fine grained to coarse clastic sediments which may be conveniently subdivided into two groupings.

1. Polymict breccias are exposed along the Ring River Road from 2100-2160m. These clastic sediments occur as massive weathered breccias with subangular to subrounded pebble to small cobble sized clasts. Clast composition noted in the field includes red and grey chert, laminated mudstone, siliceous mudstone, feldspathic pyroxenite, muscovite-bearing quartzite, and haematite stained fine grained mafic igneous? rock. Bedding is lacking, though textural variation occurs through the sequence depending on the degree of rounding and the matrix to framework ratio. Close to the basalt contact the breccia may be more accurately regarded as an orthoconglomerate. The matrix of the breccia comprises a highly weathered buff coloured clay - possibly indicative of an initial tuff component. Total thickness would be approximately 40-50m thick.