

The rock is variably stressed and fractured. Microfractures are healed with films of chlorite and albite. More extensively deformed (granulated) zones are marked by semi-pervasive development of a marginally corrosive, fine-grained albite cement.

T 35210

(T.S. 31169) K-stain positive.

This is a pervasively sericitised porphyritic and weakly clastic rhyolite. Finer details have been obliterated by alteration and relatively marked shearing, and there is little to choose between a lava and a thoroughly welded (and thus lava-like) ignimbritic mode of origin. The distinction is academic in that an extrusive origin is considered likely.

S 367815 N

386680 E

Mt MURKINSON

Frequent stressed and partly fragmented quartz "phenocrysts" (100  $\mu$  - 2 mm) are accompanied by lenses of sericite, representing completely altered and sheared feldspar grains. These are embedded in a more or less massive, sericitic matrix with sporadic, poorly defined (sericitised/flattened) lithic clasts (to 1.5 mm) and a weak relict flow banding.

Quartz is of phenocrystal habit (embayed margins, partly bipyramidal) and the fragmentation is an in-situ phenomenon. Phenocrysts, overall, are rather evenly disseminated and this gives the rock a distinct lava-like character. However, very vague, shard-like features persist in pressure shadow zones, marginal to quartz grains and rock clasts, and in some of the poorly defined lithic clasts. These features tend to confirm a thoroughly welded ignimbrite interpretation.

Adularia, albite, chlorite and carbonate are accessory alteration phases. These were introduced partly in pre-tectonic, discontinuous veins and microfracture healings.

T35216

(T.S. 31170) K-stain negative.

This is a greenschist metapsammite, clearly an argillaceous ortho-quartzite. The rock is of distinctly detrital character and devoid of pyroclastic or volcanomict features.

S 367,825 N

387205 E

Mt MURKINSON

The relict framework is poorly to moderately sorted in the silt to fine sand range, with sporadic medium-sand-sized grains. Detritus is almost entirely quartz with (somewhat flattened) angular to well rounded shapes. Bedding is variably relict on a sub- to millimetric scale, defined in part by the distribution of detrital heavy mineral particles (zircon, opaques, leucoxenic semi-opaques, rare tourmaline) and by sporadic crude argillaceous partings, and is intersected by the tectonic cleavage at low to intermediate angles. The stressed/partially recrystallized cement consists of quartz with accessory sericite.