

CAMBRIAN

Porphyritic quartz-feldspar rhyolitic lava :

This massive unit dominates the lithologies of the Lewis River Volcanics and is mappable as a continuous belt from the southern coastline at Elliott Bay north to the Moores Fault a total exposure length of 20 kilometres. This report however, is restricted in its coverage, to the southern 5 kilometres of the lava belt. The width of this unit remains generally constant in the area under discussion with a maximum width of approximately 10 kilometres immediately north of the granite bodies.

Although mapped and discussed as a single unit, minor macroscopic differences are present throughout this lava belt. It is conceivable to assume that several stratigraphic equivalents are present.

Essentially the rock contains subhedral to euhedral phenocrysts of quartz and feldspar randomly disposed within a homogeneous microcrystalline groundmass showing relict flow textures. The quartz phenocrysts are commonly subrounded and embayed, with an average diameter of about 2mm. Quartz crystals usually amount for 30% of the total rock, with the feldspar content averaging approximately 20%.

The groundmass consists of diffuse cryptocrystalline to microcrystalline potash feldspar with abundant, small (0.1mm) mottled allotriomorphic quartz crystals. Commonly a penetrative hydrothermal alteration of the glassy groundmass results in a fairly uniform gross composition of extremely fine clays, shredded sericite and fine mottled patches of ultra-fine quartz.

This is a lava of gross rhyolitic composition, examples of which are represented by KR 3300 and KR 3606.