

KR3475: volcanic breccia of porphyritic glassy rhyolite, and minor epidotised dacitic material

Field note: crystal lithic tuff (quartz felspar chlorite)

The stained off-cut shows patchy domains up to 20 mm which have a distinctly potassic matrix, distinct from other areas of similar size which are not potassic.

These domains have a predominantly, porphyritic rhyolitic glassy lava composition. Phenocrysts of subhedral quartz (15%) up to 2 mm, of altered potash felspar (15%) also altered plagioclase (?7%), occur in a sheared, diffuse micro-crystalline quartz mosaic, crowded with extremely fine chlorite, which depicts a wavy ?flow layering. Minor foliae are marked by relatively coarser chlorite, studded with minute titaniferous granules + fine epidote.

Areas between these domains are non-potassic, and consist of a diffuse micro-mosaic of quartz, crowded with ultra-fine epidote, also with scattered, embayed quartz crystals, veins and patches of relatively coarser epidote. These areas have a gross epidotised dacitic composition.

Within the rather limiting size of this sample, it is interpreted to consist of breccia fragments of porphyritic glassy rhyolite, with interfragmental epidotised dacitic material, which would appear to indicate the most appropriate rock name of volcanic breccia.