

Secondary Features: The feldspar phenocrysts have been completely replaced by K-feldspar (a type showing an unusual undulose pattern near extinction) and are dusted with fine-grained hematite. The groundmass of the pink material consists of fine-grained quartz-feldspar, green phyllosilicates, very fine-grained hematite, and minor (?) rutile. The pink material is brecciated and filled with a green matrix of quartz-feldspar, green phyllosilicate, (?) rutile and Fe-oxide. Patches of coarse-grained quartz + chlorite occur locally.

The green phyllosilicates range from a typical chlorite (P: green to colourless; AIC: green-grey) to a green-brown mineral with second-order birefringence. The latter is characteristic of the matrix, except for areas with coarse-grained quartz. Both occur together in the pink blocks. The chlorite occurs in veins with quartz.

Other veins contain sericite, as bundles with chlorite centres, or as simple planar to slightly stylolitic veins. There are veins of limonite (due to weathering).

Identification: Originally a feldspar-phyric volcanic rock, subsequently brecciated and altered during the hydrothermal episode associated with massive-sulphide formation.

The pink "rhyolites" around the chloritic pipe, in order south to north S718, 725, (727), 726, 734, 732:

S718 Primary Features: Feldspar phenocrysts and accessory zircon and apatite are preserved.

Secondary Features: The phenocrysts are replaced by sericite (100% in some cases), albite and hematite-magnetite. The groundmass is possibly the product of deformation of snowflake devitrification products. It is an intergrowth of deformed very irregular quartz-feldspar crystals. Patches of coarser-grained quartz may correspond to original phenocrysts. Other patches rich in sericite and hematite occur locally. There is no chlorite, and K-feldspar was not identified positively. The specimen is cut by veinlets of sericite which form networks locally.

S725 Primary Features: Feldspar phenocrysts are abundant.

Secondary Features: The feldspar phenocrysts are replaced by K-feldspar (undulose near extinction) and magnetite partly replaced by hematite. The groundmass consists of fine-grained quartz-feldspar and abundant magnetite as euhedra. Other opaque material is finely bladed and may be hematite. There is a little rutile. The groundmass is limonite-stained and there is no chlorite. A veinlet of K-feldspar is surrounded by a zone in which blades of K-feldspar are intergrown to give a texture similar to that found in Spec. MS2 (Murchison Gorge). The specimen is cut by rare stylolitic veins of sericite.

S726 Primary Features: A few feldspar and quartz phenocrysts are preserved in a fine-grained granular groundmass.

Secondary Features: The feldspar phenocrysts are replaced by K-feldspar (undulose near extinction) and hematite. The groundmass consists largely of fine-grained equigranular quartz-feldspar. Chlorite occurs in patches (P: green-yellow; AIC: yellow on grey, some second-order colours also). One area of chlorite is associated with a cluster of rutile grains. Stylolitic veins of sericite cut the specimen.

The sample is weathered.