

0504

SAMPLE NUMBER: 562451

SUMMARY:

This is an augite+plagioclase-phyric basaltic lava cut by abundant calcite veins, and is typical of the basalts at Hellyer.

HAND SPECIMEN:

This sample is a dark grey-green finely porphyritic basaltic lava cut by abundant angular networks of calcite veins, some almost 1cm thick.

THIN SECTION:

This is a texturally well-preserved formerly augite+plagioclase - phyric basaltic lava, typical of the Hellyer basalts. Former augite phenocrysts are mainly stubby prisms less than 1mm long that have been completely pseudomorphed by brownish calcite, and make up about 12-15 modal% of the sample. The albitized plagioclase phenocrysts are rather elongate, lath - shaped crystals also less than 1mm long, that are relatively free of alteration, except for a slight pinkish hue from submicroscopic Fe oxide dust. They make up about 7-10 modal% of this sample.

The groundmass of this rock is fairly crystalline, and composed of well-formed laths of albite and small altered granular augite grains in subordinate chloritized glassy mesostasis charged with small leucoxene blebs after tiny FeTi oxide grains. Slightly larger angular patches of green chlorite fill angular fractures, and often contain granular gold epidote crystals. Calcite is abundant as irregular patches overprinting the groundmass of this sample, and as quite thick veins lacking any associated pyrite or other sulphides. Except for the calcite veining, this is a quite well-preserved basaltic lava.