

**SAMPLE NUMBER: 563717, MAC-27, 833.8m**

**SUMMARY:**

This sample is a well-preserved olivine+augite-phyric fairly primitive basaltic lava typical of many of the Hellyer basalts.

**HAND SPECIMEN:**

This is a massive pale- to medium grey finely porphyritic basaltic lava cut by narrow calcite veinlets, and with common tiny blebs of black chlorite in the groundmass.

**THIN SECTION:**

This is a texturally well-preserved olivine+augite-phyric basaltic lava. Former olivine phenocrysts are entirely replaced by very fine-grained polygonal silica and minor calcite, and make up about 7-10 modal% of this sample. They are up to 3mm long, euhedral, and commonly contain tiny red euhedral chromite inclusions. Augite phenocrysts are equally as abundant as olivine, mainly finer-grained (0.5-1.5mm long), perfectly fresh and unzoned. Unlike olivine, they usually occur as clusters of crystals, often intergrown.

The groundmass of this sample is very similar to that in the previous sample. It is murky, very fine-grained and charged with tiny albite and augite microlites. In places, small sheaves of intergrown albite and augite represent quenched spherulitic crystallization, typical of the margins of pillowed units. Fractures through the groundmass are filled by pale green chlorite and lined by tiny blebs of quartz. Narrow meandering calcite veinlets transect this sample.