SAMPLE: 562806

SUMMARY: This rock was a glassy plagioclase+augite-phyric evolved andesitic lava.

HAND SPECIMEN:

This rock is a dark green massive aphyric basaltic or andesitic lava.

THIN SECTION DESCRIPTION:

This rock was a sparsely plagioclase+augite-phyric andesitic lava with a glassy groundmass. It has been quite strongly recrystallized and altered. Albitized plagioclase phenocrysts are totally replaced by very fine-grained sericite, as is albite in the recrystallized groundmass, resulting in the phenocrysts being very hard to differentiate from surrounding matrix, and precluding sensible modal abundance determination. However, a best guess would be that this sample had 5-10 modal% of plagioclase phenocrysts; these were less than 1mm long, and occasionally occur in multi-crystal clots. More obvious but much less abundant are chloritized augite phenocrysts that are less than 1mm long euhedra. FeTi oxide phenocrysts and microphenocrysts are altered to leucoxene, and were not uncommon. Apatite microphenocrysts are also notable but not common.

The groundmass of this sample was undoubtedly glassy. It has recrystallized after devitrification to a messy quartz-albite uneven snowflake mosaic in which the feldspar is largely replaced by fine-grained sericite. Angular patches of polycrystalline quartz to several mm, and green chlorite, are common, and tiny leucoxenic blebs riddle the quartz-albite(sericite) mosaic.

This rock was probably a glassy evolved andesite lava, as suggested by the relatively large apatite microphenocrysts and abundance of Ti-alteration phases in the groundmass among other things. Texturally, and in the size of the plagioclase phenocrysts, the rock is unlike typical dacites from the Que-Hellyer area.