SAMPLE NUMBER: 4317488

SUMMARY:

This is a formerly glassy sparsely plagioclase-phyric dacitic lava that has suffered strong silica-sericite alteration.

HAND SPECIMEN:

This is a pale grey even-textured felsic aphyric lava with a few thin calcite veinlets and spots of darker chlorite concentration.

THIN SECTION:

Despite intense alteration and recrystallization, this sample preserved its original texture well enough that the rock can be confidently identified as having been a sparsely plagioclase-phyric glassy dacite lava. The former plagioclase phenocrysts are entirely sericitized, and some are slightly stretched out and deformed; they originally made up less than about 2 modal% of this rock and were smaller than 1mm long.

The originally glassy groundmass of this sample probably devitrified then recrystallized as quartz and albite. However, relatively strong alteration has led to extensive recrystallization of the groundmass to fine-grained and rather uniform-textured quartz riddled by sericite and small Fe oxide grains. The sericite shows a weak orientation across the section. Disseminated pyrite grains to about 0.3mm across are sparse. A few thin calcite veinlets transect the sample, but calcite overprinting is insignificant.

SAMPLE NUMBER: 431489

SUMMARY:

This is a formerly glassy olivine-phyric basaltic lava or lava breccia, less vesicular than 431487 but otherwise very similar. It underwent a strong silica-chlorite ± minor pyrite alteration of glass, then was overprinted by intense calcite alteration.

HAND SPECIMEN:

This is a medium to dark grey strongly altered and recrystallized mafic lava or lava breccia with abundant calcite alteration.