

THIN SECTION:

This is an exceptionally strongly altered, slightly vesicular formerly glassy andesitic lava with totally altered sparse plagioclase phenocrysts and even less augite phenocrysts. The plagioclase phenocrysts are completely sericitized, and the few recognizable former augite phenocrysts are chloritized. The remainder of this rock is so heterogeneous as to almost defy description. It is composed of weakly foliated, curving, highly irregular domains of darker colour that have a very fine-grained chloritic base overprinted by secondary quartz and angular patchy areas of sericite. Paler coloured domains are more sericite and quartz-rich, and include areas with finely granular saccharoidal silica intergrown in an almost banded fashion with streaky pale green chlorite. Larger patches of deformed coarse secondary quartz appear to be slightly flattened vesicles.

The abundance of chlorite and the few augite phenocrysts suggest that this was a dacite to acid andesite. It has suffered intense silica-chlorite alteration, but has minimal associated pyrite.

SAMPLE NUMBER: 431558

SUMMARY:

This is a strongly recrystallized and weakly foliated originally glassy dacitic to andesitic lava with strong silica-sericite alteration.

HAND SPECIMEN:

This is a grey-green intensely sericitized felsic or intermediate lava or lava breccia with a weak foliation and cut by chloritic veinlets.

THIN SECTION:

This sample is a formerly glassy dacitic to andesitic lava composed of about 3-5 modal% of small altered plagioclase phenocrysts in a groundmass that is strongly and variably recrystallized, and weakly foliated. The former plagioclase phenocrysts are mainly less than 1mm long and are entirely replaced by polycrystalline aggregates of very fine-grained quartz and sericite. A few phenocrysts replaced entirely by fine-grained quartz may have been originally augite.

In the least-altered areas of groundmass, the texture is seen to be a fairly coarse snowflake texture after devitrified glass. However, this has been strongly modified by variably intense alteration and foliation development. The most common style of alteration is granular fine-grained silica and intergrown sericite and subordinate chlorite.