

SAMPLE NUMBER: 431486

SUMMARY:

This is a thoroughly recrystallized former basaltic lapilli tuff that suffered strong chlorite-quartz-pyrite alteration, followed by strong calcite overprinting.

HAND SPECIMEN:

This is a uniform-textured mafic lava with fairly extensive alteration, probably calcite-chlorite dominated.

THIN SECTION:

This sample bears minor relict textural evidence that it was originally an exceptionally vesicular basaltic lava, or else a basaltic lapilli tuff. Rounded to ovoid bodies often aggregated too close to have been vesicles, are defined by chlorite and secondary quartz. The few outlines of former phenocrysts are suggestive of olivine precursors, and a few deep red chromite inclusions are present, supporting this interpretation. Most of the rock consists of extremely variable textured intergrowths of very fine-grained saccharoidal secondary quartz and chlorite, and this has been overprinted by strong to intense calcite alteration. Calcite probably constitutes 50 modal% of the sample. In a few areas, secondary quartz and chlorite are coarser-grained and may represent disrupted veinlets. Idiomorphic pyrite grains to about 0.5mm maximum diameter are not uncommon disseminated throughout the sample, and often have quartz pressure fringes.

This sample was almost certainly composed essentially of glassy basaltic lapilli. It has been very strongly silica-chlorite \pm pyrite altered, leading almost complete recrystallization and obliteration of the original texture. Subsequent calcite alteration, with no associated pyrite mineralization, has strongly overprinted the rock.