

SAMPLE: 562693

SUMMARY: This sample is a microvesicular formerly plagioclase+augite - phyric basalt or basaltic andesite lava.

HAND SPECIMEN:

This is a massive dark grey-brown mafic or intermediate lava with calcite spots to several mm across and small phenocrysts of feldspar and a mafic phase.

THIN SECTION DESCRIPTION:

This sample was a microvesicular plagioclase+augite-phyric basalt or basaltic andesite that has suffered quite strong calcite alteration. Former augite phenocrysts to about 1.5mm across make up about 3-5 modal% of the rock and are totally replaced by dirty brown calcite with intergrown green chlorite. Plagioclase phenocrysts are notably more abundant than augite and range from 0.1-2mm long; they are albitized, and many are slightly rounded and resorbed-looking. They commonly occur in multi-crystal clots, or intergrown with augite in small cognate gabbroic inclusions. Small epidote granules commonly occur in albite crystals, although sericite is uncommon. Small leucoxenitized FeTi oxide microphenocrysts are reasonably abundant. A reasonable man may well ask just what is reasonable when it comes to FeTi oxide abundances.

The groundmass of this sample was vitrophyric and riddled with tiny gas bubbles and trails. The former glass, now devitrified to a dark irresolvable material, is charged with tiny microlites of albite, and full of blebs of quartz and chlorite, with occasional intergrown epidote. Calcite occurs as brownish patches overprinting groundmass, and as angular patches and veinlets.

This is a plagioclase+augite-phyric evolved basaltic lava, probably approaching an andesite composition.