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Much finer grained pyrite occurs in similar association as winding trains that wander in the interstitial areas bounding 'fragments' or domains.

I think that this was probably a dacitic to silicic andesite lava with a glassy groundmass. The relative abundance of apatite is generally unlike the dacites in the Que-Hellyer area that I am familiar with, and makes me lean towards silicic andesite. Intense alteration, probably in several stages, has almost destroyed the original identity of the rock. The first alteration event probably involved sericitization of devitrified glass and some feldspar phenocrysts. Subsequent silica-chlorite-pyrite alteration overprinted the sericite alteration.

**SAMPLE NUMBER: 431570**

**SUMMARY:**

This is a strongly silica-sericite  $\pm$  pyrite-altered polymict felsic lava breccia composed originally of largely glassy lava fragments.

**HAND SPECIMEN:**

This is a grey strongly sericitized polymict lava breccia composed of abundant fine-grained felsic lava fragments to about 1cm maximum length

**THIN SECTION:**

As is frequently the case with strongly altered formerly glassy felsic lava breccias, the fragmental texture is much less evident in thin section than in the hand specimen. A few undoubted totally recrystallized devitrified dacitic to rhyolitic lava fragments are obvious, but most of the others tend to merge imperceptibly into the matrix of the very altered rock. In the few clear lava fragments, sparse small feldspar phenocrysts have been totally replaced by polycrystalline quartz. The sample has been quite strongly silica-altered (silicified) with saccharoidal fine-grained silica replacing many former fragments and coarser-grained polycrystalline quartz being abundant through the matrix, usually intergrown with a pale sericite and very fine-grained Fe oxide dust, and minor crystalline pyrite. The pyrite occurs disseminated through matrix quartz as idiomorphic grains to about 0.4mm across. Several clots of multi-crystalline pyrite have pronounced quartz fringes in which coarse-grained sericite is growing. At first, these clots appear to be detrital, but I think