Foliation planes and microshears, and crosscutting fractures are marked by strong chlorite development and recrystallization of groundmass secondary quartz. Patchy calcite alteration overprints the altered groundmass and the assemblages developed along the veinlets and foliation planes.

I think it is not possible to judge petrographically whether this sample is andesitic (as the Ti/Zr data suggest) or dacitic. I would say it is closer to dacite in thin section, as chlorite is a minor phase and augite phenocrysts were scarce.

SAMPLE NUMBER: 431559

SUMMARY:
This is a formerly glassy, sparsely plagioclase+quartz -phyric dacitic lava with a groundmass that is probably less silicified than many of the other samples in this set.

HAND SPECIMEN:
This is a mid-green to grey mottled felsic to intermediate lava with a few diffuse patches of more chloritic matrix.

THIN SECTION:
This sample is texturally quite well-preserved, and one of the least-altered rocks in this set. It is a sparsely plagioclase+quartz-phyric dacitic lava with a very fine-grained groundmass after devitrified glass. The plagioclase phenocrysts are less than 1mm long and totally sericitized. A few phenocrysts that have shapes more typical of plagioclase than augite are replaced by pale green chlorite. Quartz phenocrysts are less than 1mm across and are strongly rounded and resorbed, with no crystal faces preserved. Former FeTi oxide phenocrysts were also not uncommon and are replaced by very fine-grained aggregates of leucoxenitic material.

The groundmass of this sample was originally devitrified glass that has recrystallized to a very uniform-textured intergrowth of fine-grained quartz and sericite. The extent of silicification of the recrystallized groundmass is less than most of the other samples described herein. A few fractures and microshear zones are defined by more intense sericite development and subordinate intergrown chlorite. This sample was originally very similar to most of the other dacites described above.