SAMPLE NUMBER: 562459

SUMMARY:

This is a sparsely plagioclase-phyric holocrystalline dacitic dyke rock, probably a feeder to dacites higher in the section.

HAND SPECIMEN:

This sample is a dark grey relatively coarse-grained andesitic lava or volcaniclastic sediment with some calcite veining.

THIN SECTION:

In thin section, this sample is seen to be an unusual virtually holocrystalline sparsely plagioclase-phyric dacitic or andesitic dyke rock. It consists of about 5 modal% of blocky subhedral to anhedral albite phenocrysts to about 1.5mm long with slight sericite speckling, often intergrown at their rims with relatively coarse groundmass albite. No mafic phenocrysts were observed, although small leucoxenized FeTi oxide grains are quite common.

The groundmass of this sample is almost holocrystalline, and composed of stubby laths of albite with interstitial anhedral quartz, Kspar (or sericitized albite) and chlorite. Streaky discontinuous chlorite and sericite veinlets are quite common. Fine-grained calcite is quite abundantly diffused through the rock, and strained calcite veinlets are not uncommon.

The most satisfactory explanation of this sample is that it is a feeder dyke in the Animal Creek Greywacke to the overlying dacites (which dacites should be easily testable with wholerock chemistry). The holocrystalline texture, and sparse blocky plagioclase phenocrysts and lack of mafic phenocrysts all support this interpretation.