

0506

**SAMPLE NUMBER: 563713 MAC-27, 515.45m**

**SUMMARY:**

This sample is a massive sparsely plagioclase+quartz (+rare augite) - phyric andesitic lava identical to the precursor lava of 563712.

**HAND SPECIMEN:**

This is a massive, uniform textured pale- to mid-grey finely porphyritic basaltic to andesitic lava.

**THIN SECTION:**

Despite the fact that it apparently comes from exactly 100m deeper in the drillhole than the previous sample (563712), this rock bears an astonishing similarity to 563712 petrographically; the only significant difference prior to alteration is that this rock is unbrecciated. It consists of around 2-3 modal % of dirty brownish somewhat rounded albite phenocrysts less than 1mm across, some of which are flecked with chlorite and granular pale yellow epidote. A few microphenocrysts of fresh augite are preserved. Two definite quartz phenocrysts (xenocrysts?) were noted, both rounded and reacted, with narrow high-temperature reaction rims of very fine-grained clinopyroxene.

The bulk of this sample is a relatively even textured groundmass composed of abundant albite laths set in a matrix of anhedral quartz, and abundant dirty brown extremely fine-grained epidote and chlorite. A few elongate fractures are filled by secondary quartz and pale green chlorite.

This sample is undoubtedly identical to the precursor lava of the preceding sample. It is unusual and distinctive in having both rounded dusty albite phenocrysts and rounded quartz phenocrysts or xenocrysts. I have not seen similar samples in other drillholes in the region, although I have not looked at MCH-1. The chemistry of this sample would be interesting. I suggest that it is andesitic.