

**SAMPLE: 562802**

**SUMMARY:** This rock is a lapilli volcanoclastic composed of lithic clasts and feldspar crystals and crystal fragments derived entirely from dacitic glassy volcanics. It has suffered strong pressure solution

**HAND SPECIMEN:**

This rock is a dark grey-green lapilli volcanoclastic composed of clasts of fine-grained, sometimes feldspar-phyric formerly glassy lavas, mainly less than 5mm across.

**THIN SECTION DESCRIPTION:**

This sample is a volcanoclastic sandstone (lapilli volcanoclastic) that despite its striking hand-specimen similarity to the previous rock, is quite different in thin section and provenance. The sample lacks the fine-grained devitrified messy matrix of 562801, and consists almost entirely of framework grains composed of either clasts of formerly glassy felsic lava, or phenocryst fragments derived therefrom. These clasts are mainly 1-3mm across, and are remarkably interlocked with adjacent fragments, due to intense pressure solution at clast boundaries; this is evident by the dark rims on every grain composed of 'insoluble' components concentrated on grain boundaries during pressure solution. The clasts are invariably formerly glassy, plagioclase-phyric or aphyric probably dacitic lavas. The glassy groundmasses have devitrified and recrystallized to a variety of different textures, with rather coarse snowflake textures perhaps being dominant. Plagioclase phenocrysts were albitized, and are mainly 1-2mm across and slightly resorbed blocky prisms speckled with sericite. Multi-crystal clots are abundant, and discrete detrital albite phenocrysts make up a significant amount of the finer grain size fraction in this rock. Interestingly, no quartz phenocrysts, and only a few small chloritized augite phenocrysts were noted. Alteration phases include uncommon chlorite, leucoxene and overprinting calcite.

This sample is clearly a volcanoclastic sandstone that suffered strong winnowing of finer matrix, and subsequent pressure solution. It is derived entirely from plagioclase-phyric and aphyric dacitic glassy lavas.