

Fine Colluvial Fabric with Sanidine

(Samples MC 2013/33, 34, 38, 41, 43, 97, 101, 102, 141, 142, 175 (Fig. 10))

Inclusions

20-22%. eq. sa –sr < 2 mm. Double- to open-spaced. Well-sorted. Unimodal grain size distribution.

Coarse Fraction

22-27%. < 2.5 mm

Common: Feldspar; eq. a-sa. < 1 mm. Can have fine-grained inclusions in the core. Can be simply twinned. Sanidine.

Common: Argillaceous inclusion: r. <2.5 mm. Orange brown in XP, orange in PPL. Merging boundaries, sometimes with silt-sized feldspar inclusions. Clay pellet (samples MC 2013/38, 42, 102)

Common-Few: *Micrite:* r. < 1 mm. Deposited in voids (samples MC 2013/42, 102)

Few-Rare: Pyroxene; sa-sr. < 1 mm. Second order birefringence and high relief. Clinopyroxene (samples MC 2013/34, 42, 43, 175).

Few-Rare: Biotite; eq. a. < 1 mm (samples MC 2013/42, 175)

Rare-absent: Weathered igneous rock inclusion; el & eq. sr-r. < 1 mm. Micro-phenocrysts of feldspar in a brown groundmass (samples MC 2013/102,). Could be basalt?

Fine Fraction

78-80%. Size: < 0.02 mm

Common: Feldspar

Common-Few: Biotite

Matrix

70-75%. Deep red in XP, and brown to grey in PPL. Optically moderately active (samples MC 2013/42, 43, 102,) to inactive (samples MC 201333, /38, 41, 97, 141, 142, 175). Homogeneous.

Voids

10%. Mainly micro-vughs, and occasionally channels (samples MC 2013/38, 101). Strong alignment to the margins of the sections. Micrite has been deposited in voids.

Comments

The samples in this fabric are characterised by well-sorted sanidine inclusions, set in red clay with fine biotite and sanidine inclusions. Occasionally, coarse augite, chert and biotite inclusions can also be distinguished. The clay matrix is characterised by red clay pellets and micritic calcite, which is dispersed throughout the clay. All the samples were fired in oxidising atmosphere and at a high temperature.

The clay of this fabric is similar to the Fine Clay Mixing Fabric, because it is red firing and contains fine biotite inclusions. The difference between the fabrics, however, is that there are fewer and better sorted coarse inclusions in this fabric, and they comprise mainly sanidine feldspar. It is also characterised by a homogeneous clay with clay pellets.

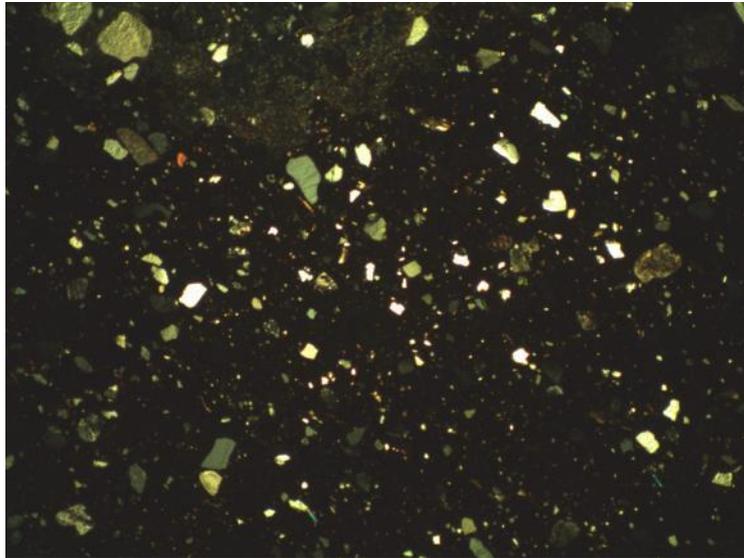


Fig. 10: Fine Colluvial Fabric with sanidine inclusions in XP. Width of image = 5.8 mm.