

## Colluvial Fabric Group

(Samples MC 2013/3, 5, 6, 9, 10, 11, 13, 18, 39, 45, 85, 90, 91, 100, 147) (Fig. 1)

### Inclusions

43-45%. el & eq. a-r. < 4.5 mm. Close- to single-spaced. Moderately bimodal grain size distribution.

Coarse fraction  
50-65%. 4.5-0.02 mm

*Predominant:* Sanidine; eq. a-sa. < 3.5 mm. Sometimes with undulose extinction and alteration (the core enclosed fine-grained small crystals of other minerals). Some are simply twinned.

*Common:* Clinopyroxene; eq. sa-sr. < 2.5 mm. Cleavage. Second-order birefringence. Sometimes with twinning (sample MC2013/91) Augite.

*Common:* Pyroclastic rock; el r. < 4.5 mm. Light-coloured and with vesicles. Clasts derived from magma. Pumice (samples MC 2013/3, 5, 85, 90, 100).

*Common:* Biotite; eq. a. < 3 mm. Brown. Perfect cleavage (samples MC 2013/3, 5, 90)

*Common-Few:* Weathered igneous rock inclusion; el & eq. sr-r. < 4 mm. Micro-phenocrysts of plagioclase, sometimes with pyroxene (samples MC 2013/3, 5, 6, 39, 85). The groundmass is composed of an opaque mineral (samples MC 2013/3, 85, 90, 91). Could be basalt?

*Common-Few:* Opaque inclusion; eq & el. (samples MC 2013/18, 90, 91). Black in XP and PPL. Magnetite

*Common-Few:* Zeolite; eq & el r. < 4mm. Euhedral microphenocrysts of leucite in an opaque groundmass (samples MC 2013/3, 18).

*Common-Few:* TFs; concentrations of clay-rich streaks. Grey in PPL, and deep brown in XP (sample MC 2013/13)

*Very Rare-Absent:* Apatite; el. a. < 2 mm. Moderate to high relief, low birefringence and no cleavage visible (samples MC 2013/18, 91)

Fine fraction  
35-50%, 0.02-0.01 mm

*Dominant:* Biotite

*Common:* Sanidine

*Common:* Opaques

*Common-Few:* Augite

### Matrix

50-60%

Most samples are orange-brown in PPL and red-brown in XP, although some are brown in PPL, and black-brown in XP (samples MC 2013/5, 6, 10, 11, 13, 18, 45, 85, 91). Relative homogeneous samples, except for one, which is inhomogeneous caused by TFs and distinct firing horizons (sample MC 2013/13). Optically active (samples MC 2013/3, 39), moderately active (samples MC 2013/9, 90, 100) to weakly active and inactive (samples MC 2013/5, 6, 10, 11, 13, 85, 91). Some samples show evidence for bloating pores (samples MC 2013/13, 45).

#### Voids

5-7%. Consisting mainly of meso-vughs (sample MC 2013/85) and macro-vughs (sample MC 2013/39). No alignment with margins.

#### Comments

This fabric is defined by the presence of sand-sized sanidine feldspar, augite, biotite, pumice, zeolite and weathered igneous rock inclusions (possibly basalt), set in a red base-clay. Some samples present important differences in that they comprise comparatively few coarse inclusions. This evidence might be interpreted as a more or less abundant addition of temper, as suggested by their angular shape and uniform composition in the samples. The firing atmosphere was generally oxidising, although some samples were accidentally fired in reducing atmosphere (samples MC 2013/5, 6, 10, 11, 13, 18, 45, 85, 91). Also, there appears to exist variability in firing temperature among the samples in this fabric: the optical activity of the matrix ranges from active (samples MC 2013/3, 39), to moderately active (samples MC 2013/9, 90, 100) to inactive (samples MC 2013/5, 6, 10, 11, 13, 85, 91). Two samples were high fired and incompletely oxidised (samples MC 2013/13, 45). This fabric comprises tiles and cover tiles. It occurs at the production sites of Forum Appii and Ad Medias, and was distributed to various consumption sites in the region (samples MC 2013/39, 45, 147).

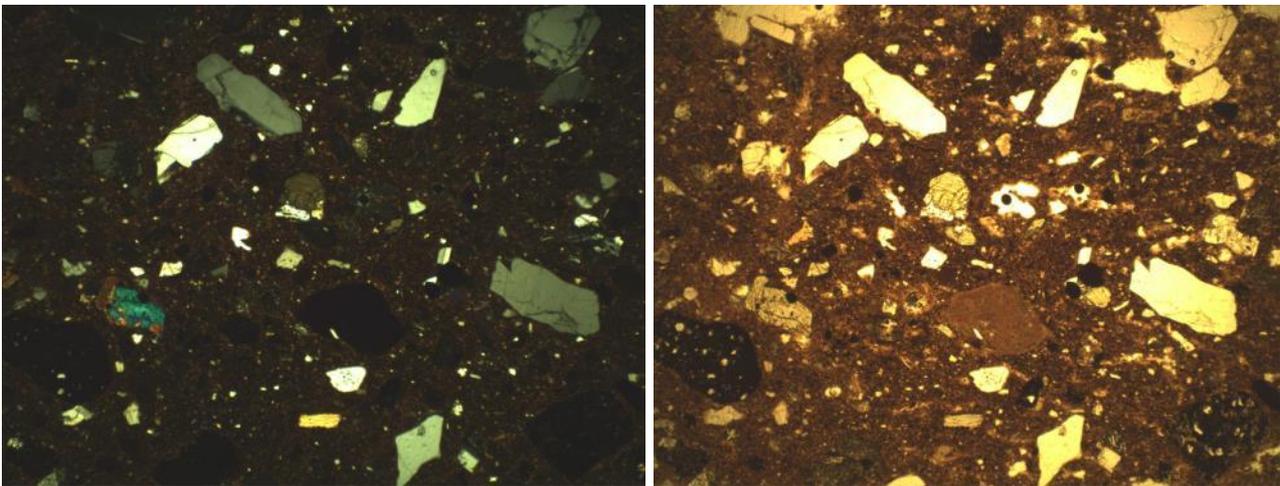


Fig. 1: Colluvial Fabric with coarse sanidine inclusions in XP (left) and PPL (right). Width of individual images = 5.8 mm.