

Sedimentary Fabric Tempered with Igneous Inclusions

(Samples MC 2013/7, 8, 14, 32) (Fig. 6)

Inclusions

43-45%. el & eq. sa-sr. < 4.5 mm. Single- to double-spaced. Moderately sorted. Bimodal grain size distribution.

Coarse Fraction

30-40%. 5-1 mm

Common: Clinopyroxene; eq. sa-sr. < 4-1 mm. Second order birefringence, cleavage and high relief. Augite

Common: Olivine; eq. sa-sr. < 5 mm. Second order birefringence (samples MC 2013/7, 14)

Common: Monocrystalline Quartz; eq. sa-sr. < 2 mm. Some show undulose extinction.

Common: Opaque inclusions; el. sr-r. < 1 mm.

Common-Few: Zeolite; sr-r. < 4 mm phenocrysts of leucite in a brown groundmass (samples MC 2013/7, 14, 28, 32)

Rare: Leucite; sa-sr. < 4 mm. Isotropic (samples MC 2013/7, 14, 28)

Few-absent: Chert; el. sr. < 2 mm (sample MC 2013/7, 8, 14)

Few-absent: Biotite; eq. a. < 3 mm. Brownish, green and speckled in XP. Perfect cleavage (samples MC 2013/7, 8, 32).

Few-absent: Micrite; el. r. < 1 mm. Occurs mainly in voids and as nodules (samples MC 2013/7, 8, 14).

Few-absent: Microfossils < 1 mm. (samples MC 2013/14).

Few-absent: Sedimentary rock inclusion; sa.-sr. < 3 mm. Consisting of sand-sized quartz and augite inclusions, set in a brown groundmass. Ferruginous sandstone (sample MC 2013/14)

Fine Fraction

60-70%. < 1 mm

Common: Quartz

Common: Augite

Common: Opaques

Matrix

50-60%. Yellowish-grey in XP, and light-grey in PPL. Different firing horizons (samples MC 2013/8), and differences in optical activity: moderate to high optical activity (sample MC 2013/14), and low optical activity (samples MC 2013/7, 8, 32).

Voids

5-7%. Consisting mainly of micro-vesicles (sample MC 2013/32), few meso-vughs and vesicles (samples MC 2013/7, 32). No alignment to margins. Micrite is deposited on the interior of voids (samples MC 2013/7, 8, 14).

Comments

This fabric is characterised by a range of sand-sized igneous and detrital inclusions, set in a light-coloured clay with microfossils. Some samples are characterised by a comparatively high amount of these sand-sized inclusions, whereas others have comparatively coarse inclusions. However, all the samples have the same light-coloured clay with fine quartz and augite inclusions. It would seem, therefore, that the samples in this fabric group have been tempered. Micrite has also been deposited in voids. The samples were fired in a reducing atmosphere, and at a moderate to high firing temperature. This fabric group occurs at consumption sites on the Via Appia, near Forum Appia. It comprises tiles and cover tiles, which appear to have been produced in the region of site 11232.

The clay in this fabric appears to be similar to the Sedimentary Fabric Group, which is the local fabric at the site of 11232. In both cases, it consists of a light-coloured clay with fine quartz and augite inclusions. Micrite is deposited in voids, and occasionally microfossils can be identified. However, the difference between this fabric group and the Sedimentary Fabric Group from sites 11232 is that the former comprises a wide range of sand-sized igneous and detrital inclusions. In terms of temper, this fabric appears to bear similarities to the Clay Mixing Fabric Group.

This fabric is similar to the II/III E poorly sorted to very poorly sorted coarse gritty/Leucite-Lava and Leucite-Tuff fabric of Satricum (Attema *et al.* 2001, 375). Firing experiments showed that this fabric turned to a pale firing colour (Attema *et al.* 2001, 367). It was used for the manufacture of tiles, storage jars, loom weights, large bowls (*tegliae*) and life-sized terracotta statues. It was also identified among the wasters from the Late Archaic Kiln (Nijboer 1998, 121-129).

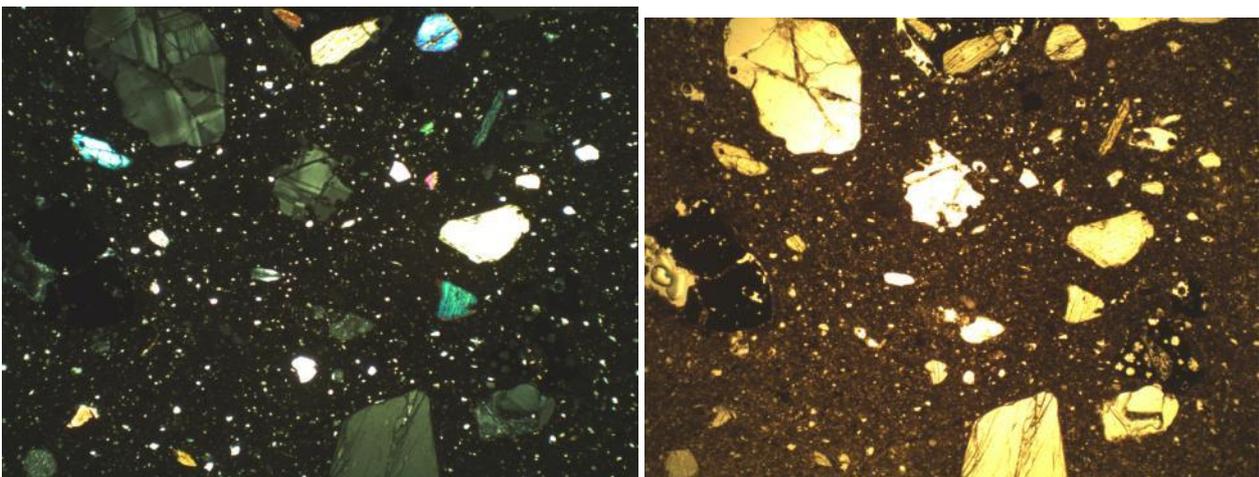


Fig. 6: Sedimentary Fabric tempered with coarse leucite inclusions in XP (left) and PPL (right). Width of individual images = 5.8 mm.