

## Clay Mixing Fabric Group

(Samples MC 2013/176, 178, 179) (Fig. 18)

### Inclusions

20-25%. eq. el. & a-sr. < 1.5-1 mm. Double- to open-spaced. Moderately (sample MC 2013/176) to well-sorted (samples MC 2013/178, 179). Unimodal grain size distribution.

### Coarse Fraction

15-20%. Size = 2 mm

*Common:* Monocrystalline Quartz; eq. sa-sr. < 1.5-1 mm. Some show undulose extinction.

*Common:* TFs; concentrations of two types of clay-rich streaks. One is light-coloured in XP and comprises fine augite and quartz inclusions, whereas the other is reddish brown in XP, and comprises fine biotite inclusions (sample MC 2013/176).

*Common-Few:* Clinopyroxene; eq. sa-sr. < 1.5-1 mm. Second order birefringence, cleavage and high relief. Augite

*Common-Few:* Opaque inclusions; sr-r. < 2 mm. Deep brown, finely dispersed throughout the Matrix. Sometimes with shrink rim (sample MC 2013/176, )

*Few-absent:* Calcite; occurs as pore-fill. Micrite (samples MC 2013/178, ).

*Few-absent:* Microfossils < 1 mm (sample MC 2013/178)

### Fine Fraction

80-85%. Size: < 1 mm

*Common:* Quartz

*Common:* Augite

*Common:* Opaque inclusions

*Common-Few:* Biotite

### Matrix

70-75%. Orange in XP, and orange to brown in PPL (samples MC 2013/178, 179), or light-coloured in both XP and PPL (sample MC 2013/176). Moderate to low optical activity (sample MC 2013/176, 178, 179). Relative heterogeneous samples caused by TFs (sample MC 2013/176).

### Voids

5-10%. Common micro-vesicles (samples MC 2013/178, 179), few meso- and macro-vughs and vesicles (sample MC 2013/176). Preferred alignment to margins (samples MC 2013/176, 178, 179).

### Comments

The samples in this fabric group are characterised by clay mixing. The first clay is defined by quartz and augite inclusions, set in a light-coloured clay with microfossils, whilst the second clay is

red with fine biotite inclusions. The clay matrix is slightly heterogeneous due to the TFs (sample MC 2013/176). Micrite has been deposited in voids. The samples in this fabric appear to have been wheel thrown. They were fired in an oxidising atmosphere and at a moderate to high temperature. This fabric occurs at the villa site Le Grottaacce, and comprises amphorae. The fabric was distributed to various consumption sites in the Pontine region (Tol & De Haas 2013)

The light-coloured clay appears to be similar to the clay that has been identified in the Sedimentary Fabric Group. This similarity can be explained by the fact that the samples in the Sedimentary Fabric comprise more misfires from the villa of Le Grottaacce, but also misfired pottery from site 11232. Similar to the villa Le Grottaacce, site 11232 is also located on the coast. It is not unlikely, therefore, that potters at the two sites sourced similar clay deposits for their products.

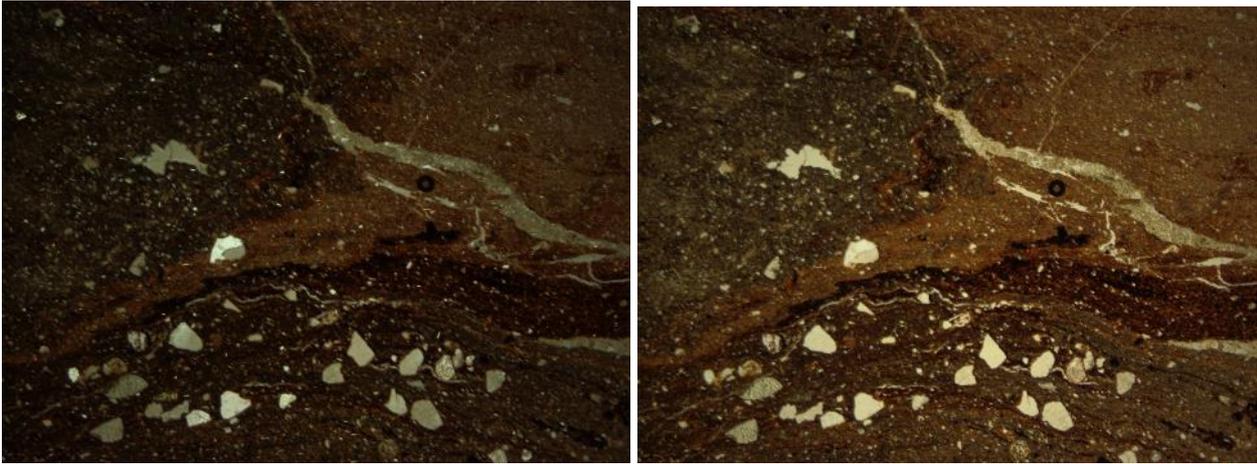


Fig. 18: Clay Mixing Fabric with coarse quartz inclusions in XP (left) and PPL (right). Width of individual images = 5.8 mm.