

MORTARIA FROM BLACKFRIARS STREET, CARLISLE

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Introduction

Fourteen mortaria samples from the Blackfriars Street excavations, Carlisle were submitted for fabric examination in thin section under the petrological microscope.\* The object of the analysis was: (1) to check on the first ten fabric samples and see if these are consistent with production in the Carlisle area, (2) to see if Fabric 16 could have been made in the Lincoln area, and (3) to see if there is anything present in Fabrics 14, 17 and 18 to confirm a German origin for these sherds. All the samples were first studied macroscopically with the aid of a binocular microscope (x20). Munsell colour charts are referred to, together with free descriptive terms.

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This work is part of a long-term project for the petrological analysis of Roman mortaria.

Petrology and Fabric

Fabric 1 CAR 78 BLA B615 (296).

Very hard, slightly rough fabric, red (10R 5/4) inner surface and core, light buff (7.5YR 7/4) slipped outer surface. The trituration grits appear to be largely composed of sandstone, coarse sand and pebbles. Thin sectioning shows frequent grains of quartz, average size 0.10mm-0.40mm, together with flecks of mica, sandstone, some plagioclase feldspar and iron ore.

Fabric 2 CAR 78 BLA B107 (354).

Very hard, rough sandy fabric, creamy-pink (7.5YR 8/2-8/4) throughout. The trituration grits are largely composed of sandstone, coarse sand and pebbles. Thin sectioning shows a scatter of quartz grains up to 0.60mm in size and flecks of mica.

Fabric 3 CAR 77 BLA A157 (350)

Very hard, fairly rough fabric, light red (2.5YR 6/6) core, creamy-pink (7.5YR 8/4) slipped surfaces. Thin sectioning shows frequent grains of quartz, average size 0.10mm-0.20mm, with a few larger grains, flecks of mica, quartzite, shale and iron ore.

Fabric 4 CAR 78 BLA B269 (239).

Very hard, slightly rough fabric, buff (7.5YR 7/4) outer surfaces, light reddish-brown (2.5YR 6/4) core. The trituration grits are largely composed of sandstone, coarse sand and pebbles. Thin sectioning shows a fairly clean clay matrix with a sparse scatter of quartz grains up to 0.50mm across and flecks of mica.

Fabric 5 CAR 78 BLA D+ (316)

Very hard, rough fabric, light reddish-brown (2.5YR 6/4-6/6) inner surface and core, pinkish-white (5YR 8/2-8/3) slipped outer surface. The trituration grits are largely composed of quartzite, quartz, sandstone and distinctive large golden flakes of mica. Thin sectioning shows a fairly clean clay matrix like Fabric 4, but with more and larger quartz grains, up to 0.9mm across, and flecks of mica, sandstone and iron ore.

Fabric 6 CAR 78 BLA B256 (219)

Very hard, fairly smooth fabric, light reddish-brown (2.5YR 6/4) throughout. The trituration grits are largely composed of quartzite, quartz and sandstone. Thin sectioning shows a fine-textured clean clay matrix with flecks of mica and a scatter of small quartz grains.

Fabric 9 CAR 78 BLA B314 (260)

Very hard, slightly rough fabric, buff (7.5YR 7/4) throughout. The trituration grits are largely composed of quartzite, quartz, sandstone and distinctive large golden flakes of mica. Thin sectioning shows a groundmass of quartz grains, 0.10mm across and below in size, with a sparse scatter of larger grains up to 0.60mm, and iron ore.

Fabric 10 CAR 78 BLA D306 (85).

Very hard, slightly rough fabric, light red (2.5YR 6/6-6/8) throughout. The trituration grits appear to be largely composed of sandstone, coarse sand and pebbles. In thin section this sherd appears fairly similar in composition to Fabric 4.

Fabric 11 CAR 79 BLA H+ (363)

Very hard, fairly smooth and slightly micaceous fabric, whitish (10YR 8/2) slipped surfaces, grey (10YR 5/1) core. The trituration grits are composed of well-rounded fragments of (?) basalt. Thin sectioning shows frequent quartz grains, average size 0.10mm-0.50mm, flecks of mica and iron ore.

Fabric 12 CAR 78 BLA B515 (291).

Very hard, fairly smooth fabric, light reddish-brown (5YR 6/6-6/8) outer surface, reddish-grey (5YR 5/2) inner surface and core. The trituration grits are largely composed of sandstone, coarse sand and pebbles. Thin sectioning shows frequent quartz grains, average size 0.10mm-0.50mm, with some slightly larger grains, sandstone, flecks of mica, some plagioclase feldspar, iron ore and shale.

Fabric 16 CAR 78 BLA D+ (321)

Very hard, slightly rough sandy and micaceous fabric, pinkish-white (5YR 8/2-8/3) throughout. Thin sectioning shows a groundmass of quartz grains 0.10mm and under in size, with a scatter of larger grains up to 0.7mm, plentiful flecks of mica and some iron ore.

Fabric 14 CAR 78 BLA D+ (319)

Very hard, slightly rough fabric, white (10YR 8/2) throughout. Only a few of the trituration grits are showing and these are largely composed of grains of quartz and quartzite. Thin sectioning shows a groundmass of small quartz grains under 0.10mm in size, with a scatter of larger grains up to 0.80mm, and flecks of mica.

Fabric 17 CAR 77 BLA A+ (366).

Very hard, slightly rough fabric, white (10YR 8/2) throughout. The trituration

grits are largely composed of grains of quartz and quartzite. Thin sectioning shows frequent ill-sorted quartz grains ranging in size up to 1mm and flecks of mica.

Fabric 18 CAR 78 BLA B22 (168)

Very hard, rough fabric, light buff (10YR 8/4) throughout. The trituration grits are largely composed of coarse sand, sandstone and pebbles. Thin sectioning shows a groundmass of quartz grains 0.10mm and under in size, with a sparse scatter of larger grains up to 1.60mm, flecks of mica, sandstone and iron ore.

Comments

It is difficult to pinpoint with any degree of precision the origins of the fourteen mortaria samples due to the general common nature of the inclusions in the fabric and the trituration grits. However, many of the first ten fabrics suspected of a local Carlisle origin contain pieces of sandstone, either in the fabric or in the trituration grits, and deposits of New Red Sandstone do occur in the Carlisle area. Moreover, many of the trituration grits appear rounded and well-worn and this would support a Triassic origin - probably obtained from river-gravels.

The mortaria sample Fabric 16 is different in fabric to the other samples, though again the inclusions are common and one cannot suggest a Lincoln area origin on this evidence alone. The same is likewise true for the three sherds, Fabrics 14, 17, and 18, for which a German origin is suspected. There is nothing in the fabric to support such a view, but on the otherhand a German origin cannot be ruled out on this evidence.