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PETROLOGICAL EXAMINATION OF MEDIAEVAL POTTERY

FROM TAMWORTH

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Twenty small sherds of Mediaeval pottery from the excavations at Moulds Yard, Tamworth were submitted for fabric examination in thin section under the petrological microscope. The object of the analysis was twofold: (1) to determine the rock and mineral content of the samples and to see if there are any noticeable fabric differences in the material submitted, and (2) if possible, to suggest likely source areas for the pottery. Two larger sherd samples were provided for heavy mineral separation. In addition, comparative samples of pottery were made available from excavations at the Saxon Mill Pond, Tamworth and Much Park Street, Coventry.

Petrology and Fabric

1) Moulds Yard FN-111-18

> Thin sectioning shows a groundmass of frequent subangular to subrounded grains of quartz, average size 0.15mm and under, together with a scatter of larger quartz grains up to 0.60mm across, and some quartzite, fine-grained silica, sandstone and flecks of mica.

2) Moulds Yard 82 (?? a possible 'waster')

Thin sectioning shows a fairly clean clay matrix containing subangular grains of quartz, average size 0.05mm and under, and flecks of mica, with a few larger grains of quartz up to 0.80mm across.

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3) Moulds Yard FB-107-1; FB-110-2; FB-113-3

Thin sectioning shows a fairly clean fine-textured light brown to buff clay matrix containing a scatter of subangular to subrounded quartz grains, some of them displaying silicious out-growths in optical continuity, average size 0.40mm-0.80mm, with some quartzite, fine-grained silica, a little sandstone and the odd grain of felspar.

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Moulds Yard FB-4-110; 107-21; 122-12

Similar to the above three sherds in thin section but with more quartz grains present. A large enough sample of 107-21 was provided for heavy mineral separation. Unfortunately very few heavy mineral grains were produced, although zircon, garnet, tourmaline and apatite were noted. These minerals are commonly found in the Keuper and Bunter sandstone of the Midlands region (Fleet, 1929;1930).

A fairly fine-textured fabric (A) was noted from Mediaeval kilns at Chilvers Coton, Nuneaton, but this also contained flecks of mica, which hardly seem to be present in these.Moulds Yard sherds.

Saxon Mill Pond A24-20; FBi-B69C-19

In thin section both sherds have a similar fine-textured clay matrix to the Moulds Yard sherds above, but the quartz grains tend to be of a smaller size, average size 0.10mm-0.50mm.

Much Park Street, Coventry Type 17 Vii-36; Vi-F47-31

Both samples have a fairly fine-textured clay matrix similar to the Moulds Yard samples above, but in addition to a scatter of larger quartz grains up to 0. 70mm across, there is also a slight groundmass of quartz 0.10mm in size.

4) Moulds Yard F1-83-13; FL-83-14

Thin sectioning shows frequent grains of subangular to subrounded quartz, average size 0.20mm-0.60mm, together with quartzite, fine-grained silica and flecks of mica set in a fairly clean reddish-brown clay matrix.

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5) <u>Moulds Yard</u> FF-96-9; FF-107-10; 82-15; FE-82-7; FE-68-22; FE-85-8; FE-95-6; FH-51-1 In thin section all the sherds in this group have a fairly similar fabric, namely a groundmass of subangular to subrounded quartz grains, average size 0.10mm and under, with a scatter of larger quartz grains up to 1.20mm across, together with quartzite, a little sandstone, flecks of mica, iron ore, a few grains of felspar and fine-grained silica. A large enough sample of FE-68-22 was provided to enable a heavy mineral separation to be carried out. Unfortunately very few heavy mineral grains were produced, although zircon, tourmaline and apatite were noted (see comments above).

Moulds Yard FE-5-89; FF-91-11

FE-5-89 has a slightly coarser groundmass than the above group, while FF-91-11 is slightly finer in texture.

6) Saxon Mill Pond AB handle 23

Thin sectioning shows a scatter of subangular quartz grains up to 0.70mm across, though the average size is below 0.30mm, together with flecks of mica, quartzite, a little felspar, red iron ore and fine-grained silica.

7) Much Park Street, Coventry Type 4 122-3-F138

Thin sectioning shows frequent subangular grains of quartz, average size 0.10mm-0.50 together with flecks of mica, quartzite, sandstone, fine-grained silica and a little microcline felspar, 8)

Much Park Street, Coventry Type 5 122/3-19c; 8/9-RB11

In thin section sample 8/9-RB11 appears to be fairly similar to Much Park Street Type 4, while sample 122/3-19c is slightly less sandy.

Comments

Tamworth is situated in an area of recent denosits, closeby to Keuper Marls/Sandstone and Boulder Clay. The fairly well-rounded grains of discrete quartz noted in many of the sherds suggests that this material was originally derived from the New Red Sandstone. It was probably obtained by the potters from the Keuper or Bunter deposits which cover large areas of the Midlands. It is possible, therefore, that these vessels might have been made fairly close to Tamworth, though given the very wide area of Triassic deposits in the Midlands, other sources, possibly some distance away, may be equally likely. The common range of non-plastic inclusions in the remaining Moulds Yard sherds make it difficult to suggest likely origins.

References

Fleet, W. F. (1929) 'Petrography of the Upper Bunter Sandstone of the Midlands', <u>Proc. Birmingham Nat. Hist. & Phil. Soc.</u>, 15(1929), 213-217.
Fleet, W. F. (1930) 'Petrography of the Lower Keuper Sandstone of the Midlands', Proc. Birmingham Nat. Hist. & Phil. Soc., 16(1930), 13-17.