4364

PETROLOGICAL EXAMINATION OF MEDIAEVAL POTTERY FROM POOLE, DORSET

D.F. Williams, Ph.D., F.S.A.

(DOE Ceramic Petrology Project)

Department of Archaeology, University of Southampton

Introduction

A number of mediaeval sherds from the "local" coarseware fabric series representing the large amount of material recovered from recent excavations at Poole, were submitted for detailed fabric examination in thin section under the petrological microscope. In addition, heavy mineral separation was carried out on the larger sample sherds. The main objectives of the analysis were: (1) to confirm the validity of a provisional fabric identification in the hand-specimen (copy attached) and (2) to see if it is possible to tell if certain of the fabrics might have been made in the Poole area. Poole is situated on alluvium deposits closeby to Tertiary heathlands composed predominantly of Bagshot Beds.

Petrology

(1) Fabric 1

CP M9 I L3 D255 no.737 (sample 1)

D 763 - Red painted ware, Dorset (sample 2)

No.873 - Dorset applied strip ware (sample 3)

A scatter of ill-sorted subangular grains of quartz ranging up to 1.50mm in size, together with a little flint or chert and iron ore, all set in a clean, fine-textured anisotropic clay matrix. A heavy mineral separation on samples 1 and 2 both produced residues in which there was a high tourmaline content, although the total heavy mineral count was comparatively small in each case. However, the tourmaline content of these samples recalls the tourmaline-rich fabric of Romano-British BB1 (black-burnished ware category 1), whose centre of production has been shown to lie in the Tertiary sands region comprising the western shores of Poole Harbour and the heathlands south of Wareham (Williams, 1977, Group 1). It is quite possible, therefore, that Fabric 1 was also made on the Tertiary sands region, perhaps situated closeby to Poole itself, as the distribution of certain types of vessel within this fabric group seems to be fairly localized (see elsewhere).

(2) Fabric 2

No.803 p 8 (sample 4)

A fairly similar fabric to Fabric 1, but with a slightly smaller range of quartz grains. A heavy mineral separation produced very few non-opaque grains.

(3) Fabric 3

PM9 IL3 D235 no.767 (sample 5)

Frequent subangular grains of quartz, average size 0.20mm-0.60mm, together with some flint or chert and iron ore set in a fairly clean, fine-textured anisotropic clay matrix. A heavy mineral separation produced little in the way of non-opaques except for a few grains of zircon.

(4) Fabric 5

No.1012 p36 - anthropomorphic spout (sample 6).

PM9 1 F50 D146 (sample 7)

Frequent subangular quartz grains, average size 0.20mm-0.80mm, with a few slightly larger grains, together with a little iron ore.

(5) Fabric 6

D879 P36 (sample 8).

A fairly similar fabric to Fabric 5. A heavy mineral separation produced only a few grains of zircon.

(6) Fabric 7

No.922 P39 - Wessex red wares 15/16th centuries A.D. (sample 9)

Frequent well-sorted subangular quartz grains, average size 0.15mm-0.30mm, together with flecks of mica, a few grains of microcline felspar, a little limestone and rounded light brown grains of what might be limonite (altered glauconite), though precise identification is difficult due to the heavy staining of many of the grains. Glauconite is commonly connected with Greensand and associated deposits, but also occurs in the Reading Beds, Thanet Sands and parts of the London Clay. Small areas of Reading Beds and London Clay are to be found some 4½ miles to the north-west of Poole, though as comparatively little Wessex red wares and black wares occur at the site, a source further away is probably likely. A heavy mineral separation produced a moderate amount of zircon together with a little kyanite and rutile.

(7) Fabric 9

Stoborough kiln 17/18th centuries A.D. (sample 10)

Frequent well-sorted subangular quartz grains, average size 0.10mm-0.40mm, together with a piece or two of flint and some iron ore, set in a fairly clean, fine-textured anisotropic clay matrix. A heavy mineral separation produced a large number of zircons together with a little kyanite, andalusite and rutile. The suite of heavy minerals from this Mediaeval sherd appears to be quite different to that obtained from Romano-British BB1 'wasters' associated with the site (Williams, 1977, 185). The results presumably indicate that different clays (or sand temper) were used at the site during the Mediaeval and Roman periods.

Comments

It is difficult to be too dogmatic in characterizing the above fabrics, firstly because the range of inclusions appears very similar in the majority of cases, and secondly because it has only been possible to examine a small number of samples from each of the fabric groups. More sampling may highlight certain fabric features or it may lead to a blurring of fabrics between the groups. However, on the above evidence Fabric 1 does seem to be different from the remaining fabrics. Like Poole, Stoborough lies on alluvium and Bagshot Beds, yet there appears to be a significant difference between the heavy mineral residues of the sherd from the kiln site at Stoborough and Fabric 1 (if we regard the latter fabric as probably being produced in the Poole area - see elsewhere). Apart from Fabric 7, the remainder of the fabric groups are less distinctive, and it is difficult to say where they are likely to have been made. Though given the common features which many of them share, it is quite possible that they all could have been made in the general Poole Harbour - Wareham region.

Reference

Williams, D.F. (1977) 'The Romano-British black-burnished industry: an essay on characterization by heavy mineral analysis', in Peacock, D.P.S. (ed.), Pottery and Early Commerce (London, 1977), 163-220.

Poole Pottery Report Notes

The Poole monograph is expected to be complete by about September 1984 certainly by March 1985. The catalogue of the report of c1050 pots (including c250 imported vessels) is complete and it remains to quantify the pottery and finalise the introduction. On the basis of the 1050 or so published pots the following nine main fabrics have been identified. However these are not finalised and the number will be reduced.

Fabric 1. 95% cook pots in this fabric. Medieval. Also Poole red-painted ware jugs and applied strip jugs in this fabric. About 40% of medieval jugs. (Samples 1-3). Red-painted ware rare at Wimborne 6 miles away, therefore source probably local.

Fabric 2. In c.15th century pots are mainly made in this fabric. (Sample 4).

Fabric 3. Medieval jug fabric (30% of jugs) Sample 5.

Fabric 4. Cancelled.

Fabric 5. Medieval jug fabric. Two samples 6 & 7 supplied. There are two anthropomorphic spouts, (one included) which are not paralleled elsewhere. 20% of Medieval jugs in this fabric.

Fabric 6. Medieval jug fabric (about 30%.) Sample 8

Fabric 7. Wessex Red and Black wares. Sample 9. 15th/16th century.

Fabric 8. Verwood. No sample.

Fabric 9. 17th/18th century. Kiln at East Holme, near Wareham. Sample 10.

Comments

Petrological examination could

1 Fabric 1. Confirm distribution evidence that this is locally made.
2 Fabric 3. Is this local?
3 Fabric 5. White fabric may suggest Ball Clay and Wareham area. Note one anthropomorphic spout found at Stoborough half mile from Wareham and site of local Fabric 9 kiln.

4 Fabric 6. Seems to merge into Fabric 1 and Fabric 5. Source?

5 Fabric 7. Wessex Red-wares and Blackwares occur in Dorset/Hampshire. Possibly not worth sectioning.

6 Fabric 9. Is fabric 9 same as fabric 5 perhaps suggesting fabric 5 from Wareham area.

common with the rest of Southern England salt glazed finewares, slip decorated coarsewares, creamwares and ultimately transfer printed wares peneterated the southern market from the northern potteries situated at centres such as Stoke on Trent.

(Comments on the pottery sequence will be re-drafted when tabulation is further advanced)

The Local Fabrics

Eight main local fabric types have been defined and the remaining fabrics are described individually. Fabrics 1-6 are used on pots that are handmade, perhaps on a turntable, whilst fabrics 7 and 8 are used on wheelthrown vessels.

Fabric 1. Rough hard sandy fabric with moderate quantities of ill-sorted rounded and sub-angular quartz <1mm with some angular flint <1mm. The fabric is pink-buff when oxidised and grey/black when reduced. This fabric is the standard local coarseware fabric mainly in the 13th/14th century and was used for cooking pots including those with bifid rims, red painted jugs, and applied strip jugs. Three variants occur(a) a variant with abundant quartz inclusions mainly used for reduced cooking pots (b)a sandy variant with few inclusions used for jugs and oxidised cooking pots or jars and (c) a variant with less sand and fewer inclusions often fired harder.

Fabric 2. A hard smooth light buff slightly orange-pink fabric containing well-sorted quartz sand <0.5mm. Occasional well-sorted rounded red-brown inclusions <1mm. This was a common coarseware fabric in the 15th/16th century.

Fabric 3. Fine hard light buff slightly pink fabric, sometimes sandy, sparse well-sorted red-brown inclusions <0.5mm. Some medieval jugs with external mottled green glaze are in this fabric.

Fabric 4. Hard sandy light yellow-buff to orange fabric with rare orange grog inclusions <3mm. A few medieval cooking pots and other vessels are in this fabric.

Fabric 5. Hard off-white fabric with rare well-sorted rounded quartz <1mm. Some medieval jugs with a light yellow glaze are in this fabric.

Fabric 6. Hard off white sandy fabric with occasional rounded quartz <1mm, organic inclusions and well-sorted red inclusions <0.5mm. Some medieval jugs with external yellow/green glaze and dark brown iron-washed applied strips are in this fabric.

Fabric 7. Hard buff fabric with some sand, rounded quartz <1mm and rare sub-angular inclusions of quartz or ironstone <5mm. This fabric when fired hard is the fabric of the 15th/16th century Wessex red wares and black wares (Jarvis 1983,53) and a few examples occur at Poole. Some pottery is intermediate between fabric 1 and 7.

Fabric 8. Hard off-white to pink-buff smooth fabric with rare red grog inclusions. This is the fabric of the Verwood and district 17th/early 20th century post-medieval coarsewares and is usually glazed amber or olive although green and brown glazed wares were also made.

Dorset Red Painted Wares and Applied Strip Wares.