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Ancient Monuments Laboratory
Report 131/87

PETROLOGICAL ANALYSIS OF ROMAN
COARSE POTTERY FROM GREYHOUND YARD,
DORCHESTER.

D F Williams PhD FSA

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Summary

Thin sectioning and heavy mineral analysis allowed the identification of black-burnished ware (BB1) from the Wareham - Poole Harbour Tertiary sands area of Dorset; two sherds were very similar in fabric to Exeter Fabric 40, an imitation black-burnished ware industry situated somewhere in the south-west of the country; a small dish or bowl containing inclusions derived from a biotite-granite, again probably from the south-west. A small group of material thought originally to be Dorset BB1 was shown not to be, though it proved difficult to suggest likely origins.

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PETROLOGICAL ANALYSIS OF ROMAN COARSE POTTERY FROM GREYHOUND

YARD, DORCHESTER

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(HBMC Ceramic Petrology Project)

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1) W67 45/09/02 FT30 (4658) Rim type 13

Small plain bead-rimmed sherd from a dish or bowl, dark grey to black surfaces with conspicuous flecks of golden mica, lighter-colored core. Thin sectioning and study under the petrological microscope shows frequent plates of mica, mostly biotite but with some muscovite, and discrete grains of quartz and feldspar, mostly orthoclase but with some plagioclase. This assemblage suggests derivation from a biotite-granite, those from the south-west of the country appear to be the most likely.

2) W67 42/11/03 (2734) Bodysherd from a ?cooking-pot

W67 43/06/02 (3279) Bodysherd from a ?cooking-pot

W67 44/06/04 (3480) Bodysherds from a ?bowl

W67 42/12/01 (2313) Rim type 46 Small everted rim from a cooking-pot

All the above four sherds look similar in the hand-specimen to black-burnished (BB1) ware from Dorset. This was confirmed by heavy mineral separation which produced a tourmaline-rich assemblage identical to that of BB1 shown to have been made in the Wareham - Poole Harbour Tertiary sands area of Dorset (Williams, 1977, Group 1). A similar origin appears likely for the Greyhound Yard material.

- 3) W67 44/04/10 (3862) Rim type 1 Upright-rimmed cooking-pot, slightly roughly
burnished and 'blotchy' in colour

W67 44/05/02 (3611) Sherds from a cooking-pot

W67 43/06/02 (3294) Sherds from a cooking-pot

W67 42/12/03 (4537) Bead-rimmed bowl with horizontal grooving

W67 42/11/08 (4671) Bead-rimmed bowl

The above material does not form a homogeneous fabric group. However, there are certain fabric similarities that these vessels share, for thin sectioning shows that they all contain frequent ill-sorted quartz grains ranging up to 1mm in size, together with some quartzite, flint/chert and a few flecks of mica. Superficially as well, these sherds have something in common with Dorset black-burnished ware, as they tend to be quite sandy, black to grey in colour and have all been burnished. There are, however, noticeable differences in the hand-specimen: no. 3862 for example tends to be rather 'blotchy' in colour; nos. 3611, 3296 and 4537 are slightly coarser in fabric than is normal for Dorset BB1, while alternatively no. 4671 is rather more finer-textured than is generally the case with the former; and no. 4537 is not a form seen by the writer amongst Dorset BB1 products. This is confirmed by thin sectioning and heavy mineral separation. The typical fabric of Dorset BB1 when viewed in thin section consists of a fairly clean clay matrix containing subangular grains of quartz, average size 0.20 - .60mm, together with a little shale, mudstone and sometimes some flint. The above sherds from Greyhound Yard appear to be texturally different to this. Also, none of this material produced a tourmaline-rich heavy mineral residue. In fact, very few non-opaque heavy minerals were produced by this pottery except for grains of zircon, one of the commonest heavy mineral types.

Unfortunately, it is not at all clear where this seemingly diverse group of pottery from Greyhound Yard originates. The range of inclusions in the fabrics are all fairly common and are not helpful in suggesting likely sources. It is

possible that this group was made fairly locally to Dorchester, alternatively some or all may have been made some distance away. It is now clear that there were many 'offshoots'/imitations of the Dorset BB1 industry in Roman Britain (Williams, 1977). One of these, for example, appears to have supplied a range of vessels to Exeter during the first century A.D. modelled on Dorset BB1 forms (Bidwell, 1977, Fabric 40). Four sherds of this fabric were kindly submitted for comparison with the Greyhound Yard sherds by the Exeter Archaeological Unit. A heavy mineral separation of the Exeter sherds of Fabric 40 showed that three of the samples contained a number of grains of zircon followed by much small amounts of garnet and tourmaline. The fourth sherd produced a tourmaline-rich assemblage identical to Dorset BB1, and an examination in the hand-specimen confirmed a Wareham - Poole Harbour origin. Thin sectioning of the former three sherds from Exeter showed a fabric packed with quartz grains, with some flint and flecks of mica. There are similarities in the range of inclusions with the Greyhound Yard sherds, but texturally the Exeter samples appear to be rather more sandier. It is not possible at present, therefore, to attribute any of the Greyhound Yard sherds to Exeter Fabric 40 on the basis of this small examination. Further work on Exeter Fabric 40 might, for example, widen the range of fabrics produced within this category, for with the identification of a Dorset BB1 vessel amongst the 'typical' Fabric 40 examples, it is clear that is not as neatly defined as was hoped.

- 4) W67 43/06/02 (3251) Oxidized sherds from a bowl with vertical burnishing lines
W67 42/10/07 (2996) " " " "

This vessel, or vessels, appears to be closely paralleled by a first century A.D. example from Exeter described as black-burnished ware in Fabric 40 (Bidwell, 1977, Fig. 13.2, no. 31). Thin sectioning showed a similar range and texture of inclusions to that described above for Exeter Fabric 40, so it is quite

possible that the Greyhound Yard sherds share a common origin with the Exeter example, presumably somewhere in the south-west of the country. In this context one should recall the possible origins of the small rim sherd 4658, Group 1.

References

- Bidwell, P. (1977) 'Early black-burnished ware at Exeter', in J. Dore and K. Greene (eds.), Roman Pottery Studies in Britain and Beyond, BAR Supp. Series no 30, 189-198.
- Williams, D.F. (1977) 'The Romano-British black-burnished industry: an essay on characterization by heavy mineral analysis', in D.P.S. Peacock (ed.), Pottery and Early Commerce, London, 163-220.