Report 1575

BB2[1] FROM THE LONDON MITHRAEUM

Petrological Examination of Pottery

by

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Four BB2 sherds, typical of the majority of this ware found at the site, were submitted for heavy mineral analyses (Peacock, 1967).Table I shows the results in terms of percentages of non-opaque minerals.

TABLE I

No.	Type	Zircon	Tourmaline	Rutile	Kyanite	Andalusite	Staurolite	Garnet	Apatite	No. grains counted
1.	Bowl, Gillam 225.[2]	79.4	7.1	2.2	3.6	.5	.9	5.8	.5	223
2.	Bowl, Gillam 222.	80.1	5.7	1.1	3.6	.5	1.4	7.1	.5	438
3.	Bowl, Gillam 310.	78.3	4.9	1.8	4.5	.9	1.2	8.4	–	302
4.	Bowl, Gillam 225.	74.8	7.3	2.9	4.1	.2	2.1	7.7	.9	289

The minerals have the following properties:

ZIRCON Small rounded or subangular dusky grains. The larger grains are often well rounded.

TOURMALINE Green or brown oval grains.

RUTILE Smallish irregular grains, usually of a deep red colour, though some orange ones.

KYANITE Large bladed grains commonly deep reddish-blue and often containing

carbonaceous matter.

ANDALUSITE Small colourless grains.

STAUROLITE Large irregular pale golden-yellow grains.

GARNET Medium-sized colourless irregular grains.

APATITE Small clear rounded grains.

DISCUSSION

The quantitative heavy mineral results for all four samples display a close degree of correspondence, and this is also borne out by the similarity of the mineral characteristics. There can be little doubt that the same type of sand was used as a filler in each of the four vessels, and that therefore they share the same area of origin.

The analyses show a high tenor of zircon, combined with almost equal amounts of tourmaline and garnet, and a moderate amount of rutile. This agrees well with the heavy minerals contained in the London clay of northen Essex (Boswell, 1915, Table IV). Futhermore, the above assemblage is identical to suites of heavy minerals obtained from BB2 products shown to have been made at or near Colchester (Williams, 1976, Group XII). A Colchester origin is likewise indicated for the four London Mithraeum BB2 bowls analysed.

1. Black-burnished Category 2 (Gillam, 1960, 126-127).
2. Refers to Gillam's Types paper (1957).

Boswell, P.G.H. (1915) ' The stratigraphy and petrology of the Lower Eocene deposits of the north-eastern part of the London basin', Quarterly Journal of the Geological Society of London, 71 (1915), 536-591.

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