Petrological Analysis of Red-Painted ware from Pevensey Castle.

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A sample of the red painted ware from Pevensey was submitted for analysis. Possible sources for the ware were suggested to include the south-east of England, northern France, the Meuse valley and the Rhineland. These possible sources were considered in the light of the ceramic petrology.

Description

The sample was thin-sectioned and stained using Dickson's method which distinguishes carbonate inclusions (although as it happens no carbonate inclusions were present).

The sample was tempered with a moderate quartzose sand composed of subangular and rounded grains of quartz, ranging from 0.4mm to 0.6mm across. With the exception of a single example of strained metamorphic polycrystalline quartz all grains were monocrystalline, although many were traversed by cracks, some filled with a thin film of brown iron-rich material. Moderate rounded dark brown to opaque grains were present, ranging up to 0.2mm across.

The clay matrix was composed of anisotropic clay minerals, abundant angular quartz grains (up to 0.1mm across) and sparse muscovite up to 0.1mm long.

Discussion

The inclusions in this sample are not particularly diagnostic. The petrological characteristics do, however, contrast with those found in products of the Rhineland which normally have little or no silt component in the clay matrix, which is usually remarkably free of inclusions. The iron-stained veins are particularly notable in quartz grains found in wares produced on the Surrey/Hampshire border where they indicate that the quartz grains were derived from an iron-cemented sandstone. However those grains usually have a well-rounded appearance, in contrast to this sample. Samples of pottery of Carolingian and later date from the Canche valley have a similar petrology, although in these cases it seems that the dark brown/opaque grains are glauconite and altered glauconite. It is possible that the Pevensey grains too are glauconitic, but subjected to more intense heating that the northern French wares, but there are other possibilities, such as iron-replaced faecal material.

Conclusion

Thin-section analysis is inconclusive, although probably disproving a Rhenish source, and a local south-eastern English origin cannot be ruled out.