

Assessment of the Ceramic Building Material and Fired Clay from the Ashby Folville to Thurstaston Pipeline (AFT04)

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A small collection of ceramic building material and fired clay from the Ashby Folville to Thurstaston Pipeline was submitted for identification and assessment. The finds include Romano-British tile, including both roof tile and brick, a fragment of daub and an unidentified fired or burnt clay lump.

Description

The tile was examined at x20 magnification using a stereomicroscope and an archive record produced (Appendix 1). Four distinct fabric groups were recognised and assigned the codes Fabric 1 to Fabric 4.

Ceramic Building Material

Fabric

Three fabrics were identified within the ceramic building material: fabrics 1, 2 and 3.

Fabric 1 contains few inclusions over 0.1mm across and has a distinctive moulding sand consisting of rounded calcareous grains, polished rounded quartz, other rounded quartz and rounded brown iron-rich grains, all well-sorted with a mean diameter of c.0.5mm. The single example has oxidized margins and a reduced, grey, core, with a sharp boundary between the two.

The polished, rounded quartz grains present in this fabric originated in a lower Cretaceous deposit but the groundmass does not have the abundant quartz and muscovite silt found in lower Cretaceous clays.

Fabric 2 contains abundant rounded off-white inclusions (probably marl), sparse to moderate rounded quartz grains up to 0.5mm across, dark brown angular mudstone fragments up to 2.0mm across and finegrained sandstone/coarse siltstone fragments up to 2.0mm across. The groundmass was probably calcareous and contains moderate quartz and muscovite silt.

The characteristics of this fabric indicate that Mercian Mudstone was the parent clay and the various inclusions present are probably also of Triassic origin.

Fabric 3 is a small fragment which is similar to Fabric 1 but without the distinctive moulding sand it has to be assigned a separate fabric number.

Form

The fabric 1 tile is a brick, with a thickness of 34mm. Such bricks were used as walling, either on their own or as decorative/levelling courses in a masonry wall, or in hypocausts (*Pilae*). In either case, they indicate the presence of a Romanised building of some pretensions.

The fabric 2 tiles consist of two *tegulae* (flanged roof tiles) and one *imbrex* (curved tile, used to secure two *tegulae*).

The fabric 3 tile is too small to identify the form.

Fired Clay

Fabric

Fabric 4 contains abundant rounded quartz sand, probably derived mainly from Triassic sandstones.

Fabric 5 consists of two poorly mixed clays: the first fires to an off-white colour and contains no inclusions visible at x20 magnification whilst the second is a red-firing clay containing abundant rounded quartz grains.

Similar white-firing clays occur in the Jurassic Estuarine Beds, which outcrop in southeast Leicestershire, and also in Coal Measure seatearths, which outcrop in western Leicestershire.

Form

The Fabric 4 fragment is featureless whereas the Fabric 5 fragment has impressions from laths, suggesting that it comes from a daub infill of a lath panel.

Assessment

The Roman brick and tile was made in two distinct fabrics, probably originating in different production sites whilst the fired clay also occurs in two distinct fabrics. The ceramic building material and fired clay from these sites therefore has the potential to reveal detail of the source of these materials. However, there are too few fragments present in the collection for statistically valid information to be gleaned from further analysis. The material does, however, show the potential of petrological analysis for studying the fired clays in this part of Leicestershire.

No further work is therefore recommended on the collection, which should be retained for potential future study.

Appendix 1

Sitecode	Context	cname	subfabric	Form	Nosh	NoV	Weight	TH
AFT04 14/2	1412	FCLAY	FABRIC 4		3	1	16	
AFT04 19/12	1914	RTIL?	FABRIC 3		1	1	4	
AFT04 24/15	2405	RTIL	FABRIC 2	TEG	1	1	414	23
AFT04 24/15	2407	RTIL	FABRIC 1	BRICK	1	1	437	34
AFT04 24/16a	2422	RTIL	FABRIC 2	TEG	1	1	138	24
AFT04 24/15	2418	FCLAY	FABRIC 5	DAUB	1	1	7	
AFT04 24/16a	2422	RTIL	FABRIC 2	IMBR	1	1	100	23