Ancient Monuments Laboratory Report 127/91

A NOTE ON THE PETROLOGY OF IRON AGE POTTERY FROM PRESTON FARM, ATTINGHAM, SHROPSHIRE (A5/149 SHREWSBURY BY-PASS PROJECT)

D F Williams PhD FSA

AML reports are interim reports which make available the results of specialist investigations in advance of full publication They are not subject to external refereeing and their conclusions to be modified the light of sometimes have in archaeological information that was not available the time of the investigation. Readers are therefore asked to consult the author before citing the report in any publication and consult the final excavation report when available.

Opinions expressed in AML reports are those of the author and are not necessarily those of the Historic Buildings and Monuments Commission for England.

Ancient Monuments Laboratory Report 127/91

A NOTE ON THE PETROLOGY OF IRON AGE POTTERY FROM PRESTON FARM, ATTINGHAM, SHROPSHIRE (A5/149 SHREWSBURY BY-PASS PROJECT)

D F Williams PhD FSA

Summary

Ten sherds of Iron Age pottery were thin sectioned and these displayed quite a variety of fabric types: sandstone, organic, quartz sand, mudstone, Malvernian compostion and rhynolite. Some of these probably indicate a local origin, while others appear to be imports to the site.

Author's address :-

D F Williams PhD FSA

Department of Archaeology University of Southampton Highfield Southampton SO9 5NH

@ Historic Buildings and Monuments Commission for England

A NOTE ON THE PETROLOGY OF IRON AGE POTTERY FROM PRESTON FARM. ATTINGHAM. SHROPSHIRE (A5/A49 SHREWSBURY BY-PASS PROJECT).

D.F. Williams, Ph.D., FSA

[HBMC Ceramic Petrology Project]

Department of Archaeology, University of Southampton

Introduction

Ten small sherds of Iron Age pottery from recent excavations at Preston Farm, Attingham, a site on the proposed A5/A49 Shrewsbury By-Pass, were submitted for a detailed fabric examination in thin section under the petrological microscope. The main object of the analysis was to try to characterize the various fabrics involved, also to see if any useful comments might be made about the likely origins of the pottery. All of the sherds were initially studied with the aid of a binocular microscope [x 20]. Munsell Soil Colour Charts are referred to together with free descriptive terms. Preston Farm is situated about 3km to the south east of Shrewsbury on Carboniferous Coal Measures, closeby to Triassic Sandstone and Pre-Cambrian outcrops [Geological Survey 1" Map of England Sheet no. 152].

Petrology and Fabric

On the basis of the range of non-plastic inclusions present in the samples submitted, a number of broad fabric divisions are suggested here. The original fabric numbering of the sherds has been retained.

Sandstone

[1]. 1003 F1.

Soft, thin rough sandy fabric with small inclusions of rock throughout, light brown [6/4 7.5YR] outer surface, dark grey [10YR 4/1] inner surface and core. In thin section the most prominent inclusions to be seen are fragments of sandstone, composed primarily of quartz grains with secondary mica, scattered throughout the clay matrix. Also present is a moderately frequent amount of subangular quartz, flecks of mica, some argillaceous material and a little iron oxide.

Some time ago Peacock drew attention to the distribution of certain Iron Age pottery in the west Midlands which contained large inclusions of sandstone [1968]. The fragments of sandstone in the Preston Farm sherd are, however, somewhat smaller and compositionally different to the sandstone identified by Peacock, for which he suggested a source in the Llandovery Beds west

of the Malvern Hills [ibid.]. Instead, since there are large areas of Triassic sandstone located closeby to Preston Farm, a more local source may be more appropriate in this particular case.

Organic

[2]. 1001 (36) F7.

Soft, thick, roughish sandy fabric with small inclusions of burnt organic material visible in fresh fracture, light brown [7.5YR 6/4] outer surface, dark grey [10YR 4/1] inner surface and dark greyish-brown core.

[3]. 1001 (15) F9.

Very Soft, roughish sandy fabric with small inclusions of burnt organic material visible in fresh fracture, lightish grey [2.5YR N5/] surfaces darker grey core.

In thin section both sherds can be seen to contain frequent variable-sized fragments of black organic material. Some of these pieces appear to display narrow longitudinal rays and resin canals, and so may possibly be ?wood. Also present are moderately frequent quartz grains, generally under 0.30mm in size but with a few slightly larger grains, a little quartzite, flecks of mica and some pieces of

sandstone. Sherd [3] is the more sandier of the two and contains a piece of sandstone which is over 3mm across.

The inclsions of sandstone, fairly similar to those in sherd [1], may again point to a reasonably local source.

Quartz

[4]. 1001 (25) F3.

Slightly soft, smooth sandy fabric, dark grey
[between 5YR 4/1 and 3/1] throughout. Thin
sectioning shows frequent grains of quartz, average
size under 0.70mm across, but with a few slightly
larger grains, together with some shreds of mica,
quartzite and iron oxide.

The common range of non-plastic inclusions makes it difficult to predict a possible source.

Mudstone

[5]. 1000 (31) F5.

Slightly soft, smooth sandy fabric, dark grey [between 10YR 4/1 and 3/1] throughout. Thin

sectioning shows a groundmass of frequent wellsorted subangular quartz grains under 0.10mm in
size, with a scatter of larger grains up to 0.50mm
across. Also present are small fragments of mustone,
moderately frequent flecks of mica and iron oxide.

[6]. 1002 (9) F4.

Soft, smooth sandy fabric, dark grey throughout [between 5YR 4/1 and 3/1] but with the outer surface somewhat patchy in colour. Thin sectioning shows moderately frequent subangular quartz grains, average size generally below 0.40mm across, with some pieces of mustone, flecks of mica, quartzite and iron oxide.

[7]. 1001 (24) F6.

Soft, crumbly vesicular fabric, very dark grey [7.5YR N3/] throughout. Thin sectioning confirms the hand-specimen impression of the fabric, since angular voids of variable size are scattered throughout the clay matrix. Also present are a few quartz grains, some shreds of mica and a little iron oxide.

Sherds [[5] to [7] would seem to belong to a group of middle to late Iron Age pottery characterized by inclusions of mudstone, and distributed mainly in the Welsh Marches but with outliers in Shropshire, Herefordshire and north Worcestershire [Morris, 1982].

The inclusions of mudstone are clearly visible under the microscope in sherds [5] and [6], and there are also a few in sherd [7]. Moreover, it is possible that the vesicles present in sherd [7] may represent former pieces of mudstone that have since been lost, since "vesicular" mustone pottery is particularly characteristic of this ware [ibid.].

Malvernian

- [8]. 1001 (22) F2.
- [9]. 1003 F2.

Somewhat soft, smoothish fabric with many angular rock fragments, dark grey [between 5YR 4/1 and 3/1] throughout. Thin sectioning reveals a range of crushed igneous and metamorphic rocks similar in composition to that found in Iron Age pottery shown to have been made in the Malvern Hills,

Worcestershire [Peacock, 1968].

Rhyolite

[10]. 1001 (3) F8.

Soft, rough coarse fabric with large angular rock fragments, light brownish-grey [between 10YR 5/1

and 5/2]. Thin sectioning shows the most prominent inclusions to consist of several large subangular to subrounded pieces of devitrified rhyolite, a fine-grained acid igneous rock. Also present are frequent subangular grains of quartz generally under 0.40mm in size, but with a few larger grains scattered about, some quartzite, flecks of mica, argillaceous material and iron oxide.

Preston Farm is situated closeby to Pre-Cambrian outcrops, and the rhyolite inclusions in this sherd may possibly have derived from there. It is interesting to note that rhyolite has also been noted in VCP pottery from a number of Iron Age sites in the general region, for which a source in the Shropshire-Cheshire basin has been suggested [Morris, 1981].

<u>Bibliography</u>

- Morris, E. [1981] 'Petrological report on the beaker and Iron Age ceramics from Midsummer Hill' in S.C. Stanford, Midsummer Hill: An Iron Age Hillfort On The Malverns, Malvern Hills Arch. Comm., 151-155.
- Morris, E. [1982] 'Iron Age pottery from western

 Britain: another petrological study', in I. Freestone,

 C. Johns and T. Potter [eds.], Current Research in

Ceramics: Thin Section Studies, B.M. Occ. Paper no. 32, 15-27.

Peacock, D.P.S. [1968] `A petrological study of certain Iron Age pottery from western Britain', PPS, 34[1968], 414-427.