Characterisation Studies of Bronze Age Pottery from Washingborough Pumping Station, Lincolnshire (WPSE)

Alan Vince

Samples of eight Bronze Age pottery vessels were taken for thin section and chemical analysis (Table 1).

Table 1

TSNO	Fabric	Action	Context	REFNO	Form	Description
V3229	1a	TS	003	14319		
V3230	1a	TS	003	5339	JAR	GLOB BODY;BURNISHED INT AND EXT
V3231	1a	TS	003	5010		
V3232	2	TS	003	5208		
V3233	3	TS	011	5959		
V3234	4	TS	104	281	JAR	THIN WALLED;BURNISHED INT AND EXT
V3235	1c	TS	105	255		
V3254	1b	TS	424	8896		

The thin section analysis indicates that the samples could be grouped into six fabrics. The analysis suggested that the tempering material found in Fabrics 1a, 1b and 1c was the same, derived from a shelly limestone, interleaved with marl. However, the shell fragments found in fabric 1c were much larger than in the other two groups and Fabric 1b contained rounded opaque grains, and mudstone fragments, both of which were absent from Fabric 1a. Possible sources for this shelly limestone include the Great Oolite facies of the Lincolnshire Limestone and the Cornbrash, both of which outcrop within a few miles of Washingborough (Kent 1980, 49).

Fabric 2 contained angular flint fragments as well as inclusions typical of Lower Cretaceous deposits, but not found in the Washingborough area.

Fabric 3 contained fragments of a bioclastic limestone, parallels for which occur locally, in the Middle Jurassic Cornbrash which outcrops to the east of Washingborough, and in lower Jurassic limestones which outcrop in the Trent valley and the Humber gap.

Fabric 4 was so badly leached that it was not possible to identify the original calcareous inclusions with any certainty, although it was likely that this was a decalcified version of Fabric 1.

Chemical analysis, using Inductively Coupled Plasma Spectroscopy, shows that the fabric groups recognised in thin section are reflected in their chemical composition. However, fabrics 1a, 1b and 1c, which were interpreted in thin section as being minor variations of a

The Alan Vince Archaeology Consultancy, 25 West Parade, Lincoln, LN1 1NW http://www.postex.demon.co.uk/index.html

A copy of this report is archived online at http://www.avac.uklinux.net/potcat/pdfs/avac2006007.pdf

single fabric, are chemically distinct whilst fabric 3 has a similar chemical composition to Fabric 1a. This favours the identification of the bioclastic limestone inclusions as being from the Cornbrash. Fabrics 2 and 4 have distinct compositions, differing from the other six samples.

Acknowledgements

The thin sections were produced by Steve Caldwell, University of Manchester, and are retained as part of the AVAC reference collection. The chemical analysis was carried out at Royal Holloway College, London, under the supervision of Dr Nick Walsh. Full reports on both analyses can be found in the archive reports (Vince 2006a; Vince 2006band 2006b), copies of which are lodged in the site archive and available online (http://www.avac.uklinux.net/potcat/pdfs/avac2006015.pdf and http://www.avac.uklinux.net/potcat/pdfs/avac2006018.pdf).

Bibliography

Vince, Alan (2006a) Chemical analysis of Bronze Age Pottery from Washingborough,

Lincolnshire (WPSE). AVAC Reports 2006/18 Lincoln.

Vince, Alan (2006b) Thin Section analysis of Bronze Age Pottery from Washingborough,

Lincolnshire (WPSE). AVAC Reports 2006/15 Lincoln.